

VISIONS FOR THE FUTURE: THEORETICAL PERSPECTIVES ON MANAGEMENT			
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“Technology advances - specifically in the areas of e-Commerce and e-Business 2.0 — have rendered traditional models of organisational structure and theories of management roles obsolete in the light of the changing nature of 21st century corporations.” Evaluate whether this claim is justified - in relation to a business sector of your choice - and provide evidence for or against it, especially in relation to the management changes it implies.

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1. Introduction

The invention of the Internet was one of the greatest inventions of human kind in the twentieth century as it had a great influence on the social economic development. During the twenty-first century, the Internet developed at a rapid speed, according to Internet World Stats by September 2009, the number of Internet users worldwide was more than 1.7 billion people and in 2010 was more than 2 billion people. With the brisk development, the Internet has become a necessary part of human life. Its application is extremely diverse, especially in the field of E-commerce.

Technological advances have greatly contributed to the increased competition. Over the past decades they have boosted up the growth of financial markets and non-banks by giving them an advantage over banks. Technological innovations have not only helped investment funds increase their securities and easily manage their client accounts, but also have made costs of managing a fund lower. Therefore, non-bank institutions can introduce a broader range of products and services to their clients (Berger, 2003). In addition, innovations in IT have helped public equity and debt markets in analysing and storing data and lowering trading costs. The securitization market has also been benefited from technology, for instance, in the area of obtaining accurate pricing, and increasing the set of securitized instruments. The financial markets have become more efficient due to these contributions from technological advances. With a broader range of products and providers, non-bank institutions have encouraged their customers to switch to alternative savings and investment products.

Asides from these benefits, innovations in IT have made competition among banks more intense. For instance, online banking, a tool that helps customers easily manage their bank account, and also compare different banks' products. Technology and internet have facilitated the entry to the market for new institutions as they can offer their products through an online distribution channel. Because of the low costs, banks can attract more customers with attractive interest rates and gain market share.

In this paper, the writer will discuss about the effects of technology – E-business or e-commerce – on the banking industry along with the approach from management theories and organisational structure. The structure of the paper is as follows: 1. Introduction, 2. The flow of Management theories, 3. Revolution of Technology: E-business and E-commerce, 4. Structural Transformation of Organisation, 5. Management style, 6. Conclusion and 7. Reference.

2. The flow of Management theories:

2.1. Classical Management Approach

From the half of the Nineteenth century to the Twentieth century, the theory and methodology of management had changed following the development of technical transformation. In the beginning of the Twentieth century, there were several famous concepts of management, which one of those based on the scientific approach. This scientific management theory was introduced by Taylor (1911) who was convened at the US House of Representatives to advocate about his belief that “payment by results” would be motivation for employees. Taylor’s scientific management set the first brick dismantling negative criticism about the major foundation of his theory as well as transforming individuals’ visions about management. Currently, Taylor’s principles of scientific theory have been adopted widely and treated as core competency in a business. For example, the American fast food chain, McDonald’s, allocates suitable tasks that matches employee’s ability to perform and trains workers to act in accordance with tick lists that contains employees’ activities. Technology was developed to control production lines as well as scripts are prepared for call centre operatives. Besides Taylor’s work, Fayol (1916) applied the administrative principles, called “command and control”, in his theory that combining rules of management: foresight, organisation, command, coordination and control. In the current business’s environment, the term “command and control” seems to be fad, however, in an

organisation that obliges with a degree of hierarchy and transparent lines of control would operate efficiently.

Weber (1947) built his theory on the engineering approaches to recognise the effects of bureaucracies. The theorist realised that the most regularly kind of plausible legal control was bureaucracy and it had substituted charismatic and traditional form of authority. Moreover, the theorist accredited bureaucracy is an indication of “the process of rationalisation of society” (Robinson, 2005). In 1973, Mintzberg published “The Nature of Managerial Work” which described the reality of management, the actual actions and behaviours of the managers. This provided a practical-oriented view rather than presenting the theory depends on the manager’s actions. During the 90s, Peter Senge, who is the “youngest” theorist in this paper, is the father of “the learning organisation” management theory. The idea of learning organisation is portrayed as a centre where “ people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning to see the whole together”. Additionally, Senge claimed that business has the ability to accommodate with economic changes and high engagement with employees will subsist and outperform (Robinson, 2005).

2. 2. Modern Management Foundations

There are 5 components in the modern management, which are: quantitative analysis, organisation as systems, contingency thinking, quality management and evidence-based management.

From a view of a quantitative researcher, numerical or mathematics approach is an indispensable tool in analysing the business’s operation because of its precise demonstration in concept and it has been recognised globally as a problem-solving method. From the view of a manager or a leader, the approach of quantitative has played an important role in advancing methodical

thinking of managers. However, its contribution is narrow as it only concentrates on the managerial practice and on certain managerial issues.

The approach that concerns with unifying and collecting interrelated parts that function simultaneously in order to obtain a common goal is the system approach. This approach fascinates several researchers contribute examinations on the system approach. The organisation was recognised as a basic and unclosed system, enterprises that communicates with their environments in an incessant process of reconstructing source inputs to outputs.

In the last three decades of the Twentieth Century, Lorsch and Lawrence (1967) presented the contingency approach theory. Comparing to the system approach, contingency approach is considered to be a better version. The approach is partly based on sub systems as it acknowledges the organisational system is the invention of the communication between sub systems and the environment. Furthermore, Olum (2004) stated that the decision-making via contingency theory would involve with the process of collecting data and take into consideration about the current status quo, which is normally recognised as a “dependent approach”.

The fourth component in the modern management is the quality management. Quality management is usually referred as Total quality management (TQM) that defined as the action of supervising an enterprise’s activities and assignments that needed to uphold at a level of distinction. The Quality management approach concerns with a long-term vision that comprises regulating policy related to quality control, establishing and applying plan, assurance as well as quality control and development. Toyota Motor Corporation is a good example of company that utilises the TQM which called the Kanban system. Kanban system is “a physical signal that creates a chain reaction, resulting in a specific action” that used for implementing the just-in-time inventory process of the Japanese corporation (Barone, 2019). Moreover, A and B applied a search strategy on the Medline database and utilising the terms “Total Quality management” and “Quality Assurance

Likewise, the Total quality management relates to ISO certificate – a global quality management, Knowledge management and learning organisation. Before the expansion of technology, knowledge formulation and deportation has conducted via coaching, job rotation, face-to-face interactions. Nonetheless, the traditional methods are observed to be less effective and not suitable with the growth of technology. Therefore, early data and material technology was invented to help professionals and managers via analysing and transmitting massive volume of data to “managers organisation-wide”. This follows the viewpoint of technology-oriented, knowledge management and managers are linked together with sophisticated systems: administrative data systems, intranet, warehousing and e-utensils: search engines and multi-media (Alavi and Leidner, 1999). Knowledge management is described a methodical, systematic and transparent function that assisting businesses in boosting current knowledge-based efficiency and obtaining profits from knowledge assets (Lytras et al., 2002). Moreover, it is treated as an aptitude to control knowledge which expresses in the collection of constitutional and extrinsic knowledge of organisations and the conversion of subsisted knowledge into ‘game plan’ and innovated ideas (Gold et al., 2001). Researchers – Dahiya et al. (2012); Byukusenge et al. (2016) – indicated that knowledge management not only bring opportunities of exploring explicit and tacit knowledge from employees and company, but also support the business in achieving efficacy of corporation’s manpower.

Last but not least, evidence-based management is the act of conducting managerial and people-related judgements corresponding with critical thinking and the “best available evidence” (Galli, 2015). The evidence-based management eliminates anxiety correlating with the extreme pressure in decision-making that resulted from the lack of data, likewise, information exuberates to support managers in deciding on the current projects and tasks. Nevertheless, there is a substantially number of researchers, managers, leaders and workers neglects this and alternatively, putting efforts in studying subjects with the outdated information or on existed knowledge and experience. This ensues to a poor-quality result, waste of money and time; to a

higher level, it would expose to risk and ruin the business's reputation. However, managers might encounter with "half-truth – advice that is true some of the time, under certain conditions" and it might be a challenge in identifying the accuracy of the consultation, which could lead to mislead actions (Pfeffer and Sutton, 2005).

2. 3. Changes in Management

2. 3. 1. Kurt Lewin (1947)'s Change Management

Business environment is changing every day along with new opportunities and unforeseen uncertainties. If a business could not adapt its entity to the changes, it would be retrogressive compare to the market. Therefore, it is necessary to obtain change ideology and accesses in management. According to Hiatt and Creasey (2003), authors declared that managers have the tendency to change the management method if uncertainty was detected after conducted a survey among 327 project managers to test for their reactions on change management. Nevertheless, change management is not an easy process as it requires carefully consideration, sharp thinking and actions.

The idea of accepting change management in an organisation is considered as the "unfreeze" phrase in Lewin's change management model. Lewin's theory demonstrates that adjustment associates with a transposition from an immobile phrase to a mobile state and return to different immobile phrase.

At the first stage, company must identify the current status quo and critically assess whether the current condition is suitable with the development of economy in order to adopt change in the business management. The "unfreeze" phrase is usually the most challenging part for every business in every industry as the manager "challenges his/her beliefs, values, attitudes and behaviours" in amending the company's management structure. However, high risks equal with

high returns; compelling the business to re-consider its nucleus proficiency would encourage impulse in attaining new equilibrium.

In the second stage, the business begins to apply amendment to resolve problems occurring in the current status quo. Workers and managers need time to enhance modification and they require interaction and communication to feel connected with the entity during the 'evolution' duration.

After the change operates smoothly, it is time to move from a mobile state to a static state which regarding to the new equilibrium of the business. This static state is the terminal state that businesses are successful in developing new capabilities and individuals incorporate with the company's new methods of working, admitting the changes as part of the working habit and increasing relationships.

3. Revolution of Technology: E-business and E-commerce

In the 90s, the presence of e-business or e-commerce simply encapsulated about the born of Website, administering desire of every enterprise on setting the online business and ascertained that there was information published online. The acknowledgement about the Internet was not popular during that time and there were uncertainties in understanding the meaning of Internet, however, individuals still perceived that it is essential to have the Internet.

From 1997 to 2000, electronic commerce was mentioned as transactions. This visualised the action of purchasing and 'vending' on the internet and it had the main focus on the flow of order and gross revenue. It allowed suppliers or sellers to connect with customers or buyers from distance and it simplified the process of taking transactions that traditionally involved with paperwork. Nevertheless, during this phase, the proclamation concentrated on order flow: "why-sell-it-when-you-can-give-it-away business models". Dr. Ravi Kalakota and Marcia Robinson (2001) demonstrated that most of the first movers were having sharply drawn breath or even drawing the last breath in this period, for example, Value America.

In the 21st century, people, especially leaders, concern about the profitability that resulted from the Internet or the e-commerce. The definition of profit is no longer about the expansion of revenue; besides, the gross margin is. The current phase is called E-business, which covers all aspects and movements facilitating an enterprise to proceed transaction. Moreover, E-business encompasses all applications of a business, front and back office, which create the major motive for a modern business. In general, e-commerce and online transactions conducted on Website are not the only aspects in the E-business; E-business is about reformulating outdated business models into 'up-to-date' models with the support of technology.

The question is why one should bare in mind the impact of E-business and does the advancement of technology impact the business? The number of individuals and businesses connected digitally has increased regularly. The low-cost technology binding of buyers and sellers is "as significant a technological advance as the invention of the steam engine, electric power generation, telephone or the assembly line" (Kalakota and Robinson, 2001). Technology was claimed to be the causes and core drivers of a business. Although it was not Rodney Dangerfield of the business and it did not have an apparent impact to the company, it would have the incessant and aggregate effect similar to the effects of water.

Undoubtedly, E-business is concerned as a weighty challenge to the business since the appearance of computers. However, computers alone could not change the business; with the combination of e-commerce, the business foundation changed. Therefore, structural conversion of a business would be difficult to manage since technology has penetrated into business process and problems related to technological innovations would pose on larger scale. The Internet redefines the obsolete commerce by replacing it with modern industries like portals, application service provider and Internet service provider which commensurately equals to the outburst of virginal markets. Good will, reputation, external relationships and other intangible assets are affected by the development of the Internet along with the tangible assets.

Communication is key in operating a business. For organisations with subsidiaries or owning multinational business, communication technology must be carefully invested. Travelling globally for a business trip or having a meeting outside of the company is not only time-consuming but also costly and reduces productivity. Hence, the use of Internet or video calls, video conferencing technologies help to transmit information quicker, increase the interaction between managers and employees and reduce the cost of operation.

On the other hand, adopting technology would help organisations gain exclusive customer experience. Taking the example of the most famous transportation company – Uber, the company builds and operates business on a “user-friendly mobile app”, which has courageously transformed the taxi industry. The invention has mostly crossed out the action of ringing a taxi station and delivering exact updates on when and where the driver is (Gough, 2017).

Deloitte, Touche Consulting Group and IBM defined E-business as “the use of electronic networks for business usually with web technology” and the revolution of business over internet technology (Chaffey and Smith, 2008). In an elementary understanding, E-business could be observed as the act of exchanging goods and services on the Internet. In a broad view, E-business comprises E-commerce and it is a universal platform where engagement between business and customers exists. E-business is an advanced method of operating business which concerns with clarity, distribution, rectitude and connectivity. Thanks to the development of e-business, large corporations with global subsidiaries would easily connect and function as an entity by the way of digital connection from partners to employees or from the enterprise to the supplier or from the business to customers. Assimilation and adjustment in organisational structure, human resource and technology are necessary in adopting e-business (Hackbarth and Kettinger, 2000).

Furthermore, the quality and the efficiency of “the planning process of information systems” is affected by the business characteristics (Kao and Decou, 2003). Business characteristics also correlated with the adoption of technology, which demonstrated in numerous empirical and

authoritarian researches (Phan, 2003; Yap and Thong, 1995; Davenport, 1993; Brynjolfsson and Hitt, 1996). It is proved that organisational framework and consolidation manipulates “telecommunication technology” (Grover and Goslar, 1993). According to Yap and Thong (1995), the size of the company is one of the determinants that has huge impact on the use of technology. Small size companies might face disadvantages in establishing IT due to the limit of finance, restriction of resources, deficiency of professionals, specialists and sensitivity to external tension. However, small size companies do not respond to the competition between the intensive volume of data and the market when using IT in the firms.

Additionally, the effect of IT is studied with the “organisation competitive priorities”, the adjustment of strategic goals (Kearns and Lederer, 2003), the application of IT and the success of particular IT function (Subramani, 2004). Generally, the support of technology has benefited corporation’s performance by bolstering greater degree of business’s integration (Vickery et al., 2003). Lim et al. (2004) and Sriram and Stump (2004) showed that there is an existence of productivity paradox as technology affects directly on the company’s performance which led to inconsistent consequence. There were several researchers studied this identical phenomenon under many forms as Dos Santos and Sussman (2000) displayed the failure of management “to leverage the full potential” of technology or Stratopoulos and Dehning (2000) presented “ineffective implementation”, the existence of time lag in the IT investment process (Deveraj and Kohli, 2000).

Given the assertion that E-business and e-commerce have altered the management theory as well as the organisational structure, E-business is treated as the core operator in transforming an entity’s structure. Regrettably, there were only a few businesses have established the information-centric business layout that used for addressing concerns arising from the economic changes and IT. Altering the stream of information necessitates the amendment from not only the product mix but also the business environment, where organisations contest. In the 80s, IBM and Digital Equipment Corporation dominated the PC world until there was a rapid growth from

other technology and manufacturing companies like Dell, Compaq and Gateway. The reason was IBM and Digital Equipment Corporation did not pay attention to the market changes, in the 90s, the Digital Equipment Corporation's line showed that "PCs represented a niche market with only limited growth potential." (Kalakota and Robinson, 2001). Unfortunately, due to the company's obstinacy and lingering in changing the concentration from midrange computers to PC, the IT company delved into a black hole with no ways to escape. Additionally, the company was hesitant in endorsing the Internet which was a huge mistake and resulted in an acquisition by Compaq. This is well-proved that the economic changes are harsh on organisations that do not change. Another example of successful firms failed was the case of CompuServe and Prodigy. CompuServe and Prodigy, a joint venture of Sears and IBM, both founded in the 20th century; CompuServe displayed numerous exclusive content ranges to its subscribers as the most updated news and information, valuable resources, databases. Prodigy owns inventive products and services and once had 2 million followers. Both was proved to stand steadily and take advantage of the digital Web. Nevertheless, glory would come to an end when both companies met an issue in management. During that time, AOL bombarded American market with floppy disks and soon became an influential brand and "outexecuted" the rivalry. In consequence, Prodigy was sold by Sears and IBM, and the similar ending happened to CompuServe as it was purchase by the AOL in 1998 (Kalakota and Robinson, 2001).

4. Structural Transformation of Organisation

4. 1. E-banking booming

4. 1. 1. What is E-banking?

During the end of 20th century, thanks to the invention of e-banking, the management of personal money is simpler for people. In 1983, the e-banking service was first introduced to Nottingham Building Society called "Homelink" by The Bank of Scotland. Consumer were presented a variety range of banking services with helpful information, entrance to their bank accounts along with

specialised tools utilizing for specific purpose. For example, people were allowed to make a payment of their bills or transferring money by connecting to a television set and a telephone. After ten years, Microsoft Money personal finance software was formed to cover the online banking services; which attracted 100.000 accesses to bank accounts online in 1994. However, the spread of Internet banking was not going strong among customer in the mid-1990s as they were afraid of losing money without any physical actions that they used to use. On the other hand, e-commerce corporations as America Online, Amazon.com and eBay consuming the internet banking as a way of payment on their website. (Pilcher, 2012).

The development of E-commerce contributes to facilitate business, cutting costs and accelerating the integration process as well as improving competitiveness in banking. Banks are constantly increasing the application of modern technology, typically e-banking services with the aim to attract a great number of customer.

Currently, the world of e-banking services has developed quite popularly, diversified in types that including: call centre, SMS-banking, phone banking, mobile banking, home banking, internet banking. Among those services listed above, Internet banking is one of the outstanding products of e-banking. This is a new product distribution channel that helps banks diversify types of services and expand their business scope. Businesses and consumer have the ability to access into their account 24/7 as long as they have connection with the Internet. Apparently, one could save his or her travel cost as he or she does not need to enter a physical branch. Additionally, with the aim to boost the development of online banking system, banks often propose better rates on the internet for loan, mortgage, deposits or FOREX (foreign exchange) which is price transparency, thus, customer could have the best use of e-banking. Likewise, this demonstrates users could make comparisons of financial services between distinctive firms through portals. For fastidious and careful consumer, they can download data to their personal computers for managing intentions.

Moreover, not only traditional financial institutions but also virtual banks delivering Internet banking. The inveterate banking system contains both physical and virtual platform which means it has two methods of distribution that opens to target a wider of customers of all ages. Furthermore, it is worth noticing that some banks establish Online services under a name that is not associated to the original brand name and treating it as an independent sector while others operating in the contrast way.

Besides, the virtual banks do not function their organisations through physical branches like the traditional banks, all tasks and actions are taken online. Nonetheless, consumers are also offered the ability to withdraw from ATM (automated teller machines) free of charge as well as depositing cash into their accounts (Furst K., Lang W., Nolle D., 2000). Its services are corresponding to the traditional banks which users make a payment or transfer money to others. Virtual banks usually face difficulty in reaching new customers as it is new to the market, people were not willing to experiment and the amount of money invested in marketing costs is higher than the brick-and-mortar institutions (Sarel D., Marmorstein H., 2003). Furthermore, basing on Laudon and Traver (2003) paper, multi-channel banks are expanding quickly with inadequate chances of customer acquisition, changeover and retention expenses. The authors also stated that multi-channels corporations attained interests from e-banking visitors that resulted in 86 percent of internet users consume “a secure channel”.

According to the technology advances, there was a change in people’s habit of using Internet. When the second generation of World Wide Web established, Internet users gained interactive and positive experience online that contributing to the success of Internet banking. In the first era of e-commerce, the Internet banking was born but in the second era, there was a truly explosion of the e-banking. Back in 1995, the research showed that there was an existence of only one bank had the world wide web and after 7 years, there were more than 5000 corporations owing banking world wide web. From 2001 to 2007, online transactions are taken predominately and banks trying to develop its online system constantly, which including well-organised and designed website in order to bring the best service for customer, together with introducing new services as

receiving trust and stock statements online, online customer services with emails and news alerts.

Following the 22 Nielsen Ratings, there was an increment of financial transactions adopting online from 2001 to 2003, which was indicated a rise of 79 percent in numerical (Anesti, 2004). Furthermore, Gartner group demonstrated that since 2002 one over five of America's population conducted online banking services and the number of people choosing e-banking will double in 5-year time. They also stated that by 2010 "more than 50 million households will be conducting their banking transactions over the Internet" (Online Banking Report, 2002).

4. 2. The start of something new: Renovating banking's structure

According to Tan and Teo (2000), the market of e-banking services was expected to increase sharply in the next few years of 21st century, affecting the competitive advantage of traditional banks. As mentioned in The Journal of Financial Perspectives by Ernst & Young (2014), according to Boot (2000), when there are competitions among banking sector, banks tend to leverage their current relationships to deal with the problem, however, if competition arises from capital markets, it will be a transaction orientation. Some financial institutions choose to have a mix of relationship and transaction banking system, but some banks that are based on investment activities prefer to take transactions whereas retail banks are keen on relationship oriented. Moreover, banks usually do not set a clear choice between retail and investment banking as businesses favour having both types of activities. Consequently, basing on which kind of activities that banks focusing, banks would be called "retail-oriented universal banks" or "investment-oriented universal banks".

In Europe, in the digital 1.0 phase, banks operated as branches with physical offices and employees. Stepping in to the 2.0 phase, most corporations changed to online models. In the United States, American banks declined to endorse online banking or the universal banking due the Glass-Steagall Act, however, the development of technology back in 1999 had changed American's mind. Based on Ernst and Young's article, the emanation of e-banking began to

spread across American banks and the separation in retail and investment banks obliterated after the published of Gramm-Leach-Bliley Act (Kohler, 2014).

Since Internet banking raised the curiosity among households and businesses, the economies of scale was expanding during that time (Delgado et al., 2007). It is claimed that the Internet Banking should increase its impact and grow massively in order to comprehend promising economies of scale and turn into profitable. Comparing to the traditional banking start-up, the speed of development in Internet Banking is faster, however, this rapid growth did not meet the demand of internet users and be aware of exposed risks (DeYoung, 2005). It is estimated that if financial institutions fail to meet the demand for e-banking services, it is likely to lose more than 10 percent of their customer base in 2000. Moreover, the end of IT booming cycle affected not only Internet technology but also the banking sector.

Besides, in order to establish online technologies, it is essential to acknowledge the importance of costs. According to Arnaboldi and Claeys (No time)'s suggestion, the investment in digital banks would amend the status quo of the operation with heavy cost structure. The amount of bills and costly branch network would be erased when a bank goes online. Furthermore, taking over "a loss-making stand-alone internet bank" and establish distinctive internet subsidiaries would make the cutting-down-cost process quicker.

Nevertheless, there are several banks instead of constructing digital banking under the corporation, they prefer to obtain current ex novo internet banks. European banks like Italian or French, the action of merge and acquisition ex novo and small-sized digital banks becomes popular as they believe this action would pose the least risk to the corporation.

The birth of online banking spawned a profound challenge to the status quo of banking system. It transformed operations' structures of traditional banks, for instance, banks have to split its workload into two different channels: branch and the online channel. Andersen Consulting exposed that financial institutions should drive attention to IT and apply e-commerce for marketing in order to dealing with online channels rather than adopting the old method (Storie,

A., Thompson, J.B., Bokma, A. and Bradnum, J., 2000). Sharing the same school of thoughts, Partnov and Estier (no time) illustrated that the banks and financial domain must focus on technical infrastructure and “e-banking applications’ architecture” to form an efficient organisational structure. Its innovation affected every aspect of the enterprise including the fundamental applications, proportion, components and organisation.

As an example of Halifax, this high street bank faced issues when establishing new operation with e-banking. The definition of online banking confused the company, they assumed that most of the time would be spend on the phone then online transactions because they planned to establish “a stand-alone Internet bank using telephone, Internet, digital television and mobile-phone-Internet technology” (Nicholson, 2000). Likewise, British Telecom was contacted as a partner with Halifax for the web-type mobile phone network. Due to the unconscious awareness, the boat of Halifax e-banking system sailed in another direction that kept the distance of reaching the dream dock far away (Storie, A., Thompson, J.B., Bokma, A. and Bradnum, J., 2000). Additionally, ICBC – the Industrial and Commerce Bank of China – found a specialised team to in charge the Internet finance. Executives of the bank from seventeen departments: “Innovation Management, Financial Markets, Asset Management, Personal Finance Business, Corporate Business, Bank Card Business, Trust and Investment Management, Settlement and Cash Management” perform as team leaders or vice team leaders. Furthermore, ICBC organised a team that specialised in analysing data and the Internet Finance Marketing Centre, where includes not only the e-commerce but also the non-e-commerce group as followers.

Furthermore, it is essential to consider applying value chain disaggregation and reaggregation. In United States, one of the brick-and-mortar banks that is well-known for its innovation leading as well as sophisticate structure is Citibank. The bank used disaggregation and reaggregation to establish new business structure. Disaggregation is defined as a value chain process including “identifying, valuing, and nurturing the true core of the business: the underlying needs satisfied by the company’s products and services.” This method allows the firm to dismantle obsolete business model, restructure the bank’s competence and new sources of value. Along with

original departments, the corporation set a team working specialized in technology to introduce new developments in opening e-banking accounts, upgrading online functions and services on Citibank's website.

In parallel with disaggregation, reaggregation's purpose is to help firms gaining distinctive customer experience and streamline the value chain through reconstructing the company to an accurate vision. By this method, the engagement between customers and business would increase and customers would find it appealing when they experience a wide range of services, assistance and the positive responsiveness from the business. The determinant that determined the success of a reaggregated enterprise is the well-unified combination of the business software applications. These applications interpret the new technological determination of a contemporary and modernised company, and it presented the importance of technology in reaggregating the value chain of business in a digital world.

To all organisations, customer is an essential element and understanding customers' needs is key. As the market has been growing stronger every day, the clients' interests and desires changed rapidly. Therefore, banks emphasis on the Business-to-Consumer (B2C) online services as well as the Business-to-Business (B2B) e-business. Joint ventures were developed by some corporations to advance the certification authority systems that visitors in the existed network are authorised by personal digital signatures. Users can sign digitally for important paper works and financial transactions that need approval by applying the encryption capability. Besides, other groups are aiming attention at advancing electronic bill payment and presentment systems.

Since the new technology requires sophisticated training and critical skills with outstanding human resource, the idea of outsourcing is conducted by some financial institutions. Banks often seek for the reduction in operating costs, which are not lied in the primary line and a positive progress in company's efficiency when outsourcing. Employees, who works in Human Resource, Administration and Information Technology, are first targets of outsourcing as corporations no

need to spend time on educating and organising new teams while hiring specialists. Nonetheless, the old generation of business's core competence was saying no to outsourced. Businesses considered that this was a risky action as they could lose customer relationship because of the outsiders. Currently, the growth of technology in computers, digital devices and networks has constructed a trend of outsourcing as it is easier for managers to manage the firms.

In general, Internet banking has been popular and convenient to use, users could take advantage of it and created the risk of money laundering. Money gained from insider trading, selling illegal drugs, gambling or tax evasion can be transferred internationally as well as hackers could easily "steal" money from bank accounts and users would have no attention of it. This creates a chaos in the online system as institutions could not answer the "w-questions", when, where and who did it. Therefore, banks raised awareness on investing in internal controls to oversee fraud and errors from both internal and external sources.

5. Management style

5. 1. Knowledge Management

The goal of any businesses, mostly in banking industry is to gain profits and satisfying customers' needs. As the nature of business itself has change, the development of technology and e-commerce has changed the management style of corporations and numerous organizations around the globe began to present knowledge management. Nonetheless, if the definition of knowledge management is "simply treated as the latest management panacea following on from total quality management and business process re-engineering", the introduction of knowledge management by firms can be troubling (Gamble and Blackwell, 2001). Knowledge workers or especially bankers utilized advanced technologies like connecting to the Internet or digital personal computer to work, however, approaching and leveraging knowledge do not seem to be as simple as that. Likewise, it is claimed that provisioning a wider range of access to information for employees does not mean expanding solutions for employees when facing problems. As a

result, from the begin of e-banking, managers changed this style of management to fit with the nature and market conditions.

In the last decade of 20th century, the focus fell in human resource management while managers have the tendency to intensify on the improvement, learning and gaining experience in 21st century. In the book Knowledge Management: A State of the Art Guide, the concentration of the human side of business was on “core competences” and “learning organisation”; in the field of technology, the Internet and prudent information schemes are prevailing than others. Corporations that followed the traditional management style of strategy-structure-systems were no longer meeting the success in operating operations. Recognisably, communication connects people. The idea of sharing a matching sense of values among the company results a better interaction and escalating the efficiency. Furthermore, from the business’s point of view, the convenience of the Internet, which allows people to connect globally, to reach to international firms and subsidiary companies along with the ability to innovate product or introducing services from distance, eliminates not only the structure but also the way of managing enterprise.

Knowledge management in banking refers to the control of internal intellectual capital and the customer’s data that heels via transactions. Banks are usually appeared to be skilful at this style of management because of its service-based nature, however, the underlying fact is not. Cross and Weller (2001) conducted a survey amongst nearly 200 European banks and insurance companies, the result showed that the number of respondents rejected to apply Knowledge management lied in banking corporations. The authors claimed that other financial businessmen like brokers, insurers are taking the knowledge management seriously and cautiously, they are more amenable to the advantages of this management style than bankers. Likewise, it was stated that more than 66 percent banks across Europe failed to employ the intellectual capital adequately due to lack of knowledge management.

Currently, managing banks’ “knowledge” has been considered as a demanding expertise. A large amount of money is investing in developing the Knowledge Management in banking industry in

which the system of document management and data of warehouses are the most popular industrial science (Chweya, Ochieng, Ojera and Riwo-Abudho, 2014). To be able to understand what knowledge management is, it is essential to enhance that information is not knowledge. Data and knowledge are components that builds information, on the other hand, data and information builds knowledge. Knowledge management comprehends all these fundamentals. This management style concentrates on the corporation's IT and database, especially in enterprise's knowledge assets of innovating, storing, protecting and distributing. Knowledge management delivers not only competitive competencies but also synergy, precise compromise and decisions without meeting errors, creative innovation, expansive organisation along with sharing knowledge.

The knowledge management method established by Michael Earl was introduced by Sorrentino (1999) in her paper. In her work, it was stated that this is a useful application of management as Earl set "knowledge systems, networks, knowledge workers and learning organizations" as elements of the knowledge management and financial institutions must consider having all those components. Organising business in a digital oriented market, all activities of the corporation relies on IT, thus, the networks and knowledge systems are frequently well established and developed. This attention creates an unbalance structure as banks may 'forget' to mature its human resource, improve employees' skills and cross-functional learning culture. Therefore, to eliminate this gap, banks started to adopt knowledge management as a compulsory tool and treated as an intangible asset of the companies. This management style would bring a positive result in increasing firms' performance if it was applied correctly. It should follow the knowledge-centric approach together with the focus on information technology and working environment that lead to knowledge formulation. In banking industry, manager is endeavoring to apprehend, manipulate and assemble applicable data into corporation's knowledge to enhance the quality of the company. This process needs to apply "the rules of modern banking institutions in the economy" (Kogut, 2000).

Risk management, marketing management, customer relationship management and performance measurement are the four common subjects of knowledge management (Marshall, Prusak and Shillberg, 1997). In particular, Decision Support Systems, Data Warehouses and Data Mining are the Knowledge systems that banks pour money to invest in. These systems help firms to have an easier approach and access to information, designing an efficient working environment in the companies that assists the wide spread of data or the transfer of firms' knowledge. Moreover, in this management systems, the enormous volume of information is considered to be valuable when placed into specific categories. According to Young, Kung (1999), the Marketing Director at Autonomy stated that consumer behaviour can be illustrated by Neural network technology which enables financial firms to promote cross-selling to others. This type of technology increases the process of making decision and helps the launching process by uniting the tacit knowledge of workers to make it become conspicuous.

In United Kingdom, NatWest Markets is one of the banks that has formed "knowledge map" among its companies. The flow of NatWest's knowledge management demonstrates how and where knowledge locates in the corporation as well as the way employees maintain and store it. (Jayasundara, 2008). The Barclays bank declared their opinion on knowledge management "I can give you text book answers if you like but having worked in the business, to me knowledge management is obviously making sure everybody within the organization has access to the right expertise that they require. But also, it's making sure the people within your company feel that they are contributing to the bottom line by their involvement in business processes and procedures. I think, having seen it develop, actually mushrooming within Barclays it is very, very much a 'people thing'. For me, if you can get buy-in from people and your colleagues you can make anything work." (Gamble and Blackwell, 2001).

Skandia AFS in Sweden utilizes capture and store tacit knowledge which is one of the internal structure initiatives. The international financial based company is one of the most popular finance-oriented firms in knowledge management sector. Skandia AFS was the first corporation to file intellectual assets

5. 2. Customer Relation Management (CRM)

During the 70s, the concept of Customer Relationship Management arrived together with the first yearly scrutiny that was constructed to appraise customers' enjoyment. In this last decade of the 20th century, customer services and customer's satisfaction had been the major concern in business, thus, the customer relationship management (CRM) is one of the approaches to administer clients as it concentrates on enhancing and learning customers individually rather than assessing in a group. Currently, products have been assembled based on the needs of customers which means the customer relation skill is the foundation of embellishing and accomplishing customer's gratification. Moreover, the act of protecting market shares and the endurance of the business in rivalry would be problematic tasks, if customers were dainty and not interested. Understanding and devoting effort to customer's demand with creativity and modernisation as well as responding to the market are the methods that business should embrace to survive. The area of expertise of CRM covers all aspects of decision-making together with the aspects of marketing.

The ecosystem of banking industry has reformed by the cause of changing administrative, organisational structure, the advancement of technology that decreases the barriers of entry and constructs a consolidated universal banking market. Due to these adjustments, banks reformulate customer services and increase the value of services with the aid of technology.

From the aspect of developing countries, the need for Customer Relationship Management in retail banking is vital. For instance, in a developing market like India, the increment in number of middle class consumers is a crucial component as it would promote purchasing power. Furthermore, with the aim to boost connection with customers, the quality of the products and the services is the top concerns in retail banking since it is the basis to flourish and keeping relationships with customers.

ICICI Bank ratifies investment on technology to lower the operation cost, broaden customer connection and providing wide range of services. According to Rao, Padmavathy and Madhavi (2014), ICICI has applied the “click and brick” strategy to lift the capability of e-channels and the to guarantee the speed of delivery, accomplishment of financial contracts and paper work. Additionally, ICICI achieves several strategies in organising the standard CRM and it helps expanding communication among digital bank and customers, anticipations and between employees in physical office.

In a scenario where the inflation rate rapidly decreases, Garanti Bank has developed a customer relationship management (CRM) system to prepare for this economy change. If Osmanli Bank merges with Koferzbank, the total number of customers is expected to grow approximately one million more. The bank has partnered with IBM to manage the relationship with their customers in the last three years. The project couldn't be done without the important technological and architecture choices. Since customer information availability is very important, the first of these project focuses on the problem of collecting and cleansing data (Onut, Erdem and Hosver, No time).

6. Conclusion

In conclusion, there are many identical ideas and opinions about the impact of technology, especially in E-business and e-commerce, demonstrated in researches, studies or on the news. First (2016) claimed that “Technology changes, good management doesn't”. First (2016) shared a same school of thought with Peter Drucker, who refused to sort new method in human management according to the advancement of technology. The author presented various proves of changing management in “the \$14 billion leadership industry”, in a bestseller management book due to lack understand of human nature. He believes there has been no change in the human essence and the methodology study of human management (First, 2016).

However, under this thesis, it is proved that technology advances “have rendered traditional models of organisational structure and theories of management” in the banking industry. Since

technology developed rapidly, virtual or digital banks have been an advantage to have as its convenience and low operational costs. Nevertheless, in order to proceed products and services online smoothly, it is important to examine the status quo of the firm regularly and the method of management should be changed when moving from traditional banking to virtual banking. The underlying reasons are stated above, as reforming the bank from tradition to a modern one corresponds with the organisational structure changed.

In the near future, banking industry is hoping to process the digital bank 2.0 which combines the artificial intelligent (AI), robotics process automation, blockchain, open banking and internet of things. These would acquire complex technology; thus, banks should invest in the IT teams and leaders and managers should be fully aware of risks. Additionally, the robotics process automation would replace the use of human resource in the future, the organisational structure and management of a company would be affected, hence, managers should adopt changes to respond with the economic changes.

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