# **Digital Transformation: Is Gonna Be Culture Shock?**

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Abstract: This paper is conducted to describe the digital transformation using the theory of culture shock. It purposes to generate a mapping of culture shock theories by applying a descriptive qualitative approach and literature review of some previous studies. Successful digital transformation of organizations must be supported by digital talent transformation, digital product transformation, and digital infrastructure. In fact, these changes can lead to culture shock, that affects the performance of individuals and organizations. This paper will analyze digital change using the stage of culture shock which consists of four stages including the honeymoon phase, culture shock phase, adjustment phase, and mastery phase. The results of this study are descriptions of each phase and strategy for handling culture shock. So the development concept of the culture shock concepts can be use to explain the dynamic change to achieve organizational sustainability.

## **1 INTRODUCTION**

Organizations over the past few decades have experienced significant changes, including changes in the global environment (Ghosal, 1987), changes in labor (Lerman & Schmidt, 1999), technological (Self, 2008), highly change competitive environments or an increasingly stable economic environment (Hoskisson, Eden, Lau & Wright, 2000), Organizations have been forced to adapt and anticipate change by creating change preparedness through organizational redesign, changing organizational culture (Gilmore, Shea & USeem, 1997) or use several other ways. Organizations that fail to respond to change appropriately have a big risk by having competitors who are better able to adapt to change, to the worst that the organization is unable to survive and stop operating (Collins, 2001; Vollman 1996). Most of the research included in reviewing organizational change (Armenakis & Bedeian, 1999; Porras & Silvers, 1991; Weick & Quinn, 1999) focuses on how organizations prepare, implement, and react to organizational change.

MIT Sloan Management Review and Deloitte's 2015 global study of digital business found that maturing digital businesses are focused on integrating digital technologies, such as social, mobile, analytics and cloud, in the service of transforming how their businesses work. Less - mature digital businesses are focused on solving

discrete business problems with individual digital technologies. The ability to digitally reimagine the business is determined in lage part by a clear digital strategy supported by leaders who foster a culture able to change and invent the new. While these insights are consistent with prior technology evolutions, what is unique to digital transformation is that risk taking is becoming a cultural norm as more digitally advanced companies seek new levels of competitive advantage (Kane, Palmer, Phillips, KIron & Buckley; 2015).

A Culture conducive to digital transformation is hallmark of maturing companies. These а organizations have a storng propensity to encourage risk taking, foster innovation and develop collaborative work environments. Digital transformation is a technology-induced change on many levels in the organization that includes both the exploitation of digital technologies to improve existing processes, and the exploration of digital innovation, which can potentially transform the business model. Digital innovation, which is defined as the re-combination of digital technologies and physical components to create novel digital products (Yoo, Hendfridsson & Lyytinen 2010; Berghaus & Back 2016), can be perceived as potentially threatening to the organization (Abraham & Junglas 2011; Berghaus & Back 2016). Digital innovation involves transformational changes in strategy, processes, and products and thus requires the company to rethink its organizing logic (Yoo et al. 2010; Berghaus & Back 2016).

Whether culture drives technology adoption or whether technology changes the culture is still an open question. A former telecom industry CMO sits on the other side of the debate. He observes that the digital culture of his organization traces its roots to early social media experiments. "Social helped get the momentum going," he says. "As more people jumped on board, social played a major part in changing the culture. I'd like to say it was thought through in advance and part of a formal culture change program. But it wasn't. The change started with a technology experiment." The strategy executive from the manufacturing sector quoted earlier is somewhere in the middle. To her, culture and technology are inextricably linked. As an example, she cites replacing desktop computers with laptops, which allows people to move around the office. But if the culture and physical space of a company don't support employees working together, people will likely stay put. "Organizations often think about technology in a very narrow sense," she says. "They don't ask questions about what behaviors a new technology might foster and what behaviors it might actually inhibit. The answers must line up with the overall culture and direction that leaders want to take the company" (Kane, Palmer, Phillips, KIron & Buckley; 2015).

Bovey and Hede (2001) state that individuals will always show their reactions when faced with major organizational changes. According to Scott and Jaffe (1988), this process consists of four stages: initial denial, resistance, gradual exploration, and commitment. Individual subconscious processes arise when responding to threats of change (Halton, 1994; O'Connor, 1993). Unconscious individuals use defense mechanisms and have a habit of protecting themselves from change and from feelings of anxiety from change (Oldham and Kleiner, 1990; de Board, 1978). This defense can sometimes hinder and prevent a person from adapting to change (Halton, 1994). When changes occur, individuals tend to seek comfort levels and try to maintain these conditions. Each individual is different in terms of ability and willingness to adapt to organizational change. This is because individuals experience a change in different ways. Some people tend to move quickly through the process of change, while others are trapped or experience some transition transitions (Bovey and Hede, 2001).

This includes the occurrence of digital transformation in organizations. Previous employees worked with manual labor, then because there were

innovations in the field of technology, the organization changed the soft side and hard-core. This change must be followed by all employees so that companies can compete with other competitors. Someone who moves from one culture to another and is unable to adjust properly will experience culture shock (Yunanda, 2013). The term culture shock or in Indonesian is called a cultural shock is a psychological term to describe the circumstances and feelings of a person facing different social and cultural conditions (Sulaeman, 1995). Culture Shock can be experienced by anyone who has lived in a place for a long time, then for some reason, individuals move to other places that have different cultures. Because a person's transfer to a new environment can lead to culture shock, the individual will try to adjust to the culture in the new environment. At first, there was a shock to the new culture, then there will be an action to anticipate the culture shock or culture shock experienced so that it can adjust to the new environment (Chamidan, 2009).

# 2 LITERATURE REVIEW

#### 2.1 Digital Business Transformation

Digital transformation is a rather fragmented field as a result of the existence of multiple and diverse areas of investigation, such as the digital transformation of societies, industries, economies and individuals (Abdelaal & Zaki, 2018). Recent work related to digital business transformation has predominantly focused on investigating its challenges, drivers and the failures of previous attempts. Although the pivotal role of a dedicated strategy has been recognized in the literature stream, it is still in its infancy, requiring more in-depth work to fully comprehend how the transformation can be achieved (Kulatilaka & Venkatraman 2001; Piccini et al. 2015; Hess et al. 2016). Exploring digital business transformation from a strategic point of view should therefore enhance the academic literature with valuable insights and also aid leaders in grasping the recent developments and underlying strategic building-blocks of the transformation that they are attempting.

Abdelaal and Zaki (2018) examine the phenomenon about digital business transformation form various perspectives. Figure 1. Represented as distint perspectives.



Figure 1: Digital Transformation Perspective (Abdelaal & Zaki, 2018).

From a digital era perspective, DT stresses the fundamental change in our world due to the pervasive nature and proliferation of digital technologies (Anderson & Lanzolla 2010). Arguably, we have reached the fourth industrial revolution, which builds on the preceding three but uses new digital technologies with "full force", whereby both the development and diffusion of innovations are much faster than before (Schwab, 2017). A new global world economy, characterized customization and by dynamism, intense competition, is developing and the cornerstones for succeeding in it involve embedding knowledge, technology and innovation into products and services (Atkinson, 2005). Additionally, the novel concept of a circular or sharing economy is shifting the linear take-make-dispose model of resources to a model where flows of materials, energy, labor and new information interact and promote a restorative, regenerative and more productive economic system (Schwab 2017). The industry perspective highlights how the disruptive nature of digital technologies has revolutionized the way that industries operate and how the traditional boundaries between them have dissolved. In recent years, manufacturing has gained popularity with the introduced concepts of "Industry 4.0", "smart factories" and "advanced manufacturing", which seek to enable industry to navigate its way through digitalization through the use of cyber-physical systems in the production network and service-orientation in traditional industries (Lasi et al. 2014; Blau & Gobble, 2014). New technologies have also accentuated the changing network dynamics from the center of organizations to accommodate digitally engaged customers at the edge, where consumers and communities co-create value in a digital ecosystem (Gray et al. 2013). Value network competition is another research area for academics, who seek to explore how IT affects overlapping, as well as non-overlapping, networks (Katsamakas, 2014). The need for transformation is also a clear business reality, which occurs in all industries and impacts companies of all sizes and shapes (Basole, 2016). It is no surprise that "90% of business leaders in the U.S. and U.K. are expecting IT and digital technologies to make an increasing strategic contribution to their overall business in the coming decade" (Hess et al. 2016).

Digital transformation is also exhibited in the "extended self", where technological changes dramatically affect the way in which individuals present themselves and communicate. Five crucial changes resulting from the digital age have been conceptualized in the literature (Belk, 2013): dematerialization of possessions in the form of photos and videos; re-embodiment of our physical bodies into pictures and videos; sharing more with the help of digital devices; co-constructing the sense of self through digital enablers such as social media and blogs; and a distributed memory, where human memories are outsourced to engines and hard drives. This individual level of digital transformation allows an exponential increase in digital data volume, revealing a huge amount of information floods that often bypass intentionally constructed barriers. Thus, researchers have recommended ways of managing the super-transparency of people in our world today (Austin & Upton, 2016).



Figure 2: The Dimension of The Transformation (Bowersox, Closs, & Drayer: 2005).

Figure 2. illustrates an integrative management framework for the digital business transformation. To fully embrace this framework, a company needs

to put aside (at least temporarily) most of its traditional ideas about organizational structure. The picture above shows that in digital business transformation, the human element is one of the most important resources for the success of a comprehensive and mutually integrated change.

#### 2.2 The Evolution of Culture Shock Theories

Bronfenbrenner (1994), states that human development takes place in the context of complex networks that influence each other. This context includes the deepest microsystems (family at home, teachers, and peers) to the mesosystem (the relationship between two Microsystems) to the outermost macro systems (such as culture, society). The inability of individuals to adjust to society and culture can cause anxiety, discomfort, and tension. This feeling of anxiety, discomfort, and tension is called culture shock (Oberg, 2006)

The culture shock was first introduced by an anthropologist named Kalervo Oberg in the late 1960s. Oberg himself defines it as the "disease" suffered by individuals living in a new cultural environment. Culture shock is anxiety, frustration and helpless feeling felt by individuals due to the loss of known cultural symbols and signs (Oberg, 2006). Culture shock refers to the amount of adjustment that individuals experience at cognitive, behavioral, emotional, social and physiological levels when they are placed in different cultures. Cross-cultural relations are divided into two broad categories, namely those that occur between two residents or people with diverse cultures, and that occurs when someone from a community goes to another country with a specific purpose, for example: to work, play, study, exploit or give help (Ward, Bochner & Furnham: 2001).

Guanipa (1998) defines culture shock as physical and emotional discomfort when someone comes to another area or a place different from the place of origin. Habits used in the previous place are not accepted or considered as something inappropriate in the new place. Agree with the previous opinion that different cultures or habits can cause inconvenience for individuals and individuals cannot take or benefit from the environment (Smith, 2008)

Culture shock shows that the inability to know what and how various things are expected to be carried out and accepted in society. In other words, there is an absence of knowledge about what is appropriate and what is not. This normally affects people in the initial week in a new area (Pyvis & Chapman, 2005). According to Peterson (1995) culture shock is a mental disorder that is associated with symptoms such as anxiety, depression, difficulty sleeping, fatigue, easily offended, feeling alone, easy to forget, remembering the past and feeling unworthy of him. These symptoms can affect the output of a person's behavior in daily life when anxiety at a high level (depression) this is very much related to social ability and can reduce work performance. The research conducted by Aluja and Blanch (2004) inability to adapt is a burden for a person and the most powerful effect in influencing achievement is the inability to adapt themselves to the social environment.

### **3 RESEARCH METHOD**

This study collected several literature studies on the results of research and reviews of the theory of culture shock that occurred in the digital era. The results of the literature review are explained using systematic qualitative descriptive methods beginning with changes in the development of world technology in the organizational context, then the evolution of the theory of culture shock to the phenomenon of culture shock conditions experienced by employees who work in technologybased organizations.

LOGY PUBLICATIONS

## 4 DICUSSION

Many organizations will have to change their cultural mindsets to increase collaboration and encourage risk taking. Business leaders should also address whether different digital technologies or approaches can help bring about that change. They must also understand what aspects of the current culture could spur greater digital transformation progress. Digital Business transformation can cause culture shock to employee, because employees are faced with new and unfamiliar conditions about technology.

The application of culture shock to digital business transformation will be explained using a theory developed by Oberg (1960) explaining that the model of adaptation when someone is in an environment that is different from the previous environment, where individuals will go through each stage to the final adaptation stage. Are as follows:

- 1. The First Stage, is the Honeymoon stage where everything new is seen as something positive, interesting and fun. New habits are considered to provide unlimited opportunities, and some welcome them with joyful euphoria. There is openness and great curiosity to accept new things. At this stage, everything that is badly suppressed and everyone focuses on things both about work, colleagues, regulations and, others. At the beginning of the new technology was introduced, some people will be enthusiastic about the sophistication and convenience offered by technology. For example, the persistence method that was previously manual then now uses fingerprint or tapping id cards. Of course, this facilitates the work of the HR section in recapitalizing employee attendance lists. Likewise, with flexibility-oriented organizations, employees do not have to be present in the office at work. Simply report the work results via email or video conference with your boss or work team. These conveniences make some employees accept new technology easily with a pleasant adaptation process.
- The second stage is in the phase of culture 2 shock, employees begin to realize something is different. This experience begins with the awareness of disorientation and feeling of not knowing what is happening to the organization. This includes very negative symptoms such as stress, anxiety, depression. This phase is characterized by general anxiety which can lead to discomfort with the new situation and ultimately does not like everything new. The main reason at this stage is uncertainty regarding self, environment, and future. The signs that are available are not enough to explain and provide certainty about the changes that are taking place. The ideal approach at this stage is to use symptoms that are perceived as indicators that indicate to change the approach to engage in some form of self-development, handling emotions and understanding yourself / others. Meanwhile, the worst thing at this stage is ignoring symptoms or adapting to a rigid attitude and believing that our methods/habits are the best and forcing them to others.
- 3. The third stage is recovery, starting with accepting and realizing that individuals have problems and must work in them. In the recovery phase and the final adjustment stage,

the practice involves thoughts and feelings from the previous phase, the honeymoon phase, and the culture shock phase. This compromise is exceeding expectations and reality.

4. The fourth stage is in the form of adjustments, individuals can return to work effectively, know their respective skills, can use new ways of doing things and most importantly can be flexible.



Figure 3: Adaptaton Phase (Oberg, 1960).

Figure 3 shows the adaptation phase and involves mood swings. This phase can be used at different stages of life such as getting a new job, marriage or even buying a house (Marx, 1999). Where the first stage of honeymoon always involves excitement, euphoria, and optimism. Furthermore, the culture shock stage with its effects in the form of confusion, anxiety, and frustration. Furthermore, the recovery stage of symptoms caused in the previous phase (recovery of depression and anxiety from culture shock). The last step is an adjustment.

According to Marx (1999) in his study mention culture shock depends on cultural alienation (how much difference with one's own culture), social context (owned social support) and personality that is able to cross borders. This phase in culture shock does not always appear sequentially. It is more realistic to use a culture shock model that is not fully linear but integrates a dynamic and repetitive cycle from the positive and negative phases to be able to break through culture shock (breaking through culture shock), as seen in Figure 4.



Figure 4: Breaking Through Culture Shock (Marx, 1999).

Starting from disagreement with the opinion of Oberg (1960) who stated that culture shock is something negative and tends to be dangerous for individuals. Ward, Bochner, and Furnham (2005) state that culture shock is an individual response to foreign cultures in the environment that actively demands change. Next, they introduced the culture shock model which explicitly divided the process into three components: Affective, Behavioristic, Cognitive making a different culture shock model. The culture shock model is linked to each element to create a theoretical framework that provides the basis for empirical research in exploring issues related to culture shock. Cultural distance principles are used to explain the extent to which an individual's experience in overcoming culture shock. The relationship between each component of culture shock can be seen in Figure 5 below:



Figure 5: Model ABC "Culture Shock" (Ward, Bochner & Furnham, 2005).

Based on the description above, it can be concluded that the aspect of culture shock used in this study combines the theory suggested by Oberg (1960) and Ward, Bochner & Furnham (2005) that Culture shock is not only something that produces a negative impact but culture shock can also positive impact on performance. This study wanted to know the culture shock process that occurs in individuals from tension, feelings of loss, rejection of people in the new environment, confusion over roles, expectations of those roles, espoused values, feelings, and self - identity, disliking differences, feeling helpless. These aspects can cause individuals to feel depressed and uncomfortable, in this uncomfortable situation, individuals will feel unable to carry out their duties or individuals will be increasingly compelled to try and adapt in the new environment as employees in organizations that have undergone a change.

### 5 CONCLUSION

Culture shock as a result of the inability to adjust to the new environment and culture will affect the psychological condition of employees so that it can become a barrier to produce work performance. Many experts try to make different models in the process of adaptation to foreign cultures. But there is no standard model. Theoretically, the action to reduce culture shock is very dependent on clinical construction and personality traits, this can also explain the culture shock difference between each individual. Factors to reduce the negative impact of culture shock including personal resources such as self - efficacy, emotional resilience and interpersonal assets such as social support. Can be demonstrated through various interventions, for example, personal characteristics can be considered in the readiness of employees to accept technology in an effort to increase the likelihood of successful adaptation. In addition, Interpersonal assets can be increased by mentoring, participation in organizations, and systematic social support. Counseling especially interventions will help in developing effective coping skills, useful for improvement. Intervention techniques on behavioral components are needed techniques that function effectively in a cultural environment to obtain the basis of relevant social skills through training in cultural behavior, mentoring and learning about the process of technological change in the digital era. People who have difficulty adapting are very likely to develop a sense of anxiety, uncertainty and ultimately have low self-esteem. Conversely, anxious, depressed people tend to make efforts to develop appropriate cultural skills. It was concluded that interpersonal beliefs and perceptions when making cultural contacts will trigger change or resistance to changes in the individual. Although culture shock is quite easily defined as an affective and behavioral and adaptive and maladaptive element, the specification of the cognitive culture shock indicator is a more complex problem. Anxiety, confusion, inferiority and feelings of helplessness are undesirable experiences. Technology change in the business world is a change that cannot be delayed if an organization wants to win the market. But the success of organizational change relies heavily on individual changes in it because members of the organization are the real object of change.

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