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Does Koperasi Angkatan Tentera Malaysia Bhd Meet Bank Safety and Soundness Criteria to Become a Co-operative Bank?

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Teaching Case Synopsis

This case is an evaluation case to assess the readiness of Koperasi Angkatan Tentera Malaysia Bhd (Koperasi Tentera) to become a co-operative bank with FLAME-T rating system (modelled after CAMEL rating system), a tool commonly used to judge the financial safety and soundness of co-operatives in Malaysia. On 12 September 2013, Koperasi Tentera has formally put in its application to become a co-operative bank. Subsequent to the first-stage application, Malaysia Co-operative Societies Commission has given its approval on 18 May 2016 for Koperasi Tentera's upgrading. On 16 July 2018, the chairman, Datuk Zulkiflee Mazlan, claimed that Koperasi Tentera is ready to become a co-operative bank. However, Koperasi Tentera has not been able to secure the green light from the central bank, Bank Negara Malaysia, at the second-stage (final stage) of its application after it has obtained the approval from Malaysia Co-operative Societies Commission. Why there is such a long delay in the licensing process? Does Koperasi Tentera meet bank safety and soundness criteria and is 'ready' to become a co-operative bank?

Keywords: Financial safety, financial soundness, co-operative bank, FLAME-T rating system

1. INTRODUCTION

On 16 July 2018, the chairman of Koperasi Angkatan Tentera Malaysia Bhd. (Koperasi Tentera), Datuk Zulkiflee Mazlan, was approached by a group of reporters at Menara Ilham after attending a 30-minute meeting with the Council of Eminent Persons. The reporters were trying to find out from him about Koperasi Tentera's transformation programme to become a co-operative bank.

"Our plan to become a co-operative bank is still on the move. Now, we are awaiting the higher authority to make a decision on this," Datuk Zulkiflee replied. "In fact Koperasi Tentera already has in place a core banking system, and it is now behaving more like a financial institution," he added.

When asked whether the higher authority would issue a decision for Koperasi Tentera to become a bank before year-end, Datuk Zulkiflee said "I'm not sure". He continued, "We think Koperasi Tentera meets bank safety and soundness criteria and is ready to become a bank but at the end of the day, we are only ready to be a bank if the regulator says so."

2. ABOUT KOPERASI TENTERA

Koperasi Angkatan Tentera Malaysia Bhd. (Koperasi Tentera) was established in 1960. It was a military thrift and loan co-operative at its inception. Over the years, it had progressively emerged to be one of Malaysia's leading credit co-operatives.

Three distinct levels of leaderships were at the helm of Koperasi Tentera to ensure accountability, good governance and business growth. The heads of Malaysian defence and military command were the honorary appointees in Koperasi Tentera: (i) Minister of Defence, (ii) Chief of Defence Force, (iii) Chief of Army, (iv) Chief of Navy, and (v) Chief of Air Force. The board of directors was responsible for the corporate governance of Koperasi Tentera. The board had 15 directors. Ten of them were elected

ATM group Takaful scheme, KT medic scheme, motor Takaful and general Takaful, and (iii) Ar-Rahnu (Islamic pawn financing) offering two different types of products as the alternatives to instant cash financing – i.e. Ar-Rahnu Prihatin and Ar-Rahnu Prima. Koperasi Tentera was also involved in investment activities with the aim of generating sustainable investment income for its members. In preserving its capital, the co-operative always made careful consideration on risk-return trade-off before embarking on any investment endeavours. As of 31 December 2017, Koperasi Tentera had undertaken the following investments by holding: (i) 51% equity in Harper Wira Sdn Bhd – a cargo transportation agency over land, air and sea, (ii) 30% equity in Great Eastern Takaful Malaysia Berhad – a Takaful operator, and (iii) 30% equity in Pacific Mutual Fund Berhad – an investment management company.

Koperasi Tentera had also provided welfare assistances to ease the financial burdens of its members. For this purpose, Koperasi Tentera allocated RM2 million annually to be distributed to its members and their families through a number of welfare assistance schemes such as educational aids for members' children and death benefits for the next of kin of deceased members.

3. MOTIVATION BEHIND THE TRANSFORMATION OF KOPERASI TENTERA

Koperasi Tentera had the desire to become the third co-operative bank after Bank Kerjasama Rakyat Malaysia Bhd (Bank Rakyat) and Koperasi Bank Persatuan Malaysia Bhd (Bank Persatuan) ever since 2002. Over time, this desire grew stronger and the call for transformation of Koperasi Tentera to become a co-operative bank gained momentum in view of the challenges it faced in generating income in its present market which was restricted by its membership and constrained by the policies in giving out financing (like the implementation of government policy regarding net salary payment of public sector workers). By becoming a co-operative bank, Koperasi Tentera could expand beyond its member-only-market. As such, it could embark on new initiatives to enlarge its customer base to also serve non-members such as the co-operative sector, small-and-medium enterprises (SMEs) and the general public. Hence, becoming a co-operative bank could lay the foundation for a solid and sustainable growth of Koperasi Tentera in the long run. Doing so would also enable Koperasi Tentera to cope with the operational challenges and intense competitions from banking institutions in the financial services industry.

In 2012, Koperasi Tentera had made a significant move by announcing that it would start to pursue a transformation programme in order for the credit co-operative to become a co-operative bank. In the pursuit of becoming a co-operative bank, at the first-stage, Koperasi Tentera would have to acquire a go-ahead from Malaysia Co-operative Societies Commission. Then, Koperasi Tentera would have to obtain the final nod from the central bank of Malaysia, Bank Negara Malaysia.

On 12 September 2013, Koperasi Tentera had formally applied to Malaysia Co-operative Societies Commission to become a co-operative bank. Koperasi Tentera managed to pass the first-stage application when the approval for upgrading was given by Malaysia Co-operative Societies Commission on 18 May 2016. At the second-stage (final stage) of its application, Koperasi Tentera had more preparations to do as it would have to fulfill the requirements of Bank Negara Malaysia.

In July 2018, Datuk Zulkiflee Mazlan, the chairman claimed that Koperasi Tentera was ready to become a co-operative bank when approached by reporters asking about the progress of the co-operative's transformation programme. However, Koperasi Tentera had not been able to secure the green light from Bank Negara Malaysia after more than two years since it had obtained the approval from Malaysia Co-operative Societies Commission. Why such a long delay in the licensing process? Had Koperasi Tentera managed to meet bank safety and soundness criteria of FLAME-T rating system (which modelled after CAMEL rating system) to become a co-operative bank? Refer to Exhibits 1 to 4 for more details about FLAME-T rating system.

4. TRANSFORMATION OF KOPERASI TENTERA (2013-2017)

Koperasi Tentera aimed to become the most preferred co-operative bank not only for its members but also to non-members. As such Koperasi Tentera would have to stay current and continue to expand its growth opportunities. To achieve this aim, Koperasi Tentera must invest to be technologically modern and operationally agile to create operational distinction and maintain innovation excellence. Under the transformation programme developed by Koperasi Tentera since October 2012, the co-operative had undertaken various structural transformational reforms in refining management framework, enhancing service delivery, embedding governance processes, improving credit risk management, implementing new information and communication technology (ICT) system and building a strong talent pool.

4.1 ICT Systems

Koperasi Tentera had made a substantial step forward in ICT developments to reap the economic incentives from merging telephone network with computer network in conducting its daily business. In September 2015, Koperasi Tentera had engaged an internationally renowned ICT service provider to develop its core banking system which integrated membership, financing, treasury, compliance and collection into a single unified system. The system had successfully completed in April 2017. This system could assist Koperasi Tentera in processing, evaluating and approving the applications of members, thus enabling the co-operative to make speedy and appropriate decisions. The system could also facilitate Koperasi Tentera to deal with other potential customers (non-members) such as SMEs in the future. After launching the core banking system at the first phase, Koperasi Tentera moved on to the second phase to develop internet banking and mobile banking to provide better services for its members. These digital platforms were eventually made available for its members in 2018. Not only focusing on the banking aspect of its business, Koperasi Tentera had also successfully upgraded its accounting system, insurance system and human resource management system.

The core banking system and the digital platforms were the cornerstones of Koperasi Tentera's competitive advantages in the financial services industry. They had increased Koperasi Tentera's capability to the level equivalent to the industry benchmark indicating that it was ready to pursue its growth opportunities as a co-operative bank. The core banking system and the digital platforms could simplify process and make it easier for the members to transact and do business with Koperasi Tentera. The ICT application also could allow Koperasi Tentera to develop new products and services, both traditional and digital, thus this could ease the co-operative to expand beyond its existing member-only market to penetrate new markets in the future.

4.2 Service Delivery Channels

Customer service remained at the heart of Koperasi Tentera's focus. The co-operative had adopted creative marketing strategies to introduce its products and bring its services close to its members through worksite marketing, promotions at mobile counters and the use of text messaging service.

Koperasi Tentera's branches had been the frontiers of the co-operative to reach out to its members in providing better services. The co-operative had performed image rebranding by upgrading its facilities to provide refreshing atmosphere and pleasant environment for the comfortable of its members who had visited the branches. At the same time, Koperasi Tentera had also set up new branches to expand its geographical reach.

In 2013, Koperasi Tentera had a total of 19 branches to serve its members. In 2014, the co-operative set up three new branches making it had a total of 22 branches. In 2015, the co-operative set up another three more branches; one of them was a new branch while the remaining two branches were meant to relocate the existing branches to a more strategic place. As such Koperasi Tentera had a total of 25 branches including the two branches which would be closed upon relocation. In the following year,

there was no opening of new branch, so the co-operative had a total of 23 branches in 2016. In 2017, Koperasi Tentera set up one new branch and rolled out its call centre at Wangsa Maju making it had a total of 24 branches. Hence, Koperasi Tentera's members could easily access the services provided by the co-operative from the so many branches located nationwide across Malaysia. Besides the physical branches, with the rolled out of a call centre in 2017 and the introduction of internet banking and mobile banking (digital platforms) in 2018, Koperasi Tentera had provided diverse customer service channels to let its members have the different ways of how, when and where they would want to transact and do business with the co-operative.

4.3 Human Capital Developments

Human capital used to be the most important asset for a business entity because having employees with the required skills to manage the organisation had been the key to success. In line with the aim to become the most preferred co-operative bank, it was essential for Koperasi Tentera to have employees with the required skills to manage the co-operative.

A number of human capital development initiatives had been taken by Koperasi Tentera. In 2014, the co-operative had managed to recruit a group of experienced individuals from the banking industry to helm the important positions of chief operation officer (COO), head of customer banking, head of information system and head of internal audit unit. Other initiatives taken for human capital development were such as providing training programmes to newly hired fresh graduates and existing employees to groom them to become high performing workforces, and adopting succession planning to ensure the availability of talents at the co-operative to run the business in an uninterrupted manner.

4.4 Corporate Governance

Koperasi Tentera recognised the importance of good corporate governance, so the co-operative was committed to improve its governance system. In 2014, Koperasi Tentera had added four committees, namely audit committee, risk committee, nomination committee and remuneration committee, at the board level (as required by law) and their terms of reference were spelt out clearly to ensure good corporate governance.

Koperasi Tentera had set up risk management and compliance, internal audit, finance and treasury divisions. The co-operative had successfully developed compliance policy in providing guidelines to the employees in carrying out their daily duties to promote responsible corporate behaviour. Other policies such as capital management policy, credit management policy, Syariah compliance policy and connected party policy were also being put in place to ensure good corporate governance.

4.5 Risk Management

Koperasi Tentera believed that risk management policy could enhance its competency in managing risks, improving operational efficiencies and facilitating continual growth in a responsible manner. In line with the changes to the financial services industry landscape in recent years, Koperasi Tentera had performed internal reviews to ensure that the scope of its risk management policy was sufficient in meeting the current needs. Meanwhile, the risk registers containing risk assessment, risk control and risk mitigation plan on risks identified were being updated periodically.

Koperasi Tentera had also developed a business continuity plan to ensure the recovery of its critical business operation as soon as possible in time of emergency or disaster. With this plan in place, the survival and continuity of Koperasi Tentera's services could be ensured so that financial or reputational loss could be minimised.

5. FINANCIAL REPORTING STANDARD AND FINANCIAL PERFORMANCE OF KOPERASI TENTERA (2013-2017)

Malaysian Financial Reporting Standard (MFRS) had been the standard recommended by the Malaysian Accounting Standard Board (MASB) for the financial institutions in Malaysia to prepare their financial reports. In compliance with MFRS, Koperasi Tentera had started to use accrual concept in its financial reporting starting 2014. Later, Koperasi Tentera had switched to follow MFRS in preparing its annual reports starting from the financial year of 2016. The change was necessary in the course of Koperasi Tentera's transformation to become a co-operative bank so that the use of a standardized financial reporting system, as adopted by the financial institutions in Malaysia and worldwide, would enable the comparison of the financial performances of Koperasi Tentera relative to other financial institutions.

Koperasi Tentera's compliance with MFRS was a good move as it could improve the internal control, corporate governance, risk management and transparency of the co-operative. For example, in compliance with MFRS, the provision for impairment of Koperasi Tentera's financing had changed and become bigger. As the increase in non-performing loan (NPL) allocation would adversely affect Koperasi Tentera's financing income, the co-operative had to become more vigilant in its financing activities by following more stringent guidelines (i.e. credit risk management policy) in disbursing loans to the borrowers in the future to keep the NPL allocation amount low.

Consequent to the adoption of MFRS by Koperasi Tentera, the co-operative had re-stated its earlier financial reporting to be in line with the strict standards. Refer to Table-1 for the 5-year financial highlights of Koperasi Tentera from 2013 to 2017.

Table 1: Five-Year Financial Highlights of Koperasi Tentera (in RM million)

	2013	2014	2015	2016	2017
Current assets	562	316	381	457	517
Current liabilities	638	952	812	738	572
Equity	1642	1832	1968	2158	2301
External borrowings	452	662	520	477	285
Investment in non-movable assets	7	6.8	3.7	5	5
Members' fund	1325	1453	1558	1705	1803
Non-performing loans	n.a.	n.a.	25.8	51.5	67.6
Profit before tax and zakat	166	165	184	172	205
Total advances	2388	2248	2136	2339	2327
Total assets	2616	2909	2829	3009	2970

Sources: Annual Reports of Koperasi Tentera for Years 2013, 2014, 2015, 2016 & 2017

6. CLOSING PARAGRAPH

The chairman of Koperasi Tentera, Datuk Zulkiflee, was about to leave Menara Ilham, the reporters quizzed him again on the possible reasons that had delayed the co-operative's approval to become a bank. He said, "When you talk about becoming a bank, the question in the regulators' mind would be, is Koperasi Tentera fully prepared to become one?" He explained that it was absolutely natural for the two regulators, Malaysia Co-operative Societies Commission and Bank Negara Malaysia, to voice their concerns on whether Koperasi Tentera would live to become a successful bank in the market which had been flushed with so many commercial local and foreign banks alongside with two co-operative banks. "We embrace the regulators' concern," he added.

Exhibit 1: FLAME-T Rating System – Criteria and Benchmarks

	1 Very Satisfied	2 Satisfied	3 Moderate	4 Dissatisfied	5 Very Dissatisfied
Financial structure (F)					
Total advances / Total assets (%)	> 70	50-69	30-49	10-29	< 9
Investment in non-movable assets / Members' fund (%)	< 10	11-19	20-50	51-70	> 71
External borrowings / Members' fund (%)	< 5	6-20	21-40	41-60	> 61
Equity / Total assets (%)	> 15	11-14	9-10	8-9	< 7
Liquidity (L)					
Current assets : Current liabilities	> 2:1	2:1	1:1	< 1:1	< 1:1
Asset (A)					
Non-performing loans / Total advances (%)	< 2	3-4	5-6	7-8	> 8
Management (M)					
12 criteria (qualitative measures) ¹					
Earning (E)					
Profit before taxation and zakat / Total assets (%)	> 2	1-1.9	0.5-0.9	0-0.4	< 0
Profit before taxation and zakat / Members' fund (%)	> 3	2-2.9	1-1.9	0-0.9	< 0
Information technology (T)					
7 criteria (qualitative measures) ²					

Notes:

1. The 12 criteria (qualitative measures) in management (M) component are:
 - i) whether the co-operative achieves satisfactory rating for each component of F, L, A, E & T
 - ii) whether the co-operative complies with internal policies and the relevant laws of co-operatives
 - iii) whether the co-operative effectively supervises its subsidiaries, branches, departments and units
 - iv) whether the co-operative complies with the suggestions of external auditor and the commission
 - v) whether the co-operative pays allowances, honorariums and other benefits, salaries and bonuses in line with its financial capability
 - vi) whether the co-operative achieves its objectives and gives priority to its members' interests
 - vii) whether the co-operative ensures that its board members are committed and responsible
 - viii) whether the co-operative has strategic plan with measureable achievements
 - ix) whether the co-operative ensures that its board members are prudent in carrying out their duties
 - x) whether the co-operative ensures that its internal audit committee functions effectively
 - xi) whether the co-operative puts in place and complies with the policies, procedures and guidelines
 - xii) whether the co-operative ensures that its accounting records are prepared in an orderly manner and up-to-date
2. The 7 criteria (qualitative measures) in information technology (T) component are:
 - i) whether the co-operative has a steady and secured information technology system
 - ii) whether the co-operative has any problems on data integrity and information reliability with its information technology system
 - iii) whether the co-operative has an effective risk management plan for its information technology system
 - iv) whether the co-operative has clear strategy and well-developed plan for its information technology system
 - v) whether the co-operative has a comprehensive and dynamic information technology system that can also connect to external system
 - vi) whether the co-operative could identify the weaknesses of its information technology system as soon as possible and take appropriate actions to relsolve the problems swiftly
 - vii) whether the co-operative monitors the service providers of its information technology system in terms of their financial position and technical ability

Exhibit 2: FLAME-T Rating System – Components and Weights

Component		Weight (%)
Financial structure	F	20
Liquidity	L	15
Asset	A	15
Management	M	30
Earning	E	15
Information technology	T	5

Exhibit 3: FLAME-T Rating System – Deriving Composite Rating

Component		Rating	Weight	R x W
Financial structure	F	R-F	0.20	RW-F
Liquidity	L	R-L	0.15	RW-L
Asset	A	R-A	0.15	RW-A
Management	M	R-M	0.30	RW-M
Earning	E	R-E	0.15	RW-E
Information technology	T	R-T	0.05	RW-T
Composite rating =				ΣRW

Exhibit 4: FLAME-T Rating System – Interpreting Composite Rating

Scale	Satisfactory Level	Safety and Soundness
1	Very satisfied	Safe and sound
2	Satisfied	Safe and sound
3	Moderate	Unsatisfactory
4	Dissatisfied	Unsatisfactory
5	Very dissatisfied	Unsatisfactory

Note:

The contents of exhibits 1, 2, 3 and 4 were compiled by the authors from the information contained in Sistem Penarafan Dalaman Koperasi – FLAME-T, an unpublished reference material, prepared by Jabatan Pembangunan Koperasi Malaysia in 2006.

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Leadership Communication Practices of a Successful Female Fashion Icon: Belle Al-Yahya from Bella Ammara Sdn. Bhd

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Teaching Case Synopsis

The growing interest and the rise of modest fashion have redesigned the fashion trend. Muslim designers and social media influencers have decided to fill the gaps that they have spotted in the market, using their platform to gain influence and set up online stores. Sharifah Nabilla Al-Yahya Syed Sheh, the founder of Bella Ammara Sdn. Bhd. has the ability to develop and run Bella Ammara brand and has become a well-established brand among Muslim fashion fans in Malaysia. Belle was not just into design and fashion; she has certainly positioned herself as a role model for women across the nation who are pursuing leadership roles in entrepreneurship. As a fashion icon and also a lady boss, she is highly admired by her fans, followers and her subordinates, thanks to her ability to communicate respectfully, in a way that people could relate to, and understand. Hence, the case study provides a platform to discuss the female communication leadership concepts and to identify the leadership characteristics and styles. Belle exhibited a visionary and affiliative style of leadership, while expressing a high level of credibility emotional intelligence. She is hardworking and at the same time humble towards her employees. This case study is to indicate the good and best practices in leadership communication. This case study might be of relevance for women which are currently addressing leadership challenges and also for young females who aim to become entrepreneurs.

Keywords: Female entrepreneur, Leadership communication, Belle Al-Yahya, Bella Ammara

1. INTRODUCTION

Only operating for eight years, at the age of 34, Belle Al-Yahya, the founder of Bella Ammara Sdn Bhd. already has her own business empire with seven boutiques across the country. A great achievement and inspiring to anyone just starting a business.

Amidst the presence of more established local competitors like Naelofar Hijab, dUCk Scarves and Sugarscarf in the Malaysian market, Bella Ammara has done fairly well. Bella Ammara has become one of the leading brand for the hijab industry in Malaysia with the aim of bringing the latest fashion trends to the doorstep. Bella Ammara uniqueness is due to providing a variety of online products under one roof. It currently has customers not only from Malaysia but from Singapore, Brunei and Indonesia. The strength of the fashion brand's goods is due to the personal touch of Belle who designed the hijabs. She incorporated architectural experience into every design of robes and brackets to create something new and fresh. As a result, the combination of these ideas had make each design look elegant and stylish.

The focus of the case study was in Belle's leadership communication. This was because she had to manage the business since she became the founder of Bella Ammara. Graduated in architecture, it was her passion in fashion that inspired her to venture into the fashion industry. A woman with exceptional communication skills and determination, Belle knew how to connect with people. As a fashion icon and also a lady boss, she was highly admired by her fans, followers and her subordinates, thanks to her ability to communicate respectfully, in a way that people could relate to, and understand.

2. BACKGROUND OF THE CASE ORGANIZATION



Figure 1: Bella Ammara Shah Alam

BELLA stands for beautiful and AMMARA means lady with a strong iman. Thus, the brand actually says “Beautiful lady with a strong iman”. Bella Ammara was a fashion boutique that designed muslimah clothes. The brand not only designed *telekung*s and *jubahs*, but it also created blouses, pants and accessories.

It all started in 2012 right after graduating in architecture. In a bid to get married, she and her then-husband, Muhammad Khalif Samsudin, known as Carl Samsudin, began to earn extra income to finance their marriage. Carl borrowed RM1,000 from her mother to start a business because they need capital. From that RM1,000, they made nine colored *telekung* (female prayer robes) to sell. Within a short time of selling *telekung* via Facebook and word of mouth, they made a 100% profit. Surprisingly, they spent their money without making bank loans.

They reinvested the earnings and repeated the process. In just five months, they manage to made their first RM50,000. Today, there are seven Bella Ammara Boutiques and many more resellers and stockists. Bella Ammara was found on 26th July 2012 and runs an online business. A year later, on 1st July 2013, Bella Ammara's first boutique opened in Setapak. The second boutique opened in Shah Alam on 29th August 2014, followed by the third boutique in Bangi on 28th March 2015. The fourth boutique was launched on 30th May 2015 in Sungai Petani and the fifth in Johor Bahru on 28th August 2015. Their sixth in Kuantan was launched on 25th December 2015. Seventh and latest boutique is in Kuala Lumpur on 30th September 2017.

In view of the increasing demand, the mere intention of collecting money for marriage turned into a huge dream of opening a Muslim business empire. With the trending of the Muslim clothing brand at the time, Belle felt it was important to create her own uniqueness through the design of the jubah. From there, they both did not look back and they continued to realize their dream to build a business empire and fly higher when Bella Ammara empire was better known throughout Malaysia.

Bella Ammara Sdn. Bhd was the leading shopping destination for modern Muslimah fashion in Malaysia. Bella Ammara's concept is to create garments that take into account simplicity, style and comfort. It desired by Muslim women who find themselves playing multiple roles in today's society.

Bella Ammara's vision was to emphasize all Muslims the importance of the prayers. The fact that no matter what actions one performs in their life. The most important aspect is one's relationship to God, Allah. The one's faith (*imaan*), God-consciousness (*taqwa*), sincerity (*ikhlas*) and worship of God (*ibaadah*). This relationship with Allah is demonstrating and put into practice. It is as well as improved and increased, by the prayer. Therefore, if the prayers are sound and proper, the rest of the deeds will be sound and proper; and if the prayers are not sound and proper, then the rest of the deeds will not be sound and proper.

Among Bella Ammara's main achievements to date are BellaLofa, abaya BellaLiyana, Daisy Dwi Tone Jubah, B'Belle Luxe Instant Shawl and Haute Bella No.1. Helped by social media, Belle focused on marketing to get Bella Ammara design promoted. There are close to 890,000 followers on the company's Instagram account and 540,000 followers on their Facebook Page (as on 1 August 2020) and the number kept increasing each day.

Early Life

Belle Al-Yahya, the second child from six siblings, was born in 20 December 1986. She was famous for being a fashion designer who founded the Muslimah-inspired fashion label, Bella Ammara. She was synonymous with women of high moral character and attractive personality.

This figure was often seen on her Instagram, Facebook and official website wearing Bella Ammara fashion brands. She was beautiful with a smooth and fair-skinned, gentle-eyed, and with *tudung* exactly like Arab women. No wonder as she has mixed Arabian blood thanks to her grandmother.

She attended Sekolah Kebangsaan Taman Keramat and Sekolah Menengah Seri Keramat for her secondary school. To be honest, Belle had pursued an education in architecture at Universiti Teknologi Malaysia.

She continued to expand her business because she likes being her own boss. That is why people dubbed her as 'Lady Boss'. Do not be too alarmed by the nickname. Based on her employees' feedback, Belle was as humble a person can be. She was not bossy at all.

The sweet girl admitted that she had being working so hard to be what she is today. Effortless efforts were made without knowing the meaning of despair to be the secret of her success. All the hardships were shared with her husband who has been her greatest pillar for so long. In fact, they had experienced running out of money and not wanting to bother their family, she and her husband just ate instant noodles.

Challenges lie ahead

Recognizing her husband as the backbone to this day, Belle was grateful that her husband is committed to seeing the business and her family grow together. Although it is said to be fast to the top, she admitted that her business challenge remains. Disappointment and hopelessness inevitably come to an end, but they were all set aside because it can ruin their hopes of seeing their business succeed.

"We came without any knowledge, but Carl was smart in driving the business through the knowledge he had learned. For him only effort, prayer and devotion to God can help us grow our business," Belle said.

What makes their business sustainable today and was one of the most beloved brands of women is a strong belief in the power of God. The strengthening of internal energy was very important as it was able to overcome all challenges easily. Due to her industriousness, she proved once again by creating two other labels Sugarbelle Cosmetics and Naarabelle Spa, featuring modern and stylish cosmetics. Sugarbelle was one of Malaysia's earliest cosmetic brands. Besides having fans and customers in Malaysia, Sugarbelle was also well-known in other countries such as Singapore, Brunei and Indonesia.

"The world of design seems to be in my heart. If I used to do the design of the building, but now I try to express my passion for fashion", she said.

Today, she employed more than 60 staff in the management and retail sector. She enjoys more being an employer and an entrepreneur. Her thinking pattern has changed and she felt more energetic. Her work drew her great self-satisfaction as more and more customers were recognizing and admiring her work. For any individual be it a man or a woman, the most desired goal is to have his/her own identity and freedom. Belle felt more confident and accomplished being a woman leader in entrepreneurship. If a woman has complete confidence in her work and has the right knowledge, she would definitely find identity and freedom.

"Many women lack communication strategies. Even big names still respect communication. It's all about communication and networking power," added Belle. Belle believed that her strength lies in daring to do something different and taking risks. She also believed in following the trend.

She said that the Gen X way of doing things and keeping the same job for life is not applicable anymore. That was one of the reasons why she decided to start a business and the best way was to keep up with the trends. More people are shopping online now, if she stayed conventional, the company won't progress much.

While women have clearly made significant gains, the challenges faced by women leaders must acknowledge strategies. Women still typically have to work harder and perform better than men in order to be viewed as equally competent.

"I see woman who have left an impact on many lives. An empowered woman is someone who knows her strengths and isn't afraid to embrace them. A woman, who has taken a stand for herself, aware of her rights, is confident to face the world and is not scared of taking risks and making strong decisions. An empowered woman will empower other women and show them the right path." Belle was indeed a great leader and an inspiration.

"To be empowered means to be in control of your life, aware of your capabilities, and ready to take on even your biggest dreams".

Her female charisma

Although she has already fully focused on the business, her artistic and creative soul is still thriving. The source of her inspiration came from her customers, employees and even her husband and children to build a stable organization and sustained it. She also learnt how to communicate with people and started building good relationships with regular customers and suppliers. She met many other great businesswomen and made friendship with them.

I work primarily with female business owners who may or may not do their work online," she explains. "I also work with nonprofit organizations, so we dig deeper into who they're trying to reach and who their customers are."

She said that gender shouldn't be a factor in whether or not a person can be a great leader, a person's leadership abilities should depend on their individual strengths and personality traits.

"My vision for women in business is that follow your passion,". "I want women to think of Bella Ammara first whenever they want to purchase hijabs."

Being the founder and director herself, Belle believed that it is vital for a women leader to know how to manage people (staffs, vendors, clients, associates, investors). Taking right, ethical and kind human approach in every aspect of business and personal life. Also, choosing the right path between right and wrong and choosing the best path between two right paths. Every day, she reminded herself that leadership was not about herself. It was about the great people who are working with her.

Blessed with two cute children, Ammara and Umar, Belle was also a wife and a mother. She always believed that women are always better when they use their heart and mind at optimum level. Only a woman possesses a heart to take good care of their family, house and people. They have strong steady heart. When that strong heart is tuned and balanced with strategic mind, a woman becomes the strongest human being.

She believed that for a woman, the work and family goes side by side and that is why she felt herself equally responsible in both and was more comfortable running her business nearer to her home. All these years, she has had tremendous courage and strength for balancing her personal and professional life in an appreciative way.

"Never project yourself to be different because you are a woman. Always focus on what it is that you are doing and if you are better than a man- then you just are. If other people have biases, it's best to ignore those biases and focus on what it is you are doing in order to be the best.

Based on one of her employees, "Belle was a great boss, I really admired her because she was able to balance personal and professional leadership skills. We feel at ease to approach her with a personal request, or a sensitive question. I also found Belle more proactive in becoming mentors, because we have such an open and communicative relationship that the interaction was easy for us.

For most women, the language of conversation is primarily a language of rapport, which is a way of establishing connections and negotiating relationships.

"Boss always asks how we are doing as she was very personable. She always listened to her employees. She has high energy all the time, really passionate about what she does."

3. CONCLUSION

To become a female fashion icon, she should have vision about something that she wanted to do in their life and business. Belle has certainly foresight the intention to build her own brand and willing to take risk. She admitted that she worked very hard to be what she is now. She has gone through hardship together with her husband who has been the backbone for so long. As an inspiration and idol for many of us, we surely can learn a few things on business and leadership communication from her.

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Let's go Perhentian: Overcoming competition to acquire potential customers

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Teaching Case Synopsis

Mieha Holidays Sdn Bhd is a new company focusing on travel and tourism products and service offerings. It is located in Kuala Besut, Terengganu. As competition in the tourism and hospitality industry was getting intense, it was critical to identify the best suitable marketing strategy to acquire potential customers. Data was collected via in depth interview with the Managing Director of the company, spanning on a few interview sessions in December until May 2020 in addition to researcher's personal observations. This case study offers in-depth qualitative information of a common travel agency operation. It focused on marketing measures that travel agency entrepreneurs apply in their daily operations. Specifically, it explores the service marketing issues and suggest alternatives to overcome challenges in acquiring potential customers amid the high competition and to understand the importance of theory (knowledge) and practice and in ensuring smooth service and problem solving in daily operation of a travel agency. The process of documenting and exemplifying the strategies could be a source of reference by others to ensure that the alternatives can be implemented in the tourism and hospitality industry. Hence, students can apply their knowledge of how to manage a travel agency business in order to sustain the business in the long run. The study will help the management of Perhentian Mieha Holiday to strategize their business strategies and marketing efforts towards acquiring potential customers.

Keywords: Competition, marketing strategy, potential customers, travel agency operation

1. PROLOGUE

It is 12 noon, on a sunny Thursday, 19 of December 2019; and Puan Mieha Ishak, the Managing Director of Perhentian Mieha Holidays; had been glaring at her computer since morning. She looked anxious and stressed out. Once in a while, she bit her lips and sighed. The spreadsheet on her desktop computer was displaying a table showing the sales revenue and total number of customers who booked their travel packages to Perhentian Islands for the month of July 2019 onwards until the current date. Mieha was murmuring to herself ..”Hok aloh! *Separuh tahung doh dan pelanggan koho kurang. Jumlah semua pelanggan utk 6 bulang pertama sbenonya sama dengang jumlah pelanggan kita tahun lepas.*” (Oh no! It is already half way through the year and our customers were declining. The total number of customers for the first six months of 2019 was only equivalent to the amount of four months customers we received last year).

Suddenly, there was a knock and a hunky, middle-aged man opened the door. He immediately saw Mieha frowning and this came out abruptly from him. “*Hmm.....kita rasa musykil dan rasa macam ada hok dok kena.*” (“Hmmm....you look kind of curious, which tells me things were most definitely not OK”, uttered Mael, one of her senior right-hand man. Mieha then replied, “*Kalu tengok ke data ni, kena buat sesuatu. Saya rasa jumlah tour ajen yg koho tamboh memberi kesang kpd jualang dalang tempoh beberapa bulang lepas.*”

Ada jugak pelanggan yg cerewet dan nak kite layan dia mcm VIP walaupun harga pakej hok kita tawor paling murah banding pakej-pakej lain. Kita kena bicang cepat dan rangka strategi cara untuk libatkan org lain” (Have a look at these figures, something quick need to be done. I think the increase in the number of independent tour agents around here had affected our sales in the past few months. Some customers were also too fussy and expect to be treated like VVIPs although the package price that we offered to them were the cheapest amongst other packages. We really need to sit down as soon as possible and device strategies to get people to come in).

2. BACKGROUND OF THE COMPANY

Puan Noor Hamiha Ishak, or also known as Mieha Ishak; is the owner and Managing Director of Mieha Holidays Sdn Bhd, which is also known as Perhentian Mieha Holidays. She has established the travel agency for nearly five years due to her passion for the travel industry and being a local Terengganu herself, she knew she can contribute something towards Terengganu’s tourism industry. Mieha Holidays Sdn Bhd is a Bumiputera based-company focusing on travel and tourism products and service offerings. It is located in the East Coast of Peninsular Malaysia, specifically in Terengganu, with its main head office in the shop-lot houses of Kuala Besut jetty.

The main product and service offerings cater to both local and international tourists who want to travel to the pristine Perhentian Islands and nearby surrounding islands, with a total of ten staff running the operation. Perhentian Mieha Holidays has had an aim to be the forefront in the travel agency business in the area and hopes to achieve this aim by 2020. The below information list the company profile of Perhentian Mieha Holidays Sdn. Bhd, with Figure 1 portraying the company’s logo and Figure 2 highlighting Perhentian Mieha Holiday’s organisational chart.

Company Profile

Nama Syarikat	: MIEHA HOLIDAYS SDN. BHD. (1140407 – U)
Managing Director	: Noor Hamiha Binti Ishak
	: Zawawi Bin Mansor
Company No.	: 1140407-U
Date Established	: 15 th April 2015
Registered Address	: No B6, Plaza Mara, Pekan Kuala Besut, 22300 Kuala Besut, Terengganu.
Modal Dibenarkan	: RM 200,000.00
Bank’s Name	: Maybank Berhad
Bank Address	: Cawangan Jerteh, Besut, Terengganu
Company’s Contact No.	: 09-6902230/09-6902232
Major service	: Travel Agency
Products and Services	: Tour packages to Perhentian Islands, scuba diving and boat transfers



Figure 1: Perhentian Mieha Holiday's Company Logo

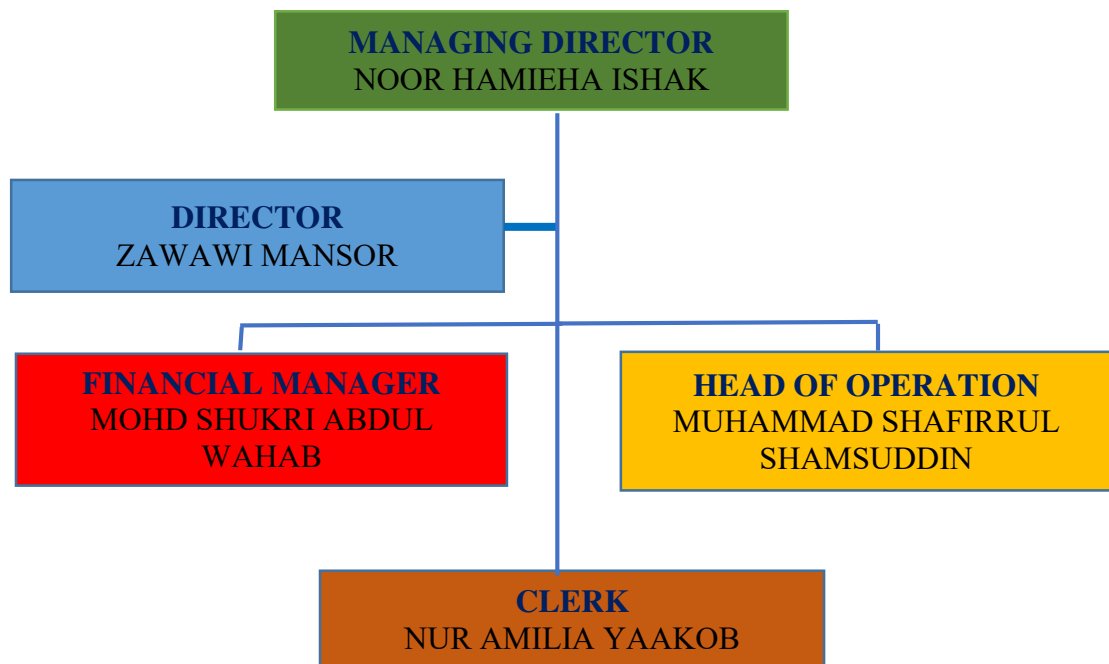


Figure 2: Perhentian Mieha Holiday Organisational Chart

Based on the current statistics of tourists taking up their travel packages, things were not looking so good. Therefore, it was critical that Puan Mieha and her team tried to attract as many potential customers as they could especially when competition was high, especially from other travel agents, and the rise of independent tour agents had made the market even more competitive. Apart from that, being a young boss, Puan Mieha needed to acquire more knowledge and skills to run the company to compete in this increasingly challenging market. It is critical for Mieha to start to think about market segmentation and develop strategies to target potential market segments in order for her their company to stay competitive and relevant in the travel agency business.

3. ISSUES AND CHALLENGES IN THE CURRENT BUSINESS ENVIRONMENT

The East coast of Peninsular Malaysia is not only famous for its food and cultural attractions, but also for its long stretch of coastal attractions consisting of beautiful islands and pristine beaches. Among some of the most famous islands are Perhentian Island, Kapas Island, Redang Island and many more. These islands have attracted an abundance of tourists who look forward to savouring the sun, sea and sand these islands have to offer. One of the most famous islands is Perhentian Island. Perhentian Island consists of two islands – Perhentian Besar and Perhentian Kecil. Perhentian Kecil is mainly inhabited by the locals and equipped with a community centre, a mosque, a primary and secondary school, a police station, and a shop houses.

Perhentian Besar is mainly developed with major resorts and other types of tourist accommodation. People who work in Perhentian Besar commute from Perhentian Kecil daily. Perhentian Island is famous for honeymooners, snorkelling, scuba diving and is regarded as one of the most beautiful islands and popular places to visit in Malaysia. Figure 3 forwards the location of Perhentian Islands in the Peninsular Malaysia map. There was much less settlement in Perhentian Besar as compared to Perhentian Kecil. A lot of publicity was made to attract more tourists to visit the island and tourists come from all over the world to explore these exquisite islands. Domestic tourists are also the main contributing income generators for these islands, especially during the school holidays and public holidays.

Getting over to the island was not a big issue as it is accessible via ground transport and air transport with a short drive by the car from the airport to reach the jetty to get to Perhentian. Perhentian only operates around eight months in a year (as any other islands in the East coast of Peninsular Malaysia) and was closed during the monsoon seasons (November until February) every year. Although Perhentian received a lot of visitors during its opening season, there were many accommodation suppliers and travel agencies competing to acquire customers.



Figure 3: Location of Perhentian Islands

(source: Downloaded from <https://barattioman.com/about-barat-perhentian/>)

Among the services offered by Perhentian Mieha Holidays Sdn Bhd were tour packages to the Perhentian Islands consisting of normal and budget holiday packages, snorkeling trips around Perhentian and its surroundings, room booking packages, student packages, family day packages, group packages as well as speedboat transfers and boat services from Kuala Besut jetty to Perhentian. They also offer day trip trial diving (discovery scuba diving) in addition to student trip, camping, family trip, 4 days 3 nights, 3 days 2 nights and 2 days 1 night trips. The range of accommodation offered by Mieha Holidays covered a variety of tiers to suit every budget, with budget, economy, superior, high class, deluxe, dorm, and VIP rooms. Private speedboats can be arranged for those needing a more private tour.

Boat transfers or snorkeling long trips to nearby islands, eg: Redang or Lang Tengah can also be arranged by them. Scuba diving course was recently added to their product and service offerings as they are in high demand nowadays. The high level of competition was one of the most difficult challenges that tourism companies face in the tourism and hospitality industry. This is reflected by the increasingly narrow profit margins by travel operators and pressure to provide more and better service, which mostly have led to increasing costs, reduced customer loyalty and consequently a decrease in the occupancy rate. In Malaysia, the travel agents operated in an aggressive competitive environment, thus making it a vulnerable competition among them.

There were around eight travel agent companies in Kuala Besut jetty itself, the same location where Perhentian Mieha Holiday's office was located. There were also a few more travel agencies located at a line of shop lots approaching the Kuala Besut jetty, which signified the vast competition between the tourism suppliers. Most of the travel agents were offering more or less the same tour packages, with the similar price range. They also use more or less the same platform of marketing their products and services, for example: facebook, twitter, Instagram, company websites and blogs. Therefore, the competition was intense as all travel agencies compete to grab the market demand.

On top of that, there were also unreliable independent tour agents who sometimes would approach customers directly and offered packages with unreasonable discounts, without customers knowing the authenticity of the package. These packages were most of the time cheaper than what other established travel agents were offering, however these packages were always problematic with misleading information given, ie: did not have insurance coverage, rooms given were not upon, etc. Therefore, in order to sustain in this challenging and competitive environment, service providers need to differentiate their product offerings.

Perhentian Mieha Holidays had been successful in acquiring new customers in the early settlement of the company, however as time goes on the competition was getting intense, the number of tourist arrivals taking up their packages were also affected. Usually within eight months of operation, Perhentian Mieha Holidays have received around 250 until 400 customers per month, and the numbers increased around forty percent during school holiday seasons and public holidays. In this past year, however, their customers declined to about twenty percent from the yearly total statistic. Their customers mainly consist of domestic travellers which amounted about eighty percent of total customers, while around twenty percent were international markets, mainly from Western countries. These domestic travellers came from various segments of travellers with the mass public contributed the most customers. Apart from that, university students also frequently book their packages as

Perhentian Mieha Holiday offered reasonably priced packages which were suited to students' budget and requirements.

One of the products on offer was the team building package, which mainly attracted companies and government bodies. Perhentian Mieha Holidays was also quite popular amongst repeat customers as usually they will offer loyalty discounts to these customers. As domestic tourism was on the rise, the number of customers taking up the travel packages to Pulau Perhentian was also amounting. However, Puan Mieha realised that competition was getting tougher as there were many rivals booming in recent months consisting of new travel agent establishments and independent tour agents. Therefore, the company needs to find strategic ways to promote their existing packages and perhaps need to form alliances with other companies and introduce new and attractive packages to win over potential customers.

4. EPILOQUE

It was already 10.00 pm, on the same day; and it was supposed to be Puan Mieha's bedtime, as she needed to wake up early to arrange a confirmed 3 days, 2 nights booking by a customer. However, the issue of attracting more customers to their business and considering competition was getting higher by day, and kept lingering in her mind. Puan Mieha was thinking hard about how to go about with the problems. How to get more customers? How to compete with other competitors around her? How to convey a good promotional strategy so that existing customers will repeat bookings with their company? After hours and hours of thinking, Puan Mieha then realized that the arising issues need to be solved carefully and strategically. "Will my dreams to put Perhentian Mieha Holidays as the fore-front establishment in the travel agency business in Kuala Besut area be realised?," she murmured.

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Empowering student intercultural competence for a global world: A case of PPA CAS, UUM

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Teaching Case Synopsis

Development of intercultural competence among students is viewed as a critical educational outcome for higher education. For many higher learning institutions, this outcome is often facilitated by encouraging students to engage with cultural others in the campus. This case highlights the context of RAKAN CAS - a student platform established by the PPA CAS, UUM to help empower students with their intercultural competence. Specifically, this case addresses the issues and challenges on student intercultural competence as observed by Dr. Mohamad Farhan who served as an advisor to the RAKAN CAS. The case provides an opportunity for readers to study intercultural competence and the issues that may impede its development within the context of higher education. More importantly, it aims to address roles that can be played by important stakeholders like the PPA CAS on facilitating development of intercultural competence among students. Essentially, the purpose of the case is to bring forth discussion of intercultural competence as an important concept within the communication field, particularly intercultural communication.

Keywords: intercultural competence, language proficiency, networking and training.

1. INTRODUCTION

Dr. Mohamad Farhan Mohamad Mohsin (thereafter as Dr. Farhan) was a Deputy Dean at the Student Development and Alumni Office, College of Arts & Sciences, UUM (PPA CAS). In keeping abreast with the vision of PPA CAS to produce global students, Dr. Farhan and the PPA CAS has been proactive in providing students with the opportunities to engage with cultural others. One of the attempts made was establishing a platform for students called the “RAKAN CAS”. In addition to his position as a Deputy Dean, Dr. Farhan also took the role of an advisor to the RAKAN CAS. Given such appointment, he positioned RAKAN CAS as an important supporting unit for the PPA CAS, particularly in assisting the office with the inward mobility students. Much of RAKAN CAS work involved assisting mobility students (viewed as foreign buddies to the RAKAN CAS) with their academic adjustment and wellbeing in the campus.

Since the RAKAN CAS was given the opportunities to engage with cultural others in the campus, there was an assumption that students could be empowered to develop intercultural competence based on their own experiences. In other words, they would be able to “play it by ear” when dealing with others and eventually learned about effective/appropriate interaction on their own. Unfortunately, Dr. Farhan saw issues on empowering students for their competency in terms of language proficiency, global networking and intercultural training. These issues presented challenges for him to think of the strategies needed to equip students with the necessary attitude, knowledge and skills to become competent.

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2. BACKGROUND OF THE CASE ORGANISATION/COMPANY

The Student Development and Alumni Office (PPA), College of Arts & Sciences, UUM was led by Assoc. Prof. Dr. Bahtiar Mohamad as the Dean and Dr. Mohammad Farhan Mohamad Mohsin as the Deputy Dean. The office was supported by a Senior Assistant Registrar, followed by an Administrative officer, two coordinators (practicum and mobility) and seven administrative staffs (see figure 1)



Figure 1: PPA CAS Organizational Chart

The main objective of the PPA CAS was to develop global student that comprises of mental, physical and spiritual aspects via structured curriculum and non-curriculum programs and activities. In accordance to such objective, the PPA UUMCAS provided various type of services to students of UUM CAS such as practicum program, mobility program, club and association consultation, student academic enhancement program and alumni program. Student Development & Alumni Office (PPA) also envisioned to strive for offering increased level of assistance in enhancing the employability skills and overall development of the UUMCAS students. They endeavored to rigorously assess and cater to the needs of students differing in their capacities and intelligence, and also ambitions. Students' outward and inward mobility have been the point of attention over a period of time for PPA CAS and they expected to take it at higher level with increased possibilities and new associations with the forward looking institutions. It was very clear that the PPACAS played important roles in ensuring development of a global student.

Driven by the need to empower students, the RAKAN CAS was established in 2014 with the intention to assist the PPA CAS in terms of wealth creation and in-coming mobility programs by the university. The RAKAN CAS had more than 75 members who were ethnically diverse and came from various academic programs under the College of Arts & Sciences, UUM. Most students joined the RAKAN CAS in their second semester. By being a RAKAN CAS, students did not only work as a volunteer to assist academic adjustment and wellbeing of the incoming foreign mobility students (viewed as *foreign buddies* to the RAKAN CAS). The students were also requested by the PPA CAS to host several activities with the latter. The members of RAKAN CAS had been assisting more than 200 mobility students with their medical checkup, insurance placement, matric card and course registration at academic schools. Most mobility students came from partner universities in Indonesia such as Telkom

University (Indonesia), Universitas Computer Indonesia, Universitas Islam Indonesia, Universitas Kuningan, Universitas Pasundan, Binus University, and University Syiah Kuala. Few others came from partner institutions in Japan, Germany and China. Assistance of RAKAN CAS to their foreign buddies most often occurred within one to three months to help the latter feel at ease throughout their mobility terms in the campus.

Since the RAKAN CAS was considered as student volunteers to PPA CAS, Dr Farhan saw the need to establish it as a formal student association. This would help RAKAN CAS operate more effectively. Following such consideration, a new student association was established by the name of “Student Innovation Association” (INOVA) in 2019. Despite this new formal establishment, members still identified themselves as RAKAN CAS. Given the new established association, the PPA CAS offered RAKAN CAS with more opportunities to host many high impact projects at the international level. The projects, include among others, the ASEAN University Youth Summit 2019 (AUYS 2019), ASEAN Community Engagement Programme (ACEP) 2019 and South East Asia Teacher Evaluation Meeting 2019 (SEAMEO 2019). These projects have successfully attracted more than 100 participants coming from various Southeast Asian countries such as the Philippines, Thailand, Indonesia and Cambodia. Apart from hosting international seminars at home, RAKAN CAS has also organized various activities in neighboring countries. The activities include, among others, joint seminars with Vietnam National University (Vietnam), Suan-Dusit University (Campus Trang, Thailand), Hatyai University (Thailand and Asian Institute of Cambodia (Cambodia); and several CSR (Corporate Social Responsibility) projects in those countries.

Under Dr Farhan’s advisory, the RAKAN CAS (or INOVA) was awarded with the “Best Student Association” in 2019 by the university. The award was granted in recognition of their involvement and outstanding achievements with international programs. Dr. Farhan aspired to continue doing many programs, especially at the international level. He hoped to confer more global exposures for the RAKAN CAS.

3. ISSUES AND CHALLENGES

Given the many international activities organized the RAKAN CAS, Dr. Farhan believed students might have gained some hands-on experiences with various cultures and languages, thus equipping them with intercultural competence. However, empowering students with such skill was not an easy task. Dr. Farhan observed issues in terms of language proficiency, global networking and intercultural training.

Language proficiency

Dr. Farhan observed at the early stage of students’ involvement with the RAKAN CAS, they seemed struggle with English language proficiency. He noticed students could speak with others but most often, they speak broken English. Given that English was used as a lingua franca in students’ interaction with foreigners/foreign buddies, he saw that lack of language proficiency has somehow impacted their self-confidence to communicate. Students tend to avoid or feel apprehensive to engage in conversation with foreigners. In other instances, he observed most of them hardly volunteer to speak in front of a foreign audience.

Dr. Farhan saw his role to help students enhance their language proficiency and self-confidence. Taking his position as a Deputy Dean /Advisor, he encouraged students to step out of their comfort zone. This was achieved by urging the RAKAN CAS to initiate projects with neighbouring countries. He believed such projects would push students to practice their speaking skills. Given his encouragement, the RAKAN CAS had conducted several projects like joint seminars with many universities in Thailand, Indonesia, Vietnam and Cambodia. In such seminars, selected members of RAKAN CAS presented their academic papers in English and shared their thoughts with fellow students from the partnering

universities. Through such projects, RAKAN CAS had the exposures to engage with others and practice their English speaking skills. He observed the projects had somehow inspired participating students to improve their language proficiency and self-confidence. Auspiciously, he noticed some changes amongst the RAKAN CAS over two years of engaging with their international projects. He saw they have more confidence to speak. Apart from organizing joint projects, Dr. Farhan had also assigned several RAKAN CAS member to a short-term outbound mobility program which necessitates participants to spend about two weeks in a foreign university. Through this program, students were required to participate in cultural exchange activities with the host members. This is necessary for helping them to connect with others and eventually build intercultural competence. By doing such initiative, he hoped students would take own efforts to improve their communication and language skills. He discovered there has been slight improvement in the students' confidence to interact. Although the joint projects and short-term mobility programs have somewhat improved students' language proficiency and confidence, he saw such improvement was not sufficient. He wished to see students with greater language proficiency and confidence. Such traits are important for developing their competency and increasing their employability in today's global market.

Global Networking

Although the RAKAN CAS had the opportunity to work with their foreign buddies, unfortunately, Dr. Farhan observed students failed to seize such opportunity for global networking. He noticed many RAKAN CAS seemed to engage with their foreign buddies only within the campus space. The social interaction they had with their foreign buddies ceased when the latter completed their mobility program in the campus. He felt frustrated when the students were oblivious of the advantages they could capture to establish global networking. Students did not see the importance of having good global connections which might be useful for their future careers. Thinking out loud, he rationalized as to why this issue occurred to majority of RAKAN CAS. He thought it might relate to the students' communication (or connecting) skills. He noted students hardly initiate and engage in good conversation not only with their foreign buddies, but also with foreign participants in the many events they have organized.

Dr. Farhan saw the need to impart awareness to the RAKAN CAS (especially those who hold leadership positions in the association) on global networking opportunities. He expressed such opportunities were always available to them in the campus. Students must capture the given opportunities and realized they could initiate global networking within their own local campus. Perhaps, students need to be exposed to ice-breaking and greeting activities as these are important features of conversation which will help them to start communicating with anybody. Dr. Farhan believed students should be taught with the positive attitude of initiating intercultural or interpersonal communication. In this way, intercultural competence could be developed, and global networking among students could occur meaningfully and effectively.

Intercultural training

Dr. Farhan expected that since students were motivated to join RAKAN CAS, they would be able to "play it by ear" when dealing with foreigners and eventually learned about effective and appropriate interaction on their own. Unfortunately, such expectations seemed misleading. Dr. Farhan observed during the hosting of AUYS 2019 (which was held from 25-27 August 2019), some RAKAN CAS were not aware about the importance of language politeness (primarily in English). To illustrate, he noticed the students who worked at the registration desk had ignored saying "please" when asking foreign delegates to follow instructions. He was afraid the foreign delegates might have negative impressions on the students' language courtesy. In other situations, he saw challenges faced by the RAKAN CAS to assist mobility students which could affect their attitudes toward the latter. He reflected one conversation with a RAKAN CAS - Atikah (pseudonym) who had assisted mobility students from China:

- Atikah : *Most of them speak very little English.*
Dr. Farhan : *So how do you interact?*
Atikah : *I have to call my Malaysian Chinese friends to help.*
Dr. Farhan : *If you do not have Malaysian Chinese friends, how do you interact?*
Atikah : *We use hand phones.... their hand phones, not mine. I write in English and then they translate to Chinese (language).*
Dr. Farhan : *Do you remember what you write?*
Atikah : *No...normally I write full sentence... like "what is your name"?*
Dr. Farhan : *They do not understand that?*
Atikah : *No... fortunately, I have a list of their names so I just follow the list.*
Dr. Farhan : *How do you feel? Do you feel not wanting to speak to them anymore?*
Atikah : *At first, I do feel that way but... I have to deal with it. They will use their hand phones... find the words in their dictionary and then translate the words. It was slow because I have to wait for them. They need to type up each word.*
Dr. Farhan : *Do you like helping them?*
Atikah : *If I want to say I like it, not really because it takes time.*

In other situations, he recalled a conversation with Amir (pseudonym) and Syazana (pseudonym) as they shared their experience with foreign buddies from Indonesia:

- Dr. Farhan : *What have you learned from your experience?*
Amir : *I should never make a promise to Indonesian students. There was one time I said to them "nanti saya bawa awak jalan-jalan kampus (I will take you for a campus tour) but sometimes I may forget or I don't really mean it. I just want to be nice. To my surprise, they asked me to keep that promise. So I learned to be more careful not to give them any promise if I can't deliver it.*
Dr. Farhan : *I see. That's what we normally do here. It is "ajak-ajak ayam"... we just wanted to be nice but it could be taken differently by others.*
Syazana : *I see my foreign buddies as not that careful when it comes to how they mingle with others. As Muslims, I am very cautious in terms of touching if I mingle with my male friends. They seemed to have not taken this rule seriously. It is okay for male and female friends to shake hands and touch each other, although they are all Muslims. Over time of assisting many Indonesian students, I see it as normal for them.*

The establishment of RAKAN CAS certainly indicated a positive initiative by the PPA CAS. However, such initiative alone was not sufficient to assist students with their intercultural competence. Dr. Farhan felt merely providing opportunities with an expectation that students will, by default, be equipped with experiences that automatically confer with intercultural competence was misleading. If the university does not play active roles to help students develop positive attitude towards others, it is most likely the students will resort to having negative feelings when dealing with foreigners. Dr. Farhan lamented that cross-cultural understanding and cross cultural learning should be enhanced by the university through a proper training. He added that the PPA CAS has offered continuous soft skills training for students. However, the attention was very much centred on developing student leadership and entrepreneurial skills. There has not been any training or formal communication courses established by the PPA CAS to empower students with the necessary attitude, knowledge and skills for their competencies. Moreover, there was no evaluation taken by the PPA CAS on student skills related to intercultural competence. This is very much needed to help produce global ready students who are well equipped with intercultural competence.

In the light of training, Dr. Farhan believed development of intercultural competence is a process and as such, it takes time for students to be able to develop such skill. It is impossible for students to harness their competency by attending one-time training. As such, he argued the need for students to continuously develop their competency through training on campus. Dr. Farhan planned to organize

several in-house training or workshops on personality development and communication skills. However, such plan has to be adjourned due problems associated with budget allocation. Unfortunately, the PPA CAS has seized its operation in early 2020. Accordingly, he suggested that specific training on intercultural competence can be taken by the Student Affairs Department (HEP) of the university. Such training could be embedded within the existing Organizational Management Course (or known as *Kursus Pengurusan Organisasi*) which is annually organized by the HEP. There are two camps (i.e. training modules) in the KPO which are the leadership camp and management camp. The HEP seemed to focus more on organisational management skills. He saw there should be a slot that highlights communication skills given there is not enough module on such aspect.

Dr. Farhan asserted the need for the university (particularly HEP) to improve students' skills. This could be done by focusing on a specific training module that includes international/intercultural communication, English language skills and cultural understanding. Students could learn about the do's and don'ts that help them deal with cultural others more effectively. Additionally, there could be more courses that help students boost their public speaking skills and confidence. If there is constraint in terms of expertise on the HEP's part, he recommended that HEP could send students for training/workshops organized by other professional parties. He hoped to see students with communicative confidence who are able to engage in conversation with others, especially with foreigners

4. CLOSING PARAGRAPH / CONCLUDING REMARKS

Dr. Farhan came to acknowledge that students' interaction across cultural lines must not be left with chance. He saw simply encouraging students to engage in interaction with cultural others may not guarantee productive outcomes. It is quite possible that students' experiences would result in poor development of intercultural competence. Therefore, he felt that students' competence must be facilitated by the university in order to help them experience meaningful interaction. Dr. Farhan believed that RAKAN CAS indicated a positive initiative. However, such initiative was not sufficient to assist students' overall development especially when it regards to their intercultural competencies. He felt an urgency to identify competencies needed for students to value their engagement with cultural others. Since the university is committed to shape students' self virtues based on established standards and globalization, it has to increase its level of assistance in empowering students with their intercultural competence.

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Managing talent in global business sourcing environment

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Teaching Case Synopsis

Prime Global Services (PGS) is a global business process outsourcing (BPO) and technology-enabled services company founded in 1986, with the head office in New York, United States. Prime Global Services Malaysia (PGSM) started its operations in 2011 in Kuala Lumpur, and later brached out to Cyberjaya. Recently, PGSM was experiencing human resource issues such as poor staff attendance, staff punctuality, and high staff turnover. As a newly appointed intern at the Human Resource Department, Adam was assigned to prepare a proposal to mitigate the issues. Prior to that, Adam need to get to know the company and the staffs. First thing first, as requested, Adam sought approval on draft of his main idea from the human resource manager. He also requested an interview session with human resource representatives and a survey of the employees on work-related matters.

Keywords: human resource; talent management; global business

1. INTRODUCTION

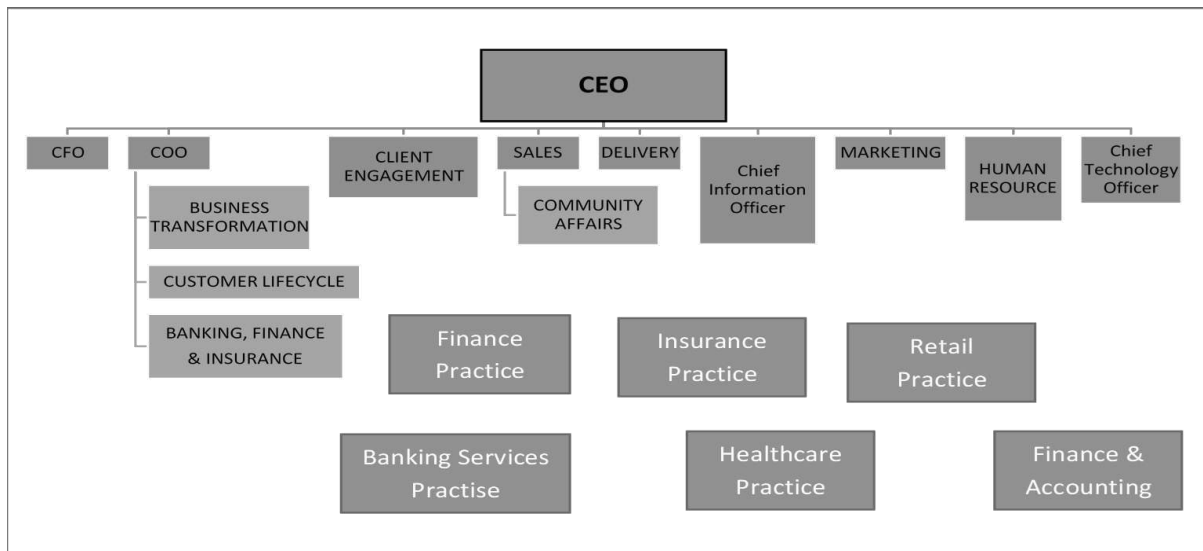
Adam was a newly appointed intern at the Human Resource Department of Prime Global Services Malaysia (PGSM). In his meeting with the Director of Human Resource (HR), his job scope during the six-month internship was explained. In general he will perform various administrative tasks and support our HR department's daily activities which include updating internal databases with new employee information like contact details and employment forms; gathering payroll data like working hours, leaves and bank accounts; and screening resumes and application forms. He was then introduced to the staffs at the HR Department. Before the meeting ends, Adam was assigned a task to prepare a proposal to the HR Department outlining effective and creative ways to motivate employees at work. PGSM was experiencing issues with regard to staff attendance, punctuality, and staff turnover. Adam was asked to communicate his plan on how to handle these issues to the HR Director for his consideration and further action. Adam came out of the meeting with at lot of questions in mind. He knew that he needed to get to know the company, and to understand the issues before he could propose anything.

2. PRIME GLOBAL SERVICES

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Prime Global Services (PGS) was founded in the year 1986. The head office is located in New York, United States. It is a global business process outsourcing (BPO) and technology-enabled services company offering an integrated set of back-office and customer facing front-office services that support the entire customer lifecycle. The chairman and Chief Executive Officer (CEO) of this up growing company is Phillip Hansen. PGS is owned by TPG Capital. PGS's strive towards excellance in operations is obvious through compliance with various quality standards such as Six Sigma, ISO 9001:2000, and ISO 27001:2005. The organisational structure comprises of 3 levels. The CEO as the head of the organization will oversee the whole business operations. At the second level, there are business functions such as financial, operations, sales, client engagement, information management, marketing, human resource and information technology. Finally at the third level, PGS has BPO units which provides services to clients. Currently PGS has six units at this level including, finance, banking services, healthcare, insurance, finance and accounting and retail practice. In particular the type of services offered can be organized into 3 main areas: information technology, finance and accounting and human resource. The organizational structure is depicted in Figure 1.

Figure1: Organization Structure



Source: Prime Global Services, 2019

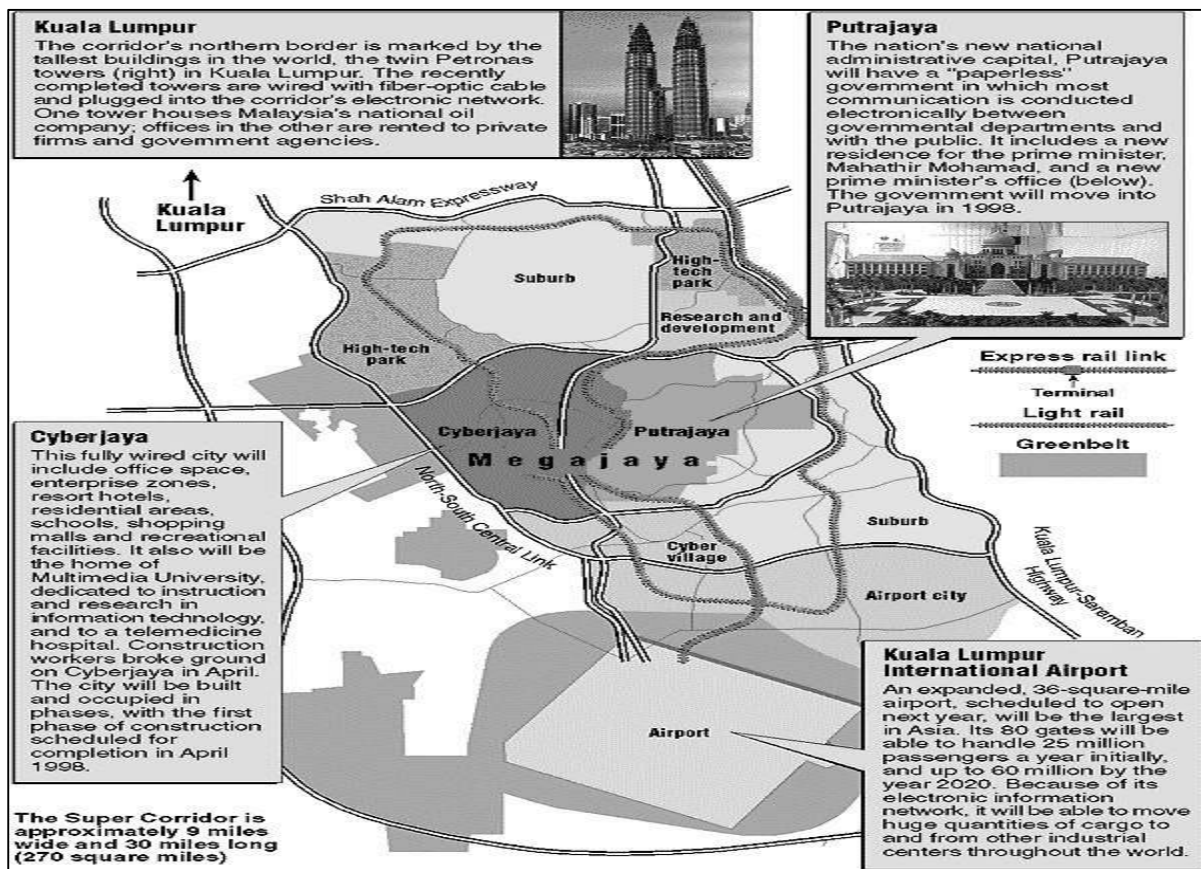
Since its inception, PGS has expanded its networks to more than 60 locations all over the world including Australia, Brazil, Canada, China, Egypt, India, Malaysia, Mexico, Philippines, Sweden, United Arab Emirates, United Kingdom, and United States. At the moment, PGS operates with a strength of around 25,000 employees.

PGSM started its operations in 2011. PGSM provides services related to business processes and technology management. PGSM is one of the largest, independent BPO companies in the world serving many major clients from various industries. PGSM provides end to end process transformation that delivers improved results. Besides, the company also deconstruct a client's process, rethink it, rebuild it and deliver it back smarter than before. It helped companies change how they work. At present, PGSM head office is located at Kuala Lumpur, Malaysia. Kuala Lumpur is the national capital of Malaysia. Kuala Lumpur is also the largest city in the

country. PGSM recently branched out and occupies an office in Cyberjaya, Malaysia. Cyberjaya is the key part of the Multimedia Super Corridor (MSC) of Malaysia.

The MSC is a Government-designated zone in Malaysia designed to leapfrog Malaysia into the information and knowledge age. It aims to attract companies with temporary tax breaks and facilities such as high-speed Internet access and proximity to the Kuala Lumpur International Airport. MSC Malaysia covers an area of approximately 15 km (9.3 mi) × 50 km (31 mi) (that is, 750 km² (290 sq mi)) stretching from the Petronas Twin Towers to the Kuala Lumpur International Airport, and including the towns of Putrajaya and Cyberjaya. On 7 December 2006, Port Klang was added to the MSC. MSC area is shown in Figure 2.

Figure 2: Overview of MSC area



Source: Invest Malaysia

3. INFORMATION LOOK-OUT

Adam turned to internet, to find information that he was looking for. He also consulted his university lecturers and circle of friends for ideas. Two days later, he wrote an e-mail to the Director stating his main ideas on how to effectively manage the issues facing HR Department. Together with his main idea, Adam requested an interview session with HR manager and his key officers. It was not until the third time that the following ideas were finally accepted;

Main idea on how to manage HR issues at PGSM

All organizations want to be more successful, even in current environment which is highly competitive. Therefore, companies irrespective of size and market strive to retain the best employees, acknowledging their important role and influence on organizational effectiveness. To overcome these challenges, companies should create a strong and positive relationship with its employees and direct them towards task fulfilment.

To achieve their goals and objectives, organisations develop strategies to compete to highly competitive markets and to increase their performance. Nevertheless, just a few organizations consider the human capital as being their main asset, capable of leading them to success or if not managed properly, to decline. If the employees are not satisfied with their jobs and not motivated to fulfil their tasks and achieve their goals, the organization cannot attain success.

People have many needs that are continuously competing one with another. Each person has a different mixture and strength of needs, as some people are driven by achievement while others are focusing on security. If the managers are able to understand, predict and control employee behaviour, they should also know what employees want from their jobs. Therefore, it is essential for manager to understand what really motivates employees from their jobs without just making just an assumption. Asking an employee how he feels about a particular situation does not provide an accurate evaluation of his needs, as the interpretation could distort the reality itself. The closer one gets his perception to given reality, the higher is the possibility to influence that specific reality.

4. TALENT MANAGEMENT

Based on the interview and other sources of reference, Adam prepared his notes on talent management at PGSM by categorizing them into talent identification, talent development and talent retention.

Talent Identification

Finding new recruits is always a challenge. For PGSM, new recruits are always in demand at the Business Process Outsourcing (BPO) level. Talents at the BPO level are consultants who provide expert advice in a particular area such as security (electronic or physical), management, education, accountancy, law, human resources, marketing and public relations, finance, engineering, science or any of many other specialized fields. A consultant is usually an expert or an experienced professional in a specific field and has a wide knowledge of the subject matter.

Institutes of higher learning is one of the sources to identify potential talents. PGSM has initiated collaboration with selected universities to offer credit hours for training on BPO activities and performing BPO tasks. Prime also provides scholarships for students while the students are studying to acquire the talented pool to work for the company in future.

We want to propose maybe have some credits point. If they go for this training, we are going to start with customer services. I'm talking about international customer services. Followed by language, followed with domain that could be retail, ICT, and financial. (HR executive 1)

PGSM sourced out new talents if there is a new customer PGSM and retrained existing talents, if there is a need for a specialized skill needed to meet the new clients' requirement.

So, we normally try to plan ahead and sense what type of client is coming to source for the right qualification and skills. We also have existing client so we know what kind of talent we need to provide throughout the year. Basically, we service multinational client so language will be the first gap you know that we are looking language as well the attitude (HR manager1)

Another source of potential talent is the women, however Prime has not initiated specific efforts to capture this pool. In Malaysia, we have a huge number of female in university yet 56% of female graduates don't work.

If the industry offers flexibility, the women can do full time work from home. I went to Japan recently and I will share the intelligence of what Japan do for women, and to bring here their work from home model. (HR executive 1)

Talent Development

PGSM offers internship programs for prospective talents during their study period. Buddy system is used whereby the intern is paired with an employee. Buddy session allows the intern to acquire knowledge and skills through planned interaction with the designated buddy. As a follow through mechanism, a mentoring system is also being used at PGSM. The system creates sense of company ownership among the employees.

The process of onboarding is the process to help and enable newly hired employees to acclimate to a new environment in Prime. This process is also fondly known as orientation. In the process of onboarding, just-hired employees are given the exposure of the business operations, and the rules and policies that should be abided by all employees. Employees are also introduced to PGSM's organizational culture. Onboarding stage also covers matters related to training, scheduled milestones, mentoring programs and interactive meetings sessions. A large sum of money and time are invested in employees in terms of educating them through extensive training at this stage.

One example of the major training program in PGSM is the *consultant development program*.

First entry, they will be provided with what they need to know about the product, so we start with communication training, customer service training and then product training. We don't just let our people take the floor without knowing the product.

Period for the training depends on the existing technical knowledge, client requirements, tools to be used and complexity of the processes. We have nesting period before the employees go live. Nesting is where it is like a buddy system. What you have learned, you practiced and then only you deal with the real thing. (HR manager 1)

PGSM also utilizes simple practical approaches in their training. For example, employees preparing for an interview selection with clients are required to tune in to CNN channel to improve on their pronunciation and reduce their accent. Online self-assessment English test

allows the employees to evaluate their performance. Other than communicating orally and verbally using proper English language, the employees are also trained to search for information about the client.

What we used to do, we need to train before they interview. Go and try this test online, go and do on this English test, go and learn about this company that you're going to be working. The client. Come back and write me a paragraph. So, we did a lot of training before they go for interviews. When they go to interview, they pass. (HR manager 1)

Talent Retention

Talent retention is an effort by an organization to maintain a working environment which supports employees to remain within the organization. Many employee retention policies are aimed at addressing the various needs of employees to enhance their job satisfaction and reduce the substantial costs involved in hiring and training new employees. There are several reasons for PGSM to implement and practice employee retention policies. One of the main purposes is to keep valuable employees showing potential within the company. Every organization needs hardworking and talented employees who can really come out with something creative and different. No organization can survive if all the top performers quit. Hence it is essential to retain these employees with the organization. PGSM has dynamic career frameworks. Training is designed to provide employees with competencies that suit the company's needs. Employee talent development and growth is part of employee retaining plan. Variety of trainings are provided to employees to support their career growth.

The HR manager reported this:

So you know for new hire they merely see it as a stepping stone for their career. They need a job so just they come to PGSM and from there try search for something else and find what they really want to be. So that is a challenge for the company.

People really are not aware of the opportunities as some new employees will consider PGSM as call centre and there seem to be confusion about career growth in the company. (HR manager 1)

Employee retention activity at PGSM involves direct engagement with employees. There are various practices to get the employees engaged to the company. For instance, Platinum Award and Extra Mile is presented to employees as recognition of their contribution. Another practice is point based recognition where employees can accumulate and redeem their points. Besides, PGSM implements the concept of town hall which is conducted once in every 3 months. Employees are given the opportunity to speak their mind, voice out issues and give suggestions. In addition, there are fun and wellness activities, and newsletter. Corporate social responsibility activities such as PGSM Cares and corporate events are held by the company to encourage engagement.

Performance management is another area of concern at PGSM. Performance management is a process for helping both the employer and employee; it is a tool that influences almost every part of the employment relationship and can be key to help retaining quality people in the business. This process ensures that employees know what is expected of them – tasks, quality/standards, timeframes, priorities and behaviour –and how these will be monitored and

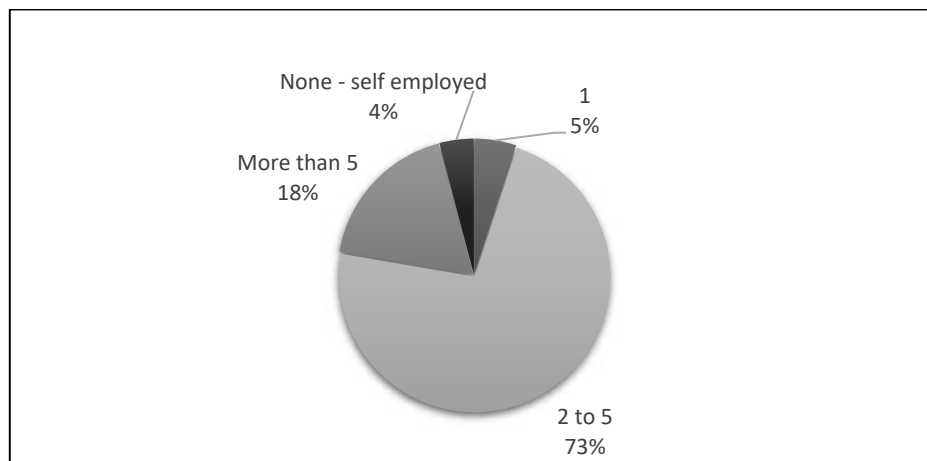
measured. It also makes sure they have the knowledge, skills and resources needed to achieve these goals through dynamic career framework. Training is designed to provide employees with competencies that suit the company's needs. Employee talent development and growth is part of employee retaining plan. Variety of trainings are provided to employees to support their career growth.

Employees are required to set their short and long term goals. This creates goal-oriented employee. An annual performance review and appraisal with their managers is where the job performance of the employee is documented and evaluated. The central reason for the utilization of performance review or appraisals is performance improvement. Performance Enhancement Program at PGSM helps the employees improves their performance.

Setting goals is the first step in turning the invisible into the visible. By setting goals and measuring their success, employees are able to see where they are going, what they have accomplished, and what they are capable of. With each success, they should be able to accomplish more. (HR executive 2)

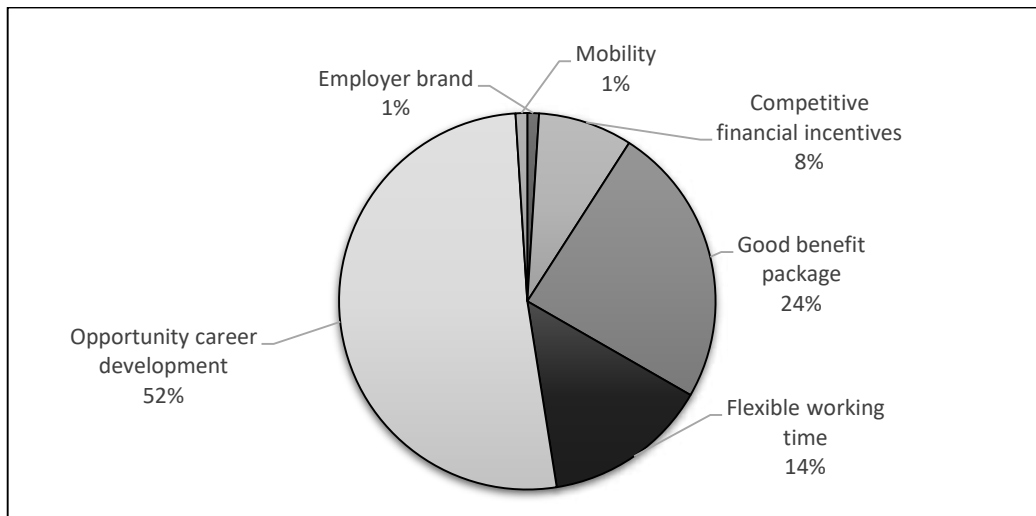
After studying the feedbacks, Adam further studied on the millennial's perception on the employee retention by conducting a survey to know more on how to attract and inspire the millennial in the workplace. He randomly picked a sample of 35 respondents and summarized the findings.

How many employers do you expect to have in your career?



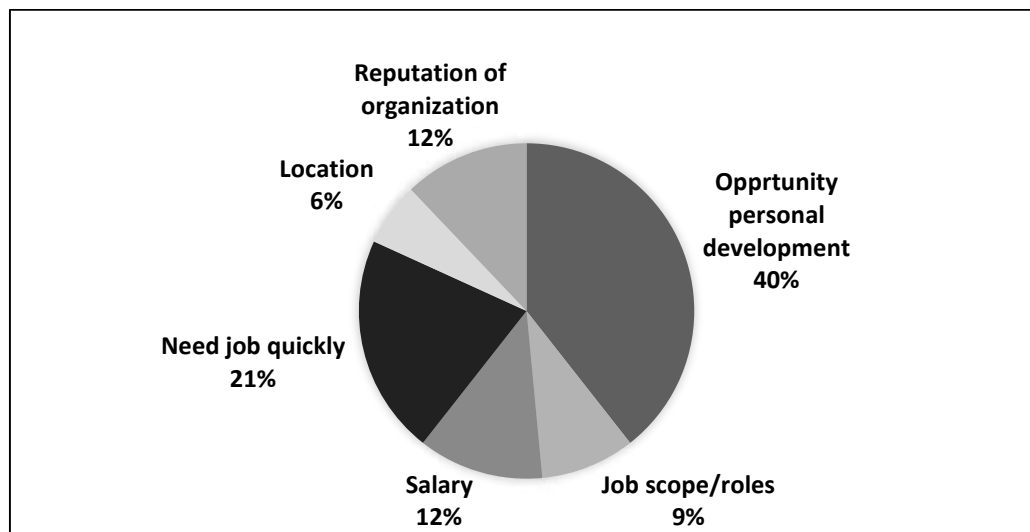
A total of 72.7% of those questioned said that they thought they would have between two and five employers during their working lives. Another 18.2 % expect to have more than 5 employers throughout their career. The remaining 9.1 percent expect to have one employer Or self employed. This shows that the majority of respondents expect have multiple jobs and wanting to be job hoppers. Millennials have seen that corporate loyalty doesn't necessarily bring rewards or even long term security in today's economic environment. It's clear that many millennials are keeping an eye out for new opportunities.

In your opinion, what are the things make an organisation an attractive employer?



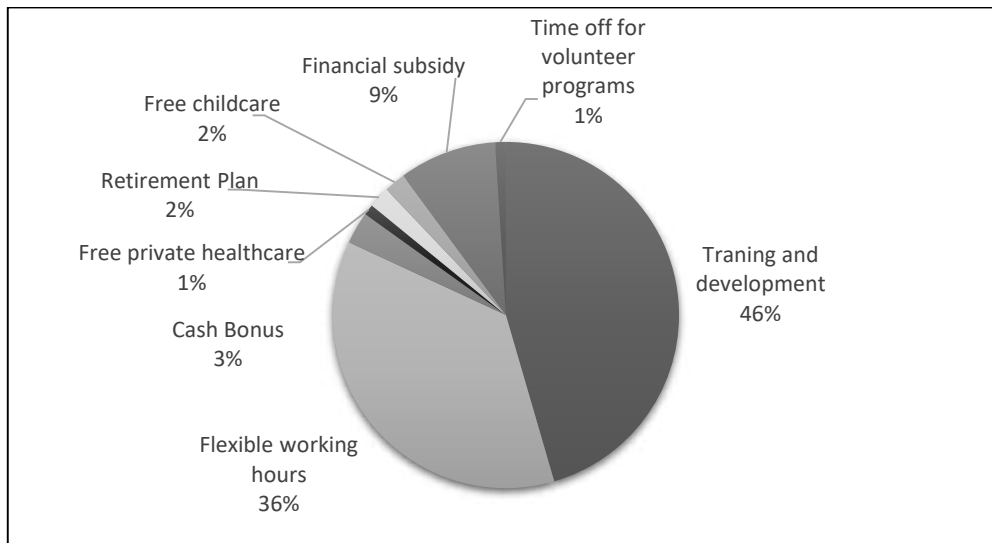
51.5% of the respondents felt that opportunity for career development makes an employer attractive prospect; 24.2% chose good benefit package; while 14.2% and 8.1% chose flexible working time and competitive financial incentives respectively. Here comes the ambition and the optimism of this generation. Based on the responses, it can be said that Millennials are attracted to employers who can offer more than merely good pay.

What is the most influencing factor to accept your current job?



A majority of them or 39.4% of the respondents answered that opportunity for the personal development is the most influencing factor for them to accept their current job. They want to do something that feels worthwhile, they take into account the opportunity for them to grow when considering a job. Other influencing factors include the need to get a job quickly (21.2%); salary (12.1%); reputation of organization (12.1%); and job scope (9.1%).

Which benefit would you value most from an employer?



The millennials' desire to learn and progress is apparent in their view of the benefits offered by employers. When asked which benefits they would most value from an employer, respondents named flexible working opportunities (45.5%) and training and development (36.4%) over financial benefits.

5. CONCLUDING REMARKS

After more than two weeks, Adam had a better understanding of PGSM's operations. He also had some data on employees perception on work environment at the company. He was excited to prepare his report for the HR Manager. Before he could do that, he would analyse the survey responses to identify the demographic background, level of job satisfaction, job passion and self-evaluation, and needs and wants of the staffs. He intended to propose an action plan, together with identification of lead responsibility, and timeline for implementation by the HR Department of PGSM.

ACKNOWLEDGEMENTS

We would like to extend our appreciation to UKM for funding part of this research project

Appendix 1

Open ended survey responses

1. What suggestions do you have for the improvement of Prime?

1.	Improve the facilities in Cyberjaya like the pantry and add more air-conditioners.
2.	Improve on management, be more fair to employee, do not inform things last minutes
3.	More transparent communication flow. If employee opinion is really important, why not make the communication transparent and not using a traditional top-down approach? If a top-down approach is implemented, how much value is there for feedback?
4.	Improve in term of management
5.	Prepare good and comfortable work station for employee - our new office in Cyberjaya is not good choice.
6.	I would suggest to think more regarding the welfare of the agents.
7.	please don't move again, the RM200 not really enough for our transportation and those who moving out may cause a huge amount of penalty by the current house owner which might cause RM2000
8.	Real time support from WFM and RTA team
9.	need more locker & more space for pantry -this issues happened when at Kuala Lumpur, but it getting worst when moving to Cyberjaya, disappoint, do you think that Prime really take care of employee, I don't think so.
10.	Should have party, or celebration as employees are working hard. -Should have extra service, shuttle free, meal treat.
11.	not too sure about other Prime but Malaysia Prime should at least come out with activities that is more energetic. sports recreation.
12.	Make sure all the lead and managers recognize their hardworking employee who does put much effort and passion to the job. Reward them with what they truly deserve.
13.	Engage and involve agents in more parts of the company. Don't let the company be just a place for work, but a source of satisfaction.
14.	To be clear on what are the expectations and to provide an answer to the issue we raised. Ex. Moving to a different location and the transportation fee, is not a joke to us, especially the basic is just enough for ourselves and for our family back home.
15.	improvement computer and internet
16.	In the past it makes me not sure about the company plan to move so almost of employee move house but the company not move. In my opinion the company should make sure first before giving the detail and then postpone.

17.	I want to facilities more that this time such as, locker.
18.	would like to ask you a favour to consider our transportation allowance
19.	Secure more domestic clients to help unemployment issues in Malaysia.
20.	The company should inform every important matter to staff clearly. If any changing should inform the staff in advanced at least 3-5 month.
21.	Air-conditioner, place not enough, pantry too small, too far for us go to eat, locker too less
22.	The office, we need prayer room, sink in the pantry and the coffee
23.	1.. work station, not enough pc since we moved to Cyberjaya. 2. Locker room is too small and not enough locker for us to store our belongings.
24.	Should provide enough water for employees.
25.	Air-conditioner please, water please, increase salary
26.	Increasing annual leave
27.	Locker problem please solve as soon as possible
28.	Enhancement on computer internet connectivity/ Wi-fi, add on workstation, water supply
29.	Not to solve everything at very last minute or giving sudden information to employees. Listen to what employees are saying. Work environment is very important as it will help to grow the sense of belonging of our employees.
30.	PGSM should be honest and straight forward with their employee's in terms of career growth.
31.	No air-condition, pantry is too small, toilet smelly, not enough locker to use
32.	It is very disappointing on the new site which was promised that no seats issue will be happen but instead seats issue still exist here. Besides, the temperature of the Cyberjaya office is way too hot after the centralized air condition switches off. Other than that, there's 7th floor is with the electric room which is so dangerous for agent to work in. What if suddenly it went on fire? It is really demotivated because this new site. It is not proper plan and I heard this site was cost RM1 million to setup, I'm wondering how this new office worth of RM1 million.
33.	PGSM needs to improve how to satisfy their employees more. We are as employees are often pushed to the edge until we got no room to voice out especially with the quality of your management at the moment. I am not sure this company will grow bigger.
34.	Relocation bring me trouble; I feel like a slave not a warrior in Prime.
35.	Regular team building activities for bonding employees from different departments.

36.	Salary must increase - recognition must be given - more job offers to oversea - treat employee as asset more than liability - provide better and good career progression
37.	1. Classification of job description/scope 2. Salary Increase
38.	We need to have marketing materials in order to have our branding circulated.
39.	Add more employer benefits such as optical, dental
40.	When hiring people, make sure the project is ready
41.	The location of company should be in city centre, for me Cyberjaya is too far from my house. Next, I think HR department should be inform all employee earlier about anything about company decision.
42.	TOO MUCH. THERE IS NOT ENOUGH SPACE IN HERE TO DESCRIBE WHAT CAN PRIME IMPROVE.
43.	Better communication to avoid any misunderstandings and negative energy around the workplace. Being transparent to all department to avoid misunderstanding about issues which may affected to our future and productivity.
44.	Being transparent to all department. Communicate well to all LOB to avoid misunderstanding
45.	A good working environment will build up the whole team. - Pantry with no sink? - Pantry looks so "big" to house 500 employees under the Uber Account. - Even management does not have workstations to perform let alone motivate the whole team and telling them that it's a new site with new things.
46.	More recognition and value to the employee
47.	More concern about employees' need
48.	Better communication, coordination and leadership Stop promoting people who don't have any experience for any position
49.	Appreciation in an increment for Consultant who got promoted to be a Support Team (like me). Prime will soon lose their best Support Team or Consultant or Agent because there's no appreciation in salary for their loyal and great works.
50.	Better working floor
51.	Install more air cooler, the condition of air cooler in the new office are extremely bad. Agents even sweating on floor.
52.	1. more air-corn 2. increase salary at least RM400 - RM600 as moving to Cyberjaya area had increased my expenses (high rental, expensive car park and foods) 3. you should not have denied my VPP as I'm working every day and I did not take any EL, unpaid leave, etc., and I did not do any FATAL too. I think your calculation for VPP has a big problem!!! 4. I demand for year-end bonus since you're not willing to give us VPP.
53.	For those changing team, please let them have a training in that fields. So, that it won't be failed for provide customer information.

54.	Place for Muslim pray
55.	Employee engagement, involvement from consultant level to management level and transparency of any changes
56.	Balance the head count of each team, utilize the man power
57.	1) Add basic salary and allowance 2) We want more air-corn 3) Free Carpark lot for employee 4) No cafeteria 5) Pantry not enough space 6) Locker not enough
58.	1. Proper air conditional for YOUR employees to further concentrate on their job 2. LEARN to choose a strategic location 3. Increase the SPACE of the current pantry 4. Provide water FILTER 5. Insufficient lockers and locker room space
59.	We don't satisfy with the new office in Cyberjaya. - Pantry is too small, as we have many staff over here, we don't even have a chance to get a seat - the air circulation is bad, air-conditioner is warm, how we concentrate to work - car park space is limited, inconvenient for staff
60.	resolve insufficient seat issue.
61.	To have a comfortable rest room.
62.	To have an office breakout space maybe.
63.	system improve office environment the new security attitude is bad management not qualify
64.	I highly suggest that Prime can provide a very comfortable working environment for agents while working on floor, this including the minor group of Taiwan team. Even though the team consists of small number of agents, they are now working in a very small room with bad conditions where their office was right beside an electric room and cables room. This is very dangerous as the magnetic field from the electricity might affect their health. I strongly believe that if all the agents are treated nicely they can increase their working productivity.
65.	After office hour or Sat/Sun/PH, temperature in office is very high, please prepare more fans inside the floor.
66.	This kind of pantry is totally cannot fit with your current number of staffs. In addition, please consider increase the number of air-cond. I have never ever see this kind of terrible working environment in my working experience.
67.	Pantry - locker
68.	Always post up a proper notice or keep update for the employee from time to time preferably not a last-minute information.

2. What 2-3 things do we need to work on to improve PGSM's performance?

1.	Employee basic need (inclusive wider area for pantry, solution for locker insufficiency and ventilation in working space) 2. Rest room for employee to have power rest (10-15min) to stay focus 3. Extend ~15min for lunch time due to longer travel time (by keeping quality as priority)
2.	Increase efficiency on preparing confirmation letter and medical cards for agents - resolve the issue of insufficient seats and improve the working environment - improve in term of technical wi-fi.
3.	provides entertainments/vacations for employees to increase employees' performances.
4.	Promote learning culture, when I first hear about Cyberjaya, there will be some kind of language corner but where is it now Better space for pantry and locker. It's a big mess now
5.	1. Agent's welfare 2. Increase the salary of each agents based on their work performance and not on how much of work experience they have
6.	your employee work hard but the salary they get paid is not really what they should get. pay more to create more motivate, that's all. 1. Please heard the agent complains about the facility in the new building office
7.	Good working place, more product knowledge, more information, please focus on locker shortage & pantry area issues first! Last have a tool to flag over breaks real time to increase our productivity.
8.	1. Listen 2. Act on it 3 When act on it, you mean it
9.	working environment, temperature,
10.	Provide basic utilities for employees, e.g.: ensuring availability of space to keep belongings, regulating work conditions in the office, providing outlets for employees' suggestion readily
11.	Transparency and support for the employee who work in your company. We don't need empty promises that leads to your employee not to trust the management. Management should be clear and accurate to the information that they will provide.
12.	Employee's attendances and attitude
13.	upgrade internet speed and computer
14.	1. Proper due diligence, planning on expansion. 2. Stop this last minute datelines. 3.
15.	Facilities Employee Recognition Incentives
16.	1. keep your word 2. care of staff thought 3. increase salary
17.	complaint to admin
18.	1. work station, not enough pc since we moved to Cyberjaya. 2. Locker room is too small and not enough locker for us to store our belongings.
19.	get better computer , too lag hard to do our job

20.	suggest open back RM 2 incentive, if not everyone just hit tph and will not help to clear queue. suggest work 8 hours, is not because we lazy, if got people come to office when 2pm - 4 pm, is not enough place to sit and too many people cross shift at that time is no people help to clear queue, actually do 9 hours is no use at all.
21.	HR and recruitment team must have communication - Must feel employee feel - personal belonging need to have a safe place to protect.
22.	Management plan and transparency.
23.	please improve our working environment
24.	PC performance too slow, please do something with it.
25.	better computer
26.	add more air conditioners and desktops more locker
27.	We need more air-conditioners.
28.	Inform agent earlier if any changes with off- AL, training etc.
29.	Annual Leave minimum is 14 days, 10 days/year is not enough for us - lunch/dinner time minimum 1hour plus break time 2 times.
30.	Travel allowance. Our expenses from home to office (vice versa) has increased a lot since we are moving out to Cyberjaya. - we have heard that there will be 4PM to 1AM shift, where we don't have access to public transport, and will be charged a midnight charge (additional 50%) if using taxi. - parking facility, no season parking on the basement of the building.
31.	treat employee as an asset - more benefits - adjust and provide increment twice per year
32.	Job Scope 2. Salary Increasing after probation as support team
33.	1. HR should be reachable. 2. Study well the Prohance. 3. Do not hire outside from the project for the movement it should be the person who is capable and in the project at the start.
34.	1. Prohance is too much - 60 minutes is not enough for lunch, short break and pee break. It will be more acceptable if pee break is not included, after all it's call of nature that is uncontrollable 2. Career growth for those who deserves it - do not stop people from growing just because he/she is an asset on your account.
35.	More dedicated office space environment
36.	Salary increase
37.	Tools
38.	Employee engagement Transparency Regular update on business direction when there are changes
39.	1 team work 2 funny activity 3 team celebrate
40.	1, quality control of working 2, product training 3, office facilities in Cyberjaya

3. What other issues not included in this survey need to be addressed in this organization?

1.	It would be good if there is a monthly / quarterly meet between agents and clients to discuss on work / other matter to improve on project quality. How would a back end who is not stepping on the front line, justify by numbers, to come out with solution for the front line? Do the simple, put them together.
2.	please focus on locker shortage & pantry area issues first!
3.	give allowance for transportation and accommodation for foreign employee
4.	Career growth should be in the performance of the employee and not because the higher management is fed up from the escalations of the agent.

4. What is it that helps you to be productive and provide quality service?

1.	All I want is there no more issue with the office temperature and PC station issue where is we the shift some of us do not get the PC station
2.	1. Free flow coffee?? That would be inspiring. 2. Better ventilation in workspace, too stuffy especially on weekends 3. Sanitization would be good 4. Hardware (PC) upgrade for better work output 5. Listen to music while working. May draw some bandwidth, but it helps some to remain focus at work. Pay and gain.
3.	comfortable place/workstation, good environment
4.	Clear information and clear expectations
5.	needs a better quality of laptop. -heavy laptop, laptop battery run up very fast, can't detect webcam, issues with zoom call.
6.	work life balance. for almost a year it's more like Rihanna's song. "work" "work" "work". a lounge would be nice too.
7.	I hope each Management and support level members have our own laptop for work. since there is not enough work station. TM is sharing laptop; 1 laptop share among 2-3 TMs
8.	My self-motivation to improve from what I'm learning from my job, to climb up the ladder of my career and My Departments Bosses encouragement and words of appreciation and advice. Also, their availability to provide help and support when I always need.
9.	Not having issue with utility in the office and better product updates. It doesn't help if our customers know special promotions or events prior to us.
10.	I am good with everything that Prime provided.
11.	Employee feedback should be sought. Before any changes.
12.	give allowance for transportation and accommodation for foreign employee

For the splendour of rice: Governance in a farmers' association

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Teaching Case Synopsis

On 30 July 2019, Adibah, the General Manager of SXI-PPK, received a letter and documents from the Registrar, Muda Agricultural Development Authority (MADA). The letter stated that the Farmers' Organisation Authority (LPP) would conduct an imminent management audit on SXI-PPK in early 2020. The management audit was conducted every five years to examine and verify the financial performance and governance practices of the PPK. SXI-PPK was required to prepare its financial statements, minutes of meetings and other relevant documents, and to identify key individuals to be interviewed by the auditors. Having perused the letter and documents, Adibah reflected on the financial performance of SXI-PPK and its governance practices since the previous management audit in 2014. Adibah was required to assess whether SXI-PPK would be able to maintain its status as a 'Grade A' PPK in the upcoming management audit. The 'Grade A' status was crucial to enable the PPK to be nominated and shortlisted for the PPK Jaya Kebangsaan Competition. The names in this evaluative case had been altered but the details were based on an actual event. The data was collected through interviews with key players and with reference to the minutes and other documentation of SXI-PPK.

Keywords: Corporate governance, board of directors/senior management, financial analysis, farmers' association.

1. PROLOGUE

9.30 a.m., 30 July 2019

Adibah, the General Manager of SXI Pertubuhan Peladang Kawasan (SXI-PPK), was sitting in her office holding the trophy the PPK received at the *Hari Peladang, Penternak dan Nelayan 2019* in Alor Setar. She had been overwhelmed with emotion as SXI-PPK won the Excellence Award at the event and *PPK Jaya Negeri Kedah* at another. This was not the only accomplishment that SXI-PPK had achieved under her helm. Over the past ten years, SXI-PPK had been continually recognised as an exceptional and excellent PPK by the Farmers' Organisation Authority (LPP), and Muda Agricultural Development Authority (MADA).

The phone in Adibah's office suddenly rang. Putting aside the trophy, Adibah picked up the phone. It was Kamal, the chair of the board directors, asking to meet her in his office. Adibah went along to Kamal's office "*Assalamualaikum, Adibah. Please have a seat,*" he said. "*I thought it would be good for us to catch up as I know it has been a while since we last chatted. You know, I have been busy gathering the information needed by MADA. MADA wants us to write a brief report to them offering our opinions of whether we will be able to maintain our 'Grade A' status in the upcoming audit. I have*

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gathered some of the information and put it into this envelope, together with the letter and documents that MADA sent us. I am passing you the envelope, and can you please write the report required by MADA.” Pausing awhile, Kamal sipped the remaining coffee in his cup. He then continued: *“You know, we have been working hard all these years to be nominated for the best PPK competition at the national level. If we are able to maintain our grade A status, I believe that we will be shortlisted for the competition. Once and for all, we might be crowned as the best PPK in the whole Malaysia. This is something that the members and all of us are looking for.* Smiling with hope, Kamal handed Adibah the envelope labelled ‘Management Audit 2020, and uttered: *Once you are done with the report, please let me have a look at it. I want to table it at our board meeting and see what other directors might say”.*

Adibah left to return to her office. Arriving back at her office, Adibah opened the envelope and read through the documents and letter. As Adibah was perusing the documents, she reflected on the changes she had made in SXI-PPK. When she first joined as an account executive in 1996, no proper internal control system existed in SXI-PPK. Soils and pesticides were often stolen. Directors repeatedly signed blank cheques, and the amount was left to be filled in by the payees.

Today, SXI-PPK had turned into an outstanding PPK. It was ranked first among twenty-seven PPKs in Kedah and Perlis for its best practices, performance and management. Looking at the letter and audit checklist that was attached to the documents in the envelope (refer to **Exhibit 1**), Adibah was required to report to MADA on the governance practices in SXI-PPK and to discuss whether SXI-PPK would retain its grade A status in the upcoming management audit. Adibah paused for a moment and thought about what she should report. She understood how critical it was for the PPK, the members, the board and herself to maintain the grade A status.

2. THE FARMERS’ ASSOCIATIONS GOVERNANCE STRUCTURES

The farmers’ associations in Malaysia had been developed into a three-tier, vertically organised model that consisted of the Ministry of Agriculture and Agro-based Industry (The Ministry), the LPP, and farmers’ associations at the national, state and local levels. The Ministry was responsible for developing agriculture policy, executing the decisions taken by the government, and monitoring and evaluating the strategies implemented. The LPP served as a government statutory body that coordinated, regulated and supervised the economic development activities of all farmers’ associations in Malaysia.

The National Farmers’ Organisation (NAFAS) served as the parent farmers’ association at the national level. Its roles included coordinating the activities of all PPKs and representing the voices of PPKs in their engagement with the government. There were 293 farmers’ associations in existence, made up of fourteen at the state level and 279 at the locality level (i.e. SXI-PPK was one of the 279 PPKs in Malaysia). The overall membership of all farmers’ associations totalled 881,684 members (as shown in **Figure 1**).

In the northern region of Malaysia, MADA provided overall supervision to twenty-seven PPKs in Kedah and Perlis. MADA was a statutory body that was established to increase farmer involvement in the value chain of the rice industry and to transform the PPKs into competitive and independent farmers’ associations. MADA officers were assigned to PPKs to guide the farmers and staff and oversee PPK projects. SXI-PPK was one of the PPKs in Kedah that was under the territory of MADA

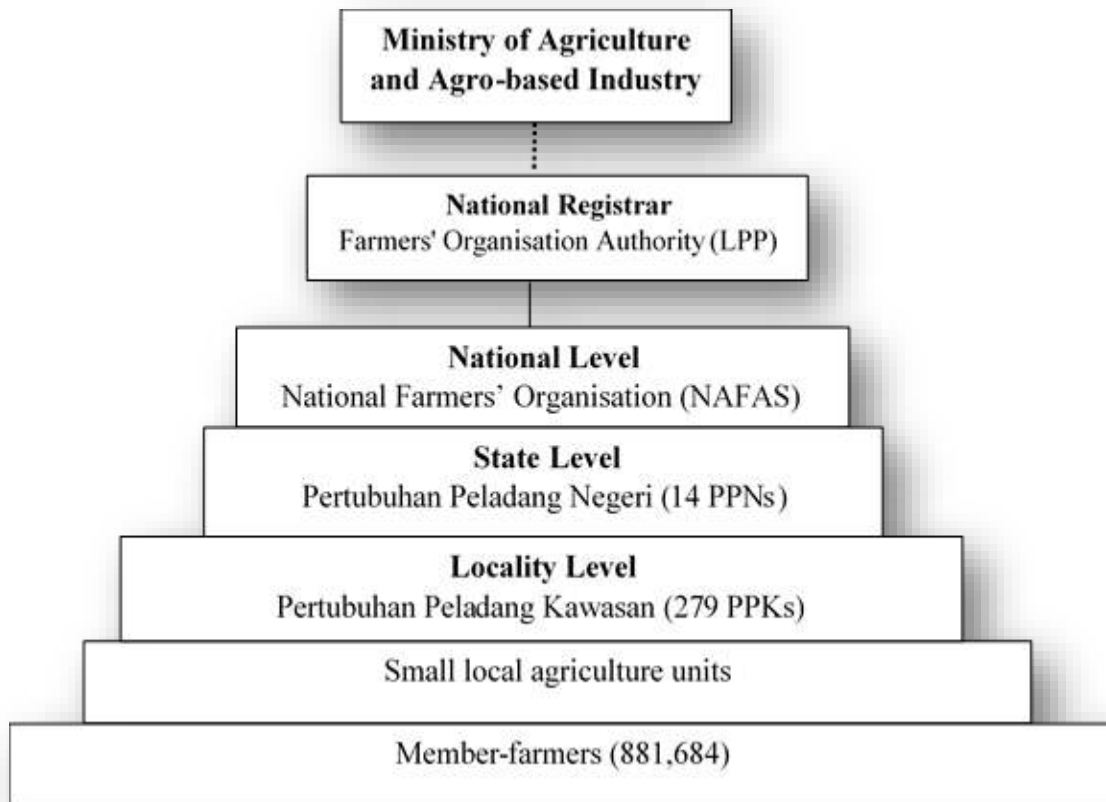


Figure 1: Malaysia's farmers' associations structure (Source: NAFAS, 2019, analysis by case writers)

There were twenty small agriculture units under SXI-PPK. The agriculture units acted as a bridge between the PPK and the farmers and served as the basic unit for election purposes. Farmers received information about governmental policies, incentives and subsidies via the head, secretary and representatives of their agriculture units.

3. BACKGROUND OF SXI-PERTUBUHAN PELADANG KAWASAN (SXI-PPK)

SXI-PPK was a farmers' association located in Kedah. It was established among paddy farmers in 1969 under the *Akta Pertubuhan Peladang 1973 (Akta 109)*. The PPK had paid-up capital of over RM1 million, which was made up from the contributions of 1,851 paddy farmers who were also regarded as the owner-members. The objectives of the PPK were to create social value for its members, such as by improving their socioeconomic conditions, skills and knowledge, and to transform itself into an independent, united and progressive farmers' association.

An individual could become a member of a PPK if he or she was: (i) 18 years old and above, Malaysian and a resident of the PPK operating area; and (ii) participating in farming and livestock production; or (iii) earning income from farming and livestock activities; or (iv) majors in any farming and livestock production. Members had the right to receive information and voice their opinions on the way the PPK was run. Each member had the rights to take part and vote at the unit AGM, to be appointed as the unit representative and to cast a vote at the PPK AGM, to ask questions of the board and make comments on the PPK's businesses at the AGM, to put forward resolutions to be discussed and voted on at the AGM, to nominate candidates for the board, to receive a fare subsidy for the purchase of soil, insurance

coverage, *hajj* and *umrah* contributions, natural disaster and bereavement donations, and medical treatment subsidies (RM20/day for a maximum of ten days per annum).

SXI-PPK was involved in a variety of projects, such as the National Key Economic Area (NKEA) project, a rice buying centre project, a rice straw project, and non-paddy-related projects, such as livestock farming. Approximately 2,648 hectares of the paddy fields in Kedah were managed by the paddy farmers in the region in which SXI-PPK operated. The farmer-members also engaged in agro-businesses by selling locally made food, such as *kuih-muih* and biscuits, and producing fruit squashes. As of 2018, SXI-PPK's total assets were worth RM11.7 million, with a statutory reserve of RM2 million.

In terms of manpower, SXI-PPK had twenty employees who were assigned different responsibilities, such as accounts and credit, crop management, irrigation monitoring and other administrative tasks. They were either members or the children of members of SXI-PPK. Over the years, SXI-PPK had received many awards and recognition at the national level. SXI-PPK was ranked a five-star farmers' association in 2014 by the LPP. It had won the Innovation Award in 2012, Outstanding Award for NKEA Rice Estates Project in 2017, and recently the Excellence Award 2018 and *PPK Jaya Negeri Kedah* from the state government of Kedah and MADA, respectively.

4. FINANCIAL RESULTS AT SXI-PPK

SXI-PPK had a strong financial performance over the years with the revenues grew from RM1.236 million in financial year 2014 (FY2014) to RM1.282 million in FY 2018. The PPK achieved the highest revenue in FY2016 at RM1.286 million and the lowest growth of RM1.161 million in FY2017 and RM1.263 million in FY2015.

In terms of net profit, SXI-PPK recorded a net profit of RM586,437 in FY2014, but the net profit dropped slightly to RM509,420 in FY2015 due to a decline in the income of non-primary revenue-producing projects, such as the rental of premises and machinery, management and administration services, and interest income from advances to other parties. In FY2016, the net profit were at RM673,521, it dropped significantly in FY2017 to RM318,984. The decrease was due to decline in the net revenues, termination of the drainage cleaning services provided by the PPK and the rice yield sold by farmers to the PPK decreased after years of production, which led to revenue from the sales of rice in the PPK falling in FY2017.

In FY2018, the net profit of SXI-PPK increased to RM429,296, respectively. The rise in profit was mainly due to the year witnessing growth in the paddy-cultivation-management segment (see **Exhibit 2**). SXI-PPK had consistently paid dividends to its members while allocating funds for the organisation's growth and investment. For the previous five financial years under review, a dividend of 10 per cent per member investment was paid.

5. ORGANISATIONAL GOVERNANCE AT SXI-PPK

The board of directors of SXI-PPK consisted of individuals from diverse backgrounds. They were full-time paddy farmers, retirees, housewives, contractors, officers and sole proprietors. The majority of the directors had experience in agriculture, agro-business or paddy farming. Their primary responsibilities included making significant decisions in the running of SXI-PPK, such as deciding the overall business strategy of the PPK, the credit limit, and the agricultural and non-agricultural projects to be undertaken.

The board was also required to act in the best interests of their members, to engage frequently with them and to listen to what they said. Kamal would typically meet members at a *Kopitiam* or mosque to discuss the farming and irrigation scheduling, government subsidies, and any other matters related to paddy farming. Adibah had noticed that, other than Kamal and herself, not all board members engaged with

the members. Most of the other directors preferred to communicate with members via WhatsApp, rather than meeting them face to face.

Of the eleven directors, two were female and two were ‘young’ (below the age of forty). The board of directors believed that a successful board should be diverse, well-balanced and incorporate the voices of female and young directors. Female directors contributed to the board’s understanding of issues among female members. Young directors were expected to be more active and contribute more refreshing ideas to the PPK.

The majority of the board of directors were full-time farmers who had years of experience in agriculture. They were assisted by MADA officers who provided them with directions and guidance, managed and monitored the projects and operations of SXI-PPK, and ensured that the objectives of SXI-PPK stayed on course. **Figure 2** presents the organisational structure of SXI-PPK.

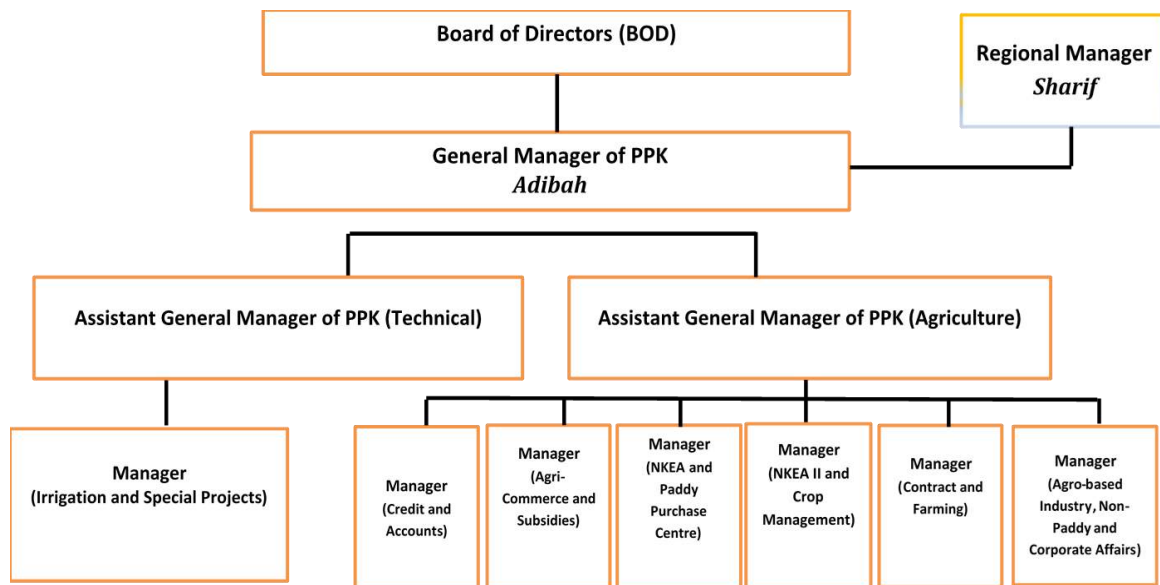


Figure 2: Organisational structure of SXI-PPK (Source: SXI-PPK, analyses by case writers)

MADA officers held the positions of general manager, assistant general managers and functional manager. Two assistant general managers - technical and agriculture - were accountable to Adibah. The roles of the technical assistant manager were, among others, to plan, manage and monitor the irrigation and special projects. In contrast, the agriculture assistant manager was responsible for managing and overseeing the credit and accounting, agro-commerce and farming, and agro-based industry and non-paddy operations. Six functional managers reported directly to the agriculture assistant general manager. While the assistant general managers and functional managers were accountable to Adibah, she was directly responsible to her regional manager, Sharif. Sharif’s expectations of Adibah were at times high. Nonetheless, this had made Adibah a better manager herself through the accomplishments that SXI-PPK attained.

6. ANNUAL GENERAL MEETING (AGM)

SXI-PPK convened two AGMs annually: one at the unit level and one at the organisational level. The unit AGMs were held within five months of the financial year end, and SXI-PPK’s AGM was conducted before 31 July each year, as presented in **Table 1** below.

Table 1: Date of AGMs and number of voters who attended (Source: Annual reports of SXI-PPK, analysis by case writers)

Financial year end	Date of AGM	Voter turnout
31 December 2018	12 June 2019	74/85
31 December 2017	27 March 2018	74/86
31 December 2016	30 March 2017	84/86
31 December 2015	21 April 2016	80/93
31 December 2014	12 March 2015	83/93

During the unit AGM, the members elected a unit head, a secretary and two to four unit representatives from the unit to attend the AGM at the organisational level. Many measures were taken to entice turnout at the AGMs, such as on-the-door gifts, free food and an allowance given to members who attended the meetings. Some units even ran lucky draw campaigns to attract more attendees. Members of each unit were excited to attend their unit AGMs to discuss about paddy cultivation and water irrigation and voted for their favourite candidates to be appointed as the unit head, secretary and unit representatives.

Upon appointment at the unit level, the unit head, secretary and unit representatives were eligible to stand for election as directors at the PPK AGM. They were also entitled to elect directors to the board and vote on other resolutions at a computerised polling station in the PPK building. Each voter was given a list of eligible candidates who could be voted to the board of SXI-PPK. The voters had one vote, regardless of the amount they had invested in SXI-PPK

The voting process was organised and monitored by MADA officers and all ballots were automatically counted by the automated system. The result of the voting was announced at the penultimate stage of the meeting by a MADA officer:

“As all of you might be aware, seven directors would be elected from among the twenty candidates that were shortlisted during this meeting. The Arahan Pendaftar Pertubuhan Peladang Bilangan 1 Tahun 2019 (Arahan Pendaftar Bil 1/2019) stated that another five directors, a female director, a young director and three other directors, would be appointed by the minister [the Minister of Agriculture and Agro-based Industry]. We have not had the names of the new directors, but you will know them in due course.”

The announcement and appointment of the five directors bewildered Adibah and other farmer-members. They were uncertain whether the process could undermine the principle of democracy. SXI-PPK was set up in the first place by its members, who were also owners of the farmers’ association. As the owners of the PPK, the members had certain rights, such as the right to vote for and elect directors who could serve their best interests. However, the minister was seen to have taken over the rights of the members by appointing ‘their own’ directors. Many farmers were upset by the direction taken by the minister, yet, all they could do was complained among themselves.

7. BOARD COMMITTEES

Upon the appointment of the new board, in consultation with Kamal, Adibah assigned the board members to chair different board committees based on their background and experience. Twelve sub-committees, such as the NKEA Rice Estate Project Committee, the Training, Development and Supervisory Committee, and the Agro-business and Subsidies Committee, were established based on the projects undertaken by SXI-PPK.

Each sub-committee comprised at least five members which included the director, staff, selected unit representatives or MADA officers. They met to discuss and monitor the performance of SXI-PPK projects and to ensure that appropriate actions could be taken to manage any problems that arose.

Members of each sub-committee met at least four times every financial year depending on the scale and scope of the projects led by the sub-committee.

After each sub-committee meeting, the committee would prepare a brief report that was approved by the chair. The report informed of the achievements and status of the sub-committee projects and the problems that required the attention and collective decision of the board members. It had become a common practice for the chair of the sub-committees to present their report at the board meeting. Usually, Adibah and the other managers made significant decisions in consultation with the members of the sub-committees. **Exhibit 3** shows the background of the directors, details of their membership and the sub-committees to which they were assigned.

The majority of the directors attended all twelve board meetings that had been held every month over the past five years. None of the directors had failed to attend three consecutive board meetings without first obtaining a leave of absence. Nonetheless, Adibah noticed that the five new directors had been reticent during the meetings. They had not offered any suggestions or queries about the ongoing projects in the PPK. When they were gauged to participate in discussions, they were very passive. This was an alarming problem to Adibah and the rest of the board should the newly appointed directors continued to behave passively. To increase their participation, Adibah organised a programme of engagement between the directors, staff and members, whereby the directors could meet and greet the staff and members.

8. MEMBER ENGAGEMENT PROGRAMMES

Two months after the appointment of the new board directors, Adibah informed Kamal after a board meeting that she intended to hold an engagement programme for the new directors *“in conjunction with the celebration of Hari Raya Haji. I think we should organise Majlis Kesyukuran for the PPK and invite the members, directors and staff to attend the event so that the new directors could meet and engage with the members and staff. Most members and staff seem not knowing who the new directors are and this event would be a great platform for them to engage”*.

Adibah realised that listening to the members had made SXI-PPK what they were today: an outstanding and well-accomplished PPK. It was never a duty or an obligation for the board to meet and engage with the members, but a privilege to meet and talk with the members. The board noticed that when they understood the members problems and needs, they could better represent them in liaising with the government and external stakeholders. By understanding the members, the board could also work with their business counterparts to search for alternatives that could help to increase the rice yield of the farmers. When farmer rice production increased, the community and society at large would have sufficient access to rice, and this would increase the farmers' household income, and ultimately their living standards.

This was the main reasons throughout the year, the PPK held a number of member engagement programmes, such as meeting with members at unit level, *kenduri*, gotong royong, and other member related activities, as a chance for members to hear from the board of directors and ask them the questions on their minds. Farmers became increasingly aware of the membership benefits of SXI-PPK as the number of members grew, from 1,632 in 2014 to 1,851 in 2018 (see **Exhibit 4**). An additional 100 new members had registered with SXI-PPK for the FY2019. In addition, the amount of share capital increased from RM691,789 in 2014 to RM1,006,703 in 2018 (see **Exhibit 5**).

Despite the rising number of members, the majority of farmer-members were aged forty-one and above (as shown in **Exhibit 6**) and the population of farmers continued to decrease. Farmer, such as Pak Abu, often complained: *“who is going to take over my rice paddies? My kids have secured jobs in Johor and Kuala Lumpur, and they are not going to continue with paddy farming”*. Many of the farmers' children had moved to urban centres, such as Kuala Lumpur, Penang and Johor, to seek better job opportunities. The population continued to fall in the villages, and some farmers had to seek the help of Bangla labour to manage the paddy fields. The ageing problem in SXI-PPK had remained the main concern of the

board and they had been searching for alternatives to attract young generation to engage in farming. However, their efforts were not paid off as farming was being perceived antiquated and unprofitable.

EPILOGUE

12.00 p.m.

Adibah had spent the whole morning pondering and assessing the governance practices and financial performance of SXI-PPK. She believed that SXI-PPK had the resilience and strength to achieve a satisfactory performance in the current and following years as the existing business operations were making a profit and the PPK was well positioned to meet the challenges and competitiveness in the market. The PPK also had the intention of building its own rice mill plant and expanding its fruit cordial business operations in the next few years. After weighing the strengths, weaknesses and potential opportunities and challenges to SXI-PPK, Adibah picked up the audit checklist and skimmed through it again (refer to **Exhibit 1**). She then scribbled in her diary, “Will I be able to get an A for SXI-PPK?” Being awarded with grade A was extremely important for SXI-PPK as they would be able to be nominated and shortlisted for the PPK Jaya Kebangsaan Competition. Should the PPK won the competition, it would be regarded as the best PPK in Malaysia. This has been the aspiration of the members, the board and Adibah. Hesitating awhile, Adibah started jotted down the critical points that she would highlight to MADA.

EXHIBITS

Exhibit 1: Criteria for a PPK to be classified as ‘Grade A’ are as follows*:

1. The directors have been appointed following the provisions of *Arahan Pendaftar Pertubuhan Peladang Bilangan 1 Tahun 2019 (Bil 1/2019)* and *Akta Pertubuhan Peladang 1973 (Akta 109)*.
2. The directors and managers have duly carried out their duties and responsibilities.
3. All the projects undertaken by the PPK are managed efficiently and effectively.
4. The PPK has in place plans for the growth and expansion of the businesses.
5. The PPK should be considered for grade A if it fulfills the criteria set out in items (1) to (4) and assessed in the management audit checklist. If the PPK is not eligible for grade A status, it should be considered for grade B.

The management audit checklist is prepared in compliance with the requirements of *Akta Pertubuhan Peladang 1973 (Akta 109)* as follows:

MANAGEMENT AUDIT CHECKLIST		Status	Auditor’s comments
SCOPE 1: Capital Management			
Scoring	Detail		
Increase=A Decrease=E	Did the PPK estimate an additional increase in the amount of share capital for the FY2018? If yes, what was the targeted amount?		

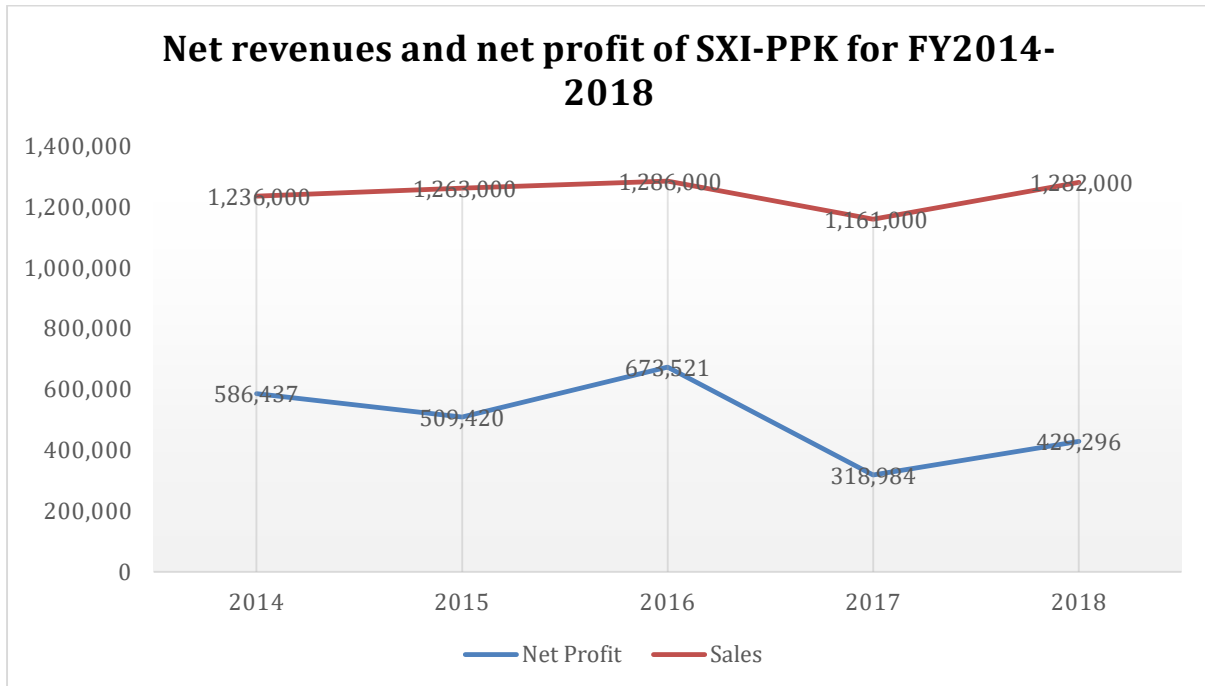
<p>The percentage of increase in member shares:</p> <p>>140% =E 131%-140% =D 121%-130% =C 111%-120% =B 90%-110% =A 80%-89% =B 70%-79% =C 50%-69% =D <50% =E</p>	<p>(i) What was the actual amount of share capital for FY2018?</p> <p>(ii) What was the percentage of increase or decrease in member shares in FY2018?</p> $\frac{\text{Increase/ Decrease in member shares (\%)}}{\text{Actual amount of member share capital (RM)}} = \frac{\text{Estimated share capital (RM)}}{\text{Actual amount of member share capital (RM)}}$		
<p>The share return is positive for:</p> <p>5 years =A 4 years =B 3 years =C 2 years =D 1 year =E</p>	<p>What was the stability of the share returns over the past five (5) years?</p> $\text{Share return} = \frac{\text{Net profit (RM)}}{\text{Total share capital (RM)}}$		
<p>Average share:</p> <p>>RM200 =A RM180-199=B RM150-179=C RM100-149=D <RM100 =E</p>	<p>What was the average share per member in FY2018?</p> $\text{Average share per member} = \frac{\text{Total share capital (RM)}}{\text{Total members}}$		
SCOPE 2: Governance			
<p>5 years =A 4 years =B 3 years =C 2 years =D 1 year =E</p>	<p>The number of years the AGM at the unit level was held before 31 May.</p>		
<p>5 years =A 4 years =B 3 years =C 2 years =D 1 year =E</p>	<p>The number of years the AGM at the PPK level was organised within seven (7) months.</p>		

12/12=A 11/12=B 10/12=C 9/12=D 8/12and below=E	Was all directors' investment more than RM200?		
YES=A NO=E	Were the numbers of board meetings in accordance with <i>Perlembagaan Pertubuhan Peladang</i> (i.e. twelve (12) times per annum)?		
YES=A NO=E	None of the directors were absent from board meetings three consecutive times over the past two years.		
YES=A NO=E	None of the directors incurred bad debts with the PPK.		
YES=A NO=E	Did all directors organise other meetings (apart from the AGM and unit meeting) to engage with members?		
SCOPE C: Financial Management			
The net profit margin is positive: 5 years =A 4 years =B 3 years =C 2 years =D 1 year =E	What were the net profit margins of the PPK over the past five years? Net profit margin = $\frac{\text{Net profit (RM)}}{\text{Net sales (RM)}}$		

Source: *SXI-PPK Management Audit Report (2014)*

*(The checklist was not an exhaustive audit checklist and it is for the use in the classroom)

Exhibit 2: Net revenues and net profit of SXI-PPK for the financial years 2014 to 2018



Source: SXI-PPK Annual Report from FY2014 to FY2018, analysis by case writers

Exhibit 3: Background and committees of the members of the board of directors

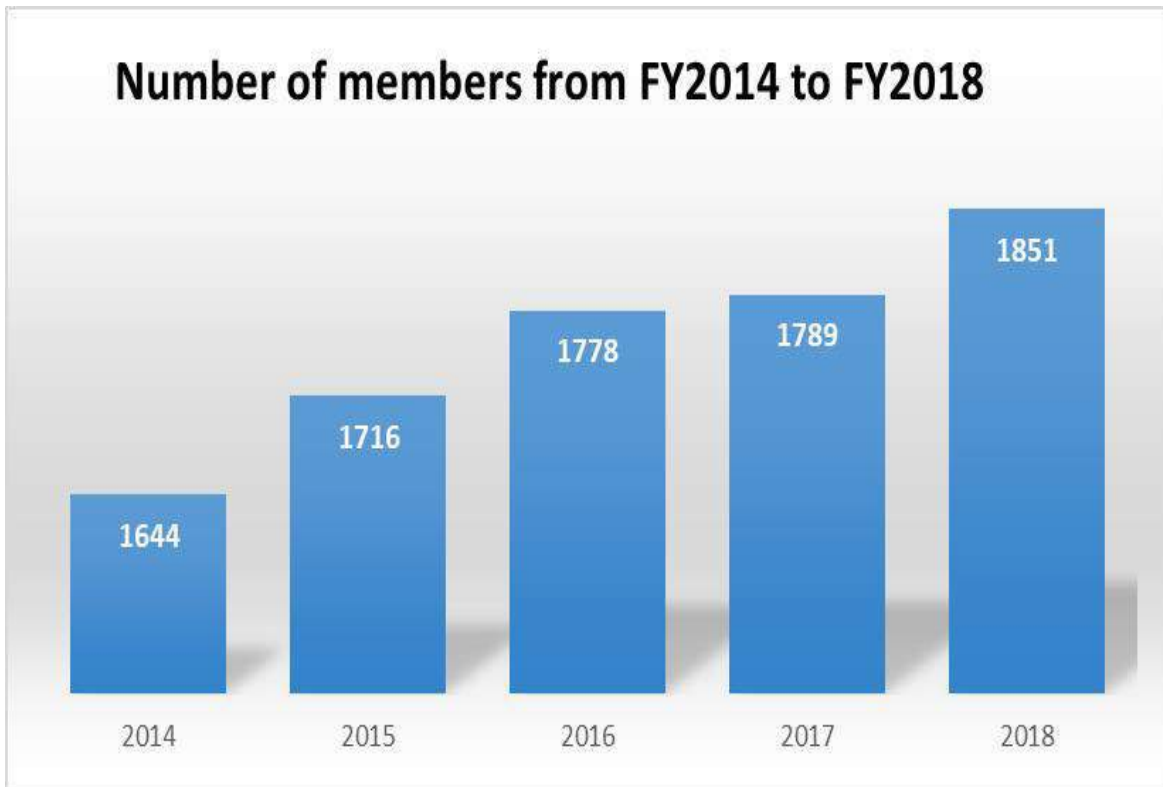
Name	Age	Education	Present or past working experience	Effective date of membership	Total investment	Year of appointment	Committee	Has agriculture experience? (Yes=Y) (No=N)
1. Mohd Kamal bin Kamardin - Chair	64	Agriculture Institute	Retiree and ex-government officer	11 Nov. 2002	RM37,200	Since 2016	Investment, Finance, and Administration	Y
2. Md Din bin Lokman	74	SPM	Farmer	1 Aug. 1986	RM3,905	Since 2012	NKEA Rice Estate Project	Y
3. Mohammad Zahid bin Hamdan	58	Diploma	Contractor	31 Oct. 2008	RM1,666	Since 2012	Training, Development and Supervisory	Y
4. Ali bin Abu	58	STPM	Farmer	9 Sept. 2011	RM1,001	Since 2016	Agro-business and Subsidies	Y
5. Nasrullah bt Dino	60	SPM	Housewife	21 July 2005	RM210	Since 2016	Female Farmer Committee	Y
6. Najib bin Zaid	43	Diploma	Farmer	7 Nov. 2016	RM375	Since 2016	Irrigation, River Cleaning and Contract Project	Y
7. Haji Helmi bin Ahamd	61	Diploma	Retiree	18 April 2014	RM661	Since 2017	Credit Management	Y
8. Abdul Rahim bin Shamir	40	Maritime Certification	Officer	3 March 2008	RM109	Since 2019	Welfare, Religion and Social Services	Y

(Malaysia and Singapore)									
9.	Radzee bin Radli	44	MARA Certification	General officer	11 July 2015	RM25	Since 2019	Cordial and Special Projects (such as rental of shophouses and tents)	Y
10.	Amar bin Amir	60	Diploma	Contractor	7 June 2019	RM25	Since 2019	Rice Reaping Machines, Tractors and Straw Project	Y
11.	Suhaila binti Khalid	44	SPM	Sole proprietor	20 April 2019	RM25	Since 2019	Entrepreneurship, Marketing and Stitches Project	Y
12.	Yusuf bin Said	28	MARA Certification	Farmer	20 March 2016	RM125	Since 2019	Young Farmer Committee	N

Source: SXI-PPK Director Records (2019)

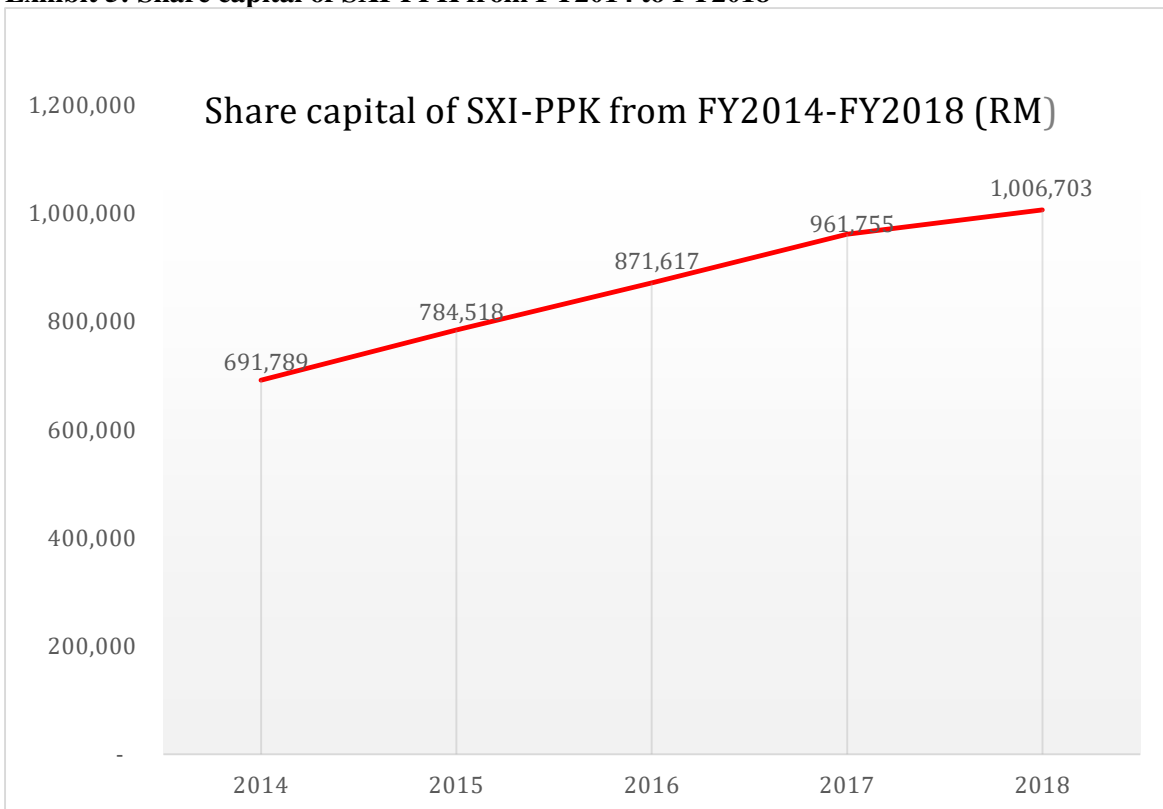
*Directors from one (1)mi to seven (7) were appointed during the AGM and directors eight (8) to twelve (12) were appointed by the minister.

Exhibit 4: Number of members from FY2014 to FY2018



Source: Annual reports of SXI-PPK, analysis by case writers

Exhibit 5: Share capital of SXI-PPK from FY2014 to FY2018



Source: Annual Reports of SXI-PPK, analysis by case writers

Exhibit 6: Number of Members (By Age)

41-YEARS-OLD AND ABOVE	YEAR 2017	YEAR 2018	INCREASE/ (DECREASE)	INCREASE/ (DECREASE) IN PERCENTAGE
MALE	1,140	1,211	71	6
FEMALE	359	424	65	18
TOTAL	1,499	1,635	136	
40-YEARS-OLD AND BELOW	YEAR 2017	YEAR 2018	INCREASE/ (DECREASE)	INCREASE/ (DECREASE) IN PERCENTAGE
MALE	204	160	(44)	(22)
FEMALE	86	56	(30)	(34)
TOTAL	290	216	(74)	
TOTAL	1,789	1,851	62	3.5

Source: Member Records of SXI-PPK, analysis by case writers

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- iii. Pn. Siti Syaheeda bt Sobbbihi, Ketua Cawangan Penyeliaan Kewangan dan Perniagaan Tani, Bahagian Pengurusan Institusi Peladang MADA.
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Konsep diri dalam komunikasi pesakit hemophilia

Self-Concept in Communicating Hemophilia Patient

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Sinopsis

Kajian kes ini dilakukan untuk mengenalpasti konsep diri dan komunikasi pesakit hemophilia dalam mendepani ujian Allah ini. Dalam penceritaan kajian kes ini, terselit jawapan kepada soalan-soalan yang diajukan di akhir kajian kes. Protagonis bagi kajian kes ini adalah Encik Mohd Nor Hidayat bin Bidin, Pegawai Penerangan di Cawangan Perkhidmatan Komunikasi dan Pembangunan Masyarakat, Jabatan Penerangan Negeri Perlis. Beliau adalah seorang pesakit hemophilia yang merupakan seorang yang berjiwa besar dan mempunyai keyakinan diri yang tinggi. Sesuai dengan karektornya, seorang yang merendah diri, sentiasa mengukir senyuman, ramah, dan bersedia menghulurkan bantuan kepada yang memerlukan.

Kata kunci: Konsep diri, komunikasi, hemophilia.

Synopsis

This case study was conducted to identify the self-concept and communication of hemophilia patients in the face of this test of God. In the narration of this case study, the answers to the questions posed at the end of the case study are discussed through the teaching notes. The protagonist for this case study is Mr. Mohd Nor Hidayat bin Bidin, Information Officer at the Communications and Community Development Services Branch, Perlis State Information Department. He is a hemophilia patient who is a big-hearted person and has high self-confidence. In keeping with his character, he was a humble man, always smile, friendly, and willing to help those in need.

Keywords: *Self-concept, communication, hemophilia, interpersonal.*

1. PENGENALAN

Seawal usia dua tahun, Hidayat telahpun kehilangan bonda tercinta. Ketika usianya 12 tahun, ayah tercinta pula dijemput Ilahi. Dugaan demi dugaan menimpa kehidupannya. Namun ia sedikitpun tidak mematahkan semangatnya untuk menongkah arus kehidupan membina kejayaan walaupun disahkan mengidap penyakit Hemophilia A.

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“Aku dilahirkan pada 13 Januari 1985 di Kg. Longboh, Tambun Tulang, Perlis. Aku dilahirkan seperti kanak-kanak lain yang cukup sifat dan normal. Ayah, ibu dan kakakku sangat menyayangiku.

Gara-gara terjatuh ketika bermain semasa di tadika, detik itu menjadi permulaan disahkan sebagai pesakit Hemophilia A. Sendi-sendiku menjadi lebam seperti pendarahan dalaman. Lutut kiri yang paling terkesan, mungkin disebabkan hentakan akibat terjatuh. Selain kaki, lutut dan siku yang lebam-lebam, malam itu juga menyaksikan hidung, gusi dan telingaku tak henti-henti mengeluarkan darah. Aku menahan sakit yang berterusan kerana pendarahan pada sendi dan rongga-rongga tersebut. Aku hanya mampu menangis menahan kesakitan. Ahli keluarga yang cemas melihat keadaanku ini membawa diriku ke Hospital Besar Kangar atau HBK (sekarang dikenali sebagai Hospital Tuanku Fauziah).

Doktor telah mengenalpasti aku menghidapi penyakit Hemophilia A (Severe). Doktor bertungkus-lumus ingin menyelamatkan kakiku daripada tidak boleh diluruskan kerana pendarahan lutut yang terlalu lama dengan cara menggantung batu serta menyimen kaki, namun kaki kiri tetap tidak boleh diluruskan seperti biasa. Rawatan yang diberi adalah rawatan cyro (cryoprecipitate) secara iv (intravenous) ke dalam saluran darah bagi tujuan menambahkan kembali komponen pembekuan darah.



Tahun 1992, aku melangkah ke Sekolah Kebangsaan Kg. Serdang. Disebabkan aku masih tidak boleh berjalan, masa persekolahan berlangsung Allahyarham ayah akan menghantar aku dengan basikal tuanya. Ayah akan mendukung aku ke kelas sehingga ke tempat duduk dan bila masa rehat ayah akan membeli makanan dan menghantar masuk ke kelas serta mendukung aku ke tandas untuk buang air kecil atau besar. Berlinang airmataku saat mengingati detik itu. Ayah tanpa jemu tetap setia menghantar, mendukung, membeli makanan tanpa gagal setiap hari.

Hakikatnya, terbit juga perasaan malu pada rakan-rakan dan guru, namun itulah pengalaman dan anugerah yang aku dapat.

“Aku harus kuat, cekal dan sabra, SEHEBAT ayah” - Hidayat

Ayah memang seorang yang sangat baik dan lurus orangnya. Bila sakit menyerang, aku perlu dimasukkan ke wad HBK bagi tujuan rawatan cyro dan boleh dikatakan setiap tahun 20 – 30 kali aku perlu dimasukkan ke wad bagi tujuan rawatan. Bayangkan berapa banyak yang aku tertinggal dari segi pembelajaran. Namun, aku boleh dikategorikan sebagai pelajar cemerlang di dalam kelas sehingga darjah 5. Dari darjah 1 sampai 5, kedudukan yang paling teruk aku pernah dapat hanya nombor 6 walaupun jarang ke sekolah. Mungkin disebabkan aku tiada ruang untuk bermain, jadi banyak masa dihabiskan dengan membaca buku di rumah walaupun sering keluar masuk wad untuk rawatan.

Tahun 1997 ketika aku berada di darjah enam, berlaku satu peristiwa yang sangat membuat aku sedih dan tidak bersemangat. Masihku ingat dalam bulan Mei tahun tersebut, ayah yang dikasihi telah meninggal dunia. Ayah telah pitam di dalam kawasan sawah padi di Seriab ketika menabur baja namun mujurlah ada orang kampung yang melihat kejadian berkenaan dan membawa ayah balik ke rumah. Ayah masih sedar dan boleh bergerak seperti biasa, namun pergerakannya kelihatan lemah. Namun malam tersebut bermulalah segalanya, ayah mengalami kancing gigi dan tidak sedar di alam nyata. Keluarga berpakat menghantar ayah ke hospital dan Mak Ndak yang menemani ayah di hospital. Jam 7.00 pagi 24 Mei 1997, terdengar deringan telefon di rumah makcik. Makdak memaklumkan ayah sudah kembali menghadap penciptaNya. Hancur luluh jiwaku, airmata mengalir tanpa sedar, menangis tanpa suara. Secara rasminya aku bergelar anak yatim piatu.

Selepas ayah meninggal dunia, Mak Ndak dan nenek mengambil alih sepenuhnya tugas membesarkan kami dua beradik. Selepas ketiadaan ayah sebagai tempat bermanja, aku hampir 2 bulan tidak ke sekolah disebabkan semangat dan motivasi yang hilang. Masihku ingat, guru-guru datang memujuk diriku disebabkan aku akan menghadapi peperiksaan UPSR pada bulan September. Ku gagahkan jua ke sekolah dengan hati yang kosong dan cuba untuk mengejar kembali pelajaran yang tertinggal. Aku menghadapi peperiksaan dalam semangat yang hilang serta kesihatan yang turun naik, aku mendapat keputusan yang biasa sahaja iaitu 2A, 1B, 1C dan 1E.

Di sekolah, aku seorang yang pemalu, pasif dan tiada kawan-kawan kerana keterbatasan dari segi masalah kesihatan tidak dapat bermain bersama. Dalam tempoh ini, kadangkala aku cemburu bila melihat kawan-kawan sekelas yang mempunyai ibu bapa yang menjaga mereka. Hati ini kadangkala menangis dan sedih bila tiba hari raya memandangkan tidak punya kesempatan untuk beraya bersama ayah dan emak. Namun, inilah kehidupan yang Allah telah rencanakan sebaik-baiknya.

Kalau tak dipecahkan ruyung, manakan dapat sagunya. Aku faham diriku adalah orang miskin yang tiada harta, yatim piatu, orang kelainan upaya dan mempunyai penyakit namun aku faham hanya pendidikan sahaja yang dapat mengubah hidup. Oleh itu aku sedaya upaya menjawab soalan peperiksaan SPM dengan sebaik mungkin. Bila keputusan peperiksaan diumumkan, aku mendapat keputusan yang sederhana sahaja iaitu 2A.



Tahun 2003 selepas SPM, aku mengambil keputusan melanjutkan lagi pelajaran dengan memasuki tingkatan 6. Memandangkan SMKSA tiada lagi tingkatan 6 pada masa tersebut, aku melanjutkan pelajaran ke Sekolah Menengah Kebangsaan Syed Saffi (SMKSS), Simpang Empat. Aku diletakkan di dalam kelas aliran ekonomi dan Mak Ndak masih setia menghantar dan mengambil aku dari sekolah dengan motorsikal C70nya. Dalam tempoh ini, aku sering berasa malu dengan pelajar lain kerana masih dihantar dan diambil oleh Mak Ndak berbanding dengan orang lain yang datang sendiri atau dengan kawan-kawan lain ke sekolah. Namun, inilah pengorbanan Mak Ndak yang sangat besar yang senantiasa memberi sokongan dan motivasi pada diri ini. Sebagai manusia, sudah tentu semangat itu kadangkala turun naik namun beliau tidak jemu-jemu menyuruh aku belajar sebaiknya bagi mengubah hidup.

Dalam tempoh masa memasuki tingkatan 6, perasaan pemalu sudah semakin beransur hilang. Ini kerana dalam tingkatan 6, proses pembelajaran kebanyakan adalah kerja berkumpulan dan juga pembentangan di hadapan kelas. Aku kira inilah yang membuat perasaan pemaluku semakin kurang. Tambahan pula semasa tingkatan 6 atas, aku satu-satunya pelajar lelaki di dalam kelas aliran ekonomi tersebut sementara 23 pelajar lain adalah perempuan. Diriku seringkali diusik, namun aku faham kerana aku satu-satunya kumbang yang ada dalam kelas tersebut. Kawan-kawan juga banyak membantu diriku mengejar kembali pelajaran yang tertinggal. Selain itu, ubat baru telah diperkenalkan kepadaku iaitu FVIII (Factor 8) yang mana proses penyembuhannya lebih berkesan dari Cyro. Ubat yang baru ini menyebabkan aku lebih cepat pulih dari sebelumnya. Pada masa ini aku belajar menyuntik sendiri ubat tersebut namun perlu disuntik di wad dan tidak dibenarkan dibawa balik stok ubat tersebut ke rumah.

Langit tidak selalu cerah, aku demam semasa peperiksaan Malaysian University English Test (MUET) pada Mei 2004. Aku hanya sempat mengambil kertas *Listening*, *Reading* dan *Writing* di sekolah dengan keadaan yang demam. Selepas itu keadaan demamku semakin teruk dan juga berlaku bengkak serta pendarahan dalaman di lutut kiriku serta perlu dimasukkan ke hospital. Pada masa tersebut kertas bagi *Speaking* MUET akan dilaksanakan dalam 3 hari kemudian. Setelah doktor mendiagnos dan memeriksa keadaan diriku, doktor mengesahkan lutut kiriku mengalami *knee septic arthritis* (jangkitan kuman pada lutut) dan memerlukan pembedahan kecil. Walaupun pembedahan itu kecil, namun disebabkan aku mempunyai hemophilia A, ia berisiko mengalami pendarahan yang berterusan. Pakar perubatan, orthopedic dan bius saling bekerjasama melaksanakan pembedahan pada keesokan harinya. Alhamdulillah, ia berlangsung dengan baik dan tanpa komplikasi kerana ubat Factor VIII telah disuntik dengan kadar 100% liputan. Aku terpaksa mengambil kertas *speaking* dengan keadaan sakit dan di atas katil wad. Masihku ingat aku perlu berlawan bercakap dengan 2 orang guru pemeriksa yang

datang berbanding jika di sekolah kertas tersebut akan dilaksanakan dengan setiap kumpulan mengandungi empat orang pelajar yang akan saling berdiskusi. Bila keputusan diumumkan, aku hanya mendapat band 3.

Peperiksaan STPM kian menjelang tiba. Aku bersyukur dikelilingi rakan-rakan sekelas yang baik dan prihatin serta guru yang mengambil berat. Walaupun sering ketinggalan dalam pelajaran, namun rakan sekelas akan memberi nota kepadaku bila aku kembali ke sekolah. Aku mengambil 5 subjek bagi peperiksaan STPM yang akan berlangsung pada bulan November. Sekali lagi aku jatuh sakit 2 hari sebelum peperiksaan berlangsung dan ini juga menyebabkan aku mengambil kesemua subjek di Hospital Tuanku Fauziah (HTF). Walaupun hanya 5 subjek, tetapi tempoh masa kesemua subjek itu hampir 4 minggu dan aku terpaksa berkampung di sana. Satu hal yang buat aku tersentuh adalah seorang guru subjek ekonomi yang pergi mengajar aku di hospital dua malam berturut-turut sebelum kertas ekonomi berlangsung. Terima kasih kepada Cikgu Ahmad Farid bin Karim (kami berdua menjadi kawan baik) yang sanggup datang ke hospital mengajar subjek ekonomi. Terima kasih juga kepada barisan Jururawat Kelas Dua Medikal yang mengatur satu bilik khas di wad tersebut bagi tujuan pembelajaran pada 2 malam tersebut. Peperiksaan diduduki dengan baik walaupun dari segi sakit dan kesihatan yang kurang memuaskan. Alhamdulillah, bila mana keputusan peperiksaan STPM diumumkan, aku menjadi pelajar cemerlang di sekolah dengan memperoleh PMK 3.29. Semasa majlis tersebut berlangsung, aku berada di hospital kerana rawatan dan Mak Ndak yang mewakili diriku untuk mengambil anugerah tersebut.



2. PENUTUP

Semakin kita bersyukur, semakin Allah tambah nikmatNya. Hidayat bersyukur sepanjang hidupnya, beliau dikelilingi oleh insan yang baik sama ada keluarga, rakan taulan, guru, pensyarah, rakan sekuliah, rakan sekerja dan orang perseorangan. Sifat diri yang positif dan optimis sejak kecil menjadikan beliau seorang yang berjaya membina kerjayanya. Bagi Hidayat, beliau perlu kuat secara dalaman dan spritual. Sokongan dan dorongan luar turut menyumbang kepada pengukuhan kekuatan dalaman. Bak kata pepatah, yang pipih tak datang melayang, yang bulat tak dating bergolek. Kejayaan tidak akan hadir tanpa adanya usaha, ilmu dan tawakal.



3. OBJEKTIF KAJIAN KES

- i. Untuk menentukan faktor mempengaruhi penguasaan kemahiran intrapersonal dan interpersonal protagonis.
- ii. Untuk mengenalpasti konsep diri yang sesuai diaplikasikan untuk mendepani penyakit hemofilia.

Category planning and department restructuring at A-one Mall

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Teaching Case Synopsis

This case highlights the issues faced by A-one mall which was a large format department store. Major issues were stagnant growth, negative customer feedback and non-performance of certain categories. The food and grocery category was not performing, while there was an increasing demand for women's western apparel which the management found through survey and other research. The management decided to go for complete category restructuring across all floors. The food and grocery as a category, which was previously managed by local vendors, was completely eliminated. Tie-ups were done with international food chains like Café Coffee Day and they were given small spaces across different floors. Women's apparel was allocated the entire floor space on the first floor. All these decisions led to increased category contribution from 7 to 12 per cent and YOY growth of 60 percent.

Keywords: Restructuring, category, sales, performance, department, merchandise

1. INTRODUCTION

Mr. Ajay Kumar, the regional manager of A-one Mall was presiding over the weekly meeting with his category management team. All his apprehensions were coming true as his team started sharing facts of the last six months. The growth was stagnant, categories were not performing as per expectations and customer feedback was also moving towards negative. The entire fourth floor was not performing and retail space was turning out to be a non-productive space. Mr. Ajay started recalling his earlier research on category contributions for food and grocery industry and apparel which he had conducted prior to the meeting (Refer Exhibit A). He found out that in the retail sector, the total contribution of Food & Grocery Industry is 42 per cent. He had also found out that fashion apparel was the second most preferred category amongst consumers (IBEF, 2017). "I thought that food category would be a crowd puller, but it is turning out to be dampener." said Mr. Vikram Bhathija, who was heading the Men's Division. "It is so disappointing, but we must think of corrective actions. We were operating in food category because the existing reports suggested that it is the number one category followed by apparels. However our number are not justifying continuing with the same focus. What if we are functioning on a broader product width than we can manage? What if we focus on fashion category instead of trying to operate in multiple categories?" replied Mr. Ajay. Instead of focussing on corrective actions towards one category or on one floor, Mr. Ajay decided that the entire mall including all the categories needs to be planned and restructured for long term benefits. For that he decided that the existing floor plan, merchandise assortment and category contributions needs to be studied and evaluated.

2. ABOUT THE MALL

A-one Mall was a one-stop shopping destination that offered the latest in fashion & accessories from over 1000 brands. A-one mall was launched in June 2002 in Mumbai, as India's first no-barrier concept store and the biggest lifestyle retail brand from Beta Group. A-one Mall offered options across categories including apparels, cosmetics, fragrances, eyewear, watches, accessories, sportswear, toys,

mobiles, electronics, home and much more for the entire family. A-one Mall had a countrywide presence with over 34 A-one malls across 16 cities in India.

Mr. Ajay was responsible for handling three stores in the state of Uttar Pradesh in the cities of Agra, Lucknow and Kanpur. The Lucknow Mall opened on 1st October, 2009. Even after the opening the question remained that whether the city was ready for a mall like this with so many brands on one floor. It was a rented property with its headquarters in Mumbai. Total area of the mall was 1, 20,000 square feet which included parking space. Around 20,000 square feet space was available per floor and in total there were five floors including parking.

3. ORGANIZATIONAL HIERARCHY & RECRUITMENT

The organizational structure at A-one was simple divisional structure which followed product based categorization with scalar chain of command (Ouchi, 1977). At the bottom of the ladder were fashion consultants who reported to department managers who in turn reported to Divisional Managers also known as the Assistant Mall Managers. The Assistant Mall Managers reported to the Mall manager and at the top of the chain of command was the Regional Manager. All the recruitments up to the posts of Divisional Managers were handled locally and it was controlled by the head office for higher designations. In total 389 employees were working in A-One Lucknow in April 2016. Salary of the employees ranged from INR 15,000 per month for a newly recruited fashion consultant to INR 50,000 per month for a department manager.

4. THE PROBLEM

The time when the store opened, the category team had a perception that the food was a strong category and an entire floor needed to be allocated to this category. Despite this notion Food category remained disconnected and could not pull enough traffic. The fourth floor included supermarket catering to food category which offered entire gamut of food category like grocery, packed food, fresh vegetables and fruits, etc. This arrangement was done with the purpose of creating a one stop destination which was in rhythm with the tagline of A-One Mall “Eat here, Shop here, Enjoy here!” Besides, there were private players serving ready-to-eat food items which assured higher margins for the mall. But none of them were leading national or international players in the category. The belief that people would visit the fourth floor for purchasing grocery and food items could not be realized. This led to the situation of stagnant sales and piling up of losses.

Another problem related to category allocation and space planning was that the ladies category was not on a single floor. Customer feedback taken before the mall opening indicated ethnic wear as the traffic generator in the women’s wear category, but later on looking at the sales data, it was established that women’s western wear and youth also had equal potential. Furthermore, within a year, menswear became the top category of A-one Mall belying all previous notions about women’s ethnic wear category performance. Even though the team was able to identify these things, instant corrective action was not possible as control was in the hands of the head office.

5. APPROACH TOWARDS SOLUTION

After carefully considering all the options suggested by his team, Mr. Ajay Kumar decided to go for a three step approach for entire mall restructuring. In the first step multi-source feedback was gathered from customers, sales team and category team. The second step involved planning of brand and category restructuring as per the feedback by the combined team of Head office and mall. In the final stage implementation was carried on as per planning by the team selected for the task.

6. MULTI-SOURCE FEEDBACK

Before taking a major decision like restructuring of the entire space allocation plan, careful planning and collection of feedback from various sources was inevitable. The process started with a survey by the marketing team of A-one wherein a questionnaire was circulated to all the store staff (Refer Exhibit B). The subsequent questionnaire included comments on space planning, department allocation, customer perceptions, sales patterns, etc. The customer survey included questions on profiling for which data related to demographics, information on vehicles owned, loyalty card ownership, etc. was collected. Further, questions were included to explore the purchase pattern and shopping preferences of customers. The questionnaire for customers was structured in the head office and was carried out on a sample size of 200 respondents within a month. In-depth interviews were organized for both sales team and category team. The entire process of data collection was carried out in January-May' 2016. During the survey it was established that most of the respondents were locals residing in the surrounding area and around eighty five per cent of them owned loyalty cards. Majority of the customers wanted a better and a larger collection in womenswear. Almost half of the consumer base (around forty per cent) stated that they did not visit the top floor because either they were not hungry or they wanted to eat somewhere else. Those who visited the top floor stated that even though the choice of food outlets at A-One Mall was sufficient (eighty one percent), still majority of the respondents (seventy five per cent) stated that they would prefer to have food at branded outlets such as McDonald's, KFC, CCD, etc. rather than the local food outlets available in the mall. Most of the respondents stated that the grocery section did not attract them much because they felt that fruits and vegetables were not fresh enough and there are no bulk discounts or special offers on this category. For them it was a tedious task to travel all the way to fourth floor just to buy small items like grocery and fruits and vegetables. Sales team and category team were of the opinion that they were losing a lot of sales because of poor performance of the food section. Instead they felt that if the same space was occupied by fashion category, the sales performance would have been much better.

7. BRAND AND CATEGORY RESTRUCTURING

The reallocation process required a three-pronged approach. The confirmation and acceptability of the various brands, already present and involved in the process, was the primary need for the re-allocation to take place. Secondly, new national and international brands were to be identified and introduced. Lastly, local brands were also to be identified for possible tie-ups.

Pricing and margin working was done by the Head Office. Brands needed to agree on the minimum guarantee and the margin working. The entire process of restructuring took a time span of seven months from June'2016 to Dec'2016 which also included brand entry and exit (refer exhibit C). If space was created due to brand exit then immediate intimation was sent to the category team with a suggestion to invite and include new brands.

Earlier the concept was dedicated towards positioning A-One Mall as a one stop destination where one could eat, shop and enjoy. The focus had then shifted on creating a fashion forward concept, eliminating the food court which was not performing as per expectations. Therefore the team was committed towards having tie ups with new fashion brands. Apart from Ground and second floor rest of the three floors saw major changes as part of the category restructuring (Refer Exhibit D).

8. REALLOCATION & IMPLEMENTATION OF NEW PLAN

As per the three pronged approach of the brand restructuring, the following happened during implementation:

- Most of the brands present agreed to extend their contract and move to a new location within the mall.

- Previously women's section had fewer brands. After restructuring many new brands were introduced. In women's western wear category nineteen new brands were introduced after the reallocation.
- Tie up with Green Timber and Jade Black happened in the menswear section.

A total of eighteen cash counters were set up and their presence was ensured on each floor with maximum number on ground floor. The entire first floor was allocated to the women's western wear which was double the previous area allocated. Baby world, kids and Toys were shifted to top floor. The logic behind was that the customers would visit the top floor for purchasing kidswear. Third floor was allocated to youth category.

Food section was completely eliminated. They introduced KFC on the third floor and CCD on the second floor as they were leading partners. These food partners were international players and although they were offering comparatively lower margins, they were a major attraction for shoppers.

9. POST IMPLEMENTATION PERFORMANCE

Earlier there were fifteen brands in Women's section but the number of brands after restructuring increased to thirty four. Also the area of Ladies Western Wear section was increased to 11,000 square feet from 5000 square feet. Due to these changes, the contribution of the category increased from 7% to 12 % (2016-17) in six months. The two year YOY growth in this section in the period 2014-15 to 2016-17 was 60% every year which indicated a huge growth potential. The Ladies Western Wear category which earlier had a value of six crores (60 million) had become a category with total value of fifteen crores (150 million). Earlier Ladies denim section did average daily sales of INR 2,000-3,000, now it was selling merchandise worth INR 15,000-20,000 per day. The store staff knew that such an improvement could never be achieved if Toy's section was allocated the same area. Toy's section which was earlier on the third floor along with Ladies denim was now moved to the fourth floor and Ladies denim was moved to first floor to be part of the entire women's section. In the ladies denim section brands like Lee, Levis etc. had limited options in terms of SKU but now they have increased their options considerably as they were given more floor space. A Stock Keeping Unit (or SKU) is an identification assigned to a product with respect to its distinct price, product options and manufacturer of the merchandise. Men's section was the only section which was not moved because it already had around eighty brands and sales performance was also satisfactory. Contribution of Men's section remained similar to the previous year at around 30-35%. After the restructuring, the regular customers were frequently invited to attend store promotional events. Since the new concept of A-one mall was fashion-centric, fashion shows were being regularly organized at the time of new collection launch.

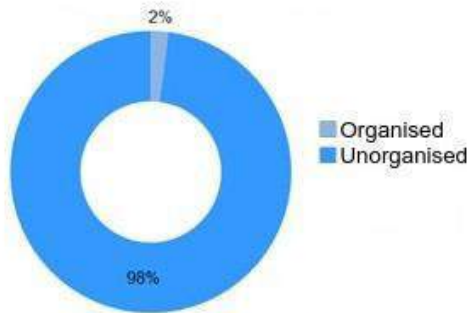
10. EVALUATION AND FUTURE OUTLOOK

In the past five years a new trend of increasing acceptance of western wear amongst young females of Lucknow was recorded. This was also one of the reasons for the initial proposal to increase the area allocated to Women's Western Wear. Mr. Ajay called another meeting to discuss the latest sales trends. Although the sale of Women's western wear was showing a positive increase (refer Exhibit E), GMROF of the category had reduced from 56% to 40%. GMROF stands for Gross Margin Return on Footage – a measure of inventory productivity that expresses the relationship between your gross margin, and the area allotted to the inventory (Levy, Weitz, & Ajay, 2009). Out of the total footfall 46% was in Men's section, 43% was in Women's section and around 10-11% was in the Kid's section. The yearly sales of Toy's section was 80-90 lakh (8 – 9 million) and it was having a de-growth of 10-20 % in the past few years. Growth of kids did not decrease despite moving to the fourth floor and it kept giving a consistent contribution of 4-5%. It was the major traffic puller in the top floor. The Average Margin for the whole store was 37-38% for the regular stock (excluding EOSS stock). Six months was not sufficient period to analyse the overall impact, however sales performance of the mall improved as indicated by six month evaluation, with major contribution to that coming from Women's Western Wear category. The team decided to go for periodic evaluation department wise and a complete performance evaluation of the

mall after one year of implementation. The initial stats were encouraging and the team was optimistic about the future.

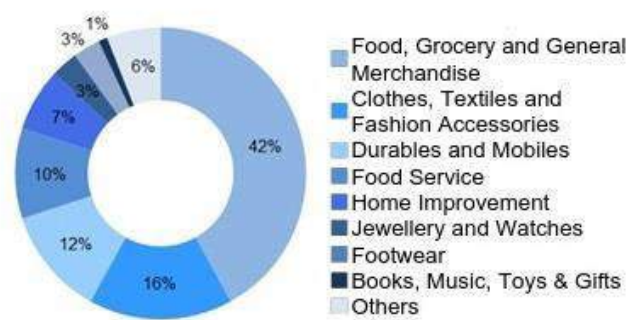
Exhibit A. Organized retail share data

Indian retail industry (2016)



Source: Indian Retail Report, TechSci Research

Shares in organised retail sector (2015)



Source: Indian Retail Report, TechSci Research

Source: (IBEF, 2017)

Exhibit B. Multisource Feedback System

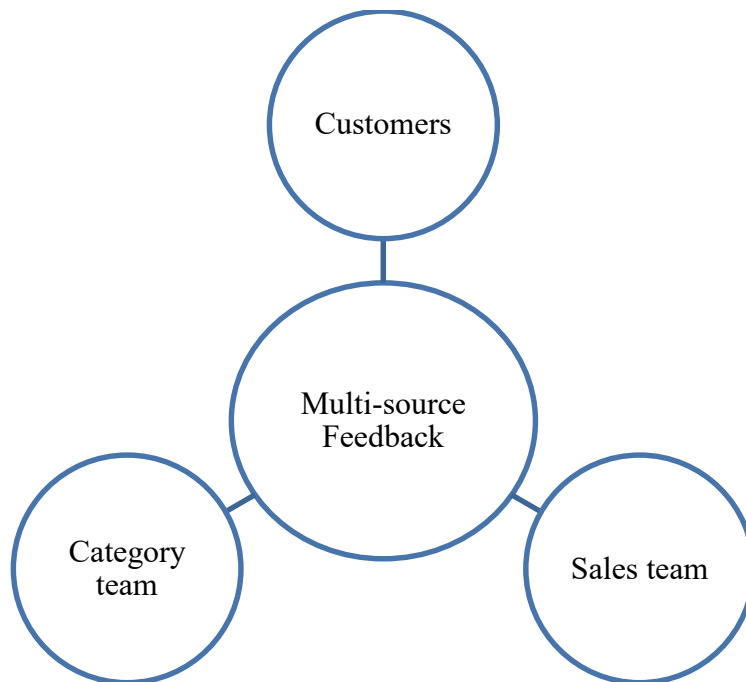


Exhibit C. Restructuring Timeline

S. No.	Particulars	Time Period	Timeline
1	Problem Identification & Overview	One year	January-December'2015
2	Feedback from stores	Two Months	January- February'2016
3	Chain Level Performance check of categories*	Two Months	March- April' 2016
4	Market Study	One Month	May'2016
5	Visit & Evaluation by project team	One Week	June' 2016
6	Information to Brands & Space planning	One Month	June' 2016
7	Brand Negotiation	One Month	July' 2016
8	Visit by brand teams, evaluation and feedback	One Month	August' 2016
9	Agreement with brands	One Month	September' 2016
10	Implementation by Project Team	Three Months	October- December' 2016
11	Hiring	Three Months	October- December' 2016

* Chain Level Performance check of categories referred to study of relative performance of all categories across different A-one Malls in India.

Exhibit D: Mall floor allocation before and after restructuring

Mall Floor	Before changes	After changes
Fourth	Food outlets, Food bazaar (supermarket)	Home, Kids, Toys, Babyworld
Third	Babyworld, Kids, Toys, ladies denim.	Youth category, KFC outlet
Second	Mens	Mens category, CCD outlet
First	Womens – western, ladies, youth.	Entire Women's category including Western Wear, Lingerie, Footwear, Denim etc.
Ground	Ladies Ethnic, Cosmetics and Watches.	Ladies Ethnic, Cosmetics and Watches.

Exhibit E: Women's western wear sales growth pattern

S. No.	Financial Year	Sales Growth
1	2012- 13	18%
2	2013- 14	22%
3	2014- 15	6%
4	2015- 16	11%
5	2016- 17	12%

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Tastiway's Export Strategy

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Teaching Case Synopsis

Tastiway Sdn. Bhd. was incorporated in Malaysia in July 2000 as a Private Limited Company. It has been certified to MeSTI and HACCP by the Ministry of Health, Halal certification by JAKIM, and ISO 22000:2005. This firm manufactures products under its own brands such as "ALOR" Freeze-dried fruit as Pre-packed beverages, "TASTIMINT" Sugar Free Lozenges and "DKE" Goat's milk powder, vinegars and honeys. To boost up its economic growth, a factory of 70,000fts is built as a hub of excellence for Research & Development, Ingredient Manufacture, and Product Packing. The center has helped this beverage manufacturer drive growth through new product innovation, increasing supply chain efficiency and optimizing product formulation. To date, their products have been successfully exported to other Asian countries such as Sri Lanka, Thailand and China. The success story of Tastiway in penetrating foreign market through exporting has given the opportunity to provide an interesting teaching case. This teaching case will show a clear picture on how Tastiway gets opportunities to export its products to foreign markets. It covers three important phases in exporting strategy viz. (1) pre-exporting, (2) exporting and (3) post-exporting in which the product readiness, company readiness, potential partners selection, export documentations and procedures involved in each phase are being discussed in detail. This will help students to learn how Tastiway grown to become one of the largest and most technologically advanced manufacturers of beverage ingredients and flavors in northern region of Malaysia.

Keywords: Export strategy, pre-exporting phase, exporting phase and post-exporting phase

1. PROLOGUE

It was raining heavily. Mr. Lim Beng Lee got up from his desk and sat on a sofa facing the window. Having worked day and night to build his company, this owner of Tastiway took a moment for himself to enjoy the beauty of Wang Tepus while sipping his ALOR White Coffee. While relishing his coffee, he recollected some wonderful memories of how he started the Tastiway venture. The idea of starting the food ingredients and ready-made food business originated from his previous working experience at DXN's Research and Development Department, where he acquired knowledge of the fermentation process and the food industry. That job was his steppingstone in setting up the Tastiway business. It was tough in the early days as there were many obstacles to overcome, such as shortage of seasonal fruits supplies, new tax rules and regulations imposed by the government, a lack of workers, and shortage of raw materials for production. Nevertheless, he was able to overcome these challenges and the business grew to be a success not only in Malaysia, but also internationally. Tastiway registered 81% to 90% export increase mainly in South Asia, Eastern Asia and Domestic market. The growth was remarkable.

All the effort and hard work paid off and the business received numerous awards and worldwide recognition. In 2019, Tastiway was awarded the prestigious Malaysian Best Brand Award for its extraordinary success. Earlier in 2017, the company's innovative and effective marketing practices was recognised and it was awarded the prestigious Kwong Wah Yit Poh (KWYP) Dr. Sun Yat-Sen

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Achievement Award for the Food & Beverage Manufacturing category. In 2016, the company was awarded the Keris Award for Excellence in the Food & Beverage industry for its honesty and integrity in business dealings. In 2015, the business won the Power Brand Award for building and growing a successful and dynamic brand locally as well as internationally. Tastiway's products also received certifications for Hazard Analysis Critical Control Points (HACCP), Halal, Good Manufacturing Practice (GMP) and Veterinary Inspected. The company's products are also ISO 22000- certified. Tastiway's reputation in the food ingredients and ready-made food industry has been built by focusing on quality, innovation, and taste. Working in close partnership with its customers and suppliers, Tastiway has created a family culture on a global platform. This is in line with the company's vision to improve and promote health and wellness together with safety and sustainability in the Food and Beverage industry, through product and manufacturing innovation. Reflecting on the memories of all his accomplishments and proud to have them recognised by the accolades, Mr. Lim found himself smiling from ear to ear.

**Knock, knock* "Boss". Someone knocked on the door and called out to him. The noise startled him out of his journey down memory lane. It was Mr. Joe, his Assistant Operations Manager, who was waiting at the doorstep together with some visitors. "Yes, Mr. Joe, please come in," Mr. Lim replied. Mr. Joe then said, "Thank you, boss. We have visitors from Universiti Utara Malaysia. I would like to introduce, Dr. Alisha, Dr. Ayu Nurisma, and Dr. Naren. They have come for a visit to learn about the success of our company in the international market". Mr. Lim responded accordingly and said "Oh yes. I was expecting to receive you all. Welcome, everyone. I'm delighted to meet all of you and it's my pleasure to have the opportunity to present you with an overview of Tastiway's business, its success, and its exporting strategies in the international market". Everyone proceeded to go to the meeting room where Mr. Lim introduced his staff to the visitors and started to brief them about the company's background and showed the company video.*



(Scan this QR code to watch the company video)

2. COMPANY BACKGROUND

Tastiway Sdn Bhd is a Small Medium Enterprise (SME) in Malaysia, based in Kedah in the northern region of Malaysia. Its headquarters is located in Alor Setar and its factory is located in Bukit Wang, Jitra. In July 2000, the business was incorporated in Malaysia as a Private Limited Company. Tastiway has 201-300 employees and registered total annual revenue amounted USD 5 million to USD 10 million. Tastiway's primary focus has been the improvement of Health and Wellness and Safety and Sustainability in the Food and Beverage industry. The company has been certified by various boards and has received numerous local and international awards. Tastiway's organizational chart attached in Exhibit 1.

Product Range

Tastiway is actively involved in the food and beverage industry. It produces a variety of products such as Creamy Filled Wafer, Freeze-dried Fruits, Prepacked Beverages, Vinegar, Honey, and Tastimint Lozenges. These products are manufactured using various in-house brand names. "ALOR" is the brand name for freeze-dried fruits such as rambutans, pre-packed beverages such as instant coffee, ready-to- drink juices, and fruits wafer. The brand name "TASTIMINT" is used for sugar-free lozenges, and the brand name "DKE" is used for goat's milk powder, different kinds of vinegars,

and various types of honey.





Figure 1: Tastiway Range of Products

Business Subsidiaries

Currently, Tastiway products are available both domestically and globally. Working with external business partners, the company's products have been successfully exported to other Asian countries such as Sri Lanka, Thailand, and China, capturing a large global market share. Specifically, 60% of total revenue were from South Asia, 10% were from Eastern Asia, 10% were from Southeast Asia, 10% were from the Domestic market, and 5% from the Middle East and another 5% were from the South America markets.

Tastiway's new factory is becoming the center of excellence for Research & Development, Ingredients Manufacturing, and Product Packaging. There are three subsidiary companies under the Tastiway company portfolio, namely Tastiway Marketing Sdn. Bhd., SLM Packaging Sdn. Bhd., and Kholin Sdn. Bhd. Leveraging on its international sales, Tastiway has also partnered with CEPHEI and FameSeen to promote and sell its range of products through their online platforms. Both these platforms are recognised as being the most prominent and leading online stores in Shanghai and Guangzhou, respectively.

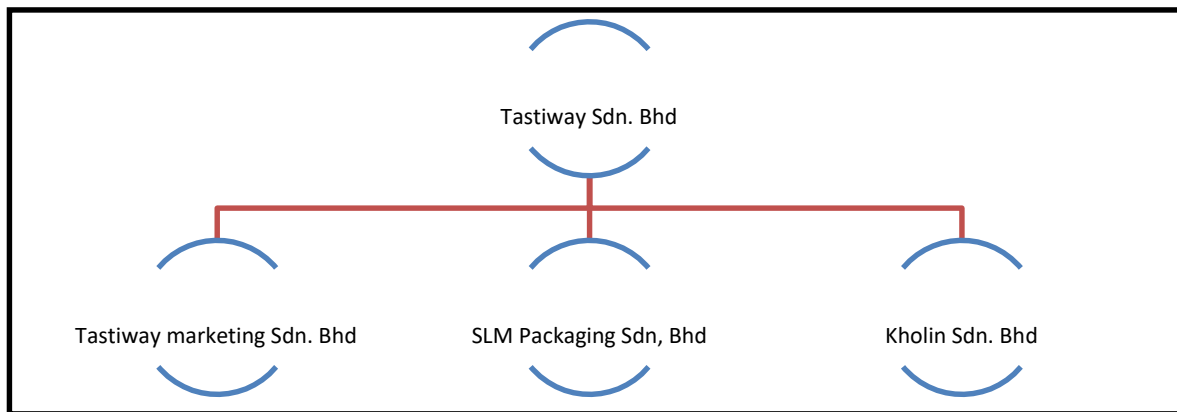


Figure 2: Tastiway Subsidiaries

Strategic Planning

Mr. Lim highlighted that Tastiway has achieved great success due to having a strong vision and mission statement. Tastiway's vision is to be the leading supplier of value-added brands in the local and global market and to be recognised worldwide as a reliable, ethical partner and an advocate for healthy and high-quality products. To realise the company vision, Mr. Lim said he channelled the company's energies towards achieving four missions, namely to continually expand the product range and customer base through quality and innovation, to become the leading supplier of value-added brands in the local and global marketplace, to maintain the highest standards of business and ethical behaviour, and to fulfil its responsibilities by creating long-term value for all of its stakeholders (internal and external) on a socially and environmentally sustainable basis.

Apart from the above, Tastiway also has four strong philosophies which it applies in upholding the company's vision and mission. First, the company has built and continues to maintain its reputation through winning the confidence of both its customers and business partners. Upholding the company's principles of integrity and reliability is the responsibility of every one of its employees. Second, regulatory compliance is compulsory and non-negotiable. Third, the company is committed to supply products that exceed its customers' expectations whilst conducting its business in an environmentally friendly and responsible manner. Last but not least, the company continually focuses on being innovative, regularly refreshing its product range and manufacturing capability. "Together, these vision, missions, and philosophies have helped to make Tastiway one of the most successful companies in the food and beverage business," said Mr. Lim in one breath.

Exporting Strategy

After Mr. Lim's in-depth explanation, Dr. Alisha asked, "Could you explain about the exporting strategy at Tastiway?" "Yes, of course," responded Mr. Lim, turning to his team. "Mr. Jo, please make a short presentation on how the exporting strategy is executed at Tastiway." Mr. Jo replied, "Sure, Boss, thank you. At Tastiway, there are three main phases in the exporting: pre-exporting, exporting, and post-exporting."

Tastiway's customers can be divided into two categories - existing and new. Existing customers who wish to buy Tastiway's products will directly contact the customer services department through email or phone to place an order. New customers usually request for samples of Tastiway's products so that they can taste them. Given that, the customers of Tastiway are located all over the world, there are several ways for them to obtain the samples. Potential local customers that reside in Kedah can simply come to the company headquarters. Meanwhile, for potential customers who are located

overseas, the product samples are delivered through air shipment, which is fast and reliable.

However, some customers insist on visiting the factory to witness and understand the manufacturing process first-hand, as they wish to ensure that they are satisfied with the operational activity at the factory. Based on Tastiway's experience, usually, new potential customers take approximately three weeks to decide whether to proceed with the purchase order.

Once the customers have tasted and selected the products they wish to order, several in-house logistic activities are involved in processing the requested orders. First, the sales division will issue a pro forma invoice based on the terms and conditions agreed with the buyers prior to the shipment and delivery, detailing the items purchased and other relevant information. Such terms and conditions state the shipping method or Incoterms between Tastiway and the buyer.

Commonly, both the seller and the buyer agree to use Free on Board (FOB) as the terms of sale between the two parties. As stated in the pro forma invoice, approximately 50 percent of the payment is required upfront to confirm the deal. Alternatively, a Letter of Credit issued by the buyer's bank, is also another payment option accepted by Tastiway, as it acts as a guarantee of payment upon delivery of goods. A few related departments within Tastiway will also receive instructions via e-mail to proceed with the production of the products ordered. While the goods are being manufactured, a material planner executive will be working on the creation of the packaging design. Three layers of packaging designs - for sachets, bags, and cartons - are required for use. To complete the packaging process, the planner executive will place an order to arrange for the suitable and appropriate packaging raw materials. Simultaneously, the production department will produce the requested products and the quality control department will inspect the manufactured goods. Only after the quality control examination is approved, the finished products will be transferred to a dedicated warehouse for temporary storage.

Depending upon the quantity of the order, Tastiway's warehouse personnel will then proceed to upload the products into a 20- or 40-foot container for export. In the meantime, the sales division will provide the necessary information and documentation to the forwarding agent in the named port of departure for the shipment of the goods. "Once the goods arrive at the port, Tastiway is compulsorily required to sign the customs declaration form to verify that the products being shipped are legal and can be exported," Mr. Jo concluded.

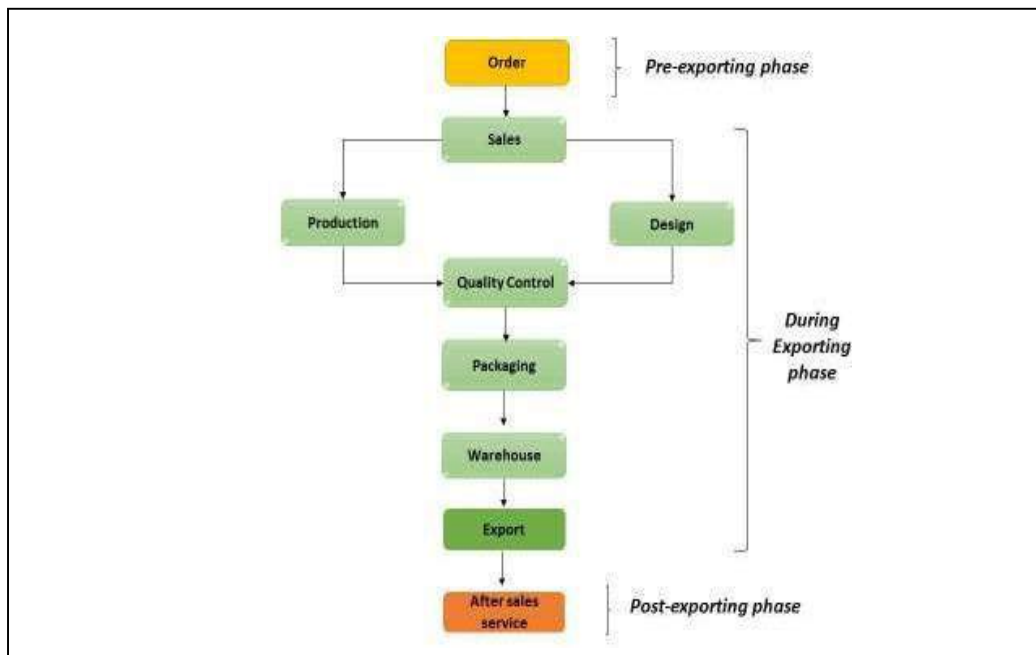


Figure 3: Exporting flow

Like other SMEs, after-sales service is an integral part of the services provided by Tastiway to its customers. This service is associated with the condition of the goods received by the buyer. If the products are damaged upon arrival, an immediate replacement shipment is dispatched. This is to ensure that the customer is satisfied with Tastiway's services. Customers' feedback on the products is of primary importance to Tastiway. Based on customers' feedback, ways to improve and develop the products can be identified and facilitated. Mr. Jo then proceeded to show the visitors a flowchart of exporting strategy at Tastiway.

Summarising the presentation made by his staff, Mr. Lim emphasised that there were three important phases involved in the exporting strategy: (1) pre-exporting, getting the potential customers; (2) during exporting, focusing on designing, packaging, quality control, payment and shipping; and (3) post exporting, focusing on after-sales services. "Is our explanation sufficient?" Mr. Lim asked Dr. Alisha. "Yes, we appreciate your clear and concise briefing regarding Tastiway's exporting strategy," replied Dr. Alisha. Dr. Naren then remarked, "Now we understand the secret recipe for Tastiway's success in the international business arena". Mr. Lim and his team grinned with pleasure.

3. EPILOGUE

After the in-depth discussion, Mr. Lim and Mr. Jo brought Dr. Alisha and the team for a tour of the factory and explained the functions of each department and the entire manufacturing process in detail. Dr. Alisha, Dr. Ayu Nurisma, and Dr. Naren were satisfied with the outcome of the visit. However, there was an unanswered question in their minds. Today, Tastiway is no doubt successful, but will it be able to sustain this success in the future, especially in the current volatile, uncertainty, complexity and ambiguity (VUCA) business environment?

ACKNOWLEDGEMENTS

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The Art of War During Turbulent Time: The Case of Epic Valley Holdings Sdn. Bhd.

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Teaching Case Synopsis

This is a case of Epic Valley Holdings Sdn. Bhd. (Epic Valley), one of the leading property developers and building contractors in Peninsular Malaysia. Since its establishment in 1998, the company had encountered a number of cyclical national economic crisis which had seen business closure of its competitors. Yet, Epic Valley managed to steadily withstand the turbulent times. Hence, this triggers the researchers to unveil the secret recipes of the success story of Epic Valley. In other words, this best practice case study intends to highlight the art of war implemented by its Founder cum Managing Director, Yang Berbahagia Tan Sri Fng Ah Seng during the tough times. The niche area of this case study is that it deals with a privately owned company in property industry.

Keywords: Property developer, best practice, turbulent times, private company

“As you know, the current financial crisis and the economic downturn is not new to our business. We have encountered this kind of situation several times before and we are still here, doing business together with you. We are well aware that someday, economically, we may be hit really hard, but we are ready to accept the challenge and move forward” - Tan Sri Fng Ah Seng

1. INTRODUCTION

Faster changes and unpredictable influences characterise the environment of today’s businesses. In this uncertain environment, new products, technologies, and capabilities are available at an accelerated pace, suppliers and competitors are entering and exiting the market on short notice, and customer demands and expectations are shifting and evolving in a very short time (Nogueira & Raz, 2006).

In 2018, a recession hits almost all business sectors in Malaysia resulting in business slowing down. Prof Hoo Ke Ping, a political and economic affairs analyst, stated that the property market has shown signs of slowing down after market speculators failed to secure bank loans or buyers or tenants for their properties (Kaur, 2016). As a result, the total number of unsold residential properties has increased to 146,196 units in the first quarter of 2018 compared to 142,950 units in the fourth quarter of 2017 (Housingwatch, 2019). A survey by the Real Estate & Housing Developers' Association (REHDA) Malaysia reported that majority of the unsold units were the properties within the price of RM250,001 to RM500,000, located in Kuantan, Pahang, and Alor Setar, Kedah (Kaur, 2018). Further, a report by the Moody’s Investors Service has launched alarm bells over the direction of the financial system in Malaysia, after the rating agency called property loans the biggest threat to Malaysian banks (Kana, 2018). The same report has also brought under scrutiny the plan of the Ministry of Housing and Local Government to ease the need for home financing, raising further questions about the relevance of such a move. While the plan was aimed at boosting home ownership and reducing the number of unsold residential housing units, property experts warned that the plan to loosen lending requirements could be backfired.

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The following years onwards will continue to be a challenging year for Malaysia's economy. Unquestionably, it is a turbulent time. Recession continues to grow due to several factors, including a decline in consumer confidence and the retrenchment of workers in various sectors (Kaur, 2016). Also, as Malaysia relies heavily on exports to China and the US, the ongoing trade war between these two countries will further slow down China's growth (Cigala, 2019). As a result, Malaysia's GDP has fallen from 30% to 21%, with prices expected to fall lower. Besides, corporate and household debts rose significantly from 115% to 134% (Cigala, 2019). Accordingly, doing business in this turbulent time requires the business to change its strategy and response to these new conditions. Operating in this soft property market is indeed a challenge to most of the developers. As business entities, the developers would hope to operate at profit to support their future growth. In addition, the business also needs to create new organisational structures that can change their behaviour (Rivera-Rodríguez, Garcia-Merino, & Santos-Alvarez, 2017). This effort is necessary to ensure the company's capability to survive, adapt, and grow even in turbulent times (Leon, 2017).

Nevertheless, growth by itself is not sufficient. The growing concern is on how they could create sustainable growth and remain relevant in the business. This issue is crucial and needs to be addressed accordingly as it may help businesses to understand, engage, and more importantly sustain in a turbulent marketplace. Hence, Epic Valley Holdings Sdn. Bhd. could be one of the exemplary models of the sustainable company in this turbulent time (Figure 1).



Figure 1. Epic Valley Holdings Sdn Bhd grows despite the bad economic climate

2. EPIC VALLEY HOLDINGS SDN. BHD.

Epic Valley Holdings Sdn. Bhd. is one of the leading property developers and building contractors in Peninsular Malaysia. It was established by Yang Berbahagia Tan Sri Dato' Paduka Dr. Fng Ah Seng in 1997. With its humble beginnings of RM3,000 capital in 1997, the company achieved a turnover of RM2 million in 1998. In 2014, the company successfully generated a turnover of RM300 million. Based on the EMIS Report (2016), the company managed to increase its net profit by 5.31 percent and net sales by 8.57 percent compared to the year before.

This business empire has spread its wings throughout Peninsular Malaysia with over 500 staff members in 14 branches all over Malaysia, particularly in the northern region of Malaysia including Perlis, Kedah, Pulau

Pinang, Perak, Terengganu, Pahang, and Selangor. Positive remarks by the staff, such as “enjoy the work environment” and “good team work”, show that this company’s priority agenda is their human capital and no employee has been asked to leave even in difficult times. This suggests that the company can still manage its financial in- and out flows, thus explaining its ability to survive successfully to this day. In addition, in 2018, the company promoted and launched its new property development projects at various locations in Kedah, namely, at Kuala Nerang, Pokok Sena, Alor Setar, and Jitra. The details about their company can be found in the company’s website at <http://bit.ly/epicvalley4education>.

Armed with the noble determination of developing affordable homes for people in Malaysia, mainly in northern area, Epic Valley is well-known for the construction of one and two-storey shop houses, one and two-storey semi-detached houses, one and two-storey terrace houses, and one/two and two-and-a-half-storey bungalows with an optimum selling price of RM500,000. The details about their product is shown in Figure 2. This is a marked difference from their competitors, which focuses on townships, high-rise and luxury residences; and on the development of areas outside the Kedah state, in Perak and Perlis.



Scan me for details

Figure 2: About the product

As an entrepreneur, in addition to generating income to the company, Yang Berbahagia Tan Sri Dato' Paduka Dr. Fng Ah Seng pays back to society by contributing to charities. Tan Sri serves as the chairman of Yayasan Muhibah Tan Sri Fng Ah Seng. His ideology is "Pay back to society by contributing to charities, to be a good corporate citizen with the well-being of the people at heart."

As a prominent business leader in industry, Tan Sri has received a number of awards and recognitions. Among them are:

1. World Chinese Young Entrepreneur in 2009.
2. Top Ten Chinese Economic Excellence 2010 from Beijing, China.
3. KWYP Centennial The Dr. Sun Yat Sen Outstanding Achievement Enterprise Award by Kwong Wah Yit Poh on 10th October 2020.

In addition, he has also authored two books on entrepreneurship and leadership entitled “Unique Entrepreneur: Doing it My Way” and “The Creation of Uniqueness” to inspire young entrepreneurs.

3. THE ART OF WAR

“The art of war is of vital importance to the State. It is a matter of life and death, a road either to safety or to ruin. Hence it is a subject of inquiry which can on no account be neglected.”

— Sun Tzu, The Art of War

MORNING PRAYER : MONDAY – 9.00 A.M.

“If you know the enemy and know yourself, your victory will not stand in doubt; if you know Heaven and know Earth, you may make your victory complete.”

— Sun Tzu, *The Art of War*

It was not at all unusual for the Epic Valley Holdings Sdn. Bhd. employees to attend a morning prayer. It was a routine where they had a chance to communicate with the CEO, Tan Sri and the top management. However, everybody was anxious about today’s morning prayer. The spacious meeting room and its pleasing ambience did not lift their spirits that morning. They could only think of their future! During the economic crisis that the country was facing, and developers experiencing tough times, and with the possibility of retrenchment looming large, the only thought that ran through their mind was the possibility of losing their own jobs. While they knew that Epic Valley had managed to surmount difficult times at least twice before during the global economic crisis of the late 1990s and early 2000, the current crisis looked more foreboding. Will they come out of the crisis this time? Or did this signal a downward spiral for Epic Valley? Endless unanswered questions ran through their minds until the charismatic CEO walked into the room calmly with his head held high, and the session began.

Tan Sri : Good morning, everyone. Thank you for being here today. I know everyone is eager to know how Epic Valley is doing now and how are we going to go through these difficult times. First of all, I would like to reiterate that you don’t have to worry of losing your jobs. Retrenchment is not an option for Epic Valley. As I have mentioned before, an economic crisis is something that we cannot prevent. It is cyclical. It should constantly be on your mind even in good times. In other words, we have to be prepared at all times, both for the good and bad. That is the policy of the army. They do not train their officers only during war times. Training is always on-going even when there is no conflict or war, so that our soldiers will always be ready when their services are required. It is my hope that all of you here can be the soldiers of Epic Valley. You have your own strengths and unique capabilities and together, we can overcome this crisis or any other challenge we may have to face in future. Epic Valley’s continued success will be your own success too.

Ali : Tan Sri, from our meeting at the departmental level, we were informed by our Head that our cash flow is shrinking. My apologies for asking this, but would it affect our salary?

Tan Sri : Thank you, Ali. I appreciate your concern. My answer is both yes and no. Basically, your pay will be affected, but not in terms of the amount. I can assure you that I will not cut a single cent from your salary or allowances. You will still enjoy the same pay and perks. You can still drive the company’s car without having to pay for petrol and toll. The only thing is that the time of payment may be affected. During good times, everyone is paid by the due date, but now, we may have to reschedule slightly in that you will be paid but at different times. In other words, Epic Valley will follow a flexible payment schedule. Perhaps, the lower and middle-level staff will be given priority over the upper level staff. In this regard, I would like to thank the Accounts Department for their efforts in arranging this flexible payment schedule. However, should any of you have something that you wish to discuss regarding this, by all means, please consult Ms. Lee or even me. I would like to emphasize that this is our strategy to maintain our cash flow at the optimal level, but I envision that it will be just a temporary measure. One thing you have to remember is that the Epic Valley family is my biggest asset and no one will be taken for granted.

I would also like to take this opportunity to announce an interesting investment scheme for all Epic Valley members. This profit-guaranteed scheme was initiated during our weekly management discussion. It offers Epic Valley employees the opportunity to invest in Epic Valley properties with rewarding returns. We are now in the final stage of drafting the agreement letter for legal review. I would say this is a blessing in disguise; management has come up with this plan during this difficult time, to enable Epic Valley employees to invest and own property.

Wong : Tan Sri, thank you for the explanation. It certainly puts our mind at peace. Epic Valley has done much for us for so long, and this flexi-payment mode sounds reasonable to me. However, I heard from Project Department that Epic Valley will continue to build houses despite the current financial constraints. I am not sure this is a wise decision. Other developers have halted projects, and are trying to sell their houses and liquidate the assets. We seem to be adopting a reverse strategy? It is really hard for us in the sales and marketing department to sell houses now.

Tan Sri : Thank you, Wong. I do understand your concern. But it is my belief that we need to distinguish Epic Valley from other companies and re-strategise to stay afloat. I know that other developers have stopped building, but we must persevere and carry on, with the same synergy and quality. Remember, Quality is our number one priority. We are not followers, we are leaders. We set the benchmark and standards. As I said earlier, an economic crisis is cyclical and will come to an end, after which the economy will pick up again and revive – just like that beautiful rainbow that emerges once the storm is over. At that time, people will want to buy houses again and Epic Valley will be ready. Compared to other companies, we will have completed units for sale. Then, your department will be so busy accommodating requests from clients.

Also, I do understand the constraints in your department. Hence, I suggest that everyone in Epic Valley becomes a marketing manager. With the clarion call, ‘I am a marketing manager, I sell houses’, we can market and sell our products. I will channel most of the resources, both financial and human, to this department. To me, this is the only way for us to stabilize our financial position, that is, by selling as many houses as possible. We could hold many exhibitions, and organize campaigns and advertise more aggressively. Offer discounts (if necessary) if that can boost our sales. I know that if we can pool our talent and strengths as a team, nothing is impossible. After all, TEAM stands for Together Everyone Achieves More’ - let’s prove it.

Any other questions or concerns? I am happy to see the positive vibes in this room. I hope this explanation has quelled your worries and fears. Should you have any further queries, suggestions, or comments, I will be more than willing to listen and deliberate, and together, we can overcome or find solutions. By now, you must have realised that I adhere to an open-door policy. Feel free to come and see me if necessary. Now, let’s get back to work. Thanks, everyone.

NEW POLICY MEMO : MONDAY – 9.00 A.M.

*“Customer satisfaction is worthless.
Customer loyalty is priceless.”
Jeffrey Gitomer*

It was the first day of the week after a long weekend. The clock on the wall showed that it is already 9.00 a.m. It was time for breakfast but everybody seemed to be in no hurry to leave their seats. They were engrossed with the memo in their email. The memo titled, 'New Sales Policy' (see Figure 3) sounded interesting and required their attention. They knew that “everyone now is the sales manager and sells houses”.

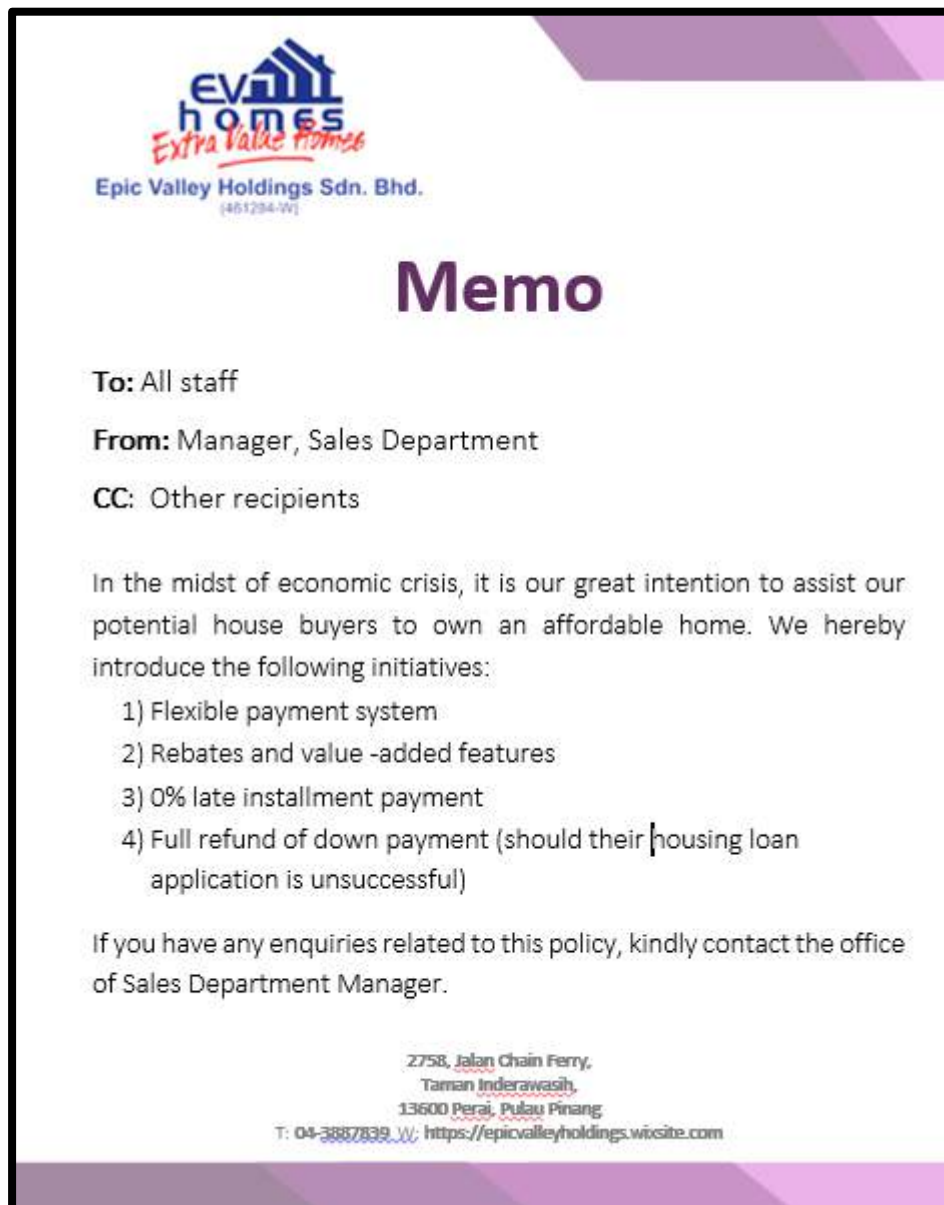


Figure 3. Memo

4. CONCLUDING REMARKS

Tan Sri Fng Ah Seng felt relieved that he finally manage to communicate with his team on potential strategies to successfully escape from the turbulent time.

“And to everyone... thank you for your invaluable contributions. Together, we have worked very hard to transform Epic Valley into what it is today. Lastly, be positive, always sincere in whatever you do and move forward. We can overcome every challenge together because in Epic Valley, we are ONE TEAM ONE HEART”

ACKNOWLEDGEMENTS

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Pancaran Matahari: Disentangled the Complexity of Manual Payroll System

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Teaching Case Synopsis

This is the case of Pancaran Matahari (M) Sdn Bhd, a successful Bumiputera transportation company located in Kedah. The case presents the perspective of Pancaran Matahari (M) Sdn Bhd which is in the process of improving its current manual payroll system. The manual payroll system is currently having problems and Pancaran Matahari is looking forward on resolving the related issues. With a unique process flows especially related to drivers' payroll, the owner, Mr. Uzir decided to develop a customized computerized payroll system instead of buying off-the-shelves payroll software. The case requires the students to analyze the current system problems and suggest a conceptual design for a new computerized payroll system.

Keywords: manual payroll system, computerized payroll system, transportation, conceptual design

1. INTRODUCTION

Pancaran Matahari (M) Sdn Bhd is a family-owned medium-sized company, located in Alor Setar Kedah. The company is owned by three people, Mohamad Uzir bin Salleh, Mohamad Kaharrudin bin Salleh and Fazilah binti Hussain. Pancaran Matahari is a service business providing public transportation services. It was formed in 2008 with the intention to provide executive alternative mode of transport to the public regardless of race and status. The routes covered by the company are from Northern to Central, East and Southern of Malaysia. Currently, the company owns 55 VIP buses.

As the world faces rapid change in technology nowadays, there is no doubt that payroll processing system, a core component of human resource management, is also experiencing a transformation into a digital platform. When payroll process is automated, the tedious and clunky manual calculations of employees pay would require less work, effort and time especially for big organizations. The idea of taking control of the process through innovation of computerized payroll system is advantageous as it minimizes human calculation errors, increases data security from breaches, and enhances competitiveness. While the advantages of computerized payroll system are valid, Pancaran Matahari is still using manual payroll processing system.

2. THE SCENARIO

It was a lovely afternoon on 30th August 2020. Mr Uzir, Managing Director of Pancaran Matahari (M) Sdn Bhd was sipping a cup of hot tea in his office at Shahab Perdana, Alor Setar

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while thinking of the future the company that has been established 12 years ago. Suddenly, ‘knock, knock’. There was someone knocking on his office door.

Mr. Uzir: Yes. (Door opened).

Madam Zuraini: Hi, Mr Uzir. I have something to discuss with you.

Mr Uzir: Sure, please come in.

Madam Zuraini: Thank you.

Mr Uzir: Yes, what is bothering you? You looked tensed. How can I help you?

Madam Zuraini: Mr. Uzir, you know that I’ve been working with Pancaran for 12 years. Things were going smoothly before. I enjoyed working here. But now, things have changed.

Mr. Uzir: Wait a minute. It seems like a serious matter. Is this regarding our discussion yesterday about my concerns on complaints received from drivers about their salary payment?

Madam Zuraini: Yes, exactly. I am happy that the bus operation has expanded. Our buses covered more routes. The company employs more people now. It also means that the number of drivers has raised dramatically compared to 10 years ago. However, I feel more burden now. I perform manual calculation for 140 drivers and other administrative staff members’ salary. There are too many things I need to consider when preparing employees’ salary at the end of every month. Sometimes, as human, there are errors that I have overlooked. There might also be delayed in 1-2 days before I can release the salary when things are not right. I mean, particularly when I found inconsistent data provided by the drivers.

Mr. Uzir: I see. But as an account executive who is responsible for the payroll process, you must understand that salary must be ready on time with accurate amount being paid. Else, we might lose our drivers.

Madam Zuraini: Yes, I know. Yet, the current operation levels make my job more difficult. I handle all payroll process by myself. So, it is quite unfair for me to be blamed for all these problems. I really hope the company can help me in some ways to speed up the tasks while minimizing the errors.

Mr. Uzir: Do you have any suggestions?

Madam Zuraini: Perhaps by using a computerized platform for payroll calculation.

Mr. Uzir: Well, on-the-shelves payroll software is not suitable for our operations. In fact, as you know, we already appointed external programmers to develop a computerized payroll system before, but none of them managed to fulfill our requirements. Therefore, I am still looking for a suitable vendor that can understand the process flows of Pancaran Matahari’s payroll process.

Madam Zuraini: Yes, I understand. Please consider my suggestion Mr. Uzir. I believe with appropriate system in use, our company will be able to produce timely and accurate salary for all employees. No more complaints in the future.

Mr. Uzir: Hmm... Let me think about it.

3. BACKGROUND OF THE CASE ORGANISATION/COMPANY



Pancaran Matahari (PM) (M) Sdn Bhd is a family-owned business in a transportation industry. The company is owned by three people, Mohamad Uzir bin Salleh, Mohamad Kaharrudin bin Salleh and Fazilah binti Hussain. Prior to owning his own company, Mr. Muhammad Uzir bin Salleh, worked with his uncle, the owner of well-established bus company in Kedah. In 2008, Mr. Uzir together with his brother and sister in law, joined forces to create their own bus company with a specialize service, (i.e., VIP long distance service). When started in 2008, the company bought 5 VIP buses, and now they already owned 55 VIP buses. In order to survive in a competitive transportation industry, the company focuses on providing exclusive travel experience for their customers by using double decker bus with only 21 seats. The routes covered by the company are from Northern to Central, East and Southern of Malaysia. Figure 1 shows the organizational chart of Pancaran Matahari.

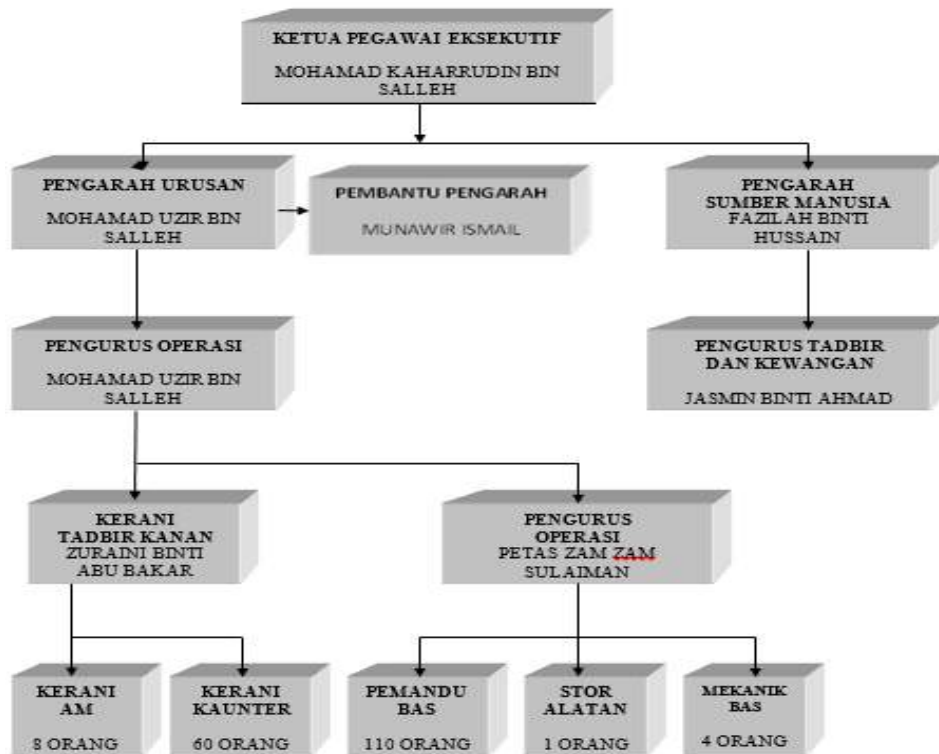


Figure 1: Organizational Chart

Current Payroll Process at PM

Early this year, Mr. Uzir has appointed Ace Technology, a consulting firm in computerized system development in the northern region of Malaysia. On 7 September 2020, an experienced analyst at Ace Technology, Miss Imelda Zahrin made a visit to Pancaran Matahari head office at Alor Setar. After a conversation with Mr Uzir and Madam Zuraini, and documents review, she found this crucial information:

1. Pancaran Matahari (M) Sdn Bhd has two categories of drivers, permanent bus driver who earn basic salary (RM1000 a month) plus trip allowance; and the second category is temporary bus driver who just get trip allowance. The trip allowance is different based on the route of the trips and the driver type. The routes and the trip allowances are shown in Table 1 below.

Table 1: Route Rate

Route	Permanent Driver Rate	Temporary Driver Rate
Kangar → Klang	70	110
Kangar → Seremban → Melaka	100	140
Kangar → Kajang → Putrajaya	80	120
Kangar → Temerloh → Bandar Jengka	110	150
Kangar → Kuantan	110	150
Kangar → Kota Bharu	70	110
Kangar → Johor Bharu	130	170
Kuala Nerang → Klang	70	110
Sungai Petani → Klang	70	110
Kota Bharu → Shah Alam	70	110

- The drivers can claim for a food allowance of RM5.00 (a.k.a elaun mati trip) if the duration of the trips meet certain hours. The account executive will determine whether the drivers entitle for the food allowance.
- For every trip, drivers will receive a waybill from each departure point that consist of information regarding the route, number of passengers and final destination. The waybills will be hand over to Madam Zuraini when the driver reach the Alor Star station. Figure 2 below shows the example of a waybill for a driver.

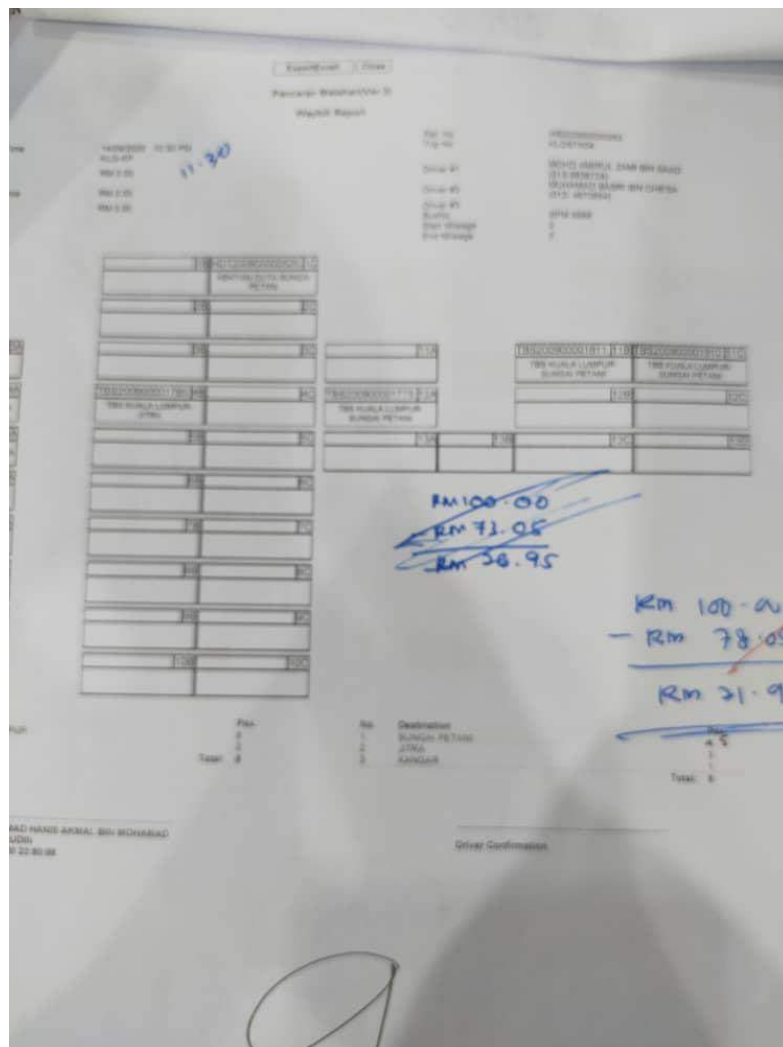



Figure 2: Waybill


- Once Madam Zuraini receives the waybills, she will calculate the total allowance for the trip, prepare a payment voucher, send to Mr. Uzir for approval and pay the drivers immediately. Figure 3 below shows a trip payment voucher for a driver and Figure 4 displays monthly trip allowance records.

**BAUCER PEMBAYAR
GENERAL CASH VOUCHER**



TARIKH: 13/9
LALUAN (TOL) PLUS

JITRA
HUTAN KAMPUNG
ALOR SETAR (U)
ALOR SETAR (U)
ALOR SETAR (U)
ALOR SETAR (U)
ALOR SETAR (U)
PENDANG - SG T
PENDANG - SG T
SG PETANI (S)
JURU - DUTA
JURU - PUTRAI
JURU - SEREMBE
JURU - AYER KI
SG BESI - KAJAI
SG BESI - SERE
SG BESI - AYER
BANGI - SEREB
SEREMBAN - J
AYER KEROH -
AYER KEROH -
AYER KEROH -
SEREMBAN -
SEREMBAN -
PUTRAJAYA -
SHAH ALAM
DUTA - JURU
SG DUA - SG
SG DUA - AI
SG DUA - HI
SG PETANI (S)
SG PETANI (S)



PANCARAN MATAHARI (M) SDN. BHD., 78246-U
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05150 Alor Setar, Kedah Darul Aman.
Tel: 604-720 8388, 720 8389 Fax: 604-720 8387

TARIKH: 15/09/2020
Date

Debit: **BPM 8888 (AMIRUL)** KIRA-KIRA Account

BAYARAN KEPADA Pay: **MUHAMAD BASRI BIN CHE'SA**

LINTUK for: **ELAUN PERJALANAN**

13/09/2020 (11.30 MLM)	SP - TBS	110.00
14/09/2020 (11.30 MLM)	TBS - KER	
ELAUN MATI TRIP		5.00
		JUMLAH TOTAL RM 115.00

CASH CHEQUE: _____

RINGGIT Dollars: **SATU RATUS LIMA BELAS SAHAJA**

SAH & DILULUSKAN OLEH
Approved & Passed By:

93.05

DITERIMA OLEH
Received By:

SG PETANI (S) - ALOR SETAR (U)	3.44	
GURUN - ALOR SETAR (U)	1.88	
PENDANG - ALOR SETAR (U)	2.46	
PENDANG - HUTAN KAMPUNG	*****	*****
**** *LAIN-LAIN TOL* ****		
BAGAN AJAM (PANTAI)	1.20	
PERAI (BUTTERWORTH)	1.30	
AWAN BESAR (KESAS)	1.50	
SRI MUDA (LUSA)	1.20	
MAJU EXPRESS WAY (MEX)	2.50	5.00
SG RAMAL (KAJANG SILK)	1.00	
MINES (BESRAYA)	1.30	
TERMINAL ONE SEREMBAN	5.00	
	RM 13.05	

Figure 3: Trip Payment Voucher

- Each driver has a predetermined monthly trip schedule, prepared by Mr. Uzir. It is important to identify the last trip date as payment for the last trip will reflect on the deductions, such as personal loan, EPF and SOCSO. For permanent drivers, they will receive a basic salary and a last trip allowance and the temporary drivers will only receive a last trip allowance. However, permanent drivers must drive at least 20 trips a month to be entitled for the basic pay. If a driver fails to achieve the target, he will be converted into temporary driver status, hence entitle for the temporary driver allowance rate (in which the previous trip payments will be adjusted accordingly). Madam Zuraini is required to manually check the number of trips by referenced to the predetermined monthly trip schedule. This scenario is one of the complicated process that Madam Zuraini needs to handle every month for more than 80 drivers. Figure 6 below is an example of the calculation for total payment for each month.

No	Nama Pekerja	Gaji Pokok	Gaji 30 hari	Over Time (OT)			Khasiat	Cuti Duitan	Kerja Hk Cuti	Cut Tanya Gaji	Pejabat	Jumlah Gaji (RM)	CATATAN
				Jan OT/16	EM/Jan	Jan OT							
1	1,000.00	33.33		21	X	40.00	840.00				600.00	238.00	uj 21 hr shj
2	1,100.00	36.67						300.00			800.00	300.00	
3	240.00							26.67				266.67	hsaf 4th
4	1,000.00	33.33	140	X	4.00	560.00			66.66		400.00	1,226.66	
5	800.00	26.67	15	X	3.00	45.00			53.34		750.00	541.66	af-2
6	1,000.00	33.33	35	X	4.00	140.00					300.00	840.00	af-3
7	1,500.00	50.00						1,000.00			1,200.00	1,300.00	
8	350.00	13.00										350.00	uj 13 hr shj
9	1,100.00	36.67									300.00	510.00	uj 27 hr
10	1,100.00	36.67	6	X	4.00	24.00	100.00				300.00	924.00	mc-1
11	1,000.00	33.33						300.00			300.00	800.00	af-1 mc-2
12	800.00	26.67	25	X	3.00	75.00					300.00	575.00	
13	270.00											210.00	uj 7 hr shj
14	1,000.00	33.33									300.00	700.00	
15	1,000.00	33.33	10	X	4.00	120.00					300.00	820.00	af-2
16	1,000.00	33.33	20	X	4.00	80.00					300.00	780.00	
17	800.00	26.67	10	X	4.00	120.00						1,020.00	
18	900.00	30.00									330.00	450.00	
19	1,100.00	36.67	6	X	4.00	24.00	100.00					1,224.00	af-2
20	1,000.00	33.33	10	X	4.00	100.00					300.00	800.00	
21	800.00	26.67	25	X	3.00	75.00					300.00	575.00	
22	900.00	30.00	16	X	4.00	144.00					300.00	744.00	
23	800.00	26.67									300.00	500.00	
24	1,000.00	33.33									200.00	701.00	af-3
25	1,000.00	33.33									200.00	701.00	
26	1,000.00	33.33	55	X	4.00	140.00					200.00	841.00	af-4
27	900.00	30.00	10	X	4.00	120.00			30.00		200.00	850.00	trmbh sj 31/12 1hr
28	900.00	30.00	48	X	4.00	192.00			60.00		200.00	952.00	trmbh sj 31/12 1hr
29	800.00	26.67	25	X	3.00	75.00					300.00	575.00	
30	900.00	30.00									300.00	600.00	
31	800.00	26.67									400.00	400.00	
32	800.00	26.67									300.00	1,000.00	
33	1,100.00	36.67						200.00			300.00	705.00	af-1
34	900.00	30.00	35	X	3.00	105.00					300.00	780.00	
35	1,000.00	33.33	20	X	4.00	80.00					300.00	680.00	
36	900.00	30.00									300.00	600.00	
37	900.00	30.00	10	X	4.00	120.00	200.00				500.00	920.00	
38	1,100.00	36.67	10	X	10.00	170.00	1,000.00		100.00		2,500.00	770.00	af-5 af-1
39	2,000.00	66.67	37	X	4.00							1,000.00	af-1
40	1,100.00	33.33										90.00	
41	900.00	30.00											

Figure 6: Payroll

- Before the payroll slip is released to the drivers, Madam Zuraini will seek for Mr. Uzir's approval.
- The manual payroll recordings are not linking with their accounting system, i.e. Hypeledger. Therefore, the Madaim Zurain needs to key in the payroll data into the Hypeledger manually every month for preparation of financial reports.

The Hiccups of Payroll Process at PM

The senior clerk of PM who is in charge of the payroll process, Madam Zuraini, raised her concern and not happy with the current manual payroll system. At the moment, the company has 140 staffs, including 80 permanent drivers and temporary drivers. During festive seasons PM needs to hire more temporary drivers to fulfill the seasonal demands.

In preparing the salary for the drivers, Madam Zuraini encounters various problems due to the unique nature of the pay that includes basic pay, different trip allowance, food allowance, and personal loan. She has to manually check the waybills, determine the entitlement for food allowance, and check for the trip schedule to ensure that the permanent drivers are entitled for basic pay. It is important for her to detect for last trip in order to charge for EPF, SOCSO and to deduct loan made during the month. She needs to handle at least 30 waybills on a daily basis for more than 80 drivers.

Due to inability to have their own unique computerized payroll system yet, Madam Zuraini and her team are forced to perform the clunky and mundane tasks manually every month. Repeatedly, human calculation and data entry errors have impediment the company from producing the pay slip on time. This has increased complaints from the drivers. If the problem persists, the company worries that they might lose some of the drivers.

4. CLOSING PARAGRAPH / CONCLUDING REMARKS

Mr. Uzir aware that Madam Zuraini is struggling every month to prepare the payroll for their employees, especially the drivers. Hence, he has considered several options to improve the current payroll process at Pancaran Matahari. He heard about off-the-shelves or commercial payroll software such as UBS, SQL Payroll and others. However, after further exploration, he found out that the software functionalities did not meet the unique needs of the payroll process at Pancaran Matahari.

Since the commercial payroll software was off the list, Mr. Uzir was thinking to own a customized computerized payroll system. Thus, he appointed few programmers to develop a computerized payroll system for the company. Unfortunately, none of the programmers managed to develop the payroll system due to its unique process flows. The programmers failed to understand the needs, requirements and process flows of the PM's payroll process as they were not given the conceptual idea and design of the system. Therefore, he is thinking to hire a consulting firm that is specialized in system development.

Recently, Mr. Uzir discussed with the appointed systems analyst to help him to solve the problem related to the payroll processing for a smooth running of its operation and be able to pay his staffs timely, and most importantly reduces the work burden of Madam Zuraini. Overall, this case study focuses on the role of system analyst to identify and understand business process of payroll system, to analysis current problems of manual payroll system and to develop a conceptual design for computerized payroll system.

ACKNOWLEDGEMENTS

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Eriez Wellness and Medispa: The Royale Balinese Spa

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Synopsis

The main purpose of this case study is to examine the implementation and commercialization process of Eriez Wellness and Medispa, one of the growing beauty, health and wellness spas in Malaysia with authentic Balinese concept and delicate practices that should be experienced by many. Background of the company and the founder who initiated the idea and the business, and the starting up process is described. The leadership style and capabilities of the founder, Harizatul Izzayu Muhaimin (Harizatul) is highlighted and emphasised on. The researchers found a critical success factor that has yet to be fulfilled by the company – becoming sustainably competitive. And, the most important factor upon becoming sustainably competitive is to continuously create, develop and confirm demand and opportunity in the market and the industry. Hence, a synchronous combo of strategies and resources is needed in order for the entrepreneurial endeavour to be successful.

Keyword: Beauty, Health and Wellness Spa, Micro, Small and Medium Enterprises, Strategic Entrepreneurship, Sustainable Competitive Advantages.

1. INTRODUCTION

Growing up, a traditional masseuse would come over to Harizatul's family's place to provide massage services for her entire family regularly. Other than that, Harizatul, together with her family, enjoy going to the spa for aesthetic therapies during pastime or even on vacation, locally and internationally (at most – Indonesia). These family culture or practices mentioned had definitely be the “matches” that sparks up the flame of a particular passion – to explore, to learn and to build – within Harizatul. Why? Fast forward to the present day, at the age of 24, Harizatul Izzayu is now the managing director of Eriez Wellness and Medispa (EWMS) with two outlets in business – Platinum Walk (Setapak) and Publika (Kuala Lumpur). This year, 2020, is the third year of operations since Eriez Wellness and Medispa was born. It has been doing great so far, but just like any other businesses, challenges and obstacles are unavoidable – human capital, marketing and, reputation and perception are the ones highlighted by Harizatul.

Eriez Wellness and Medispa (EWMS) stands as one of the few beauty, health and wellness spas in Malaysia with authentic Balinese concept and delicate practices that should be experienced by many. Objectively, Harizatul would like to set forth the authentic Balinese therapeutic body and facial treatments for those desiring peak relaxation. For splendid results, she believes that the fusion of traditional and modern intricacies that EWMS has, blends perfectly to help people unwind and rejuvenate.

“In Eriez Wellness and Medispa, we offer a spectrum of products and services that are especially designed to destress and neutralize with a taste of soothing Bali air. We are eager to encourage the stimulation of inner peace by first rewarding people's body and mind after braving the hustle of daily life. Our varieties of products are 100% safe for people's lavish body and facial treatments. Our team of dedicated therapists are professionally trained in the art of traditional Bali reflexology and facials – promising people especially our beloved customers only the best of results by the end of every session. And worry not, here at Eriez Wellness

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and Medispa, we only promote professional exchange of services. Should there be any ill-treatments, our customers best believe that we'll get to it immediately," said Harizatul in an academic interview recently.

2. SPA INDUSTRY IN MALAYSIA

As a whole, the spa industry in Malaysia is productively exciting. According to a news report, the president of the Association of Malaysian Spas (AMSPA), Datin Jeanette Tambakau, said that the industry has been generating more than RM600 million in revenue annually. The key aspects of this industry that needs to be looked at are the opportunities for the existence of the spa itself and the demand for these services. In addition to that, when we look at the details of the industry aspect, it tells us that the market environment is progressive, good and has the right balance and space. This is supported by factors such as the economic, political, applicable legislation, cultural value, demographic and trends. We recognized that not all environments are at a perfect pace, but they are still tied to the conditions under which a market can flourish. For example, we know that the current economic situation is on the decline, but the spa industry is supported by other elements such as the growth and progress of the tourism industry which indirectly provides spa-related opportunities that are closely linked to the business segment. The market trends such as, the younger people nowadays have developed interest on going to the spas because of the increase in awareness and importance on beauty and image, also positively influenced the spa industry. This indicates that the level of competition within the spa industry in Malaysia is at a moderate level, which the scope at scale is between medium competition and medium concentration.

Referring to EWMS, which is the subject of this study, it can be justified that within the scope of the market, they have an excellent opportunity to gain competitive advantage in terms of having their own niche market as well as being a practitioner of focused strategy in the market. However, in terms of market growth, it is somewhat hindered by the relatively high cost of skilled therapists. EWMS has the potential to fill the market and the industry with the uniqueness of its products and services, on top of being geographically and segmentally strategic. To sum it all up, it can be said that the size, the position and the growth of the spa industry in Malaysia gives EWMS a slight advantage upon continuing to move, explore and expand further into the market.

3. HARIZATUL'S STORY UPON BUILDING ERIEZ WELLNESS AND MEDISPA

Initially, Harizatul had no experience in beauty, health and wellness industry at all. On top of that, there was a limitation in terms of her financial capacity too. However, her strong determination drove her forward day by day. Other than the countless times of going for beauty and therapy sessions at the spas, both in Malaysia and Indonesia, she decided to begin with preparing herself upon building EWMS. Believe it or not, Harizatul was a freshman when she started planning. Along the way, she signed up for many certified courses on aesthetic and wellness in Malaysia and Indonesia to make herself be as competent as possible. Harizatul knew that she needed to have the essence (knowledge, skills, capabilities and capacity) within her in order to build up and to nurture the people that was going to be part of the EWMS team.

The word "Eriez" from the name of the spa is actually Harizatul's nickname since she was little. With her name as the brand, intentionally, she envisioned to start her own legacy. The tagline – The Royale Balinese Spa – formed to capture the audience who reads it to instantaneously understand what kind of a spa EWMS is, what theme or concept of a spa EWMS is and what are the services that EWMS provides. The logo attached below was idealised by Harizatul herself.



Figure 1 Official Logo of Eriez Wellness and Medispa

“As I started to learn, to research and to look deeper into the industry, I manage to identify a market gap – the Thai-themed spas are monopolising – there are rooms for spas with other, differentiated concepts such as Eriez Wellness and Medispa to come aboard into the market. I acknowledge that passion with knowledge and skills alone are not enough – experience still is and forever will be the best teacher among all. However, I believe in what I had comprehensively constructed. Well, who wouldn’t, right? Especially when you have spent more than a year to plan, to find resources, to renovate (the outlet) and to prepare everything including yourself,” said Harizatul.

Long story short, on 29th October 2017, the first outlet of Eriez Wellness and Medispa (EWMS) was officially launched in Setapak. Six months prior to the launching ceremony, Harizatul and her management team had started marketing and promotion – mostly by pursuing word-of-mouth strategy, distributing flyers and hanging up banners at common areas – the traditional way of marketing. Not saying that EWMS was not being promoted online at all. In fact, the team did engage online by paying the social influencers for creative, promotional content services. However, interestingly, even in today’s rapidly changing trends and technological advancements, it is still relevant and very effective for Harizatul and her team to be undertaking the traditional way of marketing – the spa was full-house on the launching day and it was fully booked on most days throughout the first quarter of operations. At that time when EWMS first opened its door to the public, Harizatul was still on her second year of pursuing her bachelor’s degree. She expressed on her entrepreneurial experience as per the quote below.

“Honestly, it was really tiring having to juggle between finishing my degree, learning about beauty, health and wellness and opening a business but I always keep in mind that it will all be worth it at the end of the day. I can clearly remember how hectic my life was back then. How I have to struggle during exams but still manage to achieve the Dean’s List awards for a couple of times. Not to forget, my almost every week trip to Indonesia – either Jakarta, Bandung or Bali – either during the weekends or semester breaks – usually to attend my aesthetic and wellness classes – or buying, finding stocks,” shared Harizatul.

“Because of that, I had a quite plain life as a university student – unlike others. I go to the campus only to attend the classes or important events and that’s it. I rarely eat at cafeteria or hanging out with my coursemates, but I still got to create lots of awesome memories with all my closed (university) friends and I must say they are all my true friends. They have supported me all the way – through my ups and my downs, they understood my career and my business – up until today. One of the tips to anyone who would want to do business while studying, it is possible and achievable if and only if your personal schedule is arranged appropriately. As for me, I would make sure I spend my time wisely and accordingly for studies, for work

and for social or leisure, including the time to be spent with loved ones. I was very passionate in doing all those things, I put my effort and heart into every single bit of it,” added Harizatul.

4. BACKGROUND OF HARIZATUL IZZAYU

Harizatul Izzayu Muhaimin was born on 20th August 1996. She is the eldest of six siblings. Her first working experience was back when she was 16 – she worked as a Sales Assistant during the year end school break. Other than that, she started helping the parents on the family business around the same age too. A year later, Harizatul took the baby steps towards becoming an entrepreneur by doing online business, particularly, drop-shipping. Fast forward, in 2015, she pursued her tertiary education at Universiti Tun Abdul Razak (UNIRAZAK), from foundation studies to a bachelor’s degree in business management, majoring in entrepreneurship. Few years later, she graduated at the UNIRAZAK 18th Convocation on 2nd December 2018. Knowing that an academic certification was not sufficient for her and her business, Harizatul signed up for multiple aesthetic and wellness courses in Indonesia throughout her planning and preparation period – Sijil Tata Kecantikan Kulit and Linx Beauty Consultant Certified Course to name a few. Also, locally, under the International Academy of Advance Aesthetic (IAAA) that is based in Kota Damansara, Harizatul enrolled for the Professional Certificate for Aesthetic Therapist (PROCAT) programme and was officially certified on 11th January 2019. Other than being academically competent, the entrepreneurial “spirit” inside her made her able to turn her interest and passion into skills, to turn her dreams into reality – which brought her to where she is now.

5. THE RISE OF ERIEZ WELLNESS AND MEDISPA

Authentic Balinese spa, relaxation, rejuvenation, beauty, health and wellness – these are the core values of EWMS that Harizatul and her employees uphold since day one. Being an attention to detail kind of person, with the comprehensive standard operating procedure (SOP) for each and every services that she, herself, has structured – in addition to that, with her being the primary trainer for the new, incoming and current employees – there are low to zero chances for the service team to make mistakes. Harizatul, personally, enjoys mentoring and nurturing her employees. Generally, such practice develops a sense of unity, family-like bond and teamwork – will directly impact the service delivery and quality positively. Eventually, it will attract more customers – by that, more revenue will be generated.

Another influential and impactful aspect would be marketing. Prior to market entry, Harizatul pursued three kinds of approaches – promotional and exclusive discounts, demand generation, and last but not least, social media marketing. In terms of promotional and exclusive discounts, opening (or launching) discounts started to be blasted six months before the launching of the first outlet in Platinum Walk, not just to tell the public of the new business existence, but the promo price is extremely low, objectively, to drive in diversified customers – no regards of gender, age or even income. Secondly, in terms of demand generation, Harizatul explained, as per the quote below:

“I implement the kind of marketing initiative that educates people first – by showing them the problems that arises from a busy lifestyle that most people nowadays are facing, before explaining how treatments in Eriez Wellness and Medispa can help them. I believe it is a more proactive approach to gain awareness, attention and interest from the public,” explained Harizatul.

Last but not least, in terms of social media marketing, EWMS did try to follow the current trend – by paying the social influencers for creative, promotional content services. Harizatul added that every detail posted and presented on social media has to be very specific, attractive and easy to accept – be it the written (or typed) content of every post, the photos and the videos uploaded as well.

Evidently, both of these impactful aspects have brought Harizatul and EWMS to where they are today. Other than the fact that EWMS reached the breakeven point as early as the 6th month of operation, the annual revenue for the first year was so outstanding – more than RM1.5 million. With the growing amount of net gain, Harizatul decided to open the second branch of EWMS in Publika at the end of the first year and it was officially up and running five months later, particularly, on 20th March 2019.

The organisational chart is attached on the next page. The structure of EWMS is divided into two – the management team and the service team. The management team is led by Harizatul as the director, assisted by a business consultant, with marketing, operations, administrative and finance being the departments that work on specified matters respectively and accordingly. As there are two outlets of EWMS, the service team is divided further into two, led by the supervisor that is stationed at the Publika branch and the operations manager that is stationed at the Platinum Walk.

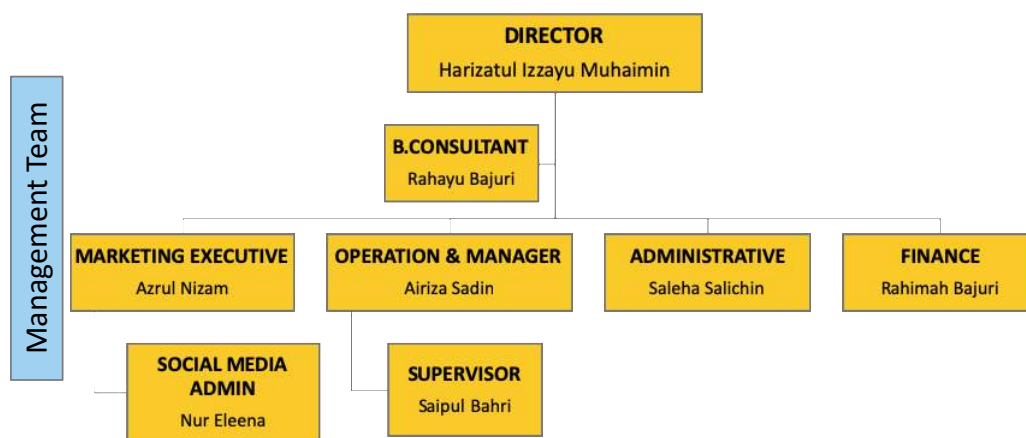


Figure 2 Management Team of Eriez Wellness and Medispa



Figure 3 Service Team of Eriez Wellness and Medispa

6. THE CHALLENGES

The study conducted has manage to identify few main challenges faced by EMWS. These challenges are clustered into 3 main categories. Among the challenges faced are in the areas of human capital, marketing and legal. Due to the increasing demand from consumers EWMS expanded its operations by opening a second outlet in Publika. As a result, such expansion would require additional number of therapists in order to meet with the growing demand. The main challenge faced by EWMS in terms of human capital is in the area of recruitment. Recruitment of therapists among locals are significantly low. This is generally due to wellness industry being deemed as part of the sex trade. This negative perception among the public has made it difficult to recruit staff. The current awareness on value and benefits of the wellness industry among the public in Malaysia is still at a low especially among the elders. The public is still reluctant mainly due to disapproval from their family's members as well as some find it being labour intensive.

Despite being in operations for almost three years, EWMS has yet to have a proper website. This signifies that the company's online presence is still weak. Although the brand has a strong foothold on Instagram, the content quality, originality as well as consistency is questionable. Marketing is a very important component that shapes the direction of the business. In this current age, businesses would normally leverage on digital marketing. It gives small businesses such as EMWS to compete with a smaller advertising budget. When managed effectively, it gives them an opportunity to laser-focused control over and where they spend their money. Digital marketing is also more targeted and hyper-personalized in comparison to other form of conventional marketing.

Finally, EWMS faces issue of reputation and perception. In general, the spa and wellness industry in Malaysia is commonly associated with the sex trade. There are growing concerns among the public as the industry generally has been a proponent of human trafficking. As a result, enforcement activities are on the high among the local authorities. The raid conducted in order to deter such immoral activities within the industry has somehow affected EWMS in terms of its optics towards the general public. These outlets are very common in the area of Setapak. EWMS could also investigate avenues of educating their potential consumer in order to create and grow awareness among them.

7. FINANCIAL PERFORMANCE

Table 1: Income Statement of Eriez Wellness and Medispa

Income Statement of Eriez Wellness & Medispa for the year ended 31st December 2018		
	RM	RM
Net Sales		1,604,179.40
COGS		145,512.15
Gross Profit		1,458,667.25
Operating Expenses:		
Marketing	6,091.00	
Operations	653,953.17	
Administrative	41,941.30	
Others	50,000.90	
Total Operating Expenses		751,986.37
Operating Profit		706,680.89

Gross Profit Margin	Break Even Point	Operating Profit Margin
$\frac{\text{Gross Profit}}{\text{Total Revenue}} \times 100\%$	$\frac{\text{Overhead}}{\text{Contribution Margin}}$	$\frac{\text{Operating Profit}}{\text{Total Revenue}} \times 100\%$
$\frac{1,458,667.25}{1,604,179.40} \times 100\%$	$\frac{RM687,354.58}{RM116,169.62}$	$\frac{706,680.89}{1,604,179.40} \times 100\%$
90.92%	5.92 / 6th Month	44.05%
	$RM133,681.62 \times 6$	
	RM802,089.70	

Figure 4 Financial Analysis of Eriez Wellness and Medispa.

The figures of tables above reflect the financial statement and financial analysis of EWMS for the year ended 31st December 2018. Briefly, it can be said that the company has recorded good profit from its operation. In term of sales performance, EWMS has recorded an impressive return. The company recorded RM1,604,179.40 in sales annually with RM145,512.15 in Cost of Goods Sold.

Although it was only one-year old back in 2018, EWMS managed to record outstanding numbers. For instance, the company managed to achieve a net sale of RM1,604,179.40 with an operating profit of RM 706,680.89. It reached breakeven on the 6th month of operation as soon as it surpassed RM802,089.70 in accumulated sales. Looking at the one-year expenses, EWMS spent RM6,091.00 in marketing, RM653,953.17 in operations, RM41,941.30 in administrative and RM50,000.90 in others. Interesting as it is, although the company did not invest so much in marketing, but EWMS still manage to attain high amount of sales for 2018. In December 2018, Harizatul decided to open the new branch of EWMS in Publika. Similar marketing “tradition” was being implemented – mainly, handing out flyers, hanging up banners and word-of-mouth marketing and promotion began five-to-six months prior to opening the new branch. Up to date, EWMS has two outlets, with a total of 30 workers, consists of the management team and the service team, and a variety of aesthetic, authentic Balinese services to choose from.

8. MOVING FORWARD

“As for the next expansion plan for Eriez Wellness and Medispa, I will be introducing to the public, especially to our returning customers, a new and interesting concept of literally bringing Balinese therapeutic world to the customers at their home. People just need to loosen up and open their doors as we ring the doorbell... because Eriez Wellness and Medispa is coming to their doorstep. Yes, as convenient as that!” shared Harizatul excitedly.

Harizatul stated that the nourishment of the body feeds the mind and the soul – she believes in catering to the needs of the customers no matter where they are. EWMS’s new revenue stream is called the Spa On-The-Go, which objectively to bring a world of Balinese facial treatments and body massages at the comfort of the customers’ own home.

“Meanwhile, from the expertise of our professionally trained therapists, to the authenticity of the serene Bali ambience, we shall provide our customers with the complete Eriez Wellness and Medispa treatment set-up – including the standardized equipment, calming music, and even therapeutic aromas for clients’ utmost relief, where they are most comfortable. Eriez Wellness and Medispa prioritises professionalism and security throughout our sessions, so any form of harassment shall be shut down accordingly. Moreover, this spa on-the-go is just one click away to so it’s more convenient for people to use,” added Harizatul.

By adding up the Spa On-The-Go into the revenue streams, it increases the competitive advantage of EWMS. Harizatul, together with the EWMS, is foreseen to potentially and gradually grow in every aspect, in time to come. Her dream of opening up one outlet at every state nationwide may even come true in the near future. However, in order to get there, the challenges highlighted on earlier section need to be encountered effectively and accordingly. On top of that, Harizatul needs to always be ready to innovate, to improve and to improvise in order to stay relevant in the market and the industry. Bottomline is, Eriez Wellness and Medispa (EWMS) is undoubtedly profitable, up to this day, but, moving forward, is the business really going to sustain in the long run? A wise businessman once said, being profitable is one thing, being sustainable is another, whereas, being sustainably competitive is the ultimate success factor for any business across every industry.

9. ACKNOWLEDGEMENTS

With utmost sincerity, praise to Allah, the Almighty and the Merciful, for His guidance and stewardship, He has granted us the opportunity and capability to pursue this case study completely and successfully. Also, this case study was conducted with the cooperation, assistance, guidance and support from several people whom we would like to offer our deep and sincere gratitude to on this section.

First and foremost, the main credit goes to our one and only mentor, Prof. Dr. Mohar Yusof for his invaluable guidance, encouragement and support throughout conducting this case study. His contribution, in terms of knowledge and wisdom, had eased the entire process – from deciding on the theme of the case, all the way until the study is now realized in the form of a teaching case.

We also like to express our gratitude to the rest of the UNIRAZAK Graduate School of Business family – the faculty members and the supporting staff – for the precious knowledge taught and shared; and the administrative assistance needed.

Also, we are indebted to Harizatul Izzayu Muhaimin and her team for their time, energy, cooperation and commitment which allows us to conduct a thorough and transparent case study on their growing wellness and medispa chain.

Last but not least, we would like to express our sincere appreciation and gratitude to our families for all sort of tremendous and unconditional support. With our parent's blessings, encouragement and faith in us, we gained the strength to successfully pursue, not just this case study, but also the entire master's degree programme and courses.

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Digital Entrepreneurship and Innovation: The Case of Kongsi

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Synopsis

The main purpose of this case study is to examine the implementation and commercialization process of Kongsi, which was originally known as Qu Exchange. Briefly, Kongsi is a digital platform that helps solve cash flow problems for micro, small and medium-sized enterprises (MSMEs) with the creation of a non-cash alternative-financing platform, putting together the concept of barter and point-based system. Background of the company and the co-founders who initiated the idea and business, and the starting up process is described. The researcher and the entrepreneurs found a critical success factor for technology commercialization, which is resource leveraging. And, the most important factor in resource leveraging is to create, develop and confirm demand for the solution. Hence, a synchronous combo of strategies and resources is needed in order for the entrepreneurial endeavor to be successful.

Keyword: Cash Flow Management, Micro, Small and Medium Enterprises, Technology Commercialization, Resource Leveraging, Empowering Community.

1. INTRODUCTION

This case is developed as a basis for academic discussion related to the areas of entrepreneurship, innovation, technology commercialization, and market adoption. It does not illustrate either effective or ineffective handling of any business or management situation. It is based on qualitative data, obtained and built on interviews with the co-founders, and is supplemented by secondary data gathered through desktop research. It should not be viewed as a typical business case, but rather an insightful and interpretation of what we expect the students in business management and entrepreneurship degree program to understand, appreciate and demonstrate when they review, analyze, and discuss the issues and challenges faced by a technology start-up in resource leveraging and validating a business model in a highly competitive environment.

In the midst of the third quarter of 2017, under the MSME New Media Sdn. Bhd., the co-founders began with the launching of Qu Exchange. It was developed based on research and observation on the needs, requirements and challenges that arise among the MSMEs upon generating growth and enhancing sustainability. In order to make it more publicly available, the solution was rebranded and is now known as Kongsi.

2. FINTECH INDUSTRY IN MALAYSIA

From an industry point of view, Kongsi is categorized as a Fintech segment which refers to businesses based on the use of technology to provide financial services in general. It is also acknowledged by Wayne Lim, the founder of Kongsi, which is to make Kongsi a mobile application-based service product that can be easily downloaded by its target customers. As for the Fintech industry, Malaysia is a country that is very receptive to Fintech's economic development sector. The Fintech sector has been in Malaysia since the 2013-2014, but at that time in the early stages. But that changed with a positive acceptance in 2016-2017. Many companies in Malaysia at that time began to use Fintech as a platform

in their business. This has a drastic effect on public awareness of this matter. As a result, people are starting to actively use online payments in their lives. This is further compounded by the history and chronology of Malaysia being the first ASEAN country to have a regulatory framework of equity crowdfunding with the aim of early-stage financing for start-up companies and also for existing entrepreneurs in 2015.

The rapid growth of the Fintech industry is also influenced by the rapid development of the internet world. According to the Fintech 2019 Malaysia news report, Internet penetration in Malaysia is 86%, while the Bank's population is 95% and with a population of 32.6 million of them, it is evident that the presence of the Fintech sector provides significant and complementary relationships with available technology and tools available in Malaysia.

Referring to Kongsii, which is the subject of this study, it can be seen that they have good opportunities in the market and this is further enhanced by the uniqueness of their different service offerings. This opens up space for them to gain a competitive advantage in the market, especially in the market they want to focus on which will give them a profit. To sum it all up, it can be said that based on the size, position, and growth of the Fintech industry in Malaysia it gives many advantages to Kongsii after continuing to move, explore and grow further into the market. Apart from that, also look at the current situation where the industry market is expected to be bigger and it is the best opportunity for Kongsii to be in this market.

3. KONGSII

3.1 STARTING UP KONGSII

Initially, Kongsii was built with internal investment of a wholly-owned subsidiary of the Malaysia SME Media Group – MSME New Media Sdn. Bhd. – which was owned by Wayne Lim and Beverly Lim (refer to Appendix-A for their brief profiles). Also, a huge portion of the company shares were owned by MSME Incorporated Sdn. Bhd. and BIZ Angles Sdn. Bhd. The idea and decision to create Kongsii was actually made two years after the establishment of the company. The two-year period prior to the launching of Kongsii was spent on conducting integrated and comprehensive research and development. Wayne Lim, himself, found and acknowledged that there was a growing financing gap for MSMEs over the last few years due to lack of fundraising.

The team took the risk to develop Kongsii with the aspiration to help the MSMEs by providing a non-cash platform or virtual ecosystem, particularly for financing purposes. Comprehensively, it is a platform for the MSMEs to conduct trading transactions using a point-based system, without involving any sort of financial transactions except a one-off facilitating fee of 3% imposed on the pledge application. Over the span of more less three years, Kongsii had, by far, secured a total of RM25,105,237.22 transactions and 346 pledges via the platform. However, the team had yet to achieve and were still striving to reach their target of acquiring 10 percent of the local, registered MSMEs, which, approximately around 100,000 in numbers.

Throughout the entrepreneurial journey, it was found that, even in these modern days, most MSMEs were still not aware of the importance of cash flow management and on adapting, adopting to the rapidly evolving technological advancements. As a result, many companies suffered losses and had to close down due to the inefficiency of the management in dealing with the challenges of the business world.

There was no other option for most of these MSMEs because when they needed support and assistance, especially, in financing, they were not able to acquire it due to poor cash flow management – not only that it led them to shut down their businesses but it also added up to the gap that existed in this industry.

In an interview with the SunBiz back in March 2018, Wayne Lim, himself, said and acknowledged that there was a growing financing gap for MSMEs over the last few years due to lack of fundraising and sources of funding.

“Since we can’t find more money to help the SMEs, why don’t we just look at their collection problem...Businesses only get paid three months after they provide the services. This is why they need funding”.

Wayne Lim, founder of Kongsii.

3.2 FUNDING AND NETWORKING

Obtaining funding was not difficult for the company. Being a subsidiary of the country’s first and only, all-encompassing media organization focusing specifically on SMEs, both within Malaysia and across all regions – the Malaysia SME Media Group – the implementation cost or initial fund was (easily) obtained at RM5,000,000.00.

On a recent (and greater) news, the Silverlake Group had collaborated with Kongsii by providing US\$200,000 – approximately, RM850,500 – worth of technology investment to strengthen risk management and technology innovation. The extensive network of the parent company was utilized upon creating the awareness and delivering the knowledge on Kongsii. With all these resources which, indeed, an advantage for the company, the only challenge that they seem to face was (and still) on acquiring the mass market.

With the huge amount of fund to begin with – even before the Silverlake Group came on board – a comprehensive business development, marketing and sales strategies were implemented accordingly and presented, analyzed on the next section.

4. DATA PRESENTATION AND ANALYSIS

4.1 BUSINESS DEVELOPMENT ACTIVITIES

Business development activities were aimed at establishing strategic relationships and alliances with other organizations. In this aspect, the strategy was to leverage on the network resources, such as the experts, technologies or other intellectual properties of business partners and collaborators to enhance the capabilities and capacities for identifying, researching, analyzing and bringing the digital solutions to the market.

4.1.1 ENGAGEMENT WITH MALAYSIA SME

Being the founder of Malaysia SME and the founder of Kongsii concurrently, Wayne Lim had utilized the existing platform on Malaysia SME upon introducing Kongsii. As per mentioned earlier, the Malaysia SME Media Group is the first and only, all-encompassing media organization focusing specifically on SMEs that was established in 2005. On 30th September 2018 – same day when Kongsii was launched - the users were made able to purchase the Malaysia SME newspapers using the Kongsii points. Indirectly, it benefited the company by pulling and convincing the existing customers of the parent company to use Kongsii.

4.1.2 INVOLVEMENT IN THE MSME CONFERENCE: FINANCING TRANSFORMATION 2018

Kongsii was invited to the MSME Conference organized by Cheng & Co. With Financing Transformation 2018 being the theme, Wayne Lim was invited to be one of the panel speakers. Kongsii was widely introduced at the conference and the impact was very positive. For instance, many MSMEs involved were interested, attracted and even became users of Kongsii.

4.1.3 ENGAGEMENT WITH UTILITY AND TELECOMMUNICATION COMPANIES

One of the many initiatives undertaken by Kongsu was when the point system was enhanced to enable utilities, telecommunications bills and subscriptions to be paid via the Kongsu platform. Objectively, it was meant to encourage continuous and comprehensive usage, on top of the additional product features included in the digital solution. Electric bills under Tenaga Nasional Berhad (TNB), Telekom and Unifi bills, Astro subscriptions, mobile prepaid and post-paid bills are among the many bills and subscriptions that could be made via the platform.

4.2 MARKETING ACTIVITIES

Marketing activities were focused on raising brand awareness and promoting Kongsu as a cash flow management integrated solution for the MSMEs with the creation of a non-cash alternative-financing platform, putting together the concept of barter and point-based system. Also, the company wanted to highlight the unique selling point that MSME New Media Sdn. Bhd. was not all about providing a financial solution, but also advisory services, training to assist and gather the users to be part of the community in order to grow and sustain their businesses

To strategically position the brand and solution, the marketing budget was allocated internally. The marketing division led by Beverly Lim had implemented the strategic marketing plan for Kongsu to this day. The division produced marketing collaterals to promote Kongsu which included the promotional video production, bunting, brochure, and booth displays. Among the printed channels used were newspapers such as the Malaysia SME, The Star and The Sun. Facebook, LinkedIn, Instagram and YouTube were the social platforms emphasized on for the online marketing.

Initially, Kongsu was named Qu Exchange. However, in order to capture the mass market of the MSMEs in Malaysia, which, in majority, consists of the Malays, the name was rebranded and is known as Kongsu since early 2020.

4.2.1 SOCIAL MEDIA CONTENT

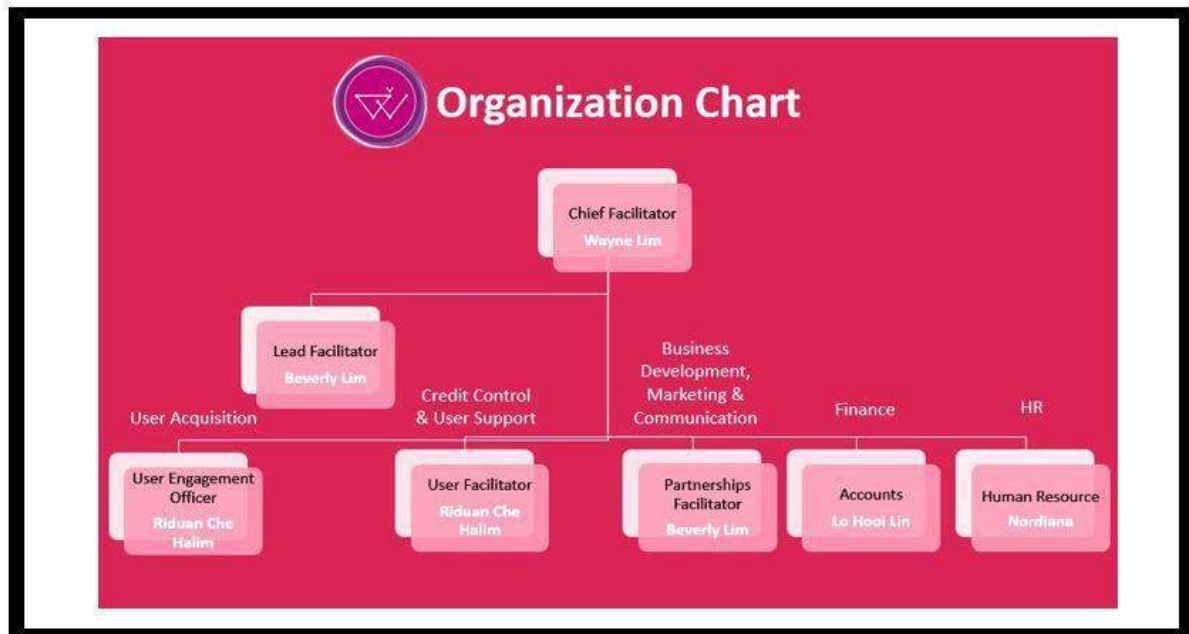
Realising the importance of online presence, on top of the mobile application downloadable via the Apple App Store and the Google Play Store, the company created its own website. The idea of Kongsu website was not only to enable potential users to subscribe and attain more information and knowledge about the digital solution but to also serve as a platform to provide advices to the readers about the importance of managing their finances and cash flows. Other than that, the marketing personnel engaged users and followers, mainly via Facebook and Instagram, with constant posts of the product in creative, customised template, smart quotes and financial advices, and also to engage with potential new subscribers.

4.3 HUMAN RESOURCE PLANNING

The co-founders believed that one of the most important success factors was by employing strategically. The right employees on board would be able to grow the potential of the company in the market. Thus, they started to recruit and form a team that comprises of experienced professionals and fresh graduates. The company was also supported and assisted by part-timers in certain areas such as customer service and sales. By September 2017, MSME New Media Sdn. Bhd. had seven full-time employees in the team assigned to key positions.

4.3.1 STAFF RECRUITMENT

The organization chart below was tabulated to present the staff recruited by the MSME New Media Sdn. Bhd.



4.4 SALES ACTIVITIES

The sales activities had been, primarily, focused on attracting, developing relationships, and gaining new users. Throughout 2018, the major approach used was attracting potential towards the introduction of the platform before converting them into Kongsu users.

Evidently, among the highlighted initiatives conducted in 2018 were as follows:

- Enabling book selling via Kongsu.
- Developing Malaysia SME newspaper subscription using Kongsu points.
- Malaysia Kini E-commerce Entrepreneurship Summit.
- Global Marketing Summit 2018.

In 2019, the approach used was developing relationships through information and the activities conducted were as follows:

- Introduction of Qu wallet to benefit your employees.
- Increase business productivity with Qu.
- Mid-autumn festival special.
- Pay utility bills with Qu point.
- Employee medical benefit on Kongsu.
- A Christmas treat for Qu activities.

Last but not least, in 2020, the approach used was acquiring new customers and the activities conducted were as follows:

- Conducting property-related business activities on Kongsu.
- Get your groceries with EZ Mart.
- 5% more when you top up your Qu Wallet.
- Kongsu protect in partnership with AXA Affin General Insurance.

5. THE CHALLENGES

The study conducted successfully identified some of the key challenges faced by Kongsu throughout this business journey. Among the challenges faced are in the area of product and marketing. The beginning of the strategy used by Kongsu is to introduce the product to the market first by using the resources that are already available including platforms, data, and networks. This gives Kongsu the advantage from that point of view as it is backed by the parent company that has access to such things, however, there are a few problems encountered which is related to the use of the product itself. This is because when their customers, which are MSMEs, use this Kongsu, they find it quite difficult to use it, a string of lack of knowledge on technology, even though this Kongsu was established through a mobile app that should be easy to use.

The second challenge is marketing, where, although Kongsu has diversified marketing, but they are still far from the main target. One of the connections on this matter is because related to the Kongsu business model. Kongsu is a business and service that is not as common as other businesses and services and this to some extent makes it difficult for the target customers to understand and trust the Kongsu business model. As a result, it is also quite difficult for the company to find a partnership in their business. However, looking at the challenges faced by Kongsu, it does not affect the integrity of Kongsu to continue to stand and introduce this service to the target customers. The credibility and experience that Wayne Lim possesses, such as previous business management, leadership, and teamwork skills, make this challenge just one of the steps that need to be overcome.

6. CONCLUSION AND DISCUSSION

The extensive resources made MSME New Media Sdn. Bhd. able to pursue Kongsu independently. Although it is an ongoing challenge for the company to acquire the mass market, it was able to launch Qu Exchange, rebrand it to Kongsu and stay in operation – even with the global pandemic outbreak - up to this day. It shows how strong the financial capacity of the company is, on top of the support of the parent company. Also, it highlights how being able to leverage on resources strategically and effectively is key to grow, survive and sustain in business. In other words, having resources with the disability to leverage well on them is equally pointless to not having resources at all. On another perspective, pursuing a digital solution is a challenging task, especially, when you are aiming for the mass market. It requires a lot of time, effort and energy to just grab their attention, what more to convince them to accept, adopt and adapt to the changes. Nevertheless, Kongsu is a highly potential digital solution that could be the “hero” to gradually close the worrying financing gap. With the Silverlake Group on board, MSME Media Sdn. Bhd. and Kongsu is expected to reach ultimate target within the next three years.

7. ACKNOWLEDGEMENTS

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On this occasion as well, first and foremost, a major appreciation is given to our mentor, Prof Dr. Mohar Yusof for his invaluable guidance, encouragement, and support throughout the conduct of this case study. His contribution, in terms of knowledge and wisdom, has eased the whole process - from deciding the theme of the case to this study can be implemented in the form of teaching cases.

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APPENDIX A: DIRECTORS' PROFILES

Directors	Experience
<p style="text-align: center;">Wayne Lim</p>	<p>Wayne Lim has been actively involved with the MSME community for over 23 years. His involvement with the MSME community began when he was attached to a Singapore PLC. There he started the SMI Business Directory with the SMI Association of Malaysia in 2001 and ever since he has been deeply involved in the business of MSMEs. He founded the MALAYSIA SME® media group in 2005 and subsequently conceptualized the MALAYSIA SME® media brand. Within 3 years he propelled the group from being the publisher of a single MSME directory to becoming an established MSME media corporation in Malaysia. In the course of his business endeavours, he has always kept abreast and connected to the MSME community, along which, he acquired an in-depth understanding of their trends and challenges. He regularly champions for MSMEs to be recognized and assisted on a level playing field with large corporations. He is currently developing an alternative financing exchange to help MSMEs solve their cash flow problem.</p>
<p style="text-align: center;">Beverly Lim</p>	<p>Beverly Lim pursued a bachelor's degree in Law at the University of Manchester, United Kingdom. Instead of pursuing a career as a lawyer, she pursued her interest in the business. Having co-founded Kongsi, Beverly Lim believes in helping MSMEs since they form a large majority of businesses globally. Beverly met her cofounder, who shared similar views during an internship, and that was where the journey to create this platform started. Kongsi gives MSMEs the option to finance without the use of cash in order to aid their cash flow difficulties. With this belief in mind, Beverly's vision is to make Kongsi a global exchange for MSME businesses.</p>

Are We Ready for ‘Work-from-Home’?

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Teaching Case Synopsis

The case is about the challenges faced by a company after introducing the work-from-home concept in the pandemic times. Allowing employees to work from home resulted in a loss of productivity. Diving deep, factors like lack of motivation, work ethics were found to be the probable causes behind the productivity loss. While cultural factors cannot be directly accounted for due to lack of evidence, one of the demographic factors, gender was found to have a direct impact. The findings create concern and raises the question whether employees should actually be allowed to work from home and if so what should be done to prepare them. It also fuels the never-ending debate between theory X and theory Y of motivation. Although previous studies establish a positive relationship between productivity and working from home, the findings of this case suggests otherwise. The purpose of this case was to identify the challenges and issues companies are facing because of the current business practices and present the findings. Although this case focuses on the IT industry, it leaves a great scope for future researchers to conduct further studies on this particular topic.

Keywords: work-from-home, productivity, motivation.

1. INTRODUCTION

It was March 22, 2020. Mr. Kowser was in his office when he heard the news. It was kind of anticipated considering the situation. The government declared a 10-day shut down effective from March 26 to April 4 to battle the spread of the coronavirus (Dhaka Tribune, 2020). This was effective for both public and private sectors excluding emergency services. Mr. Kowser who always took his decisions quickly didn't fail to assess the gravity of the situation. He knew he had to be prepared for the future as he could read between the lines. He turned on his laptop and started his groundwork on the work-from-home (WFH) concept. He found out that the concept has not emerged recently. In fact, the term telecommuting was coined in 1973 by Jack Nilles, who is also known as "the father of telecommuting". According to the definition given by the United States Office of Personnel Management (US-OPM), telecommuting or popularly known as working from home is a work arrangement in which employees do not travel to a central place of work, such as an office or a store. These employees are known as telecommuters or teleworkers. Gaining popularity in the late 90s, the concept boomed in the early 2000s. By the year 2009, more than 100,000 US federal employees were working remotely (US-OPM). However, what bothered Mr. Kowser was that the scenario was not the same in the Asia-Pacific region. In a 2012 survey, conducted by SAP Concur, it was revealed that 88% of the Indian employees wished for working from home. Owing to the global pandemic, there had been a massive upsurge in the work from home concept. Although a massive shift to working from home had helped firms stay afloat in this challenging time, the consensus was that not everyone could pivot to a home-run office and remain efficient (The Straits Times, 2020). Employees from Asian countries like the Philippines, Indonesia, Japan, South Korea were in fact returning to the workplace. On one hand, poor infrastructure was not being able to support the shift to work from home. On the other hand, communal culture among Asians

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leaned towards in-person connections and was compelling the workers to return to their workplace. (The Straits Times, 2020). Even though work from home looked like a win-win scenario for both the parties, in reality often that was not the case. Loss of productivity was a price companies often paid, allowing their employees to work from home (SAP Concur, 2012). While the whole world had widely embraced this concept and was even thinking to make a permanent shift towards working from home, Mr. Kowser was left with the question, whether we are ready for this concept.

2. CALL FOR CUTOUTWIZ

Kowser Ahmed Nirob, the founder and CEO of CutOutWiz, was among many others who was forced to introduce the work from home concept in his company to run the day-to-day business activities during the global pandemic. CutOutWiz is an e-commerce content post-production company in the global marketplace. It helps global e-commerce companies with image editing and digital asset management as well as high volume content production services. Background Removal, Photo Retouch, Image Masking, Shadow Creation, Color Correction, Image Manipulation are some of the key services offered by CutOutWiz. Starting from the e-commerce industry, the company serves industries like automotive, food, real estate and property, marketing and advertising and so on. Within only 3 years of its operation, CutOutWiz managed to secure a customer base of more than 500 companies across the world. Mr. Kowser accounted this success to the reasonable pricing, affordable services, efficient process and fast delivery. With the help of data analytics and proper reporting, the company managed to maximize its efficiency and minimize the turnover time.

3. THE DILEMMA AND DYNAMICS

It was all going well for Mr. Kowser until the whole country came to a standstill. However, what was a curse for most of the industries, looked like a huge prospect for the IT industry. CutOutWiz was no different and aimed to make full use of this opportunity by introducing the work from home concept. Accordingly, employees with no desktops in their households were provided with desktops. The company invested in assets and in return expected productivity from the employees. Moreover, in an attempt to increase productivity and ensure rapid growth, CutOutWiz took a proactive approach and doubled the working hours. Earlier employees who used to work 8 hours a day, started working 16 hours from their home. The extra hours were being counted as overtime; however, the company was yet to decide on the overtime payment. Mr. Kowser wanted to observe things for a while before taking any rash decision. The stage was set for the employees to perform and deliver. Mr. Kowser, an optimist by nature, was hopeful and expected higher revenues in the month of April. However, the reality was far from his expectations and even after expending twice the time, the revenues dropped. He figured out that the employees were overworked and lacked motivation. Although as a CEO, Mr. Kowser was not satisfied with the outcomes, he appreciated the efforts put in by his employees and decided to reward each and every one of his employees with a 'Thank You Bonus' of BDT 5000 in May irrespective of their salaries and designations. The company also arranged a 2 hours motivation session for the employees. However, there seemed to be no improvement whatsoever and the bad streak continued. That's when Mr. Kowser had realized that something needed to be done.

Table 1: Comparison of the Quarterly Production Performance Data (CutOutWiz, 2020)

Quarter 1		Quarter 2	
Month	Total Number of Images Processed	Month	Total Number of Images Processed
January	659000	April	431000
February	725000	May	454000
March	529000	June	420000

4. CONNECTING THE DOTS

In the modern day IT industry, functioning without data analytics is near to impossible and CutOutWiz had the perfect tool in this case, their one of a kind job-tracking platform. This enabled the company to not only supervise the performance of a particular team on a certain project but also allowed it to measure employee productivity in terms of images processed. The employees were responsible for entering information like their in and out time, number of images processed, projects they are involved in and even the condition of their mood while entering or exiting the platform. This information was then presented to the management who would either approve those or assign respective project leaders and supervisors to investigate any anomaly.

Mr. Kowser wanted to act before it was too late and decided to go into the root of the problem. Earlier it was seen that the productivity for the second quarter was just 68% of the first quarter's productivity. However, when he dug deep it was found that the reason behind low productivity was not really employee motivation but determination. Reports suggested severe sincerity issues resulting in poor output. In fact, even after doubling the work hours, productivity was not even half of what it was before, let alone equal. The output was so low that it raised concerns and questions. Questions like whether an employee actually worked for 16 hours from home. Even though the in and out time showed that employees worked for around 16 hours, the suspicion remained whether they had been actually working or just logged in to the platform timely and then engaged themselves in something else. The reports clearly indicated a productivity fall of approximately 60% in just between 6 months, January to June. What was more concerning was the downward trend of the number of images processed per employee. Mr. Kowser felt disappointed at his employees and began to rethink what went wrong.

Table 2: Comparison of the Quarterly Production Performance Data per Employee (CutOutWiz, 2020)

Q1	Average Number of Images Processed per Employee		Q2	Average Number of Images Processed per Employee	
	Monthly	Daily		Monthly	Daily
January	1600	51	April	870	29
February	1500	52	May	750	24
March	1050	34	June	630	21

5. IMPLICATION OF THEORY X AND Y OF MOTIVATION IN CUTOUTWIZ

According to Douglas M. McGregor's theory X and theory Y of motivation, the perception of managers on the nature of his/her employees is based on various assumptions. The theory X views employees as the typical worker (Hattangadi, 2015) and assumes that they are inherently self-centered, indolent by nature and indifferent to organizational needs (McGregor, 1960). Neither they are intelligent nor ambitious. They dislike responsibility, resist change, prefer to be led and must therefore be persuaded, rewarded, punished, controlled to manage their activities. These employees just work for money and managers must closely supervise them and adopt a dictatorial style in order to ensure productivity. On the contrary, theory Y suggests that employees are internally motivated, possess skills and capabilities and dedicate their efforts to achieve organizational goals. They have the potential for development and the capacity for assuming responsibility (McGregor, 1960). A manager's task is to arrange the organizational conditions so that employees can achieve their goals and in the process fulfill the organizational needs. Depending on the nature of the employees, managers must choose their way of management. However, the choice is not that simple most of the time and it is likely that a manager will need to adopt both approaches depending on the evolving circumstances (Avolio, 2007). Failing to correctly design or choose an approach can prove to be really costly and not only affect an organization's productivity but also risk its sustainability. It is evident that CutOutWiz followed theory Y in their management style, trusting their employees to work responsibly, ethically and stay motivated. However, this style clearly failed and it looked like shifting to theory X was the only option to change things.

6. MATTERING FACTORS

While earlier studies conducted on the employees of a Chinese travel website, working from home marked an increase in productivity (Bloom, 2014), the question remains whether the fall of productivity in this particular case can be accounted to cultural factors. Neighboring countries like India are not holding back, almost 85 percent of IT staff in the country began working from home after the lockdown started. Moreover, Tata Consultancy Services, the largest IT employer of the country, has already indicated that about three-quarters of its nearly 500,000 employees will be working remotely by the end of 2025 (The Straits Times, 2020). Factors like ethics, moral values depended largely on the cultural dimensions of a country. Although without proper research and conclusive findings, it cannot be said that cultural factors had a role to play in this case; it was found in previously conducted research that national cultural dimensions could be considered as pivotal variables in justifying productivity (Abraham, 2019).

Demographic factors can be crucial in terms of measuring productivity. Ms. Siti Aisyah Tumin of Malaysia's Khazanah Research Institute thinks that work-from-home arrangements could potentially worsen inequality (The Straits Times, 2020). In Bangladesh, on average, an employed woman spent 22 hours weekly doing household chores, which is only 8 hours for an employed man (Labor Force Survey, 2016). This indicated that female productivity could have taken a hit working from home particularly when distraction was identified as the major reason for loss of productivity working from home (SAP Concur, 2012). Proper analysis of the relationship between demographic factors and productivity could prove to be really profitable for a company both in the short run and the long run. Globally there have been many counteracting studies on gender and productivity; while some suggested gender influences productivity, others nullified the statement. In the case of CutOutWiz gender did have an effect on the employee productivity. Although productivity dropped in case of both male and female employees, the fall was much sharper in case of the latter. In case of male employees, even though in the first month productivity decreased, there was a recovery just the month after. The overall decrease was around 15% from February to June. However, the situation was different in case of female employees. Productivity started dropping right after February and hit the rock bottom in the month of April. In fact, ironically the combined productivity of April-May-June equals the productivity of February. The drop was approximately 64%, which was more than four times the drop in productivity of the male employees.

Table 3: Gender Wise Production Performance Data (CutOutWiz, 2020)

Male		Female	
Month	Number of Images Processed per Employee (Daily)	Month	Number of Images Processed per Employee (Daily)
February	52	February	44
March	35	March	23
April	59	April	13
May	50	May	15
June	44	June	16

7. CONCLUSION

The global business scenario had never been so dynamic in the past. With the tools of Industry 4.0, traditional business operations are transforming. Amidst all these, a global pandemic has reshaped the way of doing business. Companies resisting the change and trying to stick to their traditional approaches are fighting to sustain, contrarily, companies adapting to the change and utilizing the opportunity are consolidating their position in this highly volatile environment. As it is said, what is sport to the cat is death to the rat. When the question is about survival, we must know what is best for us. While the whole world is moving at a fast pace, we might find ourselves lagging far behind even after marching forward, because what matters is the pace. Companies around the world have increased productivity introducing the work from home concept (Bloom, 2014). It is a matter of time before this turns into a permanent arrangement instead of being a temporary solution for the pandemic. However, only time will say if Mr. Kowser will be able to turnaround his company from the conundrum he had fallen into.

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Resolving Ambiguities of Program Accreditation and Building a Participative Quality Culture

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Abstract

The objective of this paper is to show how to identify and resolve ambiguities regarding quality management system, accreditation procedures, and compliance to standards and finally how to develop a participative quality culture. There is a need to professionalize the faculty and staff and mold them into the essential character of Quality Assurance (QA). This study adopted a pervasive and ubiquitous approach to reveal all the prerequisites of QA and program accreditation with the objective to clarify ambiguities and prepare a blueprint of building a participative culture. This requires breaking the bureaucratic set-ups and use QA as a tool for innovation and improvement. This study is a detailed account of the application of a prototype model in a real life situation, customized and conceptualized to meet the required needs of QA system and accreditation. Using the prototype model with a case based approach and cognitive categories; this study presents a list of essential components of QA needed for accreditation. This paper recommends best practices such as a bottom-up approach and top management support to set up such internal mechanisms within a program that would focus primarily on QA while adhering to the fulfillment of accreditation prerequisites.

Keywords: Ambiguities, evaluation, quality assurance, accreditation

1. INTRODUCTION

The statement released by European Higher Education Area in the Bergen Communiqué was not a mere political statement when it stressed upon higher education institutions (HEIs) to work towards enhancement of the “quality” of their practices and introduce such “internal mechanisms” that would correlate with external benchmarks of quality assurance as well as meet stakeholders’ expectations (Bergen Communiqué, 2005). The Bergen meeting was one of the governmental meetings held to take forward the Bologna process which was initiated by 28 countries in 1999 and which now has 48 signatories (Bologna Process, 2005). These participating countries gather formally to reiterate their commitments to quality assurance in higher education in the European countries. While the countries outside the European Union contemplate to apply the Bologna principles, it is often argued what kind of quality assurance should be addressed (Prchal, 2008, quoted in Bollaert et al, 2007); whether “managerial quality” or the one referring to the course/ program under evaluation. Hence in a science college, if there are multiple programs under the evaluation of quality assurance, it is pertinent to understand whether Quality assurance principles should be general or program specific (e.g. Biology, Physics, Mathematics or Chemistry) or a combination of both.

However, the countries outside the European Union have evolved over the last two decades, and improved their respective qualification frameworks and devised such quality assurance

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mechanisms that were based on “Bologna reforms” but in their implications, they emphasized on pedagogical practices, assessment methods and evaluating learning outcomes through self-evaluation methods. Such a vision statement needed a qualification framework of a robust nature that would enthrone Quality at a very high position. Once a qualification framework is established and implemented at the national level (NQF), the program management and quality assurance systems must comply with its requirements and produce direct evidence of their compliance. These requirements include learning outcomes to be specifically measured in three domains of learning: Knowledge, which is categorized as theories, facts, concepts and ideas, trends, and historical data; Skills, which are a set of cognitive and physical abilities that should be acquired to apply the knowledge gained; Competencies are practical attributes that are viewed in the form of values, ethical and responsible behavior in socio-cultural situations as well as work environment.

A major requirement to implement such a qualification framework is not to reduce internal quality assurance to “formalized processes” but try to motivate individuals in the institutions to create a “quality culture” and a “continuous improvement” of quality practices. The faculty and staff must be aware of the significance of conformance of quality and accreditation regulations and also the consequences or the cost of non-conformance, which may even jeopardize the program accreditation prospects. Crosby (1979) emphasized on the orientation of the faculty and staff through written manuals, booklets, videos and posters. Adopting the Delphi technique the QA committee in each program should set up an informal forum for quality discussions where teams and sub committees can participate in focus groups and deliver short presentations (Ilyas, 2019). This will further help people to change from a conceptual and policy perspective to that of a personal accountability. Such an informal forum could also reduce personal differences and make people understand the accreditation requirements and put all critical success factors under one roof.

2. PROBLEM STATEMENT

A program aspiring for accreditation faces several challenges. There are ambiguities, related to quality matters, as one may not be able to differentiate between objectives and outcomes or fails to see any difference between teaching and assessment strategies or how to define key performance indicators (KPIs) and so on (Schmadeka, 2015). There is also a lot of ambiguity and a limited approach in mapping the course learning outcomes with the program learning outcomes. The vision, mission and goals statement of programs are also often not aligned with those of the institution at the macro levels. The participation of community and stakeholders is also ignored. Many faculty members may also have personal constraints and attitudinal issues due to their narrow outlook, limited access of information, and often refusing to share a collective responsibility nor willing to be a part of the shared vision or a team. Quality matters for them are an administrative issue and should have a separate agency under the program administration. Their primary role in the institution is to perform academic tasks such as teaching and research. They fail to understand that quality matters are now integrated into academics and are seen as the ultimate result of the performance of their academic tasks. Their academic tasks deem to be complete when they prepare course reports for the semester giving evidence of the compliance of the program specification and the course specifications. Failing to do so would mean nonperformance and negligence of the assigned tasks or paying little attention to the regulations encoded in the program and course specifications.

Several interventions (Bergen 2005; Bologna Process, 2005; EUA, 2006; EUA, 2007; Brennan & Shah, 2000) have drawn attention to lack of governance at the institutional level partly responsible for allowing such issues. The institution may lack a monitoring agency dedicated

to the compliance of the Quality and accreditation regulations; though it is a mandatory requirement of any accreditation Commission that institutions must have a Quality Assurance and Accreditation unit in every institution responsible for the compliance of the norms, standards and criteria related to quality and accreditation. This unit is also responsible to conduct training workshops for the faculty and staff to orient them with the quality requirements and how they should contribute to accreditation. Last, but not the least, it is often argued that lack of empowerment, lack of professionalism among the staff, bureaucratization, absence of top management support, absence of incentives and rewards are a few other deterrents that dissuade people from quality matters.

It is high time that institutions devise essential QA practices such as decentralization employee empowerment, a positive bottom-up approach and how much autonomy to be given for internal quality assurance processes (EUA, 2006). Hence, there was a need to address to all these micro and macro issues with a case based approach and attempt to discuss specific accreditation scenarios in order to analyze the issues and frame appropriate resolution.

3. RESEARCH METHODOLOGY

The objective of this case is to show how to identify and resolve ambiguities regarding quality management system, accreditation procedures, and compliance to standards and finally how to develop a participative quality culture. To achieve this objective, a case based reasoning approach was chosen as the appropriate research design for this study (Richter & Rosina, 2013; Hüllermeier, 2007) because with the application of specific accreditation prerequisites, it is much easier to accomplish implicit generalization of do's and don'ts of QA and accreditation. The study also adopted a pervasive and ubiquitous approach to uncover all the prerequisites of quality assurance and program accreditation with the noble objective to clarify ambiguities and prepare a blueprint of building a participative culture. For this purpose, a Prototype theoretical model was customized to build up a quality assurance system and cognitive categories were designed in a graded manner.

The Prototype theory (Rosch, 1973) is applied in linguistics for mapping lexical structures to their meaning in order to achieve cognitive outcomes. Figure 1 illustrates how a prototype is developed in the first stage and how its successful completion and evaluation leads to an iterative process. The process undergoes major categories of the prototype model such as initial requirements, information gathering, building prototypes, review and refiner and evaluation which are iterative and comprise good practices deployed for continuous improvement. These categories form prototypes or clusters; and new members can be added on the basis of resemblance to each prototype.

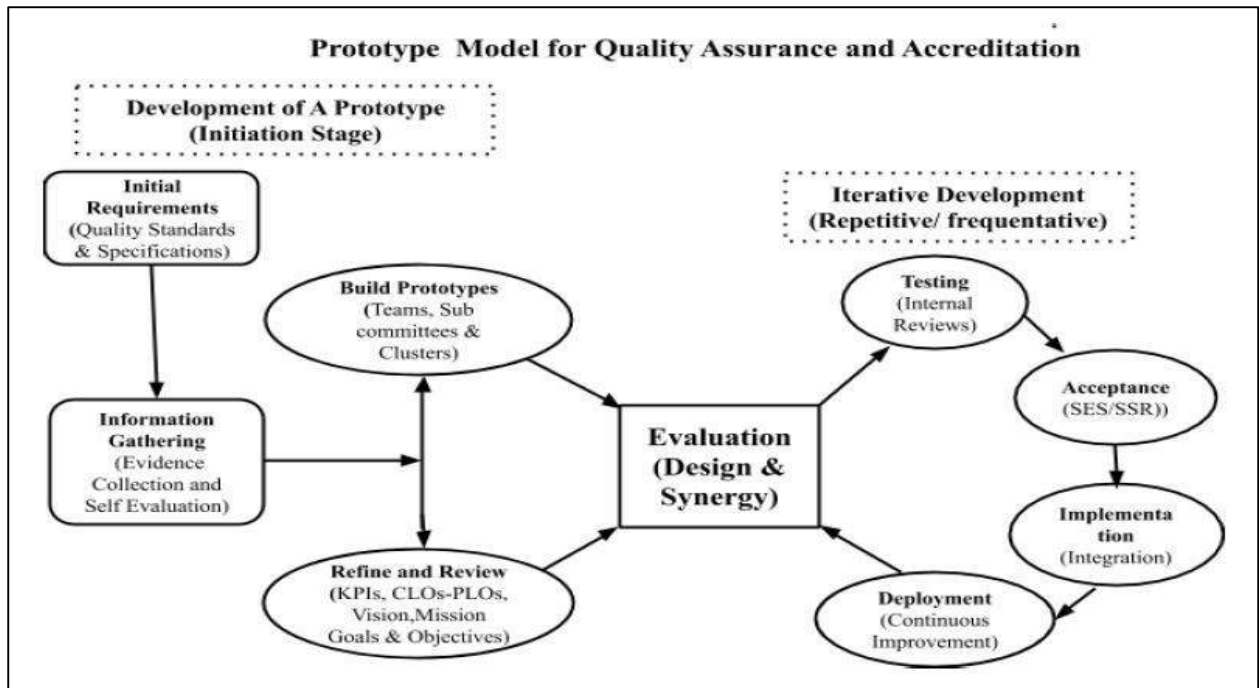


Figure1: Stages of a Prototype Model

This study is a detailed account of the application of this prototype model in a real life situation, customized to meet the required needs of QA system and accreditation. For the purpose of information gathering and collecting evidence based data, the researcher first fulfilled its initial requirements such as familiarizing the Faculty and staff with the quality standards and Program/ course Specifications. This provided them the self-evaluation scales upon which the information was to be gathered. Once a prototype was developed with the help of Delphi technique (teams and sub-committees) and reviewed and refined through a checklist of KPIs, CLO-PLO matrix etc., it was evaluated and synergized with a kind of iterative process. During this stage norms and criteria were so established that they became automated, repetitive and frequentative.

The concepts and ideas presented in this paper are based on best practices gained through practical experiences and field research. It is evident from this study that there is a need to professionalize the faculty and staff and mold them into the essential character of Quality Assurance (QA). It should therefore be seen as a narrative of such experiences and not the outcome of any field research based on any sample nor should be generalized over a population.

4. DISCUSSION : PROTOTYPE MODEL

The following sections discuss the major categories of the prototype model in the context of a Quality Assurance framework and the task of acquiring accreditation. These categories include initial requirements, Information gathering, Building prototypes, Review and Refiner and Evaluation which is iterative and may include repetitive activities for quality enhancement like internal reviews, acceptance of self-evaluation reports of institutions, implementation or integration of the good practices and finally their deployment for ensuring a continuous improvement.

5. INITIAL REQUIREMENTS

There are several initial requirements by accreditation and regulatory bodies in education across the developing nations, which very proactively wish to ensure that graduates of all

Higher Education Institutions (HEIs) should possess uniform knowledge skills and values. For this purpose, Bergen Communique (2005) recommended to establish national qualification frameworks (NQFs) which should outline expected learning outcomes in each learning domain. In addition, an accreditation commission also sets certain performance standards and asks HEIs to prepare program specification and course specifications in accordance with these standards.

i. Accreditation Standards

Standards are judged differently in every organization which depends upon how they are perceived, in both broad and narrow terms. For instance, standards are seen as “minimum thresholds” (Harvey, 2008, p. 8; quoted in Bollaert, 2008) or small contributions towards program quality improvement. The reason of treating standards so trivially is perhaps the thought that they could only be applicable to narrow and easily manageable learning outcomes. Standards in such a situation are often broken down into short term indicators. On the contrary, Bollaert (2008) defines standards as broad performance objectives or descriptions of good practices. They are viewed as goals or outcome oriented, often aligned to program mission statement. The faculty and staff feel more autonomy in complying with these standards, and may often deviate from these standards provided they can justify themselves. Such standards therefore must be carried out under guidelines and orientation.

Another perspective of standards is to treat them as good practices, since they have gained legitimacy over a period of time, having proven successful and effective at a number of occasions (Bollaert, 2008). Standards are viewed as process oriented and their aim is to accomplish learning outcomes most effectively. The standards framed by any accreditation agency has “normative functions” (cf. Lassnigg & Gruber, 2001), to provide “scales and measures” and “facilitate comparisons.” This allows the program administration to set up parameters, plan evidence based activities complying with the criteria of all standards.

ii. Program and course specification

Program specifications comprise objectives and desired program learning outcomes (PLOs) by defining the required inputs and processing requirements in terms of documentation. It is often termed as an input-output mechanism that requires mapping of the input values (objectives) with the set of output values (outcomes). In addition, the program specifications not only provide guidance regarding planning and program management to those responsible for its delivery but also demonstrate how program should meet the accreditation requirements. The focus of program specifications is therefore on what is to be achieved, and not how to achieve it. It highlights all descriptive information about the program like credit hours, learning outcomes, teaching methods and student assessment strategies for each domain of learning. Finally, it is a constant reference guide for all courses to be taught under the program and to prepare their course specifications.

The course specifications primarily contain their course learning outcomes (CLOs) teaching strategies and assessment methods in accordance with the guidelines stated in the NQF and adopted by the university and HEI concerned. Since the PLOs are very generic and few in number, viz. 8 to 10; hence they need to be mapped with the CLOs of courses taught. Each PLO is so broad and generic that it requires several courses in the program to align their CLOs with it in part or while hence the CLOs in course specification must be planned in such a way that they not only represent the respective course content, they also absorb in them one or more PLO enabling their mapping. This means that any course or a set of courses are merely a part of the whole package represented by PLOs in the program specifications. The PLOs are thus

progressively achieved throughout a program which must be mapped in a matrix, stating the level of achievement viz., Intermediate, Practiced, Advanced and Mastered.

6. INFORMATION GATHERING

i. Collection of evidences

The subcommittee appointed for quality standards should be responsible for gathering or creating evidence relevant to the criteria of each standard. It is important to look for the right kind of evidence for all criteria or sub-criteria or initiate a plan to establish the required evidence if not available. Hence, such activities can be initiated and executed which can establish evidence of the compliance of the standards. It is important that evidence should be presented as statistical data, in the form of self-evaluation scales showing ranking on a 4 or 5 point scale; or in the form of students and alumni surveys and Employers' and stakeholders' surveys. Evidence may also relate to trends or a comparative analysis of the present and past statistics. If a program is run in more than one campus, evidence must be collected using the same processes in all branches meeting the same standards for accreditation. It is likely that the accreditation teams may ask for additional evidence after reviewing the available evidence, in order to verify a specific data. It is therefore important to cite and produce if required supplementary evidence on which self-evaluation was based.

ii. Self-Evaluation Scales

The evaluation of the quality of a program and the compliance of its standards is carried out using a rating scale. The purpose of carrying self- evaluation is to give an opportunity to the program administration to reveal their strengths and self-evaluate the capacity to accomplish the program objectives and also comply with the standards. Self-evaluation is also beneficial in knowing the weaknesses or areas that may have been overlooked. The program management may then prepare action plans for improvements in all such areas.

Self-evaluation is an important component of a program portfolio as it is also the evidence of its overall annual performance. The higher is the rating on self-evaluation scales, the greater is the performance of the program. Hence, it is recommended that a general announcement may be made at the beginning of each academic year that self-evaluation would be carried out, indicating its purpose, explaining its procedures, and defining the role of faculty and students, or any other stakeholders. The faculty and staff are responsible for various activities in the program. They must self- evaluate the level of performance of these activities and their relevance to the standards and their criteria. In some institutions, in order to determine the credibility and objectivity of the evaluation, the self-evaluation by the program staff is required to be reviewed and supported by independent opinion of an independent evaluator outside the institution.

7. BUILDING PROTOTYPES

i. Team and subcommittees

No edifice is complete without teamwork and building a strong and rich quality environment also needs team intervention. Normally, there should be three teams to build a quality environment: first team for training, orientation and coordination; second team for monitoring compliance of regulations and gathering documentation; and the third team for coordinating evidence based activities and carrying out self-evaluation. The first team will conduct need based, in-house training and orientation programs to resolve queries, doubts and questions related to quality standards and accreditation. It will explain the faculty and staff about

expectations of each standard, familiarize them with topics like KPIs, PLO-CLOs matrices, help them to administer student learning assessment, and addresses to their issues and concerns.

The second team will monitor the documentation of course portfolios and archive them as evidences to be later produced at the time of preparing annual reports, self-evaluation and team visits. The third team will identify, suggest and explain evidence-based activities consistent with the quality standards and other accreditation prerequisites. It will also be responsible for carrying out self-evaluation and monitoring the conduct of evidence based activities in a time bound manner. Each of the three teams may have two members who will also form a steering committee to monitor the subcommittees at the next level in the team hierarchy.

The number of subcommittees and their responsibilities would depend on the requirements and priorities of each program. For instance, there could be one subcommittee for every standard and for prioritized sections like KPIs, Student Learning Assessment, and PLO-CLO alignment. These sub-committees would carry out tasks related to their standard or section and investigate in a procedural manner. They will work on templates and procedures designed by the accreditation commission for different sections like course specification, course reports, KPIs, alumni and employer surveys and annual program reports. The distribution of tasks between teams and subcommittees will give both credibility and consistency of data without overlapping and redundancies across standards and quality concepts.

ii. Students learning assessment

The Student Learning Assessment (SLA) can be carried out at four levels: classroom level, course level, program level and institutional level. At classroom level, the instructors use tests and quizzes to assess each individual student and assign grades; at course level, there are mid-term and end term examinations and assignments for each course where itemized grades are added to the aggregate score of students.; at the program level, there are capstone or graduation projects, field experience assessment and surveys; and at institutional level, assessment is carried out through multiple measures, qualitative and quantitative, direct and indirect, aligned to each learning outcome.

One of the subcommittees should be responsible for SLA whose primary responsibility would be to suggest how to align each assessment level to student learning outcomes. The subcommittee will oversee that the questions in examination or any other assessment measure are aligned with student learning outcomes in every course taught in the program. The committee would suggest both direct and indirect assessment methods. The direct assessment methods may include rubric based quizzes and assignments, essays, presentations, group discussions, capstone projects and case studies while indirect methods include alumni and employer surveys, student satisfaction surveys, focus groups and transcript analysis, awards and scholarships received, etc.

The subcommittee will also extract recommendations from course reports to suggest the required modifications in course specifications or teaching strategies. This committee will work in close coordination with the course coordinators and report its findings to the program coordinator on regular basis.

Both direct and indirect assessment methods contribute to measuring student learning outcomes by framing KPIs, benchmarking, and tracking students' performance in local placement exams. The outcome of the direct and indirect assessment methods also act as evidence of what students are learning and whether such a learning contribute to attainment of the program level learning outcomes.

iii. Graduate attributes

Graduate qualities are viewed differently in universities and HEIs globally. At some places, graduate attributes are termed as generic abilities while in others they are attributed as core or key competencies or skills of each individual. As generic abilities, graduate attributes are the targeted qualities and skills that a graduate should develop during the time spent in an institution (Bowden et al, 2000), often also termed as the 'core' achievements of graduates (Holmes, 2000). As core competencies, graduate attributes are very specific and often can be termed as learning outcomes of a study program.

Graduate attributes are undoubtedly formal outcomes of a university education, in both tangible and intangible terms. Tangibly, these attributes are reflected in the content knowledge of a discipline or a major in broad terms; while intangible attributes are specific skills and abilities of university graduates, beyond any disciplinary content knowledge.

8. REVIEW REFINE

i. KPIs and PLO-CLO matrices

Key Performance Indicators (KPIs) are quantifiable metrics that are evidence of the achievement of key learning objectives at both program and institutional levels. The KPIs at institutional level determine the level of achievement of its strategic and operational goals while KPIs at program level evaluate the target achievement and gauge the program performance in terms of learning outcomes. It is necessary to monitor and continuously update KPIs and report in real-time. For instance, a KPI is set for number of graduates who pass out annually or succeed in placement test for employment; the KPI metric for research grants is a measure to evaluate the number of successful grants availed by faculty and students. For the purpose of accreditation, the report templates are equipped with KPI tables for each standard or sub-standard. It is the responsibility of the program to align the institution KPIs with its Program Learning Outcomes (PLOs) and identify suitable program levels KPIs as individual performance targets.

At program level, there are two types of student learning outcomes—Program Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs). PLOs are a sort of metrics to measure the learning domains of knowledge, skills, competence values and behaviors that every graduate, regardless of major, is able to attain throughout a program. These are broad attributes of graduates that qualify them for a profession and to make a smooth transition into industry or their professional career. PLOs are created by each program from the Institutional Learning outcomes (ILOs), from its vision and mission statement, goals and objectives and graduate attributes framed at the institutional level. On the other hand, CLOs are specific take-aways from a course that a student is expected to gain after the completion of a course. The CLOs are more specific and are drafted for each course with a view to align with the PLOs. This PLO-CLO alignment is shown in the form of a matrix. Most programs align PLOs and CLOs with their teaching and learning strategies and assessment methods for the purpose of credibility and sound judgment in self-evaluation.

ii. Vision, mission Goals and Objectives

A vision is a long term statement of inspiration for all members of a program, faculty, staff and students'. It is the destination to reach and all activities, plans and strategies must be aligned to the vision. The mission statement is the purpose for which a program has been designed and established. It is based on the type and nature of the program and the role that it would play in the accomplishment of its objectives. A mission statement is also in accordance with the

capabilities and opportunities available in the environment. Goals are specific statements about future plans and activities which are expressions of ambitions and aspirations of members of this program. For instance, a program may have the goal of making its students techno savvy or create a research environment where all faculty produce good research papers. Objectives are the steps that a program must take to achieve its goals. Following the SMART guidelines, they are specific, measurable and quantified, attainable, realistic and follow a strict timeline.

For example, to achieve the goal of making its students techno savvy a program may set objectives of building SMART and Wi-Fi enabled classrooms or organize orientation sessions every quarter. Similarly, to achieve the goal of research environment, a program may announce rewards and research grant to faculty for research publications. The vision, mission, goals and objectives (VMGO) play an essential role in the accreditation. They are the direct interface with the internal and external stakeholders (e.g., faculty, staff, students, industry, employers, etc.) and should be strong enough to gain the confidence of all concerned. The VMGO are also the basis for other supplementary concepts like the program objectives, and students learning outcomes. The teaching methods and assessment practices are also to be designed appropriately to enliven to the VMGO in their practice.

9. EVALUATION – DESIGN AND SYNERGY

i. Internal Reviews

Once a program has completed self-evaluation scales, an internal review is carried out as an internal assessment, prior to getting a program evaluated by an external reviewer or the representative of the Accreditation commission. The Internal review is a sort of verification process focusing on accreditation standards, students' learning outcomes, appropriateness of the processes and activities to establish evidences. The internal reviewer may also comment on the infrastructure, manpower, teamwork, and services being used to achieve quality standards. It may also recommend help and support from the institution to improve and strengthen the efforts made by the program towards accreditation. It is important that the internal review should happen only when a decision has been taken to file the accreditation application for the program. Moreover, internal reviews should not take place too frequently in the quality assurance cycle as it might result in evaluation fatigue or lack of motivation to participate in a genuine dialogue.

ii. Acceptance

The acceptance stage in the evaluation cycle is the attempt to integrate the best practices and successful interventions in program management and administration. This integrated approach helps to set benchmarks and standards for future implications. An acceptance model will include such best practices like use of quality implementation manual, fulfilling the norms and standards of the accreditation in the preparation of self-evaluation scales, and ensuring the student learning outcomes in each domain of learning. Moreover, the acceptance model also includes compliance of accreditation standards and assimilation of their criteria in their work environment.

iii. Implementation

Implementation is a cross-functional action plan across all verticals at program level. It represents the compliance and integration of best practices, monitoring overall quality assurance management, carrying out the evaluation of the quality measures, and continuously tracking the self-evaluation rating scales. The implementation phase in any journey for

accreditation is the evidence of quality matters being complied and monitored on regular and iterative basis.

iv. Deployment

Deployment refers to adoption of best practices and recommending them as KPIs and program benchmarks. These best practices can be deployed initially to create a pilot system. Once things go well, the deployment can expand from semester to semester, involving more groups, courses, and programs. When more groups and programs are involved, it boosts the evaluation processes until the whole system is established.

10. ISSUES AND CHALLENGES

To establish a robust QMS, it is important to align quality assurance with the strategic context of the institution. Teay (2016) finds it a challenging task to establish a linkage between quality assurance and strategic plan in an institutional setting. It requires engendering institutional vision, mission, goals and objectives into QA activities planned for each standard. However, the benefit of such a linkage is that it will automatically align all program activities with the strategic plan of the institution whenever applicable. Evidence-based self-study report (SSR) would then be seen more as statement of strategic performance of an academic program. Teay (2016) recommended to establish a committee for strategic planning to overview all QA operations and to ensure the linkages and interactions of the QMS with the strategic plan of the institution.

Another challenge is to create an internal Quality Assurance and Accreditation Unit (QAAU) dedicated to the execution of the accreditation action plan and sustenance of quality measures. Since this unit will function as an integral part of school's administrative and governance mechanism, its first priority will be to internalize and institutionalize quality enhancement initiatives. It should ensure participation of all stakeholders, internal and external. By integration and internalization, it should not mean that this unit would function as yet another record-keeping department or act as a part of the school's hierarchy. This unit should in fact play a significant role in facilitating the establishment of a participative culture, and a voluntary but planned intervention of highly motivated faculty and staff members. While coordinating quality-related activities, this unit will be responsible for establishing best practices; creation of institutional database of evidence based documents, review and assessment of the documents in accordance with the standards of the accreditation agency.

There must also be a Quality manual containing mechanisms and procedures for performing the quality assurance activities ultimately leading to accreditation. This manual will act as guideline for carrying out preparations of Accreditation related activities at the Program level. While this manual acknowledges the significance of centrality of preparing master documents like Self Evaluation Scales and Self Study Reports, it also explains how to involve teams and sub committees to carry out various tasks. Last, but not the least, this manual lists such quality improvement practices and evidence based activities that would facilitate teams and sub committees to complete the process of self-evaluation and self-study.

11. CONCLUSION

To resolve these issues and challenges, an easy alternative is to adopt a decentralized approach through people's empowerment and top management support. This will encourage people's involvement in quality matters and help create a participative culture in which there is an institution-wide compliance of rules, regulations and procedures related to quality and

accreditation. But this cannot happen without top management support. The top management can integrate quality assurance and quality improvement measures within overall the administrative and strategic framework and agree for a bottom-up approach of implementation rather than top-down bureaucratic style. In quality frameworks, central monitoring or top-down approach is important but only to a certain level, limited to guiding and mentoring on quality management strategies. A decentralized system also delegates the decision-making power to teachers, students, and staff who are ultimately the ones responsible to bring accreditation in effect. This is consistent with Berlin and Bergen conference reports which emphasized upon training and orientation for setting up effective internal quality assurance processes and compliance of regulatory standards, in order to avoid any conflicts with external agencies (Bergen Communiqué, 2005).

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Mutaiyas Sustainable Retail Mix Practices

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Teaching Case Synopsis

Mutaiyas is a local retail company in Malaysia. It was established in 1937 by its founder the late R.M. Mutaiya as a small stall Indian sundry shop in Sungai Petani, Kedah. This business was later developed to the next level by Mr Mutaiya's sons. From its humble beginning selling sundry shop, it was in the 1990s it transforms into Mutaiya Trading and then now, emerge significantly as Mutaiyas Departmental store business. It started the operation from a small-scale enterprise and became one the first departmental store headquartered in Sungai Petani and heading to become Hypermarket. The successful retailer is the one who is most likely to remain popular and able to retain its customer with changes in operation and services, including penetrating new markets. However, the present issue hovering within Mutaiyas's is its ability to sustain in the long run and remain resilient in the retail industry. Therefore, the study aims to explore the current best practices in term of retail mix strategy implemented by Mutaiyas on sustaining its growth in the retail market.

Keywords: Mutaiyas, market; sustainability, retail mix; retailing

1. INTRODUCTION

Retailing is the set of business activities that add value to the products and service sold to consumers for their personal or family use (Levy and Weitz, 2019). The retail industry structure and operation is ever-changing and becomes more connected through systems, processes, information and communication technologies (Daunt and Harris, 2017; Ferracuti et al., 2019). In Malaysia, the retail sector was initially made up of a large number of small shops offering a limited range of goods and services. However, as the economy developed and customers became more mobile and affluent, the retail sector underwent rapid change, later complementing small traditional stores with large department stores and supermarkets offering a wide range of goods and services. Although there is rising in online shopping and e-tailers, the traditional stores in Malaysia still capture the majority of shopping time, and they are starting to leverage on technology and incorporate online service into their traditional store business. Malaysian consumers still prefer to do shopping in a store that offers a more convenient experience when shopping for groceries. (Euromonitor, <https://www.euromonitor.com/retailing-in-malaysia/report>). They find that stores that easy to navigate and provide comprehensive product offerings are more preferred. This is because the store-based retailers allow them to spend less time browsing for goods and this permits them to reduce time spent on grocery shopping. Thus, Malaysian still views shopping in brick and mortar stores is still a favourite past time of Malaysians.

The first quarter of 2020, the Covid-19 pandemic affected the retail performance of all retail sub-sectors. During the first quarter of 2020, the Department Store such as supermarket sub-sector, recorded a negative growth rate of 8.5 percent compared with the same period a year ago. The negative impact of the Movement Control Order (MCO) in March 2020 was cushioned by this sub-sector's food business. It is to be noted that retail sub-sector of supermarkets and hypermarkets was the least affected retail sub-sector during this crisis. The business declined by 3.0% during the first quarter of 2020 (<https://ifranchisemalaysia.com/malaysia-retail-industry-report-july-2020.html>). To deal with this,

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retailers need to look for creative ways to strengthen customer relationships and encourage them to add more to their baskets, create avenues for online shopping for customers in addition to in-store

Table 1: Year On Year Percentage Change In Retail Sales By Retail Sub-Sector, 2019/20

Retail Sub Sector	1 st Qtr.	4 th th Qtr	1 st Qtr.
	2019 %		2020 %
Department Stores cum supermarket	6.2	7.6	-8.5
Department Store	0.8	-0.3	-17.5
Supermarket and Hypermarket	-2.3	-3.4	-3.0
Fashion and fashion accessories	1.9	3.5	-30.5
Pharmacy and personal care	1.8	8.8	-3.9
Other speciality retail stores	5.3	6.3	-17.9

Source: MRA/Retail Group Malaysia

2. RETAIL JOURNEY OF MUTAIYAS

Mutaiyas realise that it has gone through many phases since the founder established it since 1937. The management felt that current operation need to strengthen and move forward into making it sustain in a competitive retail market. The core element of retailing is customer satisfaction. Thus, the number of choice people enjoy today, customers switching between retailers and online/in-store channels, only retailers who with the right know-how and tools, can come up with new and innovative ways to keep the customer coming back for more. The retailers who are made up of self-service operations providing a full range of household products are struggling to fight a new type of competition and demographic change that has been building for years. Therefore, retailers need to incorporate new elements in the retail mix and operation that could be a turning point for retailers to sustain their growth steadily.

Although Mutaiyas established in the year 1937, Mutaiyas transformed as a traditional sundry shop in the early 1980s and now operating one the first departmental store for household products in Sungai Petani. Earlier, the company was only selling a few Indian grocery items related to food and sundry goods. The company heavily relied on the demand of local customers and their recommendation of word-of-mouth. However, the present issues faced by Mutaiyas were to restructure their retail mix, image and mixed up with online based selling in order to be relevant and competent in the hyper competitive market. Mutaiyas realised that it is also facing a challenging future since it has to compete with many near-by retailers and online retailers, in other words, the store-based and no-store based retailers. Furthermore, the rise of other established grocery stores and online shopping due to the changes in the retailing structure and market demand, the company to reconsider its retail operations structure and their store image for market expansions and franchise. The summary of the journey as described below:

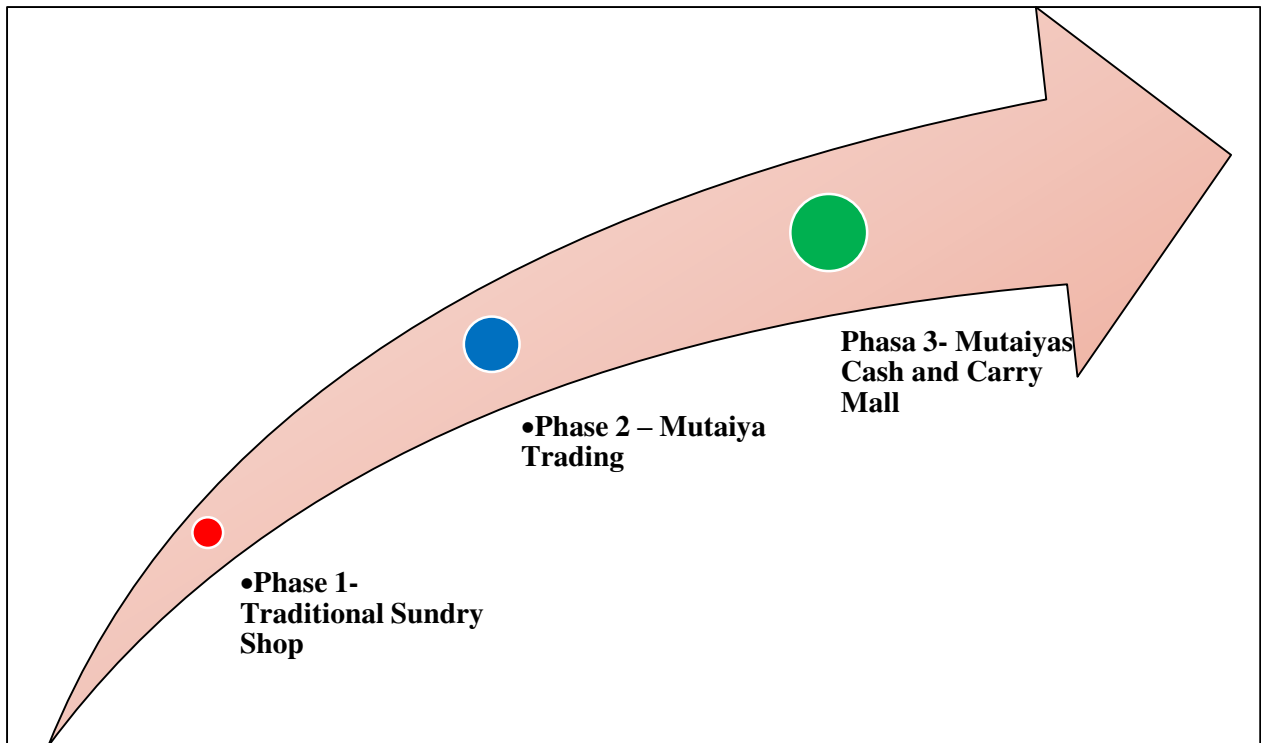


Figure 1: Journey phases of Mutaiyas

- Phase 1- Traditional Sundry Shop

Mutaiyas is a local retail company in Malaysia. It was established in 1937 by its founder the late R.M. Mutaiya as a small stall Indian sundry shop in Sungai Petani, Kedah. This business was later developed to the next level by Mr Mutaiya's sons. In early days, both sons, have gain experience of selling and business operation who trained by their late Father.

- Phase 2 – Mutaiya Trading

From its humble beginning selling sundry shop, it was in the 1990s it transforms into Mutaiya Trading. In this phase, Mt Vasu incorporates new businesses into its grocery retail activities, such as the Indian film and music industry. These include items related to sales, audio cassettes, movies and music.

- Phase 3- Mutaiyas Cash and Carry Mall

Then it emerges significantly as Mutaiya Cash and Carry business, a concept that a large shop where offers goods in larger quantities and at lower prices than in ordinary shops. Mutaiyas become well known to local customers as a store, which selling varieties of grocery goods and products at a reasonable price. Thus, Mutaiya tried the best to be the leader as a one-stop centre to satisfy the customer's daily needs. To retain Mutaiya Cash and Carry regular customers and to attract the new ones by continuously developing and introducing new products and in the meantime, they continuously promote the tested brands effectively and efficiently. As an under-one-roof centre, Mutaiya offers a wide range of products to meet the mass market demands such as personal care, medical products (approved by WHO), and food products for household needs and indirectly to satisfy daily customer needs with the innovative products and lift their aspiration to a better life.

3. MUTAIYAS 'S VISION AND MISSION

Mutaiyas focus was customer friendly and all goods were well displayed and arranged neatly to the convenience of our customers. At Mutaiyas, we believe and practice divinely -" YOU NAME IT WE HAVE IT, " and it is conveniently a " ONE-STOP CENTRE" for all daily household needs. Thus following is the vision and mission:

Vision

We aspire to be the most successful and innovative business entity in the region. We will realise our aspiration by emulating excellent working culture and good business practices in our management and support teams

Mission

Its our commitment to make known Mutaiyas as the household name by offering the BEST SERVICES, the HIGHEST QUALITY & the LOWEST PRICE.

4. CORE BUSINESS ACTIVITIES

Earlier, Mutaiyas was only selling a few Indian grocery items related to food and sundry goods. The company heavily relied on the demand of local customers and their recommendation of word-of-mouth. The segment of products can be categorised into general household grocery items (canned food, detergent, dish wash, powder milk, body hair care, curry powder and seasoning), vegetables and fruits (various types of fresh vegetables and fruits), cosmetics (various types of brands includes Avon, Dove, Nivea etc.) and jewellery products (semi-precious stones, crystals, silver, individual rings, bracelets, earring, bridal etc.), Indian festive and daily items (products related to Deepavali, Thaipusam, etc.), also have their own brands for selected items (cereal, candy, jelly, canned food and chocolate). Mutaiyas main customers consist of the regular local household customer, walking customers who purchase daily and grocery product and specific group of customers who look for specific products of Indian grocery items and festive items.

5. RETAIL MIX FOR GROWTH SUSTAINABILITY

The retail mix also includes product assortment, and placement, promotions, signage of goods within the location and price discount. There has been a rapid-changing climate as the market becomes more competitive and resilient. Therefore, the success of retailers highly depends on retailers strategy in differentiating their product and services from their competitors. In doing so, the retailers should extend their marketing efforts to customers with the use of retail mix elements. The retail mix is a marketing term that refers to the variables that a retailer can combine in alternative ways to arrive at a marketing strategy for attracting its consumers.

5.1 Product

The product assortment is a range of products offered by the retailer that business makes or retailer offer for sales. Mutaiyas, the retailer who started with just few grocer items has expanded their product assortment by selling extensive product ranges such as various types of grocery products, fresh vegetables and fruits, cosmetics and jewellery products, Indian festive and daily items and also have their own-brands for selected items. The company trying to make Mutaiyas store as a one-stop centre to convenience the customer have all daily household needed. Among the core category of products include:-

- Grocery Household - Canned food, detergent, dish wash, powder milk, body hair care, curry powder and seasoning.
- Vegetables and Fruits – Tomatoes, orange, apple.
- Cosmetics products - Various types of brands include Avon, Dove, Nivea, St. Ives, Safi Rania, Shiseido and so on.

- Jewelleries - semi-precious stones, crystals, silver, individual rings, bracelets, earring, bridal and so on.
- Indian festivals - Offer the items that related to Indian festivals like Deepavali, Pongal, Thaipusamand so on
- Mutaiyas products (own brand) – juice, shampoo, frozen vegetarian food, moringa leaf and so on.

5.2 Price

Mutaiyas look at price as a significant factor behind satisfaction and product loyalty because a customer carefully perceives if he/she is getting the most benefit from the product against his/her spending. According to Mr Vasu as a Managing Director, lowest pricing based on competitive and cost-based pricing were the standard pricing strategies for most of the SKU (items). Mutaiyas able to offer quality products at low prices as it buys in great volume. The fact that Mutaiyas buys such large quantities of these products allows excellent leverage for negotiating the best possible prices with its suppliers. Buying large quantities of each product allows Mutaiyas to pass these savings to its customers. This enables them to get the finest quality products. One of the key pricing strategies is to offer the lowest prices for daily household items and import items that are rare in the current market, especially Indian and Indonesian merchandise. Mutaiyas, however, face difficulties handling the lowest prices when it comes to staple merchandise from their nearest competitors.

5.3 Location

Mutaiyas desiring to reach a given target market; this has meant selecting the best location for a store based on a location that is typically the most influential consideration in a customer's store choice decision. Mutaiyas location considered as Freestanding unit in which the location is an individual, isolated store and unconnected to other retailers. Mutaiyas is well-known Cash and Carry retailer in Sungai Petani, which is the largest town in Kedah. The location was very suitable for consumers in the area. When considering the stores' locations, Mutaiyas take into account:

- The number of people visiting an area as well as the demographic of the area – the population of Sungai Petani more than 400,000 people.
- Accessibility to the store and link to public transport
- Availability of parking space
- The position of the store – Mutaiyas focuses on locations with good visibility from the main road and not too much competition. Besides, Mutaiyas premise signage was massive and clear, helps to attract customers and drive sales.

5.4 Promotion

Mutaiyas use promotion as communication tools to generate sales by making the customers aware, persuades, reminds and buying the merchandise offered. Various communication activities which retail companies carry out in order to influence those target markets, not only for sales but also to influence customers perceptions, attitudes and behaviour towards merchandise and store. The various promotion activities elements designed for this purpose were also referred to as —retail promotion mix; these means used to bring the customer traffic into retailers' stores. Products and services were accurately and correctly labelled, advertised and communicated to ensure that consumers have a pleasant shopping experience in order to capture attention and sales. Mutaiyas used prominent signs at the store locations, media bites on local news and online, special sales which is one of the leading sales promotion, which includes seasonal and festival based promotions to capture customers.

5.5 Store Design

Mutaiyas presentation style of a store was conveying "what the store is all about" to the customers. It has a well-presented store design that creates a persuading invitation to the customer from the entrance of the store and a positive ambience while inside the store. The design based on product assortment that emphasis image of conveniently a "ONE-STOP CENTRE" for all daily household needs. The current store design strengthens the idea that the store is consistent and capable in meeting the customers' expectation from the entrance to the checkout counter. Mutaiyas store design influence customers' buying behaviour in term of their intention of purchasing, impulse purchasing as well as repurchase of selected products in-store. The store design was not just creating an attractive looking store but a well-thought-out operation strategy in creating a store to optimise sales, space, images and well as to assist a practical purpose, such as brand-inventory management and protecting against shoplifting.

Mutaiyas has a comprehensive plan for the overall layout of the store. The plan included the framework of types of layouts, both the exterior and interior layout of the store that matches the best traffic circulation and the desired store image. The layouts enable the retailers to plan the best spots for placing their merchandise of specific products, categories, fixtures, check-outs, design customer traffic as well as ambience within the store. Especially for the customers, a precise and well-organised store layouts have been found to influence their buying decision process, help them to feel easy navigate and direct them to high-priority products. While for Mutaiyas, strategic layout plans increased impulse sales, maximise floor space and minimise operation costs

6. CONCLUSION

It was evident that Mutaiyas re-evaluate its retail mix in order to be sustainable and become relevant to a new transformation from a small grocery shop into a departmental store. Based on the analysis, it is evident that Mutaiyas has gone through various phase primarily related to the product, store design and promotions. Mutaiyas's main objective was to move forward to become Hypermarket soon. It stems from the fact that Mutaiyas has yet to achieve a hypermarket retail format and online business. In this situation, Mutaiyas need to retain as well as enhance their competitive advantages and differentiation in the intense competition through its strategic retail mix strategies.

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Digital Diagnostics and Portable Handheld Device Business Segments: A Case-Based Approach Using Big Data Analytics

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Abstract

A World Economic Forum (2020) study highlights that a large number of hospitals, doctors as well as companies engaged in medical diagnostic devices and drug manufacturing, employ digital diagnostics methods for purposes like disease diagnosis, R&D, process and product innovations. While AI applications were known for simulating human intelligence and critical thinking, they are now being utilized to manage and optimize big diagnostics data. Using a case based approach, this paper first sampled a few hand held diagnostic devices that increased the necessity of data management and data analytics; and attempted to understand and measure the use of AI applications in these devices. With the help of its applications like NLP and Machine Learning, AI extracts trends and patterns from large sets of data and makes predictions. While the focus of this study remained on digital diagnostics and the use of hand-held devices, adequate attention was paid on the use of AI applications for computation and analysis of the diagnostic data obtained. Evidence was also collected to show how AI algorithms and similar automation platforms manage and optimize big data, enabling data analytics to become more predictive and prescriptive in business operations and marketing strategies. The findings also reveal that big data analytics help optimize healthcare operations in general and patients' diagnosis and business operations in particular.

Keywords: AI applications, big data analytics, case based approach, disease diagnosis,

1. INTRODUCTION

This is an era of e-Health devices and digital health services. The COVID pandemic has further emphasized to create an ecosystem where health services must be managed and monitored remotely through digital tools and smart devices. Today hospitals and doctors are using mobile applications, Emails and mobile phones to prescribe telemedicine, conducting remote and computer assisted web-based diagnoses while patients are looking for accessible, convenient and affordable m-Health solutions. Moreover, computational and intelligence technologies in medicine and healthcare are equipped with both hardware and software solutions; data analysis techniques and communication media that are capable of creating such a need-based digital healthcare ecosystem. On the business front, several organizations are engaged in digital therapeutics, consulting Key Opinion Leaders (KOLs) in complex diseases like cancer, diabetic retinopathy and autism. In retail marketing, particularly digital therapeutics has changed patients' point of View (PoV). The marketing and distribution companies are now not emphasizing on stock or distribution of drugs but on the exact needs of consumers (patients) who require low cost drugs and their accessibility (Albert, 2018).

This change in the perspective is because digital health is no longer a technology-driven or enabled healthcare system but a useful convergence of social, economic and entrepreneurial ecosystem where health concerns have led to invention and manufacturing of several gadgets, tools and devices (Daley, 2019; Sonnier, 2017). WHO has also recognized terminologies like e-health and m-health (WHO, 2016), permitting the use of information via mobile technologies and ICT applications for health and health-related concerns (WHO, 2019). Several nations have

adopted digital health practices, for instance, the Topol review report of NHS recommends integrating digital healthcare technologies with healthcare workers through education and training offering them digital fellowships (NHS, 2019). A very good example has been set by the FDA which issued an Enforcement Policy for Digital Health Devices according to which any App designed to assist anyone in a medical condition will be called a medical device. However, seeing the difficulty in regulating all such Apps, it was decided to use “enforcement discretion” (FDA, 2019) and not to regulate such digital applications and programs unless they contribute to treatment or diagnoses. FDA (2018) has also designed a Digital Health Innovation Action Plan to facilitate healthcare professionals and provided them wireless devices, telemedicine and other devices that ensured quality and access of services. Two of the WHO agencies, United Nations Specialized Agency for Health, and the International Telecommunication Union (ITU) have jointly established ITU-WHO Focus Group on Artificial Intelligence for Health (FG-AI4H). This joint venture aimed at facilitating AI in health diagnostics.

Several diagnostic aids use computational technologies and AI applications in the form of e-Health tools or hand-held devices, which help to diagnose instantly both symptomatic and asymptomatic ailments that were hitherto often unpredictable without a prolonged test protocols (Ananth, 2018). A few of these e-Health tools and applications include hand-held echocardiography, tele-echocardiography, ECG monitoring, Blood pressure monitor, Digital stethoscope, portable ultrasound imaging device, portable echoscopy, otoscope and other such miniaturized devices. The next section examines the wide range of such hand-held devices.

2. HANDHELD DIAGNOSTICS DEVICES: PORTABLE BUSINESS SEGMENT

Digital diagnostics uses AI applications for analyzing and interpreting medical images and is considered as the next generation technology of computer-aided detection (CADe) or computer-aided diagnosis (CADx). The advanced features of digital diagnostics include m-Health and pocket-size portable/ hand-held devices. A general practitioner today is equipped with portable diagnostics tools such as hand-held ECG, a blood pressure monitor, a digital stethoscope, a portable ultrasound imaging device, and a fundus vision test equipment. There are hand-held portable devices for other specialists too such as a battery operated X-ray or a fluoroscopic scanner for dental scanning; a portable helmet-like, whole-brain MRI scanner for patients with mobility challenges developed by MIT, Cambridge; Butterfly iQTM portable ultrasound scanner which supports diagnostic imaging of anatomical structures developed by Butterfly Network, Inc; and a digital image projection device to screen skin diseases developed by Barco, a Belgian company. A Bangalore based optical imaging company, Sascan Meditech, is soon going to launch an imaging device called OralScan for detecting oral cancer.

There is a FDA-cleared mobile EKG (from AliveCor) screening tool for patients with low risk of cardiovascular disease (CVD) assisted by a mobile app *Kardia* which delivers the electrocardiogram (ECG) to a smartphone instantly. It quickly detects the valvular heart ailments with the help of an inbuilt digital stethoscope. A more sophisticated handheld device is a point-of-care ultrasound, or POCUS, to probe ultrasound images on a tablet or Smart phone. In COVID-19 situation, this tool proved a first line of defense as it allowed a medical practitioner to quickly diagnose whether a patient’s lungs are infected and whether he needs a ventilator. In addition, there are devices such as portable blood analyzers to measure blood hemoglobin, hematocrit, oxygen saturation level, and pulse rate enabling a physician to quickly make a treatment decision.

On home front too, patients today have access to a wide range of portable self-examination diagnostics tools. For instance, *TytoHome* is a diagnostic kit equipped with a digital camera, a thermometer, a tongue depressor to examine throat, an otoscope for ears, and a stethoscope for heart, lungs, and abdomen. This kit is also linked with a teleconferencing App which connects the patient with a certified healthcare practitioner for further diagnosis and a prescription if required. There are also Automated Insulin Pumps and Smart, portable glucose monitoring systems to track the glucose levels as well as a portable Wireless Blood Pressure Monitoring (BPM) device to check high/low blood pressure. Non-contact Infrared thermometers, which use HotSpot Sensor Technology, are now commonly used as a preliminary check of temperature before entering all public places. It is also a very handy device for fidgety or agitated patients, or children with mental health disorders,

A pertinent example of handheld devices is the FDA approved autonomous and AI-based diabetic retinopathy diagnostic system (IDx-DR). It is a software managed system that analyzes a patient's retinal images using an AI algorithm and provides a diagnosis in just a few minutes. This is one of the many such AI supported devices that have reduced diagnosis time from minutes to seconds (Slachta, 2019; FDA,2018; Abràmoff et al., 2018; Gulshan et al., 2016; Kermany, et al., 2018). Similarly, a Finnish medical technology company known as Optomed, launched a new product, Optomed Smartscope EY80 (Figure 1), a non-contact handheld fundus camera for the retinal screening of newborn babies and small children. Visuscout 100 from ZEISS is a portable, reliable device to diagnose retinal disorders (Figure 2).



The RetinaVue is an automated retina imaging handheld camera built with auto-alignment auto-focus and auto-capture features to examine diabetic retinopathy (Figure 3). The digital Welch Allyn's PanOptic Ophthalmoscope (Figure 4) when fitted with the iExaminer adapter

(Figure 4) turns it into a mobile digital imaging device capable of giving the output 5X larger than standard ophthalmoscopes (Shikino, et al.,2019).

These devices require both software and AI applications to complete the diagnostic process. Equipped with a mobile fundus camera, the key benefits of these portable devices include a wireless flexibility of fundus examination, easy capture of images and videos through its non-mydratric and precise autofocus function even in an undilated eye with an option to instantly transfer images to a computer or a Smart phone. These devices can also be connected to a DICOM-based data management system through advanced data connectivity systems.

As a business segment, hand-held diagnostics devices are now associated with public health and employs mobile technology and wireless digital devices for patients' health tracking, medication reminders, access to medical helpline, diagnosis efficiency, tele-education and training. They are replacing the bulky, conventional diagnostic machines that were too much dependent on stationary power sources and also were responsible for low doctor-patient ratio due to long queues and waiting time to receive reports. The cost of these handheld /portable devices is also significantly lower than their conventional counterparts (Walker, 2019). The Butterfly iQ ultrasound scanner, for instance, is available at only 2% of the cost of the traditional ultrasound machine. Besides the cost effectiveness, other factors that have contributed to growth of hand held devices include the technological advancements that have made available affordable hand held devices; the growth of these devices can also be attributed to the growing geriatric population, lifestyle changes, upsurge in chronic diseases, and like. Last, but not the least, the affordable and 24x7 access to the internet and the use of the social media platforms for diagnostics purposes has also prompted companies to market these devices directly to the customers (Duckler, 2019; Walker, 2019).

Specifically, the segment of hand-held devices has gained prominence in both regulatory companies and usage by medical practitioners in the diagnoses of a range of domains like ophthalmology, gynecology and obstetrics, dentistry, orthopedics, cardiology, pediatrics and urology. More recently, there are handheld ultrasound scanners to diagnose individuals suspected of having contracted the novel coronavirus (COVID-19). A NHS report entitled "Global Handheld Ultrasound Imaging Devices Market, 2020-2030" presents an overview of the current market landscape of post COVID-19 era in terms of increase in market size, annual global demand for handheld devices, cost saving potential associated with the use of handheld ultrasound imaging devices and future opportunities in the next decade (NHS, 2019).

3. BIG DATA ANALYTICS

While the focus of this study remained on digital diagnostics through hand-held devices, adequate attention has also been paid on the use of AI applications that simulate the human intelligence and critical thinking required for computation and analysis of the diagnostic data obtained so rapidly, frequently and in big volumes. This study therefore also highlights how AI algorithms and similar automation platforms can be widely used to manage and optimize big data, and how data analytics becomes so predictive and prescriptive.

Big data Analytics (BDA) can be defined as a field that is capable of extracting and analyzing sets of data which are too complex for a traditional data-processing system to handle (Power, 2015). Such an amount of data requires a system designed to stretch its extraction and analysis capability. The BDA is classified into 2 major segments: Data Discovery and Visualization (DDV) and Advanced Analytics (AA). In a business situation, both these segments help organizations to make use of big data analytics to drive business decisions (Power, 2015; Luca

et al., 2016). This is carried out through solutions such as descriptive, diagnostic, predictive, and prescriptive analytics. While Descriptive Analytics describes what happened in the past; the Diagnostic Analytics explains why it happened; Predictive Analytics predicts what is most likely to happen in the future and Prescriptive Analytics sets recommendations how to face those outcomes. Take for instance, in medical diagnostics, when the historical data are collected with the help of hand-held devices or other machines, they are stored in AI algorithms. The Descriptive Analytics adopts data visualizations techniques like graphs, charts, reports, and dashboards to access such data. So when a large number of patients are infected in a pandemic or if they need immediate medical attention, Descriptive Analytics would record all that would happen and provide real-time data of all events, volume and patient details (Power, 2015).

Diagnostic Analytics, often called root-cause analysis method, takes the descriptive data a step further to analyze why a symptom occurred by using processes such as data discovery and data mining techniques. Hence Diagnostic Analytics would prepare correlation of patients' symptoms in order to classify them as symptomatic and asymptomatic, having high fever, dry cough, and fatigue and breathlessness. The next step of Predictive Analytics uses all this historical data collected from previous two steps to prepare a machine learning model by setting trends and patterns reflected from the data (Agrawal, et al.,2018; Agrawal, et al.,2016). These patterns are then applied on the current data to predict what will happen next. Hence, based on the patients' data, predictive analytics can predict either a surge or a decline in the number of patients in the next few weeks. Finally, the Prescriptive Analytics utilizes the predictive data to prescribe the best course of action with positive implications. In the case of a surge in the number of patients, hence the prescriptive analytics tool may suggest to increase the number of staff as a proactive measure to face the rapid flow of patients (Power, 2015).

4. DIAGNOSIS AND DATA ANALYTICS

The handling of Big Diagnostics data through data connectivity systems might have issues of speed, time and accuracy but with the use of help of AI applications it has become much easier (Duin, & Bakhshi, 2018). Machine learning (ML) application uses structured data; Natural Language Processing (NLP) analyzes unstructured data; while Computer Vision (CV) and Deep Learning (DL) applications have transformed the entire diagnostic medical imaging systems.

Machine learning is best for predictive analytics in as it processes big data with fast, iterative algorithms and intelligently and automatically manages data governance in order to make predictions and analysis for prevention of illness and suggesting the best treatment (Cohen, 2018). In addition to diagnoses and personalized prescription, ML has also potentially contributed to drug discovery, clinical trials, building smarter electronic health record (EHR) and health information exchange (HIE) systems and now recently in the prediction analytics of COVID-19 pandemic related data. One study conducted by the Centerstone research institute found that predictive modeling of EHR data achieved 70%–72% accuracy in predicting individualized treatment (Edwards, 2018).

Likewise, NLP helps in identifying, analyzing and processing large amounts of human language data through complex computer programming and extracts the required information from a huge data corpus (Health IT Analytics, 2019). NLP is capable of converting unstructured clinical data into a structured, codified electronic medical record (EMR). Often this unstructured data is related to the transcribed version of the physical dictation, list of medication, allergies, previous surgical history and family history of the patients. NLP directs

computers to perform various computational processes to store this data in a structured and understandable format and retrieve it when required.

Deep Learning (DL) and Computer Vision (CV) are tools used for image classification tasks (Gao et al, 2018). Both applications have huge potential in diagnosis that requires medical imaging. The algorithms in these applicators access all the information required for therapeutic purposes and processes it for the required output directly to the end-user (Luca et al, 2016; Power, 2015). These applications are widely used in computer-aided detection (CAD) systems to make a retrospective analysis of any possible clinical abnormalities, by analyzing both image data and the related EMR. This enables doctors to examine areas of abnormality in the images and suggest a differential diagnosis.

The deep learning applications are also used for very complex tasks such as recognizing cancerous tissue or detecting phenotypes that correlate with rare genetic diseases by analyzing patient's photographs or facial analysis. In addition, AI algorithms also help in detection of infections, signal analysis (symptomatic and asymptomatic), segmentation of tissues and extraction of structured data from unstructured texts. Biological samples can also be isolated from the human body such as blood or tissue to carry out medical diagnosis. AI algorithms are also involved in tasks such as regression analysis and classification of diseases, along with determining the compliance of regulatory requirements in the whole diagnostic process.

While performing medical diagnostics, AI also supports other automated operations such as call center responses, rehabilitative robotics, patient navigation services, predictive and prescriptive analytics, sensors and wearables, remote monitoring, and speech recognition (Nguyen, 2017). With the help of integrated online assistants such as Apps, chatbots, clinical robots and "social companions," which have speech recognition capabilities, hospitals and doctors can perform real-time monitoring of patients. To enable this direct-to-consumer communication, algorithms simulate the human cognition style and analyze and interpret big data without any direct human input but addressing to a customer oriented AI experience (Duckler, 2019; Evans, 2019; Belleghem, 2019) These algorithms collect patients' symptoms and perform a potential diagnosis leading to prevention of the disease and issuing prescription as well.

Data analytics has also played a vital role in drug discovery and drug classification and development with the help of AI applications. The problem was perceived when it was difficult to monitor and process the variations in bio-molecular structures and molecular compounds that showed the potential to be used as therapeutic drugs. It was essential to keep a record of volume of tests and reactions and at the same time control its cost and time consumed. Algorithms within ML and NLP environments could manage to narrow down the variations and structure the molecules by their order of magnitude. These algorithms were also trained to identify select small molecules suiting the drug related functions. Initially, it sounded strange to discover drugs through unnatural methods or through computational data but recent pharmaceutical industries now have adopted AI enabled applications to evaluate molecules out of voluminous pages of study results in order to compare data of a specific patient. These applications have even assisted in clinical trials and treatment, particularly in head and neck cancers, where radiation oncologists spend hours in mapping the anatomical structures, and calculating radiation absorption at various angles in order to build the best treatment plan. Such treatment plans are built by ML and NLP applications in minutes or even seconds. Studies have ratified and validated these ML-generated clinical trials and treatment plans with those actually

built by expert human teams (Mullin, 2017; Hernandez, 2017a; Nicolae et al, 2017), some of which were difficult to even differentiate from those created by doctors and human experts.

In emergency care, too, there is a great potential to utilize predictive analytics and big data comprising thousands of EMR. In emergent situation, there is an urgent need to quickly identify similar cases and analyze their big data and derive clinical predictions based on trends. This enables the doctors and experts to judge and stratify the risk factors and precisely predict the need of resource, equipment and medication (Janke, 2016). Genomics or the study of genes is another field where AI applications could help in genome analyses and disease predisposition for the sake of precision health. This is a recent phenomenon where predictive analytics is performed with the help of ML and NLP applications to scan an individual body in order to diagnose, prevent, and treat a future illness (Genomics, 2019). This is carried out through planned interventions by making use of patients' EHR, biometric data, environmental sensors, wearables belts, and genetics, along with their socio-economic status. A personalized treatment plan is prescribed to optimize the clinical outcomes. It is hoped that such precision health techniques would not only help in recognizing a future risk but also in reducing and potentially eliminating certain illnesses (Hernandez, 2017b).

Besides diagnostic and therapeutic use, there are several operational, administrative and business benefits of data analytics in order to achieve a profitable healthcare management system (Fountaine, McCarthy & Saleh, 2019). This is however not limited to the commonly known tangible benefits such as personalization of data and data security of doctors and hospitals or ensuring confidentiality of patients' data. The role of data analytics can be extended to operational efficiencies and cost-reduction through analysis of performance metrics and mapping of the past and the present data. Data analytics can make use of financial trends to predict profitability through revenue cycle optimization. The clinical documentation integrity programs assisted by AI enabled data analytic coding system reveal several unclaimed annual revenues resulting in the revenue collection of millions of dollars. During the COVID-19 pandemic, owing to the need of contactless communication, AI applications have proved particularly useful solutions to provide cost effective solutions to complex types of diagnosis.

With the use of data analytics, the field of research has also benefited greatly. There are usually two common methods to analyze and interpret a research domain: qualitative and quantitative. The key deliverables in qualitative analysis in medical diagnostics include flow chart of diagnosis procedures, diagnosis process on patients, cost and cost-utility analysis of drugs, devices, hospitalization, patient time spend, Quality-adjusted life-years (QALYs) and Foot-fall analysis. All these are stored and archived in various data sets and can be retried when needed. On the other hand, a quantitative analysis measure things through questionnaires, observation analysis, data visualization and data mining techniques, demographic analysis of patients and like. Data analytics not only allows the access to these metrics, but also makes available the tabulated opinion of medical professionals like General physicians, Ophthalmologists and diabetologists. If required, the institutional analysis of hospitals and clinics and governmental and regulatory policies can also be carried out.

5. CONCLUSION

Attention can be drawn to challenges and constraints in Big Data Analytics (BDA) like cognitive overload and burnout for users. One of the biggest challenges faced by digital health is to ensure the accessibility of the data required for the execution of their operations, both vertically and horizontally. The ubiquitous rise in BDA has presented to health professionals

unprecedented volume of data embedded in our ecosystem comprising networks, information systems. This constraint is partially resolved by using NLP tools to automate EHR data and to scan and accurately predict the course that a disease would take in a person. The NLP application has also enabled doctors and medical practitioners to make assumptions based on data analysis and identify drug-drug interactions and take prescriptive decisions during the diagnosis as well as the treatment.

One of the big barriers for AI in healthcare is that often there is sparse data to analyze across healthcare system. It is because of non-connectivity or lack of interoperability of data systems. The governments and regulatory bodies do not allow to link datasets across networks which could be interoperable and could be accessed when needed by following security and governance protocols. Though a few efforts have been made to make interoperability of data under supervision and restricted access (Lehne, 2019; Brunak, et al., 2002; Genomics, 2019; Wall street Journal, 2019) but most healthcare data are licensed under proprietary software and archived in data-silos. A data silo is a collection of data by one system which is not easily or fully accessible by other incompatible systems. As a result, a large amount of data exists only virtually and unutilized. Data interoperability can solve this problem by bringing together proprietary systems, vendors, suppliers and software providers. An interconnected data infrastructure may also resolve the issue of interoperability which can sequence data comprising EHRs, digital health diagnostics DNA protocols, diseases codes and like.

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The Islamic Banking Leadership Tracks of Datin Nor

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Teaching Case Synopsis

This case study relates the leadership story of Datin Nor, who was the first CEO of Bank Berkat¹, a full-fledged Islamic financial institution which was acquired by a conventional bank as part of its M&A strategy. It captures the CEO's thoughts on leadership, evaluates the business performance of Bank Berkat within the said period and describes the effort to leverage on digitalisation as a way forward. Leadership challenges in managing an Islamic financial institution are narrated through the reflections of the CEO on various key developments of the bank. It ends with the question of how Bank Berkat should forge its way forward as it charts its next phase of growth.

Keywords: Financial Services Industry, Merger & Acquisition, Islamic Finance, Leadership, Digitalisation

1. ANOTHER MOUNTAIN TO CLIMB

In 2014, when Datin Nor was appointed as the first CEO of Bank Berkat, which was formed through an acquisition, the avid rock climber knew that it was another tough mountain to climb. The acquisition was hailed as a highly successful one, and Datin Nor knew that expectations of her were high. The vision for the future was clearly spelled out – to position the bank competitively. This entailed boosting market share, serving more customer segments, differentiating products and services, as well as enabling services with technology.

“Branding was the main challenge for us given the market segment of the bank before the acquisition. We face sector barrier, generational barrier and status barrier,” Datin Nor said as she shared her recollection of her feelings when she first took the rein to lead the bank.

In rock climbing the objectives could either be to complete the task in the quickest possible time or to attain the farthest point on an increasingly difficult route. Datin Nor knew for a fact that in her case, she was bound by both objectives – to manage growth in a difficult terrain with skills and speed.

The acquisition of Bank Berkat was an ambitious and bold move on the part of its parent company given the odds against mergers and acquisition as a strategic move. Nonetheless, perhaps faced with not too many options to combat a harsher economic climate, increasing competition, more stringent regulation as well as technological challenges, Bank Berkat was acquired. There were many possible strategic reasons for a company to pursue M&As; to enlarge its market base, product line or services; to acquire additional capital be it intellectual, financial, social and others; to transform corporate identity; to enter a new industry, as in an inter-industry M&A; to enter a new geographical market within the national boundaries or the global marketplace in order to develop international presence; as well as to gain brand loyalty and a larger market share. A popular mission for an M&A is to gain synergy in the form of

¹ For confidential purpose, the names and dates in this case are disguised.

operating synergy², revenue-enhancing synergy³ and financial synergy⁴. In the case of Bank Berkat, what was unique was it became an Islamic Bank with a conventional parent.

2. THE CHOSEN ONE

Datin Nor was hired due to her deep knowledge in a fee-income business model and familiarity with Shariā'h practices. The board was confident that she was best candidate to see through the operational phases as well as to align IT design in Shariā'h-compliant processes. Datin Nor had more than 25 years of transactional experience in investment and Islamic banking, having held various C-suite positions in the Islamic Banking Industry.

Datin Nor was most honoured to accept the invitation to lead Bank Berkat. Embracing and propagating the Shariah principles in business dealings was a motivating factor. The challenge to promote Islamic banking as an inclusive endeavour was not easy but inspiring enough to make her take the lead. To Datin Nor, it was not just a job but rather a calling enabling her to apply the principles of Maqasid Shariah. It was a calling from the point of view that work is Ibadah⁵, work is a form of worship. At that point in her career, Datin Nor's presence in the banking arena especially in Islamic banking, had become highly noticeable. A breath of fresh air in the stone-cold banking environment, the dynamic optimistic leader was viewed as a passionate and inspirational leader in the industry⁶ and beyond. She was the dynamo of the industry! Given the high regard of Datin Nor, how did she scale the mountain of expectations in the first few years of her tenure? What were her leadership challenges?

3. ON YOUR MARK, GET SET, GO

Taking the baton at the end of the acquisition marked the beginning for Datin Nor. As Bank Berkat had become a bigger and stronger outfit, Datin Nor knew that there would be meant bigger hopes and dreams. She understood well that while acquisitions offer an enticing method for driving business growth, they must be carefully managed from the outset if they are to deliver success long into the future. Since its inception as a full-fledged Islamic bank, Bank Berkat had to keep a 20-20 view on how it could contribute to the achievement of its parent company's vision and goal in line with its core values namely Excellence, Integrity, Teamwork and Innovation.

Datin Nor knew that dedication, commitment and action were not options but requirements to catapult Bank Berkat to perform at the level expected of it. As the custodian of trust, Datin Nor was fortunate that its parent company's guiding principles were consistent with Islamic banking principles. She forged on with confidence to further enhance Malaysia's position as the knowledge hub of Islamic finance.

"It is important to know that banking is a commodity, a homogenous commodity. It is not rocket science. Therefore, differentiation is needed. We must focus on the customers' journey, their experience. We must always remember that customer is king. There has been a major evolution in the banking sector. Bank Berkat is a small bank compared to our parent company which is more than 100 years old. After the acquisition, our parent company had more than 200 branches. However, today the game is no longer about growing branches. There are alternative channels for example online based channels such as social media. Besides that, an emerging segment i.e. the Gen Y and Gen Z speak a different language and to engage with them we must do things differently, we must speak their lingo. The hard-selling approach does not seem to work anymore. We need to engage in a psychological warfare," shared Datin Nor.

² Operating synergy is often derived from cost reduction as a result of economies of scale reducing unit costs, as well as efficiency gains.

³ Revenue-enhancing synergy is when the combined entity's revenue exceeds the sum of the individual entities added together.

⁴ Financial synergy is obtained if the new entity can have access to cheaper and higher amount of capital as a result of its new standing after the merger.

⁵Ibadah means worship.

To penetrate a bigger market segment, Datin Nor needed to change the DNA of Bank Berkat. This required a massive change in the organisational culture and a strategic will to reach out to new segments of customers. One major initiative was expanding its market by intensifying its reach in the consumer market and wholesale banking to increase its corporate client base. Bank Berkat needed to wrestle with the other big players which had big market share in government accounts. The ‘know who’ was not adequate to get the job done. To Datin Nor, the ‘know how’ and the ‘know what’ were more important. Real added value for the customers was critical. By providing digital payment solutions as a value-added feature, Bank Berkat was able to provide a more holistic solution for their public sector clients. Datin Nor shared her views on how to handle customers well:

“Being consistent in your deliverables is very important. People are generally forgiving. As long as you can handle the spectrum of services end-to-end, it should be fine. Customers do not expect us to be perfect all the time, but they want us to be consistent.”

Consistency builds trust and confidence. At Bank Berkat, the philosophy handed down by its parent company was used as a guideline for its operation. The philosophy encompasses (1) being fair and responsible in its lending activities (2) ensuring integrity in its conduct by not encouraging customers to take on unnecessary debts; and (3) prioritizing sustainability. A leader must always be mindful of the philosophy of his or her organisation to drive the company forward. This was the finishing line which Datin Nor saw as she raced forward as the CEO of Bank Berkat, reflecting every step of the way.

4. THE FUEL OF LEADERSHIP

Strategy without leadership will lead a company nowhere. To Datin Nor, the success of an organisation is highly dependent on a leader’s ability to ‘build a family’ within the organisation.

“Management is like parenting, requiring both transactional as well as transformational leadership skills. Like parents, leaders need to balance between being democratic and autocratic. Leaders must understand that employees come to work to give their best. The length of employment is not as important as the quality. For example, when employees leave because they have outgrown the bank, we should be happy to see them grow. In Bank Berkat, there is the culture of not being calculative. Like the rice pot, the more you put in, the more you get out of it. We want staff to be loyal while they are with us as loyalty is everything for a bank, it even affects national security. For most employees, a pay check is not an end in itself. Finding meaning in work is most important,” Datin Nor explained.

Datin Nor also advocated leading with a cultural perspective. In multicultural Malaysia, Bank Berkat had many opportunities to break cultural barriers. A few years after the acquisition, the results had been encouraging; non-Muslim heads are respectful of the Shariah principles; the team had been able to develop excellent products based on the culture of mutual trust and respect; and Bank Berkat had quite a few awards as testimonies of their success in breaking barriers to work together to attain success. Besides cultural intelligence the ability to work as a team and to serve and respect others are also practised at Bank Berkat.

“At Bank Berkat, team-building is of utmost importance. There is this culture of coming together. Through our CSR activities for example, we develop servant leadership – the ability to see ourselves as people who choose to serve others through the spirit of volunteerism. We propagate management by consultancy where we need to listen to all views. We believe that to be productive, to grow the wealth, we need to grow the individual,” Datin Nor exemplified.

Talking about leadership, Datin Nor felt that in Islamic banking, thought leadership is a major requirement for development of the sector. As one of the pioneers in building the industry, Bank Berkat had been working closely with its team of Shariah committee which is represented by leading scholars in the field. In the spirit of *ukhuwah fillah*⁶ it is imperative that the fraternity of thought leaders must

come together to take on the cause to develop shariah-compliant products and maintain sustainable growth. How do all these ideas about leadership translate into organisational performance?

⁶ *Ukhuwah Fillah* means a bond of relationship for the sake of Allah.

5. PRODUCT DEVELOPMENT

Bank Berkat's performance showed promising growth on all fronts as was evidenced from its offering of products, financial performance, introduction of multiple channels especially in the digital space, its contribution to the development of Islamic banking and Shariah application. The later was in support of Malaysia's aspiration to become a leading Islamic financial centre under the MIFC⁷ initiative spearheaded by the Central Bank and the Securities Commission.

As a full-fledged Islamic bank, Bank Berkat offered a comprehensive suite of Shariah-compliant products and services covering:

1. Personal Financial Services
2. Business and Corporate Banking
3. Islamic Global Market
4. Digital and Transactional Banking

Bank Berkat was also appointed as a deposit collection agent for Lembaga Tabung Haji (Pilgrims Fund Board), providing convenience of salary deductions to its own payroll customers for their own TH deposit accounts. This initiative was taken to provide convenience for customers to fulfil their religious obligations, which is part of Bank Berkat's mission to be a community-centred bank. Bank Berkat offered products based on the *Murabahah*⁸/*Tawarruq*⁹ principle. Other innovations came in the form of the issuance of Subordinated *Sukuk Ijarah*¹⁰, international remittance service, development of digital and mobile channels, conversion of all *Mudharabah* deposits and certain *Wadiah* deposits into Tawarruq deposits as per the reclassification of Islamic deposits under the Islamic Financial Services Act 2013 ("IFSA"). How did all these initiatives impact the bottom-line? How did Bank Berkat perform financially in the five years since its acquisition?

6. FINANCIAL PERFORMANCE

In terms of financial performance, Bank Berkat performed very well as was reported in its five-year financial performance highlights (Figure 1). Total assets grew from RM22,196 million in 2014 to RM31,875 in 2015. For three years (2015 -2017), total assets remained above RM31,000 million increasing to RM33,281 million in 2018. In fact, according to Datin Nor, since the acquisition Bank Berkat has tripled their asset size and profitability.

⁷ MIFC - Malaysia International Islamic Financial Centre (MIFC) Community, founded on the launch of the MIFC initiative in 2006. The MIFC Community is a network of the country's financial sector regulators, including Bank Negara Malaysia (Central Bank of Malaysia), Securities Commission Malaysia, Labuan Financial Services Authority and Bursa Malaysia (Kuala Lumpur Stock Exchange), Government ministries and agencies, industry players from the Islamic banking, takaful, re-takaful and Islamic capital market industries, human capital development institutions as well as professional ancillary services companies ranging from legal firms and Shariah advisories to tax and audit firms and research companies.

⁸ *Murabahah*: Markup sale; a contract of sale in which the seller declares his cost and the profit. It has been adopted in Islamic banking as a mode of financing called cost-plus sale financing.

⁹ *Tawarruq*: An arrangement consisting of two sale and purchase contracts used to seek liquidity. The first involves the sale of an asset by a seller to a purchaser on a deferred basis. Subsequently, the purchaser of the first sale will sell the same asset to a third party on a spot basis.

¹⁰ *Sukuk Ijarah* refers to the securities in which the owner, jointly, owns some part of the assets the profits of which has been transferred to the consumer or the originator according to the *Ijara* contract. In *Ijara Sukuk* the right of using the profits of the assets or a series of assets is transferred from the owner to another party in exchange for the payment of the rent. The tenure of *Ijara* contract is definite and the rent could be paid at the beginning or end of the period or at monthly, quarterly, or annual maturity dates. Since *Ijara Sukuk* are the securities that are indicative of joint ownership, they could be traded at secondary markets and with a price that is determined by market agents.

Gross financing increased steadily over the five years from RM6,480 million in 2014, to RM13,395 million in 2015 and by 2018, it had increased to RM17,142 million. With increased customer confidence, customers deposits also grew from RM10,226 million in 2014 to RM19,547 million, more than double within the five-year period. Shareholders' fund also almost doubled within the five years, from RM983 million to RM1,849 million. Profit after tax (PAT) increased year-on-year from 2014 until 2017, from RM77 million tripling to RM241 million. Challenging market conditions brought PAT down to RM200 million in 2018.

Figure 1 : Five Year Financial Highlights

	FY14 RM million	FY15 RM million	FY16 RM million	FY17 RM million	FY18 RM million
Total Assets	22,196	31,875	31,729	31,798	33,281
Gross Financing	6,480	13,395	14,657	15,543	17,142
Customer Deposits	10,226	17,301	18,250	19,900	19,547
Shareholders' Fund	983	1,166	1,353	1,540	1,849
Profit Before Tax	90	154	301	308	255
Profit After Tax	77	112	227	241	200

Source: Annual Report 2018

Having achieved commendable growth in the first five years post the acquisition, how can Bank Berkat continue to sustain growth? For Datin Nor, a strong advocate of technology as an enabler, digitalisation is certainly the way forward.

7. DIGITALISATION AS A WAY FORWARD

Digitalisation or application of technology as a business enabler was one of the most powerful business idea at the time. According to Datin Nor, the era of digitalisation required a major paradigm shift, and the best approach was to be from the customer experience perspective i.e. to enhance customer experience. Though, Datin Nor's stint at Bank Berkat started with a challenge in branding as was mentioned earlier, five years on, it was no longer the case. Brand loyalty was fast becoming a thing of the past especially among the younger generation. The mantra had changed from loyalty to engagement. Many organisations had begun to delve into cognitive strategy, looking into experience and persona. As the concept of banking had changed and digitalised banking became more prominent, banks must move on with the times to move in tandem with technological development. Datin Nor explained:

“We understand in this digital age that our customers are looking for convenience and variety and have spent much time looking at the changing behaviours of consumers to determine how to respond to their needs. We know we must provide new ways for customers to do banking, in particular today's tech savvy customers who want services to be faster and with less intervention. Technology certainly has a major role to play in business today and therefore we are taking on the challenge in catering to the needs of the younger customer segment whilst also maintaining the long-lasting relationships we have with our loyal customers.”

In January 2015, Bank Berkat's parent company announced that it was enhancing its digital platform for its wholesale banking business which contributed 30% to the group, minus its treasury segment. Bank Berkat purchased a digital omni-channel delivery platform and related applications in digital cash management, liquidity management, domestic and foreign payments, trade finance and supply-chain financing. At the time, it was estimated that only 25% of the Malaysia's Islamic and conventional banking landscape were digitalised. Explaining the rationale behind the move, Datin Nor said:

“The digital platform is the way forward and we are looking to provide more services to our customers to heighten consistency of transactions. We have a house target for that. The engagement would strengthen productivity of our digital banking platform and enable us to

develop products which provide end-to-end services for our clients. We also hope to roll out more digital products this year and to grow SME businesses in tandem with the digitalisation plans of the group as a whole. Furthermore, more of our wholesale banking clients have gone global and expect more competitive banking services to facilitate their crossborder business. It has become more compelling for the Islamic bank to use alternative channels such as digital banking because we are not on the main channels like other banks.”

Bank Berkat’s parent company also invested in cognitive computing capabilities to boost customer support for its large credit card customers; providing customers round-the-clock access to via online life chat to information about general credit card terms, policies and procedures; allowing customers to find the most suitable card to match their lifestyle needs; as well as enabling it to anticipate customer needs so that it can provide solutions proactively. This initiative was an important part of group’s overall digitalisation blueprint. These major developments show that the road to digitalisation for Bank Berkat as a subsidiary of the bigger Financial Group had been phenomenal in the last three years. This synergistic alliance to the parent company could be compared to free climbing in rock climbing where equipment is used solely as protection not as support, or as aid climbing if one were to view the move as a gear-dependent form of climbing. In the case of Bank Berkat, the first comparison would enable it to be more proactive to chart its destiny as far as it could. What were the CEO’s view on digital banking?

8. THE CEO’S VIEW ON DIGITAL BANKING

Datin Nor started getting involved in digital banking when she commissioned the development of the electronic payment solutions in 2014 for Bank Berkat’s government agency clients. As a strong advocate of online banking, she knew that digitalisation requires proactive and forward thinking. One of her favourite quotes is Brett King’s ‘*banking is no longer somewhere you go but something you do*’. She often used this quote to illustrate how technology has the power to change the way things are done, and in the case of banking, how technology changes the roles of banks and how banks should learn from other sectors such as retailing and travel on how to innovate their services through technology.

With the emergence of digital banking, Datin Nor predicted that the concept of branches would be very different from what they look like then, and to succeed banks need to come up with the most appropriate concept design, one that would be able to balance face-to-face with online services. Datin Nor also felt that going cashless was efficient as it provides convenience and speed, reduces cost and possibly access to review banking patterns; and Malaysia needed to catch up with other countries, such as Sweden, Kenya, China, the UK and the US.

The major challenges and risks in digital banking, according to Datin Nor were technology, regulatory and human in nature including challenges in having legacy systems which can no longer accommodate newer business needs, regulatory framework which needs immediate compliance, as well as lack of cooperation among banks, FinTechs and Telcos. On the other hand, she was optimistic that opportunities in digital banking were immense. She underscored the importance of addressing the needs of the digital natives, an emerging market segment globally. Digital natives are those who were born not knowing a time when the internet did not exist; who expect transactions to be easy, convenient and accessible. They want clear and comprehensible information. They do not see the need to be loyal to a product if the experience is unsatisfactory.

All said and done, according to Datin Nor, a CEO must ready to think out of the box in order to manage the waves of digital disruption. One needs to ask the questions of how a bank can reinvent and reengineer itself, and how it can redefine its organisational structure. In trying to comprehend the earlier mentioned notion that banking is no longer a place you go to but something you do, Datin Nor asked that we reflect upon the roles market disruptors such as of AliBaba, which had in 2019, about 755 million users, which in a sense could be considered as the world’s fastest growing bank although it was not a bank in the traditional sense of the word. It was therefore not surprising to know that at that point, the most exciting innovations in financial services were coming not from the banks, but from technology providers. This built on the idea that business and trade move money. An ability to comprehend this is

likened by Datin Nor to moving from Banking 1.0 to Banking 3.0. She viewed digitalisation as a game changer for banks and consumers. The case of traditional banks buying online banks, branchless banking and increasing use of electronic payment all point towards change in the financial landscape. As more than half of Malaysians are expected to do online banking from 2018 onwards, banks must certainly improve their delivery channels. Bank Berkat must reinvent its branches to give better customer experience. It needs to continuously look for new sources of differentiation. Having pursued various ways to leverage on technology to take Bank Berkat to greater heights, Datin Nor pondered what else could she do next?

9. WHICH SUMMIT TO CONQUER NEXT?

Datin Nor stood at the top of the hill, looking intensely at the horizon, oblivious to the chatter of the small crowd who had climbed all the way up to see the sunrise. It had been a good year for her as well as Bank Berkat, despite a trying economic situation. Like the other players in the financial services industry, Bank Berkat had been progressing well on its digital journey. Malaysia's commitment to the development of Fintech¹¹ was encouraging with the establishment of the Financial Technology Enabler Group (FTEG) in 2016,¹² spearheaded by the central bank. Bank Berkat has been consistent in pursuing its digital agenda to enlarge its presence in the digital space while deploying cost leadership strategy to optimise its resources in the physical space. Datin Nor felt motivated to further pursue the idea of how digitalisation could empower those in the emerging markets which are often characterised by a high percentage of unbanked population, weak consumer banks and high mobile penetration rate. Digitalisation could certainly be a solution to enhance financial inclusion, a concept well-supported by Islamic banking principles. There was still so much room for growth in digitalisation and Islamic banking

As she looked further into the horizon, waiting for a glimmer of light to spring forth and present the orange hues of the sunrise, Datin Nor wondered how much had she contributed to the growth of Bank Berkat. In what ways had she and her team achieve the objectives of the acquisition which gave birth to this unique Islamic bank called Bank Berkat? What else could Bank Berkat do to leverage on the massive potential of Fintech and digitalisation? How will Bank Berkat progress in its next phase of digitalisation? What would be the outcome of its effort to broaden the local and regional franchise to grow fee income in Islamic wholesale and investment banking, treasury and wealth management?

As she snapped out of her reverie and marveled at the huge round orange morning sun rising slowly up the sky, Datin Nor knew that only time could tell. She only knew that, in the new year, she would need to find better and more novel ways to apply Fintech technology in the financial services sector. She must always move forward because rock climbers do not usually climb back down the same route!

¹¹Fintech is defined in the Oxford Dictionary as "computer programmes and other technology used to support or enable banking and financial services.

¹² A cross-functional group led by the Central Bank tasked with formulating and enhancing regulatory policies to facilitate the adoption of technological innovations in the Malaysian financial services industry.

Accountability Forms and Mediums of a Zakat Institution in Malaysia

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Abstract

This study aims to explore and examine forms and means employed by the case organization, a zakat institution in Malaysia, in discharging its accountability to the stakeholders. Case study approach was used in the study. Data used both of primary and secondary data. The primary data was gathered via a semi-structured interview that conducted with the representatives of the case organization. The secondary data was gathered from different sources such as the zakat collection and distributions reports of the case organisation. The interview data was analysed using a manual coding and the secondary data was content analysed using a thematic analysis. The study finds that the case organization has been discharging two categories of accountability that are financial or formal and social or informal form of accountability. The financial/formal form of accountability has been discharged mainly via the zakat collection and distribution reports. Meanwhile, the second category of accountability has been discharged through both of means that are account- and action-based mechanisms, which include the publication of the bulletin and booklet and various non-zakat society/community programs respectively.

Keywords: Accountability, Forms, Mechanisms, Zakat Institution, Case Study

1. INTRODUCTION

In the history of Muslim-majority countries, zakat has been benefitted to provide jobs, consumer goods and other basic services to poor and underprivileged people, such as health care and education (Rini, Fatimah, & Purwanti, 2020; Zauro, Saad, & Sawandi, 2020). In Arabic term, zakat is referred to growth and purity of wealth for the Muslim marginalised populations (Latief, 2017). Generally, zakat can be comprehended as one of the five pillars related to Islamic religious obligations, purification of wealth, distribution of affluence from the zakat collection to the people in need that are qualified as *asnaf* (Syukor, Omar, Atim, & Mustapha, 2020). Although much of the criticism of zakat institutions evolves around their lack of coordination, functionality and transparency (Noviana, Arifudin, Indah, Tanjung, & Sofyan, 2020), zakat has many advantages in benefitting poor people as a whole. It provides a platform for zakat to play an essential role in zakat collection and distribution for the underprivileged people (Fauziah, 2020).

Zakat institutions are carrying out public services to the poor and the vulnerable (Gada, 2017; Hassan, Amuda, & Parveen, 2017). In promoting transparency, accountability has indirectly become an interesting matter to be addressed, particularly in regards to giving and accounts to beneficiaries, zakat payers and the community at large (Noviana et al., 2020; Sawandi, Aziz, & Saad, 2019; Zauro et al., 2020). As one would expect, when conducting zakat management research, the issues surrounding accountability mechanisms have become important discussions, particularly concerning the morality role of zakat institutions (Bakar, Aladwan, & Basarud-Din, 2019).

Zakat institutions aim for the government to gain public confidence and are judged for their actions by the Muslim community (Tajudin, Omar, Smedlund, & Aziz, 2020; Tuan Ibrahim, Hashim, & Mohamad

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Ariff, 2020). Public opinion is constantly questioned of the existence and integrity of zakat institutions in providing and distributing zakat collections to the vulnerable or eligible in categories (Saripudin, Djamil, & Rodoni, 2020). The administration of zakat particularly related to the collection and distributing of zakat money for the poor has to explore new ways of allocating zakat money effectively (Syukor et al., 2020). To foster transparency and accountability in the Malaysian zakat daily affairs institutions, the zakat institutions need to resolve society's challenge, professionalism and achieve a level of excellence (Noviana et al., 2020).

In accordance with the matter, the study is carried out to resolve the accountability mechanism, which included adherence forms and mechanisms in ensuring 'giving an account' to the public at large. As a consequence, this study aims to examine forms and accountability mechanisms of zakat Institution CC.

2. LITERATURE REVIEW

2.1 Zakat and its roles

According to Islam, zakat is mandatory for Muslims who have the right to pay zakat in compliance with clear requirements based on Shariah Law. Muslims are obliged to pay zakat to the underprivileged persons or *asnaf* according to specific surplus of wealth per year (Farah, Shafiai, & Ismail, 2019; Sulaiman, Cob, & Ali, 2015). Zakat must be paid by any Muslim who has reasonable wealth on the basis of Islamic jurisprudence and according to a monetary equal sum of nisab or precise calculation (Shaikh, Ismail, Ismail, Shahimi, & Mohd. Shafiai, 2017). The common zakat payments are 2.5 percent annually, which is collected and distributed by the zakat institutions to the qualified beneficiaries (Wahab & Rahman, 2013).

In Malaysia, the zakat institution had previously been left behind in its management and implementation (Al-Mamun, Haque, & Jan, 2019). The selection and distribution system adopted by the authority concerned was still underused, which does not represent the actual amount of zakat to be collected, resulting in lower zakat collection for a certain period of time. (Hairunnizam Wahid & Kader, 2010). The substantial reduction in zakat collection would indirectly contribute to lower investment in socio-economic development in Malaysia (I. H. J. Ahmad & Ma'in, 2014; Al-Banna & Michael, 2015).

Interestingly, zakat seems to play a significant role in achieving sustainable development goals of poverty, hunger, public health, well-being, quality education, decent work, economic growth and income inequality (Abdul Rasool, Mohd Harun, Salleh, & Haji Idris, 2011; Abdulai & Shamshiry, 2014; Aydin, 2015; Hashim, Othman, Mohamad, & Md Hussin, 2019; Osman, Suib, & Md Noor, 2020; Shaharuddin et al., 2019; Tahiri Jouti, 2019). With regards to this, the zakat management contributes a good governance and transparency for delivering and implementing appropriate coordination for zakat collection and distribution for the *asnaf* (Ahmed, Johari, & Wahab, 2017; Othman & Noor, 2017; Taha, Zulkifli, Embong, & Mohd Nor, 2017; H. Wahid, Ahmad, Nor, & Rashid, 2017).

Zakat institutions foster Islamic economic system for poverty alleviation and public development. Malaysia's Growth Production Productivity (GDP) faced a reduction due to the Covid 19 pandemic and this year's poverty rate is projected to be relatively higher in Malaysia¹ (Malaysia Economic Performance Second Quarter, 2020). Zakat institutions establish an important role in helping Muslim community, particularly *asnaf*, continue their lives for the rest of the Covid 19 disaster (Eka Sri Apriliana, 2020). Food insecurity and hunger is also a major problem in Muslim poor community, especially in Malaysia and most Muslim countries (Sumai, Mutmainnah, Nurhamdah, & Arsyad, 2019). This may be due to lack of reliable sources of subsistent income rates. Zakat institutions have developed strategies to reduce *asnaf* in Malaysia by providing adequate financial assistance, skilled worker

¹ Malaysia's GDP contracted 17.1 per cent from a marginal growth 0.7 per cent in the first quarter of 2020. The performance for this quarter was the lowest recorded since fourth quarter 1998.

It also concerns promoting transparency credentials in the administration and management of funds by zakat (Ibrahim, 2014).

As a consequence, zakat accountability is deemed essential to the zakat mechanism and management structures that directly affect trustworthiness standards among zakat stakeholders and beneficiaries. The privileged acts of the respective parties, mainly by the "accountor" and "accountee," would contribute to transparency for the respective people in the zakat institutions in deliberating zakat collection and zakat collection based on reasonable accountability mechanisms.

3. RESEARCH METHODS

The study used a qualitative approach whereby a case study design was employed. The case organization of the study is Zakat Institution CC that is located in northern region. For private and confidential reason, the actual name of the zakat institution participated in the study was replaced with "Zakat Institution CC". Established under the zakat enactment of the state, Zakat institution CC has responsibility in collecting and distributing zakat in its state. In collecting research data, two methods were employed which are semi-structured interview, and documents review. The semi-structured interview was conducted with Zakat Institution CC's officers who involve with zakat fund collection and distribution and the preparation of accountability mechanisms such as zakat institutions report. The interview was conducted to get insights and views of the case organization, for example, about its zakat management, what accountability means to them, and their accountability practices. The interview guide (Morgan and Smircich, 1980) was sent out to the interviewees in advance prior to the interview. The interviews were carried out for about two hours. The interview was recorded, with the permission from the interviewee, that was later transcribed and field notes were prepared.

The study also reviewed, a number of different documents, such as zakat institution's press releases, zakat institution's websites amongst others. The evidence that was collected come from various sources, mainly from the organizations' websites, the organizations' collection, and local newspapers. The documents that were reviewed are as listed in Table 1.

Table 1. Documents analysed

No	Document/Item
1	Zakat annual report
2	Zakat collection & distribution report
3	Bulletin/magazine/newsletter
4	Website of zakat institution CC
5	Facebook Account zakat institution CC
6	Newspaper articles

The interview transcript and field notes was analysed manually by employing a manual coding (O'Dwyer and Unerman (2008). Meanwhile, the documents were content analysed by employing a thematic analysis (Krippendorff, 2004) by using a theme or combination of several categories involving the use of a coding unit such as words, sentences, or paragraphs. The interview findings were then corroborated with evidence from document review in order to make inferences and draw conclusions. The findings and discussion are provided in the following section.

4. FINDINGS AND DISCUSSION

Evidence suggests that, first, Zakat Institution CC has been discharging financial/formal form of accountability to its stakeholders including the zakat payers, zakat beneficiaries and the general public. As shown in Table 2, Zakat Institution CC has issued both the zakat annual report and the zakat collection and distribution summary report could. These reports could be regarded as means that are employed by Zakat Institution CC to discharge its (financial/formal) accountability to its stakeholders

mainly the zakat payers and zakat recipients (Sawandi, Aziz & Saad, 2019). However, to minimize the cost, the practice of Zakat Institution CC is to issue two-year annual report in one issue e.g. year 2014 with 2015. Primarily, these reports enable Zakat Institution CC to discharge its accountability by offering explanations or reports on in fulfilling its obligations in managing zakat (Fidiana, 2020; Saripudin et al., 2020; Sihombing, Purnama, Ginting, & Nasution, 2020). The issuance of these report also mirroring Zakat Institution CC commitment in promoting transparency that is vital in the administration and management of zakat funds (Ibrahim, 2014).

Table 2. Forms and mechanisms of accountability of Zakat Institution CC

Form/ Element	Financial/formal form of accountability	Social/informal form of accountability	
		Account-based	Action-based
Mechanism	Zakat Report	Bulletin & Booklet	Various non-zakat society/community programs/events
	Zakat collection & distribution summary report	Relevant information/updates on its Website & Facebook	
Stakeholder(s) addressed	Zakat payers & recipients, and the general public	Zakat payers & recipients and the general public	Zakat payers & recipients and the general public

Interestingly, evidence also suggests that in discharging its accountability, the case organization goes beyond financial/formal form of accountability. As observed, there are two sub-types of social or informal form of accountability discharged by Zakat Institution CC, which are account-based and action-based (Sawandi & Thomson, 2014). Firstly, for the account-based medium evidence indicates that Zakat Institution CC has been discharging its social/informal accountability to its stakeholders via the publication of the bulletin and booklet by Zakat Institution CC. The bulletin provides coverage on the case organisation's activities, events and program relating to zakat collection and distribution. Meanwhile, the booklet contained latest updates and information on zakat collection and distribution of Zakat Institution CC. In addition, Zakat Institution CC has been using its website and Facebook in "giving-account-for" the stakeholders in discharging this type of accountability. These mediums provide the zakat payers with a real-time information and updates on the zakat activities and financial positions including the strategic actions plan for Asnaf or zakat recipients.

Meanwhile, the dimension on action-based of social/informal accountability encompasses the various non-zakat community programs or events for the public sphere. The extensive programs and events have been designed and implemented for the people to create valuable awareness and high level of understanding on the distribution of zakat. Zakat Institution CC also believes that the delivery and sharing of necessary and relevant information could minimise if not eliminate the negative perceptions among the general public on the zakat issues and matters. This form of accountability and its mediums used not only able Zakat Institution CC to discharge its accountability to a boarder stakeholders (Sawandi & Thomson, 2014) but could also assist Zakat Institutions CC in upholding transparency in its administration and management of the zakat funds (Ibrahim, 2014).

5. CONCLUSION

The study concludes that Zakat institution CC has been discharging two forms of accountability that are financial/formal form of accountability and social/informal form of accountability. Meanwhile,

evidence suggests that the case organization has been discharging its social form accountability via both account-based and action-based mechanism. The financial/formal form of accountability has been discharged mainly via the zakat collection and distribution reports. Meanwhile, the second category of accountability has been discharged through both of means that are account- and action-based mechanisms, which include the publication of the bulletin and booklet and various non-zakat society/community programs respectively. These action-based mechanisms may enable the case organization to reach broader groups of stakeholders in attempts to discharge its social accountability.

While the study has been able to document several new insights on the forms and means of discharging the accountability of the case organization, the findings of this study may not be appropriate to be generalised to other zakat institutions in Malaysia or in other contexts due to the nature of the case study approach applied in the study (Sawandi, Abd Aziz & Saad, 2017). Further studies may be undertaken in the future by examining accountability practices of not merely zakat institutions but to include other relevant institutions such as State Religion Islamic Institutions in Malaysia to document new insights on the matter. Despite its limitations, the study provides new insights on the current practices and means of accountability used by the zakat institution CC in discharging both its financial and social accountability to its stakeholders.

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Strategizing the Magnetic Technologies

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Abstract

Innovation has been a platform from various industries not only to increase better company's performance, but also to reduce cost and increase profit. This has been the case for CAV Technologies Sdn Bhd, which involves the customers right from the start in the development of their products. Even though CAV is one of the leading companies in the field of development, production and application of know-how of magnetic materials, they are also affected in the turbulence of the Covid-19 pandemic, where they were forced to seek lower costs which include manpower costs. In September 2020, Mr Azlan and his team pondered about the best technology strategy that the company could remain as a dominant player in the magnetic technology industry.

Keywords: Technology Strategy, Innovation, Magnetic Technologies, Managing Technology

1. INTRODUCTION

CAV Sdn Bhd is one of the few firms worldwide that produce a whole range of magnetic technologies. This firm provides various kinds of magnetic products, from soft magnetic to the strongest permanent magnets of the world. The global market size for permanent magnets was estimated at USD 20.74 billion in 2019 and is projected to rise from 2020 to 2027 at a compound annual growth rate (CAGR) of 5.9 percent. Market growth is primarily due to the consumer goods and electronics industry, where permanent magnets, including smartphones and personal electronics, are commonly used in various applications. The main driver of the demand was rising production in the electronics sector before the onset of the COVID-19 pandemic (Grand View Research, 2020). Since 1923, CAV began in a humble factory in Kuantan, Pahang and later reinforces their presence in markets of North America and Asia-Pacific. Up until now, Kuantan remains as the location of choice as the centre for development, production and the coordination of our world-wide activities.

1.1 Vision and Mission

CAV Sdn Bhd's vision is to establish an outstanding position throughout all our chosen market sectors either as market leader. Moreover, their mission, as a globally operating company, supply their customers around the world with innovative systems solutions, providing comprehensive service and high-quality products. With state-of-the-art technological developments as their basis, their continuously expand their product portfolio, process expertise in magnetic materials and related advanced products to the benefit of their customers.

Mr Azlan commented on the key principle at the heart of CAV Sdn Bhd:

Advanced Materials is our Key to Success!

With their advanced materials expertise by Mr Azlan and his employees, they guarantee maximum efficiency and quality and establish the basis for maintaining our competitive edge in the future. By developing on going innovative solutions to achieve technological and cost leadership in their business segments, they are able to identify and enter the markets of tomorrow. Further key parameters which they apply to achieve their goals are customer orientation, communication, reliability, product quality

and innovative strength. Ultimately, customer satisfaction and profitability are the keys to CAV's long term success. This enable them to continue to expand their market position, safeguard corporate financing and create jobs. Every member of the company contributes to these goals.

1.2 Production of CAV Sdn Bhd

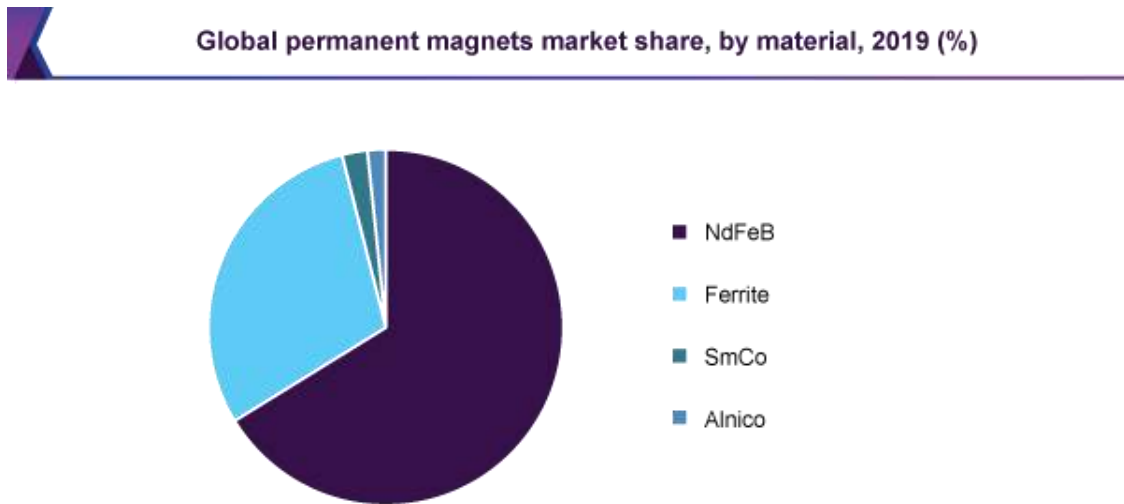
CAV Sdn Bhd began to transfer labour-intensive manufacturing processes to more cost-effective countries. Since the 1980's, CAV Sdn Bhd has maintained production facilities in Asia. CAV Sdn Bhd primarily produces components for the sectors of installation technology (e.g. tape-wound cores), automotive engineering (e.g. transmitter antennas) and drive technology (e.g. frequency converters). Products manufactured in Kuantan are sold all over the world. The production facilities at CAV Sdn Bhd have an area of around 6,000 sq. m. Approximately 850 staff work here for the CAV Sdn Bhd, which is known as the best electronics firm in Pahang. Currently, Malaysia manufactures are more focus on inductive components for the automotive industry.

However, with the turbulence of the pandemic crisis has forced CAV Sdn Bhd to find new ways to manage their innovation to stay competitive. Thus, the objective of this case is to determine methods in managing their technology, and its future direction from the perspective of their technology strategy.

2. THE PERMANENT MAGNET INDUSTRY – MARKET LANDSCAPE

Developments in sectors, including renewable energy, consumer electronics and electric vehicles, are expected to stabilise and uplift the permanent magnet market. Several electric vehicle plants have resumed operations, which is a hopeful indication of the permanent magnet market for goods. In May 2020, for instance, Okinawa resumed production with a workforce of 25 percent. During the forecast period, the resumption of manufacturing activities is expected to fuel market growth. The largest volume share of more than 75.0 percent was held by Asia Pacific in 2019. The production of automobiles, along with the production of electronics in the region, is expected to increase product demand in the near future. The market has been characterized by high competition. Growing demand for permanent magnets pushes businesses through capacity expansions and mergers & acquisitions, to achieve a competitive edge in the industry. USA Rare Earth LLC, for example, purchased NdFeB permanent magnet manufacturing equipment from Hitachi Metals America, Ltd. in April 2020 (Grand View Research, 2020).

Some of the prominent players in the permanent magnets market include Arnold Magnetic Technologies, Electron Energy Corporation, Daido Steel Co., Ltd. and many more. The largest volume share of over 80.0 percent was accounted for by Ferrite in 2019, as shown in Figure 1. Ferrite magnets are derived from iron ore that is accessible in abundance in the earth's crust, unlike rare earth magnets. In addition, these provide corrosion resistance and high coercivity at low cost, making them suitable for high-temperature engines (Grand View Research, 2020). Research activities to find ways to increase the consumption of ferrite magnets are motivated by factors such as phenomenal features, ample supply and low cost. In June 2019, for example, Greenspur Renewables created a permanent magnet generator (PMG) concept using ferrite that could be useful in the design of giant 25MW offshore wind turbines (Grand View Research, 2020).



Source: www.grandviewresearch.com

Figure 1: Global Permanent Magnets Market Share, by Material, 2019 (%)

3. APPLICATION OF THEORY

In the turbulence of the pandemic, we apply the Technology S-Curve to the discussion of CAV Sdn Bhd future prospects. Previous literature supports the methodology and concept of strategic methodologies by managers, given that competition is increasingly complex and the inherently interrelated development of creativity and competitive advantage (Chiesa and Manzini, 1998; Davenport, Campbell-Hunt and Solomon, 2003). In addition, technology strategy could be characterised by considering the advent of emerging technologies, changes in other companies' dominant strategies and structures and changes in the nature of competitors.

The evolution of technology relies on the mechanism by which scientific advancement happens. New discoveries are made as researchers, building on prior expertise that has accumulated, pursue answers to existing technological problems (Dosi, 1988). In addition, it is also possible to understand social, economic, and political factors as they influence the direction that technological progress takes, each in very different ways (Szántó, 2001). The technology S-curve is a pattern that allows us to understand the evolution of technology. Since the relation between effort and output is usually S-shaped, these graphs are called S-curves. Initially, performance gains per unit of effort are minimal, so before we can substantially boost the performance of modern technology, there are many things we need to learn (Foster, 1986).

Technology progresses through cycles of gradual innovation, disrupted by cycles of disruptive innovation, according to Utterback and Abernathy (1975). In an industry, the growth of a radical invention leads to a fluid period, during which time several companies join and compete on the basis of various product designs. Eventually, companies in the sector settle on a dominant template, resulting in a particular period during which only gradual innovation takes place. With the emergence of a new radical invention, which introduces a new fluid step, the cycle continues after a while.

While the model of Utterback and Abernathy has proven to be very helpful in understanding technological evolution, researchers have found four major changes that we need to recognise. According to Barras (1986), a separate paradigm that he called the "reverse product cycle" existed in service industries. Barras further asserts that usually emerging innovations that are first introduced in a product industry are adopted by service industries.

In order to make current systems more effective and thereby minimise costs, the implemented technology is applied. Usually, these initial developments are gradual improvements. The new technology is used in the second stage of the reverse product cycle to make the service more efficient.

At this point, the technologies that are implemented appear to concentrate on changing the processes used to service clients, thereby improving quality.

4. HOW DO THEY MANAGE THE LATEST TECHNOLOGIES?

In all industries there are various problems encountered in order to get the best results in any technology used. It is a big challenge for each company to compete with each other. It is no exception for this CAV Sdn Bhd. Some of the things in this company need to be improved to ensure the company continues to compete with other giants. One important factor that needs to be improved is the reluctance of his management team to pursue with the latest technologies. This was stated by Mr Azlan:

It was found that our senior management team members were less concerned about revealing the latest technologies available in the market. This is because the company feels that with the latest technological improvements will result in increased operational management costs. Other than that, they prefer to use old technology because of its low cost. Therefore, disclosure should be given to further enhance knowledge in this field of technology as well as provide a healthy competitiveness among engineers.

In regard to identifying the key opinion leaders from his management team, Mr Azlan also noted the importance of understanding the innovation culture of the top management and team. According to him, to get through the reluctance of his management team members to pursue with the latest technologies, they need to put trust on their subordinates or employees that they are capable to use the latest technologies. According to Mr Azlan:

Management Company Headquarters does not disclose any of the latest technology to companies under it. This is because they are not convinced of the expertise and capabilities of their subordinates. They prefer building the technology itself and sending it to its subordinates for use. We must demonstrate and give full confidence to the Head Office that subsidiaries under it are also capable of building up-to-date technologies on par with foreign countries. If this disclosure is made, it will help us to further enhance its existing technology to more sophisticated and effective technologies.

Since the company was established, most training were done by the founders of the company who at the same time manages the whole company. Since most of the founders are already retired, further training to engineers need to be provided with local universities. Mr Azlan related this:

Actually, the demand of our products is high but we are still low in terms of expertise and skills among engineers. Thus, we need to encourage technology development with local university parties. This is because with the advanced training provided it can help the company in developing new technologies while delivering good returns in the industrial sector.

5. CAV SDN BHD FUTURE DIRECTION AND WHAT IS THE NEXT TECHNOLOGY STRATEGY?

Since 2012, CAV Sdn Bhd upgraded their technology due to compete with their rivals. As such, CAV Sdn Bhd has reviewed several strategies in technology so that it can compete with other competitors. Mr Azlan realised that to ensure the company continues to remain competitive with other companies, a number of strategies in the field of technology is currently implemented. According to him:

It is intended that this company with the latest technology and at the same time can improve the competitiveness of each other. The current technology strategy that we are working on are: (a) Testing Process, (b) Tinning Process, (c) Cutting, Winding Bending, and Cleaning Process. Thus, we remain these current strategies and segment which market to venture into.

The automotive industry is one potential segment to venture into, which is expected to see steady growth due to electric vehicles in the coming years. Permanent magnet electric motors, such as neodymium magnets, tend to have better induction, save energy, are light in weight and produce more strength. For example, permanent magnets are used by Nissan LEAF to generate 20 percent energy savings. Growing government policies and laws on the adoption and manufacture of electric vehicles (Grand View Research, 2020).

Mr Azlan mentioned another sector to pursue on its technology strategy, which is the energy sector. He expressed his views regarding this sector:

Another segment with attractive growth prospects for the industry over the coming years is the energy sector. For example, wind turbines have had a preference for permanent magnets over electromagnets, owing to added advantages such as improved efficiency and lower construction costs due to reduced electricity-generating component weight. In the coming years, this is a good sign for the segment to grow.

Mr Azlan realized a keen understanding of the stiff competition. Thus, he began to further strategize the technologies into three main focus: (a) Materials Design (b) Application know-how, and (c) Process Technology. The first focus was to nurture the technological capabilities of his engineers. He mentioned that:

Their ability to tailor the composition and all further processing step including specific heat treatments according to their proprietary know-how enables them to design alloys with unique properties for specific customer needs. Their expertise in material design and processing combined with their knowledge of markets and applications secures the development of advanced materials.

This brought his notion to expanding the application know-how by designing magnetic circuits. As a manufacture of both soft magnetic and permanent magnetic materials, CAV Sdn Bhd has outstanding knowledge of the material properties as well as the possibilities for processing them. The company uses this knowledge in application development for expert customer advice in designing permanent magnet systems. CAV Sdn Bhd uses analytical and numerical methods (Finite Element Analysis) for the design and optimization of magnetic circuits. The intelligent combination of soft magnetic materials and rare earth permanent magnets from their own production taking account of their physical properties lead to innovative applications.

Another application know-how is developing power transformers for switched mode power supplies. Mr Azlan and his R&D team is developing a nanocrystal line material called *Noltron* on rapid solidification. The *Noltron* 500 F power transformer can be used to outstanding effect in switching concepts for power supplies. The circuit topologies of switched mode supplies have assumed an important role in the range of up to 100kW in transport technology and in industrial power supplies. Usually, push-pull converters in full or half bridge circuits are used that are modulated with pulse-width modulation (PWM) at frequencies of 5 kHz to 50 kHz. The main advantage of switched solutions is a construction volume up to 1/20 smaller in comparison to the classical 50 Hz or 16 2/3 Hz Technology. His enthusiasm on transformers has enable its properties are needed to be able be exploited. According to Mr Farouq, the Head of R&D:

The properties of transformers can be exploited to produce low switching losses, even at high alternating amplitudes. Additionally, they are capable to produce transformer that have high saturation induction and thus high magnetization. Besides that, it can have high electric strength of the windings. These features can definitely fit to extreme demand in rail application where it requires good heat transfer and isolation voltage requirements of up to 6 kV.

Mr Farouq and his team is also trying to find a way forward with vacuum induction melting as one of their technology strategies. They are willing to invest aggressively in process melting and casting under

vacuum conditions on an industrial scale to get Ni, Fe, Co and Cr alloys with lowest levels of C, N, O, and H, as well as lowest levels of non-metallic inclusions (oxides, nitrides, carbides). Inductive heating yields excellent homogenization of composition and of temperature. The purification process is enhanced by additional Ar-purging of the melt. The high purity and homogeneity associated with as narrow as possible tolerances for chemical composition are fundamental for the production of alloys with superior soft magnetic or other unique physical properties as well as for the production of highest-grade Rare Earth permanent magnets.

6. CONCLUSIONS

CAV Sdn Bhd is one of the leading companies in the field of magnetic material production, manufacturing and application know-how. Owing to carefully executed manufacturing methods, this company's excellent materials produce their best properties. Depending on the material, it is possible to select different ones for more processing, such as punching, deep drawing, spinning, milling or bonding. Stamped bent part after magnetic final annealing from a high permeability soft magnetic Ni Fe material for sensitive relays. Based on the expertise and knowledge of the materials of CAV Sdn Bhd, the clients and CAV Sdn Bhd together tailor all the detailed production steps required to obtain an optimised portion with the best properties.

The heat treatment to change the magnetic properties is often the deciding step. CAV Sdn Bhd is capable of annealing parts under dry hydrogen, vacuum and air or of annealing parts under a heavy magnetic field. The research and development of CAV Sdn Bhd is committed to ensuring technology leadership in close touch with our clients. With the latest information on technology it will be able to assist businesses, governments, and individuals as well as improve their efficiency and effectiveness. It will also provide robust improvements in hardware and processing capabilities and provide a healthy competition in introducing new and effective technologies. On a market level, this rapid turnover creates high demand. This business must continue to demand groundbreaking technical innovations, leaving no space to compete with new entrants.

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Factors influencing safe wayfinding behaviour at sports complex surface access in Universiti Utara Malaysia

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Abstract

Wayfinding is a process in which people navigate a landside environment using information support systems. A movement of process or activity which involves adaptive displays as directional signs and accurately following the planning and route is maintained. This paper explains the factors influence safe wayfinding behaviour from surface access of campus main entrance to sports complex in Universiti Utara Malaysia (UUM). The importance of wayfinding strategy and their influence on the decision-making process for the provision of sports complex road access wayfinding was considered. The Mean, Standard Deviation (SD) and Two-Way ANOVA test were used to analyse the results and discussed with reference to the general needs as standard design of sports complex access and take into account the preference of users' general experience. The contributory factors were then analysed and presented; risk to collisions, speed exceedances, centreline crossing and road edge excursions. The results show that there is a relationship between wayfinding and surface access design. Although many studies have been conducted on wayfinding in general, a detailed evaluation on safe wayfinding behaviour at sports complex were still unexplored domains.

Keywords: Navigation, road access, transport, sports complex, signage

1. INTRODUCTION

Wayfinding is a natural skill which people gradually learn, through using common-sense knowledge of geographic space. They navigate by relying on knowledge that is mediated by structures and categories of people's daily experiences in the space¹ they live (Johnson, 1987, cited in Raubal & Egenhofer, 1998). Wayfinding is intrinsically linked to all forms of transport (i.e. road, rail, sea and air). It is a natural skill that people begin to learn as a child and develop as they grow up. The skill is embraced in many ways such as driving across a country, walking in a city or moving through a building (Piaget, 2013). As technological advances were made, new ways of controlling wayfinding (e.g. including traffic signs) were necessary. Traveller behaviour, environmental design features, operational policies and practices in wayfinding systems are the key elements to efficient road navigation.

A complete plan of road wayfinding reflects a new way of thinking about how streets are designed and may be put together in a number of different ways as alternative routes to access the road; however, it must be intentionally designed to serve all potential users including industry players in halal logistics. Transport planners and transportation agencies have a responsibility to design, operate, and maintain the entire right of way to enable safe access for drivers, transit users and vehicles, pedestrians and cyclists, as well as for the elderly, children and people with disabilities. A right of way is a legal right allowing the public to pass along a linear or specific route over land or private property (with permission) at all times (IPROW, 2016; UK Government, 2016).

¹ Space in transportation terminology acts as a generator that supports mobility as it will shape the nature and structure of the transportation system (Rodrigue, 2013).

The surface access design can be very complex when the road area becomes more difficult and time consuming, inadequate access limits the growth potential of road facilities. In order to deal with road complexity, sign systems should be standardised with regards to terminology, lettering style, location and colour (J. Harding, 2012). Hence, when road users are confronted by a complex environment, they are more easily able to locate sign information if it is presented in a consistent format. They will more easily and safely navigate when they can rely on their previous experience with roadway signs.

2. SETTING THE SCENE

Wayfinding is defined as a process in which people navigate an environment using information support systems such as architectural clues, lighting, sight lines and signage as people are interested to find the way from one place to another (Raubal & Egenhofer, 1998). The terminology of wayfinding was described by Lynch (1960) as an attempt to embrace the sequential process that individuals use to reach a destination. Wayfinding occurs when people need to travel along the intended route and direction without having accidents or getting unnecessarily delayed and successfully reaching their destination (Montello & Sas, 2006).

Wayfinding is useful for making a quick decision due to complex road access design. Drivers use two immediate elements of wayfinding; choices and clues. Choices are related to instance decision points in wayfinding (Raubal & Egenhofer, 1998). The choices give opportunity to decide two or more alternative ways of sports complex road access. Drivers prefer to use a clue to make estimation based on road architecture. Clues include any signs and physical architecture along the road. Mitchell (2010) agreed signage should be specific, designed and placed in accordance to national standards which have advantages to drivers in terms of being able to locate, read and understand them within a timeframe.

Surface access wayfinding will be beneficial to road users as well as to first time travellers and frequent road users. There are three major environmental factors that affect the ease of navigation orientation and wayfinding (J. R. Harding et al., 2011). Firstly, the sign design of the environment should be distinctive and different. The 'directional arrow' signs should be bigger, with bold text, using different colours and symbols than other signs. The landside signs should be identical in term of size, colour and style to be compared with current roadway signs. Therefore, it is very important that road signs adhere to copy, styles and sizes, consistent terminology and symbols and uniform colours of the basic guiding principles standard functions. Message contents should be easily understood by road users. For instance, first time drivers require different information to navigate compared to frequent road users.

Traffic signs play a vital role in directing, informing and controlling drivers' behaviour in order to make roads safe. The necessity of signs is not just for new drivers needing to pass their driving test, but for all road users, including logistics providers' driver and experienced professional drivers. According to the Department for Transport (DfT, 2013), a sign is a device that delivers a clear visual message, is efficient, readable and is an essential device to road and traffic engineering. The purposes of signs are to control and guide traffic, and promote road safety to users (De Ceunynck et al., 2014). For instance, drivers are dependent on signing for information and guidance while driving. Highway authorities are dependent on signing for the efficient working and the enforcement of traffic regulations (Road Safety Observatory, 2012). A traffic sign system, therefore, should meet the changing needs of road users and provide effective tools for better management of the road network by incorporating new technologies and minimising the impact on the environment.

In addition, surface access is the structures found within a road corridor, whether the road is a highway or a country lane (Transport Scotland, 2006). It includes road signs of all descriptions such as variable message signs (VMS) and signs to provide directions to tourist destinations (e.g. lighting, safety fences, barriers, bollards and verge marker posts, bus shelters, telephone kiosks, telephone and other control pillars), and related objects placed by utility companies, the most recent being mobile phone masts. For

example, the Motorcycle Council of New South Wales (NSW) (2015) stated that the surface access includes fixtures on the road access such as steel covers, traffic domes (i.e. silent cops) and lane markers, all of which can create a hazard for a motorcycle. Road access through the provision of a convenient and safe wayfinding for the road user is crucial (Ryley et al., 2013). A well-designed road access wayfinding (including road furniture) represents a good image of a city and country and plays an important role in establishing the identity of the city and country in the mind of tourists and business visitors.

Good wayfinding systems can be measured by considering the effect of driving experience on the sports complex road access, and how the self-navigation signage information facilitates from a start point to the sports complex area. Sports complex's road access wayfinding systems should create a welcoming and enjoyable environment, reassure users and provide answers before they have to ask for assistance in the complex area (National Passenger Facilitation Committee, 2011). It can be achieved by focusing on the drivers' needs, especially during the planning and design phases, and, encompassing environmental factors (e.g. building design, user expectation and signage information) into sports complex road access wayfinding design.

3. PROBLEM STATEMENTS

Poor wayfinding provision discourages drivers (Burns, 1998; Darken & Sibert, 1996; Montello & Sas, 2006) in roadway areas. Driver capabilities and limitations in performing the driving tasks influence driving behaviour and drivers' safety on the road. Past research (Alosco et al., 2012; Bella, 2008; Godley, Triggs, & Fildes, 2002; Horswill & Coster, 2002; RoSPA, 2010) have examined the characteristics of drivers' behaviour and safety. The research outcomes confirmed that change of behavioural adaptation to the road environment (e.g. road design, human errors and drivers' age) have an impact on driving performance. In this section, two main characteristics that lead to drivers' wayfinding have been discussed; (1) attention and wayfinding information, and (2) vision. These two important characteristics of sports complex surface access wayfinding design were based on previous literatures and contributory factors (Department for Transport, 2015). Attention limitation, ability to process wayfinding information and visual awareness (Matthews et al., 1998) where failing to look properly, poor turn manoeuvre, 'disobeying' of traffic signs, travelling too fast and exceeding speed limit are examples of these.

Drivers' attention and ability to process signage and wayfinding information is limited. These limitations create difficulties for drivers as driving require the division of attention (Taylor & Dorn, 2006) between control, guidance and navigational tasks in order to navigate AASHTO (2010) to the sports complex. Drivers prefer to attend to one of these at a time as the driver's attention can be easily switched from one wayfinding information source to another. For example, drivers can only extract a small proportion of the available information from the road scene to perform navigation. With regards to limited information processing capacity while driving, these drivers subconsciously determine acceptable information loads that they can manage. They are unaware that important information has been neglected when the incoming information load is exceeded, which leads to the driving errors during this process. AASHTO (2010) agreed that a driver may neglect a piece of information that turns out to be critical, while another less important piece of information was retained.

Visual awareness is the most familiar aspect of vision related to driving, and this in respect of wayfinding is equally important for safe driving behaviour (Matthews et al., 1998). Hills [(1980) (cited in AASHTO, 2010)] stated that around 90 per cent of the driving information is visual. AASHTO (2010) agreed that drivers' peripheral vision such as moving vehicles on an intersecting path, pedestrians, signs, wayfinding and signals are important to be noticed while driving. In general, targets (i.e. an image that generates the thought that the vehicle should be stopped) best detected by peripheral vision are objects that are closest to the focal point; that differ greatly from their backgrounds in terms of brightness, colour and texture; are large and moveable. Studies show the majority of targets were

noticed when located less than 10 to 15 degrees from the focal point and that even when targets were conspicuous, glances at angles of over 30 degrees are rare (AASHTO, 2010; Smiley, Houghton, & Philp, 2004). Target detection in peripheral vision is also dependent on demands placed on the driver.

The number of signs can have a large impact on road surface access. Good positioning is more important than quantity. Having many signs in one place can be ineffective, creating ambiguity and confusion (Charles & Haddad, 2007) for logistics providers' driver and being visually intrusive. Two signs that are poorly positioned can be less effective than one that is well positioned. Drivers can only absorb a limited amount of information while moving, so overload can lead to confusion and the possibility of drivers executing dangerous manoeuvres (Fofanova & Vollrath, 2011); thus it is better to provide fewer signs of better quality.

4. RESEARCH METHODOLOGY

In order to assess the safe wayfinding behaviour on UUM sports complex surface access, an adoption of a specific method of research to achieve the study objectives was reviewed. In this research, the descriptive approach continued to be applied to understand safe wayfinding behaviour at UUM sports complex surface access. A problem or situation was evaluated using a descriptive analysis after extensive previous knowledge was defined (Robson & McCartan, 2016). This research needed extensive preliminary work to be done to gain familiarity with the phenomenon in the wayfinding and drivers' behaviour situation and understanding the research scope for further investigation. For instance, emails have been sent to academic and professional experts in order to have a better understanding of drivers' behaviour and experience, Halal, and wayfinding design. Theories (e.g. theoretical frameworks), hypotheses and theoretical model were designed, and patterns were gathered. In order to increase the validity of the research, the quantitative approach was applied. Items and concepts were tested through a questionnaire. Sekaran and Bougie (2016) stated that the questionnaire can be carried out by employing the same research instrument in another context with the problem of causality being eased by the emergence of path analysis to which surveys are well suited.

The questionnaires were designed to be effective, approachable and easy to understand. Feedback and comments were acquired from road users. The first section indicates respondent demographic profiles. General information is useful in obtaining data on the background of the respondents which might have a direct correlation with the responses to the questionnaire statement (Sekaran & Bougie, 2016). Section two evaluates the key factors influence safe wayfinding behaviour. The questions were developed based on research questions; *what are the key factors that may influence safe wayfinding behaviour?; how should the effect of wayfinding on road users be measured?; and does wayfinding have an effect on road users?.*

5. RESULT AND DISCUSSION

The results show that there is a relationship between road design complexity and driving errors. The results also revealed that the road edge excursions were the most common errors and 'disobeyed' red traffic lights had the lowest number of errors made by drivers in all simulated driving scenarios. Drivers preferred to drive near to the road edges (or road shoulders), 'too carefully' at the junctions and roundabouts and surprisingly drove too fast in sections of the road that had lower speed limits. This pattern showed that drivers make more errors with increasing complexity and are exposed to incidents on the road.

During non-peak hours, road users were likely to cross the road edge (mean=3.90, SD=2.32), be exposed to the risk of collisions due to driving too close to a vehicle in front (mean=1.43, SD=0.81), exceeding the speed limit (mean=0.33, SD=0.57), cross the centreline (mean=0.10, SD=0.30) and were aware of red traffic lights (mean=0.05, SD=0.22).

During peak hours, road users were likely to speed and exceed the standard speed limit (mean=0.43, SD=0.84). They preferred to drive close to the kerb, which resulted in road edge excursions (mean=4.20, SD=1.44). However, they were likely to cross the centreline of the road lane (mean=0.15, SD=0.43) when attempting to turn at the next junctions. Tailgating as one of the major contributors to the road accidents could raise the risk of collision (mean=1.48, SD=0.91). Traffic light ticket (mean=0.03, SD=0.16) rates were low during this hour, perhaps because of the slow traffic flow.

5.1 Risk to Collisions

The results show that there was low statistically significant difference between risk of collisions and road users' age group. It shows that road users had no difficulties to reach the UUM sports complex during non-peak hours ($F=0.73$, $p=0.49$) and peak hours ($F=0.16$, $p=0.86$). Therefore, there is no impact to road access wayfinding designs on road safety. The highest possibility of road users being exposed to a road accident was in the peak hours (mean=1.63, SD=0.70), followed by non-peak hours (mean=1.43, SD=0.81). Drivers were observed to drive near to the road edges (especially at the roundabouts), had difficulties in making a fast decision at the decision point (e.g. junctions and approaching signs), and failed to respond to speed limit signs at low speed limit roads. These factors are contributory factors that lead to road collisions.

5.2 Exceeding the Speed Limit

Results show no significant difference between speed exceedances and age group; non-peak hour ($F=0.52$, $p=0.60$) and peak hours ($F=1.73$, $p=0.19$). The results revealed that UUM sports complex road access wayfinding design was not linked to driving behaviour and safety. Drivers preferred to speed in the peak hours (mean=0.60, SD=1.08) compared to non-peak hours. Variable speed limit signs were considered; however, the results confirmed that the surface access wayfinding design did not impact on speed. Surprisingly, the results revealed that the speeding was lower in non-peak hours (mean=0.33, SD=0.57). The results confirmed that drivers felt it to be comfortable and easy to navigate to the UUM sports complex.

5.3 Centreline Crossings

Results show the drivers' age had no effect on road centreline crossing. Drivers are likely to cross the centreline more often during peak hours ($F=0.83$, $p=0.45$) compared during non-peak hours ($F=0.15$, $p=0.87$). The ANOVA results revealed that busy traffic affected driving behaviour. The high traffic during peak hours led drivers to crossroad centrelines more often (mean=0.35, SD=1.48) compared during non-peak hours (mean=0.10, SD=0.30). Poor turn manoeuvre at roundabouts and junctions were main factors of unsafe driving behaviour. DfT (2015) confirmed that poor turn manoeuvre led drivers to road accidents.

6. CONCLUSION

The drivers may have more experience behind the wheel, but could be more likely to be nervous and concerned about their own reaction times and eyesight (National Institute on Aging, National Institutes of Health, & U.S. Department of Health and Human Service, 2011). As the study investigated the key factors influencing safe wayfinding behaviour, the Two-Way ANOVA results showed that there were no significant effect of UUM sports complex road access wayfinding (in terms of age group) and the research parameters of; (1) risk of collisions, (2) exceeding the speed limit and (3) centreline crossings.

An effective road access with a systematic traffic signing system is essential for the efficient use of the road network. Wayfinding (including traffic signs) are important elements for UUM sports complex surface access design. Road users are dependent on wayfinding (including traffic signs) in order to provide them with hazard warnings, road traffic and direction. In order to make the best and safest of

road networks, clarity of signs and road markings play an important role in wayfinding design. A consistent road traffic sign system is instantly recognisable and becomes familiar to the road users. This consistency has been delivered through legislation and guidance which ensures that traffic signs can be seen and readily understood under all common road conditions.

Complexity of road design and the environment or increased traffic congestion contributes to a distracted driver's ability (Taylor & Dorn, 2006) to keep track of wayfinding. Inattention results in diverse movements out of the lane, exceeding the speed limit (Chevalier et al., 2016) and failure to detect a vehicle on a conflicting path at an intersection (Dukic & Broberg, 2012; Mårdh, 2016; Oxley, Fildes, Corben, & Langford, 2006) that exposes drivers to the risk of collisions and reduced road safety.

7. FUTURE WORK

This research addressed the gaps in the literature on the UUM sports complex surface access and the relationship between road users' behaviour on safe wayfinding design. A survey has been used as a tool to measure the relationship between these variables. In this section, further directions for future research are suggested.

- i. Road users and UUM sports complex users were chosen to participate in this research. Results from the survey were analysed and findings were measured only focusing on young road users' attributes. It is suggested that this research could be extended to the senior users and with a consideration of gender to assess any effects on driving behaviour and road safety on the complexity of UUM sports complex road design.
- ii. The research could be extended to other areas such as the school and hospital environments. The impact of road access complexity to road users in these areas is perhaps an interesting topic for future research.

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Alternative Ways to Improve Green Design in Sport Complex, Universiti Utara Malaysia

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Abstract

Green design integrates modern society become more efficiently and healthy. Designers, developers and builders consider alternative resource such as renewal energy and green technology to construct new building or convert existing buildings into green building. The quality and availability, incentive, education and government policy and regulation of implementation of green are recommended. The purpose of the paper is to evaluate the awareness of green surface access on sport complex in UUM and the importance of green building application to the public. The research explores the user preferences that may change the future pedestrian design. The impact of this study might useful as a theoretical guideline for road planners to design a new pedestrian pathway in UUM areas by considering the preferences of facilities needed. Although a number of papers have been written on pedestrian facilities in general, a detailed evaluation of current provision of pedestrian facilities and the importance of future provision of pedestrian facilities as well as an expectation of transport users as original research is regarded as adequate for the purpose of this research. The research contributes to increase the pedestrian protection system and safety as campaign and road safety education. Thus, this research explores the preferences of pedestrian facilities may change the future pedestrian design in Sport Complex areas based on provision of pedestrians' perception. In addition, the results of this study might useful as a theoretical guideline for road planners to design a new pedestrian pathway by considering the preferences of facilities needed.

Keywords: Green Sport Facilities, Pedestrian, Road Safety

1. INTRODUCTION

Public awareness of the ecological benefits and reduction of operating costs of sport buildings were very low. Consumer awareness of green building emphasizes the importance of innovation and the comfort of the user who inhabit the building. The commercial buildings (which includes sport complex) more environmentally friendly, comfortable and can increase user productivity. Building green is an alternative to the sustainability of the current building to reduce environmental problems. Green building designed is aimed at reducing indirect effects on human health and the natural environment, through:

1. Energy, water and other resources are used efficiently;
2. Protecting the health and improving the productivity of workers; and
3. The waste, pollution and environmental degradation must be reduced.

The planners should consider the importance of pedestrian preferences and perceptions when designing efficient and pedestrian friendly facilities in sport complex. In addition, initiative should be taken to promote pedestrian travel (e.g. appropriate pedestrian facilities) which offers potential users an assured level of convenience, efficiency, comfort, and security for successful applications.

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The research background designs intended to address the safety needs of pedestrians in sport complex area. This is readily evidenced in the prevailing design guidance on roadway and UUM community design. Walking is the most universal mode of transportation. In other word, many people have to travel from one place to the other place. Walking is the free source and readily available to those who are young or old to drive and cannot afford the cost for owning and maintaining a vehicle (Lloyd Wright, 2012).

UUM is located near Pekan Changlun, a small city. UUM is also located near the Bukit Kayu Hitam, is known as a small town at the Malaysian-Thai border. It is the main entrance into Malaysia from the north through Thailand. The campus is surrounded by the lush greenery tropical rain forests set against a background of mountains and is one of the most pleasant and serene campuses in Malaysia. The university has provide many sports and recreational activities such as swimming pool, running track, archery range, badminton, tennis, basketball, volleyball, rugby, handball, badminton, softball and etc. UUM is the first university that has a go-kart circuit and an equestrian centre as well as 9-hole golf course. Others recreational facilities provide for canoeing, jogging, cycling, jungle trekking, climbing, and camping.

2. RESEARCH OBJECTIVE

The research concentrates on possible alternatives to improve green surface access facilities design in sport complex areas. The provision of pedestrian facilities enhances the applicability of the research to be used as guidelines which aims to propose adequate pedestrian facilities design to be used for UUM and Malaysia scenario.

3. CONTRIBUTING FACTORS TO PEDESTRIAN FACILITIES DESIGN IN UUM

3.1 Vulnerability

Vulnerability means to the inability to withstand the effects of a hostile environment. Pedestrians will receive severe injuries, even at relatively low impact speed mainly because only protection is clothing. Speed plays a vital part in determining the seriousness of the outcome of collisions. If the clash speed exceeds 45 kilometers per hour the probability for a pedestrian to survive is less than 50%. In contrast, if the clash speed is less than 30 kilometers per hour more than 90% of the victims will survive (Carlsson, 1996).

The weight and speed of pedestrians rarely pose any threat to other road users is the another aspect for vulnerability. Normally, the pedestrian is the victim for the cyclist in this respect but of no threat to other road users. Since pedestrians and cyclists pose little threat to automobile users. So the automobiles users have less reason to be aware of them. The most vulnerable populations who suffer the highest burden of injuries and fatalities are the low income communities, pedestrians and children (The World Bank, 2009).

3.2 Instability

Instability means the pedestrians may trip or fall in the traffic environment or the situation that can brings the accident happen. A minor mistake or failure may occur in a severe outcome even though there are no other road users present. Pedestrians may stumble and get serious injuries when the surface of the road is uneven. The instability of pedestrians is an even bigger issue when they are mixed with other automobile traffic (European Transport Safety Council, 1995).

3.3 Differing abilities

Differing abilities means that the problem related to the speed and the pedestrians do not aware of the danger. Speed is the main factor contributed to the seriousness of the pedestrians injuries when

collisions occur. Mostly, pedestrians are unaware when they are crossing the road due to the catch of time. When they are catching on time, the pedestrians just do the assumption that they could cross the street because the car is far away from them. But the reality is the car is speeding, and it is very fast. Most accident is happened under these kinds of situation because the pedestrians are unaware of the situation. The pedestrians and to a large extent also cyclists are drawn from the entire range of the population. They include children, elderly people with reduced capacity and people with reduced mobility. No certainty licensing procedures could exclude them from the streets, even if it conceivable to think of doing so in open-minded societies (European Transport Safety Council, 2001).

3.4 Estrangement

Estrangement means that the pedestrians do others things when they are walking on the street such as eating ice-cream, listen to the music as well as walking on the street. According to Evans and Norman (1998), found that social pressure is an important variable in determining pedestrians' crossing behaviors'. The involvement of the traffic process differing from person to person and from situation to situation. Walking from one location to the other, to become a road user is not the only task we perform. Pedestrians often doing other things than travelling. The modern traffic environment is designed largely for automobiles users than for pedestrians and cyclists. This situation creates a condition of estrangement of pedestrians. Providing pedestrian facility is usually an afterthought rather being considered as a vital part in the planning and design of the traffic system. Actually, majority of European car drivers belief is more consideration should be paid attention to walking and cycling when planning for the future (SARTRE, 1997).

4. THE RELATIONSHIP BETWEEN THE LEVEL OF AWARENESS AND GREEN BUILDING PRACTICE

Table 1 also that 43% of respondents did not agree that the pollution from the refinery is no longer a major issue to be addressed and only 3.5% of respondents agreed. In addition, 44% of respondents strongly disagreed that the company withdraw money to design a green building if it is able to improve the green environment and only 3.5% of respondents who strongly agree with this statement. 38% of respondents also disagreed with global warming is not an issue that should be handled by a group of developers in Malaysia and only 3.5% are agreed. Respondents also strongly disagree with the fact that 43.0% of green innovation is not an issue that should be handled by a group of developers in Malaysia and only 4.1% who strongly agree with this statement. For the fact that green technology is very important in improving the environmental standards for the better, 44% neutral and only 14% of respondents disagreed with this statement.

Table 1: Relationship between respondents' level of awareness and green building practices

No.	Statement	Sig.	Results
1.	Multinational companies in Malaysia have a program to eliminate toxic waste / mill.	0.543	Accepted H ₀ fail
2.	The Government has implemented an active effort to address environmental issues.	0.053	Accepted H ₁
3.	The company must make a profit instead of mounting environmental ethics program.	0.032	Accepted H ₁
4.	States should undertake a more active role in promoting green innovation.	0.017	Accepted H ₁
5.	The government has done its best efforts to raise awareness about green innovation.	0.032	Accepted H ₁
6.	Pollution from the refinery is no longer a major issue to be addressed.	0.028	Accepted H ₀ fail
7.	Companies spend money to design a green building if it is able to raise good green environment	0.076	Accepted H ₀ fail
8.	Global warming is not an issue that should be handled by a group of developers in Malaysia.	0.57	Accepted H ₀ fail
9.	Green innovation is not an issue that should be handled by a group of developers in Malaysia.	0.628	Accepted H ₀ fail

Table 2 shows the differences in significant values for user's preferences in significant order: air condition system (0.050), green roof (0.004), disabled facilities, solar arrays (0.006), internal use of plants and trees (0.01), lighting (0.012), installation of solar panel (0.032), LED (0.005), physically separated walkway (0.016) and the view of outside (0.02). Therefore, the hypothesis alternative is accepted as these facilities have been highly significance to the public. Table 2 also shows that specific green facilities are rated as not being significance as shown by high ρ values (0.05), by users [for example, public phone (0.893), rain garden (0.900) and wayfinding (0.062), not significant to users were strongly agreed these facilities are more not important.

Table 2: Perception of public on the usage of green facilities

Green Facilities	Significant Value (p)
Air conditioning system	.050
Parking space	.314
Green roof	.004
Children Facilities	.705
Disabled Facilities	.025
Solar arrays	.006
Internal Use of Plants and Trees	0.01
Information Board	.309
Lighting	.012
Installation of solar panel	.032
Advertising Board	.163
Light emitting diode (LED)	.005
Physically Separated Walkway	.016
Public Phone	.893
The View of Outside	0.02
Seating Availability	.245
Self-service Vending Machine	.005
Spatially Separated Walkway	.004
Rain garden	.900
Exposure to the sun	.543
Wayfinding	.062
CCTV	.273
Glass Boarding Hall	0.01

5. CONCLUSION AND FUTURE WORK

Infrastructure facilities play a vital role in keeping the safe environment at the UUM. It is crucial for the UUM management to identify the accident prone area and make the safety policy on behalf of the community in UUM. The future researcher may use the previous researcher findings and improve the quality of the research. The future researcher may include the entire hostel, DKG, sport centre, hospital and others. It is important to observe all the possible place and state out the infrastructure facilities problem. It is also important to find out the sophisticated infrastructure facilities which can help the UUM management to reduce the pedestrian's accident. The future researcher may also do the research in quantitative research and distribute the questionnaire to the students. The research result can use together with quantitative methods and qualitative methods to make the strong foundation to the research

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Implications of Deficit Financing on Unemployment and Human Capital Development in Nigeria

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Abstract

The weak nature of human development and high level of unemployment coinciding with huge debt accumulation calls for existence attention through empirical studies. Hence, this study examines the implications of deficit financing on unemployment and human capital development in Nigeria using descriptive analysis to explain the interaction between human development index and deficit financing variables such as external debts, domestic debt and debt servicing payments on one hand. While it also explains the relationship between unemployment level and the same deficit initiatives as formerly stated on the other hand. The study concluded that the Nigerian deficit financing over time does not reflect on the ever-growing unemployment level. It also shows that despite the nature of huge debt accumulation in Nigeria, the human capital nature remains weak and insignificant. The study therefore recommends among others the need for Nigerian government to strengthen its human development capacities through all its tiers and non-governmental organizations to boost human capital in Nigeria.

Keywords: Deficit financing, human capital development, unemployment, debts, and debt service payments.

1. INTRODUCTION

Developing nations of the world have adopted deficit financing as a means of achieving infrastructural development and sustained economic growth owing to the quest to positively affect the welfare of their citizens (CBN, 2012; Hasan, 2019). Deficit financing can be seen as government deliberate action to increase central expenditure through the implementation of budget deficit. As this enables the government to embark on excess spending above its proposed expenditure over a specified period. Fiscal gaps created through deficit financing are mostly funded by the government through the combination of domestic and foreign borrowings where such debts repayments are actualized on future arrangements.

Furthermore, economic literatures have revealed several opposing explanations to justify its relative positive or negative impacts of deficit financing on the growth and development of any nation, particularly in a country with high rate of unemployment. The Keynes theory postulated that deficit financing tends to stimulate economic growth toward development in countries confronted with high unemployment (Monogbe & Okah, 2017). The scholars further opined that increase in government spending translates in excessive funds availability, tax reduction and accompanied by decrease in the rate of interest, and investments are boosted as a result of

high private savings in the economy. All these are targeted towards increasing output which indirectly creates employment to translate into economic prosperity if sustained in the long run.

On the other hand, the Neoclassicals believed that deficit financing has negative and devastating effects on the growth of a nation in the long run. As deficit financing in fiscal spending is anchored on high taxes, while both interest rate and investment remain constant. This was explained that in the event of debt repayment, the initial tax cut will be raised above the supposed rate in the previous period. This implies that accumulated savings in the economy are later channeled to offset debts in the future period. These opposing theories argue between immediate or future payment of high taxes (Monogbe & Okah, 2017). While the Ricardian believed that embarking on fiscal policy to induce the growth of the aggregate economy will prove abortive, as the theory concluded that deficit financing will not in any way crowd in or crowd out private investors (Bahmani-Oskooee, 1999). It revealed that there is no relationship that exists between deficit financing and the growth of a nation.

In Nigeria, it is evidenced that deficit budget financing has taken preference over surplus budget as a result of ever increasing capital and recurrent expenditures. Empirical figures have also revealed continuous rise in debt accumulation, debt service payments, unemployment, increasing budget deficits followed by sluggish human development index. All these explain the rhetorical justification of ever-growing values of the gross domestic product in Nigeria. For instance, the human development index in Nigeria for 1996, 2006, 2016, 2017 and 2018 remained at 0.534 which shows a weak growth rate in human capital development all through. This value calls for concern due to the continuous increase in annual budget deficits, where budget deficits are observed in 1986 at ₦8.25 billion and ₦101.0 billion in 2005, it rose to a deficit of ₦2,673.84 billion and ₦2.175 trillion in 2016 and 2020 respectively. All measures to fund Nigerian deficit budget over time prompted annual increase in both domestic and external debts. The sum of ₦28.44 billion and ₦41.45 billion were obtained as domestic and external debts respectively for the year 1986. And this debt accumulation still maintained ₦1753.37 billion and ₦451.46 billion for domestic and foreign debt respectively in 2006 despite the debt forgiveness to the Nigerian economy by the Paris club of creditors in 2005. Similarly, the 2018 domestic debt shows the sum of ₦12774.40 billion at the expense of ₦7759.20 billion for external debt. These debts values for deficit financing have accounted for annual growth in Gross domestic product of ₦15, 237.99 million in 1986, ₦39,995.50 in 2006 and continuous upward of ₦69,310.02 million in 2018. However, it can be emphatically stated that the recorded growth in Nigeria over the years have remained non inclusive of the citizens welfare owing to the high rate of unemployment as shown in 2019 at 16.6 percent from 12.3 percent in 2006. It stood at 24.17% and 26.17% in 2016 and 2018 respectively (CBN, 2019).

Economists' opinion on the Nigeria conflicting macro-economic indicators has shown that misappropriation and high level of debt mismanagement is responsible for retarded inclusive growth in Nigeria (Monogbe & Okah, 2017). Isah (2012) supported the neoclassicals argument that deficit financing has a wilder negative effect on economic growth and crowds out private investment. While Onuorah and Ogbonna (2014) supported the need for complementing domestic and external debt to stimulate economic growth. On the other hand, Obinabo and Agu (2018) and Osuka and Achinubu (2014) concluded that fiscal deficit has positive effect on economic growth and other macroeconomic indicators. These diverse opinions on deficit financing as supported by the Keynesians and the neoclassical postulations inspired the need to examine the implications of deficit financing on human capital development in Nigeria between 1986 to 2019.

This study is divided into four sections: section one discloses the introduction of the paper. Section two provides the literature review. The method of Analysis and discussion of result are captured in section three while section four gives the conclusion and recommendations from the study.

2. LITERATURE REVIEW

2.1 Conceptual Issues

There are wider perceptions by different authors, researchers and institutions on the concept of deficit financing in any nation. However, the main illustrations of the subject matter connote excessive public expenditure gap above proposed revenue of a country. CBN (2013) observed deficit financing as government practice to expend more than it received as revenue and the gap being financed through injecting money to the economy in the form of borrowing to increase business activities and stimulate economic growth. On the other hand, Nwanna & Umeh (2019) asserted that deficit financing arises as a result of government inefficiency caused by task evasion or excessive spending on non-productive ventures.

The International Labour Organization (ILO) defines the unemployed as numbers of the economically active population who are without work but available for and seeking work, including people who have lost their jobs and those who have voluntarily left work (World Bank, 1998). According to Briggs (1973), unemployment is defined as the difference between the amount of labour employed at current wage levels and working conditions and the amount of labour not hired at these levels. However, Gbosi, (1997) has defined unemployment as a situation in which people that is willing to work at the prevailing wage rate and are unable to find jobs. Within the Nigerian context, unemployment rate is defined as the percentage of persons among the labour force (15– 65 years) excluding students and those medically unfit, available for work but did not work (CBN, 1993).

The concept of human capital refers to the abilities and skills of human resources of a country, while human capital development refers to the process of acquiring and increasing the number of persons who have the skills, education and experience that are critical for economic growth and development of a country's economy (Okojie, 2005). Also, Ejere (2011) posited that human capital refers to the human factor in the production process; and consists of the combined knowledge, skills or competencies and abilities of the workforce. Thus, according to Lyakurwa (2007), human capital development has the capacity to enlarge people's choices and opportunities, improve healthy living through acquired skills and knowledge and eventually enhance growth in the nation's gross domestic product through increased productivity. To this end, human capital development remains the fundamental components of development that have the capacity to usher in country's economy to prosperity. Among the generally agreed causal factors responsible for the impressive performance of the economy of most of the developed and the newly industrializing countries is an impressive commitment to human capital formation (Adedeji and Bamidele, 2003; Barro, 1991).

2.2 Theoretical framework

It is widely believed in economic literatures that deficit financing is regarded as the Government act of spending in excess of its proposed annual revenue, where the expenditure gap is being financed through public borrowings. In view of the government deficit financing, this study utilizes the explanation of the Keynesian and the Neoclassical theories as its

theoretical framework, this is based on the conflicting arguments from the theories that deficit financing has both positive and negative relationship with the growth of a nation (Monogbe & Okah, 2017; Mohammed & Sule, 2020).

The Keynesian economists postulated a positive relationship between deficits financing and economic development through investment in consumption (Kaplanoglou & Rapanos, 2013). In the model, it was stated that an increase in government spending stimulates the domestic economy. As increasing aggregate demand, increases savings and private investment at any given level of interest rate and hence crowds-in private investment. The Keynesians provide an opposing argument to the crowd-out effect by making reference to the expansionary fiscal policy. They believed that deficits financing tends to result in an increasing domestic production, which enables private investors to be more optimistic about the future trend of the economy by increasing their investment prospects. This is termed the —crowding-inll effect. This theory suggested that active government policy could be effective in managing the economy. Deficit spending is necessary when a nation suffers from recession or when recovery is long-delayed and unemployment is high—and the suppression of inflation in boom times by either increasing taxes or reducing government expenditures. This theory concluded that governments should solve problems in the short run rather than relying on the market forces in the long run.

The neoclassical economist postulated a negative relationship between fiscal deficits and economic growth (Monogbe & Okah, 2017). The theory pointed that increase in government expenditures instigates aggregate demand and brings about both the government and private investors demanding for little available loan leading to higher interest rates and this discourages the issue of private securities, private investments and private spending, increases the level of inflation, and results in similar increase in the government current account deficits and generally reduces the development rate of the economy through resources crowding out. The Neoclassical school considers individuals consumption over their life cycle. By shifting taxes to future generations, fiscal deficits increase current consumption. By assuming full employment of resources. The neoclassical school argues that increased consumption implies a decrease in savings. Interest rate must rise to bring equilibrium in the Capital markets. High interest rate in turn results to a decline private investment, domestic production and an increase in the general price level. As the Public sector tends to expand, the private sector however contrast as a result of the increase in prices on resources attributed to an excess demand by the government, hence this leads to a decline in investment and consumption by the private sector. In this case, the public sector expansion crowds out the private sector. The resource crowding out is important in developing countries where resources are scarce. as any excess demand for these resources by the government will severely affects the private sector's productivity. The believe that government borrowing reduces private investment plays a key role in the neoclassical analysis. It is sometimes referred to as the crowding out hypothesis

The theory assumes that asset holders discount future tax liabilities in the deficits. This shows that, a deficit financing with borrowing and a lump-sum cut in tax at the moment will be accompanied by a lump-sum tax increase in the future time and will be fully offset by a rise in private saving, as taxpayers recognize that the tax is merely postponed till future date, and not cancelled.

2.3 Empirical Review

Empirical studies on deficit financing tend to justify the rationale for government borrowings to upset deficit gaps in many nations of the world. This has also equipped government to borrow through the issuance of treasury bills and long-term government bonds. Moreover, economic research revealed several conclusions on fiscal deficit financing as it affects key macro-economic variables and other socio-economic indicators. Some of the studies are reviewed as follows;

Nwanno and Umeh (2019) recently appraised deficit financing and economic growth in Nigeria from 1986 to 2016, with the aid of ordinary least square technique. The examined variables are the real gross domestic product, domestic debt, external debt and debt service payments. It revealed that both the external and domestic debts gave significant negative effects on economic growth in Nigeria. While the debt service has no significant effect on the economy.

The study of Obinabo and Agu (2018) investigated the effect of fiscal deficit on selected macro-economic variables in Nigeria from 1986 to 2018 with the aid of ordinary least square and granger causality test techniques. The variables utilized for the study are fiscal deficit, money supply, inflation rate and gross domestic product. The study shows that fiscal deficit has positive and no significant effect on gross domestic product while it has negative and no significant effect on both money supply and interest rates.

In an attempt to ascertain the feasible Threshold between fiscal deficit and economic growth in Nigeria from 1981 to 2014, with the aid of Threshold Autoregressive model, Aero and Ogundipe (2018) employed gross domestic product, growth in fixed capital formation, total labor force, trade openness, inflation rate, cash surplus/deficit and broad quasi money. The study aligned with the existence of significant positive relationship between economic growth and other dependent variables while there exists significant negative relationship between fiscal deficits, financial depth and economic growth in Nigeria. It concludes by establishing a 5% threshold for economic growth in Nigeria within a year lag.

Moreso, Tong (2018) empirically investigated the effect of official deficit on economic growth in Vietnam from 2003 to 2016. The included variables are gross domestic product, private investment, foreign direct investments and net exports. The correlation result shows that fiscal deficit has negative impact on GDP, private investment and foreign direct investment. The regression output concluded that there was no relationship between budget deficit and economic growth in Vietnam.

Ayogoeze and Anidobu (2017) assessed the impact of government budget deficits on unemployment rate in Nigeria from 1986 to 2015, with the aid of ordinary least square technique. The assessed variables are budget deficits, gross domestic product, interest rate, exchange rate and inflation rate. The results show that government budget deficit has a positive and non-significant impact on unemployment rate in Nigeria.

Dang (2016), studied budget deficits and human capital development in Nigeria. From 1980 to 2013. The vector error correction (VEC) model employed human development index, budget deficit to GDP ratio and the budget deficit financing. While the causality test shows a unidirectional long-run causality from budget deficit to human development index, long run causality exists from budget deficit to GDP ratio and human development, and budget deficit significantly influence human development in Nigeria.

Nwaeke and Korgbeelo C (2016) investigated the relationship between budget deficit financing and Nigerian economy from 1981 to 2013. The study utilized the ordinary least square regression technique. It revealed that external debt have insignificant negative influence on economic growth while both the domestic debt and the non-bank public sources debts enhanced economic growth in Nigeria, and deficit financing have no significant effect on inflation as domestic sources of financing deficits tend to increase unemployment in Nigeria.

The study of Alenoghena (2015) advanced the relationship between financial market development and fiscal deficit financing in Nigeria from 1981 to 2013 with the aid of autoregressive distributed lag (ARDL). The study revealed a long run impact of fiscal deficit on financial market development in Nigeria.

Moraa (2014) enquired the relationship between budget deficit financing and economic growth in Kenya from 2002 to 2012, using quarterly data. The study utilized the vector autoregressive (VAR) Model and the Granger causality test analysis. It applied the GDP per capita, deficit financing, investment and human capita measured in terms of workers skill acquisition. The findings show that deficit financing have a huge effect on nation's economic growth as it implies lower tax rates and higher expenditure that leads to higher aggregate demand, growth in GDP and increased inflationary pressure.

Osuka and Achinubu (2014) analyzed the impact of budget deficit on macro-economic variables in Nigeria from 1981 to 2012 with the aid of regression analysis technique. It concluded that the budget deficit exerts significant impact on Nigeria macro-economic performance over the reviewed period.

Okoro (2013) estimated a five variable vector autoregressive (VAR) technique to measure deficit financing and trade balance in Nigeria from 1980 to 2008. The study advocated a positive short run relationship between deficit financing and Trade balance. While it concluded that increasing deficit financing diminishes trade balance in Nigeria.

Okelo, Monanyi, Othoon and Aila (2013) reviewed the relationship between fiscal deficit and economic growth in Kenya from 1970 to 2007 with the aid of ordinary least square estimate. The study revealed a positive relationship between budget deficit and economic growth in Kenya. This also conforms to the Keynesian postulations.

Benjamin and Olanipekun (2013) examined the relationship between fiscal deficit and debt in Nigeria from 1970 to 2011 with the aid of error correction approach. It finally shows that domestic debt has higher impact on fiscal deficit and foreign debt in Nigeria.

Ozurumba (2012) measures the causality between fiscal deficits and inflation in Nigeria from 1970 to 2009. The autoregressive distributed lag (ARDL) technique and granger causality test were utilized. It revealed only fiscal deficit/GDP causes inflation in Nigeria. The results also confirmed a significant negative relationship growth in fiscal deficit and inflation over the studied period.

Paiko (2002) investigated deficit financing implications on private sector investment in Nigeria from 1960 to 2007 with the aid of ordinary least square multiple regression analysis, the examined variables are private investment, public sector borrowings from the commercial

bank, budget deficit, external debt stock and interest rate. The study shows a negative relationship private investment and deficit financing in Nigeria.

At this point, it is pertinent to state that the various conclusions deduced from the empirical reviews demonstrated diverse evidences in conforming to some of the theoretical postulations. The works of Obinabo and Agu (2018), Okoro (2013), Dang (2016), Osuka and Achinubu (2014) including the studies of Okelo, Monanyi, Othuon and Aida (2013) all agreed with the Keynesian view that deficit financing has a positive relationship with the growth of a nation.

On the other hand, Monogbe and Okah (2017), Paiko (2012), Moraa (2014), Alenoghena (2015), Nwanna and Umeh (2019), Aero and Ogundipe (2018) and Tung (2018) supported the neoclassical views that deficit financing have negative relationship with macroeconomic indicators in any country, however, the growth and development of any nation can be ascribed as a function of the development of its citizens over time. And on the other hand, the growth of any nation has to be inclusive in nature. That is, the welfare and well being of its population need to be ascertained and captured. On this premise, this study tends to investigate the impact of government deficit financing on human capital development in Nigeria. As this depicts a clear divergence and gap realized from previous studies in this context

3. METHODOLOGY

The study utilizes secondary data relating to budget deficit such as external debt, domestic debt, and debt service payments. Including unemployment rate and human development index sourced from the central bank statistical bulletin and the website of United nations development programs (UNDP) between 1986 -2019. The variables are structured to observe the relationship that exists among them.

The study employed descriptive statistic in the form of graphical presentations to demonstrate obvious trend and convincing interactions that exists among the key variables of deficit financing and their effects on employment and human capital development in Nigeria. In this case, the analysis will be based on the relationship between Human Development Index (HDI) and external debt, domestic debt and debt service payment. On the other hand, it will also capture the relationship between unemployment and external debt, domestic debt and debt service payment

4. ANALYSIS AND DISCUSSION OF RESULT

Table 1: Relationship between human capital development index and deficit financing variables for selected years.

YEAR	HDI	EXDT	DBT	DSP
1986	0.5	41.45	28.44	1.63
1996	0.533	617.32	419.98	53.05
2006	0.474	451.46	1,753.26	249.33
2010	0.484	689.84	4,551.82	415.66
2011	0.494	896.85	5,622.84	527.18
2012	0.502	1,026.90	6,537.53	679.30
2013	0.52	1,387.33	7,118.97	828.10

2014	0.523	1,631.50	7,904.02	941.70
2015	0.527	2,111.51	8,837.00	1,060.38
2016	0.528	3,478.91	11,058.20	1,426.00
2017	0.533	5,787.51	12,589.50	1,823.89
2018¹	0.534	7,759.20	12,774.40	2,161.37

Source: CBN statistical Bulletin 2018, Human Development Index 2018

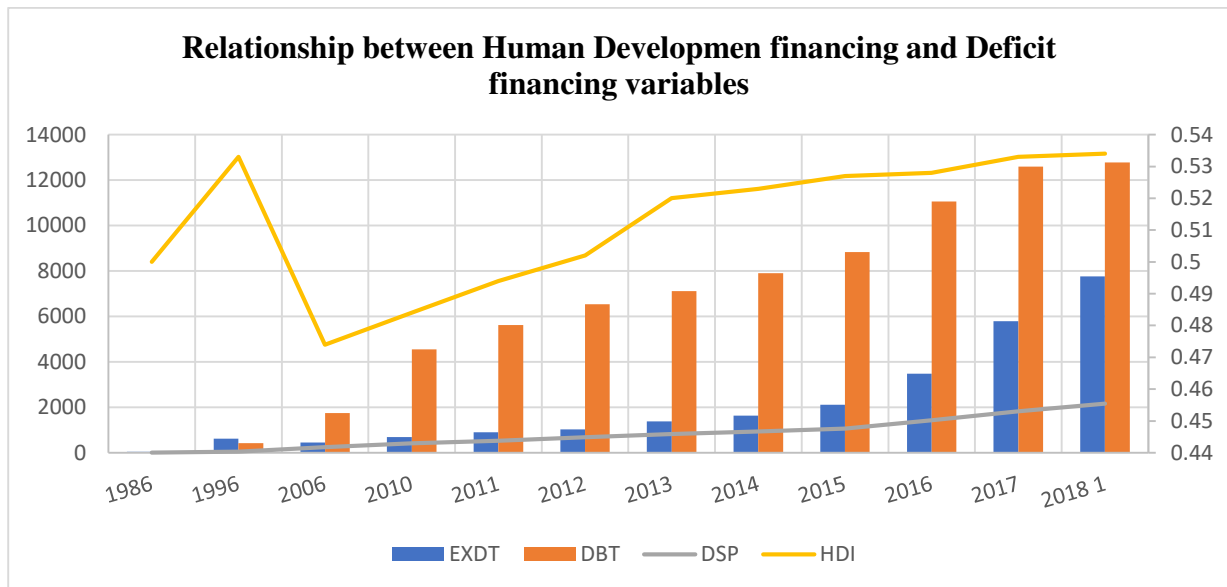


Figure 1: Graphical representation of the relationship between human capital development and deficit financing variables

Figure 1 presents explanations on the relationship between human capital development and deficit financing variables. The external debt, domestic debt and the debt service payments are employed to capture deficit financing in the study. Moreover, the left vertical axis on the graph is related to the values of both the external and domestic debts in Nigeria. While the right vertical axis on the graph explains the debt service payments and human capital development index in Nigeria. This analyzer covered the period of 1986 to 2018.

The Nigeria human Development index all through remains far less than a whole digit all through ranged between 0.5 in 1986 to about 0.534 in 2018. It witnessed marginal drop in 2010 and 2011 below 0.5. This summary explains the dormant and insignificant trend in human development in Nigeria. The Nigerian external debt values recorded in 1986 and fluctuated through the year to ₦689.84 billion in 2010. External debt revealed a sharp decrease of about 26 percent between ₦617.32 billion in 1996 to ₦457.46 billion in 2006. As this may be attributed to the effect of debt forgiveness granted to the Nigerian Government in 2005 by the Paris club of creditors. The Nigerian External debt tremendously shows increasing trend from 2012 at the tone of ₦1, 026.90 trillion in multiple folds and stood at a peak of ₦7, 759.20 trillion in 2018. On the other hand, the domestic debt stood at its minimum value of ₦28.44 billion in 1986 and rose to ₦ 419.98 billion in 1986. The domestic debt in Nigeria assumed explosive and accumulative trend annually. Where the first quarter of 2018 revealed an accumulative debt of ₦12, 774.4 billion. The numerical comparison between the external and

domestic debts shows that the Nigerian government rely more on its domestic debts to finance its budget deficits.

This reliance on domestic debt may be a strategy to avert stringent conditionalities of the international financial institutions at the point of borrowing. Furthermore, the debt service payments in Nigeria as 1986 recorded ₦53.056 billion. The annual debts service payments increases in accordance with the rise of external debt. In 2015, the external debt assumed the sum of ₦1,060.38 trillion and stood at about ₦2,161.37 trillion. It is obvious that the increase in debt service payment is a function of debts accumulation in Nigeria. In summary, the study realized that despite the rising debts and debt service payments in Nigeria, human development index remains positive. Hence, the deficit financing in Nigeria has not translate to increase in Human development.

Table 2: Relationship between unemployment rate and deficit financing variables for selected years

YEAR	UNMP	EXDT	DBT	DSP
1986	5.3	41.45	28.44	1.63
1996	2.8	617.32	419.98	53.05
2006	12.3	451.46	1,753.26	249.33
2010	21.4	689.84	4,551.82	415.66
2011	23.9	896.85	5,622.84	527.18
2012	23.5	1,026.90	6,537.53	679.30
2013	22	1,387.33	7,118.97	828.10
2014	20.5	1,631.50	7,904.02	941.70
2015	24	2,111.51	8,837.00	1,060.38
2016	24.17	3,478.91	11,058.20	1,426.00
2017	25.17	5,787.51	12,589.50	1,823.89
2018	26.17	7,759.20	12,774.40	2,161.37

Source: CBN statistical Bulletin 2018, World Development Index 2018

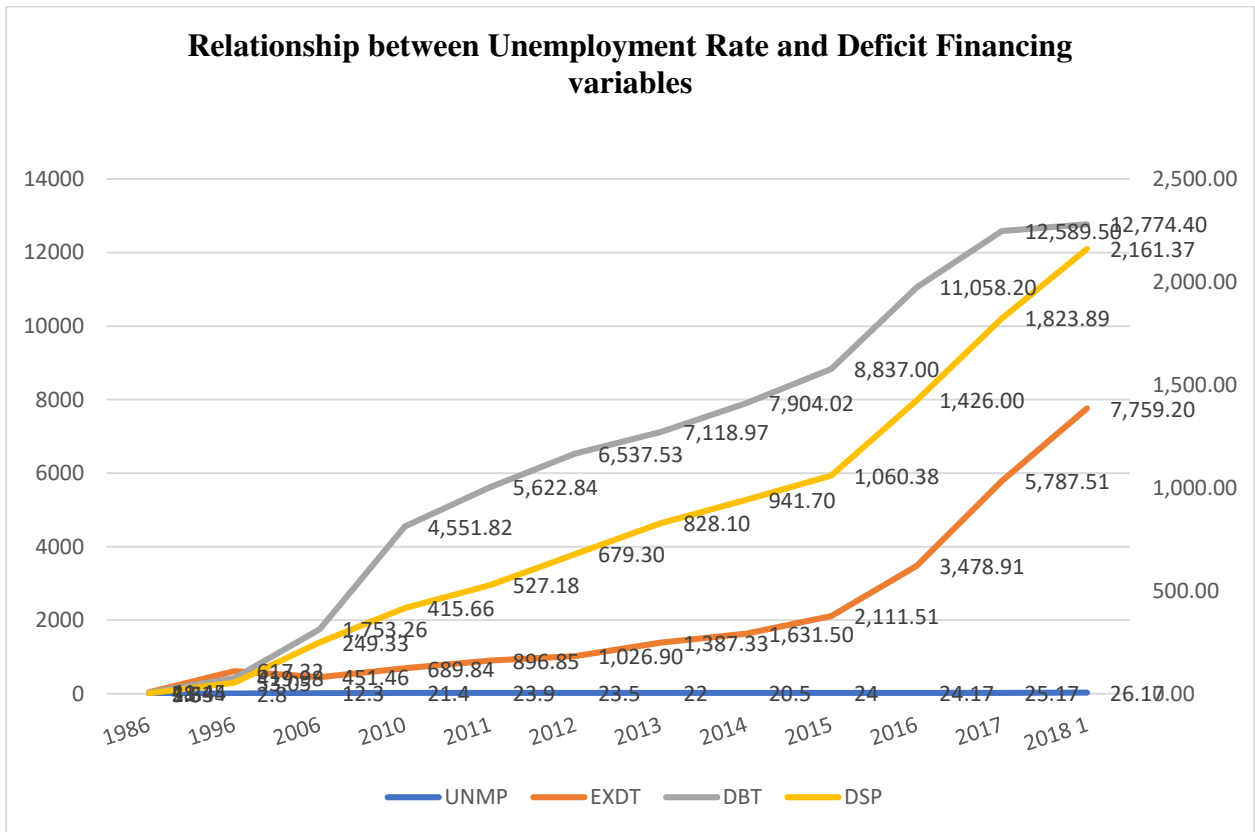


Figure 2: Graphical representation of the Relationship between Unemployment rate and Deficit Financing variables

Similarly, figure 2 demonstrated the relationship between unemployment in Nigeria and deficit financing variables such as external debt, domestic debt and the debt service payments. It is evidenced that unemployment in Nigeria stood at 5.3 percent declined within the single digit to 2.8 percent in 1996. This period characterized the implementation of the structural adjustment programme that necessitated the need for total restructuring of the Nigerian productive capacity. Hence, lower level of unemployment was attained within that decade. The 2006 unemployment rate of 12.3 percent marked a huge turning point in the history of Nigeria as this upward double-digit rate shows that the Nigerian government became incapacitated to provide gainfully employment for the teeming population. The unemployment rate in Nigeria rose to 24.17 percent in 2016, 25.17 in 2017 and stood prominent at 26.17 percent in 2018. It is obvious that the Nigerian debt profile continues to increase annually which could not reduce the annual double digits of unemployment. The debt accumulation observed in both the external and domestic debt revealed that unemployment accelerating programme and policies of the government are yet to justify the need for them. It also shows that the crowding out of the private investment in Nigeria as a result of huge domestic debt accumulation and government transfers for debt service payment are not unconnected with the annual and unending rise in the level of unemployment in Nigeria. The entire scenario on the weakness of human development strategy in the face of high un-employment level in Nigeria confirms the neoclassical views that deficit financing efforts will always remain negative, on macro-economic variables.

5. CONCLUSION AND RECOMMENDATIONS

The graphical expression of the week human development index and the upward trend of unemployment level in Nigeria confirms that government deficit financing in Nigeria debt not adequately address human empowerment despite wide deficit gap and claims on development index in Nigeria such as education, health and skill acquisition effect are largely being relegated to the background. This finding justifies the position of neoclassicals and other empirical studies such as Ozurumba (2012), Monogbe and Okah (2017), Aero and Ogundipe (2018) on the negative relationship between fiscal deficit and economic development. Importantly, the findings further shows that budgetary allocations for development are not properly utilized and might be diverted to either personal or unproductive ventures.

The following recommendations are stated to address the unprecedented outcome of the study.

- (i) The federal government need to re-strengthen its human development capacities through all tiers of government and non-government organizations in order to boost human capital in Nigeria.
- (ii) There is need for government re-orientations of the masses for supportive self-employment programme through its agencies against the current notion of that only the government give jobs to the citizens.
- (iii) The government habit to over rely on its domestic debt should be discouraged. As this tends to crowd out private investment in the Economy.
- (iv) Government diversification effort to other sectors of the economy need be encouraged to reduce the reliance on oil sector revenue due to the dwindling oil prices in the international market that frequently call for external borrowings.

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Capitalization of SWOT Analysis for Technology Strategy in MTR Sdn. Bhd.

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Abstract

In the cutting-edge of technological environment, agencies and firms must be able to adapt and evolve if they want to continue to exist and expand their business. The capability and willingness to exchange is crucial to live on in these day's exceptionally aggressive surroundings. As such, innovation has turn out to be a crucial element within the way of life of an organization and is visible as a riding pressure in attaining growth. Apart from that, strategies need to be identified that will best align with the firm's resources and technological capabilities. This can be done by for evaluating the internal potential and limitations and the probable/likely opportunities and threats from the external environment. SWOT Analysis is the most renowned tool for audit and analysis of the overall strategic position of the business and its environment. SWOT is an acronym for Strengths, Weaknesses, Opportunities and Threats. By definition, Strengths (S) and Weaknesses (W) are considered to be internal factors over which you have some measure of control. Also, by definition, Opportunities (O) and Threats (T) are considered to be external factors over which you have essentially no control. This case will give an overview of how MTR Sdn. Bhd. capitalizes this tool to analyses the overall strategic position of its business.

Keywords: Technology Strategy, SWOT Analysis, MTR Sdn. Bhd., Innovation

1. INTRODUCTION

Technology strategy can be regarded as an organisation's choices concerning the acquisition and development of technology to help achieve its business goals (Li-Hua et. al., 2013). What drives technology strategy includes maintaining of technological capabilities in existing businesses, expanding markets in existing businesses or launching a new business and securing distinctive technological capabilities from external forces. MTR company performs technology leadership in the public safety communication sector and can draw from its long-standing domain and design expertise to anticipate shifts in the industry, identify market disruptors and develop new technology solutions. In order to maintains its position in market, this company always identify, review and analyse their strengths, weaknesses, opportunities and threats using SWOT analysis (Guerel, E., 2017). Thus, this paper aims to identify the SWOT of MTR Sdn. Bhd. and subsequently, to recommend strategic alternatives to be used by MTR Sdn. Bhd. to continuously enhance their technology.

2. LITERATURE REVIEW ON SWOT ANALYSIS

SWOT analysis is originated from researcher at Stanford University in the 1960s and 1970s (Arslan & Deha, 2008). SWOT analysis is a strategic planning tool that can be used by any company, organization and industry to analyse their Strengths (S), Weaknesses (W), Opportunities (O) and Threats (T). Strengths and Weaknesses are the controllable factors that internally support and hinder organizations to grow respectively. While, Opportunities and Threats are uncontrollable factors that externally enable and disable organizations from accomplishing their mission (Jasiulewicz-kaczmarek, 2016). The main aim of this tool are to maximize strengths and opportunities, minimize external threats, transform weaknesses into strengths, and to take advantage of opportunities along with minimizing both internal weaknesses and external threats. Consequently, result from this analysis can be used by the organization

to recognize its core competencies for decision making, planning and building strategies (Phadermrod, Crowder, & Wills, 2019). There are many studies were conducted to explore the SWOT analysis deployment which covered in different types of industries and countries such as in primary industries (Akca, Kayim, & Sayili, 2006; Neagu, Bulearc, Sima, & Daniel, 2015; Ommani, 2015), secondary industries (Hoq, Ahsan, & Tabassum, 2015; Katikar & Pawar, 2011; Nagaraju & Raghavendra, 2017; Waris, Mannan, & Sanin, 2020) and tertiary industries (Al-zoubi, 2013; Citta et al., 2019; Veneramihaela, Iulia, Nedeff, & Lazar, 2014).

3. SELF ASSESSMENT USING SWOT ANALYSIS

This section describes the identification of MTR's Strengths (S), Weaknesses (W), Opportunities (O) and Threats (T) using SWOT analysis.

3.1 Strengths

The ability of MTR Company to be the first in bringing new technologies to the market even before others have, is an advantage the organisation recognizes and has incorporated in the company vision statement: "Be the leading global provider of mission-critical communications for government and enterprise customers" (Freeburg, 2012).

In order to take on the role of technology leader is important in any technology related industry, however not every organisation has the means to realise this. A firm must possess the core capabilities required to produce the technology when needed and it must have fast-cycle development processes when bringing updates on the market. MTR company is very aware of the advantage they gain when being first-movers in their field. In addition to this, MTR company have recognised, "that standards make innovation happen faster and act as a catalyst for growth that benefits customers and the industry as a whole". Put together, these two concepts form the reason why it is of great importance to the company to devote significant time and talent in these fields. At MTR company, investments in the R&D department remain a priority in order to expand and improve the product portfolio, which is done through new product introductions as well as continuous enhancement to the core products. This new product with expansive patent portfolio helps to meet business goals and enables participation, oftentimes in leadership roles, with global communications standards bodies.

MTR company invests in applications and technologies that complement and enhance their ability to keep public safety personnel safe and effective at doing their jobs. The department has a strong focus on clear return on investment and typical investments made range from \$1 million to \$5 million. In order to qualify for investment by MTR company, certain criteria must be met by these companies. The three central criteria are: there must be potential to significantly and strategically impact MTR company's business and customers; the technology must be compelling and innovative, aligning with current industry trends; and the business must be able to succeed on its own without external investment from MTR company. Over the years, the organisation has acquired or invested in relevant technology businesses and its current portfolio covers several different technology areas, which impeccably reflects MTR company's widespread areas of interest and their commitment to following current developments in the industry.

MTR company is a well-known producer of telecommunication networks, services and devices. A ranking by Netbase in 2016 placed MTR company 87 in the 100 Brand LoveList. This shows that even though most of its business nowadays is B2B, the brand is still recognised by individual customers. Its stable market position is continuously held and revenue growth of 9.89% was shown in the third quarter of 2017 which is above the competitor's growth of 3.14%. Especially the service segment is dominated by MTR company with a market share of 36.9%. As its Managing Director highlighted:

We differentiate ourselves from competitors by establishing strong and long-lasting relationships with its customers in order to increase the variety of products and support after the sale.

Each R&D centre does not operate on its own but cooperates with other centres around the world. This leads to an exchange of ideas and research results which helps to bring projects in all centres forward. The R&D centres work with the latest technology in order to develop new solutions for the customers. The importance of research for MTR company can also be seen in their employment structure. Out of 4,000 employees in Malaysia, 1,000 are working in R&D in Penang. MTR Sdn. Bhd. offers a wide variety of products to its customers. Its extensive product portfolio includes devices like police cameras and LTE devices, accessories like two-way radios accessories, software and applications, systems and networks like LTE broadband systems and analogue business radio systems and product lines and technologies like public safety LTE and industrial internet of things. All products are in line with the technology strategy and allow MTR company to generate revenue from different product groups.

MTR Sdn. Bhd. holds currently 4,300 granted patents, along with 1,300 pending patent applications. It is an indicator for the company's innovativeness and ability to protect its intellectual property from competitors. The numbers show how strongly the company is positioned in the telecommunication market. Combining the management culture, number of patents, focus on R&D and the growing revenue number, it becomes clear that MTR is a leader in innovation in the telecommunication industry. The high innovativeness constitutes in new product introductions each year.

The Managing Director emphasized on the strong encouragement towards the employee that drives innovation by stating that:

By letting employees explore ideas in areas that they are not yet familiar with, the company strives to create a working environment where ideas are respected and encouraged to pursue.

According to Iveta (2012), KPIs and rewards should be designed to motivate the employee to achieve better results and enable the whole company to increase its performance. Human capital is acknowledged as a driver for innovation and constitutes a strength of the MTR Sdn. Bhd.

3.2 Weaknesses

As with any current technologies, change and development happens fast, thus at times creating new technology areas overnight. Dealing with this can result in gaps on MTR Sdn. Bhd.'s side in providing the required competencies. Due to the fast-paced nature of the industry it is also possible that a reaction to changes in the market only happens slowly and consequently market share and business opportunities are lost. Another scenario involves the development and backing of a solution or innovation which does not succeed in the market and turns out to be a failure.

Since technology forecasting is a complex process that involves predicting future characteristics and timing of technology, it is not that uncommon that technologies are discontinued due to their lack of success (Haleem et. al.,2019).

One of the critical success factors in managing technology is creativity and how it can lead to innovation. The inspiration for new ideas comes from dissatisfaction with the current technology, therefore both people as well as environment are leading contributors to creativity. Another challenge is posed by the fact that it is difficult to quantify innovation itself, in contrast to patents for example, which makes it hard to compare it to previous years' performance and to create a baseline in the first place. Additionally, an approach to increasing innovation cannot involve encouraging staff to be more innovative.

Employees also need to persistently be kept abreast of technology evolution as well as customer experience'. Part of this information can be transferred through the company; however, it is up to the employee to check the company communication channels for news and updates regularly and to stay aware of new developments independently and this the company cannot control.

3.3 Opportunities

An opportunity for MTR Sdn. Bhd. is the predicted growth of the RFID sector worldwide. Although the RFID market has been growing steadily since the early 2000's when big Multi-National Companies like Walmart first introduced RFID into their systems. At that time however, RFID was still in its early stages and the projects never really were followed through to their full potential. However now, RFID is at a point where it can and should be deployed on a larger scale. Retailers like Macy have announced to expand their use of RFID by the end of 2018 drastically. One market study suggests that the global RFID market should reach \$38 billion by the year 2021 from \$16 billion in the year 2016. MTR Sdn. Bhd.'s radios already have the capabilities to track the asset management of a company through RFID.

Another opportunity for MTR Sdn. Bhd. lies within their core competencies. The public safety LTE market is expected to grow rapidly over the next couple of years. Market research studies suggest a growth rate of 33% over the next four years. MTR company already has the LTE infrastructure, systems as well as suitable devices in their product portfolio in order to gain from this opportunity. A strong opportunity also presents itself in the growing and emerging markets worldwide. The economic power of both the African continent as well as Asia is expected to grow significantly over the next years. Asia's economy is expected to grow the fastest out of all continents while the population of Africa is expected to increase drastically. This will almost certainly lead to an increase in demand of public safety networks and radios as well as consumer land mobile radios and MTR company should be ready to penetrate those markets further.

As MTR Sdn. Bhd. already developed systems and solutions that are able to deal with automation, the worldwide trend of increasing automation is a major opportunity. All in all, it is expected that the implementation of automation alone will increase the worldwide GDP by 1.1\$ trillion within the next ten years. One of the opportunities for MTR Sdn. Bhd. that was pointed out to us during our interview was going into partnerships, Venture Capital or acquiring companies to grow inorganically. That MTR Sdn. Bhd. is willing to do that is shown by the fact that they have acquired companies that helped them strategically before and are planning to do so again. In 2015 MTR company acquired the UK based public safety net provider Airwave and the future plans include the acquisition of Plant Holdings Inc. from Airbus, which are a provider of command centre software, at the end of 2017.

3.4 Threats

MTR Sdn. Bhd.'s main threat in the public safety communications market is its competitors. The biggest competitor of MTR company for the American market is HCorporation. Comparable in size with 21,000 employees, HCorporation is a major American defence contractor specialized in communications equipment. HCorp. own a significant portfolio of patents, intellectual property as well as technology. Similar to MTR company, although based in the US, have a global presence and reach. Their focus on research and development investments makes them a major threat to MTR company and its market presence. Alcatel Lucent is a competitor with a strong R&D department along with a presence in the most dynamic markets. Although Alcatel Lucent has been bought up by Nokia in 2015, it's flexible and responsive organization along with their many market segments pose a threat to MTR company. Hytera and Sepura are competitors who both specialize in core areas of MTR company and have significant market shares. Nevertheless, Airbus DS Communications is MTR company biggest competitor regarding the European standard of public safety radio equipment and network; Terrestrial Trunked Radio (TETRA).

Another threat to MTR Sdn. Bhd. is a switch in its core business market of land mobile radio. Traditional land mobile radio systems are analog and are slowly shifting towards digital. MTR Solution' core business has always been analog land mobile radio systems and therefore they can't afford to miss out on the switch to the digital system.

Changing government regulation of the public safety communications radios as well as lack of government contracts is another major threat to MTR company. Germany, being the biggest market for TETRA products for MTR Sdn. Bhd., changes its regulations for the public safety network each year. There is strict testing of the Federal Agency for Public Safety Digital Radio involved. Failing to meet the requirements of the agency would not only mean a loss of contracts but also research that has been done would be obsolete as a new standard is to come out in the next year. Figure 1 presents the summary of MTR Sdn. Bhd. SWOT analysis.



Figure 1: SWOT Analysis

4. STRATEGY DERIVED FROM SWOT ANALYSIS

Findings obtained from SWOT analysis were capitalized to recommend the strategies that might be used by MTR Sdn. Bhd. in strategizing their technology enhancement. TOWS matrix is used to demonstrate the strategies generated based on the relationship between external factors (opportunities and threats) and internal factors (strengths and weaknesses) (Al Salmi & Hasnan, 2015). Figure 2 shows the result of TOWS matrix.

Strengths and Opportunities (SO). Using their strong R&D department, MTR Sdn. Bhd. should invest into the growing markets. Strengthening their innovation and their business portfolio in the markets of RFID, LTE as well as their Automation technology SCADA. Their strong brand reputation should be leveraged to ease their way into the growing and emerging markets of Asia and Africa.

Strengths and Threats (ST). Their strong R&D department should also be used to develop solutions for the switching trend towards digital radio communications as well as working together with government regulators in order to stay integrate the regulations when needed. A possible lack of new government contracts can be addressed through MTR Sdn. Bhd. strong after sale service as well as their

deep relationship with existing customers; using existing contracts and expanding them to incorporate more service solutions.

Weaknesses and Opportunities (WO). MTR Sdn. Bhd. lack of competencies in certain areas can be improved through investments into new acquisitions as well as partnerships. As already stated within the opportunities, the acquisition of Airbus' communications segment as well as airwave are examples of MTR company already addressing their weaknesses through leveraging their opportunities. MTR Sdn. Bhd. should avoid crossing into the core competency areas of their main competitors, such as Hcorperation, especially when those areas are new to their company.

Weaknesses and Threats (WT). Research and Development into those areas would require massive investments and would take a long time to gain market share from those competitors. Government Regulations MTR Sdn. Bhd. are not familiar with should also be avoided as much as possible as they too would require massive investment with an unknown outcome.

SO Strategy	WO Strategy
<ol style="list-style-type: none"> 1. Investing into growing market 2. Leveraging the brand reputation to penetrate into emerging market of Asia and Africa 	<ol style="list-style-type: none"> 1. Investing in new acquisition and partnership 2. Strengthening relationship with existing customer
ST Strategy	WT Strategy
<ol style="list-style-type: none"> 1. Developing solution towards new trends of digital radio communication 2. Conspiring with government regulators 	<ol style="list-style-type: none"> 1. Avoiding massive investment with an unknown outcome

Figure 2: TOWS Matrix for MTR Sdn. Bhd.

5. CONCLUSIONS

MTR Sdn. Bhd. vision is to be the leader in the market of mission-critical communication systems for governments and public enterprises. This is backed by the strategy to be a leader in innovation which is promoted throughout all levels of the company. The employee motivation that is internally done at MTR Sdn. Bhd. The focus is on encouraging the personnel to come up with new ideas and to pursue them by discussing them with members of several departments to find out if the idea is feasible. The incentive structure in the company was developed to be in line with the strategy and shows that the employees are highly valued and seen as the engine for innovation.

MTR Sdn. Bhd. operates in a volatile market and has to adapt quickly to changes. In order to cope with this challenge, investments are made to broaden the research capabilities and leading companies in specific sectors are acquired. The direction for the coming years will be a stronger focus on the after-sale activities to even further strengthen the relationship between MTR company and its customers.

The SWOT analysis has shown that the company is already in a very strong position. It can be derived that the most important strategy for the coming years has to focus on exploiting opportunities by using the current strength. It will be important to strengthen the business portfolio in RFID and LTE markets and enter the unexplored markets in Africa and Asia by using the strong brand reputation.

This case study presented the different angles on MTR Sdn. Bhd.'s technology management and innovativeness. Its growing position in the market can be traced back to the focus on R&D and the exceptional utilization of the strengths in order to exploit new opportunities and become more competitive.

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Kopi Ajes: The Long-Lasting Aroma of Local Black Coffee?

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Abstract

Kopi Ajes was a well-known “kopi kampung” producer in Batu Pahat and Muar Johore. This case study educates readers on the business nature of small coffee producers. The study further explains the changes occurred in the coffee industry throughout the decades. The key finding of the study was the challenges and threat faced by Kopi Ajes due to the growth of current trend in modern coffee. Pak Ajes, was worried on the sustainability of his business.

Keywords: Black coffee, coffee culture, kopitiam, coffee concept shop, premium coffee shop, the wave theory of coffee

1. INTRODUCTION

Pak Ajes was a black coffee lover. For him, his day was not complete without a morning coffee. The aroma of the black coffee made his days more productive. Being brought up in a farmer’s family that usually started their day with a cup of coffee before heading to their farms, made his passions towards coffee undeniable. His dream was to produce his own coffee products. However, first he must equip himself with adequate knowledge on coffee processing. He was a coffee drinker, and not a coffee producer.

One rainy day in the middle of February 1991, when his father was not going to the farm, Pak Ajes had a chance to share his idea on venturing into the coffee business. At first, his father seemed not so interested. They were farmers for generations and his father was reluctant to change the way of their life.

Pak Ajes: Dad, you know how I love coffee. What do you think, instead of buying from other people, why not we produce our own coffee with our own brand? The Malay “Kopi Kampung”. We have lots of prospects among the villagers nearby. They love coffee as well.

Father: How you want to do that? You know nothing about coffee processing. You don’t even know how to prepare a perfect cup of coffee. Since you were a child, your mum always prepared the coffee for you. Even now at the age of 31 you still don’t know how to do it. Your wife does it for you. We live happily in our little cottage and our life is never better.

Pak Ajes: It is a small matter Dad. The skills can be learned. Do you remember Abu, my childhood friend? He works with one of the coffee factories in town. We met last week and he is willing to guide me on how to process the coffee. Besides, I am talking about producing the ground coffee, not opening a coffee shop. If it works well, I will be able to help you support our family. Like what you said: “Our life is never better”. Now is the time for us to make our life even better.

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Father: Son. If that is what you said, I will support whatever your decision is. But do make sure that you have proper planning. This is not a joke. This is about investing a hefty sum of money.

With the blessing of his parents, Pak Ajes determined to pursue his dream with the motivation of levelling-up the status-quo of his family. His father was an ordinary villager with no extra money to help him. They live from hand to mouth. To show his support, he made a small partition in the kitchen of his house at Kampung Parit Sidek, Batu Pahat Johore, letting Pak Ajes processed his coffee in that area.

2. THE AZIZ COFFEE TRADING

After weeks of hectic training and practicing, on 4th April 1991 history was recorded. Pak Ajes sold his first ground coffee after registering his business under the name of The Aziz Coffee Trading. The business manufactured and sold freshly ground coffee to suit the demand of light “Kopi Kampung” by local people. He named his coffee as “Kopi Ajes”. The first sale took place by the roadside at Pekan Baru, Parit Yusof, Muar, Johore, ten minutes away from his house. He ground and packed the coffee on site on a small trishaw. The aromatic smell of freshly ground coffee influenced more people to stop by and bought his coffee. The timing and place were a wise choice. Every Wednesday morning there was a famous morning market known as “Pasar Rabu” among people in this area. People from all over Muar, Batu Pahat and Parit Sulong¹ preferred to shop at “Pasar Rabu” due to the varieties of merchandises available. Furthermore, the morning market was bigger and operated longer hours compared to the other morning market nearby. Even though at first Pak Ajes worried he would not be able to convince customers to buy his coffee at “Pasar Rabu”, finally he was satisfied with the decision. His coffee was sold out on the first day of the business. “Pasar” means market and “Rabu” means Wednesday. That was how they derived the word “Pasar Rabu”. It only operated on Wednesday morning. If that particular Wednesday was raining, Pak Ajes did not open his stall. Ground coffee was very sensitive towards humid weather. The humidity would harden the texture of the ground coffee and changed the taste. Pak Ajes didn’t want to take the risk of losing customers.

2.1 The Expansion

Days went by and the business was expanding. Few weeks after his first sale, Pak Ajes started his second stall at Pekan Parit Batu Putih morning market on every Tuesday which was 15 minutes away. Six months later, he bought a small wagon replacing his trishaw. With the wagon, every Saturday morning he was able to join the morning market at Pekan Parit Sulong which was nearly 20 kilometres away. At this time, his coffee had been well known among local people in Muar, Batu Pahat and Parit Sulong. When Pak Ajes was not in the stalls, people came to his house to buy his coffee. After two years in the business, Pak Ajes saw the need for him to increase his production. The space at his parents’ house was no longer suitable for him to produce more coffee as the demand were growing. Also, he needed more spaces to stock his coffee. With the consent of his parents, he built a new facility in front of his parents’ house. The build-up area of the factory was nearly 1,000 square feet, complete with the processing, roasting and storing spaces. There was also a drying area located outside the building.

The business was getting better. Few years later, in 1995 Pak Ajes bought a bigger van. With the new van he was able to open more stalls at other morning or farmer’s markets that were located more distant away from his current premises. Every Friday and Sunday morning, he joined the morning market at Pekan Sri Medan and the farmer’s market at Stadium Muar which were 32 and 39 kilometres away.

¹ Muar, Batu Pahat and Parit Sulong were districts located in the State of Johore, in south of Peninsular Malaysia.

Aligned with the expansion in the number of selling outlet, Pak Ajes also offered new product in the market, “sachets ground coffee”. It was introduced in 2015. Each pack contained 20 sachets. It provided convenience to customers to maintain the dryness of the ground coffee and even more convenient to prepare a cup of coffee. It also allowed Pak Ajes to easily inventoried the ground coffee. As the sachets ground coffee were airtight packed, Pak Ajes was able to distribute his coffee at nearby groceries stores. Some of his customers even willing to help him sell the sachets ground coffee to their friends, colleagues and contacts resided outside Muar, Batu Pahat and Parit Sulong. Pak Ajes had a vision of distributing his sachets ground coffee at the local supermarkets, comparable with other well-known coffee in Johore such as “Kopi 434” and “Kluang Coffee”.

In early 2020, following the current trend of other coffee producers, Pak Ajes started selling roasted white coffee beans in the market. What was so special about the white coffee? To produce white coffee, the coffee beans were roasted without any additional ingredients, maintaining the real taste of coffee. This is contrary to how ordinary coffee was roasted, which was done with the mixture of buttery margarine and sugar, forming the aromatic smell. Each class of coffee had their own fans. The growth of Aziz Coffee Trading from selling only 1 product at two morning markets towards three products at more markets was summarized in Table 1.

Table 1: The growth of Aziz Kopi Trading

	April 1991	October 1991	1995	2015	2020
Products	Ground coffee	Ground coffee	Ground coffee	Ground coffee Sachets ground coffee	Roasted white coffee beans Sachets ground coffee Ground coffee
Selling Outlets	2 morning markets In-house sales	1 farmer’s market 2 morning markets In-house sales	2 farmer’s market 3 morning markets In-house sales	2 farmer’s market 3 morning markets In-house sales	2 farmer’s market 3 morning markets In-house sales
Transportation	Trishaw	Wagon	Van	Van	Van

2.2 The Operations

Pak Ajes’s weekly schedule was very packed. He would be at the morning or farmer’s markets five days a week and spent the other two days processing the coffee in the factory. Generally, the morning and farmer’s market operated between 8 am to 1 pm except the morning market at Pekan Sri Medan. It closed at 12 noon since Muslims needed to perform the Friday prayer at around 1 to 2 pm. Every business day, on the afternoon session Pak Ajes made preparation for his next business day. Table 2 showed clearly how his week was filled with his business scheduled.

Table 2: The growth of Aziz Kopi Trading

Day	Activities	Distance from the factory
Monday	Coffee processing in the factory: Roasting	
Tuesday	Morning market at Pekan Parit Batu Putih, Batu Pahat	10 kilometres
Wednesday	Pasar Rabu at Pekan Baru, Parit Yusof, Muar	8 kilometres
Thursday	Coffee processing in the factory: Grinding	
Friday	Morning market at Pekan Sri Medan, Batu Pahat	32 kilometres
Saturday	Farmer's market at Pekan Parit Sulong	20 kilometres
Sunday	Farmer's market at Stadium Muar	39 kilometres

2.3 Coffee Making Process

The coffee making process was not hard and Pak Ajès enjoyed doing it. Coffee was his spirit. Coffee was his world. He was surrounded by the scent of coffee since he was a kid. Most of the farmers in his village planted coffee as secondary income apart from palm oil and rubber. This was a good opportunity for him. He purchased supplies of coffee cherries from the villagers to save the transportation cost. Furthermore, the price was cheaper than other places. However nowadays, most villagers were focusing on palm oil planting, because the return was more promising. Due to this, he needed to go as far as 70 kilometres away to Benut in Pontian and FELDA Chaah in Segamat², hunting for additional supplies.

As soon as Pak Ajès received the coffee cherries, he needed to dry the cherries as soon as possible to maintain the quality. Since he did not have a drying machine, he had to use the traditional way. He sundried the coffee cherries for about two weeks in a flat drying area next to his factory. The drying process might take longer during rainy season. Once the coffee cherries already achieved the required level of dryness, the dried skin/husk were removed. The process did not take long as Pak Ajès used the milling/shelling machine and it was done on the afternoon session after he closed his stall at the morning or farmer's market.

Next was the most challenging step. Roasting the coffee beans at 210-degree Celsius to produce medium roasted coffee bean³. The mixture of sugar and margarine were added to produce ordinary black coffee. The moment the beans turned brown a nice fresh aroma of caramelised roasted coffee penetrated the roasting area. Pak Ajès loved the aroma. On the other hand, in the case of white coffee, no additional ingredients were added during roasting to maintain the pureness of the taste. Special roaster equipped with automatic paddle was used to make sure the beans were well blended and thoroughly cooked. Temperature of the roasted beans automatically cooled down after being released from the roaster. Subsequently, once it reached room temperature the roasted beans were neatly packed in air-tight container and ready for the grinding process.

At maximum capacity, the machine was able to roast 100 kilograms of coffee beans for each cycle and it could run five cycles a day. In total, it was 500 kilograms of coffee beans a day. On average, the weight of the beans would increase by 30 percent during the roasting process after adding sugar and margarine. It meant that the daily production of his factory may reached 650 kilograms of roasted coffee beans. However, he was a one man show and was not able to run the machine on a daily basis. Table 7 showed that Pak Ajès were able to roast his coffee beans only on Monday.

To maintain the freshness, Pak Ajès only grind the roasted coffee on site at his stall or only on demand for in-house selling. He rarely stock-up the ground coffee to maintain the freshness except the sachets ground coffee. Grinding for sachets ground coffee were done every Thursday at his factory and sent for outsourced packaging in Batu Pahat every Friday.

² Pontian and Segamat were another districts located in the State of Johore.

³ The suitable temperature was between 180 and 240 degree Celsius depended on the roasting level (light roast, medium roast and high roast).

Figure 1 illustrated the flow of coffee processing. Starting from sun drying the coffee cherries towards the packaging activities.

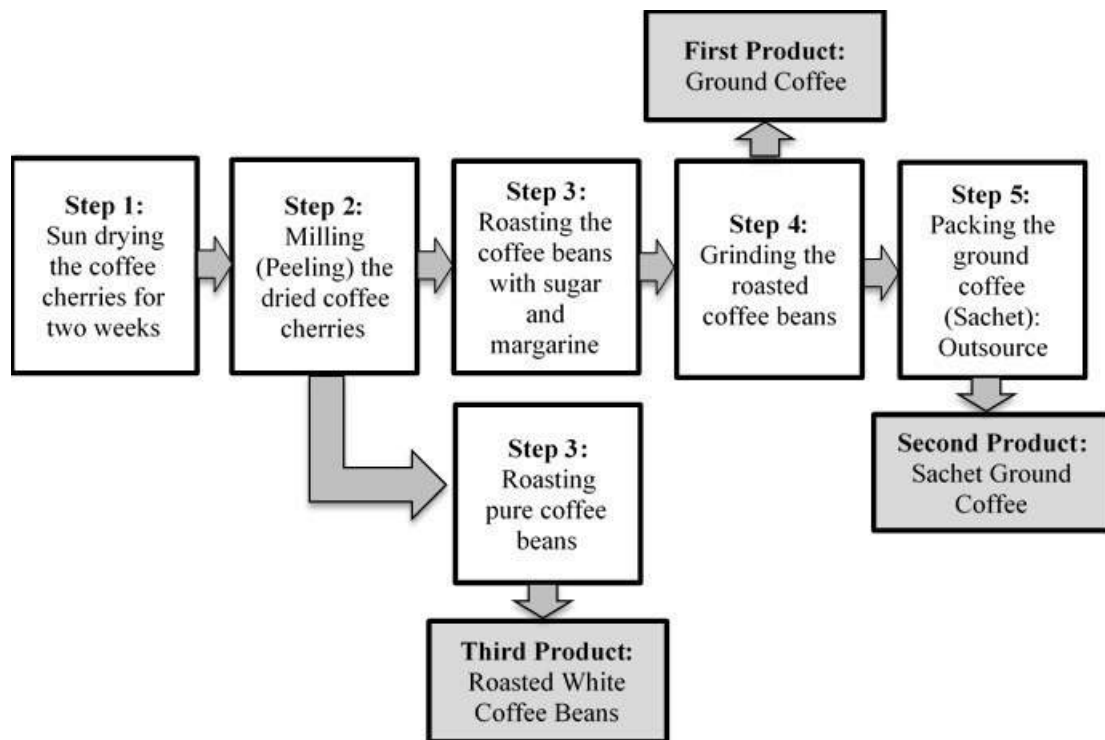
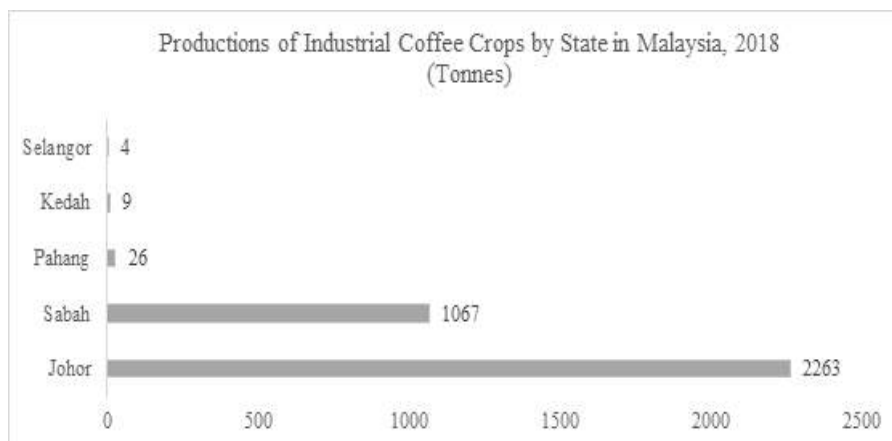


Figure 1: Flow of the Coffee Making Process

2.4 Competitors

Johor was the main producer of industrial coffee crops in Malaysia. Figure 2 highlighted that in year 2018 Johore produced 2,263 tonnes of coffee crops at 67.2 percent of total productions. It was followed by Sabah 1,067 tonnes at 31.7 percent. The rest were produced by Pahang (26 tonnes), Kedah (9 tonnes) and Selangor (4 tonnes), at 0.8 percent, 0.3 percent and 0.1 percent from total production.



Source: Department of Agriculture of Malaysia (2018)

In line with the status of leading coffee producer, Johor was well-known with “Kopi 434” which were originated in Muar, since 1953 under the name of Sai Kee Coffee Serbuk Sdn Bhd. Another most well-

known coffee in Johore was “Kluang Coffee” which were originated in Kluang⁴ since 1966 under the name of Kluang Coffee Powder Factory Sdn Bhd. “Kopi Aik Cheong” was another established coffee producer in Malaysia. It originated from Malacca⁵ in 1955 under the name of Aik Cheong Coffee Roaster Sdn. Bhd. All these coffee producers started with black ground coffee and as of today they were producing variety of products including black coffee series (ground, sachets and 2 in 1) as well as white coffee series (ground, sachets, 2 in 1 and roasted beans). Kopi 434, Kluang Coffee and Kopi Aik Cheong were recognised all over Malaysia for a long time. They were easily available in the local and international market through physical and online platform such as Shopee and Lazada.

The day Pak Ajes decided to start his coffee production he felt that it was his responsibility as a Muslim to fulfil the demand of Malay Kampung coffee, together with the famous “Kopi Tuah”. He was more motivated as recently, customers’ awareness on Halal and Shariah compliance products increased after the social media sparked the Buy Muslim First (BMF) Campaign. The campaign encouraged Muslim community to buy products or services from Muslims producers (Nor Azaruddin Husni, 2019). Kopi Tuah originated in Seberang Prai, Penang⁶ in 1955 under the name of Syarikat Hang Tuah Sdn Bhd. Although it entered the market more than 60 years ago, the market focused in the northern area of Peninsular Malaysia. This was the opportunity for Pak Ajes to market his coffee in the southern area. The Indonesian originated coffee, “Kopi Kapal Api” was another famous coffee produced by Muslim. Kopi Kapal Api started operation in 1927 and entered the Malaysian market in 2009.

Table 3 compared the average price of Kopi Ajes with the competitors as in October 2020. Pak Ajes did not worried much about the price. For him, everybody had their own preference on the taste of the coffee. The coffee lovers were willing to pay their preferred coffee at any price.

Table 3: Price of Processed Coffee

Types of Coffee	Sachets (20 pcs):		Ground Coffee	
	Price: RM	Weight: grams	Price: RM	
Kopi Ajes	5	600	10	
		1000	16	
Kopi 434	10	500	12	
		1000	22	
Kluang Coffee	8	500	14	
		1000	24	
Kopi Aik Cheong	9	250	8	
		500	14	
Kopi Tuah	11	200	6	
		1000	16	
Kopi Kapal Api	9	500	13	

3. THE NEW ERA OF COFFEE

It had been nearly 30 years since Pak Ajes made his first sale. Pak Ajes was aware that the coffee drinking style and the taste of young generations towards coffee were changing. Coffee industry had entered the new era in the new millennium with more varieties of coffee products and styles in the market. The market for black coffee industry especially for a small-scale producer such as Pak Ajes was more challenging. This transformation of the industry could be explained through “The Wave Theory of Coffee”.

⁴ Kluang was another district in Johore

⁵ Malacca was a neighbour state of Johore

⁶ Penang was a state in northern area of Peninsular Malaysia.

3.1 The Wave Theory of Coffee

The wave theory of coffee showed big changes in the coffee industry and the global culture towards the demand of coffee over the decades. Table 4 summarised the detail of the theory.

The first wave was known as traditional coffee culture and started as early as in 1800s (19th century). It involved mass coffee production. Consumption of coffee was growing at common place. Packaged coffee was everywhere in the market and coffee drinking culture was normal at common coffee shops. Refuelling was the purpose of the coffee drinking. Entering mid-20th century (mid 1990s) the second wave introduced the chain coffee shops such as Starbuck Coffee in the market with their specialty coffee. The term such as “cappuccinos”, “latte” and “espresso” were getting common. Coffee drinking was for an enjoyment (Ferreira, J. 2018).

In mid 2000s (mid-21st century) the new millennium came together with the third wave. Demand were focusing on the origins and craft of coffee, known as “Artisan Coffee”. Roasters were looking for high potential planters who were willing to do extra effort in planting high quality beans to fulfil customers’ demand. The coffee drinking was more on personal expression. The fourth wave was known as the “Science of Coffee”. It started in 2010s. Coffee drinkers preferred custom in house roasting. Lot of coffee drinkers had their own coffee equipment and accessories. The coffee drinking habit turned to be obsession (AFP, 2020). The fifth, known as the “business of coffee” started in mid 2010s. It was the combination of all previous waves by business practices with high quality boutique concepts (Young, J., 2017). It was about the success of the business offering strong and premium coffee (Allegra, 2018). Excellence was the key.

Table 4: The Wave Theory of Coffee

Development Wave	1st	2nd	3rd	4th	5th
Focus	Traditional coffee culture	Branded chains	Artisan coffee	Science of Coffee	Business of Coffee
Period	Started 1800s	Started mid 1990s	Started mid 2000s	Started 2010s	Started mid 2010s
Dominant Brand	Retail/supermarket brands	Coffee shop chain brands	Artisan roaster brands	Custom in house roasting	Smart boutique concept
Defining characteristics	Functional	Lifestyle	Craft	Science	Focus
Defining emotion	Refueling	Enjoyment	Love	Obsession	Excellence

Source: <https://www.allegraceforum.com/what-is-the-5th-wave/>

In Malaysian context, the third wave of coffee was not yet fully developed. The first wave was a time where people loved to drink at local coffee shop or “kopitiam”⁷. Kopitiam was known among Malaysians for their fresh roasted buttery coffee with hot toasted kaya bread and half boiled eggs. The second wave started when some kopitiam such as Old Town White Coffee started establishing their brands as franchises. International franchise coffee shops such as Starbuck also started entering the Malaysian market in the second wave with their specialty coffee. The third wave started when young generations came back to Malaysia from overseas after completed their study abroad. They brought the culture of artisan coffee into Malaysian market and changed the Malaysian coffee industry.

⁷ Kopitiam or kopi tiam is a traditional coffee shop mostly found in South East Asia patronized. The word “kopi” is an Indonesian and Malay term for coffee and “tiam” is the Hokkien/Hakka term for shop.

4. THE CHALLENGES

The taste of future generations towards coffee had changed over time. Pak Ajes worried that in the future, he might not be able to compete with all these fancy coffees. Lots of questions came into his mind. Will the black coffee survive in the future? What should I do for the survival of my business? How to be more innovative so that my product can attract the young generations? What ever happen in the future, I need to stay motivated. I had promised my parents to improve the financial status of my family. I had promised myself to be as competitive as the non-Muslim producers, supporting the BMF campaign.

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Is Work from Home Effective and Efficient During the Pandemic Covid-19?

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Abstract

March 18, 2020 was announced by the 8th Malaysia Prime Minister as the beginning of Movement Control Order or MCO in nationwide. Majority of the government staff and private sectors' staff were uncertain and confused with many circulars, media statements and news. Malaysian were overwhelming with rapid news and information, which received within a short period. At one point, the government staff were advised to work from home (WFH) for safety reason. Thus, this study intends to explore some issues related to WFH, as well as to identify information regarding the advantages and disadvantages of WFH during the pandemic Covid19. This paper applies case study method, using a qualitative approach to discover and build understanding of complex phenomenon. The focus will be on investigating the effectiveness and efficiency of WFH from the government organisation perspective. Data were gathered through observations, interviews and newspapers. Based on the findings, the observed items explained a significant part of the WFH outcomes. Communication, accessibility of the organization's documents, health and work-life balance were found to be the most important factors that impact the staff. This study suggests some solutions to increase the effectiveness and efficiency of WFH in the organization by highlighting the suitable method that promotes the productivity of the staff to work effectively and efficiently while being at home.

Keywords: Work from Home, communication, accessibility, effectiveness, efficiency

1.0 Introduction

World was shaken early December 2019 with new disease that spread rapidly among the residents of Wuhan City in Hubei Province, China. This outbreak caused an unusual situation, with pneumonia symptoms. Due to this development, the Chinese government decided to send a report to the World Health Organisation (WHO) on December 31, 2019 (Secon, Woodward and Mosher, 2020; WHO, 2020a). An immediate action was taken to response to the report as the number of outbreak cases, Covid-19 increased each day. In January 1, 2020, the WHO setup a Management Incident Support Team (MIST) at all three levels of the organization, putting it on an emergency footing to deal with the Covid-19 (Gralinski and Menachery, 2020). Since then, the Covid-19 had spread to more than 200 countries and has been declared a global pandemic by WHO.

In Malaysia, the first case of Covid-19 was detected on January 25, 2020 involving three tourists from China (Reuters, 2020a). Ever since the first case, the number of cases gradually increased. On March 17, 2020, the first two deaths were reported (New Straits Times, 2020a). Eventually, on March 18, 2020, the 8th Malaysian Prime Minister announced the implementation of movement control order (MCO) as a mitigation effort to reduce community spread and the overburdening of the country's health system. This action aligned with other countries' decision to prevent the spread of Covid-19 outbreak (Papadopolos, Baltas and Balta, 2020). However, the decision had implications for sustainable operations particularly on reduction of business activities, HR issues related to staffing and supply chain disruptions. Those restrictions had badly effects on small-medium enterprises (SMEs) than on larger and global firms (OECD, 2020).

Malaysia's MCO was similar to lockdowns in China and Italy, where Malaysians were only permitted to leave the house for basic activities such as buying groceries and seeking medical treatment. The MCO also restricted Malaysians from leaving the country and all foreigners from entry to any entry points. Non-essential sectors were ordered to close operations or allow staff to work from home (WFH). However, it will be a different scenario in government organisation. Challenge arise here, since WFH is relatively new implemented concept in Malaysian environment especially in government setting. It is still unclear whether it is effective or not towards the organization. There is less past evidence to prove the effectiveness or efficiency of WFH applied by government staff. Thus, in order to address this gap, this study investigate the effectiveness and efficiency of WFH from the government staff's perspective. This study employs a qualitative case study research, which uses observation, semi-structured interview and secondary data. In this study, the case to be investigated is the effectiveness and efficiency of WFH during the pandemic Covid-19, in one of the government agencies in East Malaysia-the PAP Division (Public Agencies & Investment Monitoring Division). This agency is one of the departments under the Ministry of Finance, Sabah.

This paper offers some insights into WFH during the pandemic Covid-19 and it is divided into six sections. The first section introduces and gives some overview of this paper. Section 2 briefly reviews the concept of WFH in Malaysian context. Here, this section also gives a practical definition of WFH, practice of WFH before and during the pandemic Covid-19 and discuss the advantages, as well as, disadvantages of WFH. Later in section 3, this paper explains the research methodology used in this study. This is followed by analysis findings in section 4 and discussions in section 5. Lastly in section 6, this paper offers conclusion together with future recommendations.

2.0 Literature Review

2.1 What is Work from Home?

The concept of WFH exist even earlier before the existence of pandemic Covid-19. However, the concept being known with different terms such as telework (Ng and Khoo, 2000), homeworker (Mehrotra and Biggeri, 2005), home-based (Grough, 2012) and telecommute (Teh, Ong and Loh, 2013). The term teleworks used as the work being performed from different locations say from home, which allow staff to perform their task through the use of information and communication technologies. Homeworker involved in a wide range of productions either products or services, but they are under the category of unpaid family labour (Loh-Ludher, 2017). They are also not entitled for any legal benefits like annual leave, panel clinic or allowances. Most of them were women with children or senior citizens (Loh-Ludher, 2002). Different than the home-based, it is referring to a primary business activity, which is carried out from home and it can be of any size or any type as long as the office itself is located in a home (Fong, Ching and Chan, 2000). In earlier practices, the home-based is operated from home as a part-time job and women mostly involved. However, with the emergence of technology, the home-based activities become a new trend among working community. Meanwhile, the term telecommutes means staff are allowed to work from home with a conducive working environment (PEMANDU, 2010). Again, women are more beneficial with this programme. Based on the previous studies, practices of WFH, regardless of terms used, given more advantages to women. Nowadays with a pandemic Covid-19, WFH is applied almost to everyone except for certain nature of works or industries such as staff in health, financial, security, legal, transportation and etc.

While in Malaysia, the application of WFH is relatively new, but it is a common thing in the west especially in a country like the United States and Europe. In the Western countries, information technology (IT) has been an essential part of the organization. Since those technologies are available at home, it becomes the main reason that contributes to the efficiency and effectiveness of WFH. The technological advances have proved the efficiency and effectiveness of WFH (Baruch and Nicholson, 1997). In addition, the previous studies on implementation of WFH increase productivity and job satisfaction among staff (Sulaiman, M.Shariff and Ahmad, 2009; Vani, 2011; Teh et. al, 2013; Subramaniam, Overton and Maniam, 2015; Purwanto, Asbari, Fahlevi, Mufid, Agistiawati, Cahyono and Suryani, 2020; and Papadopoulos et al., 2020).

2.3 Practices of WFH before and During Pandemic Covid-19

Venkatraman, Tanriverdi, and Stokke (1999) investigate the WFH implementation at company level in Norway by Statoil Company for its transformation purpose to global synergy group. According to Venkatraman et al. (1999), WFH preference differed between staff job positions. The WFH concept was found beneficial for staff working in shifts. Based on the data collected from the US National Study of Changing Workforce (NSCW), Halpern (2005) how time-flexible work policies can improve health, reduce stress and save money. The results showed that staff had greater loyalty to their employers and reported fewer symptoms of stress when the number of flexible work policies was widely available. Jang (2009) also used the NSCW dataset to examine the relationship between WFH flexibility and staff performances. The results were staff who had a flexible working environment perform better because flexibility enables them to have a positive effect on their well-being.

While, Dutcher (2012) investigates how WFH influences individual productivity by conducting a real-task laboratory experiment at a US university. This study finds that WFH increases productivity of individuals when doing creative tasks. At the same time Dutcher (2012) also finds that WFH has a negative influence on productivity particularly for the task, which considered as boring.

While in Malaysia, Ng and Khoo (2000) discussed the issues and prospects of teleworking in Malaysia. They state that teleworking could facilitate in realizing the national objective on achieving a knowledge economy and society. However, the first idea of WFH as a new element in the Human Resource strategy only introduced after a few years the concept accepted in Malaysia. Supramanian (2015) suggested flexible employment can be implemented in Malaysia by considering appropriate technology, staff setting up their standards based on the company's expectation and flexible working hours. This model works well for those in the creative industry. All this while, the application of WFH was never be thought seriously until the outbreak of Covid-19. The pandemic has forced and changed the way of people live their life.

Since the lockdown has made people stay at home, most of the businesses have been trying to go for Work-from-Home (WFH) concept. To implement WFH concept, several technical platforms are being used to make sure that the efficiency of the staff remain intact. Several IT companies, academic institutions and other industries have gone completely online, and the staff are now expected to work-from-home with a different set of rules and regulations that would suit the organizations. In these changing times, the staff have to shift their modus operandi completely and that may be a reason of concern considering their perception and eagerness to adapt to the situation.

2.3 Advantages and Disadvantages of WFH

As discovered by Troup and Rose (2012), the staff will have sufficient time to meet family demands and responsibilities. Staff who undertake this mode of working are able to monitor their children development and give consistent motivation throughout the growing process. Parents and children bonding are developed through the process while WFH. This advantage can strengthen the relationship between family members (Subramaniam et al., 2015).

The previous studies also mentioned about a huge number of people are wasting their time travelling to-and-from work as a lot of commercial cities have unbearable heavy traffic before and after office hours. However, this issue is solved by applying WFH. Staff can save time from commuting and travelling (Ng and Khoo, 2000; Srivastava, Sethurnadhavan, Raghupathy, Agarwal, and Rawat (2015), reduce stress from family and work conflicts (Halpern, 2005) and also save money from fuel or public transportation expenses (Teh et al., 2013, Purwanto et al., 2020).

Another advantage of WFH is it gives flexibility as the staff can decide their own time (Ng and Khoo, 2000). Staff can control all their tasks and can be more flexible in term of timing and space. However, recent study by Vishal (2016) argued that WFH will affect the staff productivity. WFH will make the staff engage with the personal chores hence affecting the time taken to complete the task. This study is also supported by Srivastava et al (2015) that suggested the staff productivity will be reduced as the

lack of human interaction and communication with co-staff and employer which lessen the competitive spirit.

Bloom (2014) point out the employer perspective on WFH, where the study finds WFH might reduce the high attrition rates the firm was experiencing by saving the staff from long commute but the managers are worried that allowing staff to WFH away from the direct oversight of their supervisors would lead to a large increase in shirking. Besides, it is also stated WFH will weaken the face to face communication among the colleagues (Baruch, 2001; Cooper and Kurland, 2002; Wilson and Greenhill, 2004) and subsequently will decrease the social interaction (Heinonen and Strandvik, 2020).

Some of the employers think that WFH will have a negative influence on staff which eventually will affect the organizations. This is because the organizations believe that combining work and family obligations will become a challenge for the staff which will affect the staff performance. Moreover, the possibility to access the organization's documents from home will be difficult because of the confidentiality (Perez et al. 2003). Nonetheless, productivity and the satisfaction of staff who are WFH can be achieved through the accessibilities of the staff to access the organization's documents (Cooper and Kurland, 2002; Karia and A.H.Asaari, 2016).

3.0 Research Methodology

This study was conducted using the qualitative case study approach to understand the reality of the case participants within their own respective settings and contexts. Through the qualitative case study researcher can study a complex phenomenon within their contexts (Baxter and Jack, 2008). Data for this study were gathered through primary data sources such as semi-structured interviews and observation; and secondary data like journal articles as well as newspapers. Both data sources were chosen because it provides better understanding of the investigate phenomenon; and the dataset developed is more comprehensive to be analysed (Cohen and Crabtree, 2006).

In the beginning of this study, researcher did some observations on the meetings, workshops, briefings and workflows involved in the PAP Division. These observations were done for a month, during February 2020 in the physical office. The second data collection method is semi-structured interviews. In this phase, researcher interviewed 14 interviewees from the PAP Division. Interviewees are consisted of one middle manager and 13 operational staff. Interviews were conducted through some medium, namely face-to-face, telephone or even WhatApps. This phase conducted during March and April 2020. Meanwhile, the search of journal articles and newspapers happened throughout the study. Reasons for this action were the researchers need to build understanding around the complex phenomenon, getting answers for the unsettle questions and reconfirm the findings of the current study.

During all the observations, researcher made some short notes or brief explanations. This reporting was considered as mini journal or daily report. For the interviews, all the interviews' recordings were transcribed and coding using thematic analysis (Braun and Clarke, 2006). Researchers need to familiarise the data, identifying the important features of the data that might be relevant to answer the research questions (for example by searching for the key words being effective or efficient). Data were then triangulated from all the sources of data (Flick, 2004). While in this process, researchers made some comparisons by searching for themes, reviewing themes, defining and naming themes. Finally, writing up process that involved merging the analytic narrative and data extracts. Here, researchers need to contextualise the analysis in relation to the existing literatures.

4.0 Findings

This paper presents a case study research on WFH during the pandemic Covid19 in East Malaysia. Findings being derived from three methods namely observation, semi-structure interview and secondary data.

Through observation, this study finds that most of the workflow in the PAP Division need to be done in physical presents in the office, provided that the division is under the Finance Ministry. There are three reasons for these:

- 1) The system work in the intranet connection. Thus, staff cannot access the system from outside or from home.
- 2) Most of the documents are circulated among the staff. For example, a document is prepared by clerk A, then submit to executives for endorsement. From here, the document passes to clerk B for entering the data into a system. The process needs to be done within 1-3 working days. This process is stated in the manual procedure.
- 3) Most of the documents are considered as private and confidential. Thus, no staff is allowed to bring any document to outside the office premises.

Based on the current practice at PAP Division, none of the staff has experience or practice WFH as the top management did not encourage their staff to do so. Before the pandemic Covid-19, basically there is no requirement or purpose for WFH among the staff.

The interview session is design to discover the effectiveness and efficiency of WFH concept during the pandemic Covid-19 among the government staff. They are six questions asked to every staff through face-to-face, telephone as well as WhatsApp's interview. From the semi-structured interview, there are other findings found.

First, the **demography data** of the staff in PAP Division, such as gender, age and marital status are collected. The PAP Division consists of 12 females and 2 male staff. Majority of the staff are from the age group 31-40 years (43%), followed by the age group 51-60 years (29%), who were interviewed for this study. Age group 21-30 years and 41-50 years are the minority group of staff, both have 14% respectively. Meanwhile, ten interviewees are married, three single and only one is divorced/widowed. Based on the previous studies, the demography data have influenced the level of readiness or acceptance of staff towards the WFH practices.

Second, only 21% of staff are **prepared to WFH** and mostly they are single. Thus, they have better acceptance of WFH. On the other hands, 79% of staff are not prepared to WFH. Majority of them are married couple and women with small children. These working moms have to juggle around the office work, house chores, kids and children's homework. That means, while performing the WFH a working mom has to deal with endless distractions that may interrupt the workflow. Eventually, these things might be slowed down the effectiveness and efficiency in executing the task and thus, effect the staff's productivity. It is a very challenging situation to all staff during the pandemic Covid-19, most of them must be independent with high integrity and good time management skills.

In the third question, this study is accessing the staff's **internet connectivity**. From the interviewee's response, only 36% of staff experience fast and reliable internet connection during the pandemic Covid-19. That means, 64% of staff have poor connection to enable them to WFH smoothly and successfully. Although, most of the telecommunication service provider offering a free WIFI connection every day from 8am to 6pm, but there is no guarantee that connection is stable all the time. Ironically, unreliable internet connection happened during 8am to 5pm every day and become worst during the weekend. The slow or interrupted connections cause a loss of quality time, which have a huge impact on both effectiveness and efficiency. This situation is a real challenge to practice and implement the WFH.

The next question is about the existence of a **clear guidelines on WFH** either from the immediate organization or government. This question tries to investigate either the staff noticed about the existence of job guidelines on WFH. While discussing this question, interviewees are a bit confused. Staff are not sure which guideline on WFH should be referred. During the MCO, there are lot of circulations, media statements, announcements and infographics; which are shared openly on social media. The rapid change of instructions create confusion among Malaysian. They are just about to understand the new guidelines, suddenly they receive another one. Sometimes the instructions are overlapping and contradict each other. The federal and the state government have different set of instructions, this happened in the middle of MCO period. From the interviewee's responses, 79% of staff stated that they are not clear with the job guideline. The unclear job guideline may result low quality of tasks, the job becomes complicated than usual, incorrect assigned or overlap job with other colleagues.

The fifth question is looking at the **difficulty to access the organization's documents and technological equipment** during the pandemic Covid-19. Based on the interviews, majority (93%) staff are facing the difficulty to access the organization's document because they are not allowed to come to office during the MCO period. That means, the staff also have constrained to get enough resources to WFH. This situation has an impact to staff productivity as they cannot access the data to perform their task. Further question asked regarding to the technological constrain. It is not surprised that 57% of the staff are experienced the lack of technological equipment such as computer, printer or scanner. This office equipment is required to enable the staff to perform their task successfully. However, the missing access to technological equipment will impact the ability of staff to work effectively and efficiently, gradually effect the work productivity.

The final question is related to the interviewee's **willingness to adapt the WFH**. The findings show that 64% of the staff are facing some challenges and having difficulties to adapt and apply the concept within a short-term period. Some of the interviewees mentioned that they have to learn a new technology application and buy a new gadget to assist them in performing their task. However, during the MCO, they have limited time to learn new applications as they have to juggle between work and life requirements. Other interviewees also mentioned that they have tight budget during the pandemic Covid-19 as they already have fixed commitment every month. Therefore, within a short period they found it hard to make adjustment on their current financial commitment. That means, they are not completely ready to apply the WFH.

Researcher has given one additional question on how the interviewees are **affected from the implementation of WFH**. There are 79% of interviewees mentioned that application of WFH has affected their health condition. The working moms for example, have to rearrange their focus, reschedule their daily routine and increase their multi-tasking skills. Based on their sharing, they do not have time for their selves, especially during the weekdays. They mentioned that during the MCO, they felt fatigue but had no choice than working until night. Their explanation is consistent throughout the earlier response of the interview's session.

In terms of physical, some of the interviewees mentioned that they experienced a severe joint problem during the MCO period. It is because they sat in front of the laptop for more than two hours. Another interviewee explained she always check emails through her smartphone that finally caused the problem on her eyesight and neck pain. The constant eye-contact to the screen has exposed them to the eyes problem. Meanwhile, sitting for more than two hours will lead to slow blood circulation and eventually caused the adjoin and nerve problem.

5.0 Discussion

The rapid outbreak of pandemic Covid-19 presents a frightening health crisis that the world is dealing with. As well as serious implications for human's health, Covid-19 is significantly impacting businesses and the economy. The pandemic heavily affecting labour markets, economies and enterprises, including global supply chains, which leading to widespread business disruptions. Business is forces to temporarily close to control the spread of Covid-19. Following the outbreak, the Malaysian Prime Minister announced a Restriction of Movement Order on 18th March 2020. The first phase of the order lasts for two weeks starting from 18th March – 31st March. During this first phase, all the government and private premises were advised to close, except those involved in essential services such as financial services, water and energy. On 4th May, the Malaysian Government had eased the restrictions under a conditional MCO (CMCO), which allowed certain business sectors to resume operations with its main goal was to reopen the national economy in a controlled manner. The restriction of RMCO was later extended till 9th June.

The Covid-19 pandemic has brought a fast-moving and unexpected variables and this pandemic caught some of the organizations off guard as they weren't prepared to handle this crisis. According to the experts, the Covid-19 will continue to evolve and it is difficult to predict when this pandemic will be over. However, with the enforcement of RMCO, a certain measure should be taken by the organization on the efforts that support a return to work.

Even though, Ministry of Finance considered as essential services, but not all divisions or staff are required to work. Thus, only certain divisions are allowed, and rotation system will be applied to those who are required to work. This is to ensure that the staff avoid mass gatherings as its pose threat to the spread of Covid-19 in the organizations. The PAP Division's staff are not required to work in the office. Thus, it becomes a challenge for this division. This is especially during the first four weeks of the MCO. The division had to close all the operations to comply with the new rule. Although, head of divisions is requiring their staff to WFH as part of the efforts to mitigate the spread of Covid-19, it will be hard for the PAP Division due to the critical nature of the work involved.

All the interviewees had expressed their feelings and shared their experiences on the WFH during the pandemic Covid-19. This paper suggests that the demographic profile of the interviewees plays a vital role in determining the effectiveness and efficiency of WFH especially in government organisation. The data are interconnected with each other and it can be seen through the self-preparation, adaptation of WFH and health. To be effective and efficient while WFH is more challenging for married staff compare to single staff. The productivity of the staff has been interrupted due to the personal responsibilities hence why it explained the struggle to adapt with WFH for married staff which indirectly cause the work-life balance is hard to be achieved.

Before the pandemic, people have a normal life-waking up in the morning, travelling to work, having breakfast before starting to work, face-to-face meeting and so on. Facing an outbreak of Covid-19, all the routine has been changed drastically. Everyone learning to live with the new normal-wearing facemask, bringing hand sanitizer, practicing cleanliness, physical distancing, virtual meeting, food delivery services-food panda, online shopping, virtual learning-ODL (Open Distance Learning) and WFH. As the WFH is implemented, it is indirectly taking a toll on the staff's health. Staff are not getting enough physical activity which could lead to joint problem. It also affects the eyesight as WFH is usually done in front of a computer. Thus, staff are expose to the risk of eye problems. This finding was supported by Alan Hedge (2016), Director of Human Factors and Ergonomic research group at Cornell University. He states that staff who are WFH tend to accelerate the onset of musculoskeletal problems ranging from neck, shoulder, back problems, to hand wrist problems, to leg problems all because of working in poor postures.

Internet connectivity is also one of the factors that make WFH inefficient. Effective communication is a key to ensure a smooth workflow but if the staff experiencing difficulty to communicate accurately and concisely, the work place will be affected. Thus, it slows down the process, which could bring a huge loss to the organization. When communication is affected, the manager would not be able to provide clear guidelines. As a result, it will lead to another problem. Additionally, inadequate resources to acquire the information within appropriate time and technology constraints, eventually again lead to the ineffectiveness and inefficiency of WFH.

The accessibility of the documents become a challenge for the division. As the documents contained a lot of confidential information, it will be hard for the staff to work on it at home. In terms of security, even if WFH is imposed, but ensuring all of the information security and data protections are well protected will be difficult as every staff are using different types of devices and this differences will enquire different types of security protections. This will indirectly make the organizations spent an enormous amount of money on the security protections to ensure all of the data are protected. In addition to that, implementing WFH will put technology constraints towards some of the staff where the lack of office equipment such as laptop and printer will become a problem.

The announcement of a conditional MCO on 1st May made by the Malaysian Prime Minister begins on 4th May allowing the staff to go to work but there are some guidelines that they will have to adhere to. A certain standard of operation (SOP) need to be followed to ensure the safety of the staff where only 20 or fewer people are allowed to be in the office at one time to avoid crowding. Nonetheless, the lack of manpower will become an issue that can cause a delay in the project. Hence, there might be several measures that the organizations can do to overcome the challenges related to Covid-19.

The company should take this pandemic situation as an opportunity to turn this massive challenges into meaningful change. The accessibility of the documents for those who are WFH can be achieved through digitalization. The company should create a system that can be accessed remotely. The creation of the system through digitalization will enable the staff to access the documents easily. However, digitalization is vulnerable hence to prevent information leakage in which information is unintentionally disclosed to an outsider, the company could apply a zero-trust approach to access the information. This approach allows the company to limit the scale of leaks and prevents staff from accessing sensitive data where they didn't have access to.

As for the staff shortage, the company could assign a work that can be done from home for the staff who could not go to the office. This method could prevent any project or work delayed due to the lack of manpower. Overall, it is important for the company to establish long-term strategies for greater resilience and to apply the lesson learned from the experience to create a system that prepares the company for future disruptions.

The impact of the COVID-19 is being felt by all businesses around the world, various industries have suffered losses and had to reduce number of staff. In Malaysia, business is shutting down as the company unable to sustain their operations with rising operational costs and diminishing profits. The 'new normal' in 2020 will demand a new and more flexible approach to overcome the outbreak of Covid-19. One of the things that obviously needed during this pandemic is digitalization. QR code has been widely used for people to enter the store to minimize the physical contacts. Other than that, the World Health Organisation (WHO) created a community-based website called CoronaTracker to prevent the spread of misinformation as well as centralising available data for research purpose. To conclude, during this challenging time the quick ability to utilise its technological resources can protect and save lives on a large scale.

6.0 Conclusion and Future Recommendation

WFH has been a rising trend for several years in Western countries. The recent pandemic is forcing Malaysian to adopt and adapt the concept. COVID-19 has sparked a revolution in the WFH scenario. This study provides the practical insights into this important problem. The concept can be highly productive if it is done in a proper way; but it can be also wrong without a clear set of guidelines. The concept comes as a package-advantages to be grabbed and challenges to be encountered. Nevertheless, with the right solution, it will solve the problem of the effectiveness and efficiency of WFH.

Adapting to the new normal would not be easy but possible to be done. Staff need to cope with it and stay productive while WFH. Several ways can be taken to be effective and efficient while WFH. First, it is important to maintain a healthy work-life balance. A healthy work-life balance would boost staff productivity. The staff could create physical boundaries by setting up a workspace that is separated from home space and can avoid everyday distraction. It is also important to stay on schedule by segmenting things that the staff need to do. Besides that, it is important to stay on track by not extending the workday too far beyond what the staff plan.

In terms of communication, it is recommended for the employer to use a platform that was easy to use where all of the staff are familiar with. With many staff owning smartphones or tablets for personal use rather than laptops or desktop computers, the switch to WFH would have left some staff unable to work. Although the organization are under no obligation to provide technology to enable staff to WFH, employers could take this opportunity to invest in it to make WFH effective and efficient for the staff. The organization could digitalize their access to organizations documents for a staff to have easy access to enable them to work effectively from home. Security over the organization could be strengthened by creating a corporate policy where only staff are allowed to access to the company's documents. Documentation will be encrypted, and all access will be authenticated, use a virtual private network (VPN) to access networked resources.

Working for hours could bring harm to the staff body and eyes hence it is important to establish regular breaks throughout the day to rest their eyes and get up and move or stretch. It's important to focus on

active stretching for your lower and upper back since the staff would likely be working on a laptop with a smaller screen. This method could improve the effectiveness and efficiency while WFH.

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