The Role of Business Leaders in Information Technology Innovation in the New Era of Disruptive Technology

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ABSTRACT

The new era of disruptive technologies such as internet of things (IoT), robotic process automation (RPA) and virtual reality (VR) not only contributes to the growth of marketplaces but also changes the individuals’ experiences in using new technology. This study examines the role of business leaders in the new era of disruptive technology and how it can fundamentally change the organisations or individuals to adapt to work challenges in changing market dynamics across industries. The research questions include what are the role of business leaders in Information Technology (IT) innovation; what are the major challenges and how business leaders overcome the challenges. Based on data gathered through interviews among the business leaders with accounting background, the findings revealed that support from the business leaders is necessary to motivate and encourage IT users to innovate with new technology. However, resistant to change, feeling complacent and anxious towards new technology are some of the challenges that the business leaders have to deal with IT users. Business leaders believed that management involvement, continuous discussion, educating IT users, demonstration of knowledge and coaching will help to motivate and inspire IT users to make full use on the benefits of new technology. The contribution of the study are two folds. Theoretically, it promotes the new rival of theory or framework that goes beyond the traditional IT use. Practically, business leaders are open to new approaches, develop and gain support for team vision, implement and execute a strategy effectively.

Keywords: disruptive technology; digital technology; information technology; business leaders support

ABSTRAK

Dalam era baru dengan kepantasan perkembangan teknologi seperti internet of things (IoT), robotic process automation (RPA) and virtual reality (VR), ianya bukan sahaja membolehkkan pertumbuhan pasaran tetapi boleh mengubah pengalaman individu dalam teknologi baru. Kajian ini mengkaji peranan pemimpin perniagaan dalam era baru teknologi dan bagaimana secara asasnya ia akan mengubah organisasi atau individu untuk menyusaiakan diri dengan cabaran kerja terutamanya dalam mengubah dinamik pasaran di seluruh industri. Oleh itu, persoalan kajian bagi penyelidikan ini adalah: i) Apakah peranan pemimpin perniagaan dalam inovasi teknologi maklumat? ii) Apakah cabaran utama dan bagaimana pemimpin perniagaan mengatasi cabaran ini?. Berdasarkan data yang dikumpulkan melalui wawancara di kalangan pemimpin perniagaan yang mempunyai latar belakang perakaunan, penenun manakahkah bahawa sokongan dari pemimpin perniagaan adalah perlu untuk mendorong dan menggalakkan pengguna berinovasi dengan teknologi maklumat. Walau bagaimanapun, sikap enggan berubah, berasa selesa dan cemas terhadap teknologi baru adalah beberapa cabaran yang dihadapi oleh pemimpin perniagaan untuk menangani pengguna teknologi maklumat. Pemimpin perniagaan percaya bahawa penglibatan pengurusan, perbincangan berterusan, mendidik pengguna teknologi maklumat, demonstrasi pengetahuan dan bimbingan akan membantu untuk memberi motivasi dan inspirasi kepada pengguna teknologi maklumat untuk memanfaatkan sepenuhnya teknologi baru. Sumbangan kajian adalah terdiri daripada dua bahagian. Dari segi teori, ia mempromosikan saingan teori atau kerangka baru yang melampau penggunaan IT tradisional. Dari segi praktikal pula, pemimpin perniagaan terbuka kepada pendekatan baru, membantu dan mendapatkan sokongan untuk visi pasukan dan melaksanakan strategi dengan berkesan.

Kata kunci: kepantasan perkembangan teknologi; teknologi digital; teknologi maklumat; sokongan pemimpin perniagaan

INTRODUCTION

Organisations today are facing with a rapid changes of technology. The Internet of Things (IoT), robotic process automation (RPA), 3D printing, blockchain, augmented reality and virtual reality all promise to do things faster and cheaper. Business leaders have little option but to adopt these technologies as quickly as possible as it has become the essential parts of every business nowadays. Businesses invest in IT to help streamline the flow of information, speed-up decision-making, sustain competitivenes and improve organisational performance (Hall 2019). As businesses constantly request for innovation to sustain competitive in the business environment, the concern on understanding the role of business leaders towards IT innovation is becoming a major
concern. Hauser (2014) addressed that not many leaders understand the concepts and principle of motivation and leading by example. Furthermore, not all investment in IT leads to success. The evidence revealed that IT users did not successfully optimise the business values from technological innovation and they have failed to fully utilise the benefits of technology (Hall 2016; Malinowska & Rzeczycki 2017; Medcof 2017).

The fourth industrial revolution (IR4) is characterised by a range of new technologies that are combining the physical, digital and biological worlds (Schwab 2016). This technology impacting all disciplines, economies and industries. For example, RPA is a software ‘robot’ that emulate and integrate the actions of a human and can work on multiple processes to greater enhance business operations (Deloitte 2014; Schwab 2016). RPA is not about mechanical robots, but it is about intelligent software that resides in a personal computer and interacts directly with business applications. Based on research that has been conducted by Price Waterhouse Coopers (PWC) (2016), forward-thinking business leaders today are fascinated with this technology and are digitising essential functions within their internal operation processes along the value chain (end-to-end digitisation) in achieving competitive advantage.

In Finance and Accounting (F&A) services, the business leaders face a multitude of challenges. The globalisation of business operation today has given a significant pressure particularly in cost cutting, improve speed, volumes and quality of information provided (Deloitte 2014; Ernst & Young 2018). The role of business leaders is seen as significant for successful innovation of IT in organisation (Mortara et al. 2009; Cascio & Aguinis 2019). Business leaders should aware that with the emergence of digital technology, F&A processes would benefit the most from the automation. Certain business functions which previously are repetitive in nature and require a lot of tedious manual efforts can be automated and contribute to low operation time (Deloitte 2014; Ernst & Young 2018). However, not all new technologies are being accepted by the IT users. The failure in IT innovation is due to users fear of unknown, not being consulted, minimal compliance to the use of technology, anxiousness with complex features, lacking of communications and more (Malinowska & Rzeczycki 2017, Saeed et al. 2012). In addition, most business leaders failed to play their role in IT innovation due to lack of holistic vision, knowledge, education or understanding on innovation culture (Lindergaard 2010).

In addition, PWC (2016) in their study to understand people and culture transformation towards digital technology discovered that fifty percent of companies see lack of digital culture and training as the top challenge in making operations more digital. It showed that the problem is not on the technology, but lack of digital culture and skills in the organisations. According to PWC (2016), organisations need to develop a robust digital culture, attract and train employees who are comfortable working in a dynamic environment. Based on the information provided, what is the role of business leaders towards new technology? What are the challenges and how to overcome the challenges in dealing with IT innovation? Business leaders recognise the importance of IT innovation (Khan et al, 2013). Their motivation and support will positively influence IT users to adopt and fully utilized the technology (Shao, Feng & Hu 2016).

Intrigued by the phenomena of disruptive technology, the researcher is motivated to understand the role of business leaders towards innovating with new technology. The objectives of this study are: i) to understand the role of business leaders towards IT innovation particularly in Finance and Accounting field, and ii) to identify the challenges and way forward in overcoming the challenges. The research questions that guided this study are: (i) what are the role of business leaders in IT innovation; (ii) what are the challenges; and (iii) how business leaders overcome the challenges. The remainder of this paper is organised as follows: literatures on the IT innovation, challenges in IT use and business leaders support. Next, analysis and findings are discussed. Finally, conclusions are conveyed.

**LITERATURE REVIEW**

Over the past ten years, emerging technologies have disrupted business operations, business models and markets. The digital technology, analytics and clouds are some of the examples to describe the way businesses engage and carry out transactions within digital environment. The other three recent trends such as digital reality, cognitive technologies and blockchain are growing rapidly worldwide (Deloitte 2014; 2017). It is not only for the front office but also for the entire enterprise. Businesses embrace with new technologies as it helps to reduce business costs, increase efficiency and effectiveness of business operations particularly in delivering better ways to operate business, serve customers and compete.

Research in initial adoption of IT has been given a lot of attention among scholars particularly in understanding the psychological perspective of humans towards intention and use (Bakar et al. 2013; Venkatesh et al. 2012). Understanding the dynamic process of users’ behaviour to accept and adopt IT would have a great influence on effective implementation and successful use of systems (Korpe1ainen & Kira 2013). One stream of research focuses on the psychological perspectives in understanding the relationship between users’ behaviour and its implication on intention and use. The best predictors of users’ behaviour in IT can be categorised into three dimensions; i) rational decisions such as perceived usefulness, perceived ease of use, past experiences and so forth (Venkatesh & Bala 2008); ii) emotional decisions such as satisfaction, feelings, motivation and so forth (Kim et al. 2013); and iii) habitual decisions such as routine or automatic action (Cheung & Limayen 2005). Another
stream of research focuses on understanding the microeconomic perspectives and its contribution to innovation and use. Researchers have employed factors such as competitive environment, size and structures, top management support, compatibility and resources as the best predictors that could contribute to innovation and the successful use of IT (Zhu, Kraemer & Xu 2006).

In a mandatory IT use of an organisation, IT users’ acceptance and actions play an important role in determining whether IT is implemented effectively and used to its maximum capacity (Saeed et al. 2010). It posits that the individual and management intervention within the organisational context would induce series of practical and useful application in IT use. This will include tasks undertaken by IT users, work processes or technology features to fit between tasks and technology in order to support work tasks and processes. However, according to Jasperson et al. (2005) and Saeed et al. (2010), in a mandatory IT use organisation, IT users may choose to embrace the systems to its maximum capacity, explore the extensions of the available features or may choose to resist, comply the systems minimally or even only use the standard package. It is argued that for an organisation to gain maximum benefits from IT innovation, the technology employed must be used effectively and extensively. Unfortunately, IT users either individuals or organisations have not successfully optimised the business values from technological innovation and failed to fully utilise the benefits of the technology (Holtham & Nigel 2010; Krigsman 2013). The successful of IT adoption requires innovative or favourable actions that is supported by a series of knowledge, skills and experiences (Diaz & Lloraz 2010).

Scholars have distinguished the difference in the meaning of innovation and invention. In recent studies, innovation is defined as newness, the capacity to introduce new ideas and concepts to solve real-world problems involving strategy, planning, end-to-end business process and continuous improvement (Deloitte 2017). In prior studies, Lin and Ho (2007) defined innovation as the process of turning opportunity into new ideas and of putting these into widely used practice. Koellinger (2008) and Sisaye and Birnberg (2010) defined innovation as an intentional attempt to bring change and new methods of arranging work structures, processes or procedures in organisations. The change can be classified into two dimensions: i) the change in products or services that offered by the organisations; and ii) the change that brings originality and novelty. Schön (1967) defined invention as the improvement on an existing form and a composition or process of something that is new. However, when it is put into use effectively and causes a social or commercial reorganisation, then that is called an innovation. In this study, IT innovation is defined as a new idea, method or process of which new IT is adopted and used to support business operations.

The benefits of IT innovation are clear. These include improving human life and businesses, speeding up communication, improving productivity and performance. Despite the benefits of IT innovation, researchers have observed that majority of users have not fully taken up the full benefits of IT (Malinowska & Rzeczycki 2017). Indeed, existing research revealed that not all technological innovations are successful (Hall 2016; Malinowska & Rzeczycki 2017). Some of the challenges that the lead to failure in IT usage were due to users’ resistance to change, routine work, minimal compliance to the use of technology, anxiousness with complex features, lacking skills and less initiative to explore the extensions of the available features to match with task and technology (Saeed et al. 2010). It is also argued that under utilisation of IT contributes to the failure in technological innovation and investment (Malinowska & Rzeczycki 2017). Investing in IT can be extremely expensive to foster future growth. However, if IT users do not take up and maximise the value from IT, the problem of waste in technology investment would deploy. Money spent on IT should be worthy particularly in achieving the return of investment. If users fail to make full use on the benefits of IT, it could destruct organisational sustainability, performance and competitive advantage (Furneaux & Wade 2011).

One of the most critical components to a successful new technology implementation is the role of business leaders (Ragu-Nathan et al. 2004). Having the support from the business leaders refers to the extent to which senior or top management get involve, participate and give directions in exploiting new technology that provide solutions to the business operations (Gloria et al. 2015; Rahim et al. 2015). Business leaders are familiar with the organisation’s current business processes. Therefore, their guidance, motivation and inspiration are needed so that the subordinate or partner will understand them properly. There are a number of studies have been conducted to understand the relationship between top management support and IT use (Gloria et al. 2015; Khan et al. 2013). For example, Ragu-Nathan el al.’s (2004) study showed that there is a positive relation between business leaders support and IT innovation. Rahim et al. (2015) stated that management support is the most essential factor of innovation. Meanwhile, that senior and top management’s support is necessary to encourage a good IT culture environment in an organisation (Gloria et al. 2015). The motivation and support shown by these group of people will not only influence effectiveness and efficiency among workers but also enables greater market experience and product commercialization.

Implementing a new technology in business environment particularly in the new era of disruptive technology requires a great support from the management and teams. Management need to exploit the new technology and communicate it with its people. By showing acceptance and leading by example, business leaders must be able to influence the group of people in achieving the success of IT implementation and business as a whole (Khan et al. 2013; Chen & Hsiao 2013). Unfortunately, not many leaders understand the concepts of motivation and leading by example (Hauser 2014). To invest time and effort into learning how to use the new technology require a clear understanding of its benefits. Normally, the employees are not interested on the cost-effective is for the company but they are more interested in understanding on how the new technology could
transform to better working lives. Interest is growing in the influence of transformational leadership on creativity and innovation. Transformational leaders raise the performance expectations of their followers (Bass 1985) and “seek to transform followers' personal values and self-concepts, and move them to higher level of needs and aspirations” (Jung 2001: 187). Researchers have studied the effects of transformational leadership on the performance of followers and organisations in the past decade (e.g., Dvir et al. 2002; Howell & Avolio 1993; Lowe et al. 1996), but only a handful of studies have examined the effects of this type of leadership on followers' creativity.

SUGGESTED CONCEPTUAL FRAMEWORK

Literatures on IT usage revealed that much of prior studies in psychological perspective have been drawn up around models in adoption and diffusion of information technology that associated with reflective cognitive processing (such as perceived usefulness, perceived ease of use) (Saeed et al. 2010; Venkatesh, Thong & Xu 2012). Most of the prior studies have focused on reflective cognitive perspective regarding technology usefulness and ease of use with little emphasis on the role of business leaders in technology innovation, the challenges that they faced and ways to overcome the challenges.

The suggested conceptual framework that will be used in this study is based on transformational leadership theory. Transformational leadership is the role that the leader play that could affect followers' trust, admire and respect for the transformational leader (Bass 1985). Transformational leaders normally guide followers by increasing their awareness of task importance and value, getting them to focus first on team or organisational goals, and activating their higher-order needs. Bass (1990) suggests charisma as the main attribute to transformational leader that could occur through coaching and mentoring. Bass and Riggio (2006) recognize the need of moral foundations for transformational leadership. These include idealized influence; inspirational motivation; intellectual stimulation; and individualized consideration. This study will focus on these components of transformational leadership as the conceptual framework in order to understand the role of business leaders in IT innovation, the challenges faced and overcoming challenges. The framework is further enhanced or extended with current literature discussed above that are related to transformational leadership in IT innovation (see Table 1).

<table>
<thead>
<tr>
<th>TABLE 1. Suggested Conceptual Framework</th>
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<tr>
<td><strong>Transformational Leadership Theory</strong></td>
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<tr>
<td><strong>Idealized influence</strong></td>
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<tr>
<td>Transformational leader serves as a positive role model for followers.</td>
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<td><strong>Inspirational motivation</strong></td>
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<td>Transformational leaders have the ability to inspire and motivate followers.</td>
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<td><strong>Intellectual stimulation</strong></td>
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<td>Transformational leaders show personal attention for the needs and feelings of followers.</td>
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<tr>
<td><strong>Individualized consideration</strong></td>
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<td>Transformational leaders challenge followers to be innovative and creative.</td>
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METHODOLOGY

This study uses qualitative research methodology and case study approach. A key feature of the case study research design is the replication or number of cases included in a project. According to Yin (2014), the evidence from multiple cases is often regarded as more compelling and robust than a single case study approach. In this research, multiple case with holistic design is used to allow for more generalisability and transferability rather than the single case design. The appropriate sample size for qualitative research is answered by ‘theoretical saturation’ that occurs when no new or relevant data in a category to emerge where the category is well developed in terms of its properties and dimensions demonstrating variation and the relationships among categories are well established and validated (Strauss & Corbin 1998).

The qualitative data is gathered through open-ended face-to-face interview among selected business leaders who are also accountants in an organisation. There came from various industries namely oil and gas, IT consulting and property development. They have experiences of managing team as well as developing accounting system in their organisation. The
interviews and discussion with the participants include their perspective and experience on the issue or problem area. Table 2 shows the list of participants involved in the study. With the consent of the participants, all interviews were voice recorded and transcribed.

Data analysis in qualitative research follows Yin (2014) that consists of examining, categorising, tabulating or recombining the evidence to address the initial propositions of a study. Every case study started with a general analytic strategy that identifies priorities and techniques to be use (Yin 2014). As the source of information is in verbal and written forms, this study uses a systematic method that would lead to valid inferences from the texts. Data analysis in this study includes the activity of making sense of interpreting or theorising the data (Schwandt 1997). As suggested by Miles and Huberman (1994), this study divides data analysis into three concurrent flows of activities such as data reduction, data display, theorisation and verification.

<table>
<thead>
<tr>
<th>Participant / Case</th>
<th>Job Position</th>
<th>Major Industry</th>
<th>System Used</th>
<th>Interview Method</th>
<th>Frequency of Visits</th>
<th>Duration of Interview</th>
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<tbody>
<tr>
<td>Case 1</td>
<td>General Manager – Finance and IT</td>
<td>Construction and Property Developer</td>
<td>IFKAR, SAP</td>
<td>Face to face</td>
<td>1</td>
<td>2 hours 10 minutes</td>
</tr>
<tr>
<td>Case 2</td>
<td>Finance Controller</td>
<td>Construction and Property Developer</td>
<td>SAP, IFKAR</td>
<td>Face to face</td>
<td>1</td>
<td>1 hour 58 minutes</td>
</tr>
<tr>
<td>Case 3</td>
<td>Head of ICT</td>
<td>ICT</td>
<td>IFKAR, CRM, SAP</td>
<td>Face to face</td>
<td>1</td>
<td>2 hours 35 minutes</td>
</tr>
<tr>
<td>Case 4</td>
<td>Head of Infrastructure and Operation Support</td>
<td>ICT</td>
<td>IFKAR, CRM, SAP</td>
<td>Face to face</td>
<td>1</td>
<td>2 hours 35 minutes</td>
</tr>
<tr>
<td>Case 5</td>
<td>Project Manager (Accounts and IT)</td>
<td>ICT</td>
<td>SAP</td>
<td>Face to Face</td>
<td>1</td>
<td>2 hours 8 minutes</td>
</tr>
<tr>
<td>Case 6</td>
<td>Senior Manager - Finance</td>
<td>Oil and gas</td>
<td>SAP</td>
<td>Face to face</td>
<td>1</td>
<td>1 hour 45 minutes</td>
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**FINDINGS AND DISCUSSION**

**ROLE OF BUSINESS LEADERS**

Findings show that business leaders play important role in IT innovation. This include the ability to provide idealised influence, inspirational motivation, intellectual stimulation and individualised consideration.

**IDEALISED INFLUENCE**

The idealised influence of transformational leader serves as a positive role model for followers. This could be achieved when business leaders get involve, participate and give directions in exploiting new technology that provide solutions to the business operations (Gloria et al. 2015; Rahim et al. 2015). The Head of Infrastructure and Operation in one of the companies agree that the leader should provide proper instructions to encourage commitment from the staffs. According to her; “...*I think our enforcement is important. When we do IT innovation, instruction from the top management is important to look at who really involve must give 100% effort. Then I think this kind of problem will get reduce...*”. In other words, the leader should play the role as a champion and get involve in the IT innovation. A Finance Senior Manager added that “...*A new technology must be...*”
championed by somebody from the high level (top management), maybe the CEO himself. If the head does not get involve in IT innovation, there is no way we can have successful implementation...”. The findings are in line with previous studies that the support from the business leaders is a significant factor in influencing the effectiveness of IT implementation and the use of IT in an organisation (Gloria et al. 2015; Khan et al. 2013; Ragu-Nathan et al. 2004).

INSPIRATIONAL MOTIVATION

Transformational leaders should have the ability to inspire and motivate followers. Business leaders could provide guidance, motivation and inspiration that are needed so that the subordinate or partner will understand them properly (Gloria et al. 2015; Khan et al. 2013). The roles of business leaders that are important. According to General Manager of Finance & IT, a business leader should show excitement when informing staff about the new IT implementation: “...Basically the role of top management is very important. Our top management was excited when informing the accounts people. Then, we follow and after a while, we appreciate (the move)....” This include playing a role as a champion for IT innovation who give instructions and information in order to encourage staff involvement. Senior Manager of Finance indicated that; “...This is more to human skills. If we inform them nicely, they will get involve ...”.

INTELLECTUAL SIMULATION

Transformational leaders show personal attention for the needs and feelings of followers. Leaders should play a role that could transform followers' personal values and self-concepts, to move them to higher level of needs and aspirations (Jung 2001). The General Manager of Finance & IT stated that there is a need to create awareness for staff to ensure that they understand what they are doing and are able to meet the complexity of tasks with new technology. He explained that: “... We create awareness for staff first. Once they understand and clear on what they have to do, then we will explain on the benefits of using the systems. With the system, your work processes will reduce. If last time your work needs to do for more than 10 steps, now you have only 4 steps and the outcomes are very good. You just have to press one button to get reports that can be produced ...”. Continuous discussion between the business leaders and the team members could help increase users’ awareness on IT innovation. Working with team members can actually make work more productive and high-morale. Head of Infrastructure and Operation Support stated that: “...By listening to others in a community, you will know what you have to do as an accountant...”. The Project Manager of Accounts and IT added that; “...Awareness is like when someone who is well aware on tasks that he or she performs, know what is the lacking. So they must initiate improvement. They must give head up to the management so that we can investigate and improve. So when they continuously do that, it seems easier ...”.

INDIVIDUALISED CONSIDERATION

Transformational leaders challenge followers to be innovative and creative. Business leaders play important role in encouraging a good IT culture environment in an organisation (Gloria et al. 2015), hence enable greater market experience and product commercialisation. Findings show that strong support from business leaders can improve effectiveness and awareness on IT to maximize the value of new technology intelligently. According to General Manager (GM) of Finance & IT Division, his company is willing to spend on technology for improvement on the system. Indeed, the top management encouraged their employees to help boost their interest in utilizing IT. The GM stated that, “... The company is willing to spend on technology for improvement on the system. Certain companies might not be able to afford on that change or investment. Most of the time we are willing to invest in technology to be competitive...”. He added; “... The management tell them that they have to change, we force IT upgrade and force them to change ... Without top management support, it will not happen ...”. Top management support is essential in achieving goals and objectives of the organisation particularly in managing challenges. Encouragement from the top management to IT users in utilizing the benefits of IT is needed to ensure the smooth running of work processes and business activities. This is in line with previous studies conducted among the researchers stated that support from the business leaders is the significant driver to influence of IT users’ beliefs in technology (Khan et al. 2013;) and progressive use of IT (Lin 2010). The lack of support from business leaders could impede IT success (Sohal et al. 2001).

CHALLENGES IN IT INNOVATION

Findings also show that the challenges in IT innovation include feeling pleasant and comfortable with existing practices, refused to change, and fear of losing job to the new technology.
COMFORTABLE WITH EXISTING PRACTICE

Head of Infrastructure and Operation Support shared his view on the feeling of being pleasant and comfortable with existing practices as the challenges in optimizing the benefit of IT innovation. He stated that: “... Usually people don’t want any changes, they are reluctant especially when they have been using the technology for five to six years. They said they are perfect already and they do not want to change!”. In other words, the IT users are feeling pleasant and comfortable with existing practices that they refuse to innovate. This is consistent with Hall (2016) and Krigsman (2013) studies whereby they have highlighted on issues of user’s resistance to change, minimal compliance of IT, anxiousness with new IT and lack of IT skills.

REFUSE TO CHANGE

Feeling anxious of using new technology is another factor being highlighted by the participants. For example, Head of ICT stated that; “...Sometime when you do not know how to use it, you will start to make problem. You make with other people, something like that. When they start to reluctant or refuse to change, until the end they will keep finding fault of the system...”. In supporting this statement, Head of Infrastructure and Operation Support explicitly highlighted that: “...Let say you really be the user of the systems, educate and advocate on the use of IT tools, the stuffs will actually use it. In fact, they will become even better than before. But if let say the company invest a lot in technology, but you don’t educate the use the IT would be not use...”. Most of the users feel anxious of using new technology because they are not familiar with it. Indeed, most IT users think that using new technology will complicate their life that they make it hard for them to use and learn (Saeed et al. 2010).

FEAR OF LOSING THE JOB

Meanwhile, fear of losing job is another challenges that IT users keep on refusing to accept the new technology. IT users feel that they are going to lose their job as their jobs will be taken over by the technology. The General Manager of Finance & IT stated that; “...Oh yes! There are people who do not want to change. People who think (new technology) is a threat. They are afraid of losing job when they use the new technology...”. Getting the attitude or behaviour would have an implication on the IT investment return. The more routine and common the activities, the more likely employees will use their unconscious script to guide their behaviour (Langer 2000; 2014). Although routine or automatic pilot action is fine when habitual behaviours are safe, what if unexpected events or risks related to the tasks and technology happen at the workplace? It is argued that users should be able to explore and optimize the IT in performing tasks at work so that the benefits of technological innovation could be realized rather than organisations with standard adoption and low-integration utilization (Hall 2016).

WAYS TO OVERCOME THE CHALLENGES

Findings show that management involvement, educating users, knowledge sharing are some of the ways to overcome the challenges in IT innovation.

MANAGEMENT INVOLVEMENT

Management plays an important role to convey the right message to its employee on the importance of optimizing the use of new technology. Without management involvement, users will not realize their mistakes and sometimes they do not even care of their organisational goals. The involvement of the management is expected to have a positive impact on IT implementation and benefits realization. Head of ICT stated that; “...IT has the limitations but definitely if the management did not spell out or convey the right messages, IT users will do their work without knowing its purpose. They don’t even think further why they have to do it or how can it help to improve the existing one. For whatever reason, the management has to come together in order to get the best result. It starts from top management to portray the direction and facilitate the work...”. This is in line with previous studies that found management’s involvement is crucially important to ensure on continued focus, review strategies and assess diversity business processes (Chen & Hsiao 2012; Zwikael 2008).
EDUCATING USERS

In addition, educating IT users is also a significant factor that influences IT users’ action in maximizing the value of new technology. Constantly educating users include persuading them that IT will assist and help users in daily activities and teaching them effective ways in maximizing the value of IT. Finance Controller stated; “...To change their mindset of doing the same work for more than 10 years, I had to suggest new way of doing work. When I talked to her, she can see the effectiveness of using the suggested approach. In order to change people behaviour, you have to educate them...”. This is supported by General Manager of Finance & IT. General Manager of Finance & IT explained that in ensuring the impact of IT utilization, the business leader himself should be mindful to educate people and know the types of information that are needed in achieving performance at the workplace. General Manager of Finance & IT explicitly highlighted that; “... Sometimes they don’t care and forget back on what we have thought. It should start with mindful superior. The superior already set in their mind on what information they require. The boss or superior must be very well versed ...”.

KNOWLEDGE SHARING

The other ways of overcoming the challenges is through knowledge sharing. Knowledge sharing refers to giving some knowledge, insights and example to IT users in optimizing IT. It is important as it helps them to understand and see the real process to be applied at the workplace. Project Manager of Accounts and IT stated that: “... We can show them that we have full sets of data. We inform them that they already have all the data and why they still need to do manually by using spreadsheet. By just pressing one button you will get good report. You will get better report for decision making ...”. Project Manager of Accounts and IT added that in order to prove to the users, they need to convince them by showing examples. Project Manager of Accounts and IT stated that: “...In order to show the easiest way to them, we need to come out with prove of concept, show them a sample then only they can see the integration from one department to another department rather than arguing each other of not providing the information ...”.

COACHING

Coaching is useful in influencing IT users to fully optimize the benefits of IT. According to General Manager of Finance & IT, coaching is another strategy that could help boost IT innovation. Business leaders could assist employees in developing their personal growth. The General Manager of Finance & IT stated that; “...That is why IT department is there to brief us, what is the latest market. IT people need to understand what are all the people needs...”. Head of ICT explained that; “...The superior will tell the junior what is the correct entry or if it does not fit, we will give example either to improvise it or make sure the entry is correct. Normally coaching or demonstration from the senior...”. Coaching refers to the process of which the leaders help or IT users seek for an expert to facilitate the exploration of needs, motivations, desires, skills and thought processes to assist them in making real or lasting changes. Coaching also involves observation, listening and asking questions to get a deeper understanding on any situation that happens at hand.

DISCUSSION AND CONCLUSION

Findings show that business leaders role in IT innovation include providing idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. However, they faced challenges in IT innovation and have to deal with the potential users who often feel pleasant and comfortable with their existing practices, refused to change, and fear of losing their jobs to the new technology. Findings also show that those challenges could be overcome through involvement from management, educating users, knowledge sharing are some of the ways to overcome the challenges in IT innovation. IT innovation requires support and close coordination from business leaders. These could influence users’ behavior in order to gain full benefits from IT innovation and understand that new technology. These findings suggest that a successful IT innovation requires good intervention and communication between business leaders and users.

Theoretically, this study extends Bass and Riggio (2006) by enhancing our understanding on transformational leadership theory. This study provides empirical evidence of four important roles of business leaders in IT innovation. This study provides further empirical evidence on the challenges faced and ways used by the leaders to overcome challenges. The role of business leaders includes idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. Business leaders could influence IT users’ belief and actions towards IT innovation by delivering the right messages of IT capabilities and its limitation as well as IT strategies to users. Practically, business leaders are open to new approaches, develop
and gain support for team vision, implement and execute a strategy effectively. Findings show some intervention or involvement from the business leaders for successful IT innovation. However, the business leaders can execute plan in several approaches: direct influence such as educating users, knowledge sharing, coaching. Business could be effected in the long run especially in this era of disruptive technologies if the business leaders do not understand their role in IT innovation. These study however has some limitation in the scope of study that focus on the role of business leader in IT innovation. Future studies may look further into the role of organisation and institutions in IT innovation.

ACKNOWLEDGEMENT

We would like to acknowledge Universiti Kebangsaan Malaysia for funding the research under matching research grant DPK-2017-005.

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