

**DIGITAL COMPETENCIES FOR RETAIL WORKFORCE TO  
MASTER THE FUTURE OF RETAILING IN THAILAND**



**METIYA RATIMART**

**A THEMATIC PAPER SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF MASTER OF MANAGEMENT  
COLLEGE OF MANAGEMENT  
MAHIDOL UNIVERSITY  
2020**

**COPYRIGHT OF MAHIDOL UNIVERSITY**

Thematic paper  
entitled  
**DIGITAL COMPETENCIES FOR RETAIL WORKFORCE TO  
MASTER THE FUTURE OF RETAILING IN THAILAND**

was submitted to the College of Management, Mahidol University  
for the degree of Master of Management

on  
July 12, 2020



.....  
Miss Metiya Ratimart  
Candidate

.....  
Assoc. Prof. Vichita Ractham,  
Ph.D.  
Advisor

.....  
Assoc. Prof. Sooksan Kantabutra,  
Ph.D.  
Chairperson

.....  
Asst. Prof. Duangporn Arbhasil,  
Ph.D.  
Dean  
College of Management  
Mahidol University

.....  
Ronald Surachai Thesenvitz,  
Ph.D.  
Committee member

## ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincere gratitude to my research advisor Ph.D. Associate Professor Vichita Ractham for providing me an invaluable guidance throughout my research writing. Her advice, patience, and caring helped and motivated me in all the time of this research work and preparation. I am grateful to have studied under her guidance and supervision.

I am extending my heartfelt thanks to my colleagues at my company and my friends at Mahidol University for their love and understanding. My completion of this research could not have been accomplished without the support of everyone. Your encouragement and friendships are much appreciated.

Lastly, I am extremely grateful to my family for their love and support and all of my interviewees for their valuable time to help me complete this research paper with quality findings.

Metiya Ratimart

**DIGITAL COMPETENCIES FOR RETAIL WORKFORCE TO MASTER THE FUTURE OF RETAILING IN THAILAND**

METIYA RATIMART 6149105

M.M. (GENERAL MANAGEMENT)

THESIS ADVISORY COMMITTEE: ASSOC. PROF. VICHITA RACTHAM, Ph.D.,  
ASSOC. PROF. SOOKSAN KANTABUTRA, Ph.D., RONALD SURACHAI  
THESENVITZ, Ph.D.

**ABSTRACT**

The shifts in business models due to technological innovation would have a significant effect on the job environment over the coming years. The question is how organizations and individuals can respond to those impacts. Redefine skills that accustomed to the changing business scenario could be a prefer solution that allow businesses to keep up with today's fast-paced digital economy. The research aims to explore the effects of digitalization on the retail industry and focuses on the competencies needed by the retail workforce. In-depth and semi-structured interviews were conducted among retail managers in Thailand to take an in-depth look at their perspectives on the two objectives. First, the retail professionals' perception towards the future of retailing in Thailand. Secondly, the relevant digital competencies for retail professionals. Each competency was discussed and ranked based on how critical it is for retail professionals to adopt. The digital competencies framework was found relevant to current retail work activities and the future strategies. Besides technical skills, high adaptability, creativity, communication, sense-making, self-management, and project management are the top competencies needed in retail professionals. The results are useful for managers responsible for developing qualified personnel. The organizations must take an active role in supporting their current workforces through re-training as well as create the enabling environment to assist these efforts. Individuals need to put on greater personal responsibility for learning and continually develop skills for development and achievement.

**KEY WORDS:** Digital competency/ retail workforce/ the future of retail/ digital skills

41 pages

## CONTENTS

	<b>Page</b>
<b>ACKNOWLEDGEMENTS</b>	<b>ii</b>
<b>ABSTRACT</b>	<b>iii</b>
<b>LIST OF TABLES</b>	<b>vi</b>
<b>CHAPTER I INTRODUCTION</b>	<b>1</b>
1.1 Background	1
1.2 Objectives and Research Questions	2
1.3 Scope of this research	2
<b>CHAPTER II LITERATURE REVIEW</b>	<b>4</b>
2.1 Drivers of Change	4
2.2 Trends Shaping the Future of Retailing	7
2.3 The Impact of Digital Transformation on Retail Workforce	9
2.4 Competency: Skill, Knowledge, and Ability	10
2.4.1 Digital Competency	10
2.4.1.1 Information Technology Competency Model	11
2.4.1.2 Skills Framework for The Information Age (SFIA)	12
2.4.1.3 Twenty-First Century Digital Skills Framework	13
2.5 Digital Skills Framework for Retail	14
<b>CHAPTER III RESEARCH METHODOLOGY</b>	<b>16</b>
3.1 Design of the Research	16
3.2 Interviewees	17
3.3 Data Collection Procedure	17
<b>CHAPTER IV DATA ANALYSIS</b>	<b>20</b>
4.1 The implication of the future of retailing from retail professionals’ perspectives.	20
4.1.1 Realized changes led by technology	20
4.1.2 Company gears toward online and omnichannel strategy	21
4.1.3 Enablers and Challenges	22

**CONTENTS (cont.)**

	<b>Page</b>
4.2 Relevant Digital Competencies for Retail Professionals	23
4.2.1 Functional Competencies	27
4.2.2 Generic Management Competencies	27
4.2.3 Social Competencies	28
4.2.4 Cognitive Competencies	29
4.2.5 Personal Characteristics Competencies	29
<b>CHAPTER V CONCLUSION / RECOMMENDATION</b>	<b>31</b>
5.1 Conclusion	31
5.2 Managerial Implication	32
5.3 Limitation and Future Research	33
<b>REFERENCES</b>	<b>34</b>

## LIST OF TABLES

<b>Table</b>		<b>Page</b>
2.1	A combined list of digital workforce competencies based on the future of retailing trends and existing literature review frameworks	15
4.1	Digital competencies between literature review and interview research	25
4.2	Final Digital Competencies categorized into five competencies classes	26





# CHAPTER I

## INTRODUCTION

### 1.1 Background

In the Fourth Industrial Revolution, everything is about digitalization and technological developments. The impact of the Internet of Things on culture, economy, education, and employment is undeniably significant. The rapid growth of technologies lay the foundation for a revolution and is a key element to reshape society into the fast and ever-growing digital-driven economy. To survive in this fast-paced and highly competitive environment is not only requiring businesses to keep up with changes but to be ahead of the game. While there is a great promise, production, consumer consumption patterns, and employment created by the revolution also give rise to major challenges.

Most occupations are undergoing a fundamental transformation as entire industries need to adjust. Internet-connected technologies like smart homes, AI (Artificial Intelligence), machine learning, automation, and big data have driven a lot of changes to work competency and capacity of a human. In the past few years, the existence of many occupations has been replaced by machines while others grow speedily. Some of the skills became useless whereas new skills become essentials. Some of the current occupations demand that skill sets be modified to do them. It is vital for any businesses, education sectors, governments, and individuals in the society to embrace digital transformation, understand its meaning, stay alert, and proactively adapt to the changes as quickly as possible.

As the Digital Era continues to progress, technology will continue to drive significant disruption as well as provide the opportunity to the businesses and the workforce. For retail companies to stay competitive, the main strategy for retailers is to improve their productivity potential and to make their presence known in the global arena with a more diverse market driven by skilled workers (Iswaran, 2016). The paper attempts to explore what are the digital skills necessary for the retail workforce



to drive a successful business in the fourth industrial revolution phase. The paper thoroughly represents the existing studies that have been conducted in the context of the digitalization phenomenon, the future of retailing, and digital competencies frameworks. The qualitative research methodology has been used in this research. The open-ended interviews were conducted to collect data from retail working professionals to come up with the main findings and conclusion. Finally, the paper identifies managerial implications that arise due to the shift to future retail practices and suggestions for future research.

## **1.2 Research Objective and Research Question**

Over the coming years, the changes to business models led by technological disruption will significantly affect the employment landscape. How businesses and individuals will react to these impacts is the question. Some recent studies have concentrated on improving education, but it's practically difficult to wait for the workforce of the next generation to get well trained to keep up with emerging technological changes. To keep up with today's fast-paced digital economy and shifting consumer behavior, redefine skills that accustomed to the changing business scenario can be a solution. Planning for skills development of today's workforce is critical to the retail industry since individual skills are the sources of new ideas, new products, new service developments, and drivers to businesses' success (Hotho and Champion, 2011; Preston, et al., 2009).

The research aims to explore the effects of digitalization that has on the retail industry, the evolution of the retail landscape, and focuses on exploring the retail industry's demand for digital skills in working professionals. Recognizing the need to remain competitive, a revisit of the human workforce competency is needed to ensure today's retail workforce has what stated as the essentials skills to support business growth and to be succeeded in their careers. By investigating the questions, this research creates a guideline for which skills are considered to be necessary for the current retail workforce.

The resulting research question is built on the two objectives to find out what the key digital competencies are needed by the retail workforce in Thailand. The

first goal is to find out what expectations retail professionals have of the future of retailing. The second goal is to synthesize appropriate digital competencies for retail professionals.

### **1.3 Scope of this research**

This research aims to explore digital competencies among retail professionals with non-ICT job roles in Thailand. Therefore, the coverage of this research is focused only on the company within the retail industry in Thailand, particularly, but not limited to, those retail businesses that are coming from the offline background. According to Philip Kotler, retailing is defined as “all the activities for selling goods or services directly to ultimate buyers for their personal, non-commercial use (Kotler and Armstrong, 2012, pp. 374)” All the data presented in the findings of the research are based on the qualitative interview with the interviewees who are currently employed under such retail businesses in Thailand.

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter divided into three parts. The first part explains the drivers of change that led businesses to adopt technology, go through digital transformation, and adjust their human management strategy. Second explores the definition of the future of retailing and its impact on the retail workforce. Finally, the chapter defines the definition of competency as well as presents various digital competencies from three existing frameworks founded essentially for any businesses in a digital environment.

#### **2.1 Drivers of Change**

By understanding what drives changes to overall industries will make it easier to understand why there is a need to change in workforce skills. The World Economic Forum stated that top technological developments include the rise of mobile internet and cloud technologies are creating more productive and opportunities to improve efficiency for the workplace (Weforum, 2016). Also, big data and computing capacity, the Internet of Things (IoT), the sharing economy with peer-to-peer networks, robotics and artificial intelligence (AI) are creating knowledge-worker tasks to be automated (Weforum, 2016).

The changing job conditions include demographic and socio-economic factors in which work becomes more flexible, the rapid urbanization, the increase of young millennials and the rise of the middle-class in emerging markets, Asia made up of 59% of the global consumption of middle-class, the increase in geopolitical uncertainty where global trade and mobility of talent have an impact on consumer ethics and privacy (PwC, 2011).

Similarly, to what Jacob Morgan (2014) explained in his book that there are five trends shaping the future of work; globalization, technology, changing demographic, new behaviors, and mobility. Globalization allows the universe to

become one enormous place where physical positions all tend to matter even less (Kopp, 2020). Big Data, Artificial Intelligence, Smart Systems, the Internet of Things, and Cloud Computing are the technology advancement that make a clearer possibility in allowing workers to work in different ways. Millennials become digital natives that expect and work in ways that suit their lifestyles, back-dated facilities, or operations in the workplace will not make Millennials enjoy (PwC, 2011). Also, millennials are predicted to be occupied 50 percent of the workforce by 2020 and 75 percent by 2025 (PwC, 2011). The organization will need to manage the new behavior of people. People are more comfortable speaking out and share their thoughts with the public (Morgan, 2014). They will post reviews on Twitter, upload pictures on Instagram, have a professional resume on LinkedIn, and make comment on Facebook. It is the changes in the way people interact, connect, collaborate, find knowledge, and create content that impacts every element of business behavior to reinvent and reimagine the modern world of work. Lastly, mobility is allowing people to link with each other and trade information at any time on any device. Indicating that people can access to data everywhere even work, it is carried with people (Morgan, 2014).

Digitalization is established as one of the main factors in changing how business and society operate (Parviainen et al., 2017). Digitalization as in Bloomberg (2018) mentioned, unlike “digitization” the word “digitalization” is hard to give one definite meaning, it does not have a single clear definition (Bloomberg, 2018). However, many experts are trying to give it a definition, still. One of them being Brennen & Kreiss, as they stated that digitalization is the way people interactions that moved away from analog mediums to the digital one, it is the way society and many things in life are reconstructed around digital communication and digital infrastructures (Brennen & Kreiss, 2014). While Gartner defines digitalization focusing on the change of business model rather than social interactions as he pinned the word digitalization as the use of digital technologies to provide new opportunities and change a business model for new revenue (Gartner\_Inc). Brooking Institute, however, stated that digitalization is more about company processes than social connections or business models (Muro, 2018). Whatever the definitions are given to the word "digitalization", it is clear that all of them are interrelated by the fact that digital technologies have a substantial impact on how the world is operating now. The

digitalization process can be summarized as the implementation of digital technologies to leverage the business processes, creating values and opportunities for an organization.

The environmental and mentality shifts force the organization to adapt and build their business strategy with the future of work and the future employee in mind. For many sectors and nations, the most requested unique professions or specialties did not exist ten or even five years ago, and the speed of change is expected to be higher. Through projecting the population of teenagers, 65 percent of primary school children today will eventually work in entirely different forms of employment that do not yet exist (Scott & Fisch, 2018). In reality, many of today's occupations, such as a drone pilot, cloud storage specialist, software developer, YouTuber, and social media consultant, did not exist ten years ago. Artificial Intelligence and robots, for instance, are predicted to take some human jobs and expected to do from simple tasks to complicated tasks such as shopping and deliver items to factory work and perform surgery (McClelland, 2020). Some of the occupations that we know today will be considered high risk for future automation and by 2030 intelligent robots could replace as much as 30 percent of the existing human work in the world (Manyika, et al., 2017). New technologies are constantly reshaping how, where and whom ones work with. New roles are emerging all the time and people in the workforce need the skills to do tasks robots or AI possibly won't do easily. The connectivity and innovation of the new global digital era bring many opportunities and empowerment for people, organizations, governments, and countries. However, for individuals too, change can be sudden and disorientating. 3 In 5 companies suffer from a lack of digital resources and more than half claim that this resource deficit is on the rise (Bessen, 2017). Hence, it is very important to ensure that people have the right skills and social security to thrive in a new world of work.

## **2.2 Trends Shaping the Future of Retailing**

Concerning the fast-changing technology in the Fourth Industrial Revolution, there is a significant impact from technology in the retail industry (Grewal, Roggeveen, & Nordfält, 2017; Reinartz, Wiegand, & Imschloss, 2019). Tracing back



about a few years ago, Artificial Intelligence may not be recognized much among people, however, now it is not new for them anymore since it has become part of their everyday lives (Rigby, 2011). The changes are allowed to happen by technology advancement with the ongoing evolvement. For retail businesses, digital technologies give the huge potential for the industry to achieve the greatest success if they know the ways to leverage them. True growth of e-commerce can be seen from the past decades in which it has now reached \$3.5 billion in revenue, accounting for 14 percent of the total share of global retail sales (Meyer, 2020). In 2019 in the US alone, customers spent \$601.75 billion online, a 14.9 percent increase from 2018 hitting a 16 percent growth rate (Young, Risley, & Ali, 2020). While in Southeast Asia, the number passed \$50 billion in 2018, more than a 20 percent increase from 2017 (Kemp & Moey, 2019). One of the very first e-retailers, Amazon generated 8.49 Billion Dollars in revenue in 2005 while it's total earning of 2019 was at 280.5 Billion Dollars that is the return on investment over an average of five years, for example at 17 percent from an average of 6.5 percent over conventional discounts and department stores (Rigby, 2011).

In Thailand context with its second-largest economy in Southeast Asia, this makes it becomes an ideal growth environment for the retail businesses with a greater Internet user base (Rastogi, 2018). Thai e-commerce market at recent has the values of US\$3.5 billion in which this is expected to have 13.2 percent of revenue growth per year and to reach up to US\$5.8 billion by the year 2022 (Rastogi, 2018). In reference to JPMorgan, e-commerce, however, presents only a tiny proportion of 0.8 percent of the total retail spending in Thailand. Still, there is a large amount of potential untapped to explore by the retailers for market share wins (J.P. Morgan, 2019).

At now and then, there is the retail disruption happens, however, this does not eradicate things that come before it, but to redefine the expectation from consumers and reshaping the landscape normally beyond acknowledgment. Retailers rely on the initial formats no matter to adapt or die out as the volume is pulled by the new ones from their stores in which results in the less profitable of the remaining volume. At this time around, it is similar to the past retail disruptions. Digital retailing has made the quick move into something so different and it would be ever hard to term e-commerce, in short, not to mention the way to measure it (Reinartz, Wiegand, &

Imschloss, 2019; Rigby 2011). Whether it is an e-commerce sale from the customers that drop by the physical shop, find that the product is out of stock, store staffs then ask another store location to fulfill the order and ship the products to their customers' home. What if the customers use their smartphone to find cheaper prices from another place while shopping in one store then, make the electronically order to pick up in-store? It is estimated from the experts that there are about 50% of the information floating digitally that influences on store sales with the rapidly increasing number (Rigby, 2011).

In Thailand, the competitions are at peak in which seems going to be tougher. Digitalization strategy has just been geared by giant modern retailers like Central Group for Thailand 4.0 era where it would take the retail business up on another level with the potential of omnichannel (Rungfapaisarn, 2017). Omnichannel in its name reflects the actual that the retailers can interact through countless channels with customers no matter it is via mobile devices, televisions, social media, websites, call centers, kiosks, physical stores, emails, catalogs, etc. One of the gigantic market players from China, Alibaba has already shifted to the post-e-commerce era to adopt the "New Retail Model" or in the other words "Omnichannel". This New Retail has the concept that goes beyond e-commerce as explained by the founder of Alibaba, Jack Ma, "Pure e-commerce would be dropped into the traditional then, being replaced by the New Retail concept that is the integration between online and offline logistics and data across a sole value chain" (Jongen & Osborn, 2017, p. 272).

Less negotiable shopping behaviors of consumers make the approach of omnichannel retailing necessary as it is undeniably shifting towards that way. While improvements over the globe have expanded the buying intensity of individuals, retailers will find that the demand rising accompanies progressively by complex desires. Buyer inclinations are moving quickly and the rush of globalization has additionally bought a bunch of shopping choices for purchasers. In addition, the digitized revolution has introduced new shopping approaches – whether through sites or portable apps or even through e-commerce markets – so that retailers can no longer rely solely on their physical shops (Cook, 2014; IMDA, 2017). It is reported in Harvard Business Review that 46,000 surveyed with shoppers showed that 73% of survey samples said they shopped from more than a single channel where only 7% just



only shopped online, and 20% shopped only in-store (Rigby, 2011). To discover new roads for growth and development, organizations must have the option to adjust to the progressions with innovation (IMDA, 2017). Now, it is not something retailers can throw under a rock to avoid it anymore and it is the time once again where retailers will have to face challenges new disruption brings.

### **2.3 The Impact of Digital Transformation on Retail Workforce**

Retail is changing since more sales are moving online. The effects of moving the sector towards being digitalized have reflected from new research from LinkedIn, a business and employment website and service. In this analysis, the retail business firms that sell general merchandise, specialty goods with at least 100 staff have been examined and the findings were based on the aggregate data of members, functions are classes from job roles as inferred via job titles (Bloomberg News, 2018). The role of ICT professionals such as IT and Engineering has increased from 7 percent to 9 percent in the past four years according to the findings of the analysis (Abdullah, 2018). Simultaneously, the number of associate retail sales has fallen from around 200,000 in 2013 to 116,000 in 2017, represented 29 percent of talent in retail in which is lower from 33 percent in 2013 (Abdullah, 2018). However, sales remain the very typical role of retail in a large percentage. For retail employees, the talent for engineering and IT are the third-most common type followed by the line of support (8%) and marketing (6%) (Abdullah, 2018). The skills on digital and engineering demand for retail are growing so fast, for instance, the ‘software developer’ position has become one of the most common job titles recent in the retail industry as moved from No.8 to No.3 in four years’ period (Adegeest, 2016). The retail developer's fastest-growing skills, in general, have included with experiences on user and web. “This has reflected the shifting from the shopping at brick-and-mortar storefronts to online given the crucial progress in the roles of technology yet when the retail becomes another industry to contest on IT support and software developers,” as shown in the findings of LinkedIn (Abdullah, 2018).

Retail professionals with non-ICT job roles such as sale associates, marketing associates, retail operations director or merchandising director have been

compelled by today's environment to relook their career pathway towards the achievement (IMDA, 2017). The definition of success can be extensively included in customers attracting and retention through the consistent experiences provided for customers in which also encompassed the employee aspect. Planning is made by many retailers for them to start on the implementation of processes digitization at the level of store employees to support for the higher efficiency (Jongen & Osborn, 2017; Grewal, Roggeveen, & Nordfält, 2017; Reinartz, Wiegand, & Imschloss, 2019).

## **2.4 Competency: Skill, Knowledge, and Ability**

Competency is a combination of knowledge, ability, and skills that affects a large part of one's work, and relates with job performance, and can be strengthened through training and development (Parry, 1996). Truth, facts, and concepts shape knowledge through formal training and/or practice (Baczynska, 2015). Skills are proven expertise in mental operations or physical processes that are mostly learned through specialized training and ability is the capacity for doing a particular profession or activity (University of Nebraska-Lincoln). Le Deist and Winterton (2005) argued that this commonly altered categorization of competencies into knowledge, skills, and abilities is more practical and comprehensive in nature responding to the need of developing professional competence in a more structured and rational way.

### **2.4.1 Digital Competency**

Digital competency is the word that widely-used in today's modern organizations, comprises a wide variety of skills and knowledge ranging from basic digital literacy skills to the general workforce and ICT professionals' advanced digital skills (Motyl, Baronio, Uberti, Speranza, & Filippi, 2017). It is a key concept and measurement of what kind of skills and understanding people must have to master their jobs in today's world. The combination of all; abilities, knowledge, and skills that contribute to enhanced employee performance and eventually lead to organizational success. Digital Competency builds upon the traditional competency but reflects more on the ability to use suitable technologies to effectively accomplish a task as a result

of the changes in the company's perspective brought by the advancement in technology (Laar, Deursen, Dijk, & Haan, 2017).

Digital skills are required for all retail job positions, varying with the skill levels. For non-ICT job roles, there are two types of users labeled as Tech-Lite users and Tech-Heavy Users (IMDA, 2017). Tech-Lite users need broad digital literacy and understanding, while Tech-Heavy users need a higher level of digital skills. ICT professionals in the retail sector, such as applications developer or data analysts, require specialist ICT skills.

The research explores three digital competency frameworks that focus on the competencies for the non-ICT job roles in the retail industry. Information Technology Competency Model, Skills Framework for The Information Age, and The Digital Skill incoming 21<sup>st</sup> Century were used as a based guideline to examine what are the key competencies essential for the workforce of the retail industries.

#### 2.4.1.1 Information Technology Competency Model

Information Technology Competency Model was published by an Employment and Training Administration: ETA (2012) purposed for career development where the model had categorized into three major competency layers: foundations, specific, and upper-tier or occupation. The foundation's competency has combined with the academic, personal effectiveness, and workplace. Specific categories, however, consist of an industry that needs various technical and industry that need particular technical. Upper-tier competencies were the knowledge, abilities, and skills related to particular IT professionals.

Personal Effectiveness is the life skills that also include soft skills and the work capabilities of teamwork. This includes an interpersonal skill which is the positive outlook and compatibility with others. Plus, the effectiveness of teamwork contains additional features such as being creative, professional, being responsible, and capable to cope with changes, diligent, and trustworthy. Academic derived from the outcomes of curriculum and education. Including in competencies are the knowledge of English medium with the reading and writing abilities or the skills in science and mathematics, and basic skills on IT. Also mentioned is the critical thinking and communication skills. Workplace set of skills are required from the professional workers for them to begin to work with real-world colleagues. Six competencies are

consisting of the group: planning and organizing, innovative thinking, teamwork, interfacing with technology tools, problem-solving, and business understanding.

It is proposed from the model that working professionals shall integrate technology and tools with business knowledge for the team to work toward problems solving. The technical competencies have come to relate in Industry-Wide for the workforce to adopt them in daily working routine problem-solving. These competencies can be explained as essential for IT-related work in the digital age. Combining as the components are database, networks, general IT, digital presentations, compliance, software development, risk management, and customer support. The focuses of a particular industry and specific skills need deeper competencies in detail to deal with a specific industry.

#### 2.4.1.2 Skills Framework for The Information Age (SFIA)

An IT framework has been proposed by SFIA Foundation (2018) so-called as 'Skills Framework for The Information Age' (SFIA7). SFIA was constructed with many IT-related working groups and people cooperation to present the essential competency and global skills required in the digital world. Consisting of this framework are knowledge, professional skills, and behavioral skills. Including as six main skill groups are the architecture and strategy, transformation and change, implementation and development, delivery operation, quality and skills, and relationships and engagement.

Including in the group of strategy and architecture are information, business, and technical strategies, for instance, a consultant's skill and ability to suggest the team on the idea about business risk and information management. Transformation and change pay attention to the management and implementation of business change. The skills on project, portfolio, and change management are crucial together with the placing of requirements and business analysis. Technical skills implementation and development, for instance, system development taking the good design concept where the user's requirements are considered as the main implementation. As part of an installation for system and integration, to understand the existing platform and the decent implementation are the dominant abilities. Delivery and operation are related to the design of service transition and service operations. The concerns of these competencies were on the approach of product



delivery and the way to shape the production and how to obtain achieved targets. There are standard delivery processes and troubleshooting skills which are an important part of this group. Quality and skills have concerned about the personal learning skills that would contribute toward the significant goal. Managing on self-development, learning qualities assessment, designing, and media development for support and learning with logical presentations for the team or customers are wholly considered as part of this group. It is suggested for this model that the working professionals need to identify also the proper learning resources for development. Relationship and engagement are related to selling skill and stakeholder management where these also cover on the digital marketing techniques, customer management, handling approaches, and customer support.

#### 2.4.1.3 Twenty-First Century Digital Skills

Twenty-First Century Digital skills for this 21st century have covered a wide variety of knowledge-related skills plus the more digital ICT (Information and Communication Technologies) related skill (Laar, Deursen, Dijk, & Haan, 2017). Only a few methods have integrated digital components into knowledge-related skills for example, as mentioned in Ng (2012) there is the difference among the digital literacy dimension of technical, cognitive, and social-emotion. Comparably, this was argued by Eshet-Alkalai (2004) to include such photo-visual, information, reproduction, branching, and socio-emotional literacy skills into digital literacy. Many authors have gone beyond the operation of the digital device and paying attention to social-emotional and cognitive skills in which essential for problem solving and tasks performing in digital environments. Besides, the differences have been presented by van Deursen and van Dijk (2010) between the medium-related skills (operational and formal digital skills) and content-related skills (strategic digital and information skills) where recently the framework has been completed by van Deursen, et al. (2016) including the content creation and communication skills measurements (Laar, Alexander J. A. M. Van Deursen, Dijk, & Haan, 2019). The stress is on such skills' conditional nature in which states that without the professional learning of the basic skills, a person will not have the ability to reflect their content-related skills (Laar, Deursen, Dijk, & Haan, 2017).

The requirement is seen to transfer to the knowledge- or content-related skills identification for technologies adoption from the technical mastery focusing (Claro, et al., 2012). Study at present interprets the digital skills as a multi-layered unit in the 21st-century skills that have integrated with digital skills (Laar, Alexander J. A. M. Van Deursen, Dijk, & Haan, 2019). The essence is the abilities of employees to use ICTs in support of a broad spectrum in the skills required in the 21st century and to take the utmost ICTs advantages. Seven core skills have been addressed which are information management, technical, creativity, communication, collaboration, critical thinking, and problem-solving) plus, five from contextual skills (ethical awareness, self-direction, cultural awareness, lifelong learning, and flexibility). Twelve skills are stressing on the digital aspect in ‘the use of ICTs’ as core skills and ‘ICTs adoption’ as contextual skills (Laar, Deursen, Dijk, & Haan, 2017).

## **2.5 Digital Skills Framework for Retail**

Thus, the Information Technology Competency Model, Skills Framework for The Information Age, and the 21<sup>st</sup> Century Digital Skills all provided both technical and general competencies related to the general workforce in the digital age. To make use of the framework, the industry needs to specify important and relevant competency.

For the retail sector, trends shaping the future of work are mainly based on the impact of technology growth and expansion. Technologies and digitalization are increasingly transforming how retail business processes are carried out. The rise of e-commerce, the world is becoming interconnected, business models change toward the omnichannel approach, the convergence of innovation, and the increased in individual responsibility. Technological development, along with the changes, makes the continuous adaptation of skills completely necessary for productive participation in the labor market thus, for the success of the organization, it is important to broaden the digital skills of workers based on these emerging trends (Ismail, 2017).

Based on the future of retailing trends and three existing digital competencies framework, the list of selected competencies is as shown in Table 1 as

follows. The competency that has similar terms were removed to create a comprehensive competency list for the retail workforce.

**Table 2.1 A combined list of digital workforce competencies**

Digital Age Competencies		A	B	C
Adaptability	Skills adapting one's tone, mood, or actions to changing ICT conditions.		x	x
Communication	Skills to successfully pass on and share opinions, ideas, and knowledge through different media and approaches.	x	x	x
Computational Thinking	Skills to use computational models, programs, software, or techniques to view and understand data to accomplish practical tasks, and to identify different online environments for navigation and guidance.			x
Creative Thinking	To combine ideas or knowledge in different ways and connect seemingly unrelated fields to generate ideas and applications, add a fresh perspective.	x	x	x
Critical Thinking	Using analytical reasoning and ample facts to support the arguments to make educated judgements and decisions regarding collected knowledge and communication.	x	x	x
Decision Making	Choose a course of action from different options, using a rational method to achieve the expected objectives	x	x	
Digital Literacy	Using ICT tools, facilities, and applications to digitally develop, analyze, and exchange information with others.	x	x	x
Interpersonal Skills	Efficiently manage relations and interact efficiently with others to gain common agreement and outcomes	x	x	
Lifelong Learning	Find ways to develop one's skills and competencies. To continually access and develop new information and skills for continuous learning.		x	x
Managing Diversity	Deal effectively with people from diverse backgrounds with racial, socioeconomic, cultural and educational backgrounds and consider the needs and desires with various working groups.			x
Problem Solving	Generate realistic and efficient approaches to problem solving and build on new opportunities.		x	x
Resource Management	Deployment and distribution of resources efficiently and effectively when and where they are needed. Include resource planning, allocation and scheduling for activities, usually include manpower, machines, resources, and material.	x	x	x
Teamwork	Work collaboratively and effectively with others to contribute to group efforts to achieve identified objectives.	x	x	x
Transdisciplinary Thinking	Understanding concepts across multiple disciplines, with the ability to synthesize knowledge and insights for decision-making and cooperation.		x	x
Virtual Collaboration	Use collaborative online communication tools to work out tasks or projects as a team.			x

Note A: Information Technology Competency Model (ETA, 2012), B: Skill Framework for the Information Age (SFIA, 2018), C: 21<sup>st</sup> Century Skills (Laar, Deursen, Dijk, & Haan, 2017).

The research then uses the comprehensive list of selected competencies for the retail sector as seen in Table 1 to conduct an in-depth interview with retail professionals in Thailand.



## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This chapter is to explain in detail the research methodology implemented for this research. Explain first the choice of the research approach. The chapter continues to discuss the sampling strategy and explain the data collection procedure. It concludes with the data analysis methods which have been applied in this research.

The objective was to unfold the research question asking a list of digital competencies needed for the retail workforce in Thailand. A list of competencies (Table 1) was selected based on the three existing competencies frameworks and the assumption towards the trends of retailing. The competency that has similar terms were removed. Fifteen competencies were identified as seen in Table 1. Subsequently, qualitative research was used to define and analyze emerging capabilities specifically for the retail workforce.

#### **3.1 Design of the research**

This research takes a deeper investigation of managers' perspectives on the digital competencies essential for the workforce in retail industries. Individual skills growth is common with industries where advances with digitalization have played a role in the delivery and consumption of goods and services (Goldkind and Wolf, 2014). It is important to research whether managers in organizational practice pay adequate attention to the human resources of the organization. Since employees are considered the most significant sources of creativity, it is a must for managers to take account of their employees' skills (Kamprath and Mietzner, 2015). To get a superior insight into the role of skill growth, in-depth and semi-structured interviews with retail business managers based in Thailand were conducted. Within this report, the skills of a person are outlined through discussion with the general-purpose to further improve the retail sectors.

Quantitative and qualitative methods are focused on two separate traditions of a scientific theory (Slevitch, 2011). A quantitative methodology based on statistical analysis and can be defined as experimental or manipulative: questions and hypotheses are formulated, then tested and confirmed, while at the same time maintaining confounding conditions to avoid inappropriate impact on outcomes (Guba & Lincoln, 1994). While the qualitative methodology is grounded in interpretivism and constructivism (Deshpande, 1983; Sale et al., 2002). Qualitative scientific research aims to achieve a deeper understanding of the phenomenon for the study subjects (Bryman, 1988).

In this research, a qualitative methodology is incorporated, as it helps the author to perform in-depth interviews examining the views of managers and senior executives on digital skills. It also shows awareness of the future knowledge of retailing and the role of skill development employed in current organizational practices. The findings yield specific benefits for retail industry managers in reacting quickly to the creation of trained workers.

### **3.2 Interviewees**

Twenty-five interviewees were selected using a purposive sampling method in which the author has chosen the interviewees by using own sound judgment (Black, 2010). Interviewees had to meet two qualification criteria: having a supervisory position, as we believed that certain workers would most likely have an overview of the sector, and currently working within the retail industry. Among these were senior managers/managers (N=19), higher management/head of department (N=4), and owners (N=2). The interviewees were both holding non-ICT and ICT job roles in the following fields: brand management, marketing, operations, merchandising, and e-commerce.

### **3.3 Data Collection Procedure**

The data collection method was through the private interview between the author and the interviewees, arranged and processed in an informal setting. Some of

the interviews were conducted via phone calls. The interview session was scheduled ahead of time, informed consent was obtained from the participants, with the consent to be interviewed orally described and audio recorded. It was also explicitly mentioned that data and findings from the interview will be confidential. The interview questions were briefly discussed to the participants before the interview is conducted. Each interview section lasted about 30 to 60 minutes and was conducted in March 2020.

To start the interview, the interviewees were asked to briefly introduce themselves by describing their organization activities, their job functions and the activities they perform in the organization, and how many years of experience working in the retail industries in Thailand. To receive a first-hand account from the manager's perspectives on the future of retailing, the interviewees were asked questions regarding the trend of the retail industry, the implication of future of retailing and the projection of any changes towards retail workforce skills or capability. The framework from the literature review was presented to the interviewees, written with a short description of each skill, aiming to explore what are the interviewees' perspectives on the skills presented in the framework against the retail workforce work activities and if they find it relevant. Furthermore, the interviewees were asked to range the top five skills they found to be the most critical to retail professionals and should consider enhancing or implement immediately if not already existed. They were also asked if there were any other skills not mentioned in the literature review framework that they would expect to see from the retail workforce. Lastly, a question concerning challenges over the next five years to be faced by retail industries and the retail workforce was asked.

Interviewees were asked the following questions:

1. Do you experience any changes in retail industries over the last 5 years?
2. To your opinion, what are the implication of the future of retailing and its enablers for the business?
3. Do you feel there is a change in expectation towards the retail workforce in terms of capability or skills? How?
4. What do you expect from your current retail professionals concerning future retailing trends?
5. Which skills from the framework do you think are relevant for the retail workforce? Why?

6. Do you find the stated skills to be relevant to future retailing trends?

Why?

7. Which of the stated skills do you think are the most crucial for the current retail professionals? Why?

8. Are there any other skills that you view as being essential to retail job functions?

9. What do you think are the challenges to be occurred by retail professionals and retail industries over the next five years?

Although, there was already a question set listed ahead for the interview an open discussion was encouraged throughout the interview session. A semi-structured interview allowed new ideas to be brought up in the interview based on what each interviewee said (Longhurst, 2010). There were extra questions arose during the interview only to obtain the information purposely to pursue the objective of the research.

## **CHAPTER IV**

### **DATA ANALYSIS**

This chapter is to exhibit the results from the qualitative interview to unfold the research question of finding what the key digital competencies essentials for the retail workforce are to help drive business in the Digital Era. With the exploration of managerial perspective on the two objectives to synthesize, first, the implication of the future of retailing from retail professionals to see whether the trends are aligned with global trends. The second is to find out the relevant digital competencies for retail professionals suggested by retail managers themselves.

#### **4.1 The implication of the future of retailing from retail professionals' perspectives**

##### **4.1.1 Realized changes led by technology and consumer behaviors**

The questions were asked to gain insight from a manager's perspective on the topic of the retail revolution and the future of retailing. All the interviewees have stated that they have been noticing and experiencing changes within the retail industries for at least in the past five years. The interviewees have mentioned clearly that the changes are led by technological developments that allow e-commerce to happen. Also, the rise of internet usage and smartphone technology that led to cross-channels retailing. Some of the interview data are presented as follows.

"The competitions are getting tougher, so many new retailers are entering the market due to the low cost of entering because the internet and technological enhance it and make it possible for them." (Participant 3)

"The changing face of retail is mainly due to the rise of e-commerce. Habits are changing so much so that you use both online and offline at the same time." (Participant 8)



“In the past, sellers sell their products through stores only, now they just need to pick up their phones, click a few buttons, chat a little, and off they go! That’s how retailing is today.” (Participant 18)

"Technology changes the way we work; the way we operate. The rise in technological development allows us to do things we have never thought it would be possible." (Participant 20)

The interviewees also associated the changing in consumer behaviors as one of the main factors when asked about the changes within retail industry.

"Customers' behaviors now are very different from the past. Everybody loves instant gratification. Technology has spoiled us, and it changes how we do retail forever." (Participant 12)

“Retailing is always changing because human never stop exploring and seeking new things” (Participant 13)

"As consumer behavior evolves, retailers, of course, thrive to stay relevant. We can no longer focus our efforts entirely on offline or online sales when both are necessary." (Participant 16)

“We cannot just choose the channel we are comfortable with anymore; we must be presenting in every customer touchpoint to able to capture them." (Participant 1)

#### **4.1.2 Company gears toward online and omnichannel strategy**

The conversations then touched on the company’s strategy, allowed the author to learn more about the company approach to the future of retailing, if the trend in the real market is aligned with what the literature reviews have shown. All of the interviewees were from the companies that have offline backgrounds, they stated that their goals for this year and in the future have involved moving towards online, build more online presence, and/or strengthen their foundations to build a strong base for an omnichannel strategy. None of them mentioned staying entirely brick-and-mortar. Some of the interview data are presented as follows.

“We are revamping the whole infra systems to support the store innovation, making sure the store shopping experience is fun and memorable to our

customers as well as building up our online presence, so customers know more about us.” (Participant 4)

“We are trying to blur the lines between online and offline because everything is connected. The ability to create a seamless experience for customers is an enabler to the future of retailing.” (Participant 11)

“Creating flawless and seamless experiential shopping journey for consumers, regardless of what the channels are, is a big part of our competitive strategy.” (Participant 22)

The interview transcripts show insights from Thai retail professionals on the revolution of the retail industry and the future of retailing in which aligned with the global trends and literature reviews. All the interviewees agreed that technological development and digitalization have led to the changes in Thailand retail landscape. Many of the interviewees' companies have already adopted the New Retail or Omnichannel as their strategies to move forward.

#### **4.1.3 Enablers and challenges**

When asked about what are the enablers of their strategy, many of them mentioned about reconstruct their infrastructure and enhancing their employee’s abilities as a part of their strategic goal. The good and flexible infrastructure and the employee's readiness will be the enablers to help drive their businesses toward the future of retailing.

"We invested heavily in training for our staff to be on par with the world megatrends and making sure they keep on learning." (Participant 9)

“To focus on building the infrastructure, building the team, that will allow us to achieve innovation and keep up with changes in the industrial revolutions.” (Participant 16)

“We need to plan out a strategy that yields the resources that will support the future. We started to educate our employees to have a mutual understanding of what the company can potentially become in the next two-three years.” (Participant 21)



"The challenge is to build a business model that is highly adaptable and to have people to be highly adaptive, support the business to move forward and lower the impact of disruption." (Participant 11)

Similar answers were mentioned when asked about the challenges they have experienced with or future challenges that could happen in the next five years. Major challenges many interviewees concerned with are the company's infrastructure and people's development as well. The infrastructure as in the traditional operating model, existing technology that was not built ready to support the future of retailing strategy, or even the company organizational chart that did not support the new way of working. People's development was mentioned as the readiness of employees' skills and mindsets to cater to the emerging roles or changes that come with digitalization transformation.

"Challenges for our business is how to constantly keep up with the fast-changing behavior of consumers." (Participant 13)

"The world with technology, traditions will constantly get disrupted, our challenges as a company, or as an employee need to learn and think fast and accurately." (Participant 2)

"Digital is a buzz word in our company, it lacks a clear definition and largely misunderstood. Only a few people can explain the strategic dynamics, most of us just speak to the symptoms of it." (Participant 18)

"With the right infrastructure, the company will go a long way but getting the right infrastructure itself is a challenge." (Participant 24)

## **4.2 Relevant digital competencies for retail professionals**

To validate the existing competencies from previous studies, the competencies framework with a brief description of each competency was prepared and shown to the interviewees. The interviewees needed to go through each competency one-by-one and answered if they found them relevant to their current work activities and explain why or how.

The result from interviewees has shown that all of the competencies mentioned in the literature are founded relevant to retail professionals. Table 2 shown

the interviewees validated each competency of the literature review framework marked as x as they found it applicable to retail professionals.

Although interviewees served different work responsibilities and positions with different organization sizes, they had similar views towards the competencies. Since retailing is about selling products and services to end consumers. Highly demanding consumers and rapid change in consumer buying patterns force retailers to rethink the way they sell things every day. Hence, adaptability, lifelong learning and creative thinking are what interviewees viewed as important to its worker. Additionally, the retailing process requires working together to get the aiming results, therefore, communication, teamwork, and interpersonal skills are viewed as necessary to be able to achieve the same goal. Computation thinking and transdisciplinary thinking were argued that the skills rely on the employee's level or experiences on the field, however, some of the interviewees suggested to call it 'sense-making' competencies, instead. For the competency such as resource management, interviewees viewed the skills as pivotal for the retail industry, as opportunity cost can cost the company lots of money. As far as digital literacy is concerned, the interviewees saw it as the ability that everyone must learn particularly in this specific timeframe. Finally, problem-solving, critical thinking and decision making were viewed as necessary. Unexpected problems can arise every day as retailers always have to deal with people. It is necessary for employees to find a solution that is best for organizations, not to lose any customers or causing negative brand image. Interviewees stated that decision-making skills based on accurate data would create lots of opportunities and benefits to the company.

**Table 4.1 Digital competencies between literature review and interview research**

Digital Age Competencies		A	B	C	Interview
Adaptability	Skills adapting one's tone, mood, or actions to changing ICT conditions.		x	x	x
Communication	Skills to successfully pass on and share opinions, ideas, and knowledge through different media and approaches.	x	x	x	x
Computational Thinking	Skills to use computational models, programs, software, or techniques to view and understand data to accomplish practical tasks, and to identify different online environments for navigation and guidance.			x	x
Creative Thinking	To combine ideas or knowledge in different ways and connect seemingly unrelated fields to generate ideas and applications, add a fresh perspective.	x	x	x	x
Critical Thinking	Using analytical reasoning and ample facts to support the arguments to make educated judgements and decisions regarding collected knowledge and communication.	x	x	x	x
Decision Making	Choose a course of action from different options, using a rational method to achieve the expected objectives	x	x		x
Digital Literacy	Using ICT tools, facilities, and applications to digitally develop, analyze, and exchange information with others.	x	x	x	x
Interpersonal Skills	Efficiently manage relations and interact efficiently with others to gain common agreement and outcomes	x	x		x
Lifelong Learning	Find ways to develop one's skills and competencies. To continually access and develop new information and skills for continuous learning.		x	x	x
Managing Diversity	Deal effectively with people from diverse backgrounds with racial, socioeconomic, cultural and educational backgrounds and consider the needs and desires with various working groups.			x	x
Problem Solving	Generate realistic and efficient approaches to problem solving and build on new opportunities.		x	x	x
Resource Management	Deployment and distribution of resources efficiently and effectively when and where they are needed. Include resource planning, allocation and scheduling for activities, usually include manpower, machines, resources, and material.	x	x	x	x
Teamwork	Work collaboratively and effectively with others to contribute to group efforts to achieve identified objectives.	x	x	x	x
Transdisciplinary Thinking	Understanding concepts across multiple disciplines, with the ability to synthesize knowledge and insights for decision-making and cooperation.		x	x	x
Virtual Collaboration	Use collaborative online communication tools to work out tasks or projects as a team.			x	x

Note: A: Information Technology Competency Model (ETA, 2012), B: Skill Framework for the Information Age (SFIA, 2018), C: 21<sup>st</sup> Century Skills (Laar, Deursen, Dijk, & Haan, 2017).

The research categorized 15 competencies mentioned in the literature into the classifications suggested by Janjua (2012), resulting in Table 3 as follows.

**Table 4.2 Final Digital Competencies categorized into five competency classes**

<b>Digital Age Competencies</b>	
<b>Functional</b>	
Digital Literacy	Using ICT tools, facilities, and applications to digitally develop, analyze, and exchange information with others (ETA, 2012; SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
Computational Thinking	Skills to use computational models, programs, software, or techniques to view and understand data to accomplish practical tasks, and to identify different online environments for navigation and guidance (Laar, Deursen, Dijk, & Haan, 2017).
*English Literacy	The ability to speak, listen, read and write effectively in English (Singh and Singh, 2008).
<b>Generic Management</b>	
Resource Management	Deployment and distribution of resources efficiently and effectively when and where they are needed. Include resource planning, allocation and scheduling for activities, usually include manpower, machines, resources, and material (ETA, 2012; SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
Managing Diversity	Deal effectively with people from diverse backgrounds with racial, socioeconomic, cultural and educational backgrounds and consider the needs and desires with various working groups (Laar, Deursen, Dijk, & Haan, 2017).
*Project Management	Initiate, plan, execute, organize, manage budget and resources to drive a project to success and achieve goals (PMC, 2018; ITPA, 2015)
<b>Social</b>	
Communication	Skills to successfully pass on and share opinions, ideas, and knowledge through different media and approaches (ETA, 2012; SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
Virtual Collaboration	Use collaborative online communication tools to work out tasks or projects as a team (Laar, Deursen, Dijk, & Haan, 2017).
Interpersonal Skills	Efficiently manage relations and interact efficiently with others to gain common agreement and outcomes (ETA, 2012; SFIA, 2018).
Teamwork	Work collaboratively and effectively with others to contribute to group efforts to achieve identified objectives (ETA, 2012; SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
<b>Cognitive</b>	
Transdisciplinary Thinking	Understanding concepts across multiple disciplines, with the ability to synthesize knowledge and insights for decision-making and cooperation (SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
Creative Thinking	To combine ideas or knowledge in different ways and connect seemingly unrelated fields to generate ideas and applications, add a fresh perspective (ETA, 2012; SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
Critical Thinking	Using analytical reasoning and ample facts to support the arguments to make educated judgements and decisions regarding collected knowledge and communication (ETA, 2012; SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
Problem Solving	Generate realistic and efficient approaches to problem solving and build on new opportunities (SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
Decision Making	Choose a course of action from different options, using a rational method to achieve the expected objectives (ETA, 2012; SFIA, 2018).
<b>Personal Characteristics</b>	
Adaptability	Skills adapting one's tone, mood, or actions to changing ICT conditions (SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
Lifelong Learning	Find ways to develop one's skills and competencies. To continually access and develop new information and skills for continuous learning (SFIA, 2018; Laar, Deursen, Dijk, & Haan, 2017).
*Self-Management	Skills to set goals for yourself and manage progress toward those goals in order to assess your own progress (ITF, 2013; Indeed 2020)



### **4.2.1 Functional competencies**

Functional competencies include skills, abilities, and technological expertise in which the technical aspects of the work are discussed (Janjua 2012). Skills recognized in this class are computational thinking and digital literacy. Technical skills were seen not only as basic practical skills but also as an intuition from the back-end of how things work. The interviewees cited technical skills as having knowledge or the ability to use the right tools to achieve specific tasks. The technical skills were mentioned vary depend on the positions and job activities, not limited to only the computational thinking and digital literacy, for example, many interviewees also mentioned English literacy as a basic technical skill all the employees should have.

"Digital literacy is a must-have skill for all the job roles within our industry. Although you are still living in the offline world, you must at least have a basic digital literacy to be able to communicate successfully with other people." (Participant 1)

"Data analytics are very very important today. Imagine when you have access to a big pool of valuable data but you don't know how to make sense out of it." (Participant 14)

"English is almost a prerequisite to enter any company these days. Almost all the digital tool manuals are all in English. We also have many international customers and partners, someone who is highly literate in English is already one step ahead of everyone else." (Participant 22)

### **4.2.2 Generic management competencies**

Generic management competencies comprise skills that are more specific to management-related jobs and involve business, industry, hierarchy, and job function in all managerial jobs (Janjua 2012). In short, they are skills which make work professionals more efficient in dealing with routine activities, they are less concerned with the technical aspects of the job. Resource management and managing diversity are classified in this group of skills. Other than these two competencies, the most mentioned skill by the interviewee is the project management skill.

"We are doing resource allocation, forecasting, and leveling in almost every department we have. It is one of our main activities." (Participant 3)



"People with good resource management skills are all about doing more with less. Resource management is centered around optimum efficiency and maximum productivity." (Participant 11)

"We are the sole distributor of many international brands, we need to have the ability to understand different mindsets and thoughts. Managing diversity is an underlying skill enabling us to perform daily tasks dialing with people smoothly and successfully." (Participant 17)

"I expect members of my team to not only be dependable but also someone I can trust that has the ability to start and end the project perfectly on their own." (Participant 20)

#### **4.2.3 Social competencies**

Communication, virtual collaboration, interpersonal skills, and teamwork are classified in this class. Social competencies cover a broad variety of abilities and attitudes that make employee capable of working successfully with team members.

"Retailing is complicated work, you cannot start and end the job on your own. You need good teamwork and you need to be smart in communicating to get things that you want." (Participant 3)

"Good interpersonal skills allow you to work more effectively as part of a team, having hard skills is not enough, we expect employees to be able to cooperate and connect." (Participant 10)

"It's difficult to reach the same goal if people can't communicate from one to another effectively." (Participant 14)

"I found skills like virtual collaboration relatable to retail working professionals as many retail activities these days require knowledge on how to use online platforms such as seller centers which built specifically for online selling activities." (Participant 15)

"Retailers like us need to be skilled in socializing. For us (as a sale person) communication skill is a key to success." (Participant 22)

#### **4.2.4 Cognitive competencies**

Cognitive competencies consist of employees' cognitive capacity to tackle company issues and conflicts such as transdisciplinary thinking, critical thinking, decision making, problem-solving, and creative thinking. Interviewees expect cognitive capacity inexperienced working professionals more than those with no to little working experiences. The interviewees stated that to be confident in decision making or to be able to synthesize the knowledge across multiple disciplines need some industry working experiences to do so. However, they seek the cognitive skills in the employee as the skills are crucial in driving business to success.

“Employees with the ability to assess problems and find solutions or options to solve them on their own, using reasoning or logic, will be appreciated in the company.” (Participant 1)

"Retailing is dealing with people and serving what they want or needs that might not reflect the way we normally operate, to have skills like creative thinking or problem-solving skills are beneficial in any roles or any job level in the company." (Participant 6)

“Retailing is like art with tech and business. Many successful campaigns I have seen came from the employees' creative ideas, you don't have to look further.” (Participant 13)

#### **4.2.5 Personal characteristics competencies**

Personal characteristics can be understood as the human being's core beliefs, attributes, self-image, motivations, and intentions such as adaptability and lifelong learning. The interviewees focused on personal characteristics more than any other skills classes. They found adaptability and lifelong learning to be very relevant to retail professionals especially in the time of change at the moment. Other than that, skills such as self-management and quick learner listed by interviewees are the basic skills employees should have in retail businesses.

“The world is spinning fast, once you stop learning, you almost become outdated immediately.” (Participant 2)

"There's no room left in a highly competitive world for people that only work on a day-to-day basis and not trying to adapt or learn new skills. It is the employee's responsibility to remain up to date." (Participant 15)

"Adaptability allows you to move fast and absorbs new things easier. These days, businesses need to be flexible so people must be highly adaptive." (Participant 16)

"There are millions of new things to learn each day, new tools, new systems. If you are someone who is a good listener and can apply them to the learning quickly, it is more likely for you to go fast and go far." (Participant 22)

Overall, all interviewees have acknowledged the digital competencies as relevant to retail professionals and that they are certainly influencing their work activities. Most of the interviewees viewed digital competencies and digital tools as part of the process to improve one's working skills towards reaching the future of retailing goals. However, many interviewees have also mentioned several skills they considered as important to retail professionals that were not included in the digital competencies framework.

Most of the interviewees viewed high-skilled employees in the retail business as someone who is not only digital-savvy but also have a great interpersonal and communication skills, show a high level of creativity, have analytical and problem-solving capabilities, demonstrate cultural sensitivity and have the ability to work across different disciplines. Besides, skills like self-management and project management expertise are the top two mentioned skills outside of the competencies list. As technology development forces the retail company to work fast, company organizational systems are moving towards leaner management, with greater accountability for projects and processes. The burden of upholding the image of the company while communicating with consumers falls largely on individuals' shoulders. It is expected that workers will gradually share responsibility for capability growth. Adaptability, self-management, and business skill such as project management will become more and more important.

## **CHAPTER V**

### **CONCLUSION / RECOMMENDATION**

#### **5.1 Conclusion**

The whole idea of the future of retailing is to design a frictionless experience. The technology is there to help create enjoyable services or shopping experiences to cater to highly demanding individuals. The expansion of employee's digital skills according to evolving trends is essential for the organization's success. Kane (2015) states maturing digital organizations are intolerant of the disparity in digital skills while keeping a close eye on how they are directed towards digital trends to develop the skills necessary to capitalize on trends (Kane, Palmer, Phillips, & Kiron, 2015).

The first objective is to seek perspectives on the future of retailing trends from working professionals in retail themselves. All the interviewees are aware of the technology disruption and the online explosion since everyone has already moved their strategies towards online, some even are already moving towards the new retail adopting 'omnichannel' approach. The enablers of their businesses towards the future are mentioned often as the flexibility of the infrastructure and the employees' ability. The retail employees must develop their skills in thinking about technology, analytics, and consumers-focused to move forward.

The second objective is to identify the competencies that retail executives and managers found to be relevant and consider important to the retail industries workforce. In the digital decade, retailing has gone through different phases throughout the past decade, however, this is an ongoing digital transformation that would have had some enduring impacts on the retail environment. Where good performance in the field of retailing, technical skill is the first prerequisite, most of the studies then pay attention to those skills, while the soft skills of the employee have been overlooked. Nonetheless, soft skills are required to build innovation capabilities that are necessary for addressing technological and organizational changes in the

workplace (Kamprath and Mietzner, 2015). The interviewees viewed technical skills, as in technical skills by different job functions, and all of the digital competencies listed relevant, however, adaptability, creativity, communication, sense-making (computational thinking and critical thinking), self-management, and project management are the skills that viewed as most important skills.

## **5.2 Managerial Implication**

The future is not certain especially in a complex and unpredictable world where changes happen quickly and on an ongoing basis. Nevertheless, it is important to consider the long-term perspective. While such research can never provide conclusive answers, it does help to stimulate reflection and discussion as part of the process of planning for the challenges and opportunities posed by the future labor market. The development of skills is an important long-term issue. By taking this research as a guideline in developing the essential competencies to remain competitive in the market, organizations, education, and training sectors, as well as individuals can be beneficial from this research.

Organizations nowadays need to think about innovative approaches to prepare themselves and be ready for the markets of tomorrow (Matzler, Bailom, & Tschernjak, 2007, p. 176). In the face of increased competitive pressures and market uncertainty, organizations should take the leadership and duty to develop the skills needed for business success to create resilience and human resource potentiality. Also, intensify cooperation with the education and training industry to obtain access to critical skills as the innovation capacity becomes crucial.

Education and training providers need to be mindful of the labor market's potential future needs to ensure people are offered with the skills that will be needed in the future. Adapting learning systems to reflect the fundamental importance of an interdisciplinary approach to organizational creativity and the wide-ranging impact of technology. Also, working closely with employers to assist them in achieving their business and skills goals and ensuring that the service is responsive to their needs and forward-thinking in a diverse learning climate.



Individuals need to understand the nature of work as it becomes less intimate, more network-oriented, project-based, and increasingly technology-intensive. Put on greater personal responsibility for learning and continually develop skills for development and achievement. Be open to and benefit from new and varied learning methods and be willing to advance across boundaries as technologies and disciplines converge, fostering a mix of technical training and softer skills. The decision of the individual on the level of skill aims to achieve and the specialization of the subject determines, to a certain degree, the career path throughout the working life.

### **5.3 Limitation and Future Research**

The findings of this research are limited to working professionals within retail industries in Thailand. Such limitations of the target population are required to perform thorough research of digital competencies for the retail workforce leading to clear and relevant results. In addition, the drawback of this research is focused on the fast-changing complexity of the topic itself. Since digital competencies are closely related to rapid technological development as it progresses with the introduction of new technologies and software that change the way business operates.

Future studies may research deeper into finding the competency gaps in existing employees and make use of the quantitative research method to reach more samples. Also, to further explore whether the results can be applied to specific job contexts or retail industry professionals in other countries. Moreover, to explore the effective ways of measuring digital competencies and assessment of the impacts.

## REFERENCES

- Abdullah, S. (2018). Data Reveals the Fastest-Growing Job in Retail (And It's Not Sales). Retrieved from <https://business.linkedin.com/talent-solutions/blog/talent-analytics/2018/data-reveals-the-fastest-growing-job-in-retail-and-it-is-not-sales>
- Adegeest, D.-A. (2016, September 19). As fashion goes digital, skills must adapt. Retrieved from <https://fashionunited.uk/news/retail/as-fashion-goes-digital-skills-must-adapt/2016091921820>
- Baczynska, A. (2015). Analytical, Practical and Emotional Intelligence and Line Manager Competencies. *Management and Business Administration. Central Europe*, 23(4), 34–54. doi: 10.7206/mba.ce.2084-3356.156
- Bessen, J. (2017, December 6). Employers Aren't Just Whining – the "Skills Gap" Is Real. Retrieved from <https://hbr.org/2014/08/employers-arent-just-whining-the-skills-gap-is-real>
- Black, K. (2010). *Business statistics: contemporary decision making*. Ontario: John Wiley & Sons Canada, Ltd.
- Bloomberg News. (2018, April 24). Demand for digital skills in retail is growing. Retrieved from <https://www.digitalcommerce360.com/2018/04/24/demand-for-digital-skills-in-retail-is-growing/>
- Bloomberg, J. (2018, May 17). Digitization, Digitalization, And Digital Transformation: Confuse Them at Your Peril. Retrieved from <https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/#6d2dfad92f2c>
- Brennen, S., & Kreiss, D. (2014, September 8). Scott Brennen and Daniel Kreiss. Retrieved from <http://culturedigitally.org/2014/09/digitalization-and-digitization/>

## REFERENCES (cont.)

- Bryman, A. (1988). *Quantity and quality in social research*. London, UK: Routledge.
- Claro, M., Preiss, D. D., Martín, E. S., Jara, I., Hinostroza, J. E., Valenzuela, S., ...  
Nussbaum, M. (2012). Assessment of 21st century ICT skills in Chile: Test design and results from high school level students. *Computers & Education*, 59(3), 1042–1053. doi: 10.1016/j.compedu.2012.04.004
- Cook, G. (2014). Customer experience in the omni-channel world and the challenges and opportunities this presents. *Journal of Direct, Data and Digital Marketing Practice*, 15(4), 262–266. doi: 10.1057/dddmp.2014.16
- Delamare Le Deist, F. and Winterton, J. (2005), “What is competence?”, *Human Resource Development International*, Vol. 8 No. 1, pp. 27-46.
- Deshpande, R. (1983). Paradigms Lost: On theory and method in research in marketing. *Journal of Marketing*, 47(4), 101–110.
- Eshet-Alkalai, Y. (2014). Digital Literacy: A Conceptual Framework for Survival Skills in the Digital Era. *Jl. of Educational Multimedia and Hypermedia*, 13, 93–106.
- Gartner\_Inc. (n.d.). Digitalization. Retrieved from <https://www.gartner.com/en/informationtechnology/glossary/digitalization>.
- Goldkind, L., & Wolf, L. (2014). A Digital Environment Approach: Four Technologies That Will Disrupt Social Work Practice. *Social Work*, 60(1), 85–87. doi: 10.1093/sw/swu045
- Grewal, D., Roggeveen, A. L., & Nordfält, J. (2017). The Future of Retailing. *Journal of Retailing*, 93(1), 1–6. doi: 10.1016/j.jretai.2016.12.008
- Guba, E. G. & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Thousand Oaks, CA: Sage.
- Hotho, S., & Champion, K. (2011). Small businesses in the new creative industries: innovation as a people management challenge. *Management Decision*, 49(1), 29–54. doi: 10.1108/00251741111094428

## REFERENCES (cont.)

- IMDA. (2017). Retail Industry Digital Plan. Retrieved from <https://www.imda.gov.sg/-/media/Imda/Files/Programme/SMEs-Go-Digital/Industry-Digital-Plans/Retail-Industry-Digital-Guide-for-SMEs.pdf>
- Information Technology Competency Model. (2012). Retrieved from [https://www.careeronestop.org/competencymodel/info\\_documents/it-industry.pdf](https://www.careeronestop.org/competencymodel/info_documents/it-industry.pdf)
- Ismail, N. (2017), The Importance of Digital Trends in the Workplace. Retrieved from <https://www.information-age.com/importance-digital-trends-workplace-123469187/>.
- ITPA, 2015. IPA : IT Human Resources Development : I Competency Dictionary. Independent Administrative Agency: Japan. Retrieved 10 24, 2016, from IPA: [http:// www.ipa.go.jp/english/humandev/icd.html](http://www.ipa.go.jp/english/humandev/icd.html).
- Janjua, S. Y. (2012). The competence classification framework: a classification model for employee development. *Interdisciplinary Journal of Contemporary Research in Business*, 4.
- J.P. Morgan (2019). E-commerce payments trends: Thailand. Retrieved from <https://www.jpmorgan.com/europe/merchant-services/insights/reports/thailand>
- Jongen, W., & Osborn, M. (2017). *The end of online shopping: the future of retail in an always connected world*. Hilversum: Nubiz, new business Publishing.
- Kamprath, M., & Mietzner, D. (2015). The impact of sectoral changes on individual competences: A reflective scenario-based approach in the creative industries. *Technological Forecasting and Social Change*, 95, 252–275. doi: 10.1016/j.techfore.2015.01.011
- Kane, G. C., Palmer, D., Phillips, A. N., & Kiron, D. (2015, June 16). Is Your Business Ready for a Digital Future? Retrieved from <https://sloanreview.mit.edu/article/is-your-business-ready-for-a-digital-future/>

## REFERENCES (cont.)

- Kemp, S., & Moey, S. (2019, September 18). The Future of Ecommerce in Southeast Asia - DataReportal – Global Digital Insights. Retrieved from <https://datareportal.com/reports/digital-2019-the-future-of-ecommerce-in-southeast-asia?rq=ecommerce>
- Kopp, C. M. (2020, January 29). Learn About Globalization. Retrieved from <https://www.investopedia.com/terms/g/globalization.asp>
- Kotler P. and Armstrong G., (2012), “Principles of Marketing”, Pearson Prentice Hall, 14th Edition.
- Laar, E. V., Alexander J. A. M. Van Deursen, Dijk, J. A. V., & Haan, J. D. (2019). Twenty-first century digital skills for the creative industries workforce: Perspectives from industry experts. *First Monday*. doi: 10.5210/fm.v24i1.9476
- Laar, E. V., Deursen, A. J. V., Dijk, J. A. V., & Haan, J. D. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior*, 72, 577–588. doi: 10.1016/j.chb.2017.03.010
- Longhurst, R. 2003. Semi-structured interviews and focus groups (pp. 143-156) N. Clifford, M. Cope, T. Gillespie, and S. French, editors.
- Manyika, J., Lund, S., Chui, M., Bughin, J., Woetzel, J., Batra, P., ... Sanghvi, S. (2017). Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages. Retrieved from <https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages>
- Matzler, K., Bailom, F., & Tschernjak, D. (2007). *Enduring success: what top companies do differently*. Basingstoke: Palgrave Macmillan.
- McClelland, C. (2020, March 2). The Impact of Artificial Intelligence - Widespread Job Losses. Retrieved from <https://www.iotforall.com/impact-of-artificial-intelligence-job-losses/>



## REFERENCES (cont.)

- Meyer, S. (2020, February 1). Top 14 Ecommerce Trends in 2020 (Industry Experts' Insight). Retrieved from <https://www.bigcommerce.com/blog/ecommerce-trends/>
- Morgan, J. (2014). *The future of work: attract new talent, build better leaders, and create a competitive organization*. Hoboken, NJ: John Wiley & Sons, Inc.
- Motyl, B., Baronio, G., Uberti, S., Speranza, D., & Filippi, S. (2017). How will Change the Future Engineers' Skills in the Industry 4.0 Framework? A Questionnaire Survey. *Procedia Manufacturing*, 11, 1501–1509. doi: 10.1016/j.promfg.2017.07.282
- Muro, M. (2018, May 4). Getting with the Program: Digital Skills as Opportunity. Retrieved from [https://www.brookings.edu/wp-content/uploads/2018/04/mm\\_digitization\\_bi\\_blackcollegians\\_050418.pdf](https://www.brookings.edu/wp-content/uploads/2018/04/mm_digitization_bi_blackcollegians_050418.pdf)
- Ng, W. (2012). Can we teach digital natives digital literacy? *Computers & Education*, 59(3), 1065–1078. doi: 10.1016/j.compedu.2012.04.016
- Parry, S. B. (1996). The quest for competences: Competency studies can help you make HR decision, but the results are only as good as the study. *Training*, 33, 48-56
- Parviainen, P., Tihinen, M., J.K.-I.J. of and 2017, U. (2017), “Tackling the digitalization challenge: how to benefit from digitalization in practice”, *Sciencesphere.Org*, Vol. 5 No. 1, pp. 63–77.
- Preston, Paschal & Kerr, Aphra & Cawley, Anthony. (2009). *Innovation and Knowledge in the Digital Media Sector – An Information Economy Approach*. *Information Communication & Society*. 994-1014. 10.1080/13691180802578150.
- Project Management Competency. (2018, December 28). Retrieved from <https://pmctraining.com/site/develop-your-core-competencies/project-management-competency/>
- PwC (2011). *Millennials at work: Reshaping the workplace*. (n.d.). Retrieved from <https://www.pwc.com/co/es/publicaciones/assets/millennials-at-work.pdf>

## REFERENCES (cont.)

- Rastogi, V. (2018, August 30). Thailand's E-Commerce Landscape: Trends and Opportunities. Retrieved from <https://www.aseanbriefing.com/news/2018/07/06/thailands-e-commerce-landscape-trends-opportunities.html>
- Reinartz, W., Wiegand, N., & Imschloss, M. (2019). The impact of digital transformation on the retailing value chain. *International Journal of Research in Marketing*, 36(3), 350–366. doi: 10.1016/j.ijresmar.2018.12.002
- Rigby, D. (2011). The Future of Shopping. *Harvard Business Review*. Retrieved from <https://hbr.org/2011/12/the-future-of-shopping>
- Rungfapaisarn, K. (2017, December). Retailers take omnichannel path in preparation for Thailand 4.0. Retrieved from <https://www.nationthailand.com/Corporate/30334856>
- Sale, J. E. M., Lohfeld, L. H., & Brazil, K. (2002). Revisiting the quantitative-qualitative debate: Implications for mixed-method research. *Quality and Quantity*, 36, 43–53.
- Scott, M. and Karl F. (2018), “Shift Happens”, <https://shifthappens.wikispaces.com>
- Self-Management Skills: Definition and Examples. (2020, January 27). Retrieved from <https://www.indeed.com/career-advice/career-development/self-management-skills>
- Singh, G.K., Singh, S.K., 2008. Malaysian graduates’ employability skills. *UNITAR e- journal* 4 (1), 15–45.
- Skills Framework for the Information Age. (2018, June). Retrieved from <https://www.sfia-online.org/en/tools-and-resources/using-sfia/browsing-sfia>
- Slevitch, L. (2011). Qualitative and Quantitative Methodologies Compared: Ontological and Epistemological Perspectives. *Journal of Quality Assurance in Hospitality & Tourism*, 12(1), 73–81. doi: 10.1080/1528008x.2011.541810

## REFERENCES (cont.)

- Speech by Mr S Iswaran, Minister for Trade and Industry (Industry), at the President's Science and Technology Awards. (2016, October 18). Retrieved from <https://www.mti.gov.sg/Newsroom/Speeches/2016/10/Minister-S-Iswaran-at-the-PSTA->
- The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution. (2016).
- Transitions Integration Framework. (2013). Academic Career & Employability Skills. Retrieved from [https://www.literacymn.org/sites/default/files/curriculum/routine\\_1\\_self\\_management\\_skills.pdf](https://www.literacymn.org/sites/default/files/curriculum/routine_1_self_management_skills.pdf)
- UNIVERSITY of NEBRASKA–LINCOLN. (n.d.). Core Competencies. Retrieved from <https://hr.unl.edu/compensation/nuvalues/corecompetencies.shtml/>
- Weforum. “An Introduction to the Digital Transformation of Industries Initiative.” Digital Transformation, reports. Retrieved from <https://weforum.org/digital-transformation/an-introduction-to-the-digital-transformation-initiative/>.
- Young, J., Risley, J., & Ali, F. (n.d.). US ecommerce sales grow 14.9% in 2019. Retrieved from <https://www.digitalcommerce360.com/article/us-ecommerce-sales/>