

# APPROACHES OF USING DIGITAL MEDIA TECHNOLOGY TO BUILD COMPETITIVE ADVANTAGE FOR BUSINESS

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## ABSTRACT

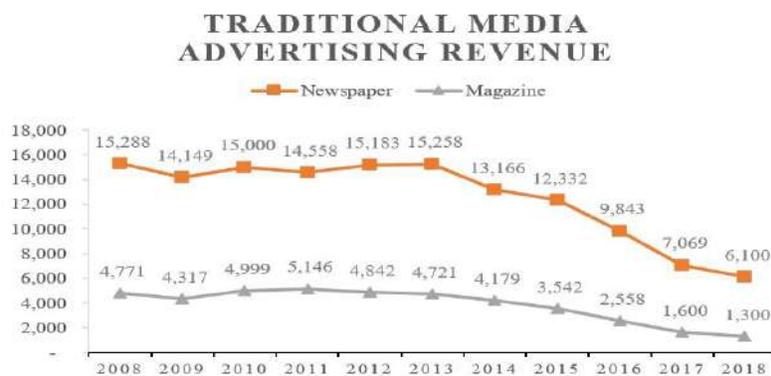
*One of the national strategies of Thailand 4.0 is The Digital Economy project. The Ministry of Digital Economy and Society (2016) predicts that by 2026, Thailand will be able to drive digital media innovation with full efficiency and compete on a global scale. This research aims to study the model of Approaches of Using Digital Media Technology to Build Competitive Advantage for Business sector. Qualitative and quantitative research was conducted in this study. Quantitative data were surveyed using questionnaires from 500 enterprises involved in digital media technology uses. The results show that Approaches of Using Digital Media Technology to Build Competitive Advantage for Business encompasses four elements consisted of: 1. Environmental Force ( $\bar{X} = 4.39$ ) the most important sub-item is keeping up with the new arrivals of digital technology such as artificial intelligence, podcast etc. ( $\bar{X} = 4.70$ ) 2. Digital Media Uses ( $\bar{X} = 4.38$ ) the most important sub-item is setting goals for the use of digital media in each project or using an appropriate platform ( $\bar{X} = 4.77$ ) 3. Digital Data Uses ( $\bar{X} = 4.35$ ) the most important sub-item is using the data to analyze the root cause of problems and predict future behaviors and come up with countermeasures ( $\bar{X} = 4.71$ ) 4. Digital Organization Readiness ( $\bar{X} = 4.26$ ) the most important sub-item which have the same mean ( $\bar{X} = 4.61$ ) are defining an organization's workflow system to facilitate digitalization, the establishment of a department solely responsible for digital media technology. The hypothesis testing shows that Approaches of Using Digital Media Technology to Build Competitive Advantage for Business sector, classified by business size, differed statistically at 0.05 levels. The analysis of the structural equation model also shows that passed the evaluation criteria had the Goodness of Fit Index with the empirical data and the chi-square probability was 0.173, the Comparative Fit Index was 1.055, Index of Item Objective Congruence was 0.935, and the Standard Root Mean Square Residual of the estimation error was 0.010.*

**Keywords:** Competitiveness; Digital media technology; Structural equation model.

## INTRODUCTION

Over the past decades, Thailand has continuously developed its own economy starting from an agricultural country or "Thailand 1.0" to a small industrial country "Thailand 2.0", and

expanding to a larger, more complex industry or "Thailand 4.0" or at present. However, the growth of "Thailand 3.0 to 4.0" did not meet expectations. The country's economy grew from 7-8 percent per year between 1957 and 1983 but is now only growing 3-4 percent and is negative in 2021 because the development model is "fragile" and unsustainable, including the use of foreign technology and capital, lack of technology transfer process and lack of capital accumulation, especially human capital development. In the end, Thailand is perceived as "the country seems to be modern and not developed". Moreover, Thailand has been trapped in the middle-income trap for the past 20 years. As a result of these problems, Thailand needs to change the mechanism of economic driving by focusing on the use of scientific knowledge, technology, innovation and creativity. Finally, it leads to "Thailand 4.0", which contains the vision and policy of economic development of Thailand, or the Thai government's economic development model based on the vision of stability, prosperity and sustainability (Techakana, 2021).



**FIGURE 1**

### **REVENUE FROM ADVERTISING NEWSPAPERS AND MAGAZINES DURING 2008-2018**

A 20-year national strategic framework was established between 2017 and 2036. The Office of the National Digital Economy and Society Board predicts that by 2026 Thailand will be able to drive and take full advantage of digital innovation. In this conceptual framework, each organization has to adapt using digital technology to increase the competitiveness caused by "Digital Disruption" or business transformation using digital technology (Verina & Titko, 2019). If the existing business is unable to adapt to the transformation into a digital organization, it results in a decrease in operating results or a business termination. The most obvious examples are the print media, retail and video rental businesses. Examples of industries that have been affected and adapted are the publishing and magazine industries. As reported by the Advertising Association of Thailand and The Nielsen (Thailand) Co., Ltd., which operates marketing consulting services, it was found that there was a continuous decline in print media after having the highest performance in 2008 at 16 billion baht and steadily decreasing until the latest in 2018 with a value of only 6,100 million baht (Online Manager, 2020) (Figure 1).

From the example above, it can be seen that if a business cannot adapt to enter a business that is driven by digital technology, the existing business will not be able to continue. Digital transformation means not only the adoption of digital technology as a tool for moving the business, but also as a key strategy of each organization because organizations that can't change

will be forced to change; otherwise they have to close the business (Dutot, 2013; Boosang, 2017). Organizations need to rely on the strategic role of new digital technologies and their ability to create successful digital innovations (Garcia-Morales et al., 2018).

The background and importance of the problem, including the phenomenon of the changing environment, can be discussed as follows. (1) The problem of changing the media consumption landscape of Thai people in the digital era is the widespread acceptance and digital media technology uses. (2) To access digital media technology easily, conveniently and without restrictions on time and place, it results in quick access to information as well as the transition from consumers to media producers. Digital media technology has become an integral part of Thai society today and also promotes the existence of occupations and communication as well as being an integral part of marketing strategies (The World Economic Forum, 2016). (3) The problem of adaptation to cope with "Disruptive Technology" is a big problem for small and medium-sized businesses or Thai SMEs (SMEs). Most of the Thai entrepreneurs have not adapted to the arrival of Disruptive Technology. (4) As for the problem of workforce adaptation, they lack confidence that they have the right skills to compete in the digital economy. Thailand's business structure still lacks the necessary knowledge and is used to traditional channels. Therefore, the organizational culture should be created, and the way of thinking and values should be cultivated so that the personnel are ready to cope with the rapidly changing global situation.

### LITERATURE REVIEW

For the past concepts and theories, the researcher could not find any study that summarize the approaches of using digital media technology to build competitive advantage for business so that it the being of this research with in-depth interview and literature review which found 4 components: Environmental Force, Digital Organization Readiness, Digital Media Uses and Digital Data Uses as the Figure 2.

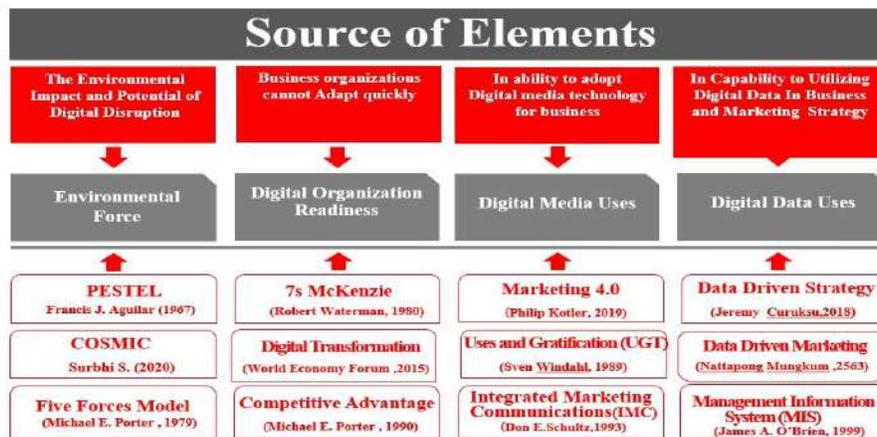


FIGURE 2

### THE ORIGIN OF THE RESEARCH COMPONENT ON THE APPROACHES OF USING DIGITAL MEDIA TECHNOLOGY TO BUILD COMPETITIVE ADVANTAGE FOR BUSINESS

### RESEARCH OBJECTIVES

1. To study the structure and nature of the organization's operations using digital media technology
2. To study the ways of using digital media technology classified by business size
3. To develop of structural equation model

### RESEARCH METHODS

This research was to create new knowledge using mixed research. It was divided into 3 components: qualitative research using in-depth interview techniques, quantitative research using survey data collection and qualitative research using focus group method to verify the validity of the research model. The method of conducting research consisted of the following steps:

The population used in the qualitative research was 9 experts in the digital media technology uses through in-depth interviews, and 11 experts using the focus group method. The population used in the quantitative research was SMEs and big industrial businesses registered in the Department of Business Development nationwide on the website of the Department of Business Development, Ministry of Commerce of 488,000 businesses. A sample size of 500 samples of a very high level was determined by Comrey and Lee (1992), categorized into 250 SMEs and 250 big businesses, using a multistage sampling method.

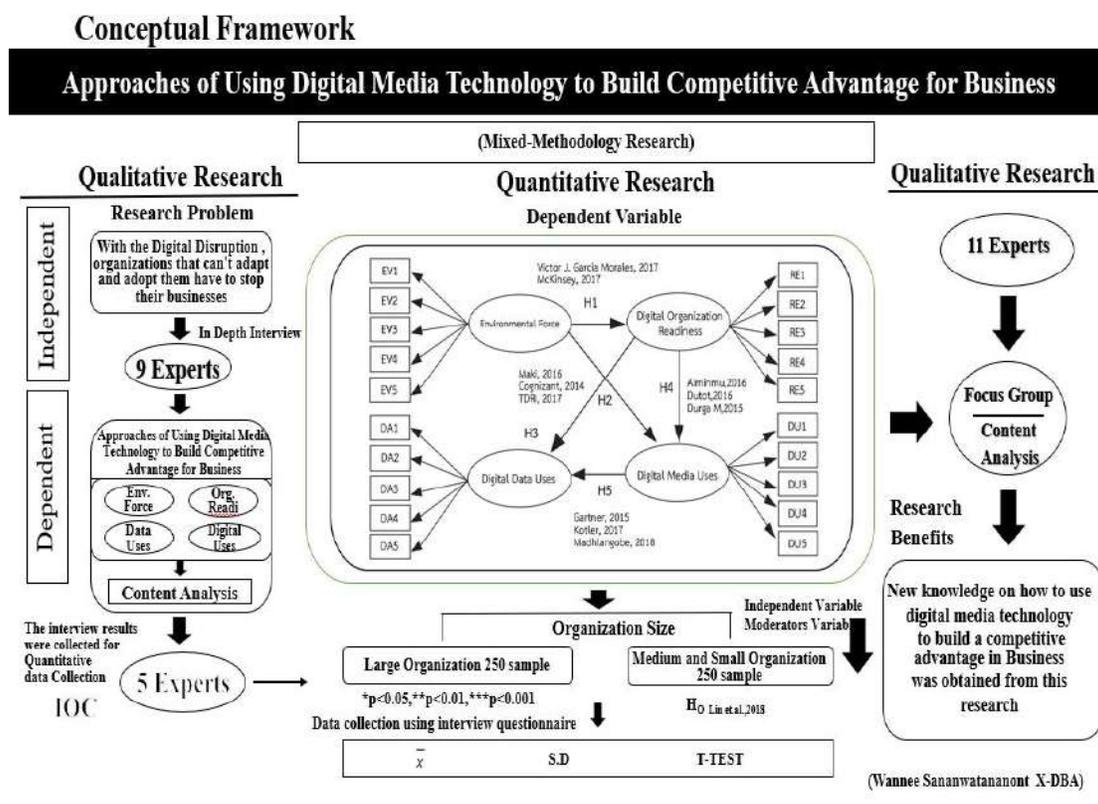


FIGURE 3

### THE ORIGIN OF THE ELEMENTS OF THE RESEARCH TOPIC APPROACHES OF USING DIGITAL MEDIA TECHNOLOGY TO BUILD COMPETITIVE ADVANTAGE FOR BUSINESS

The Methodology consisted of a Check List and Rating Scale questionnaire using a 100-item 5-Point Likert Scale. The Index of item objective congruence (IOC) was 0.60-1.00. The Checklist questionnaire was used to analyze the standard deviation and the value was 0.51-1.87. The Rating Scale questionnaire was used to analyze the Corrected Item-Total Correlation and the value was 0.34-0.75. The Cronbach's alpha coefficient was analyzed and the value was 0.977. The data collection was conducted using multi-stage sampling method.

Data Analysis was using both descriptive statistics, reference statistics and multiple statistics were used to analyze the data to develop a structural equation model (SEM) in SPSS and AMOS programs. The 4 criteria can be set for assessing the Data Model Fit as follows: (1) Chi-square Probability Level was greater than 0.05. (2) Relative Chi-Squared was less than 2. (3) Goodness of fit Index was greater than 0.90. (4) Root Mean Square Error of Approximation was less than 0.08. The research conceptual framework was shown in Figure 3.

## RESULTS

The researcher presents the overall results of the approaches of using digital media technology to build competitive advantage for business sector with the following conclusion.

The analysis results of approaches of using digital media technology to build competitive advantage in the business sector were conducted by qualitative research using in-depth interview techniques from 9 experts. It was found that it can be classified into four components: Environmental Force, Digital organization readiness, Digital media uses and Digital data uses.

The importance of The Approaches of Using Digital Media Technology to Build Competitive Advantage in the business sector (Singla & Durga, 2015), it was found that overall, the importance was high and the mean score was 4.35. In terms of aspects, Environmental Force was found to be high and had a mean score of 4.39; Digital Media Uses were high and the average score was 4.38, Digital Data Uses were high and average score was 4.35 and Digital Organization Readiness was high and the average score was 4.26; respectively. The data could be arranged in the following order:

Environment Force means tracking the new arrival of digital technology such as Artificial intelligence (AI) and Podcast with an average of 4.70, followed by tracking economic environments such as employment, household income and GDP with an average of 4.69, and net idol followers in terms of lifestyle, language, activities and likes and followers with an average of 4.68, respectively.

Digital Organization Readiness refers to defining systems and work processes in the organization to facilitate digital systems with an average of 4.61, followed by the establishment of departments directly responsible for digital media technology with an average of 4.61, and modifying the old operating system and connecting the system to the digital system with an average of 4.58 respectively.

Digital Media Uses, defined as targeting for digital media use in each project or platform appropriately with an average of 4.77, followed by the continued use of new applications, techniques and features of digital media presented with an average of 4.73 (SD=0.470), adding a map link to a service location in Google Map or QR Code in content for convenience for consumers with an average of 4.73 (SD=4.74), respectively.

Digital Data Uses refers to the use of data to analyze the causes of problems, predict future behavior and how to deal with problems with an average of 4.71, followed by the use of

qualitative and quantitative data for planning with an average of 4.68, and use of information from Google Analytics and Facebook Page Insight with an average of 4.67, respectively.

In conclusion, an analysis of the the Approaches of Using Digital Media Technology to Build Competitive Advantage for Business sector could be summarized: Overall, SMEs averaged 4.31, and sorted by importance was digital media uses with an average of 4.37, followed by environmental force averaged 4.32 and digital data uses averaged 4.31 respectively. Overall, big businesses averaged 4.38, and sorted by importance was digital media uses with an average of 4.46, followed by environmental force averaged 4.40 and digital data uses averaged 4.3 respectively.

Comparisons by Priority's approach to approaches of using digital media technology to build competitive advantage in the business sector can be classified by size of the business using a t- test; it was found that there was a significant difference at the 0.05 level. Big businesses prioritize approaches of using digital media technology to build competitive advantage for business over SMEs. For analyzing priorities of different approaches of using digital media technology to build competitive advantage in the business sector, when considering each aspect found that, Environmental Force, Digital Organization Readiness, and Digital Data Uses were significantly different at the 0.05 level. Digital Media Uses were not significantly different at the 0.05 level as shown in Table 1.

Approaches Of Using Digital Media Technology To Build Competitive Advantage For Business	Small and medium sized enterprises		Large scale enterprise		t-Value	P-Value
	$\bar{X}$	S.D.	$\bar{X}$	S.D.		
Overall	4.31	0.27	4.38	0.24	-3.43	0.00*
1. Environmental Force	4.32	0.44	4.46	0.36	-3.85	0.00*
2. Digital Organization Readiness	4.23	0.23	4.29	0.23	-3.00	0.00*
3. Digital Media Uses	4.37	0.28	4.39	0.29	-0.95	0.34
4. Digital Data Uses	4.31	0.42	4.40	0.38	-2.50	0.01*

Structural equation model of Approaches of Using Digital Media Technology to Build Competitive Advantage in the Business sector, the researchers analyzed and refined the model using modification indices considerations to exclude one at a time inappropriate observational variables until a model was obtained with all four statistical values (Arbuckle, 2011). It was found that Chi-Square Probability Level (CMIN-P) was 0.173, greater than 0.05; Chi-Square Statistic (CMIN/DF) equal to 1.055, less than 2; Index of item objective congruence (GFI) equal to 0.935, greater than 0.90, and Root Mean Square Error (RMSEA) was 0.010, less than 0.08 (Silpcharu, 2020). It could be concluded that all 4 statistics passed the congruence assessment criteria with empirical data as shown in Table 2 and Figure 3 and the meaning of the variables as shown in Table 3.

<b>Statistic</b>	<b>Criteria for consideration</b>	<b>Result before improvement</b>	<b>Result after improvement</b>
p value of Chi-square	Greater than 0.05	0.000	0.173
CMIN/DF	Less than 2	5.341	1.055
GFI	Greater than 0.90	0.352	0.935
RMSEA	Less than 0.08	0.093	0.010

<b>Variable</b>	<b>Meaning</b>	<b>Variable</b>	<b>Meaning</b>
EV2	Analyze competitors' success factors based on the use of digital media technology.	DU1	Set goals for the use of digital media in each project or platform appropriately.
EV7	Learn about technology media policies from government or related agencies that may affect your business.	DU10	Insert keywords in the content so Search Engine Optimization (SEO) can find at the top of the search.
EV8	Explore the different formats that replace traditional stores and sales channels.	DU11	Use infographics or animations instead of numerical data in a concise and easy-to-understand manner.
EV9	Closely follow the social trends, culture and tastes of consumers at each moment.	DU13	Continuously use new applications, techniques and tricks that come from digital media.
EV14	Monitor the economic environment such as employment, household income and GDP that may affect the business environment such as employment, household income and GDP that may affect the business	DU14	Develop websites and applications to present information about the organization while offering products and regular updates.
EV15	Stay tuned for new digital technologies such as Artificial intelligence (AI) and Podcasts.	DU18	Use digital media technology as a channel for corporate and executive social responsibility activities.
EV17	Follow up on the statistical report on the change in digital media consumption in the global society.	DU19	Create an online community as a space for like-minded audiences to share information.
EV20	Track and monitor the use of digital media that occur in socially misdirected such as Fake News or Web Hacking.	DU23	Use Chat Bot to set up automated conversation threads for instant communication.
EV21	Follow net idols in terms of lifestyle, language, activities with likes and the number of followers.	DU24	Insert a link of the location of the service on Google Map or QR Code in the content to make it more convenient for consumers.
EV25	Stay tuned for new digital media features added or removed.	DU25	Adding channels for ordering products and services via digital media such as Line@, Grab Food and Line Man for quick delivery.
RE 2	Establish a department directly responsible for digital media technology	DA2	Integrate data from different departments in organizations (Lamesawan et al., 2022)

RE3	Determine the workflow system that is conducive to the digital system of the organization.	DA4	Use data from Google Analytic and Facebook Page Insight to see feedback from the target audience and use it as a guideline for planning the next digital media use.
RE8	Prepare your organization by recruiting people with digital expertise to join the organization.	DA6	Install data security software.
RE13	Implement a system so that all departments can link together using digital media technologies such as sales, accounting, warehousing and shipping.	DA7	Determine the use of qualitative and quantitative data for planning.
RE 16	Change the old working system to be able to connect to the digital system.	DA8	Store various data that exists in the form of Big Data.
RE17	Implement digital media technology systems, taking into account the organization's structure, systems, departments and strategies, including practicality.	DA11	Use data to develop new products with product positioning or new market penetration.
RE19	Set up a system to use digital media technology to support real-time service 24 hours a day.	DA18	Analyze the data to determine the root cause of problems, predict future behavior and find ways to respond to organizations facing problems (Wantanakomol & Silpcharu, 2020).
RE22	Provide a cloud operating system so employees can work on their own or collaborate anywhere, anytime.	DA25	Take the transaction data through digital media channels of customers to process in the form of goods purchased, amount per purchase, and purchase frequency to present products on digital media in the future.

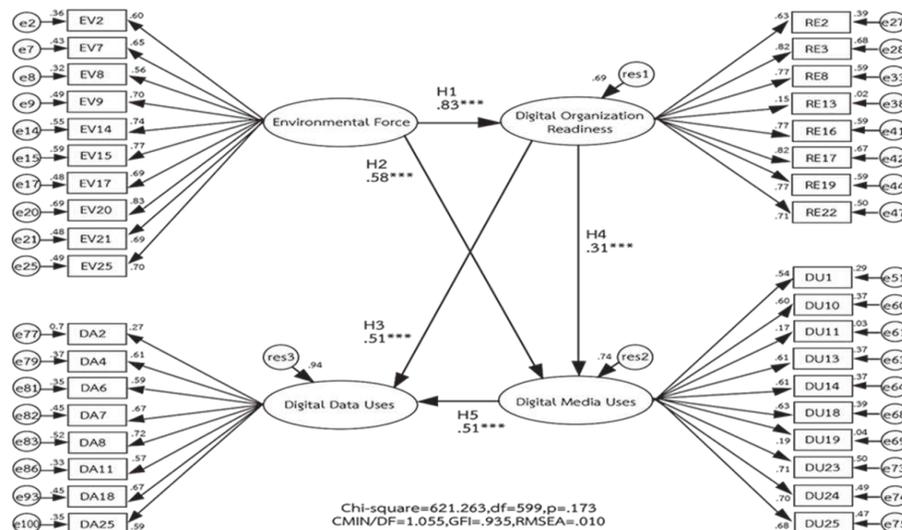


FIGURE 3

**STRUCTURAL EQUATION MODELLING APPROACHES OF USING DIGITAL MEDIA TECHNOLOGY TO BUILD COMPETITIVE ADVANTAGE FOR BUSINESS IN STANDARDIZED ESTIMATES MODE AFTER MODEL IMPROVEMENT**

According to the hypothesis testing results by analyzing the causal influence between variables in the structural equation of Approaches of Using Digital Media Technology to Build Competitive Advantage in the Business sector, 5 hypotheses were found as follows: (1) Environmental Force had a statistically significant direct influence on Digital Organization Readiness at the 0.001 level, and Standardized Regression Weights were 0.83. (2) Environmental Force had a statistically significant direct influence on Digital Media uses at the 0.001 level, and Standardized Regression Weights were 0.58. (3) Digital Organization Readiness had a statistically significant direct influence on digital data uses at the 0.001 level, and Standardized Regression Weights were 0.51. (4) Digital Organization Readiness had a statistically significant direct influence on Digital media uses at the 0.001 level, and Standardized Regression Weights were 0.31. (5) Digital media Uses had a statistically significant direct influence on Digital Data Uses at the 0.001 level, and Standardized Regression Weights were 0.51.

## DISCUSSION

Comparison of approaches of using digital media technology to build competitive advantage in the business sector classified by business size, it is found that environmental force, digital organization readiness and digital data uses were significantly different at the 0.05 level, and digital media uses were not significantly different at the 0.05 level. Consistent with research, big businesses had access to technology procurement and specialist recruitment with a broad digital technology network and technological savvy specialist. As a result, big businesses were more prepared than SMEs.

According to the hypothesis testing results, it was found that environmental force had a direct influence on the digital organization readiness and the standardized regression weight was 0.83. Consistent with the report, digital media technology had a huge influence. Organizations need to cope with changes in the era of “globalization” or “digital disruption”, it could cause many obstacles and opportunities for new business or economic activities that the older generation had never seen before and did not understand business in the digital world (Jitvirat, 2018). Everything is connected by technology. The new generation of entrepreneurs must be progressive, modern and ready to change themselves all the time. Otherwise, businesses that had been passed down from their parents' generations or those that had been operating for more than 10-20 years and had been successful would not survive. Therefore, analog businesses need a digital transformation that affects the dynamics of the socio-economic environment (Cognizant, 2014). In other words, it was a sudden, violent, rapid, and complex change that may affect organizations that could not adapt to shut down quickly. They should also be open to new skills that key to using digital media technology as much as possible.

Approaches or Using Digital Media Technology to Build Competitive Advantages, when considering each business, it was found that, Environmental Force had the highest average ( $\bar{X}=4.39$ ). This was consistent with study of Tapscott (2015) in “*The Digital Economy*” found that the advent of Digital Disruption had severely impacted traditional business structures. The middleman system was eliminated. Digital media technology and audiovisual data functionality were integrated into digital media to enable consumers to access resources and find vendors for them. They could also customize their communication and accessed to social networks, as well as choosing and setting their own rules. The changing environment of Digital Disruption was heavily impacting the transformation of large enterprises that were once highly successful such

as GE Information Services, Hewlett-Packard (HP), or BusinessWeek. These companies had to shut down and replace them with new digital media-driven business names such as Facebook, Uber, Google, or Tesla. In addition, the cost of maintaining one's standing is more expensive than moving in a new digital world.

The results of each research topic were found that priority of Approaches of Using Digital Media Technology to Build Competitive Advantage in the business sector, the sample group gave priority to the goal of using digital media for each project or using the platform properly, and the mean was 4.77. Consistent with the study of Kunlatida (2015), it was found that nowadays, online media has become extremely popular due to the development of digital technology and the advancement of marketing communication promotion. Social media has become the primary medium of choice for media planners for event marketing communications in the digital age (Aimiuwu, 2012). Television, radio, and print media have been reduced. The study also found that there were important steps in the media planning process for event marketing communications: analyzing the marketing situation, communication goals, identifying the target audience and choosing the right platform for the objectives and target audience was a meticulous process, and must work together between the media planning and event creative departments to ensure that the communication flows in the same direction. Media planning in the pre-event phase was the use of media to create awareness of participation initially.

## RECOMMENDATIONS

There were 5 recommendations obtained from the research of the structural equation model on Approaches of Using Digital Media Technology to Build Competitive Advantage in the business sector as follows:

### Environmental Force

#### Government

Recommendations to the government were the government must focus on entering Thailand into "*Thailand 4.0*" completely by campaigning and encouraging business organizations to study in terms of today's business environment, and the rapidly changing consumer behavior in the digital era. At the same time, governments must develop digital infrastructure to enable businesses and consumers to use digital technology to its fullest potential. It was important to make Thailand a world-leading Digital Nation within 20 years as stipulated in the 20-Year National Strategy, along with E-Government, E-Society, E-Education and E-Business.

#### Private sector

Business operations in today's business need to analyze the rapidly changing environment in order to understand the opportunities and obstacles of business in the digital era. This is to set guidelines for digital transformation organization to respond to the changes of the world mainly driven by the evolution of digital technology. In the perception of the environment in terms of changing consumer behavior due to changing values and tastes, the competitive environment and the development of digital technology directly affecting the current business operations, it was

found that the study of the environment was the most important factor because it directly and indirectly influenced other factors.

### **Importance of digital media**

The rapidly evolving digital media technology has created a variety of digital communication channels. The presentation of different news in each channel makes consumers more eager to seek information through digital media channels. At the same time, various channels of digital media are not only channels of communication for product promotion (P: Promotion), but also channels of transactions in the form of electronic commerce (E-Commerce). Digital channels are a place (P: Place) to deliver goods and services to consumers that are more convenient than buying from a traditional store. As a result, the point of operation of the point-of-sale retail business has been significantly reduced. Digital media technology is a channel of communication and a channel of mobility that takes place anywhere, anytime and in real time as a consumer demand.

### **Digital media for business opportunities**

The development of digital technology has created a wide range of business opportunities in terms of Data Management, Data Storage and Data Mining. Communicating with consumers on the digital space creates Customer Engagements conversations as a tool for implementing a customer relationship management (CRM) strategy. This is an especially important marketing strategy to build loyalty. Using digital media allows consumers to express their thoughts and needs through digital media. In addition, digital technology increases the productivity of business operations through Automation technology, Artificial Intelligence (AI) and Self-Service Technology (SST) to save time and business costs.

### **Readiness to cope with changes in the organization need for change**

There are some interesting change suggestions. Organizations must realize that the evolution of digital has an impact on Digital Disruption organizations that must adapt to the evolution of digital technology. Digital Transformation is a “must do” approach, not an “optional” approach. Changes can be initiated using organization alignment, such as the addition of a digital department and a technological savvy specialist. Digital organization includes digital business, digital marketing, digital communication, and digital media. It is all about cultivating a digital culture as a guide for how organizations work. Employees at all departments and levels must share a common value - a belief in the necessary change caused by Digital Disruption - that factor in shaping the course of change. Digital Transformation is a key driver of business operations today and even more important in the future.

### **Effectiveness in change management**

In order to transform an organization effectively, it requires cooperation from all employees and there is no resistance because of their lack of understanding or lack of confidence in their position if technology is used in business operations. As the evolution of digital technology, dynamic change must occur rapidly. Therefore, organizations must encourage

employees to have sense of urgency through grouping of employees in the organization as Change Agent to join this change and must reward them for their role in leading the change champion. In-house campaigns for employee to believe that changes need to be taken urgently and assuring them that organizations are putting digital media technology at the heart of their drive. It should provide information about the use of corporate digital technology in its entirety and avoid situations of opposing the use of artificial intelligence (AI) technologies in place of some employees, along with creating a new culture for seamless connection between Machine & Human. Employees must ensure the status and security of their jobs in order to prevent any resistance to digital transformation.

The ability to use digital technology is part of the Key Performance Indicator (KPI) based on the Balance Scorecard principle. The success of an organization should not only be measured by its financial performance but also by consumer satisfaction. Improving the work system of the organization and the learning of employees is essential. Therefore, changing the organization to digital organization, if employees have the ability to use digital technology to work more efficiently, rewards should be given to their morale. The ability to use technology to perform various roles must be one of the key indicators (KPI) in the evaluation of employees.

### **A focus on mobility business that takes place anywhere, anytime and in real time**

In the book "*The World is Flat*" there are 4 important phenomena in modern times as; (1) Personal means everyone has to be technologically capable and able to use digital technology on their own without relying on anyone. (2) Mobility means not attached to the place and able to communicate and transact anywhere, anytime. Organizations should adopt the principle of "Anytime, anywhere" in their business operations. (3) Virtual refers to the adoption of digital media technology to reduce human interface and create interactions and transactions with customers in the virtual world such as a virtual community on a digital space to allow consumers to chat, exchange information and experiences with each other, and a virtual showroom. "Virtual" is used in business to create a competitive advantage through virtual meetings with customers through digital channels, which allows organizations to reduce time and costs while building more opportunities and relationships. (4) Modern technology is like a "steroid" that can be used quickly and used for everything. Therefore, organizations must find ways to use technology to its fullest potential. Departments that are ready for Digitalization should take actions such as Marketing, Marketing Communications and E-Transaction.

### **Using Digital Media Technology as A Primary Channel for Communication and Services**

In today's digital space, there are many different communication channels, and each of them plays a different communication role. Entrepreneurs must learn each channel appropriately, for example, Website is used for introducing organizations and products; E-mail is used for personal communication with customers; Google Search Engine is used for providing information about products and services; YouTube is used for showing animations; Blog is used for expressing thought leadership; Facebook is used for discussion and discussion of products and services and timely presentation of corporate activities; Fan Page is used to create a virtual community for customers to exchange information and experiences with each other, and Instagram is used for showing pictures of products and establishments. In addition to providing

information to general customers, digital channels can also be used to provide services to online customers to save money and time.

### **Building a culture 24/7 in real time**

The use of digital media technology must operate and respond to customer information needs in real-time through digital channels. In addition to providing information to customers, they must also answer customer questions in real-time. Therefore, organizations must operate a business 24/7 by generating automated responses to answer customer questions in real-time through the Internet of Thing (IoT), a program that machines can communicate with each other at any time.

### **Digital communication to encourage interactive conversations**

Providing information to consumers must be communicated in accordance with the orbit of consumers' purchasing decisions. Customer Journey creates awareness to keep consumers interested in products and encourage them to engage in interactive conversations. If the customer has any further questions, it is imperative to reassure those purchasing decisions and impress consumers so that they are loyal to the brand and ready to introduce their brand to others in the digital space. Customer Journey's 5 digital communication processes must drive interactions on the digital space in order to align with consumers' purchasing decisions in the digital age known as "*C-Commerce Conversation Commerce*". This means that the consumer will make a purchase decision after a successful conversation between the buyer and seller. All of this is based on the 5 concept of "*Customer Journey*" in Phillip Kotler's book Marketing 4.0.

### **Omnichannel multi-channel communication**

The principles of marketing strategy are comprised of 3D: 1) Value Discovery 2) Value Development and 3) Value Delivery that operates through 3 channels: 1) Channel of Distribution 2) Channel of Service and 3) Channel of Communication. Once an organization understands its environment and readiness, we must communicate with consumers with Omni Channel, multichannel communication. Moreover, the importance of both online and offline marketing is the ability to reach a diverse audience and the strategy of using digital media technology such as Integrated marketing communications that focuses on content marketing and use storytelling to communicate thoroughly online and offline. More importantly, online marketing and social media use nowadays are cost-effective and cheap, but they can reach a broad audience quickly. Moreover, the effective use of digital media technology creates value of digital data that bring competitiveness to business sector.

### **Digital Information Use**

Data is a valuable asset to an organization because it takes the organization's resources to obtain, so it is extremely important to maintain and prevent the possibility of snatching outside the organization. In addition to maintaining data in an organization, data is only useful when it is modernized and can be used to formulate a business strategy known as "Data Driven Strategy", which produces more efficiency than using the intuition and experience of the planner.

## Uses of big data

Big Data consists of 4V features including volume, velocity, variety, and veracity. The ability to analyze organizational data is therefore necessary and become an organization's Core Competency, which creates a competitive advantage in this era. At the same time, the organization should have a large amount of data and qualitative data that can be used to create benefits for the organization in the future.

## New generation of customer-controlled data

In today's era, this is the era of customer-controlled data. In the past, data was generated from within an organization known as a database, which was internal data such as sales data, accounting data, production data and inventory data. Nowadays, data is generated through online conversations where organizations collect these data for analysis to determine customer needs, which is known as Big Data. When an organization obtains information from crowd sourcing, it leads to the development of products and services and leads to innovative products and services that ultimately resonate with customers.

## Various and connected communication channels

Although digital information is important in this day and age, the integration of online and offline information is still necessary. Data analysis capabilities include extraction and deletion, which provide a starting point for selecting useful data and deleting useless data. Finally, useful information is used to make decisions about business operations.

Descriptive analytics is the analysis of the results of various actions, for example, factors affecting customer decision-making behavior and sales reports or performance reports. Predictive analytics is performed by using data that has happened in the past to predict what will happen in the future by using statistical models or using AI technology to help analyze data in Big Data. Diagnostic analytics is performed by explaining the cause of an occurrence and using variable correlations, for example, an analysis of the relationship between sales and marketing activities to determine whether there is a significant increase or decrease in sales. Prescriptive analytics is the most complex type of analysis because it forecasts what is going to happen to determine its causes, pros, cons, and timeframes to make recommendations or select the best outcome. It also analyzes in terms of how each choice will produce possible outcomes.

## Implementation This Model

Businesses need to keep up with the dynamic environment of the organization, especially the rapidly changing digital disruption. Organizations must urgently transform to digital organizations in terms of infrastructure competency and corporate culture. Digital mindset should be adjusted because today's communication channels can reach a wide range of consumer groups. The use of digital media technology requires omnichannel, converging communications throughout the supply chain using digital media technology as a driver, along with developing analytics and big data analytics competency for effective and efficient use of digital media technology. More importantly, entrepreneurs need to find a balance between the use of digital

data to create a competitive advantage for their business and the ethical privacy of their customers' personal data. This is the heart of the organization in Digital Era.

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