# The Development Model for Digital Transformation of Hotel in Thailand

## Voradit Thanapatra<sup>a</sup>, Araya Uengpaiboonkit<sup>b</sup>

<sup>a</sup> Graduate school, Sripatum University

- <sup>b</sup> Faculty of Management Technology, Rajamangala University of Technology Isan, Surin Campus
- <sup>a</sup> voradit@gmail.com], <sup>b</sup> araya\_eung@hotmail.com

Article History: Received: 10 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published

online: 20 April 2021

**Abstract:** This research aimed to 1) study the elements of the development model for digital transformation of hotel in Thailand and, 2) to develop the model of the digital transformation of hotel in Thailand. There are 3 steps of research: 1) study documents and related research 2) develop a model for digital transformation of hotel in Thailand 3) analyzed the elements of the development pattern of the digital transformation of hotel in Thailand by analyzing the elements; The statistics used for data analysis were percentage, range, quartile, mean, standard deviation and elemental analysis. Research findings showed that 1) The study of the digital transformation of hotel in Thailand found that it consisted 3 important components: business model, operational process and customer experience. 2) Development of the digital transformation of hotel in Thailand found that there are 5 main components: organization, information technology, innovation, digital transformation and business performance, and the level of the digital transformation of hotel in Thailand overall are good.

Index Terms: Digital Transformation, Hotel, Model Development

## 1. Introduction

Digital transformation is having a widespread impact on all sectors, both social and industrial. In all categories, digital transformation is considered to be the cornerstone of the transformation leading to added value to the organization [1], such as adding benefit from strong relationships with existing customers in the making. Cross-Selling through successful digital transformation [2], [3], digital transformation is not just about providing and adapting technology. Use it for its intended purpose only. But it is also an important means of solving management problems in other areas [4]. In the blur of the industry, innovative companies have rapidly applied new digital technology to each other. Industry to deliver value to customers who love new things and streamline processes to be efficient as an alternative market and respond to customer needs, and gradually break down the roles of existing businesses such as Netflix and Uber are fast-growing companies with digital transformation either creating new forms of business or reshaping existing business models. Kodak and Nokia have failed to respond to the trend of digital people increasingly losing their markets because of their business failures. Companies that are able to develop new technologies meet user expectations and are consistent with the rapidly changing technology [5]. Today's digital transformation is put forward as a complex issue has an effect on many parts of a digital technology company can also lead to fundamental changes in business, product models, manufacturing processes and organizational structures with many options and factors to consider, such as information technology coupled with technological innovation and includes: Organizational management Process Successful digital transformation processes require approach and balance in securing organizational resources with capacity building and human resource development. These are not obvious traits and can lead to difficulties in managing the business if businesses ignore or choose different direction of change [5].

The main problem with digital transformation lies in the differences in digital technology use some businesses are changing with little adoption of digital technology, so it is a question of small change. Is this a digital transformation? [6] Digital transformation is a nature of transformation and transformation driven and built on the basis of internal digital technology. The organization is set to transform it into big data analytics, cloud, mobile platforms, and social media the current business environment is facing a radical shift in the business landscape caused by creating innovation and digital opportunities. Companies are taking on more opportunities. Digital technology is not just affecting the way businesses operate. But it also affects business models that exist in many industries, and the transformation will expand significantly, so organizations must choose whether to digitally transform their existing businesses and benefit from these technologies or allow them to stop. Disrupted by traditional business processes and models [7], while disruptions caused by digital technology have led to positive business transformation and new opportunities. Manage something linked to digital innovation and transforming the ability to structure business processes [8]. These challenges may arise from the complexity involved in convergence. Of digital business models versus traditional business models, including the embedding of digital technology in non-digital products and services [9], [10]. New business processes that require significant organizational changes [11] In addition, one of the most common problems with technology adoption is the ability

<sup>\*</sup>Corresponding author e-mail: voradit@gmail.com

to use technology. Most organizations, especially small ones, do not have the skills and ability to properly use modern technology to create value for an enterprise or improve its value [12].

As a result of the aforementioned problems, digital transformation in organizations poses a significant challenge for businesses, especially in the hotel chains that are widely adopted today by digital transformation. The digital transformation in the organization is influenced by the digital revolution and a number of different forms, both in terms of skills and convenience, with digital technology at both the individual or corporate employee level, thus enabling the integration of it is not easy for an organization to digitally adapt to maintain its core values and success [13]. It is very important to the business today, the researcher is interested in studying the development of digital transformation of hotel business in Thailand, a country with high tourism advantages.

## 2. Research Objectives

This research aims to 1) study the elements of the digital transformation development model of the hotel business in Thailand and 2) to develop the digital transformation development model of the hotel business. In Thailand

## 3. Research Methodology

## Population and sample group

The model of this research was quantitative research. (Quantitative Research Methodology) by conducting broad-spectrum empirical quantitative research that provides general applicable conclusions in all areas to examine the theoretical framework established by the researcher from the principles, concepts and concepts of quantitative research. Theory To obtain findings on important issues, the researcher collected data by using questionnaires for hotel businesses in Thailand, 2020, totaling 9,489 locations to determine the appropriate sample size for the analysis of the data with the LISREL program. Statistical Structural Equation Modeling (SEM) technique in which sample size must be 10-20 persons per research variable. [14] In this research, the researcher had 13 observable variables in the model. Therefore, the sample size that was suitable and sufficient should be 260 (20 x 13). Data were collected by mailing questionnaires and meeting at the workplace to obtain the proportion of questionnaires in response to this research. The researcher used multistage random sampling as the population in the study. With a large number of sizes it is necessary to select the sample from the largest scale and select the sample in subgroups with a minor level. [15] with population divided into subgroups according to step sequence.

### Research tool

The tool used for data collection was a questionnaire. Questionnaire can be divided into 6 parts: 1) general information of respondents, 2) organizational management, 3) information technology, 4) innovation, 5) digital transformation and 6) business performance. In creating the research tool, the researcher studies concepts, theories and related literature to define the operational definitions and the structure of the variables to be studied. The developers of the instrumentation and trial issues have been modified to suit the research, and the researcher has presented the developed questions to the experts to verify the content of the questions raised by the researcher. To study concepts, theories and related literature in both domestic and foreign literature, the researcher then took the draft questionnaire to test the validity by bringing the questionnaire that the researcher created to the expert. The content validity of the whole questionnaire was 0.95, which was considered in the criteria (IOC> 0.50) [16]. It covers the content that the researcher wants to study, so it can be used to collect data and test the confidence. (Reliability) with the confidence value of the whole questionnaire is equal to 0.989. [15] Statistics used in data analysis the researcher has determined appropriate statistics and consistent with statistical data in order to answer the research objectives set. The statistics used in data analysis have the following 4 sections:

Part 1: Statistics for descriptive analysis are used to describe or describe the attributes or properties of the data distribution of the variables according to the characteristic factor of the group by defining the measure as percentage (Percentage), mean and value. Standard Deviation: Researcher analyzed the basic statistical values of 13 observable variables,

Part 2, inter-variable relationship analysis statistics for the relationship between variables by Pearson's correlation coefficient analysis. (Pearson's Product-Moment Correlation Coefficient) whether there is a linear relationship or not able to determine the direction of the relationship. What is the value of the relationship (positive or negative) and what is the relative size of the relationship as a basis for analyzing the digital transformation model of the hotel business in Thailand? [15].

Part 3. Statistical analysis of the stability of the latent variable and the mean of the variance that was extracted. The researcher considered the stability of the latent variable (Construct Reliability: pe). And the Mean Variance Extracted (p.) By using the formula of Diamantopoulos & Siguaw [17]

Part 4: Statistical analysis of structural equation models, researchers used it for the analysis of Structural Equation Modeling (SEM) models to verify the harmony of research models with empirical data (Model). Fit) by the researcher to check the conformity of the model with the empirical data (Assessment of Model Fit) by the index used to check the consistency of the Model (Measurement Model) with the empirical data. [14]

#### 4. Research Results

Research Summary The researcher divided the topics of presentation into 5 topics. Details are summarized as follows:

- 1. General information of the respondents Most of the respondents were female, 66.42 percent of the respondents were aged between 40. 49 years, accounted for 35.17%, has 11-15 years of work experience, or 37.69%, has a current position as manager, 20.48%, respectively.
- 2. Average data of management variables, information technology organization, digital innovation, transformation and business performance
- 2.1 Organization Management (Organization Management) The respondents had a high level of opinion about organizational management at a high level. When considered on a single side, it was found that the competitive advantage had the highest level of opinion, followed by the effectiveness of the organization management. There were differences of strategies and relations among stakeholders, respectively.
- 2.2 Information Technology The respondents had a high level of opinions about information technology at a high level. There was the highest level of opinion, followed by proactive stance and business expansion, respectively.
- 2.3 Innovation: Respondents had a high level of overall opinion on innovation when considered on a specific basis. Regarding improvement and new direction, respectively.
- 2.4 Digital Transformation Respondents had overall opinion on digital transformation at the level of digital transformation. When considering each aspect, it was found that the customer experience had the highest level of opinion, followed by the work process and the business model, respectively.
- 2.5 business Performance) The respondents had a high level of opinion on the overall business performance, when considering each aspect, it was found that financial performance had the highest level of opinion, followed by results. Operating non-financial, respectively
- 3. The results of checking the consistency of the research model with empirical data the results of the analysis of the model from the model modification (Model Modification) were analyzed for the overall model harmony index after the researcher had performed the modifications. That the model was consistent with the empirical data, with the six indexes that met the acceptance criteria: index 1 / df = 0.265, CFI = 0.999, GFI = 0.99, AGFI = 0.98, RMSEA = 0.000, and SRMR = 0.021 It can therefore be concluded that the structural equation model is appropriate and harmonized with the empirical data.

#### 4. Path Analysis Results

- 4.1 Organization Management (OM) has a positive direct influence on digital transformation (DT) with a direct influence of 0.36, which is a statistically significant influence at the. 05
- 4.2 Information technology (IT) has a positive direct influence on digital transformation (DT) with a direct influence size of 0.40, which is a statistically significant influence at the. 05
- 4.3 Innovation (IN) had a positive direct influence on digital transformation (DT) with a direct influence size of 0.25, a statistically significant influence at the. 05
- 4.4 Digital Transformation (DT) has a positive direct influence on business performance (BP) with a direct influence size of 0.32, which is a statistically significant influence at the 0.01
- 4.5 Organizational Management (OM), Information Technology (IT) and Innovation (IN) have a positive indirect effect on business performance (BP) through digital transformation (DT), with scale of influence. Indirect was 0,22, 0.32 and 0.28 respectively, which were statistically significant influence at the. 01

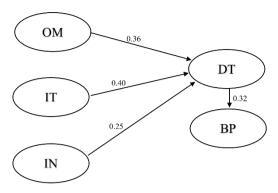


Fig.1 Analysis of variable effect in model for digital transformation of hotel in Thailand

## 5. Discussion

Research Summary The researcher divided the topics of presentation into 5 topics. Details are summarized as follows:

- 1. General information of the respondents Most of the respondents were female, 66.42 percent of the respondents were aged between 40. 49 years, accounted for 35.17%, has 11-15 years of work experience, or 37.69%, has a current position as manager, 20.48%, respectively.
- 2. Average data of management variables, information technology organization, digital innovation, transformation and business performance
- 2.1 Organization Management (Organization Management) The respondents had a high level of opinion about organizational management at a high level. When considered on a single side, it was found that the competitive advantage had the highest level of opinion, followed by the effectiveness of the organization management. There were differences of strategies and relations among stakeholders, respectively.
- 2.2 Information Technology The respondents had a high level of opinions about information technology at a high level. There was the highest level of opinion, followed by proactive stance and business expansion, respectively.
- 2.3 Innovation: Respondents had a high level of overall opinion on innovation when considered on a specific basis. Regarding improvement and new direction, respectively.
- 2.4 Digital Transformation Respondents had overall opinion on digital transformation at the level of digital transformation. When considering each aspect, it was found that the customer experience had the highest level of opinion, followed by the work process and the business model, respectively.
- 2.5 business Performance the respondents had a high level of opinion on the overall business performance, when considering each aspect, it was found that financial performance had the highest level of opinion, followed by results. Operating non-financial, respectively
- 3. The results of checking the consistency of the research model with empirical data the results of the analysis of the model from the model modification (Model Modification) were analyzed for the overall model harmony index after the researcher had performed the modifications. That the model was consistent with the empirical data, with the six indexes that met the acceptance criteria: index 1/df = 0.265, CFI = 0.999, GFI = 0.99, AGFI = 0.98, RMSEA = 0.000, and SRMR. = 0.021 It can therefore be concluded that the structural equation model is appropriate and harmonized with the empirical data.

# 4. Path Analysis Results

- 4.1 Organization Management (OM) has a positive direct influence on digital transformation (DT) with a direct influence of 0.36, which is a statistically significant influence at the. 05
- 4.2 Information technology (IT) has a positive direct influence on digital transformation (DT) with a direct influence size of 0.40, which is a statistically significant influence at the. 05
- 4.3 Innovation (IN) had a positive direct influence on digital transformation (DT) with a direct influence size of 0.25, a statistically significant influence at the. 05
- 4.4 Digital Transformation (DT) has a positive direct influence on business performance (BP) with a direct influence size of 0.32, which is a statistically significant influence at the 0.01
- 4.5 Organizational Management (OM), Information Technology (IT) and Innovation (IN) have a positive indirect effect on business performance (BP) through digital transformation (DT), with scale of influence. Indirect was 0,22, 0.32 and 0.28 respectively, which were statistically significant influence at the. 01

- 3) Innovation has a positive direct influence on digital transformation. Due to innovations for the new digital age, digital transformation is essential to organizations due to the need to compete in the marketplace. Therefore, organizations should undergo significant structural changes. Digital transformations enable organizations to change according to the needs of modern businesses, making their operations more efficient [19], according to a [24] The study found that digital technology is largely dependent on technological innovations such as mobile technology, analytical solutions, etc., while digital trans The floor covering is much more extensive than that, so Thus, digital transformation is studied from different perspectives, and studies have shown that digital transformation affects every aspect of an organization. This is consistent with Cisco & Oracle [25] research focused on the development of new technologies related to digital transformation. In addition, Nwankpa & Roumani [11] on information technology competence. And digital transformation, a case study of business performance perspectives, also found that digital transformation has a positive influence on innovation and company performance. This is also in line with the research of [19] that studies the main characteristics of organizational structures that support digital transformation. Create innovations that are sufficient for internal use.
- 4) Digital transformation has a positive direct influence on business performance, possibly because the company is able to improve its business competitiveness and promote its growth potential through testing digital transformation. The results show that digital transformation is a task that every company cannot avoid due to: The company needs to adapt to its potential to fit into a broadly established business activity model and use it as a business development strategy [26], in line with Nwankpa & Roumani [11] the research results are consistent and support how digital transformation affects business performance by studying the capabilities of information technology and digital transformation. In a case study of perspective on business performance, empirical data showed that information technology capabilities would have a positive effect on the Company's operating efficiency. Positive influence on innovation and the Company's performance in line with the results of the [27] study, the impact of digital transformation on the corporate performance of SMEs in Taiwan. In terms of service, it has a significant impact on organizational performance, in addition, it was found that the negative impact of more industry standard data is more correlated with the performance of SMEs. Also, and, like Stief et al. [26], study the transformation to success, the empirical analysis of the digital transformation of all companies facing increased demand. Businesses need to adapt and integrate digital technology to transform business activities to pursue business development through the use of new digital technologies.

#### 6. CONCLUSION

According to the study, it was found that the mean data of management variables, organization, information technology, digital innovation, transformation and overall business performance were at high levels. Research and empirical data showed that the overall model harmony index was consistent with the empirical data and the path analysis results showed that organizational management, information technology and innovation had a positive direct influence on digital trans. Information technology and digital transformation have a positive direct influence on business performance and organizational management, information technology and innovation have a positive indirect impact on business performance.

# References

- 1. Gudergan, G. & Mugge, P. (2017). The gap between practice and theory of digital transformation, in Proceeding Hawaii International Conference of System Science, Hawaii, pp. 1-15.
- 2. Weill P. D. & Woerner, S. (2015). Thriving in an increasingly digital ecosystem. MIT Sloan Management Review, 57 (3).
- 3. Westerman G. & Bonnet, D. (2015). Revamping your business through digital transformation. MIT Sloan Management Review, 56(3), pp. 10-13.
- 4. Li, L., Su, F., Zhang W. & Ye Mao, J. (2017). Digital Transformation by SME Entrepreneurs: A Capability Perspective. Information System Journal, June 2017
- 5. Kwon, E. H. & Park, M. J. (2017). Critical Factors on Firm's Digital Transformation Capacity: Empirical Evidence from Korea. International Journal of Applied Engineering Research. 12 (22), pp. 12585-12596.
- 6. Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading Digital: Turning Technology into. Management Review.
- 7. Forbes Insight Report. (2016). How Digital Transformation Elevates Human Capital Management:
- 8. Abrell, T., Pihlajamaa, M., Kanto, L., Brocke, J., Uebernickel, F. (2016). The Role of Users and Customers in Digital Innovation: Insights from B2B Manufacturing Firms. Information & Management. 53(3), pp. 324-335.
- 9. Nylén, D. & Holmström, J. (2015). Digital Innovation Strategy: A Framework for Diagnosing and Improving Digital Product and Service Innovation. Business Horizons. 58(1), pp. 57-67.
- 10. Henfridsson, O., Mathiassen, L. & Svahn, F. (2014). Managing Technological Change in the Digital age: The Role of Architectural Frames. Journal of Information Technology. 29(1), pp. 27-43.

- 11. Nwankpa, J. K. & Rounami, Y. (2016). IT Capability and Digital Transformation: A Firm Performance Perspective. Trirty Seventh International Conference on Information System, Dublin.
- 12. Van der Bel, M. (2018). Digital Culture-Your Competitive Edge. Retrieved 17 January, 2019, from: http://www.linkedin.com/pulse/digital-culture-your-competitive-edge-michel-van-der-bel.
- 13. Alagoa, H. E. (2016). Organizational Digital Transformation Anticipating and Planing for the Paradigm shift. SSRN Electronic Journal. DOI: 10.2139/ssrn.2588347, pp. 1-24.
- 14. Supamas Angsuchote, Somtawil Vijitwanna & Ratchaneekul Phinyopanuwat. (2015). Stratistical Analysis for Social Science Research and Behavioral: Techniques for Using LISREL (Edit 4). Bangkok: Rongphim Charoendi Mankhong Kanphim.
- 15. Suthiti Kattiya & Wilailak Suvajittanon. (2012). Research and Statistic Models. Bangkok: Prayoonwong Printing Co. LTD.
- 16. Sirichai Kanjanawasee. (2012). Multi-level Analysis (Edition 5). Bangkok: Chulalongkorn University Printing House.
- 17. Diamantopoulos, A. & Siguaw, A.D. (2000). Introducing LISREL: A Guide for the Uninitiated. Sage Publications, London.
- 18. Morakanyane, R., Grace, A. & O'Reilly, P. (2017). Conceptualizing Digital Transformation in Business Organizations: A Systematic Review of Literature. 30th Bled Econference: Digital Transformation from Connecting Things to Transforming Our Lives (June 18-21, 2017), pp. 427-443.
- 19. Mirkovic, V., Lukic, J., Lazarevic, S. & Vojinovic, Z. (2019). Key Characteristics of Organizational Structure that Supports Digital Transformation. 24th International Scientific Symposium: Strategic Management and Decision Support Systems in Strategic management, 17th May, 2019, pp. 255-261.
- 20. Bharadwaj, A. S. (2000). A Resource-Based Perspective on Information Technology Capability and Firm Performance: an Empirical Investigation. MIS quarterly. pp. 169-196.
- 21. Mithas, S., Ramasubbu, N., & Sambamurthy, V. (2011). How Information Management Capability Influences Firm Performance. MIS Quarterly. 35(1), pp. 237.
- 22. Pi Piccinini, E., Hanelt, A., Gregory, R. W., & Kolbe, L. M. (2015). Transforming Industrial Business: The Impact of Digital Transformation on Automotive Organization. 36th Internatinal Conference on Information System, Fort Worth 2015, pp. 1-20.
- 23. Berghaus, S. & Back, A. (2016). Stages in Digital Business Transformation: Results of an Empirical Maturity Study. In MCIS. pp. 22.
- 24. Brenmen, S. & Kreiss, D. (2014). Digitalization and Digitization. Culture Digitally, pp. 8.
- 25. Cisco & Oracle. (2014). The Internet of Things Reference Model. Internet of Things World Forum (2014), pp. 1-12.
- 26. Stief, S. E., Eidhoff, A. T. & Voeth, M. (2016). Transform to Succed: An Empirical Analysis of Digital Transformation in Firms. World Academy of Science, Engineering and Technolog International Journal of Economics and Management Engineering. 10(6), pp. 1833-1842.
- 27. Chen, Y. Y. K., Jaw, Y. L., & Wu, B. L. (2016). Effect of Digital Transformation on Organisational Performance of SMEs: Evidence from the Taiwanese Testile Industry's Web Portal. Internet Research. 26(1), pp. 186-212.