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A Future Malaysian Banking Landscape in Embracing IR4.0: A New Leadership Model

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ABSTRACT

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The Industry Revolution 4.0 (IR4.0) presents a significant impact on work and lifestyle of most people in Malaysia especially in the banking industry. Industries that are adapting to advance technology such as VR (virtual reality), Internet of Things (IoT), cloud computing, data analytics, artificial intelligence and machine learning will bear changes through physical, digital and biological aspects. The banking industry will need to go through with these three aspects of transformation as its need to be relevant and quickly acquainted to serve their new customer demands besides protecting against risks in cybersecurity, fraud and money laundering in the financial transactions. In order for these banks to stay relevant, both employees and management must be able to bear the changes. To ensure the success in embracing the change, it is suggested in this paper that banks must use a new model of leadership to steer the institutions direction towards the right path and accelerate its transformation. There are four pillars comprises of disruptive driver, human touch, sense of urgency and continuous learning that will constitute the new leadership model called "Leadership 4.0" suggested to banks that will be discussed in this paper.

1. Introduction

IR4.0 is transforming the businesses, economies, job and even the society itself. Smart and connected technologies such as blockchain, Artificial Intelligence (AI), Big Data and the Internet of Things (IOT) are embedded in many sectors including, the banking sectors. Together with machine learning, robotic and automation, these technologies have become the new normal in the banking sector. It is also known that the world's first ATM in 1967 change the connection between people and money. Thus, it makes finance and banking system more accessible. In connection with IR4.0, technologies hold enormous potential to increase competitiveness, improve productivity and address unfulfilled consumer demand and change the fundamental way of institutions providing its services. As Malaysia is strengthening its position to become a major player in the Fintech industry

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[19], it is important to discover the new model for leading change in the IR4.0 wave for the future banking sectors in Malaysia.

Leading change is an emerging concept in change management particularly because of the turbulent environment that organizations are facing today, particularly the banking sectors. According to Mdluli *et al.*, [12], leaders of today find themselves having to navigate their organizations through the most aggressive adaptation. The transformation from the era of information to the age of innovation comes with velocity of change, challenges, hyper-competition and opportunities that people could never have imagine.

Commitment to change in organization is paramount in ensuring the success of embracing the changes linked to the utilization of IR4.0 technologies. According to Zanariah Abdul Rahman *et al.*, [24], they have noted that emotional intelligence and spiritual intelligence may inspire a stronger sense of organizational commitment through the lenses of affective commitment, continuous commitment, and normative commitment. In the field of change management, leadership style plays a vital role in the organization to usher changes with respect to that utilizes the IR4.0 technologies and convince the employees to remain committed to the change for the benefit of themselves and the organization. Therefore, leaders must possess emotional intelligence and spiritual intelligence which can be categorize as human touch to bring the success for IR4.0 change in the organization especially the banking industry.

It is quite challenging for the banking sectors leaders to remain relevant amid the financial revolution. The effect of the IR4.0 combined with the rapid effect of innovation and the effect of technological automation on the workforce leaves us with some important questions, which are mainly directed to the current and the future leadership in the banking sector. To resolve these issues, such as to reduce resistance to change and to strengthen the commitment amongst employees in order to execute a breakthrough change programs to bring the banking sectors in Malaysia into the next level of dynamic competition, it is paramount that leadership to follow the new norms in their working style as well as leading the organizations.

2. Literature Review

2.1 IR4.0 in the Malaysian Banking Sector

The IR4.0 has been powered by the rise of digital technologies such as blockchain, cloud computing, AI, Big Data and the IOT. As such, it is rapidly transforming the business, process execution and particularly human-technology relationships. The banking business model innovations caused by these technology may not just brought changes in financial service delivery, but also changes in market, regulation, industrial networks, dominating actors, and culture [20].

The process automation is not a new concept for Malaysia's local banks. With hyper competition from fintech companies and digital startups, banks have been relying on the legacy system used in banking technology for quite sometimes as to reduce cost, optimize processes and speed up delivery time for product and services. Bank are also feeling pressured from client's growing demand and expectation to offer new advanced digital options.

In facing the IR4.0, most of the local banks called for a greater level of digitalization and mostly digital which also to create digital and cashless society. In 2021, 5 digital banking licenses were given to suitable institutions that have applied and fulfilled the requirements stipulated by Bank Negara Malaysia in the licensing framework for digital banking [3] which does not rely on the legacy system as to other banks operating in Malaysia. Going through this transformation will bring it with many challenges. Not everyone will be able to cope with the fast and rapid change. In order to stay relevant and not left behind, every organizational member must embrace change, and it is the leader's role

and responsibility to lead change to ensure that employees are committed to change. Due to the importance of commitment to change, it has attracted scholarly attention and interest on what leadership style that might influence it [1,5,14].

Malaysia Digital or MyDIGITAL (MD) initiative announced by the government in 2021 and the establishment of Digital Nasional Berhad (DNB) in early 2022 to accelerate the 5G network infrastructure in this country are the drivers which would encourage more individuals to adopt digital payment systems should be advantageous to various stakeholders, including service providers, financial institutions, and government organisations [2]. The Malaysia Digital Economy Blueprint, or MyDIGITAL is Malaysia's plan to guide the country's digital transformation and fuel the expansion of the country's digital economy [22].

2.2 The Human Factor in Banking

Human capital is the most important component of the organization through its influence on organization's innovative performance [15]. In reality, automations such as artificial intelligence and machine learning cannot replace many human tasks. Among these tasks dominant to humans includes imagination, innovation, collaboration, entrepreneurship, and multitasking. Without a doubt, the creation of intelligent devices and automations would make these tasks simpler and more efficient, in particular for accessing information, communications and data analytics. More work can be accomplished within lesser time and cost where humans are in control and manages these machines and equipment's which is prevalent in the banking industry nowadays.

2.3 The Technology Disruption in Banking

Disruptive technology improves the customer journey in banking. For example, artificial intelligence increases more effectively for banks to understand their customer behavior by predicting better delivery tailored to their demands and improves their customer journey [17]. The banking industry has been profoundly affected by technological disruption and have embrace most of these technologies to grow. Alternative forms of banking services, including Automated Teller Machines, mobile banking, PC-banking and internet banking are part of the banking industry. In the Malaysian banking industry, the earliest form of electronic banking was the introduction of ATMs in 1981. Telephone banking was another form of electronic channel launched in the 1990's which provided banking service assistance and introduced the automated voice response system (AVR) for customers call. Now with the availability of internet it has provided an opportunity for individual customers to make financial transactions without having to go to the bank. Customers do not need to go to a bank to conduct a financial transaction but only need access to the internet at home. They also do not have to follow certain procedures such as filling out a transaction type or need to wait long to conduct the transactions.

2.4 Knowledge and Innovation in Banking

The workforce and leadership in the banking industry must change towards interconnecting with technologies in their work and to acquire more skills which will make them irreplaceable by machines. In keeping up with the fast changing pace for banks in the IR4.0, new leadership style will be able to acquaint the workforce to new innovative and learning culture [9] which is prevalent in most of the banking organization nowadays. The following describes what are the new leadership model that must be embrace in order to facilitate the changes in banks towards transforming in the IR4.0.

2.5 Leadership Style

The change can be difficult that forced to control and manage the situation based on the participants stated. Leaders have the power to influence and control people. In order to ask the employees to commit to change, the certain thing is by influencing them to change. This thing can be done by leadership skills. Leadership likely is the unquestionable factor needed in any organizations, particularly if a change is needed in that organization because there should be a person who leads, control and manage the unpredictable situation. In implementing change within the organizations, the company should not preserve the status quo. Hence, the appropriate leadership model that constantly fit with the change is needed. As such this leadership model that is proposed in this paper consists of disruptive drivers, sense of urgency, continuous learning and also human touch.

3. Results and Discussion

Based on the findings of this study conducted from the survey among the leaders in the banking industry in Malaysia, the following new leadership model that is term as Leadership 4.0 can be proposed which is consist of the following aspects to ensure the success of implementing change in the organization suitable to embrace the IR4.0 technology.

A. Disruptive Drives

Leaders in the banking community will need to understand and cope with the new disruption in managing talents and businesses caused by the rapid changes in the banking industry such as the use of artificial intelligence (AI), robotic programming and augmented reality experience that deeply affecting the banking employees that is setting the movement towards digital banking.

Investing in disruptive technologies and human skills and talents will be an important component that will set each organization success from their competitors. The ability to cope with the continuous changes and unknown consequences introduce by the technological advancement in IR4.0 may provide technical advantage to the leaders and the banking institution as a whole. A leader who is a disruptive drives typically have more defined decision making process and they are more likely to make decisions with input from diverse sets of stakeholders as mentioned by Renjen [18], Global Chief Executive Officer of Deloitte.

B. Human Touch

It is important to consider that any changes to keep abreast the banking industry with the technology adaptation for IR4.0 must continue to provide benefits for humanity as a whole. This is because banking services are customer-centric and employs many people to deliver their services. Everyone presents a direct role in shaping the banking future and creating economic opportunity for millions of people by investing our time and resources in helping others.

A leader must not be too engrossed with deploying technology in banks that might jeopardize the humanity value. Banks of the future must maintain the human touch in customer experience propositions amidst the technology-driven changes in the industry. According to the survey on bank's customer service done by CYBG [7], bank customer of all ages still want to maintain human touch and interact with the bank's employees while visiting the banks no matter how it would transform and become modern with technologies.

Shaari [21] from Bank of Singapore provides the insight on employee engagement in communicating for the bank's workforce in IR4.0 and emphasis that the leaders must maintain human touch with their subordinates in keeping the them updated on the goals, the progress as well as the potential pitfalls that shows their respect and gaining trust from others. This can be done through more informal avenues such as small team gatherings, ad hoc visits to engage them, to hear their concerns and celebrate small wins. Besides taking care of the employees, it is also important for the leaders, including the management involvement to convey the right message to its employees on the importance of optimizing the use of new technologies [23]. This is in line with the past studies that found the involvement of the organizational leaders is critically important in ensuring continuous focus among the employees [6].

For banks to consider using technologies such as AI to engage with their customers, the ability to relate to real life will become ever greater due to the need to train AI to understand and respond to human interactions and complex needs. Although more banking operations can be automated with today's technology advancement, human capabilities such as imagination, empathy and leadership cannot be replicated by machines because it is still oriented to human, being it customers or employees.

It is important that reskilling talents in banking must focus on making the workforce tune into the data comprehension about their customers and banking products rather than making them to engross with technology and computer programming knowledge as the main bulk of activities in banking still need human touch with their customers. The main conjuncture to be gained from accelerating digital transformation in this industry is that bankers will need to be more adaptable in the digital upscaling and reskilling whereas the organizations play important role in facilitating this without compromising human touch by their employees in delivering the best services to their customers.

C. Sense of Urgency

Almost all industries will be changing due to digital innovation in the foreseeable future [4]. A leader must have a sense of urgency to keep up with changes and to bring the whole organization relevant. For the banking industry, not only do they face the technological aspects of changes in banks, but also in terms of regulatory changes that must be upheld.

According to Kotter [10], leaders can develop a sense of urgency through the development of a clear and rational perspective on the importance of changes. They should be alert and able to look and analyze developments and incorporate this information into their companies' organizational decisions as rapid technological advances will lead to changing market preferences and behavior especially in the banking industry. Two important actions that leader with a sense of urgency can do is to become a fast executor to move forward and are constantly scanning the surroundings to look for opportunity and threat for their organization [8]. For the employees and leaders in the banks, having a sense of urgency will make them become more aware to the constant changes facing the industry as well as ensuring that they are prepared to face any eventualities to come in their working environment.

D. Continuous Learning

IR4.0 will transform the labor market in banks into a skill-centric type of market, with respect to Information Technology (IT), data analytics, process understanding, and the ability to work with modern interfaces. The banking industry are facing difficulties to seek the required talents in those

fields in the labor market as they are competing with financial technology (Fintech) companies that offers better remuneration. Therefore, continuous learning is becoming more recognized by banks especially in retraining and reskilling the bank's employees towards preparing them to face the changes in IR4.0 in their working environment [13]. According to Laurent *et al.*, [11], continuous learning will keep the employees relevant in their work and prepare them to embrace the future.

Workers in the banking industry must acquire new skills and knowledge to improve their soft skills besides learning about specialized skills in the technology such as data analytics. It is important for the organization to provide the avenue for their employee to inculcate learnability culture that will create opportunities for skills and talents improvements relevant for the new working environment.

In order to attain the right balance between organizational stability and agility for their workforce to meet the changes that the banking industry are facing, leaders must foresee and proactively recognize where agility is required for response to anticipated disruptive changes. Workers must be given the resources to improve their expertise where changes are needed.

Maybank Banking Berhad have been the main advocates in providing continuous learning to their banking staffs in Malaysia especially in accelerating digital workforce transformation. Their *FutureReady* program which has been allocated RM30 million consisted of three phases started in 2018 have been able to cater the needs of their staffs to acquire relevant skills and talents as part of the strategy for digital banking transformation in the bank. These phases consisted of Phase 1 – Enhancing employee's general digital literacy, Phase 2 – Targeted development and application of *FutureReady* skills for select employees and Phase 3 – Realizing business impact from the application of *FutureReady* skills. According to Maybank, these *FutureReady* skills area includes Digital Awareness, Data Driven Decision Making, Human Centered Design, Agile, Future Communication and Risk & Governance in the Digital World [16]. Figure 1 below outlines the Leadership 4.0 model that constitutes the four aspects of new leadership in the IR4.0 for the banking workforce as mentioned above.

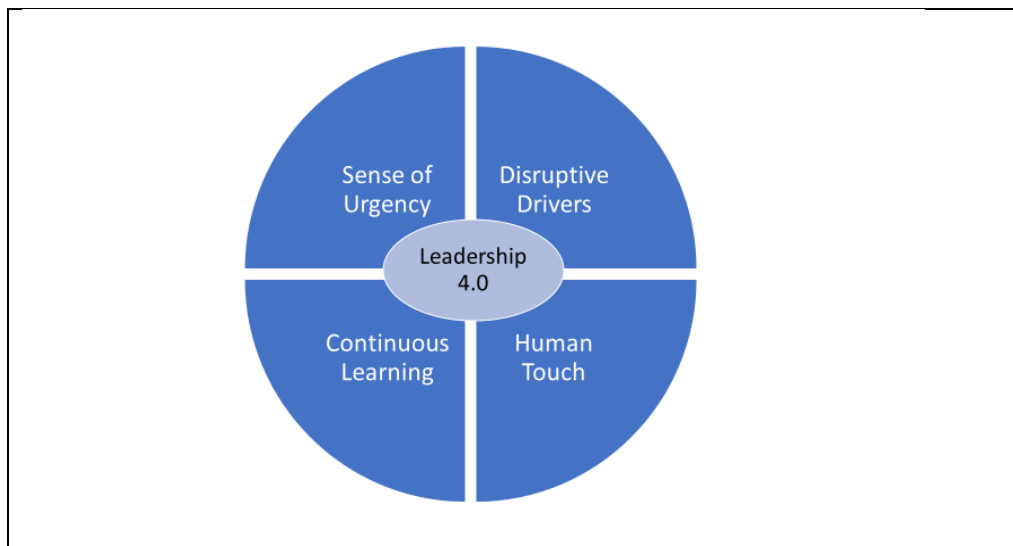


Fig. 1. Author's Own: New IR4.0 Leadership Model (Leadership 4.0)

4. Conclusion

This paper was able to explain the concept of the new leadership model for embracing change in the organization for IR4.0. The transition of banks will take time for them to transform due to the complexity of the legacy systems. But technology would smooth the process, not rigid and flexible

although some areas such as the banking regulation need further attention to abide when banks make the change.

Banks are currently dependent on human resources to conduct their daily operations such as back-office processing and cross-verification that are manually conducted. With the combination of technology and human capability, banks will be able to save hours of man hour to complete these tasks with lesser error which evidently will contribute to higher efficiency and more sustainable costs. The investment on banks to use better technology, practicing good leadership styles and improving their employees' skills will surely benefit them in the long run.

Leaders and employees in the banks should be concern in ensuring that they committed to change to remain relevant in their work and continue to contribute to their organization so that it would remain competitive and stay ahead of the curve. With the proposed Leadership 4.0 model in this study, more studies could be done by the future researchers using semi structured interview with the employees of the local banks. Additionally, by embracing new leadership model that caters for IR4.0 will potentially make the organization become more efficient and lessen the fear of losing their jobs to machines. This is recommended to be the main field for future research.

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References

- [1] Adil, Muhammad Shahnawaz. "Impact of change readiness on commitment to technological change, focal, and discretionary behaviors: Evidence from the manufacturing sector of Karachi." *Journal of Organizational Change Management* (2016). <https://doi.org/10.1108/JOCM-11-2014-0198>
- [2] Balakrishnan, Vimala, and Nor Liyana Mohd Shuib. "Drivers and inhibitors for digital payment adoption using the Cashless Society Readiness-Adoption model in Malaysia." *Technology in Society* 65 (2021): 101554. <https://doi.org/10.1016/j.techsoc.2021.101554>
- [3] Bank Negara Malaysia. "Regulatory Framework for Digital Banks." Access from https://www.bnm.gov.my/index.php?ch=en_press&pg=en_press&ac=5005&lang=en, (2020), Retrieved on 4 April 2021.
- [4] Brown, David, Sonny Cheng, V. Melian, K. Parker, and M. Solow. "Culture and engagement: The naked organization." *Global Human Capital Trends, Leading in the New World of Work* (2015): 35-41.
- [5] Chen, Jingqiu, Lei Wang, Minyan Huang, and Julie Spencer-Rodgers. "Naive dialecticism and Chinese employees' commitment to change." *Journal of Managerial Psychology* (2012). <https://doi.org/10.1108/02683941211193857>
- [6] Chen, Rai-Fu, and Ju-Ling Hsiao. "An investigation on physicians' acceptance of hospital information systems: a case study." *International journal of medical informatics* 81, no. 12 (2012): 810-820. <https://doi.org/10.1016/j.ijmedinf.2012.05.003>
- [7] CYBG. "Bank to the Future." Access from https://www.virginmoneyukplc.com/resources/c6dc7418-52d2-4454-8d51-3ee5bdee275a/V3_CYB00435+The+Future+of+Banking+March+2019-3+final+version.pdf, (2020), Retrieved on 4 April 2021.
- [8] Jordan, J., A. L. Orlick, and L McTeague. "Performance Development in the Digital Age." IMD Business School, Access from <https://www.imd.org/research-knowledge/articles/Developing-people-in-a-time-of-digital-disruption/>, (2019), Retrieved on 4 April 2021.
- [9] Kolditz, Thomas A., Tomas Casas i Klett, and John Strackhouse. "Are You a Leader of the Fourth Industrial Revolution?." World Economic Forum, 2017.
- [10] Kotter, John P. "Why transformation efforts fail." *The Journal of Product Innovation Management* 2, no. 13 (1996): 170. [https://doi.org/10.1016/0737-6782\(96\)83110-9](https://doi.org/10.1016/0737-6782(96)83110-9)
- [11] Leurent, Helena, F. Betti, E. Shook, R. Fuchs, and F. Damrath. "Leading through the fourth industrial revolution: putting people at the centre." In *World Economic Forum*, pp. 1-25. 2019.
- [12] Mdluli, Siboniso, and Olebile Makhupe. "Defining leadership competencies needed for the fourth industrial revolution: leadership competencies 4.0." *Africa Expansion Project* (2017).

- [13] Pant, D. "How Deutsche Bank Is Building a Culture of Continuous Learning." People Matter, Access from <https://www.peoplematters.in/article/skillup/how-deutsche-bank-is-building-a-culture-of-continuous-learning-21770>, (2019), Retrieved on 4 April 2021.
- [14] Pennaforte, Antoine Pierre. "Organizational supports and individuals commitments through work integrated learning." *Higher Education, Skills and Work-Based Learning* (2016). <https://doi.org/10.1108/HESWBL-07-2015-0038>
- [15] Poon, Jessie, Yew Wah Chow, Michael Ewers, and Razli Ramli. "The role of skills in Islamic financial innovation: Evidence from Bahrain and Malaysia." *Journal of Open Innovation: Technology, Market, and Complexity* 6, no. 3 (2020): 47. <https://doi.org/10.3390/joitmc6030047>
- [16] PwC and Asian Institute of Chartered Bankers. "Accelerating Digital Workforce Transformation in Financial Services." Access from <https://youtu.be/l-Ykentk0ag>, (2020), Retrieved on 5 May 2021.
- [17] Rajan, S., and D. Kuder. "How advances in machine intelligence will benefit banks." (2017).
- [18] Renjen, P. "The 4 types of leader who will thrive in the Fourth Industrial Revolution." In *World Economic Forum*. 2019.
- [19] Sababathy, Harikumara, and Syairah Hanin Shaharuddin. "Malaysian Banks' Profitability—Past Trends and Future Prospects." *Bank Negara Malaysia* 1 (2019): 35-43.
- [20] Sánchez, Marisa A. "A multi-level perspective on financial technology transitions." *Technological Forecasting and Social Change* 181 (2022): 121766. <https://doi.org/10.1016/j.techfore.2022.121766>
- [21] Shaari, B. "What a Leader Needs to Succeed in Industry 4.0." Bank of Singapore, Access from <https://www.bankofsingapore.com/research/what-a-leader-needs-to-succeed-in-industry-4-0.html>, (2019), Retrieved on 4 April 2021.
- [22] The Star. "Transforming Malaysia into a Digital Economy." Access from <https://www.thestar.com.my/news/nation/2022/07/25/transforming-malaysia-into-a-digital-economy>, (2022), Retrieved on 12 August 2022.
- [23] YUNUS, YUSASNIZA MOHD, AINI AMAN, and KAMARUL BARAINI KELIWON. "The Role of Business Leaders in Information Technology Innovation in the New Era of Disruptive Technology." *Asian Journal of Accounting & Governance* 12 (2019). <https://doi.org/10.17576/AJAG-2019-12-11>
- [24] Rahman, Zanariah Abdul, Syaidatul Zarina Mat Din, Norlina Ali, and Muharratul Sharifah Shaik Alaudeen. "Intelligence as Facet of Organizational Commitment." *Journal of Advanced Research in Business and Management Studies* 28, no. 1 (2022): 1-5.