

**ORGANIZATIONAL MINDFULNESS FOR ORGANIZATIONAL  
CHANGE: A CASE STUDY OF DIGITAL TRANSFORMATION**



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Thesis  
entitled

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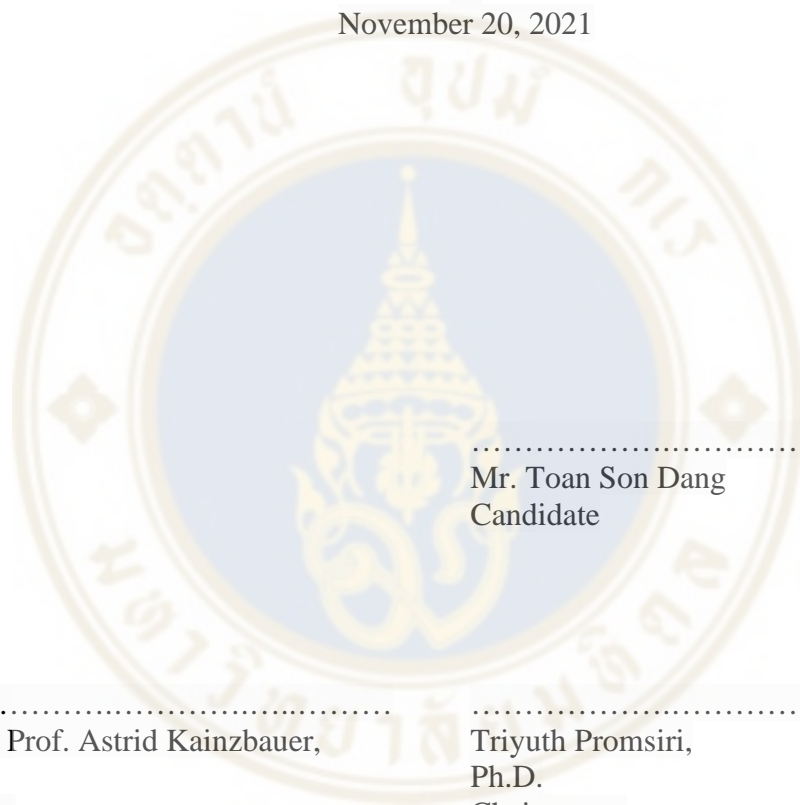
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**ORGANIZATIONAL MINDFULNESS FOR ORGANIZATIONAL CHANGE: A CASE STUDY IN DIGITAL TRANSFORMATION**

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**ABSTRACT**

This research seeks to understand how organizational mindfulness can affect the processes of digital transformation. The research objectives are to identify the organizational mindfulness processes that occur during digital transformation and examine how it can contribute to organizational change for digital transformation. Through an explorative qualitative case study with a multinational foodservice company that is undergoing large strategic digital transformation, a detailed account is made of the perceptions and challenges encountered by employees from multiple levels of the organization, and their actions taken as part of the sensemaking of digital transformation in their organization. Based on the case study and analysis, 16 thematic areas are identified relevant to the processes of organizational mindfulness and digital transformation. Key insights are also presented on how organizational mindfulness affects organizations transition across the various phases of organizational change in digital transformation. Managerial implications and recommendations for how this capability may be generated in an organization to support digital transformation are presented.

**KEY WORDS:** Organizational Mindfulness / Digital Transformation / Organizational Change / Sensemaking

78 pages

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## **CHAPTER I**

### **INTRODUCTION**

In the Fourth Industrial Revolution, it is predicted that emerging technologies such as artificial intelligence and the Internet of Things will fundamentally transform the entire structure of the world economy, communities, and human identities (Schwab, 2016). Organizations will be profoundly impacted by these new technologies, which are creating disruptive change in the business environment, driving rapid innovation, increasing competition, and changing customer behaviors (Cianni & Steckler, 2017). In Thailand, this transformation is well underway with governments and private sector working to integration technologies into their enterprises (Chernbumroong et al., 2021).

The impact of technology on organizational change has long been studied with topics such as digitization, digitalization, and IT-enabled transformation (Bockschecker et al., 2018; Venkatraman, 1994). In recent years, the term “digital transformation” emerged to reflect the significant impact of digital technologies such as social media, mobile, analytics, and embedded devices (Fitzgerald et al., 2013). Digital transformation is defined as "a fundamental change process, enabled by the innovative use of digital technologies accompanied by the strategic leverage of key resources and capabilities, aiming to radically improve an entity and redefine its value proposition for its stakeholders" (Gong & Ribiere, 2021). To achieve successful digital transformation, significant changes must be made to critical organizational areas such as strategy, capabilities, structure, culture, products & services, finances, business models, operational processes, and partner relationships (Lucas Jr. et al., 2013; Matt et al., 2015; Morakanyane et al., 2017; Riasanow et al., 2017). Furthermore, the increased scope, speed, and complexity of change creates new challenges and demands new methods for organizations to adapt (Matt et al. 2015).

Organizational scholars have pointed out the importance of the human element of digital transformation (Kane et al., 2017; Wokurka et al., 2017).

Organizations that have advanced most in digital transformation place a strong emphasis on guiding the people within their organizations to change (Kane et al., 2017). These organizations create new forms of leadership and management (Singh & Hess, 2017), adapt by acquiring new skills through training and recruiting new digital talents (Hess et al., 2016) and intentionally cultivating organizational cultures that enable collaboration and foster an experimental mindset (Kane et al., 2019). To achieve this, organizations require new ways of thinking and innovative methods of working that allow for more agility, adaptability, and rapid iteration (Haydn, 2018).

Due to the fast-paced change of digital technology, digital transformation requires constant adaptation, flexibility, and market responsiveness. It necessitates bringing the whole organization along through participative processes that give employees a say in designing digital initiatives (Hartl, 2019). Yet, recent reports show that organizations are struggling to adapt, and employees are at risk of being overwhelmed by the digital overload (Emmens & Thomson, 2018). Entrenched organizational cultures and bureaucratic organizational structures make digital transformation more difficult as there is higher resistance to change (Lucas & Kline, 2008). Furthermore, it is frequently perceived as a threat to current business models, organizational structures, and well-established business operations, potentially creating conflict and resistance (Fischer et al., 2020).

The study of mindfulness is a promising area of research that has recently grown in popularity in the organizational sciences literature (Sutcliffe et al., 2016). Built upon ancient Eastern traditions, mindfulness refers to "a state of consciousness in which attention is focused on present-moment phenomena occurring both externally and internally" (Dane, 2011, p1000). Mindfulness influences what an individual places their attention on, affecting their cognition and beliefs, and ultimately giving them more agency in how they respond to situations (R. S. Kudesia, 2019). Research on mindfulness in the workplace has shown positive impact in key workplace outcomes such as increased work engagement (Leroy et al. 2013), job performance (Dane & Brummel, 2014), social relationships (Hafenbrack et al., 2019), and wellbeing (Good et al., 2015). The Western perspective of mindfulness is based on Ellen J. Langer's work (1989), which views it from a socio-cognitive perspective (Pirson et al., 2018). In this perspective, mindfulness is characterized by active differentiation and refinement of

existing categories and distinctions, creation of new categories of streams of events, and more nuanced appreciation alternative ways forward (Vogus & Sutcliffe, 2012). Langer's perspective on mindfulness emphasizes actively noticing new information and constructing new meanings, which makes one more sensitive to context and perspective.

Building on the foundations of mindfulness outlined by Langer (1989), Weick et al. (1999) developed the concept of organizational mindfulness, also referred to as collective mindfulness, which is defined as the extent to which an organization is able to discern details about emerging threats and act in response to those details. It is an organizational attribute that can be developed and sustained through top-down organizational structure enabled by the organizational leaders, structure, and processes, and supported by bottom-up social processes called mindful organizing (Sutcliffe et al., 2016). When organizations are aware and notice changes in its environment, it enlarges the set of possible actions that can be taken. This heightened sensitivity helps organizations to avoid mistakes and successfully adapt in environments with extreme complexity, dynamism, and time pressure.

While organizational mindfulness is typically studied with how high reliability organizations (HROs) avoid significant threats and dangers of error performance (Weick et al. 1999; Weick & Sutcliffe, 2007), it may also be relevant to organizations going through the disruptive changes of digital transformation. In both cases, there is a quickly changing, dynamic, and unpredictable environment that requires heightened attention and adaptability. In particular, organizational mindfulness includes three anticipative processes and two reactive processes of identified by Weick and Sutcliffe (2007). The processes are 1) preoccupation with failure; 2) reluctance to simplify interpretations; 3) sensitivity to operations; 4) commitment to resilience; and 5) deference to expertise (Vogus, 2011; Weick and Sutcliffe, 2007; Weick et al., 1999).

## **1.1 The rationale of the study**

Organizational mindfulness can foster the conditions for readiness for change by helping organizational members to identify when perspectives and routines are no longer appropriate and the need to change them (Gondo et al., 2013). Gartner (2013) proposed that implementing the processes of mindful organizing can help to

establish an organizational culture characterized by learning, open communication, supportive working relationships, and participative decision-making, which will have a positive effect on readiness for change. By being aware of the unexpected and less desired outcomes of change, organizational mindfulness can also lead to a better understanding of strategic change (Alain et al., 2014).

In the process of digital transformation, organizations go through constantly evolving organization-wide changes. These are not only technological developments but also include changing organizational culture, structure, and business processes. Thus, organizational members are tasked with making sense of changes brought on by digital transformation, on a nearly continuous basis. When members are conscious of digital transformation and its changes, this can affect how they form new views of their organizations and how they can more effectively navigate those changes. A stronger understanding of how organizational mindfulness affects digital transformation may help leaders, managers, and change agents to lead the change processes more effectively in their organizations.

This research seeks to better understand sensemaking during the implementation of digital transformation and understand the emerging understanding of change agents and change recipients from different levels of the organization. While the extant literature has identified the critical components of digital transformation, there is a lack of prescription for how organizations can go about achieving them (Osmundsen et al., 2018). There is evidence to suggest that organizational mindfulness may be conducive to organizational change through its effects on culture and organizational practices (Sutcliffe et al., 2016). However, there is still a lack of studies on how it can impact digital transformation. Furthermore, despite the noteworthy possibilities of mindfulness, its research remains nascent in the organizational sciences beyond HROs with studies in ordinary business settings (Su, 2017, p1).

## **1.2 Overview of the case organization**

Food Services Company (FSC) is one of Asia's largest casual dining and quick-service restaurant companies. Under its management is the operation of over

2,300 outlets in 26 countries under major international brands covering fast foods, coffee, Asian foods, and desserts.

The organizational structure of FSC is established so that each brand is managed independently as a separate business unit (BU) with its own operational strategy and hiring processes. Each BU is managed by a general manager and team of functional managers who oversee the operations. The centralized group organization manages the overall strategy with an executive team and directors, and provides specialized services such as information technology (IT), human resources, marketing, and digital platform development.

FSC established an entrepreneurial business strategy focused on constant new product development relevant to the changing trends and tastes of Thai customers. This strategy is enabled through an agile organizational culture that promotes risk-taking, experimentation and collaboration. However, at the same time, due to the size and capital-intensive requirements of retail business operations, there are structural constraints to its ability to rapidly innovate.

Beginning in 2015, FSC set out on digital transformation journey which was catalyzed by a significant decline in profits as new digital competitors and aggregators disrupted the food industry. The FSC management made large strategic changes in the business strategy, leadership, technology development, compensation, and performance measurement. To support the organizations' digital transformation, a centralized digital team was set up to strengthen the group's digital capabilities. Digital platforms and mobile applications are also being implemented across FSC to enhance customer experience and drive customer insights. Key initiatives include development digital loyalty programs, applications to aggregate and facilitate delivery services, and a new competency framework to guide hiring, training, and incentives.

While there were several successful implementations of digital transformation initiatives at FSC, there were also failures and lessons learned. For example, the immediate response to increased competition in 2015 saw SBUs independently pursue development of digital platforms. However, this was later found to be ineffective, and there was a need to develop a new platform to create synergies between the organization's databases.

Due to the maturity of its digital transformation and the positive and negative experiences, FSC presents valuable lessons to be learned. Table 1.1 below provides a chronological timeline of the various digital transformation related events, initiatives, and activities implemented at FSC.

**Table 1.1 Timeline of digital transformation initiatives and activities**

Year	Initiatives and activities
2015	<ul style="list-style-type: none"> <li>• Experienced decline in profits and recognized disruption occurring from digital competition and aggregators</li> <li>• Executives became acutely aware and vigilant towards analyzing competitors from digital channels</li> <li>• Began holding events such as hackathons and workshops on design thinking, agile thinking, startups, etc.</li> <li>• SBUs pursued development of mobile applications and websites independently</li> </ul>
2017	<ul style="list-style-type: none"> <li>• Developed Global Digital Team</li> <li>• Learned from failures and launched collective projects to develop digital apps and platforms and connect databases</li> </ul>
2018	<ul style="list-style-type: none"> <li>• Enhanced use of digital data for loyalty systems and for informing marketing campaigns</li> </ul>
2019	<ul style="list-style-type: none"> <li>• Developed HR Innovation Team               <ul style="list-style-type: none"> <li>○ Increased focus on HR efforts for digital transformation</li> <li>○ Iterated and implemented new HR policies including: blend of objective and key results (OKRs) and behaviours for success model, new performance management system, new policies and methods for employee engagement</li> </ul> </li> </ul>
2020	<ul style="list-style-type: none"> <li>• COVID-19 pandemic caused stores to shut down and expedited shift towards digital business operations</li> <li>• Rolled out new hiring and competency framework with digital mindset as a key pillar               <ul style="list-style-type: none"> <li>○ Implemented new incentive and compensation structure which are aligned with digital mindset and behaviours</li> </ul> </li> <li>• Implemented new digital customer relationship management (CRM) and brand loyalty program</li> <li>• Rolled out mobile delivery app</li> </ul>

### 1.3 Research objectives

This research seeks to understand how organizational mindfulness can affect the processes of digital transformation. The objectives of this research are as follows:

1. To identify the organizational mindfulness components that occur during digital transformation.
2. To identify how organizational mindfulness contributes to organizational change for digital transformation.

#### **1.4 Research questions**

Henceforth, the research questions in this study are as follows:

1. What kind of organizational mindfulness components are present in the digital transformation of FSC?
2. How can organizational mindfulness contribute to organizational change for digital transformation at FSC?

#### **1.5 Scope of the study**

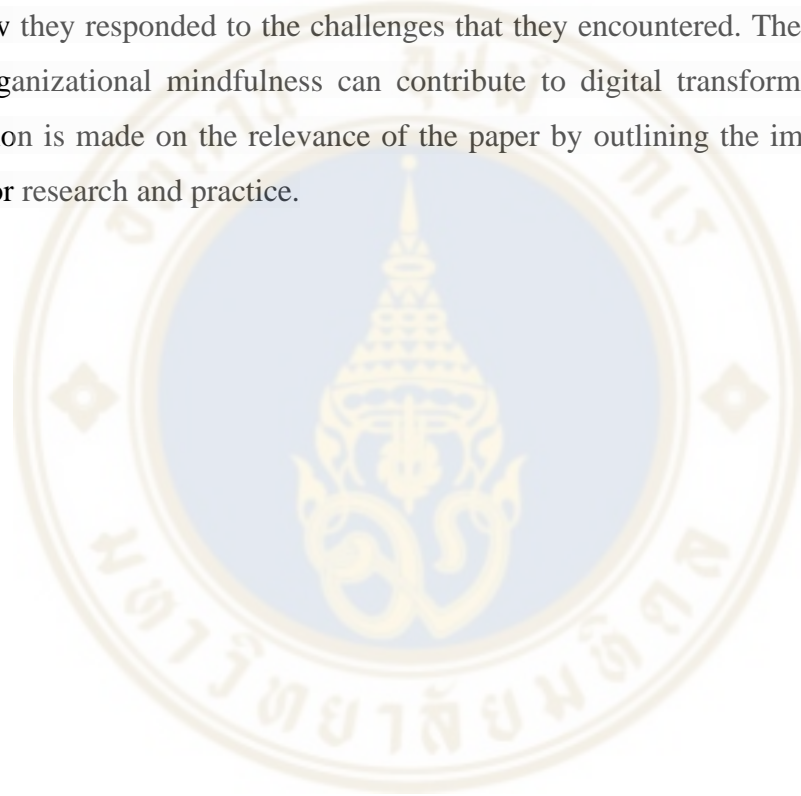
This research uses an explorative qualitative case study with a multinational foodservice company that is undergoing large strategic digital transformation. A detailed account is made of the perceptions and challenges encountered by employees from multiple levels of the organization, and their actions taken as part of the sensemaking of digital transformation in their organization. This study identifies how organizational mindfulness affects digital transformation by describing how employees make sense and react to organizational changes. Managerial implications and recommendations for how this capability may be generated in an organization to support digital transformation will be presented.

#### **1.6 Significance of the research**

This study contributes to the research on organizational mindfulness beyond HROs, to broadly explore a wider range of outcomes in a business environment. In doing so, it adds to the limited research combining organizational mindfulness and digital transformation. Furthermore, by more deeply understanding digital transformation

processes through the lens of organizational mindfulness, a roadmap is provided for leaders and change agents seeking to reshape their organizations for digital transformation.

In the remainder of this paper, core insights from the literature on organizational mindfulness, organizational change, and digital transformation are provided. Based on these insights, an introduction is made to the concept of organizational mindfulness for achieving digital transformation. Next, the findings from the qualitative case study describe how employees made sense of the required changes and how they responded to the challenges that they encountered. The analysis reveals how organizational mindfulness can contribute to digital transformation. Finally, a discussion is made on the relevance of the paper by outlining the implications of the study for research and practice.





## **CHAPTER II**

### **LITERATURE REVIEW**

This literature review will explore the relevant research on digital transformation, organizational change, and organizational mindfulness. The purpose is to provide a theoretical background and understanding as to be able to identify where organizational mindfulness can be most relevant to the study of digital transformation.

The first section of the literature review gives an overview of the concept of digital transformation, as well as relevant theoretical models and key contributors to advancements in the understanding of organizational change. Overall, research focusing on the concept and significance of organizational mindfulness to the workplace is presented. Next, the relevant research on organizational mindfulness applied to digital transformation is examined. More specifically, the literature review analyzes findings that demonstrate the role of organizational mindfulness in achieving organizational change and digital transformation. Gaps in the research are also discussed.

#### **2.1 Concept of digital transformation**

Digital transformation involves radical and evolutionary changes to an organization, that are the aggregate result of continuous changes over time which enable new business models, operational processes, and customer experiences (Morakanyane et al., 2017). These changes affect multiple areas of the organization including strategy, capabilities, structure, products, services, markets, finances, business models, and culture (Horlacher, 2016; Lucas Jr. et al., 2013; Matt et al., 2015; Nadkarni & Prügl, 2021; Riasanow et al., 2017; Verhoef et al., 2021). It can also fundamentally change how organizations operate, define capabilities, develop products, and create value for their customers, which culminate in entirely new business models (Fitzgerald et al., 2013). From their analysis of 134 different definitions of digital transformation, Gong & Ribiere (2021) defined digital transformation as “a fundamental change process,

enabled by the innovative use of digital technologies accompanied by the strategic leverage of key resources and capabilities, aiming to radically improve an entity and redefine its value proposition for its stakeholders” (p.13).

The initial stages of digital transformation can be ambiguous and chaotic, presenting challenges for organizations to make sense of the threats and opportunities, and reacting to them. Berghaus and Back (2016) identified key drivers for digital transformation such as changing customer behaviors and expectations, changing competitive landscape through the appearance of new, unknown competitors and startups, and digital shifts in the organization's industry. There are also internal factors that can drive digital transformation such as limitations experienced from information technology infrastructures and capabilities that restrict the organization's ability to quickly react to technological changes, which also signal an urgency to change. Wessel et al. (2020) summarized that digital transformation can be shaped and triggered by material, organizational, and environmental antecedents.

### **2.1.1 Change processes in digital transformation**

In reaction to the drivers of digital transformation, organizations engage in activities that are often characterized by experimentation. Some key activities include updating organizational infrastructure by creating new digital teams and units, establishing additional cross-functional meetings between relevant stakeholders, applying new approaches to innovation, re-defining roles and responsibilities, and adapting human resources guidelines. Structures such as regular cross-functional meetings, multi-level organizational workshops, ongoing communications of the digital transformation strategy, and knowledge exchange also help to foster a culture that is conducive to digital transformation (Berghaus, 2016). These activities make up an emergent process with feedback loops that occur in repeating episodes of digital strategy making (Chanas et al., 2019). Internally focused digital transformation activities emphasize helping employees leverage digital technologies to be more innovative in their work and engage in adopting new technologies (Mueller & Renken, 2018). Participative change processes can also reduce employee resistance to change and in turn, enhance goal achievement and organizational commitment (Osmundsen et al., 2018). Hartl (2019) explains that participative processes should be used to engage

employees to ensure successful buy-in. When employees are not engaged to change their work processes, the potential benefits of technology implementations can be severely limited.

Differences in approaches in organizational change for digital transformation can be identified through whether organizations are in the early, developing, and maturing levels of digital transformation (Kane et al., 2017). Organizations that progress the most in digital transformation focus on aligning their business models and fostering a conducive organizational culture (Kane, 2017). They foster organizational values and traits such as collaboration, innovation, flexibility, openness, experimentation, and co-creation to support organizational agility to achieve digital transformation (Berman & Marshall, 2014; Hartl & Hess, 2017; Kane et al., 2017; Riasanow et al., 2017). However, entrenched organizational culture and misaligned values with digital transformation can also create institutional barriers that stifle innovation and the potential benefits of digital technologies (Töytäri et al., 2017). Organizations that are mature in digital transformation are most likely to push decision making down through the organization, giving teams autonomy to define approaches in achieving their goals. In contrast, early-stage digital transformation organizations take a top-down approach and largely focus on infrastructure and technology implementations.

Nadkarni et al. (2021) make the distinction between the focus on people and technology in their model of two-sided organizational change. One side of digital transformation is the adoption of disruptive digital technologies and the other is an actor-guided transformation of organizational capabilities, structures, processes, and business models. This second process involves transformative leadership, managerial and organizational capabilities, company culture, and work environment.

Hanelt et al. (2021) proposed a multi-dimensional framework to digital transformation that described how the outcomes of digital transformation differ according to the organizational setup, economics and spillovers. The configuration of the firm determines its orientation and how it engages with the processes of organizational change for digital transformation. The economics determines whether the firm focuses on improving performance or developing new forms of value through

innovation. And lastly, the spillovers are effects that go beyond the direct control of the organization such as changes in paradigms, systems, and industry structures.

## 2.2 Theory of organizational change

Traditional approaches to organizational change depict a linear model of steps that can be planned and managed (Lewin, 1947; Edgar H Schein, 1996). This typically follows variations of a model of unfreeze-change-refreeze, which was first introduced by Kurt Lewin (1947). Stage 1 on unfreezing involves improving the readiness and willingness of people to change by fostering a realization for moving from an existing comfort zone to a transformed situation. Stage 2 on change is the stage of actual implementation of change. It involves the acceptance of the new ways of doing things. Stage 3 on freeze or refreezing, is where people accept or internalize the new ways of working or change, accept it as a part of their life and establish new relationships. In this stage, efforts should be made to strengthen and reinforce new behaviours and changes. In this perspective, change is the result of interventions through various observable objects such organizational culture, leadership, and organizational structure (P. J. Kotter, 1995; Edward H. Schein, 2004).

According to Kotter (1989), successful organizational change depends on managers to make strategic choices and implementation to lead change based on situational factors, pre-planning, speed of change effort, and methods for managing resistance (J. P. Kotter & Schlesinger, 1989). Kotter proposed an 8-step process for leading change including: 1) create a sense of urgency; 2) build a guiding coalition; 3) form a strategic vision and initiatives; 4) enlist a volunteer army; 5) enable action by removing barriers; 6) sustain acceleration; 7) sustain acceleration; 8) institute change.

A differing perspective of change focuses on its emergent and continuous nature (Bushe & Marshak, 2016; Tsoukas & Chia, 2002). Organizational change is viewed as a process that emerges over time with underlying interlocking patterns of activities (Dawson, 2014). In this perspective, change is continually enacted and re-enacted by organizational actors who are engaged in sensemaking and grounded in different mental models (Alain & Koen, 2020). As organizations navigate through the dynamic equilibrium of different sensemaking qualities, beliefs and habits of action,

new patterns of interactions emerge through an act of “becoming” (Tsoukas & Chia, 2002). Thus, organizational change must focus on the emotionally driven processes of sensemaking emotions and mental models. Managers need to engage in sense giving, to develop narratives that explain what is going on against the background of relevant alternatives and appropriate discourses that guide how employees form their expectations (Will & Pies, 2018).

Bridges (1986) emphasized the concept of transitions which considers the psychological processes that employees experience through organizational change. Successful organizational change must ensure that employees progress through the stages of transition which include the letting go of an existing process and identity, going through the neutral zone between the old reality and new reality, and moving forward with the new process and identity.

### **2.3 Concept of individual mindfulness**

The study of mindfulness is a promising area of research that may help to explain how organizations and the individuals within them develop and employ processes relevant to digital transformation. Mindfulness influences what individuals place their attention on, affecting their cognition and beliefs, and ultimately giving them more agency in how they respond to situations (R. S. Kudesia, 2019). The growing body of research on mindfulness has shown impact in key workplace outcomes such as increased work engagement (Leroy et al., 2013), job performance (Dane & Brummel, 2014), social relationships (Hafenbrack et al., 2019), and wellbeing (Good et al., 2015).

Individual mindfulness can be defined as "a state of consciousness in which attention is focused on present-moment phenomena occurring both externally and internally" (Dane, 2011, p. 1000). It is also characterized by unbiased receptivity; nonconceptual, non-discriminatory and nonjudgmental awareness; and present-oriented flexible consciousness (Brown et al., 2007). This perspective is rooted in Eastern traditions which emphasize the adoption of an open and accepting attitude towards one's experiences (Sutcliffe et al., 2016). Thus, mindfulness allows an individual to understand what they place their attention on and affects how they ultimately react to it.

The Western perspective on mindfulness is mainly built on Ellen J. Langer's (1989) work which views it as a form of information processing (Pirson et al., 2018). In this perspective, mindfulness is expressed through "active differentiation and refinement of existing categories and distinctions, creation of new discontinuous categories out of streams of events, and more nuanced appreciation of context and alternative ways to deal with it" (Sutcliffe et al., 2016). Mindful individuals react to events by actively questioning existing interpretations and creating new ones, which in turn invokes an increased state of involvement and wakefulness (Langer & Moldoveanu, 2000). When there is mindfulness, there is a decrease in mindlessness (Langer, 1989). In a mindless state, there is reduced attention in which individuals tend to respond to their environment based on pre-existing information, old thinking patterns, and persistent biases (Tang et al., 2017). Mindless behavior is compared to being "on automatic pilot", operating on a single perspective and resulting in diminished performance (Langer, 1989)

### **2.3.1 Mindfulness and mindlessness**

Mindfulness also reduces mindlessness, which is caused when routines and processes are followed without adopting new information. It is characterized as acting on "automatic pilot," through reliance on past information and fixation on a single perspective (Langer & Moldoveanu, 2000, p.129). When organizations are overreliant on established behaviors that are based on outdated information, it can prevent performance improvements (Ray et al., 2011) and cause inertia and blind spots that hinder organizational change (Becke, 2014). However, proper management of mindfulness and mindlessness can complement each other for improved organizational learning (Rerup & Levinthal, 2014). While mindfulness involves attentiveness to new information, mindlessness allows for fewer cognitive processes and routine behaviors which has benefits including conserving attention and capturing knowledge accumulated from previous experiences.

## **2.4 Theory of organizational mindfulness**

Building on the foundations of mindfulness outlined by Langer, Weick et al. (1999) developed the concept of organizational mindfulness in their study of how high-

reliability organizations (HROs) obtain near error-free performance. Examples of HROs include nuclear power plants, air traffic control systems, and naval aircraft carriers. Also referred to as collective mindfulness, organizational mindfulness is defined as "the extent to which an organization is able to discern details about emerging threats and act in response to those details" (Weick et al., 1999).

Organizational mindfulness is seen as a stable and enduring organizational attribute (Rerup & Levinthal, 2014) that can be developed and sustained through top-down organizational structure enabled by organizational leaders, structure, and processes, and supported by bottom-up social processes called mindful organizing (Sutcliffe et al., 2016). It is embodied in the interrelating of social activities and emerges from the interactions between people working together (Weick & Roberts, 1993). Lichtner et al. (2019) describe organizational mindfulness as an organizational state of being, or way of working, which is characterized by "a quality of organizational attention that increases the likelihood that people will notice unique details or situations and act upon them" (p.99). Ray et al. (2011) depicted organizational mindfulness as enacted practices and structures which ensure mindful ways of acting, thinking, and organizing. In their research with school leaders, they argued that organizational cultures that encourage rich thinking and capacity for action can be said to be mindful. Specifically, organizational mindfulness impacts how individuals perceive their organization's atmosphere and the approaches they take towards solving problems and challenges.

An organization's ability to be aware and notice changes in its environment, enlarges the set of possible actions that can be taken. This heightened sensitivity helps organizations to avoid mistakes and successfully adapt in environments with extreme complexity, dynamism, and time pressure. Not only does organizational mindfulness enable rich thinking, it can also activate it more quickly among a greater number of people as they update their mental models and knowledge (Sutcliffe & Vogus, 2014).

Organizational mindfulness is exhibited through leader-driven top-down processes that provide structure and practice. For example, when leaders look for multiple and deeper explanations to problems, pay attention to emerging operational data and create a culture that encourages rich thinking, they provide structure for their teams to do the same (Vogus and Sutcliffe, 2012). These actions shape the context and

behaviors of employees, which lead to more mindful behaviours. Organizational mindfulness is also about rules, routines, and HR practices that create a frame of reference for employees to make sense of information, which enables organizations to react quickly and execute from a wider variety of actions (Kelemen et al., 2020).

Mid-level managers play a critical role in enabling organizational mindfulness by acting as the bridge from the strategic level to the front-line. They serve to translate real-time data from the front lines for top administrators and create structures that can guide the action of front-line employees (Rerup, 2009; Vogus & Sutcliffe, 2012). Doing so, they serve to translate organizational mindfulness into more operational terms that shape the behaviors of employees in the form of more mindful organizing.

#### **2.4.1 Components of organizational mindfulness**

Organizational mindfulness consists of five key components, which can be separated into two categories, anticipating and reacting. The first three components fall into the anticipating category, which are characteristics that help the organization to better sense events in its environment. The latter two are in the reacting category, which are characteristics that help the organization to better react to the events in its environment (Alain et al., 2014).

##### *Preoccupation with failure*

An acute attention given to small and large failures in organizations, with a cautious attitude towards becoming complacent with and overemphasizing successes. Mindful organizations treat any and all failures with importance and conduct a thorough analysis of near failures. This increased attention emphasizes the importance of employees on the front line as they come into contact with the largest number of failures and have a nuanced perspective of the vulnerabilities in operations, gaps in the procedures, and sequences by which errors occur.

##### *Reluctance to simplify interpretations*

Recognition that the tendency to make oversimplify through worldviews, frameworks, or mindsets, can cause members to ignore data and make errors. Mindful organizations avoid simplification by making fewer assumptions and socializing organizational members to notice more. They intentionally cultivate a larger variety of perspective to make sense of the complex environment. This can include systems of



checks and balances, frequent reviews, committees and meetings, and inclusion of employees with diverse experiences. The divergent perspectives sensitize the organization to a wider variety of inputs for making sense of information.

*Sensitivity to operations*

Achieved through shared mental representations, collective story building, continual updates, and active diagnosis of the limitations of planned procedures.

*Commitment to resilience*

Anticipation of expected surprises, risk aversion, and planned defenses. Organizations try to predict and prevent potential dangers before damage is done. However, they also recognize that failures are inevitable and therefore seek to be resilient. Resilience refers to the capacity to cope with unanticipated dangers after they have happened, learning to bounce back, and also about coping with surprises in the moment. This is achieved through actions that prepare for inevitable surprises, expand general knowledge, technical facilitation, and generalized command over resources.

*Deferring to expertise*

A recognizable pattern in which organizations are attentive to and defer to employees on the front-line, or those with the key expertise on the topic at hand. Organizations push decision making down through to the front-line staff as they are the ones in direct contact with work processes.

## **2.5 Concept of mindful organizing**

Organizational mindfulness is enacted through bottom-up processes called “mindful organizing” which is defined as the social processes, actions, decisions, and interactions of a group that reinforce the characteristics of organizational mindfulness (Weick et al., 2007). Examples of such activities include articulating mistakes, ongoing discussions of what is being overlooked, and developing an integrated big picture of operations in the current situation (Weick, 1999).

Mindful organizing processes support the shifting from perceptual processing to conceptual processing and suspension of automatic labelling, which force awareness in the present and lead to applications of more relevant mental models in new situations (Klockner, 2017). These processes provide a structure for how individuals

interact as they develop, refine, and update their shared understanding of situations that they face. This sustained attention enhances the collective's ability to act appropriately to the situation. More simply, mindful organizing increases the likelihood that organizational members will be able to detect changes, correct errors, and adapt to unexpected events more quickly (Sutcliffe & Vogus, 2014).

## **2.6 Mindfulness and digital transformation**

### **2.6.1 Organizational mindfulness and organizational change**

Organizational mindfulness can develop the conditions for developing readiness for change by helping organizational members to identify when perspectives and routines are no longer appropriate and the need for changing them (Gondo et al., 2013). Gartner (2013) argues that mindful employees are more open to different interpretations of organizational change and thus more likely to see opportunities rather than threats, affecting their attitudes towards change.

Becke (2014) adapted the processes of organizational mindfulness to organizational change and proposed that it can contribute to what he terms as mindful change: organizing perspective diversity; promoting negotiation and conflict resolution; developing and establishing trust anchors; promoting sustainable work systems; facilitating experimental change; and developing and regenerating organizational stability anchors.

In the process of strategic change, issues, bottlenecks, and new opportunities can emerge. Through sustained attention, mindful organizations are more likely to detect these unintended consequences and unexpected outcomes of change, and have a better understanding of how to navigate the strategic change (Alain et al., 2014).

Organizational mindfulness also entails the ability to sustain attention and interpret event which leads to more effective sensemaking (R. Kudesia, 2017). Sensemaking is the act of making sense of unusual events, ambiguous information, or unexplained variations of performance (Maitlis & Christianson, 2014) This describes the process that organizations go through as they adjust their mental models, notice and interpret events and develop responses to explore the meaning of those events (R.

Kudesia, 2017). The process of developing the appropriate interpretations, understanding, and reactions to digital transformation can affect how the organization changes.

Furthermore, mindful organizations will be more receptive to emerging changes and have a higher capacity to make decisions on how to react and capitalize on those changes (Rerup & Levinthal, 2014).

### **2.6.2 Organizational mindfulness for digital transformation**

Organizational mindfulness for digital transformation can be described as the act of anticipating, planning, and managing technology change (H. Li et al., 2019). When organizations are mindful of digital technology applications, they are more able to sense and react to changes in their environment, making them more agile for digital transformation. Li et al. conducted an empirical study with 102 managers in US companies examining how organizations stay alert to changes that occur in the dynamic business environment and deploy resources to respond creatively. Their research showed that organizational mindfulness increases the likelihood of organizations to establish digital technology infrastructure, digital technology-enabled external and internal relationships, and alignment between the technology and business strategic responsibilities. These factors enhance the market agility of an organization by improving its ability to respond to environmental turbulence.

When organizations are mindful of digital transformation, they actively search for change opportunities, anticipate, and evaluate how it will affect their businesses, while deferring to the appropriate technical experts to make decisions. This is perceived as a sensing capability that allows them to scan the external environment for unexpected trends that could disrupt the organization. These organizations also react differently as they proactively and continuously pursue new external digital technology opportunities. Such activities stimulate contacts and collaborations with their external stakeholders beyond regular business transactions.

Aanestad and Jensen (2016) viewed organizational mindfulness for digital transformation as an organizational capability founded on processes of sensemaking. In seeking to understand how technology systems are successfully implemented in a hospital setting, they used qualitative research to explore the sensemaking processes that

occur during post-implementation adaptations and how it supported the organization in achieving digital transformation. This was studied by obtaining insights into how users make sense of a situation and how they use this understanding as a springboard for action in adapting to digital transformation initiatives. The insights from these 'sensemaking challenges' were then mapped to the five processes of organizational mindfulness.

Warner and Wager (2019) refer to the concept of digital sensing in their study of how firms build capabilities for digital transformation. Digital sensing involves awareness of topics such as advances in digital technologies and changes in consumer behavior. To achieve this, organizations make use of formal and informal networks in technology hubs to identify technological trends, and new technologies such as big data analytics and artificial intelligence to sense new customer-centric trends. Sensemaking of internal factors can also help to reduce alignment gaps and improve response to tensions and changes in the environment. This capability helps organizations to sense, transform, and seize and reconfigure organizational resources and redefine the strategy (Yeow & Lim, 2017)). Zimmer (2019) describes the sensemaking processes performed by members of the specialized units that lead digital transformation initiatives within their organizations. Members of these units use processes of joint sensemaking where they invite employees to different events to collaboratively make sense of the digitalization, discuss the opportunities that it offers for mobility, and learn about what it means to their organization. In these events, the digital unit and the invited employees co-produce meaning and direction for the organization's digital transformation.

Mindful organizations are able to effectively change their technology because they encourage their providers and users to explore new technological investments. This creates an open culture that fosters collaborations between internal stakeholders. Overall, organizational mindfulness facilitates the development of lateral relationships among digital technology, business, external stakeholders, and users. These connections lead to improved communication, trust, and information sharing, which are conducive to the complex information processing required for digital transformation.

In situations like digital transformation where there is a lack of well-modeled or documented processes or a continuous flux of change, mindful actors are

able to effectively decide on the appropriate actions (Baiyere et al., 2020). Baiyere et al. (2020) point out that employees make sense of digital transformation by drawing from their experience and evaluations of the circumstance of the context at hand to decide on appropriate business process actions.

## 2.7 Summary of findings

Table 2.1 below provides a summary of the findings from the literature review according to the components of organizational mindfulness and digital transformation, along with descriptions and examples.

**Table 2.1 Summary of findings on organizational mindfulness for digital transformation**

<b>Components of organizational mindfulness</b>	<b>Organizational mindfulness related to digital transformation</b>	<b>Description and examples</b>
Preoccupation with failure	Preoccupation with constraints and preconditions  Actively searching for opportunities of digital transformation	Widespread questioning of preconditions and effects of decisions, seeking to check and validate the assumptions acted upon before decisions were implemented.
Reluctance to simplify interpretations	Reluctance to premature commitment  Providing alternatives for decision making	Unwillingness to proceed based on insufficiently known information. Decisions and proposals questioned and examined for their upstream and downstream requirements and consequences.

Source: (Aanestad & Blegind Jensen, 2016; Berghaus, 2016; L. Li et al., 2018; Warner & Wäger, 2019; Weick et al., 1999)

**Table 2.1 Summary of findings on organizational mindfulness for digital transformation (cont.)**

<b>Components of organizational mindfulness</b>	<b>Organizational mindfulness related to digital transformation</b>	<b>Description and examples</b>
Sensitivity to operations	<p>Sensitivity to interdependencies and continuous prioritization</p> <p>Enabling rich communications between business and digital technology</p>	<p>Collectively constructed understanding that is achieved through collaborative workflow mapping and graphical charting to detect interconnections and dependencies between elements in the work system.</p> <p>Members of these units use processes of joint sense-making where they invite employees to different events to collaboratively make sense of the digitalization, discuss the opportunities that it offers for mobility, and learn about what it means to their organization. In these events, the digital unit and the invited employees co-produce meaning and direction for the organization's digital transformation.</p>
Sensemaking of digital transformation	<p>Awareness of topics such as advances in digital technologies and changes in consumer behavior (e.g. analytics and artificial intelligence to sense new customer-centric trends)</p>	<p>Organizations make use of formal and informal networks in technology hubs to identify technological trends and new technologies such as big data</p> <p>Actively search for change opportunities, anticipate and evaluate how it will affect their businesses, while deferring to the appropriate technical experts to make decisions</p>
Commitment to resilience	<p>Commitment to avoid disruptions</p> <p>Anticipating and evaluation the business transformation</p> <p>Seeking new digital technology or exploit current ones constantly in order to optimize the utilization of digital technology</p>	<p>Maintaining as smooth an operation as possible and minimizing disruptive changes as guiding principles in the decision processes.</p> <p>Proactively and continuously pursue new external digital technology opportunities. Such activities stimulate contacts and collaborations with their external stakeholders beyond the regular business transactions</p> <p>Encourage providers and users to explore new technological investments.</p>

Source: (Aanestad & Blegind Jensen, 2016; Berghaus, 2016; L. Li et al., 2018; Warner & Wäger, 2019; Weick et al., 1999)

**Table 2.1 Summary of findings on organizational mindfulness for digital transformation (cont.)**

<b>Components of organizational mindfulness</b>	<b>Organizational mindfulness related to digital transformation</b>	<b>Description and examples</b>
Deference to expertise	Seeking out appropriate mix of expertise  Deferring to IT experts when making decisions	Seek an appropriate mix of expertise - a constellation of actors that would be able to cover the necessary domains and ensure that preconditions and consequences are noticed.

Source: (Aanestad & Blegind Jensen, 2016; Berghaus, 2016; L. Li et al., 2018; Warner & Wäger, 2019; Weick et al., 1999)



## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This research examines the processes of organizational mindfulness that emerge as organizations navigate through digital transformation. This section outlines details the research design, methods for data collection, and data analysis.

#### **3.1 Research design**

This qualitative research uses a case study methodology with qualitative interviews. Case studies are suitable for when 'how' or 'why' questions are being posed and when the focus is to understand a phenomenon within some real-life context (Yin, 2003, p. 1). Qualitative research of organizational change can be used to uncover new and emerging phenomena (Dominie & C., 2013). This research uses qualitative in-depth interviews to uncover the thought processes of the respondents to better understand their perceptions and actions as they reconstruct their mental models and understanding of their organization through digital transformation. Multiple perspectives and levels of the organization were interviewed including executives, middle managers, and front-line employees.

The goal of this study is to examine the links between organizational mindfulness towards digital transformation. To accomplish this, it study selected a larger firm which was more likely to possess both the capability, resources, and the need to execute strategic digital transformation. To gain a deep understanding of the phenomenon of organizational mindfulness for digital transformation, an organization with rich data that would serve as a purposeful case was chosen. Such an organization should be able to provide a clear example of organizational mindfulness infrastructure and processes, and have clear digital transformation initiatives while providing adequate access to data and to individuals in order to assess the sensemaking processes. The details of the organization studied are described in the section below.



### 3.2 Population and sampling

The population selected in this research includes the employees who are currently working on digital transformation initiatives within FSC. To provide a multi-level perspective, the interviewees were evenly distributed across the executive, middle-management, and front-line level positions within the organization.

Using a purposive sampling method to align with the objectives of this study, data collection was carried out until the data was considered as sufficient. To ensure that the interviewees had relevant experience and could provide relevant insights to the question under study, the following criteria were used for selecting the samples:

For executives and middle managers:

- The participants must work directly on a digital transformation team or on a related cross-functional team mandated to carry out digital transformation initiatives.
- The participants must have direct responsibilities involved in digital transformation initiatives.
- The participants must have had a minimum of 6 months of experience with digital transformation initiatives within the organization.

For front-line staff:

- The participants must work in a position directly affected by digital transformation initiatives.
- The participants must have participated in any activity that relays information or feedback regarding digital transformation back to the organization (e.g. participating in a cross-functional team, meetings, events, interviews, or other communications).
- The participants must have worked in their position for a minimum of 6 months.

This study was completed with 16 interview participants at which point data saturation was reached. The interviewees included digital transformation executives, middle-management, and front-line employees. The executive-level employees provided perspectives from a strategic level and on how various initiatives aligned with the organization's overall goals. Middle-management level interviewees provided perspectives on how strategies were translated and managed into the operations of various brands, departments, and specific functions related to digital transformation. In

addition, front-line level interviewees provided perspectives on the operational level within brands of FSC. To protect the confidentiality of the respondents, all names have been redacted. Table 3.1 below provides an overview of the interview respondents, by position, department, and length of years experience working with the company.

**Table 3.1 Interview respondents and functions**

#	Position	Department	Length of Work Experience
1	Executive 1	Digital Products	1-2 years
2	Executive 2	Marketing	1-2 years
3	Executive 3	Digital Strategy	1-2 years
4	Executive 4	Digital Strategy	1-2 years
5	Executive 5	Human Resources	5 years
6	Executive 6	Human Resources	5 years
7	Executive 7	Marketing	1-2 years
8	Manager 1	Digital Products	1-2 years
9	Manager 2	Human Resources	>5 years
10	Manager 3	Marketing	1-2 years
11	Manager 4	Human Resources	>5 years
12	Manager 5	Human Resources	<1 year
13	Employee 1	Digital Products	5 years
14	Employee 2	Operations	8 years
15	Employee 3	Marketing	1-2 years
16	Employee 4	Operations	15 years

### **3.3 Data collection**

In the initial data gathering stage, information was collected from publicly available secondary sources such as annual reports, the company website, and online sources to familiarize with the digital transformation initiatives of the organization. This information informed the pre-planning for interview activities.

Respondents who matched the sampling criteria were invited for the in-depth interview. The researcher sent the participant information sheet and information consent form to the participants via email before the interview. The conversations were recorded during the interview with the participant's permission. Online interviews were conducted through Zoom Meetings, and focused on the progress of the project and the interviewees' perceptions of obstacles and opportunities. Open questions were asked about interviewees' perceptions of the past and current situation, and what they perceived to be challenges to digital transformation. The interviews lasted between 45–90 minutes and were recorded and transcribed. The period for data collection for this project was from April 2021 to June 2021. All information in this research is kept confidential with all electronic files stored in the researcher's personal computer and will be deleted one year after completion of the research. The names of interviewees have been replaced with labels indicating their level of position and numerical position to ensure confidentiality.

#### **3.3.1 Data analysis**

After the interviews, the recordings were transcribed and analyzed by using the content analysis method, which is the general method for qualitative research. Content analysis is a technique for describing systematic text of the communication context, following content analytical rules, and step-by-step models (Mayring, 2004).

First, a chronological timeline of the projects was developed to understand how there were created and evolved. Next, the data was also coded with the position of the interviewee to properly identify the level of perspective within the organization. In the next step, the perceptions of organizations members regarding events related to digital transformation were evaluated according to if they were supportive of digital transformation or identified as challenges. Then, the code was re-arranged by grouping according to the five components of organizational mindfulness. Finally, the data was

analyzed to discuss the impact of organizational mindfulness on digital transformation. The discussion is based on theories and concepts from the literature review and compared with the research framework.



## **CHAPTER IV**

### **FINDINGS**

In this section, descriptions are provided of events that illustrate the organizational mindfulness processes encountered in the case organization's digital transformation, as well as the problems encountered and organizational responses, both at the front-line and management levels.

#### **4.1 Thematic areas of organizational mindfulness for digital transformation**

The content analysis method was used to analyze the interview results and to interpret results. From the analysis, a set of 16 thematic areas are identified within the five processes of organizational mindfulness and accompanying quotes from the interview responses are highlighted from the differing perspectives of executives, managers, and front-line employees. Table 4.1 below provides an overview of the thematic areas and key evidence collected from the interviews.

**Table 4.1 Supporting data**

<b>Organizational mindfulness principle</b>	<b>Theme</b>	<b>Empirical finding</b>
Preoccupation with failure	1. Vigilance towards disruptions triggered by innovation and digital competition	<ul style="list-style-type: none"> <li>- Managers aware of digital channels and pay attention to digital innovations</li> <li>- Discussions about what digital competition are doing in terms of new products and marketing</li> </ul>
	2. Attention to outliers and digital data	<ul style="list-style-type: none"> <li>- Using digital tools and applications to pay attention to outlier cases</li> <li>- Looking at weak signals and identifying implications on business</li> <li>- Monitor user behaviours across various digital channels and platforms</li> </ul>
	3. Focus on impact to operational excellence	<ul style="list-style-type: none"> <li>- Expanded focus beyond achievement of operational excellence to include customer satisfaction and other customer-focused measurements</li> </ul>

**Table 4.1 Supporting data (cont.)**

<b>Organizational mindfulness principle</b>	<b>Theme</b>	<b>Empirical finding</b>
<p>Reluctance to simplify interpretations</p>	<p>4. Formalized meetings and committees for collaborative sensemaking</p> <p>5. Collaborations and cross-functional digital teams</p>	<ul style="list-style-type: none"> <li>- Steering committee, cross-brand meetings, quorums to share information related to digital transformation</li>   <li>- Cross-functional teams with strong partnership and involvement of the specific unit</li> <li>- is important for teams within brands to collaborate with other teams for specialized resources and knowledge related to digital initiatives</li> <li>- sharing resources to develop joint digital platforms</li> </ul>

**Table 4.1 Supporting data (cont.)**

<p><b>Organizational mindfulness principle</b></p>	<p><b>Theme</b></p>	<p><b>Empirical finding</b></p>
<p>Sensitivity to operations</p>	<p>6. Ongoing sensemaking of digitalization opportunities to address business constraints</p> <p>7. Reinforcement of a data-driven culture</p>	<ul style="list-style-type: none"> <li>- Willingness to experiment with new platforms and features, and share learnings</li> <li>- Balance decision-making with facts and data</li> <li>- Build organizational awareness for employees and management towards gathering, analyzing, and use data</li> <li>- Sharing about importance of customer data</li> <li>- Developing reports of customer digital data and showing impact of digital investments</li> <li>- Involve teams in identifying data, tracking and communicating results</li> <li>- Development of database infrastructure to combine various sources of data across the organization and tools for visualizing the data</li> <li>- Sensitivity and build out of digital customer profile</li> </ul>
	<p>8. Focus on practicality and problem-oriented solutions</p>	<ul style="list-style-type: none"> <li>- Evaluate and analyze digital investments based on benefits of improving effectiveness and efficiencies</li> </ul>



**Table 4.1 Supporting data (cont.)**

<b>Organizational mindfulness principle</b>	<b>Theme</b>	<b>Empirical finding</b>
Commitment to resilience	9. Move fast, fail fast culture	<ul style="list-style-type: none"> <li>- Use of agile methodology and developing minimum viable products</li> <li>- Meetings to reflect on successes and failures of initiatives within brands across the organization, and discuss how to improve before rolling out to other brands</li> <li>- Reflect on if other brands have set precedence of digital initiatives as part of new project developments</li> <li>- Develop culture of experimentation and supportive environment for experimentation with constructive feedback, empathetic listening, and coaching.</li> </ul>
	10. Promotion of collaboration through policies and practices	<ul style="list-style-type: none"> <li>- Acknowledge and encourage collaboration from management</li> <li>- Involvement of employees in the design and decision-making of initiatives for buy-in and commitment</li> <li>- Full support and alignment with managers including CIO, CSO, and IT director</li> <li>- Engagement and specific responsibilities for change management team</li> <li>- Digital squad” of employees act as focus group to review and provide feedback on digital initiative</li> </ul>
	11. Knowledge dissemination about innovation	<ul style="list-style-type: none"> <li>- Proactive recruitment and hiring of digital talent</li> <li>- Facilitate communications from ‘youngblood’ digital employees to management</li> <li>- Informal communication for rapid sharing and communications across the organization</li> <li>- Organizing workshops on startups, entrepreneurship and design thinking innovation</li> <li>- Support innovation through contests and workshops and carrying through by implementing and sharing successes</li> </ul> <p>Weekly updates to share on latest digital trends</p>

**Table 4.1 Supporting data (cont.)**

<b>Organizational mindfulness principle</b>	<b>Theme</b>	<b>Empirical finding</b>
Commitment to resilience	12. Proactiveness and sensitivity to feedback	<ul style="list-style-type: none"> <li>- Use of digital tools to proactively and continuously seek employee feedback</li> </ul>
	13. Hiring and capacity development for digital skills	<ul style="list-style-type: none"> <li>- Strategically hire employees for digital skills and experiences</li> <li>- Revision of leadership competency framework to include digital skill mindset, including collaboration, digital skills,</li> <li>- Development of integrated approach with supporting system of performance evaluation compensations</li> </ul>
	14. Continuous exploration of innovation opportunities	<ul style="list-style-type: none"> <li>- Promote open culture of searching for opportunities to leverage digital technologies</li> <li>- Specialized strategy and innovation team responsible for developing new products and projects</li> <li>- Make digital a focus for new project development</li> </ul>

**Table 4.1 Supporting data (cont.)**

<b>Organizational mindfulness principle</b>	<b>Theme</b>	<b>Empirical finding</b>
Deferring to expertise	15. Consultative partnerships with global digital leadership team  16. Sourcing technical expertise from technology partners	<ul style="list-style-type: none"> <li>- Centralized global digital leadership team tasked with implementing digital strategy across the organization</li> <li>- Authority of decision-making on digital initiatives is retained with leadership of the individual brand. The digital team has various partnership models with the brands, but all on a consultative basis</li> </ul> <ul style="list-style-type: none"> <li>- Consult technology partners and vendors for second opinions on data analysis and strategic planning of initiatives</li> <li>- Technology partners engaged to provide knowledge building on new technologies and trends</li> </ul>

### 4.1.1 Preoccupation with failure

#### 4.1.1.1 Vigilance towards disruptions triggered by innovation and digital competition

Within the context of FSC's digital transformation, threats and failures may be viewed as the inability to adapt to changes in customer behaviour and preferences, lack of innovation to compete with disruption from digital competition, which ultimately lead to a weakened competitive advantage and reduced profits. FSC developed various formal and informal mechanisms to identify, analyze, and strategize against the disruption that was emerging from its competition in digital channels.

Beginning in 2015, the growing impact of increased competition from online food delivery applications, also known as aggregators, caused a large decrease to FSC's profitability. Aggregators such as Grab, FoodPanda, and Lineman provide customers with a convenient way to view and order food from a large variety of restaurants, and facilitate quick delivery by connecting orders with delivery drivers. Businesses that list and obtain orders through the aggregators must pay a commission on the order. In addition, businesses may choose to purchase advertising and other add-on services to be more competitive on the platforms. As many of FSC's customers migrated over to the aggregators, it began to aggressively make use of the aggregator platforms, which caused overall revenue to grow but profitability to decrease due to paying large amounts of commissions.

The drastic decrease in FSC's profitability was identified as a failure and caught the attention of executives and leadership, who reacted by implementing practices to increase the organization's awareness towards disruption stemming from digital channels and innovations by their competition. FSC regularly held strategic meetings to identify and analyze the digital disruption that was impacting its businesses. Quarterly review meetings were focused on challenging managers to collaboratively make sense of what competitors were doing in terms of new product development, marketing, and their overall growth. The following excerpts provide examples of the changed awareness of the executives:

*"...FSC has started to become more mindful about looking at how the disruption is impacting business. Most of the general managers are quite aware of digital channels and start paying attention to innovators when they appear. For*

*example, when Robinhood came [to market], even before they were announced, the executives had already worked the back channels and understood what was coming.*

*It's a matter of adjusting through observation what innovation or competitors are doing or somebody in other countries doing or basically emerging trends..."* (Executive 1)

*"... We have quarterly review meetings and in general, the type of things discussed in these meetings are what our competitors are doing in terms of new products, in terms of marketing, how is your business growing overall, and how is our business doing in terms of marketing, revenue, and gross. These are quarterly checks from the top down on the business side..."* (Executive 4)

These excerpts provide perspectives from the senior management of how they recognized the importance of the disruption from the digital competition and what specific aspects were being discussed during the executive-level meetings.

#### 4.1.1.2 Attention to outliers and digital data

FSC began paying closer attention to data through investments into infrastructure and digital platforms, which provided new vantage points to identify and analyze failures. Particularly, the implementation of digital platforms enabled FSC to notice outliers and changes more easily due to the ability to more set and track metrics. Weak signals are unstructured emerging data that can provide valuable information to inform strategic action (Mendonça et al., 2012). FSC leveraged digital tools and developed tracking mechanisms to that it could pay closer attention to scenarios where customers interacted with digital platforms in ways that were unplanned or unintended. The following excerpt provides an example:

*...From a digital perspective, we always pay attention to the outliers. When you start to see normally, you will know when something wrong or something right was happening. From the digital perspective, we always look at the weak signals first because when something is happening, the magnitude of that needs to be understood and its implications on the business.*

*The numerous mechanisms are baked into the digital channels. We do performance monitoring and user analytic to basically monitor user behavior on the site. Also, across payments and loyalty channel, we also use these to indicate*

*outlying behavior. For example, there has been a bit of weak signals that started to emerge from abuse of our digital channels to the payment threads and we were paying a very close attention because they never happened before...* (Executive 1)

The excerpt from Executive 1 showed that FSC had recognized the ability and potential of digital technologies to capture and track information about customers, and make nuanced reporting about performance and customer behaviour, even if a weak signal.

#### 4.1.1.3 Focus on impact to operational excellence

Operational excellence is a core value at FSC and is considered one of the company's competitive advantages. This core value is deeply ingrained within the organizational culture, represented at the highest levels of management, where leaders are highly regarded for their ability to achieve operational excellence. Management and staff are committed towards meeting revenue and profit targets, with compensation strongly aligned to incentivize meeting those objectives.

While operational excellence is a key factor of FSC's past success, interviewees acknowledged how the emphasis on meeting revenue targets restricted the organization's ability in digital transformation. The strong focus and sensitivity to sales often did not provide enough time to follow through and obtain results from digital transformation initiatives. Reflecting on the traditional sales-driven mental model applied towards digital marketing initiatives, it was commented:

*"...the sales cannot wait. So, if we launched for 2 weeks and haven't seen an increase in sales, then we can easily drop that product as we launch another promotion to compensate for sales that we lost [during that time] ..."* (Manager 3)

The strong focus on revenue and operations at FSC has resulted in the operations function holding high amounts of political power within the organization, and an ability to strongly influence the decisions that the organization makes on digital transformation. Furthermore, a large portion of the executives are those who have earned their positions through obtaining success in a non-digital and more traditional way of operating the businesses. Thus, their decisions are perceived as barriers to digital transformation. The following excerpts provide commentary of this perspective:

*“...the problem with operations is they are more focused on base lining operations, rather than factors related to digital transformation. They don't spend that much time looking at how they can create efficiency in operations by using digital tools. It is an entirely different perspective...”* (Executive 1)

*“...Focus on operational excellence is on the operation [of the restaurants]. That tends to be more on keeping experiences to the customer that were not related to digital, in the past. For example, we have a vision in our company on operation excellence which focuses more on the people who are at the front line and their contact with the customer and giving them the best experience. So, we are focused on investing more on the people in operations and not into the digital systems...”* (Manager 3)

The strong focus on operations is also evident in the lower front-line levels, which indicates to employees the expectations held on how they should operate. For front-line restaurant employees, it was reflected that their main objective was to focus on in-store operations and interactions, rather than paying attention to digital transformation as suggested in the following quote:

*“...There is already a platform and direction about how the organization will be moving in terms of the scope of digital transformation. Our focus is more on the operations and interactions in the store...”* (Employee 3)

#### **4.1.2 Reluctance to simplify interpretations**

##### **4.1.2.1 Formalized meetings and committees for collaborative sensemaking**

There are different levels of digitization and digital capacity across FSC's portfolio of brands. While some brands have been originally developed with a core strategy and product aligned with digital, other are mainly focused on traditional retail channels and are slowly digitizing. Thus, FSC has leveraged various formalized committees and meetings to share information and to collaboratively make sense of digital transformation going on in the organization. Each brand within FSC has a steering committee made up of functional unit managers who meet monthly. In addition to that, the various functional units across all brands will also meet monthly to share updates about the latest digital trends and initiatives. These committees and

meetings provide an opportunity to frequently share information, review the environment, and socialize organizational members towards digital transformation initiatives.

There is also a head steering committee which includes the management of each brand. The head steering committee consists of the CEO, executive team, general manager of each brand, operation team, digital leadership team, and strategy team. This head steering committee aims to create strategic alignment for collaborations on any digital transformation initiatives, and to make decisions regarding its contents and strategy.

*“...We have quorums for meetings, which is like a cadence meeting, with general managers to provide updates on what we are doing, and what our competitors are doing. We also do reviews with the digital team and discuss quarter-on-quarter so that there is a basis of awareness among as many people as possible...”*  
(Executive 1)

*“...These meetings provide a good opportunity to learn from the experiences of other brands within the organization. We can also copy from their programs, which enables us to quickly implement and transfer knowledge. The environment of the meetings are very collaborative in the sense that you can ask questions, request for recommendations, and learn from each other...”* (Manager 2)

The process of reviewing and approving new projects during steering committee meetings ensures that there is a general awareness and agreement from across the organization, and understanding of how it is relevant to the business. The following excerpt provides insights into the approval process:

The aforementioned meetings and processes for sensemaking about digital transformation are crucial to achieve a common understanding. There were some misunderstandings at the beginning of the digital transformation journey at FSC where the management did not see the same way on what it meant. To some, it merely meant the development of mobile and web applications, but to others, it meant an entirely different way of doing business. The following excerpt provides some context:

*“Whenever you say digital to business stakeholder always say “oh, it’s app, it’s web”. It’s not. Digital is actually a whole framework of things and the*



*most obvious things which are there are an application or website, but that is not definitely the be-all and end-all... ” (Executive 1)*

#### 4.1.2.2 Collaborations and cross-functional digital teams

Cross-functional teams have been developed with technological competencies to facilitate the integration of “digital” into the operations of FSC. For example, an HR Innovation Team was formed two years ago as a specialized cross-functional team that collaborates with the various brands within FSC to develop human resources-related innovations such as new upgrading the organization’s human resources information systems (HRIS), employee engagement programs, and a revamp of the processes for goal setting and performance evaluations. While many of these systems had already existed, they were built on legacy platforms that were not flexible or agile enough and thus required a team to focus on the specific projects.

With only three full-time members including the head of HR innovation, HR technologist, and a people analytics manager, the team is intentionally designed to be small so that it can flexibly add project team members for stronger collaboration. Projects teams are formed with members from the brand to ensure that there is a strong partnership and that the contexts of the specific business are strongly reflected. The small size of the HR Innovation Team is based on the principle that being small forces it to find ways to partner and collaborate to involve them into the digital transformation process.

*“...The success of our projects is to involve others into the project. So, our principle is...why don't we just have a small team, and then involve them into the process...”*

*We have to establish many meetings: one-on-one meeting, steering committee meetings, and so on. We make sure that they understand the role, what we are doing, and our goals. So, I think this is the first test - to make sure that everyone is aware of the change, which is the difficult part...” (Executive 5)*

In the past, marketing teams within brands at FSC had all the necessary resources and knowledge to conduct their own marketing, and thus, limited the variety of perspectives used in sensemaking and decision-making. With the move towards digital marketing, it is important for teams within brands to collaborate with other teams for specialized resources and knowledge related to digital initiatives. The

collaboration between teams was acknowledged as an important value that must be established among various projects as reflected below:

*“...The flow in which we work together starts with a brand in terms of the product briefing and learning about the product, sales, operations, objectives, and targets that we should achieve. This is important as we work together with the brand team before briefing the marketing agency. After, we brief the agency, we work together with the brand, our team, and the agency to come up with a campaigns and strategies...”* (Executive 7)

*“...We developed an app which created various changes in terms of customer usage, menu, and marketing. The teams had to work together to achieve the goal because marketing can only imagine the fantastic things in the app, but whether it is doable, depends on the digital team. They have to work together to find a solution and to be able to implement faster than our competitors...”* (Manager 5)

While there have been successful collaborations at FSC, there are also several examples of how the lack of collaboration has led to various failed digital transformation with wasted resources, redundancies, inefficiencies. In the past, there was not much reason for restaurants in FSC to collaborate. Each brand had its own physical locations and was tasked with managing its own operations. This same mental model was applied towards development of mobile applications. At first, each brand developed its own branded application for food ordering and delivery. However, this led to inefficiencies as brands were spending money to develop, effectively, the same applications, while competing against each other for customers. Furthermore, the lack of planning meant that brands were unable to share the data between their applications. The following excerpt provides more details:

*“...In the first one to two years, every general manager went about with digital transformation in their own way. They went about the old way of building their own channels with no form of governance and with no digital knowledge. Technologically, they just relied on vendors to tell them what the best solution was. It was very shallow, superficial, and unstructured...”* (Executive 1)

*“...Every app has their own sales budget and sales targets that they must achieve. Yet, we’re still targeting the same customers. We are offering [customers] them promotions, while competing amongst each other, as well as*

*competing with Grab and Food Panda. At the same time, we still have to maintain the promotions, the service, and our app. So, I think it is a redundancy of service and sales... ”*  
(Manager 3)

The approach taken by various business units to independently develop digital platforms and mobile applications without consulting each other was initially useful quick development. However, it resulted in a failure when the organization could not combine and make use of its customer data and needed redevelop a platform that could link the data and functionalities. The failure in terms of lost resources and doubling of efforts taught FSC a lesson about the importance of synergizing. After the initial failure and learning from the errors, FSC developed a central application that aggregated all its brands and helped to organize the processing with a unified delivery service, branding, promotions, and customer database. Furthermore, the application can now support external collaborations and partnerships, as other vendors can sign up to be part of the service.

### **4.1.3 Sensitivity to operations**

4.1.3.1 Ongoing sensemaking of digitalization opportunities to address business constraints

FSC's businesses face various types of constraints in digitalization to remain competitive. Most stores under FSC's management are retail kiosk stores, which need to optimize efficient use of limited retail space. Meanwhile, high employee turnover rates create challenges for developing quick and sustainable training solutions to onboard employees. Furthermore, many of these stores are still using old legacy systems such as the point-of-sale system, which require large investments and time to update or replace. In addition, the COVID-19 pandemic caused major disruptions to FSC's business operations with lockdowns leading to a significant reduction of retail sales. This forced FSC to shift its operations from dine-in to focus on online and delivery services, requiring development of more suitable food options for customers with new menu items, packaging, and business processes.

In response, at the brand level, FSC developed a new management level that was tasked with developing new strategic digital initiatives to improve operations. Managers were focused on identifying areas where digitalization

would improve business processes and supporting and leading employees through the change process. For example, an HR manager was hired to fill in the gap between the strategic directions from the HR director and front-line HR employees.

*“... We are a kiosk business that has five hundred locations throughout Thailand. I knew that being digital was the only way to go. How else can you reach all five hundred locations? So, that was my mission. My first strategy was on how to digitize HR and operations...”* (Executive 6)

The digital transformation strategy for the HR function cascaded down to the development of new digital training programs. In the past, training managers would need to travel to provinces and cities to conduct in-person store training sessions. This was ineffective in terms of time and cost as it required travelling, accommodation, as well participants' time away from stores. At the same time, the training workforce did not have digital skills to leverage digital platforms for training. With the new digital strategy, digital platforms are leveraged to implement asynchronous training programs with online training videos, and anytime chat support from training managers provided through social media channels. Training managers are encouraged to try out different digital platforms and use the ones that are most suitable and familiar with employees. The excerpts below provide insights into the willingness of employees to experiment with new platforms and features:

*“... We are always seeking to learn more processes or on how to improve the processes by revising them with technology...”* (Manager 5)

*“... Employees recognize that [digital] is an opportunity for them to grow, and feel a sense of pride in their ability to learn new things related to digital transformation as they are able to share what they learn with other employees...”* (Employee 2)

#### 4.1.3.2 Reinforcement of a data-driven culture

While data on operations and sales have traditionally been weighted heavily in the decision-making processes at FSC, it was only recently that new information from digital channels such as customer sentiment, behaviour on digital applications, and social media were viewed as important. According to members of the digital team, they invested 1.5 years to build the understanding of executives and to change their perspectives by educating them on the data and providing evidence of how investments in new types of data could benefit the businesses. This was recognized as a key task for many members of the digital transformation team.

A core function of the digital team is to change the way how brands within FSC leverage insights from customer data to improve their digital marketing and communications. Information gathered from customer data is communicated throughout the organization so that there is understanding about what consumers want and need, and the best channels to connect with them. This serves to communicate information and sensitize leadership regarding the importance of customer data. The following quote provides an example:

*“... We keep sharing in the meetings with our senior leaders about what the market and customers are saying. In the past, we had not compiled the customer reports about customers’ comments in the digital world. We only started this year by sharing reports on daily, weekly, and monthly basis. Hopefully, they can then realize that it’s not what they think, and that these are from real customer comments. Recently, we just got appraisal on the good quality of the reports, and that the marketers should look into solving the problems. So, building on that, I think it is a good start for creating a digital mindset and seeing the value of what we are doing...”*

(Manager 3)

*“... We need to show proof to the management on the impact of the data on revenue or customer satisfaction. Many of them need to see the impact step-by-step. I think the very challenging thing for our team is that only a few people know about big data or AI. So, our team tries to go step-by-step. We make them see the little things about the analysis. We need to describe and explain to the leaders every field, in every dimension. We have taken around 1.5 years to help them to get closer to these things...”* (Employee 3)

To ensure that there is a common understanding of how data benefits the organization, there is a process of involving multiple teams, identifying data for the development of campaigns, tracking performance, and communicating results throughout the organization and to management. For example, campaign performance results from the digital marketing team were significantly improved with the collaboration of the finance, branding, and marketing teams, and due to targeting, personalization, and customization enabled by social data. Marketing was able to identify products that best aligned with customer segments, create personalized offerings which resulted in increased sales. Furthermore, the development of data systems allowed for better tracking of campaign performance and reporting of results.

FSC has also built out databases and tools for visualizing data to help improve understanding within the organization on the use of data. On the infrastructure side, the databases can pull together all the relevant data from within the organization including customer behavioral data, purchasing data and combined with customer sentiment or feedback from social media. This is enabled by a development team that customizes the interfaces according to the needs of the organizational users of the data.

*“...I think that data is important and that the visibility of the data is the key to making digital perform today. So, we have set up real-time or near real-time dashboards in the business intelligence tools. We try to make it so that brands have the ability to see real-time data so that they can see the movement and the engagement of their customers, how they engage with us, and how they interact with loyalty program...”* (Executive 4)

Being data-driven includes a process of diligently establishing goals based on metrics and benchmarks, and then tracking progress against them. FSC has developed a system where designing and planning a project must include this process, as described in the below:

*“... When we start a project, if they didn't issue the measurement, then they knew that the project was not a success. So, there's always a measurement for each thing that we do. The project wouldn't even start in the first place if they don't provide a clear measurement and objective. So, I always tell them to start with the question “why” and what's the measurement of satisfying this ‘why’...”* (Executive 6)

*“...If you want to change something, you need to first create benchmarks and track them until you see significant data. For example, click throughs on links. We can also track the conversion rate or how many users participate in sharing. We then compare these two data, and across benchmarks from each brand...”*

(Employee 3)

Connected to a data-driven culture, FSC’s sensitivity to customer behaviour through digital data, provides it with a view of an entire digital layer of customer profile and customer behavior and guides the organization’s decision-making. This is achieved through developing infrastructure to capture customer data at all touchpoints such as digital applications and websites, and widespread acknowledgement and understanding throughout the organization that digital data should guide decisions. Use of customer data expanded FSC’s focus from operational excellence to meeting digital customer preferences such as ease of use and convenience from digital tools. For example, these reports provide the digital marketing unit with data to develop campaigns and proper tracking to measure their impact.

*“...We have to let the brands see the real-time data and so that they can see the movement and engagement of their customers, how they engage with us, and how they interact with the loyalty program.*

*By using predictive modeling and data mining techniques in our data analysis, it enables management to see and understand more about the customer behavior so that they can make improvement to the product, operations, and processes...”* (Employee 3)

While a data-driven culture can help to drive innovative campaigns and ideas, inefficient internal processes can impede and prevent the organization from benefiting. For example, focusing on data can be restricting when there is an overbearing amount of data that is required before decisions can be made, and when those in management do not have enough capacity to fully understand the data. For example, one of FSC’s brands updated its communication platform for sharing promotions and updates with customers by moving from SMS to Line app. However, it found that customers engaged with the brand less on the app because they were more familiar with using SMS. Thus, the brand needed to revert back to using SMS to align with the usage of customers. The original idea to change applications came from the

brand management, which was implemented by the digital (loyalty) team. They team then needed to track performance and show evidence to management why the project had failed. In this case, the digital transformation was initiated by the brand due to their perceptions of what would work to increase revenue and sales, but did not align with actual customer behaviours and preference. The following excerpt provides an example of the challenge experienced:

*“...We need to listen to the brands because they have more power than us, as we are in the loyalty team who have to support our brands. So, if someone in the brand doesn't want to use Line, we need data to prove that SMS is better. We need to prove it to them. We need to prove to them so that they can know which is the best way for communication or make most efficient in terms of the campaign performance...”* (Employee 3)

The availability of data can also sometimes pre-emptively trigger decisions to end potentially positive projects due to a fear of failure or lack of revenues. For example, there have been various instances where digital marketing campaigns and promotions did not achieve their goals. However, some brands decided that they would iterate and improve the variables of the targeting for the campaign which ended up in success. While others were difficult to convince and were halted.

#### 4.1.3.3 Focus on practicality and problem-oriented solutions

There is a strong focus on ensuring that digital transformation initiatives solve practical issues for front-line staff. Thus, executives and management seek to understand the behaviours and needs of staff and have set clear criteria for how they evaluate initiatives.

*“...When we talk about the transformation, I'm not only focusing on the digital things, but we must view opportunities in how they allow us to do things cheaper, better, faster, or more effectively. That is our criteria for evaluating how initiatives fit in the plan...”* (Executive 5)

The company seeks to ensure that digital initiatives are sensitive to the “long use cases”, which are described as the needs of a small set of employees but highly important and could be solved by digital means. The following provides an example:



*“... We used to do roster in old-fashioned way where it used to be pen and paper. Over time, that transformed to HR platforms where, again, it was not so efficient. It was basically a transition of pen and paper to the ERP system. The problem with the ERP system is that the UI/UX is not really great. It solves for the widest use case but not specific needs of individual store holders. Then we went to the digitization of this ERP system to make more consumer friendly. My point is that, through only true understanding, what the pain points are and building solutions to meet the specific needs to exact and to address. That’s when you start to provide solutions with a convenient...”* (Executive 1)

#### **4.1.4 Commitment to resilience**

##### **4.1.4.1 Move fast, fail fast culture**

New product development at FSC is built on the principles of a “move fast, fail fast” culture where new concepts are quickly developed and tested through strategic retail locations and food kiosks to gain feedback on customer preferences. Agile methodology is used to prototype, test, and obtain feedback on digital products so that it can iterate and learn. Through the use of agile methodology and a focus on developing and launching “minimum viable products”, FSC is able to better align its products with customers. Executive 1 described this iterative thinking “as part of its backbone that’s inherent in any kind of fail fast organization.”

FSC also uses steering committee meetings and monthly/quarterly meetings as opportunities for employees to reflect on the successes and failures of initiatives before adapting and rolling out to other brands. As part of the new project proposal process, employees are required search to see if other brands in the company have done anything similar so that they can apply any lessons learned. These processes enable employees to learn from each different brands’ initiatives and avoid potential failures. The following excerpts provide examples of these processes:

*“...I received an assignment to revise an incentive program from another brand, and launch to another brand. This program had failed in its implementation in the first brand. And from that failure, I was able to use it to inform the development of other incentive programs for other brands.*

*Several reasons were identified including that our promotion did not provide a high enough discount compared to competitors, and that there was not enough visibility with customers. After that, we had meetings with the brands and recommended that we should re-run the campaign after fixing the issues and test it again. We try to convince them that using what we know about issues and causes of failure enable us to improve, instead of just altogether changing the campaign and method...*

(Executive 2)

It is recognized that a culture of experimentation and affinity towards action must be supported by a safe environment for failure. The human resources function at FSC sought to change the language and approach used by managers and leadership in providing feedback towards failures. Manager 4 observed that despite there being a variety of opportunities to experiment and learn from failure, “leadership wasn’t always so supportive”. For example, “quarterly meetings were often the setting where one would be *challenged* regarding the results of their work. This often led to less opportunities for learning from failures and initiatives.”

The HR unit aimed to make executive feedback more constructive so that employees could “really learn from it and try to improve it rather than feel down”. It aimed to change the language that was used for giving feedback to be friendlier, thereby creating more trust in the organization. Programs such as the “people manager program” provided trainings such as “empathetic listening” and “how to help employees turn lessons learned into something that they can develop”. These trainings are provided in monthly online knowledge sharing and coaching sessions. There is evidence that the encouragement and acceptance towards experimentation and learning from failure has cascaded down to front-level employees as in the examples below:

*“...I encourage my teams to explore, experiment, and do the things that they cannot yet do. So, that either way they’re going to learn from it. I tell my team that the biggest failure that cannot be forgiven is not doing anything at all. No change is going to happen if you don’t learn. You’re actually hurting the business by making it stand still or letting competitors or other brands pass you by...”*

6)

*“...Our managers support us. That is why we have the confidence to try new things. They constantly provide encouragement to try new things. We know that failure is normal and that we need to do some testing to make sure that it is suitable for our audience.*

*We’re not afraid to try new things at all. If you fail, just learn and try to find a solution together so that we can know what works and what doesn’t. We always share our learnings with each other. For example, I tried to develop new video training clips. At first, from my basic knowledge and understanding, I didn’t get many viewers or followers. But then, I realized ‘oh, I need to learn about these topics’. After I improved, I felt that I now had a lesson that I could bring to teach others...”*

(Employee 2)

The two excerpts above provide a window perspective into the mindset and dynamics of one of the teams within FSC. It can be seen that the executive actively encourages risk-taking and experimentation. While the employee confidently expresses that failure is a normal part of doing things and recognizes the benefits for personal growth and learning.

While a “move fast, fail fast” culture has been a key factor for enabling change at FSC, it can also be an obstacle for achieving larger digital transformation initiatives. Organization-wide changes such as infrastructure systems and artificial intelligence require joint buy-in and combined investments from all brands. However, because many brands acted independently, they had already invested in their own individual initiatives and were less willing to combine with the organization-led projects due to overlap and redundancies. The following comment provides more insights:

*“...The brands act individually because they think it is faster. It may be faster in terms of being able to make the first move, but it is slower in terms of execution, and implementing for the whole. I’m not sure they are aware of this, but I think it is because of this mindset of ‘think fast and execute fast’. Sometimes, I don’t think we have enough information, tools, and resources. I think we need to expand horizontally and gather more support together...”* (Manager 4)

In a competitive industry and atmosphere such as at FSC, fast action is often rewarded. However, as reflected in the above excerpt, this may be detrimental to group action that requires strong collective buy-in and investments.

#### 4.1.4.2 Promotion of collaboration through policies and practices

Collaboration is another core value and key behaviour that has been highlighted for supporting FSC's transformation. This has been communicated from the executive level and outlined through policies and HR practices and supported through various steering committees, intra-brand meetings, and organizational activities that are already happening within FSC.

*"...I think there is an acknowledgment across all of FSC that collaboration is what is going to make us successful. Therefore, if we want to succeed, we need to be ready and willing to pursue opportunities to collaborate with each other. We must be willing to approach other departments to explore how we can work together. This is a part of our organizational culture..."* (Manager 2)

The involvement of employees in the design and decision making of initiatives is a key method identified for achieving buy-in and commitment towards digital transformation. For example, when a new HR project is developed, it is intentionally formed with a small core team including an HR business partner, IT manager, and key employees from the specific brand. This ensures that there is full participation from the brands in terms of decision making and in the implementation of initiatives. It is also ensured that there is full support and alignment with managers including the CIO, CSO, and IT director. The following provides insights into how the team operates:

*"... We move fast. Once you establish that the idea is viable and worth pursuing, we start building out what we call a project charter which identifies what we're going to do and the scope of work. As part of that charter process, we engage with multiple stakeholders because anytime you build something for a large business is an implication across operations, technology, legal, and marketing. All of these things have to be aligned. The ideation phase or rather what we called the inception is where we stop the solicit for stakeholder feedback..."* (Executive 1)

*“...Our principle is to just have a small team, and then involve employees into the process. The most difficult part is not creating things, but to change people’s behaviour. The difficult part is to get them involved.*

*I create a project charter which defines who will handle each part and then one of the components is the change management team. I make sure that every business unit is involved...” (Executive 5)*

To ensure that the perspectives of front-line employees are represented in the design of initiatives, “digital squads” made of FSC employees act as focus groups to review and provide feedback for informing the prioritization of features. Furthermore, there are various platforms that allow front-line employees to submit suggestions for the designs of new menu items. Employees who get their ideas chosen are recognized publicly which provides reinforcement that their feedback and ideas are valuable.

The support for collaboration is a relatively new concept at FSC which was only strengthened after it had experienced several failures. At the beginning of FSC’s digital transformation, it had launched a new organization-wide digital HR system for employees to set their goals and align compensation with its digital transformation objectives. A new policy was launched to the HR leaders in each brand and business unit with all the necessary tools, materials, training, facilities, trainers, and facilitation. However, in the evaluation of the program one year after its implementation, it was found that the new system had failed with less than half of employees recording their objectives and key results (OKR) and their key performance indicators (KPI) in the system. Employees had found that the new program’s goals and expectations were not clearly communicated nor understood, and few perceived benefits in the new system. The following excerpt describes how a lack of support for change management contributed to the failure of the new program:

*“... We focused too much on developing policies but failed with the change management. What I learned from this mistake is that it's not about the system but it's actually about the understanding of those who make change. We cannot simply establish new policies and then assign them to managers to carry out with their teams. New programs need to be sensitive in how they may or may not be solving issues for employees. Even if it solves an issue from the employer’s side, if it is not a win-win*

*situation, or accommodates both sides of the employer and employee perspective, then it may fail. We need to involve them in the policy making in the way of working, making the process and then with that input, they will feel that they own the project...”* (Executive 5)

The above excerpt also shows how the failure to implement the new policies lead to new learnings about being sensitive to the issues of employees and developing win-win situations from both the employer and employee perspectives.

#### 4.1.4.3 Knowledge dissemination about innovation

Managers at FSC perceive one of their responsibilities as to ensure that the latest information and knowledge on innovation are shared within the organization. For example, it was commented by Manager 4 that “the ‘youngblood’ employees in the marketing team are often the ones to come up with new ideas and requests which are then communicated to leadership.” To ensure that information can be shared rapidly through the organization, FSC has developed a norm for informal communications. For example, executives can send out emails asking if there is anything new or disruptive or any new projects or innovations. FSC seeks to create such communication channels to ensure that the information is relayed to the right person in the executive team or the committees to solve their challenges.

Despite the intentions to be receptive to ideas and feedback from junior staff, the ideas were not always able to be acted upon. It was noted that management were sometimes resistant to new ideas because they felt that there were already overloaded with things to do. The following excerpt provides a direct quote:

*“...At first, they will resist, and they always say that ‘I already have enough jobs and tasks to do’. And that ‘I don't want my team to handle more things’...”* (Executive 5)

One of the ways to help bridge this gap in communication was facilitation of communications through the CSO. The managers of the digital team would collect ideas from junior employees and discuss this with the CSO, who would then help to filter out the most useful and relevant ones.

*“...he is the one who helps us align with the GMs and the top management. He also tries to help us prepare by asking information so that we can propose make it align with everyone.”* (Executive 2)

Various mechanisms have also been developed to facilitate sharing of ideas from front-line level employees up to the executive management. Beginning in 2015, after recognizing the disruption from its digital competition, the leadership at FSC initiated organizing workshops with thought leaders on subjects such as startups, entrepreneurship, and design thinking. This involved participation from front-line levels all the way up to the C-suite. Through these mechanisms, the general knowledge about innovation was distributed throughout the organization. Over the years, these workshops have developed into more specialized trainings on topics such as customer experience (CX), user experience (UX) and about various new technologies. Other events include developing contests and workshops where new products and concepts are developed. The food innovation contests and hackathons created outlets for new ideas to “come into the light and be visible to the leadership”.

Steering committee and weekly organizational meetings also provide an opportunity to share knowledge across brands and functions. The following excerpt provides an example:

*“... We have weekly online sharing sessions. We do it with our employees on a weekly basis and we track viewers. We try to make sure that we cover the latest news and technologies. like an update of digital tools that might benefit the organization...”* (Manager 4)

When product ideas were progressed to be implemented in stores or further development, the stories of the success cases led to more willingness from employees to participate, which supported the spread of information. For example, an idea to expand the product offering for an FSC brand to develop food kiosks that are focused on online food pick/delivery service was implemented and installed at public transport stations. The project’s success was featured in communications to employees and motivated other employees to try out as management proved their willingness to follow-through and implement their ideas.

#### 4.1.4.4 Proactiveness and sensitivity to feedback

FSC supports its digital transformation by proactively obtaining continuous employee feedback and developing internal communication channels so that it can quickly adapt its internal training and compensation programs. Continuous feedback on training and compensations are gained through engagement surveys and

used to iterate and improve immediately before the subsequent training session as seen in this quote:

*“...We launched an employee engagement survey to gain information from our employees and found that the employee were not satisfied with the new incentive plan that we launched. And from that point we tried to emphasize more about employee involvement. By sampling some of the employees, we ask them for their in-depth opinions and how the change affects to them. And then we use that data to revise in another incentive plan...”* (Executive 5)

Similarly, FSC has set up various mechanisms to track and gain feedback from employees uses of digital platforms. For example, the customer loyalty membership program is dependent on front-line retail employees to promote FSC’s digital applications to customers. However, employees are only incentivized to take actions that affect their own store’s performance metrics. Customers who are informed about the membership program may not immediately download the application and therefore, the app would not have a way of tracking if the employees had promoted it or not. Thus, the application needed to be developed with advanced metric tracking so that it could identify when the application was being promoted by employees and if it led to a sale.

#### 4.1.4.5 Hiring and capacity development for digital skills

The increased use of digital applications and digital channels for connecting with customers at FSC has changed the expectations of how front-line retail employees operate. For example, issues can arise from customer’s interactions with the mobile application such as order errors and long delivery waiting times, which have not traditionally been within the job scope of front-line retail employees. This requires staff to develop new knowledge and skills to service customers and solve issues that are related to the new digital channels.

In anticipation of future needs for digital skills and knowledge, FSC strategically hired employees with digital skills and experiences within digital companies such as digital agencies or digital product companies. These employees are valued for their familiarity with digital technology, and understanding of how digital can impact business needs. This began with a thorough revision of the leadership competency framework that had been previously used for the past 10 years. A “digital



skill mindset” was identified as one of four main leadership competencies. The revised leadership competencies framework has been integrated into all HR processes including recruitment, learning development, employee engagement, and compensation. Among the leadership competencies, continuous learning about digital is a core behaviour. FSC’s definition of digital mindset is a digital savvy or digital mindset to seek new technologies, to be able to improve your work and also to share with others. This continuous learning is shared in team weekly insights sharing sessions. It was commented that there is significant importance placed on people “because if our people doesn't have digital mindset or digital skillset, then it wouldn't be able to come up with anything that can transform our organization.”

FSC also redeveloped its performance evaluation and compensation systems to align with two main priorities: 1) meeting business or project objectives; and 2) learning and development. Performance evaluations were changed so that 50% was weighted on the achievement of KPIs and the other half emphasized learning and development. In particular, the learning and development portion evaluates if the employee has developed any new skills, improved ability to perform, and/or had any significant learnings from projects. Even if employees fail to meet a business or project objective, but are able to articulate the failure, what they learned from it, and how they are going to change that, then this is perceived as a positive for their evaluation.

#### 4.1.4.6 Continuous exploration of innovation opportunities

FSC promotes an open culture of searching for opportunities to leverage new digital technologies that could bring potential benefits to their organization. Proposals for innovation are sourced from various areas of the organization including a specialized innovation team, engaging with consultants, and a change in the way how normal functional teams ideate new projects. The team was recently formed with special capacities in UX, strategy, and project management. This team is tasked with creating new proposals which follow a process of developing formal proposal or presentation on how the project would contribute to revenue and sales. Then it is discussed with the Chief Strategic Officer (CSO) before proposing to the steering committee. Furthermore, FSC leverages research agencies to propose new project ideas.

Despite the formalized processes for developing projects, there is still a lack of awareness on how to leverage digital technologies for conduct new

product development that is suitable for a digital environment. It was identified that digital development requires a rethinking of processes where digital tools and data can be used to shorten the process or to pre-sample data to make that more efficient and cause sufficient process.

#### **4.1.5 Deferring to expertise**

##### **4.1.5.1 Consultative partnerships with global digital leadership team**

A centralized global digital leadership team has been formed at FSC to ensure that decisions, projects, and communications related to digital transformation can be efficiently facilitated from the executive management to front-line employees, and vice-versa. The team is tasked with implementing FSC's digital strategy in collaboration with the different brands within the organization. This is a cross-functional team of managers from various digital functions such as digital marketing, digital app development, loyalty systems, and led by the CSO.

While the global digital leadership team is tasked with overseeing the digital transformation of FSC, it does not have decision-making powers over the brands, which are still under the authority of the separate management teams of the various brands. The chain of power forces the team to be more inclusive and consultative with stakeholders from the brands to ensure that its initiatives are appropriate to the brands' digital readiness. Digital teams must consult with each individual brand to create a customized digital roadmap and then solutions that are fit to each brand. This is done through a lengthy consultative approach and has been slowly rolled out through the company over the last 3 to 4 years.

Different models of partnership have been developed for collaborating with the digital team. For example, there are three models for working with the digital marketing team: full support, partnership, support. The full support model is for small brands who do not have their own digital marketing teams. The centralized digital marketing team takes the lead in development of communication, media, and budget. The partnership model is suitable for brands that have their own digital marketing team. In this case, the central teams supervise and consult with the

brand, similar to an agency. The support model provides support on a request and needs basis, which is not currently being used by any of the brands.

*“...The digital team often works like an agency. We collaborate with each team and try to partner with them in terms of our specialty and expertise. The best way is to consult and not directly tell them what to do. Instead, we just give them recommendations and options. We provide them with the pros and cons of what they’re going to do and let them decide...”* (Executive 2)

#### 4.1.5.2 Sourcing technical expertise from technology partners

FSC’s technology vendors and partner agencies are deferred for their technical expertise and support for digital transformation. To complement the data that FSC uses to justify the development of new products and campaigns, it will consult with technology partners for second opinions on the interpretation of its data and the strategic planning of the projects or campaigns. Technology partners such as Facebook and Google are able to provide deeper insights on customer segmentation or data association based on the larger amount of data and trends seen within their platforms. These partners will also be able to comment on the customer segmentation that is being targeted, “whether FSC has properly targeted the segment, the appropriate style of communications, and what the particular segment is interested at the moment”.

Partners are also engaged to develop technology knowledge skills for the organization. Monthly meetings are held with experts from technology vendors to learn how to best implement and leverage their tools for the organization. For example, a monthly meeting is held with Microsoft Teams to make sure that the digital team has the latest updates on the features and how to make use of it to improve employee engagement. FSC has also developed a podcast series and invites digital partners as speakers to provide presentations and updates on the latest trends on their specific platform, and any specific trends relevant to the industry and specific brand. These opportunities are also leveraged to communicate about the plans of the digital team.

## **CHAPTER V**

### **DISCUSSION AND RECOMMENDATIONS**

The following section provides a discussion of the processes of organizational mindfulness in how they affect digital transformation, implications and recommendations for managers, theoretical contributions, and ideas for potential further research.

#### **5.1 Anticipating and reacting to change in digital transformation**

This study sought to understand how organizational mindfulness processes could contribute to achieving more successful implementation of digital transformation. From the analysis of the perspectives and experiences of employees at the executive, management, and front-line levels, 16 thematic areas related to the processes of organizational mindfulness were identified. Some thematic areas were identified through artefacts in the actions and processes of FSC. Meanwhile, others emerged through reflections of the issues and challenges experienced by interviewees and suggested how organizational mindfulness could strengthen and improve the organization's ability to adapt to digital transformation. The section below provides a summary of how organizational mindfulness affected FSC's ability to anticipate changes and react to digital transformation.

Emergent organizational change theory depicts change as being continually enacted and re-enacted by organizational actors as they navigate through new systems, changing beliefs, and patterns of interaction. This is affected by the processes of sensemaking and mental models which determine the narratives that explain what is going on and the appropriate actions to be taken. Bridges and Bridges (2016) described that there are three phases to change: 1) letting go of old ways; 2) going through a transition period with realignment and repatterning; 3) making new beginnings with new identity, experiences, and meanings.

In the first phase, there is a recognition of a need for change. Berghaus and Back (2016) described the beginning stages of digital transformation as being ambiguous and chaotic, presenting challenges for organizations to make sense of the information and reacting to them. In this context, the processes of preoccupation with failure serve to support the first step to understand the need for change and to develop possible alternatives to react. Being able to make sense of this process is important to the initiation of a digital transformation strategy, where research and information are needed to cover the specific requirements of digital transformation (Matt et al., 2015).

Within the context of FSC, threats and failures are viewed through the lenses of reduced competitiveness, efficiency, productivity, and the inability to achieve revenue and profit objectives. The information can be obtained through awareness of external changes in the industry, competitors, customers, and supply chain, while internal awareness of risks is related to projects, systems, processes, and employees. Through being alert to threats and failure, and actively making sense of the relevant information, organizations can improve their ability to initiate change and adapt. Within the context of digital transformation, this awareness is directed towards the digital dimensions such as online competitors and changing behaviours of customers in their interactions with digital applications.

Using the lens of preoccupation to failure, it can be seen how FSC's strategic digital transformation was initiated when it became acutely aware of the impact to its revenues and profits from digital competition. The executives and management used high level meetings to scan and be vigilant towards what digital competitors were doing and the changes in the industry. There was a sense of chaos as new understanding emerged that led to the development of new strategies that were then communicated across different levels and units in the organization. The mental models used in making sense of potential failures and threats are critical. Although the enhanced awareness by the management at FSC led to large change initiatives in the organization, the past mental models that were developed through successes of operational excellence gave the operations function more political power in decision making. This resulted in varying challenges, resistance, and blind spots as some SBUs took action on their own without consulting or partnering with the others. Only after a period of time was it recognized that the organization needed to join its efforts, resources, and databases to

achieve propose scale. Thus, sustained attention over time towards events, ambiguous information, and unexplained variations of performance from organizational mindfulness is needed to lead organizations to adjust their mental models and adjust their reactions to organizational changes of digital transformation (R. Kudesia, 2017).

According to Bridges and Bridges (2016), the second phase of transition, systems are in flux and unreliable, priorities get confused and information is miscommunicated. This is termed as the neutral zone where employees experience a sense of ambiguity. In order to transition beyond the neutral zone, employees must move into a new direction with new understandings, attitudes, values, and expression of a new identity. Organizations going through digital transformation are a chaotic environment that requires awareness and sensemaking of complex information. Thus, care must be taken ensure that more divergent perspectives are enabled to avoid simplification of information and analyses. FSC had developed formal and informal structures through steering committees and meetings where employees shared information and learned from each others' digital initiatives. Beyond the sharing of information, these structures facilitated collaborations between business units and the digital teams. Through building of cross-functional teams integrated with members who had digital competencies and skills, FSC ensured the resulting analyses and decisions that were made in the organization were sensitized and included the perspectives related to digital transformation. These activities are similar to what Chanias et al. (2019) described as digital strategy making where structures such as regular cross-functional meetings, multi-level organizational workshops, knowledge exchange, and ongoing communications support an emergent process with feedback loops support digital transformation.

Sensitivity to operations describes how organizations maintain a sense of clarity and understanding of what is happening. The use of technology and data are major factors in how FSC maintains a sense of clear understanding of what is happening in the organization. This is achieved through integrating and strengthening the company's databases, augmenting of customer data, and the use of digital applications. To strengthen the use of data and promote investments in data infrastructure at FSC, a data-driven culture has been fostered which socializes employees to understand how data can be used and its importance to the organizations' success. The data obtained

through digital applications enable FSC to leverage technology to more easily track and notice data outliers that would be more difficult through traditional methods of tracking. The excerpt below describes the data-driven culture that FSC strives to cultivate where decision-making and ideas are led with evidence.

*“...We strive for a data driven decision making culture. We want to make that happen, we want to promote that we are okay to use our instincts and our experiences to make decisions on the business, but we also need to use facts and data to balance those experiences when we make decisions...”* (Executive 5)

Digital transformation involves investments in experimentation and innovation through new product development, digital applications, and collaborations, which also require the allocation of scarce organizational resources. These investments can have a non-insignificant risk of failure that must be managed and adapted to. Even HR projects such as revised compensation plans and training programs may lead to disruptions within in the organization and decrease efficiencies and performance. Furthermore, digital transformation initiatives are emphasized on helping employees leverage technology to be more innovative and affective in their work. This helps to reduce the alignment gaps and improve how employees respond to changes in the environment (Yeow & Lim, 2017). To ensure that the organization remained resilient and could appropriately adapt to changes, FSC built a critical threshold of readiness for digital transformation through a centralized digital leadership team, development of specialized cross-functional teams, innovation events, and expanded communications. These factors directly supported in strengthening its resilience to anticipate and react to threats and failures that emerge from the digital transformation.

The last phase of transition is described as a new beginning with an expression of new understanding, identity, and values. Within FSC’s digital transformation agenda, members with digital skills and technological competencies were deferred to for their expertise and be empowered to take action, rather than from positions of traditional power. FSC established a digital team responsible for leading the digital transformation strategy of the organization and was supported by additional cross-functional project teams that supported the implementation of initiatives within key functional areas. The clear and visible technical expertise of these teams along with formal organizational structure and responsibilities created a centralized resource for

catalyzing the organizational response to digital transformation at FSC. Zimmer (2019) found that the digital units within organizations are helpful for supporting employees to co-produce meaning and direction for an organization's digital transformation. A barrier to digital transformation is the change in employees' mindset and behaviours to think digital-first and to be aware of how digital technology can support the organization's initiatives. It is important to ensure that the organization possesses an adequate workforce with relevant digital skills and competencies, while also empowering those employees to have an impact on decision making. The hiring, training, and compensation of employees at FSC was redeveloped to ensure that the organization's human resources were equipped with a digital mindset and skills that could enable the digital transformation initiatives. Furthermore, FSC engaged technology vendors and partners to build train employees on new technologies and trends. Warner and Wager (2019) described the enhanced awareness of digital technologies and trends through formal and informal networks as a form of organizational capability for digital transformation which they termed as digital sensing.

## **5.2 Implications for managers and recommendations**

In the business environment faced with digital disruption from competitors and customers empowered with more choices through the availability of digital applications and information, it is paramount to ensure that organizations are able to quickly make sense of new information and adapt. Moreover, it requires an iterative and flexible approach for organizations to navigate the implementation of new initiatives of digital transformation and to adapt to those changes. This study proposes that middle managers and change agents play a critical role in affecting organizational mindfulness to facilitate digital transformation. Middle managers facilitate communication and interpretation of information between the front-line and top management, and share information throughout the organisation. They can also provide connections between elements of the organisation particularly for ensuring that the entire systems move together. The following section provides recommendations to managers on certain initiatives and facets that can be developed in their organizations to support organizational mindfulness for digital transformation.



Sensemaking and information processing are of great importance in organizational change such as digital transformation, particularly for uncovering patterns and procedures that can bring more clarity to the beginning stages of the digital transformation process. By supporting the flow of information and knowledge transfer between what is emerging at the front-line and what is being perceived by top management, middle managers can improve the accurate interpretation of external signals which can lead to better informed digital strategies. Organizations should ensure that there are appropriately placed managers within multiple areas of the organization who have the capacity and responsibility to facilitate this sensemaking and communication.

Data is recognized as a foundational requirement to an organization's digital transformation. For data to be effective in informing decisions, there must be sufficient amounts, strong relevance to business objectives, and adequate organizational awareness of its importance and uses. Managers should ensure that information gathered from customer data is communicated throughout the organization so that there is understanding about what consumers want and need, and the best channels to connect with them. This serves to communicate information and sensitize leadership regarding the importance of customer data.

When managers can openly and willingly discuss failures and learn from them, they can bring great benefits to the to their teams and ensure more resilience. Managers who commit to openly sharing enable the organization to improvise and recover from failures of digital initiatives by learning quickly from the situation, developing strategies to overcome the problem, and re-implementing.

Awareness of digital transformation is dependent on a critical threshold of alertness, talent, and informal processes to communicate information related to digital transformation. Managers should strategically hire employees with digital skills, familiarity of digital technologies, and understanding of how they impact business needs. Organizational HR policies and processes can be developed to such as a digital competency framework to guide recruitment, learning development, and hiring. Furthermore, performance evaluation and compensation systems should be aligned to signal to employees on the importance of digital skills and behaviours aligned with digital transformation.

To maintain their competitive advantage, organizations are tasked to look for areas where digital technologies can offer innovative ways to improve efficiency and effectiveness such as for conducting customer research and new product development. Digital transformation requires a rethinking of processes where digital tools and data can be used to shorten the process or to pre-sample data to make that more efficient and cause sufficient process. Managers should develop an open culture of exploring and discussing ways in how new digital technology opportunities can overcome business challenges and limitations. Departments and functions that are not traditionally seen as being technology-savvy should be encouraged and supported through training and building of cross-functional teams with skills in digital technology. In this way, firms are supported by proper digital technology for sensing and collecting data from the changing environment. Also, organizational mindfulness towards digital transformation facilitates the build-up of connections between digital technology providers and users.

Results from several studies suggest that individual mindfulness increases collaboration, reduces avoidance, and increases creativity (Cheung et al., 2020; Kay & Skarlicki, 2020). Furthermore, the collective individual actions of mindful behaviours can be embedded in amplifying processes that can transform an organization (Kudesia, 2017). Mindfulness training can provide an environment that cultivates these beliefs. When these beliefs are put into practice, people gain greater agency in how they respond to situations. The most consistently documented organizational practices that enable collective mindfulness include active socialization (e.g., through vivid stories; Weick & Roberts 1993), continuous training and simulations of rare events (LaPorte & Consolini 1991), and empowerment (i.e., delegating authority; Roberts et al. 1994).

Lastly, the use of IT can enhance mindfulness by heightening attention through cultivating awareness of IT risks, careful analysis of issues, and increased organizational collaboration, as well as the options of actions that can be taken. (Valorinta, 2009). Li et al (2019) proposed that mindful organizations are more likely to leverage digital technology infrastructure which enhances their ability to respond to environmental turbulence in the markets promptly.

### **5.3 Theoretical contributions**

The purpose of this research was to understand how organizational mindfulness can affect the processes of digital transformation. A qualitative case study research and a content analysis methodology was employed to analyze the phenomena of organizational mindfulness during digital transformation. Based on the analysis, three key theoretical contributions are proposed. First, organizational mindfulness processes are important in business organizations going through periods of significant disruption, competition, and change. Achieving digital transformation for businesses is particularly challenging as it involves aspects of obtaining increased efficiency, performance, and/or effectiveness through investments in information technology systems, maintaining operational standards, while leading people through the transitions of organizational change. This study shows that organizational mindfulness can bring increased sensitivity to data and details about important aspects of the customer and employees, particularly in the digital context and through digital applications. In addition, a more mindful approach to organizational responses seeks to leverage appropriate digital expertise, while ensuring that the organization builds its capacity of digital skills and readiness, in parallel. The combined effect may support organizations to transition beyond the neutral zone of digital transformation.

Second, this study contributes to the body of research on organizational mindfulness in business-oriented organizations and within the context of digital transformation. It applies the organizational mindfulness framework towards digital transformation by analyzing how employees made sense of the required changes and how they responded to the challenges that they encountered. This study serves as a methodology to investigate a research topic in management literature and could represent a reference for scholars aiming to deepen future analyses on the topic of organizational mindfulness for digital transformation.

Lastly, through identifying the thematic areas from the reflections of employees within management and front-level positions, this study showed how organizational mindfulness supported the sensemaking and reactions for digital transformation, and how the lack of processes had resulted in reduced effectiveness of various digital transformation initiatives. In doing so, a valuable roadmap has been

provided for leaders and change agents seeking to reshape their organizations for digital transformation.

## 5.4 Further research

Based on the learnings from this research on the impact of organizational mindfulness on the digital transformation process, there are several interesting areas to explore further. An important next step in this area of research is to further examine the relationship of organizational mindfulness to specific outcome variables of digital transformation, such as increased performance and innovation, and outline the antecedents of organizational mindfulness for digital transformation. Establishing these relationships empirically can lead to the development of an instrument or model to measure the level of organizational mindfulness of an organization, placed within the digital transformation process. This would help to make organizational mindfulness more concrete and practical for managers. Using a quantitative research method to study to link the two concepts would also improve the generalizability of the results. Potential research questions could include:

- What is the impact of organizational mindfulness on digital transformation performance?
- How can organizational mindfulness enhance the organizational structure and resources of digital transform firms?

There are also several opportunities for future research including exploring the connection between individual mindfulness and organizational mindfulness for digital transformation, and how mindful leadership can support digital transformation. This second research theme concerns the concept of how individual managers and leaders can better influence digital transformation through mindful means. As was outlined in this research, middle managers and leaders play a significant role in supporting and facilitating the processes of organizational mindfulness. Thus, it is important to identify what type of training and development can improve behaviours aligned with organizational mindfulness.

## **5.5 Limitations**

This study has a few limitations as well. The case study and findings pertain to the food services industry and business-oriented context within Thailand. The experiences and perspectives from the participants in this study were based on their personal reflections may be influenced by differences in Thai culture and cross-cultural management aspects such as power distance, respect for seniority, etc. Also, the accuracy of these reflections may be biased according to the willingness of the participants to touch upon experiences that may be perceived as negative. Thus, there is a limited generalizability of the findings to other contexts. Furthermore, while this study shows that organizational mindfulness processes are important in how organizations make sense of adaptation to changes from digital transformation, there is not yet evidence that it directly correlates with the achievement of digital transformation. It is recommended for other scholars to investigate further into the pre- and post-interventions of organizational mindfulness for digital transformation using methods of analysis that can identify the relational aspects. Lastly, the COVID-19 pandemic created an extraordinary environment that catalyzed significant changes within the business environment, affected how consumers interact with businesses, and altered the operations at FSC. While some of the impact has been identified in this study, there may be unknown factors that impacted the digital transformation initiatives at FSC. The COVID-19 pandemic also affected the ability to conduct in-person interviews due to restrictions on gathering and business closures. This study tried to overcome the limitation by conducting video interviews and recording. However, this method may still be limited in its ability to build rapport and comfort with the interviewee to solicit the most accurate responses.

## **5.6 Conclusion**

In the process of digital transformation, organizations go through comprehensive organization-wide changes affecting how employees interact and changing organizational culture, structure, and business processes. This research sought to better understand how organizational members become aware of changes in digital transformation, make sense of the information, and react based on their new

understanding. Through the case of FSC, the perspectives from leadership, management and front-line employees provided insights into how different levels of an organization perceived the changes related to digital transformation and how they built new mental models and capacities for action based.

Based on the case study and analysis, 16 thematic areas were identified relevant to the processes of organizational mindfulness and digital transformation. By coding and comparing these thematic areas with processes of organizational change, key insights were also presented on how organizational mindfulness affects changes in digital transformation. When organizational members are conscious of digital transformation, this can affect how they transition across the various phases of change from letting go of old ways, going through a transition period with realignment and repatterning, and forming new beginnings with new identity, experiences, and meanings. A stronger understanding of how organizational mindfulness affects digital transformation may help leaders, managers, and change agents to lead the change processes more effectively in their organizations. Thus, the implications and recommendations from this study provide managers with a valuable roadmap to outline actions to be taken for building organizational mindfulness relevant to digital transformation.

## REFERENCES

- Alain, G., & Koen, V. (2020). Reframing organizational change from a processual perspective. In *European Journal of Training and Development: Vol. ahead-of-p* (Issue ahead-of-print). <https://doi.org/10.1108/EJTD-04-2019-0062>
- Alain, G., Paul, M., & Koen, V. (2014). Organizing mindfully for relevant process research on strategic change. *Journal of Business & Industrial Marketing*, 29(7/8), 610–618. <https://doi.org/10.1108/JBIM-09-2013-0206>
- Berghaus, S. (2016). *The Fuzzy Front-End of Digital Transformation: Three Perspectives on the Formulation of Organizational Change Strategies*.
- Bridges, W. (1986). Managing organizational transitions. *Organizational Dynamics*, 15(1). [https://doi.org/10.1016/0090-2616\(86\)90023-9](https://doi.org/10.1016/0090-2616(86)90023-9)
- Bridges, W., & Bridges, S. (2016). *Managing transitions: Making the most of change* (4th ed.). Da Capo Press.
- Bushe, G. R., & Marshak, R. J. (2016). The dialogic mindset: leading emergent change. *Organization Development Journal*, Spring.
- Chernbumroong, S., Sureephong, P., & Janchai, W. (2021). The Conceptual Model of Digital Transformation for Small and Medium Enterprises in Thailand. *2021 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunication Engineering*, 336–339. <https://doi.org/10.1109/ECTIDAMTNCON51128.2021.9425755>
- Cheung, S. Y., Huang, E. G., Chang, S., & Wei, L. (2020). Does being mindful make people more creative at work? The role of creative process engagement and perceived leader humility. *Organizational Behavior and Human Decision Processes*. <https://doi.org/https://doi.org/10.1016/j.obhdp.2019.12.003>
- Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2013). *Embracing Digital Technology*. MIT Sloan Management Review.

- <https://sloanreview.mit.edu/projects/embracing-digital-technology/>
- Gong, C., & Ribiere, V. (2021). Developing a unified definition of digital transformation. *Technovation*, 102, 102217. <https://doi.org/https://doi.org/10.1016/j.technovation.2020.102217>
- Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A Systematic Review of the Literature on Digital Transformation: Insights and Implications for Strategy and Organizational Change. *Journal of Management Studies*, 58(5), 1159–1197. <https://doi.org/https://doi.org/10.1111/joms.12639>
- Horlacher, A. (2016). *Association for Information Systems AIS Electronic Library (AISeL) Co-Creating Value -the Dyadic CDO- CIO Relationship During the Digital Transformation*. [http://aisel.aisnet.org/ecis2016\\_rip](http://aisel.aisnet.org/ecis2016_rip)
- Kay, A. A., & Skarlicki, D. P. (2020). Cultivating a conflict-positive workplace: How mindfulness facilitates constructive conflict management. *Organizational Behavior and Human Decision Processes*. <https://doi.org/10.1016/j.obhdp.2020.02.005>
- Kelemen, P., Born, E., & Ondráček, T. (2020). Theorizing on the connection between organizational and individual mindfulness. *Economic Research-Ekonomska Istraživanja*, 33(1), 1813–1829. <https://doi.org/10.1080/1331677X.2020.1761417>
- Klockner, K. (2017). Developing organisational resilience: Organisational mindfulness and mindful organising. *Australian Journal of Emergency Management*, 32(4), 47–51.
- Kotter, J. P., & Schlesinger, L. A. (1989). *Choosing Strategies for Change BT - Readings in Strategic Management* (D. Asch & C. Bowman (eds.); pp. 294–306). Macmillan Education UK. [https://doi.org/10.1007/978-1-349-20317-8\\_21](https://doi.org/10.1007/978-1-349-20317-8_21)
- Kotter, P. J. (1995). Leading Change - Why Transformation Efforts Fail by JP Kotter. *Harvard Business Review*, 6(1).
- Kudesia, R. S. (2017). Mindfulness As Metacognitive Practice. *Academy of Management Review*, 44(2), 405–423. <https://doi.org/10.5465/amr.2015.0333>



- Langer, E. J., & Moldoveanu, M. (2000). Mindfulness Research and the Future. *Journal of Social Issues*, 56(1), 129–139. <https://doi.org/10.1111/0022-4537.00155>
- Lewin, K. (1947). Frontiers in Group Dynamics: II. Channels of Group Life; Social Planning and Action Research. *Human Relations*, 1(2), 143–153. <https://doi.org/10.1177/001872674700100201>
- Li, H., Wu, Y., Cao, D., & Wang, Y. (2019). Organizational mindfulness towards digital transformation as a prerequisite of information processing capability to achieve market agility. *Journal of Business Research*. <https://doi.org/https://doi.org/10.1016/j.jbusres.2019.10.036>
- Lucas Jr., H. C., Agarwal, R., Clemons, E. K., El Sawy, O. A., & Weber, B. (2013). Impactful Research on Transformational Information Technology: an Opportunity to Inform New Audiences. *MIS Quarterly*, 37(2), 371–382. <https://ejournal.mahidol.ac.th/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=87369991&site=ehost-live>
- Matt, C., Hess, T., & Benlian, A. (2015). Digital Transformation Strategies. *Business & Information Systems Engineering*, 57(5), 339–343. <https://doi.org/http://dx.doi.org/10.1007/s12599-015-0401-5>
- Mendonça, S., Cardoso, G., & Caraça, J. (2012). The strategic strength of weak signal analysis. *Futures*, 44(3), 218–228. <https://doi.org/https://doi.org/10.1016/j.futures.2011.10.004>
- Morakanyane, R., Grace, A., & O'Reilly, P. (2017). *Conceptualizing Digital Transformation in Business Organizations: A Systematic Review of Literature*. <https://doi.org/10.18690/978-961-286-043-1.30>
- Nadkarni, S., & Prügl, R. (2020). Digital transformation: a review, synthesis and opportunities for future research. *Management Review Quarterly*. <https://doi.org/10.1007/s11301-020-00185-7>
- Ray, J. L., Baker, L. T., & Plowman, D. A. (2011). Organizational Mindfulness in Business Schools. *Academy of Management Learning & Education*, 10(2), 188–203. <http://www.jstor.org/stable/41318045>
- Rerup, C., & Levinthal, D. A. (2014). *Situating the Concept of Organizational Mindfulness: The Multiple Dimensions of Organizational Learning BT - Mindful Change in Times of Permanent Reorganization: Organizational,*

- Institutional and Sustainability Perspectives* (G. Becke (ed.); pp. 33–48). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-38694-7\\_3](https://doi.org/10.1007/978-3-642-38694-7_3)
- Riasanow, T., Soto Setzke, D., Hoberg, P., & Krcmar, H. (2017). Clarifying the Notion of Digital Transformation in IS Literature: A Comparison of Organizational Change Philosophies. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3072318>
- Schein, Edgar H. (1996). Kurt Lewin's change theory in the field and in the classroom: Notes toward a model of managed learning. *Systems Practice*, 9(1), 27–47. <https://doi.org/10.1007/BF02173417>
- Schein, Edward H. (2004). *Organizational Culture and Leadership*. Jossey-Bass.
- Su, H.-C. (2017). The impact of mindful organizing on operational performance: An explorative study. *Operations Management Research*, 10(3), 148–157. <https://doi.org/10.1007/s12063-017-0128-1>
- Sutcliffe, K. M., & Vogus, T. J. (2014). Organizing for Mindfulness. In *The Wiley Blackwell Handbook of Mindfulness* (Vols. 1–2, pp. 407–423). Wiley Blackwell. <https://doi.org/10.1002/9781118294895.ch22>
- Sutcliffe, K. M., Vogus, T. J., & Dane, E. (2016). Mindfulness in Organizations: A Cross-Level Review. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 55–81. <https://doi.org/10.1146/annurev-orgpsych-041015-062531>
- Tsoukas, H., & Chia, R. (2002). On Organizational Becoming: Rethinking Organizational Change. *Organization Science*, 13(5), 567–582. <https://doi.org/10.1287/orsc.13.5.567.7810>
- Valorinta, M. (2009). Information technology and mindfulness in organizations. *Industrial and Corporate Change*, 18(5), 963–997. <https://doi.org/10.1093/icc/dtp027>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901. <https://doi.org/https://doi.org/10.1016/j.jbusres.2019.09.022>
- Vogus, T. J., & Sutcliffe, K. M. (2012). Organizational Mindfulness and Mindful Organizing: A Reconciliation and Path Forward. *Academy of Management*

*Learning & Education*, 11(4), 722–735. <https://doi.org/10.5465/amle.2011.0002c>

Will, M. G., & Pies, I. (2018). Sensemaking and sensegiving. *Journal of Accounting & Organizational Change*, 14(3), 291–313. <https://doi.org/10.1108/JAOC-11-2016-0075>

Yeow, Y. K. A., & Lim, W.-K. (2017). Resisting Technology-Enabled Change Within Healthcare Organization. *Academy of Management Proceedings*, 2017(1). <https://doi.org/10.5465/ambpp.2017.15065abstract>





## Appendix A: Interview Questions

<b>Organizational mindfulness related to organizational change</b>	<b>Proposed questions</b>
<p>Preoccupation with constraints and preconditions</p> <p>Actively searching for opportunities of digital transformation</p>	<p>What processes are used to be more aware of changes brought on by digital transformation?</p> <p>How does the organization sense the challenges and risks of DT?</p>
<p>Reluctance to premature commitment</p> <p>Providing alternatives for decision making</p>	<p>How does the organization progress through making sense of the information received?</p>
<p>Sensitivity to interdependencies and continuous prioritization</p> <p>Enabling rich communications between business and digital technology</p>	<p>How does the organization ensure collective sensemaking that involves multiple reference points and perspectives in making sense of the situation?</p>
<p>Awareness of topics such as advances in digital technologies and changes in consumer behavior. To achieve this, analytics and artificial intelligence to sense new customer-centric trends.</p>	<p>How does the organization make use of networks to identify technological trends and new technologies? (e.g. big data)</p> <p>How do these processes enhance the organization's ability to respond to environmental turbulence?</p>
<p>Commitment to avoid disruptions</p> <p>Anticipating and evaluation the business transformation</p> <p>Seeking new digital technology or exploit current ones constantly in order to optimize the utilization of digital technology</p>	<p>How does the organization identify and implement processes and technologies that align with DT strategy and initiatives?</p> <p>How does the organization pro-actively anticipate and evaluate DT opportunities?</p>
<p>Seeking out appropriate mix of expertise</p> <p>Deferring to IT experts when making decisions</p>	<p>How does the organization ensure that it has the appropriate expertise and resources engaged in decision making regarding DT initiatives?</p>

Source: (Vogus, 2012)