



Digital Business Transformation : Digital Culture Before Technology

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Abstract

This article is a study to highlight that digital transformation is something that businesses cannot avoid. However, the transition is not just about adopting the technology. The organizational leaders must also understand that the condition for transitional success is a harmonious change of people, systems, and contexts. This academic paper studies three issues: 1) Concept of Digital Thailand 2) Concept of Digital transformation 3) Promotion of personnel in organizations to have skills and digital culture. The study shows that digital transformation can be successful if important aspects are implemented. The principle aspects are the self-review of the organization from the vision, strategy, operational processes and value delivered to the customer as well as determining where the organization is in the digital age industry to see why there are operational delays and, most importantly, to see the qualifications of organizational leaders who need to understand digital transformation. All of this is the corporate culture in the digital transformation era, not just buying or importing technology into the organization without considering other elements. However, the definition of the word “Digital culture” is also diverse. In this academic article, it is used to define the meaning of “Digital culture” which refers to a modern corporate culture that focuses on changing the work and way of thinking of the people in the organization.

Introduction

The COVID-19 pandemic affects business operations and activities in organizations around the world. The important policy of organizations to stop the widespread pandemic of COVID-19 is a Work from Home (“WFH”) scheme. The interview of Sharad Mehrotra, the Chief Executive Officer of Total Access Communication Public Company Limited (DTAC), offers an example of a WFH policy. He said, “Today, thousands of DTAC colleagues and I work from home or offsite without coming to the office. This is the

preparation for the situation and a test for functions that we can continually work in a different environment, especially in a necessary situation. All the working forms of DTAC are uploaded to the Cloud system, such as SharePoint or Microsoft Teams. The staff can work conveniently by logging in to the internet, access and manage the files by the software management everywhere. DTAC also uses ‘Workplace’, an online tool with Facebook features for teamwork, as a communication tool for all employees. This tool facilitates the work flow and reduces traditional steps of

work procedures, including ways for the employees to access to information of the company easily and speedily,” (dtac blog, 2020).

Meanwhile, Mr. Puttipong Punnakanta, a minister of Digital Economy and Society Ministry, spoke at a press conference about Work from Home guidelines during the COVID-19 pandemic on 17 March B.E. 2563 stating: “The purposes are to determine operational guidelines of Work From Home for the public and to create a working model of government units to become Digital Government. The conclusion is that application service providers will support government agencies and state enterprises with free online meeting systems to facilitate offsite operations via computer equipment or mobile phones (both iOS and Android). The guidelines of government agencies are for adapting a new working culture to become Digital Government. Public officials can work through the systems and digital channels at anyplace and anytime, without daily and regularly working at the office. This system can enhance work-life balance and motivate employees through result-based performance in a relaxed and fun environment. The public officials can concentrate on their jobs in which it helps to improve efficiency of work and develop creativity. This is such a starting point of innovation development” (The National Commission for Digital Economy and Society. 2020).

Digital thailand concepts

The need for national digital competitiveness was apparently shown when the Thai government announced the national policy and plan of Digital Development for Economy and Society (B.E. 2562-2580), issued in the Royal Gazette Volume 136 Section 47a on 11 April B.E. 2562 (Gazette, 2019). “Digital Thailand” refers to a period of Thailand that can create and fully use digital technology in the development of infrastructure, innovations, data, human capital and other resources, in order to drive the national economic and social development towards stability, wealth and sustainability. The plan divides Thailand Digital Landscape in 20 years into four phases: Phase 1 Digital Foundation; Phase 2 Digital Thailand I: Inclusion; Phase 3 Digital Thailand II: Full Transformation; and Phase 4 Global Digital Leadership.

To achieve the goals of the Digital Development for Economy and Society Plan, there are six aspects of development: infrastructure; economy; society; government; human capital; and confidence. Phase 1

(1-year-and-6-month plan) aims to build infrastructure with hi-speed internet access to all the villages, which is a fundamental of socioeconomic activities. In an economic aspect, doing business activities through a digital system must be seamless. SMEs, community enterprises and farmers can operate in an online system and build up a base for investment in digital clusters. The social sector can access to hi-speed internet and basic government services thoroughly and equally. Government agencies work on inter-organizational and integrated data. Labors with digital skills are well accepted in domestic and international labor markets. The government can enact digital laws that can reform relevant public organizations to drive for a success.

Phase 2 (5-year plan) aims at making hi-speed internet infrastructure to be accessible to all the villages and connected with other regions of Thailand. Agriculture, manufacturing and service sectors have changed the way of doing business with digital technology and data. Digital Technology Startups and digital clusters increasingly play roles in the Thai economy. People are confident about using digital, and access to digital education, health and lifelong learning services. Government works are linked and integrated as a single organization. The workforce can work through a digital system with borderless. Foreign digital experts will work in Thailand. Thailand will have an environment that supports digital transactions with a convenient and standardized system.

In Phase 3 (10-year plan), Thailand becomes Digital Thailand, which fully uses digital innovations to drive a country. Hi-speed internet accessibility is available for all households and supports the integration and connection of all the devices. Agriculture, manufacturing and service sectors can compete with digital innovations and connect Thailand with regional and global trade. People use technology or data in all daily activities. The public sector provides services based on people-driven needs, disclosed information and people’s participation. Thailand creates high value jobs and enough manpower with digital expertise, as needed. Thailand has laws and regulations that do not obstruct trade and digital transactions.

Phase 4 (20-year plan): Thailand is in a group of developed countries and uses digital technology to create sustainable economic and social values. The internet connection is seamless at anytime, anywhere and with all the devices. All economic activities are digital connected within and between countries. These bring

about the wealth of a nation, a decrease in digital inequity and the digital use for local development. Thailand becomes a regional leader of digital government for public management and citizen services. Thailand also becomes a regional center for digital manpower for specific fields and digital experts. In addition, Thailand is a model of development and continuously and pragmatically reviews digital regulations.

Although the government prioritize efforts to become a digital country, the development of labor with digital skills is challenging. The pushing force to develop people and organizations' digital skills rapidly is the COVID-19 pandemic. However, many organizations use information technology without readiness. The word "Digital transformation" and "Digital business transformation" can be substituted by each other. It is because "Digital transformation" is the delivery of digital technology adapted well to every fragment of business which will change the fundamental of business until developments add value to customers. It changes organization form purposefully with serving of technology. For the conditions of success in digital transformation, Chareonwongsak (2019) said that "Business organizations cannot avoid digital transformation. Digital transformation is not only the use of technology, but the leaders of organizations also need to understand the conditions of success in transformation: cohesive changes in people, systems and contexts". Similarly, Saikat Chatterjee (Chatterjee, 2020) a senior advisor of Gartner, said that "We are being pushed to move forward to the world's largest test of Work from Home. Until now it is not easy for many organizations to succeed". Saikat said that personnel department of the organizations should specify the main roles, skills and activities of required work. To work smoothly and be able to get work done via Work from Home, particularly in the crisis, the requirements or plans should be flexible. It is necessary for personnel departments to offer different help or work support, which may lead to introducing new work forms. Saikat analyzed the framework of responsibility, work content and roles, to consider which types of work should be adapted to work from home. Personnel department should offer help in the following situations.

Case 1 The impossible case. For example, production and assembly employees cannot work offsite. If the organization wants the employee, even one person, working on-site, personnel department should well prepare all-rounded safety measures such as hygienic

masks, the division of work, including support and mental care for reducing anxiety.

Case 2 The possible case. For example, the sales team can work from home. However, they will receive advice and help from their supervisors and experts, who will suggest the solutions for transportation and cultural challenges in the organization.

Case 3 The most possible case. For example, employees, who have critical thinking skills, analysis and working knowledge, sometimes can work from home. Therefore, the organization should build up the confidence in the supporting teams, by regularly interacting with the colleagues for more productive work from home.

Digital transformation concepts

Technology trends, which play a role at present and future times, are MOOC (Massive open online course) or free online courses from open systems for massive registration at the same time; Cloud computing or computer technology innovations with processing through the internet on large computing structures, sharing processing resources and having the ability of data processing and web applications via multiple platforms and devices; Open data or free access to data without restrictions and the possibility to be reused and redistributed. The sources of data and conditions must be specified as the original sources or specified by the owner. Data must be easy to use and to revise as well (Tanprasert, 2019). However, many organizations have faced obstacles for driving their organizations towards the up-to-date situations. (Thanabodithammachari, 2016). Ssummarized problems as follows.

1) The executives do not recognize the importance of technology or still think that technology is unnecessary. They assume that the success of an organization has come from conventional methods as in the past. Hence, there is no need to adjust.

2) There are political issues within the organization. Therefore, it is difficult to drive the organization in the same direction.

3) There is a lack of coordination between the supervisors from different departments in reviewing the mutual successes and plans to improve up-to-date services.

4) Management of change lacks the understanding of organizational culture. Hence, there are resistance from the employees at all times.

5) There is a lack of time allocation for the

employees' learning. This increases overloaded work, reduces the value of work and does not respond to present needs.

6) There is a lack of knowledge for applying modern technology to the organization.

Bringing the business to the digital age depends on the perception of a relationship between internal structures and external data. Operation processes must be simple with these questions: Why, When, Who, What and How. As a result, the organization can adopt technology with a wise manner. Thanabodithammachari (2016) presented a model of digital transformation called: "Digital transformation reference model," with five main components: (1) Vision & mission statement; (2) Business service & business objective; (3) Digital organization; (4) Business process as a service; (5) Digital platform (as detailed in a diagram).

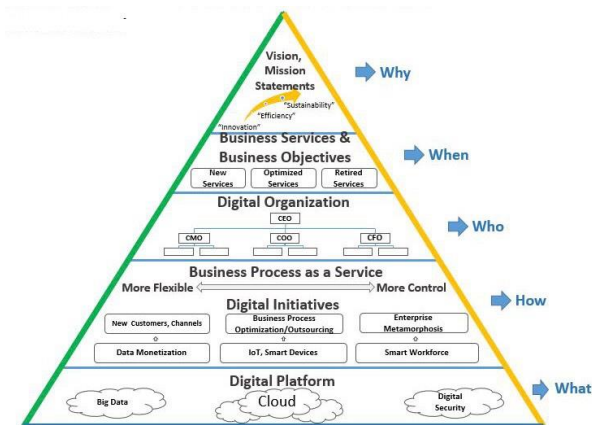


Figure 1 Digital transformation reference model Thanabodithammachari (2016)

According to the diagram, there are interrelated relationship of each question. The first question is "Why". The organization should ask about, "Why does our organization need to be in the digital age?" "When the society changes into the digital era, can we look at our organization the same way as before?" To answer the 'why' questions, it requires both internal and external information, and honest answers, to adjust organizational visions and values. This is because when the business environment has changed, the customer needs and delivery of business values would have changed with up-to-date situations.

The second question is "When". This is an important question for improving technology-oriented services to customers. That is finding the answer to the

question, "When will the service be completed?" To answer this question, the organization should specify the objectives of each service to be suitable for actual assessments. These include providing services to the internal and external customers or the development of new services. In this respect, the overall work of the organization will be in the same direction with no conflict between the operators and the evaluators.

The third question is "Who". The organization should answer the question, "Who are responsible for such service and digital development?" The responsible persons include both the supervisors and evaluators. This question starts when the organization has clearly defined its tasks. Answering this question will lead the organization to define the roles of internal and external staff. In addition, the organization can plan the digital skill development of staff effectively.

The fourth question is "What". When the organization designates the responsible persons in each task, it is necessary to brainstorm ideas from all relevant staff for improving the processes with digital technology. The organization must answer the question, "What does the organization need to plan?" There will be an improvement of the process at this step; the initiation of projects comprising technology and necessary information; the considerations of budget, including regulations and new policies. These will support a complete digital transformation of organization at this step.

The fifth question is "How". This step is the last step of implementing processes by using digital technology as a main tool to change the organization. The organization must answer the question of "How to do?", for the achievement of actual service outcomes from the given plan. These include activities relating to digital system development, system installation, communication and public relations of work system, training for practical implementation, transparent and accountable evaluation.

As previously stated, digital transformation needs well planning from the beginning. If the organizations invest in digital technology before planning, such organizations will encounter difficulties and cannot achieve their goals in the digital era.

The above statements are in line with the concept of Malisuwan (2017) noted that the strategy of digital transformation requires four-step implementation: strategic and technical plan, design, integration and implementation. However, integration is a key of success.

Often, the formulation of the strategic plan and design are not connected with the fundamental of business, with systems and processes as a mainstream of operation. As a result, the organization cannot succeed in digital transformation.

A summary below presents the four-step implementation.

1. Strategic planning is a step to review an organizational vision whether it is appropriate for the digital era. The operation with traditional methods and conventional thinking cannot respond to digital transformation. A strategic planning should start from defining the end goal of the organization, then creating the experience to change customers' awareness. These needs are essential rather than software or technology purchases. For example, the insurance company should consider the experience of customers in making easy and fast claims by using compatible modern technological systems rather than starting with the purchase of software. This step requires the speed of planning because the faster process will lead to the more competitive advantages. The way to speed up for digital organization is hackathon. Organizing a hackathon is an important tool for brainstorming ideas for solutions or innovations of business and industry. It draws capabilities of people in various fields for a strategic planning within limited time (Spaulding, 2016). A hackathon concept will speed up the planning process to determine the way to reform and convince people in the organization to understand the values and be able to adapt further.

2. Design is a process that focuses on creating new experience for customers. According to the Actual-experience digital experience quality report (Shayon, 2016), Ninety-three percent of business leaders believe that the digital experience of customers is very important to organizational success. Eighty-eight percent of business leaders believe that the digital experience of staff is very important to the organizational success too. Although the corporate leaders know that the digital experience is important to both customers and internal staff, they still do not know how to achieve the required results. Therefore, the process of design is very important for creating customers' experiences. The organization should emphasize employees' participation and collaboration with customers, including how customers interact with the organization. All the above leads to changes in digital skill and culture.

3. The third step is integration. The first two steps lead to having strategies and techniques. The success of

digital transformation should integrate various segments as one piece, or so-called the business ecosystem for the digital era. Lang (2019) said that the business ecosystem in this age is complex and rapidly changeable. Integration is very challenging. Strategic questions that the executives must answer are: "how different are collaborative forms of work within the ecosystem?", "which kind of the ecosystem is suitable for those who want to dominate the market?" and "how can the market occupiers create strategies by using a digital system for competitive advantages?". For example, the university wants to provide one-stop service to students. It is important to link all units together such as the registration and assessment, information and library service, payment and other systems. All relevant systems must be linked and operated seamlessly. As a result, the students who use the service become satisfy with the one-stop service.

4. Implementation is the final step of digital transformation. All work must be operated seamlessly via cloud computing or other systems, which support the operation of organization constantly. The organization must consider an action plan, which is a map for guiding the work and operational structure with up-to-date situations. The consideration of interrelated organizational structures, flexible management and supports from the experts will lead to practical implementation and become a digital organization, eventually.

Promoting digital skills and culture for personnel

Organizations are necessary to build up transformation skills for their staff to become a digital organization. Jack Ma, the president and co-founder of Alibaba group, lectured about good leadership at the United States Military Academy-West Point (Ma, 2019). He said that the essential skills in the digital age are competitive and collaborative skills at the same time (Co-competition). Being digital organization must always keep in mind "don't be evil". Rather, the organizations should create good values and responsibility for their own actions. To promote digital skills and culture for personnel, various executives offer their opinions as follows.

1. Steps Academy (2017) said that the definition of digital era is not only limited to technology, but it is also about changing the ways of life. The problem of transformation is the generation gap. The older generation could not adapt to technology and have different ways of thinking compared with the younger generation.

Collaborative culture between these two groups is essential for the organization. However, the development of organizational culture needs to start with the vision of organizational leaders because the vision is a key to create other creative policies. Creating environment can increase the desire of work, which will provoke organizational culture and ideas of staff according to such an environment.

2. The previous concept is in line with (Bhakdibutr, 2019), the president of Osotspa company. He said that digital transformation relies on corporate culture evolution. This is to support key persons to overcome the big test of digital transformation. The concept of 'agile' is one of business strategies for responding to changes in customer behaviors and technology. Agile working is a process that supports workflow by reducing the procedures and paperwork. It focuses on team communication for product development, testing and suggestions for further improvement. This will cause fast product development and response to more users (Lupang, 2019). The key importance of agile working are people, communication and self-development. Personnel department is necessary to create the culture in the organization or within the team to support the use of agile concept effectively.

3. Digital investment must reduce the complexity of customer service and use digital to fulfill the customers' feeling. The final goal is to satisfy the customers with reduced cost. Before considering a great amount of digital investment, an organization needs to create customer-based culture to reflect what customers' concerns and happiness are (Papasaratorn, 2018). For example, if the customers suffer from being on a long queue, do not replace staff with digital queuing cards. Rather, digital usage should eliminate or ease down the queues. Digital culture is about people who feeling confidence in information and prompt culture. Leaders must be ready to accept the flaws of action too. When the staff have confidence in the information, they put an effort for data collection for analysis. They can analyze for what happened and how it happened, and turn data to be key contents and knowledge for planning. The process emphasizes compiling and analyzing data simultaneously. No matter how much information is available, the opportunity of making a mistake still exists. Products of leading digital companies are still needed to be updated. As mentioned, digital culture comes with the leaders who always accept the flaws of action.

4. Creating digital culture of organization should

start from the leaders. The leaders should promote digital transformation with strong and concrete manners. Such action will support all employees to understand organizational goals and operate in the same direction immediately and quickly. Leesakul (2018) suggested that the essential qualification of leaders nowadays is the ability to use data for organizational benefits, starting from day-to-day operation to strategic planning. Particularly, the use of data will improve the experience of customers. In addition, the leaders must be an active digital user and can apply digital concepts in daily life for communicating with the talents in the organization efficiently.

5. Organizations with hierarchy may have been efficient in the past, however, at present time, the world is always changing. The hierarchical organization may affect work efficiency in the digital era and a reduction in creativity. Organizations with fewer levels of hierarchy will support the decision making of leaders quickly and efficiently. Each unit can collaborate its operations smoothly.

Conclusion

The reason why "Digital Culture" must come before technology it is because the term "Digital Business Transformation" is not just bringing digital touchpoints or technologies into the organization. But a successful change of digital organization depends upon following factors: a revision of organization itself – beginning from organizational vision, strategies, operations and values delivered to the customers; a consideration of organization positioning in the industry during the digital age; and the causes of operation delays. The most important aspect is a characteristic of leaders in understanding digital transformation. These are the organizational culture for digital transformation, not just purchasing or importing digital to the organization without considering other factors.

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