

HIGHER EDUCATION MANAGEMENT TO DIGITAL ENTREPRENEURIAL UNIVERSITY

TIPPAWAN MEEPUNG¹, PRACHYANUN NILSOOK², PANITA WANNAPIROON³

¹²³ Division of Information and Communication Technology for Education, Faculty of Technical Education, King Mongkut's University of Technology North Bangkok, Bangkok, Thailand

E-mail: ¹tippawan_me@rmutto.ac.th, ²prachyannun.n@fte.kmutnb.ac.th, ³panita.w@fte.kmutnb.ac.th

ABSTRACT

Transform universities with digital technology drives changes in both operations. The procedures in accordance with the planned goal or long-term university development plan are in accordance with state policy guidelines. According to the national strategic plan, national economic and social development plan, long-term higher education plan, national development plan. The purpose of this research the content to propose the structural equation model for high performance digital entrepreneurial university. The research instituted the hypothesized digital transformation, entrepreneurial university, digital organization, enterprise architecture and high-performance organization. The research was conducted in both quantitative and qualitative survey and interview were conducted with 300 representatives were selected by cluster sampling working in the higher education institutions. The results of research the analysis of structural equation model found that the evaluation was consistent with the empirical data. The conclusions are as follows: (Chi-square=90.267 df. =75) (CMIN/DF = 1.204) (GFI = . 974) and (RMSEA = . 026). The results showed that all factors had a direct effect on the significant statistics of 0.001

Keywords: *Structural Equation Modeling; Digital Transformation; Entrepreneurial University, Enterprise Architecture; High Performance Organization*

1. INTRODUCTION

Digital transformation is a transformation process that involves an organizational process and a model to take advantage of changes. The combination of digital technologies strategically affects the organization transactions management electronic actions to improve performance faster coordination and delivery of services [1]. It presents enormous opportunities for innovation and competitive advantage. This requires a complete rethink of the organization culture, technology strategy, operational changes processes in conjunction with data but digitization does not cause change. It is necessary to insert digital technology into existing processes [2]. Changes for the growth and well-being of the organization [3]. Technology is used to assist in operational work deliver better customer experience corporate culture. Experiment with a new business model [4]. The digital transformation of higher education is more than just technology. The goal is to reuse. How it works to provide continuous user-focused services in the face of technological change competition needs and behaviors higher education that digitally transforms into a more competitive state. A process that adapts digital technology to all parts, from the foundation of the work process. This is to enable businesses to adapt quickly to change and help meet emerging business needs [5]. Digital transformation is the adoption of digital technology strategies, such as

digital workspaces, to improve processes and produce risk management. Update service recipients modern digital transition strategies take advantage of more solutions. University use strategies to improve cost control efficiency and increase the value of their organization [6]. The former role of the university was to educate train creating talent and developing skills to be professional managing entrepreneurial education within the university. The goal is to develop entrepreneurial graduates as standard human capital. Highly talented, whether professional or entrepreneurial. Entrepreneurial graduates are those who complete educational courses and demonstrate the spirit or thoughts, behaviors, attitudes, and skills of entrepreneurs. Seeking opportunities, initiatives, ownership, development, commitment to seeing things differently. User-friendly decisions with limited data ability to network strategic thinking the ability to negotiate sales, persuasively to be able to align success and willingness to take profitable risks and meet economic and social needs [7]. Entrepreneurial university needs to collaborate extensively with many sectors to develop curriculums to meet demand and promote a more competitive and creative economy. The necessity for graduates of educational institutions students should have a wide range of abilities entrepreneurial thinking and mindset is important as well as soft skills [8]. From academic-focused educational institutions later focused on research

discover and profit aim to develop entrepreneurial skills in researchers in accordance with university technology transfer theory. They must participate in the commercial use of their own research or open a field of business research [9]. The educational institutions developed into entrepreneurial universities striving to meet the needs of stakeholders in a timely manner by adjusting the way they operate such as the business model. The emergence of new business models and changes in the university's business processes has been greatly facilitated by digitalization. [10] Higher education institutions (HEIs) are an important source of skills and knowledge that drive growth and innovation in today's economy. Changes are needed to adapt to the task of creating entrepreneurial ideas, stimulating business creation, and leveraging ideas in society [11]. ICT integration in the business cycle currently, organizations develop digital technologies across platforms such as IoT, location detection technology, human interfaces with machines, tools, intelligent sensors, big data analytics, and advanced algorithms, interacting with customers at multiple [12]. These networks also connect organizations with other business organizations and to the outside world. Currently, many large and small organizations are taking steps to define it as a full range of digital organizations that are implemented through the integration of information systems into the way they do business. It can be the main driver of the complete establishment of a digital enterprise [13]. High performance organization is a conceptual framework for sustainable improvements in organizational efficiency. Change operational structures and practices to meet demand. Focus on long-term success flexible, customer-oriented, and able to work as a team. Plans are available for various conditions. Situations affecting work are analyzed. This makes it possible to fulfill the objectives on time and with excellent quality of work [14]. Characterized by a strong culture and consistency between strategies. Employee leadership structure and skills Performance in the competition of the organization. Demonstrated by the ability to adapt to changes in the environment and the ability to learn. High performance working organizations are flexible and highly skilled. As stated, HPO is an organization that continuously integrates best practices to enhance it. Performance companies meet market demands beyond competitors and remain competitive in a long business environment [15]. In addition, quantitative research method might be useful to provide deeper insights on the factors in relation to the high performance digital entrepreneurial university.

2. OBJECTIVES

2.1 For the development the structural equation modeling for High Performance Digital Entrepreneurial University.

3. THEORETICAL BACKGROUND

3.1 Digital Transformation (DT)

Higher education that digitally transforms in a more competitive state this includes proactive decision-making and data-based actions. It suggests that digital transformation of higher education institutions is vital to future success [16]. The university's digital transformation involves setting a vision or mission to know how the objectives of transformation require results. Digital Transformation (DT) [3]. It is a tool to digitally transform operations from the present to new goals in the future together, and a new way of operating in all dimensions of the organization. Everyone in the organization is involved in the transition, which consisted of 1) Strategy refers to everyone sees the same future image from the direction. Strategies, goals, visions, missions, strategic plans, and plans that result in clear goals and directions for change, 2) Business process refers to the operational model. Organizational competencies work processes, prioritization, resource allocation, finance budget to support operations in various areas, including operational indicators, 3) Digital technology refers to the use of digital technology to support work in the organization in line with the strategic direction of the organization. Supports new and changed operational patterns increase communication channels with direct and indirect stakeholders and changing digital regulations, 4) Organization culture means modifying new ideas. Cultivating new ideas that are suitable for the organization leadership, vision, operational direction, planning, budgeting, human resource management, inspiration building momentum, commitment and 5) Employee means aiming to develop people to be viable, capable, creative and ready to deal with technology that is helping to transform the organization into a digital organization by focusing on developing a wide range of skills, including hard skills related to professional technical abilities. Intellectual and soft skills or social competencies communication capabilities social expression of mutual respect the use of language to suit your creativity. Good adaptability, curiosity. Be flexible as part of building a strong team. Embrace learning new things. [17] [18]

3.2 Entrepreneurial University (EU)

The university aims to become an entrepreneurial university promote start-up from leveraging knowledge of science and technology in the development of research within educational institutions and through collaboration between university. Developing research towards innovation products or services and commercial, Intellectual Property (IP). The success of business within the university, develop the university to become a sustainable entrepreneurial university, which consisted of 1) Leadership and Governance; Long-term

plan for sustainable investment in research, development and commitment to entrepreneurial university promotes collaboration with education leaders industry & government, 2) Organizational capacity, people and incentives; Create a business incubator within the university to create and support people to be entrepreneurial. Establish a technology transfer agency to take care of assets derived from research and development of personnel within the university, 3) Entrepreneurship development in teaching and learning; entrepreneurial education, entrepreneurship system support, technology commercialization, entrepreneurship outreach and Entrepreneurship initiatives , 4) Pathways for entrepreneurs ; A capital market made up of government and private capital that will have the potential of technology and innovations to be effective in venture capital. As a result, technological development and innovation of entrepreneurs are always achieved. Collaboration with industry and government support and 5) University – business/external relationships for knowledge-exchange; Cooperation with the government to support and invest in building research that is beneficial to the industry. The establish a university technology transfer agency to help and supervise departments to conduct research. Technology and innovation to commercialization are easier.

3.3 Digital Organization (DO)

ICT integration with on-the-job Currently, organizations develop digital technologies in platforms such as IoT, human interface location detection technology and tool machines. Intelligent sensors, big data analytics, and advanced algorithms interact with multiple levels of customers. Cloud or mobile computing focuses on digitize all physical assets. Integrate with the digital ecosystem with the value chain [12]. It has a relationship entirely with those involved in business processes using a digital network that spans the entire organization. These networks also connect organizations with other business organizations and to the outside. Being a digital organization is the use of the Internet to drive all aspects of business processes, thereby modifying the way businesses operate and being open to increased productivity and opportunities. Currently, many large and small organizations are working to define it as A full range of digital enterprises are implemented through the integration of information systems into the way they do business. It may be the main driver of the establishment of a completely digital enterprise [13] . which consisted of 1) Structure; Creating and restructuring the organization to facilitate the process operations within the organization Effectively connects internally and externally to support flexible working, 2) Leadership;

Management defines policies, organizational structures for various tasks. Operational support, 3) Operating Process; Digital organization of operating processes based on digital technology Transparent, verifiable, 4) Talent and skills; Develop employees with the skills to use those digital technologies like experts. and 5) Personal Data Protection Act (PDPA); store of personnel data.

3.4 Enterprise Architecture (EA)

Enterprise Architecture (EA) defines the current and future desirable status of the organization. Related to corporate applications It also provides information systems and IT infrastructure and develops a road map to achieve goals from its current state. Business innovation, technology collaboration Compliance assessment, IT business alignment, and EA technology standard management provide value to the organization, saving IT costs and recycling [19]. Enterprise Architecture (EA) the organizations need to adjust their policies and systems to achieve their technological goals. EA is widely used in the industry. It is a technology-driven process for continuous change, systematically integrating technology (IT) into organizations from the architecture level to driving organizations to implement vision policies effectively [20][21][22].

The main structure of Enterprise Architecture (EA) consists of 3 structures. The main sections are as follows:

1) Architectural description is a documentation of the entire work system from the original divided into multiple views. In report format Table diagram with relationships in each organization unit.

2) Architectural design methods, using techniques, tools, methods, and practices to guide the development of enterprise architecture, including: each step includes a process. each process corresponds to the purpose for architectural development.

3) Architectural developers are those involved in the development of the organization's architecture. team organization unit.

which consisted of 1) Business Architecture; about the behavioral structure of the business process, 2) Data Architecture; about data structures, storage descriptions, data descriptions of storage data groups and data items, 3) Applications Architecture; structure and features of the application used in universities, focusing on how they interact with each other and with users. Shows the relationship between the application and the business process.

4) Technology Architecture; Hardware, software to support data management, applications and processes, tasks, and infrastructure.

3.5 High Performance Organization (HPO)

Indicators, quality from the world university rankings and its reputation in various areas lead to rapid implementation and practices to meet demand. Focus on long-term success as a monitoring tool as a tool to measure performance. It is very useful to measure the university's research and reputation in the subject, which consisted of 1) teaching and learning, 2) research 3) citation 4) industry revenue and 5) international. [23][24] [25] [26] from factors related to the factors influencing for transition higher education institution to high performance digital entrepreneurial university in all 5 areas have led to the following research hypotheses.

H1: Digital Transformation (F1) has an influence directly to Enterprise Architecture (F4)

H2: Digital Transformation (F1) has an influence directly to High Performance Organization (F5)

H3: Entrepreneurial University (F2) has an influence directly to Enterprise Architecture (F4)

H4: Entrepreneurial University (F2) has an influence directly to High Performance Organization (F5)

H5: Digital Organization (F3) has an influence directly to Enterprise Architecture (F4)

H6: Digital Organization (F3) has an influence directly to High Performance Organization (F5)

H7: Enterprise Architecture (F4) has an influence directly to High Performance Organization (F5)

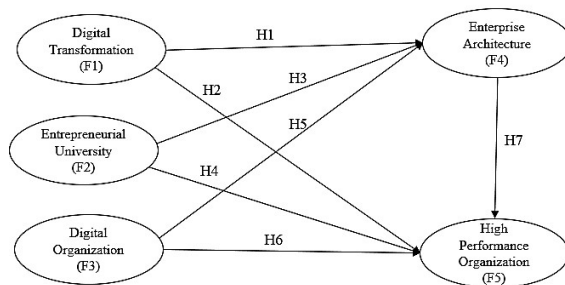


Figure 1: Research Framework

4. METHODOLOGY

A study on factors influencing for transition higher education institution to high performance digital entrepreneurial university research methodology is survey research. Using quantitative research methods using descriptive research methodology and using questionnaires as a tool to collect data using a sample size was determined as 300 persons. Five variables were rated on five-point Likert scale ranging. Statistics in data analysis using descriptive statistics, frequency distribution of data by percentage. Arithmetic mean standard deviation analysis of inferential statistics. structural equation model to check the harmony of research model with empirical data

(Model Fit). All variables were measured for high performance digital entrepreneurial university consist of 1) Digital Transformation 2) Entrepreneurial University 3) Digital Organization 4) Enterprise Architecture and 5) High-Performance Organization. To development the Structural Equation Modeling for High Performance Digital Entrepreneurial University. The following steps.

Step 1: The variable divided into 5 areas of transition higher education institution to high performance digital entrepreneurial university.

1. DIGITAL TRANSFORMATION

Variable	Meaning	Rating scale
DIG1	Strategy	1-5
DIG2	Business Process	1-5
DIG3	Digital Technology	1-5
DIG4	Culture	1-5
DIG5	Employee	1-5

2. ENTREPRENEURIAL UNIVERSITY

Variable	Meaning	Rating scale
UNI1	Leadership and Governance	1-5
UNI2	Organizational Capacity	1-5
UNI3	Teaching and Learning	1-5
UNI4	Pathways for Entrepreneurs	1-5
UNI5	Center of knowledge-exchange	1-5

3. DIGITAL ORGANIZATION

Variable	Meaning	Rating scale
ORG1	Structure	1-5
ORG2	Leadership	1-5
ORG3	Talent and skills	1-5

4. ENTERPRISE ARCHITECTURE

Variable	Meaning	Rating scale
ARC1	Business Architecture	1-5
ARC2	Data Architecture	1-5
ARC3	Applications Architecture	1-5
ARC4	Technology Architecture	1-5

5. HIGH PERFORMANCE ORGANIZATION

Variable	Meaning	Rating scale
PER1	Teaching and Learning	1-5
PER2	Research	1-5

PER3	Citation impacts	1-5
PER4	Industry income	1-5
PER5	International	1-5

Region	Northland	10.33
	Northeast	21.33
	Western Region	2.00
	Central Region	51.34
	Eastern Region	7.33
	The South	7.67
	Total	100.00

N=300

5. FINDINGS

The findings comprise demographic data analysis the examination of measurement model and structural model.

5.1 Respondents Data

The analysis of the survey participants profile is show in Table 1.

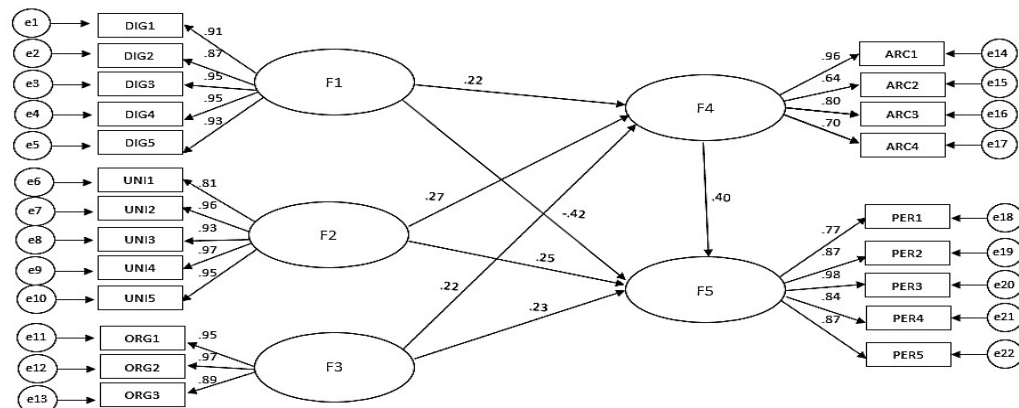
Table 1: Profile of the sample group

Profile	Options	Percentage
Gender	Male	52.00
	Female	48.00
	Total	100.00
Status	Executive	2.67
	Instructor	89.33
	Staff	8.00
	Total	100.00
Academic Positions	Associate professor	0.33
	Assistant professor	8.34
	Instructor	91.33
	Total	100.00
Education Institutions	Universities in Directing	22.33
	Public University	62.34
	Private Universities	15.33
	Total	100.00

From questionnaires 300 responses, 52% of the respondents were male and 48% were female. Status background of the respondents from executive 2.67%, instructor 89.33%, staff 8%. And education background of the respondents is associate professor 0.33% assistant professor 8.34% instructor 91.33% and universities in directing 22.33% public university 62.34% private universities 15.33%

Step 2: Development the structural equation modeling for High Performance Digital Entrepreneurial University.

5.2 Structural Equation Modeling



Chi-square=90.267 df=75 Sig=.110 CMIN/df. = 1.204 n.300

CFI=.998 NFI=.991 GFI=.974 AGFI=.912 IFI=.998

RMSEA=.026 RMR=.031

Figure 2: Results of the research model

Table 2: Discriminant Validity

Variable	Digital Transformation					Entrepreneurial University					Digital Organization			Enterprise Architecture					High Performance Organization			
	DIG1	DIG2	DIG3	DIG4	DIG5	UNI1	UNI2	UNI3	UNI4	UNI5	ORG1	ORG2	ORG3	PER1	PER2	PER3	PER4	PER5	ARC1	ARC2	ARC3	ARC4
DIG1	1.000																					
DIG2	0.813	1.000																				
DIG3	0.869	0.808	1.000																			
DIG4	0.865	0.823	0.807	1.000																		
DIG5	0.841	0.812	0.860	0.892	1.000																	
UNI1	0.736	0.767	0.692	0.688	0.796	1.000																
UNI2	0.730	0.772	0.746	0.755	0.791	0.876	1.000															
UNI3	0.708	0.752	0.694	0.700	0.761	0.855	0.831	1.000														
UNI4	0.722	0.671	0.726	0.729	0.699	0.761	0.813	0.803	1.000													
UNI5	0.691	0.643	0.708	0.690	0.667	0.760	0.808	0.878	0.846	1.000												
ORG1	0.617	0.674	0.582	0.594	0.628	0.664	0.763	0.811	0.792	0.759	1.000											
ORG2	0.651	0.686	0.657	0.647	0.653	0.632	0.788	0.801	0.810	0.805	0.818	1.000										
ORG3	0.576	0.631	0.560	0.571	0.604	0.635	0.726	0.768	0.762	0.711	0.827	0.868	1.000									
PER1	0.221	0.089	0.223	0.211	0.210	0.277	0.308	0.296	0.370	0.368	0.317	0.273	0.298	1.000								
PER2	0.064	0.094	0.098	0.019	0.082	0.299	0.257	0.247	0.295	0.308	0.325	0.287	0.322	0.867	1.000							
PER3	0.083	0.207	0.089	0.044	0.072	0.212	0.280	0.236	0.281	0.314	0.298	0.254	0.295	0.770	0.857	1.000						
PER4	0.286	0.266	0.289	0.247	0.222	0.338	0.419	0.376	0.406	0.430	0.438	0.391	0.423	0.642	0.736	0.834	1.000					
PER5	0.208	0.230	0.280	0.249	0.290	0.277	0.375	0.338	0.382	0.401	0.409	0.368	0.398	0.666	0.771	0.860	0.806	1.000				
ARC1	0.560	0.546	0.570	0.537	0.568	0.536	0.609	0.612	0.614	0.602	0.607	0.606	0.557	0.412	0.365	0.329	0.352	0.401	1.000			
ARC2	0.333	0.286	0.354	0.309	0.318	0.335	0.416	0.415	0.473	0.478	0.430	0.404	0.385	0.574	0.575	0.539	0.531	0.535	0.788	1.000		
ARC3	0.410	0.367	0.418	0.376	0.406	0.381	0.441	0.453	0.478	0.482	0.452	0.425	0.404	0.425	0.412	0.372	0.361	0.446	0.774	0.816	1.000	
ARC4	0.461	0.442	0.485	0.478	0.484	0.479	0.533	0.513	0.533	0.542	0.484	0.479	0.447	0.538	0.523	0.523	0.469	0.533	0.657	0.690	0.596	1.000

Table 3: Factor loadings, t-value, R², CR, and AVE

Variables	B	SE	t-value	R ²	AVE	CR
Digital Transformation					0.851	0.966
DIG1	0.91	-	-	82.0%		
DIG2	0.87	0.049	23.957**	76.0%		
DIG3	0.95	0.038	30.118**	91.0%		
DIG4	0.95	0.04	30.153**	90.0%		
DIG5	0.93	0.043	28.387**	87.0%		
Entrepreneurial University					0.857	0.967
UNI1	0.81	-	-	66.0%		
UNI2	0.96	0.044	28.582**	92.0%		
UNI3	0.93	0.049	26.539**	86.0%		
UNI4	0.97	0.065	21.287**	94.0%		
UNI5	0.95	0.057	21.480**	90.0%		
Digital Organization					0.874	0.954
ORG1	0.95	-	-	90.0%		
ORG2	0.97	0.031	34.581**	94.0%		
ORG3	0.89	0.024	39.260**	79.0%		
Enterprise Architecture					0.616	0.861
ARC1	0.96	-	-	93.0%		
ARC2	0.64	0.058	13.001**	41.0%		
ARC3	0.80	0.046	16.986**	64.0%		
ARC4	0.70	0.052	13.735**	49.0%		
High Performance Organization					0.753	0.939
PER1	0.77	-	-	59.0%		
PER2	0.87	0.038	28.259**	75.0%		
PER3	0.98	0.059	20.003**	97.0%		
PER4	0.84	0.065	17.308**	71.0%		
PER5	0.87	0.06	17.937**	76.0%		

Significant at ** $p < 0.001$ Source: Hair et al. [27]

The questionnaires show analysis of factor loadings, t-value, R², CR, and AVE overall at a statistically significant level of 0.001 consists of 5 Factor 1) Digital Transformation 2) Entrepreneurial University 3) Digital Organization 4) Enterprise Architecture and 5) High Performance Organization in total 22 variables were observable. An analysis was found that the coefficient weight between 0.64– 0.98 was greater than 0.40. There is an error value between 0.02 – 0.07 multifunctional correlation coefficient (R²) between variables 41.0% - 97.0% and the multi-raised correlation coefficient between 37.0% - 95.0% variance mean extracted (AVE) between 0.616 – 0.874 more than 0.50 in conclusion, measurement models have a good track straightness, considering variables to have good unity and there's a total value of fidelity (CR) between 0.861 – 0.967 more than 0.60 in conclusion, observable variables and passive variables confirmation element model. Factors influencing the transition of higher education institutions to universities, high-performance digital entrepreneurs all of them highly classified fidelity. The measurement value has a highly classified accuracy that indicates the unity of latent variables that meet the criteria. Models of structural equation models can be imported, factors influencing the transition of higher education institutions to universities, high-performance digital entrepreneurs. Statistically significant at 0.001

Table 4: Results of structural equation modeling for high performance digital entrepreneurial university

Factors	Influence	Enterprise Architecture	High Performance Organization
Digital Transformation	Direct influence	0.22	(-0.42)
	Indirect influence	-	0.09
	Overall influence	0.22	(-0.33)
Entrepreneurial University	Direct influence	0.27	0.25
	Indirect influence	-	0.11
	Overall influence	0.27	0.36
Digital Organization	Direct influence	0.22	0.23
	Indirect influence	-	0.09
	Overall influence	0.22	0.32
Enterprise Architecture	Direct influence	-	0.40
	Indirect influence	-	-
	Overall influence	-	0.40
R ²		29.0%	43.0%

Table 4 shows results of the analysis of the values of influence models. Enterprise Architecture an overall influence coefficient is 0.40, the second is Entrepreneurial University an overall influence coefficient is 0.36, Digital Organization an overall influence coefficient is 0.32. The negative influence on Digital Transformation Overall influence coefficient (-0.33) variables influence change 43.0% And the factors with the highest impact on Enterprise Architecture are the Entrepreneurial University. There is an overall influence coefficient 0.27 Second, Digital Transformation Overall influence coefficient 0.22 and Digital Organization overall influence coefficient 0.22, influencing the transition 29.0% in addition, the Enterprise Architecture has a positive influence on the High-Performance Organization. Overall influence coefficient 0.40 Influence change 43.0%.

Table 5: Results of Hypotheses

	Hypothesis	Results	Influence	Coefficient	R ²
H1	Digital Transition has an influence directly to Enterprise Architecture	Accepted	Positive	0.22	43.0%
H2	Digital Transition has an influence directly to High Performance Organization	Accepted	Negative	(-0.42)	29.0%
H3	Entrepreneurial University has an influence directly to Enterprise Architecture	Accepted	Positive	0.27	43.0%
H4	Entrepreneurial University has an influence directly to High Performance Organization	Accepted	Positive	0.25	29.0%
H5	Entrepreneurial University has an influence directly to Enterprise Architecture	Accepted	Positive	0.22	43.0%
H6	Entrepreneurial University has an influence directly to High Performance Organization	Accepted	Positive	0.23	29.0%
H7	Enterprise Architecture has an influence directly to High Performance Organization	Accepted	Positive	0.40	29.0%

From the results of the analysis of influence lines, structural equation modeling, factors influencing the high performance digital entrepreneurial university can be summarized as follows:

Hypothesis H1: The digital transformation component directly influences the enterprise architecture component. The test result was an acceptance of the H1, or digital transformation component, directly influencing the enterprise architecture component. A positive path coefficient of 0.22 had a 43.0% influence on the change with a statistical significance of 0.05.

Hypothesis H2: The digital transformation component directly influences the high performance digital entrepreneurial university. The test results are recognizing the H2, or Digital Transformation Element, directly influencing the high performance organization component. A negative path coefficient of -0.42 influenced the change by 29.0% with a statistical significance of 0.05.

Hypothesis H3: The entrepreneurial university component directly influences the high performance organization component. The test result is an

acceptance of the H3 or university component, the entrepreneur directly influences the organizational architecture component. A positive path coefficient of 0.27 had a 43.0% influence on the change with a statistically significant 0.05.

Hypothesis H4: The entrepreneurial university component directly influences the high performance organization. The test result was an acceptance of the H4, or University Composition, Entrepreneurship Directly Influenced the high performance organization composition. A positive path coefficient of 0.25 had a statistically significant effect of 29.0% change at 0.05.

Hypothesis H5: Digital organizational elements directly influence enterprise architecture elements. The test result is an acceptance of H5 or Digital organizational components directly influencing the enterprise architecture component. A positive path coefficient of 0.22 had a 43.0% influence on the change with a statistical significance of 0.05.

Hypothesis H6: Digital organizational elements directly influence high performance organizational components. The test result was a recognition of the H6, or Digital Organizational component, directly influencing the high performance organizational component. A positive path coefficient of 0.23 had a 29.0% influence on the change with a statistical significance of 0.05.

Hypothesis H7: Enterprise Architecture elements directly influence high performance organizational components. The test results recognized the H7, or enterprise architecture component, directly influenced the high performance organizational component. A positive path coefficient of 0.40 influenced the change by 29.0% with a statistical significance of 0.05

6. CONCLUSION AND FUTURE WORK

This study the structural equation modeling using confirmatory factor analysis for high performance digital entrepreneurial university in Thailand. The results of the evaluation from people working in higher education institutions. Total of 300 people active survey. the findings of this research found that related the five factors. From the results of this study, the structural equation modeling of high performance digital entrepreneurial university After adjusting the two variables by Model adjustment index statistics are used.)Modification Index(. The results of the analysis are consistent with the empirical data. The models are harmonious with empirical data. Chi – Square = 90.267 df = 75.0 Sig. = 0.110 > 0.05 and CMIN/df. 1.204 < 2.0 conforms from [27] Hair et al. (2021) analysis of model adjustments showed that the index was consistent, and these statistics met certain criteria.

The future works, result of this research to development enterprise architecture for high performance digital entrepreneurial university in next phase.

ACKNOWLEDGMENT

Thank you, the experts in computer technology in assessing, certifying, and providing suggestions for improving develop structural equation modeling for high performance digital entrepreneurial university, thanks to Faculty of Business Administration and Information Technology Rajamangala University of Technology Tawan-Ok Chakrabongse Bhuvanarth Campus, Bangkok, Thailand and Thanks to the advisor from King Mongkut's University of Technology North Bangkok, Bangkok, Thailand

REFERENCES:

- [1] S. ElMassah and M. Mohieldin, "Corrigendum to 'Digital transformation and localizing the Sustainable Development Goals (SDGs)' (Ecological Economics (2020) 169, (S0921800919303258), (10.1016/j.ecolecon.2019.106490)),", *Ecol. Econ.*, vol. 171, no. February, p. 106604, 2020.
- [2] M. Guarino, M. A. Di Palma, T. Menini, and M. Gallo, "Digital transformation of cultural institutions: a statistical analysis of Italian and Campania GLAMs," *Qual. Quant.*, no. 0123456789, 2019.
- [3] N. Verina and J. Titko, "Digital transformation: conceptual framework," in *International Scientific Conference*, 2019, no. August, pp. 719–727.
- [4] Marketing Tech Thailand., "Digital Transformation," 2019.
- [5] T. J. B. Blayone, O. Mykhailenko, M. Kavtaradze, M. Kokhan, and W. Barber, "Profiling the digital readiness of higher education students for transformative online learning in the post-soviet nations of Georgia and Ukraine," *Int. J. Educ. Technol. High. Educ.*, vol. 15, no. 37, pp. 1–22, 2018.
- [6] T. Nathida, "Digital Transformation," 2018. [Online]. Available: <https://www.marketingoops.com/digital-transformation/scb-digital-transformation/>.
- [7] A. Gustomo and A. Ghina, "Building a systematic framework for an entrepreneurial university," *Int. J. Adv. Appl. Sci.*, vol. 4, no. 7, pp. 116–123, 2017.
- [8] E. Badzińska and L. Timonen, "Exploring the University-based Entrepreneurial Activities in International Collaboration: Development Cases of HEIs," *J. Intercult. Manag.*, vol. 12, no. 2, pp. 1–30, 2020.
- [9] dolanay soguzturk B, "Research Oriented and Entrepreneur University as an Element of National Innovation System: Samples of South Korea and Turkey," 2019. [Online]. Available:

- <http://www.ss-pub.org/wp-content/uploads/2020/09/JMSS2020061001.pdf>.
- [10] L. Seres, M. Maric, P. Tumbas, and V. Pavlicevic, "University Stakeholder Mapping," in *ICERI2019 Proceedings*, 2019, vol. 1, no. November, pp. 9054–9062.
- [11] I. M. Taucan, A. G. Strauti, and M. Tion, "Roadmap to Entrepreneurial University – Case study," *Procedia - Soc. Behav. Sci.*, vol. 238, pp. 582–589, 2018.
- [12] E. Martínez-Caro, J. G. Cegarra-Navarro, and F. J. Alfonso-Ruiz, "Digital technologies and firm performance: The role of digital organisational culture," *Technol. Forecast. Soc. Change*, vol. 154, no. June 2019, p. 119962, 2020.
- [13] EXEO s.a.l, "What is a digital firm?" 2020.
- [14] PTTEP, "High Performance Organization (HPO)." 2018.
- [15] T. T. Do and N. K. Mai, "High-performance organization: a literature review," *J. Strateg. Manag.*, vol. 13, no. 2, pp. 297–309, 2020.
- [16] L. Seres, V. Pavlicevic, and P. Tumbas, "Digital Transformation of Higher Education: Competing on Analytics," *INTED2018 Proc.*, vol. 1, no. May, pp. 9491–9497, 2018.
- [17] J. C. T. Bieser and L. M. Hilty, "Indirect Effects of the Digital Transformation on Environmental Sustainability: Methodological Challenges in Assessing the Greenhouse Gas Abatement Potential of ICT," vol. 52, no. July, pp. 68–53, 2018.
- [18] A. Rof, A. Bikfalvi, and P. Marquès, "Digital transformation for business model innovation in higher education: Overcoming the tensions," *Sustain.*, vol. 12, no. 12, 2020.
- [19] G. Shanks, M. Gloet, I. Asadi Someh, K. Frampton, and T. Tamm, "Achieving benefits with enterprise architecture," *J. Strateg. Inf. Syst.*, vol. 27, no. 2, pp. 139–156, 2018.
- [20] R. Perez-Castillo, F. Ruiz, M. Piattini, and C. Ebert, "Enterprise Architecture," *IEEE Softw.*, vol. 36, no. 4, pp. 12–19, 2019.
- [21] Tippawan Meepung; Panita Wannapiroon; Prachyanun Nilsook, "Transition Elements, Enterprise Architecture for Digital Entrepreneurial University," *2021 Res. Invent. Innov. Congr. Innov. Electr. Electron.*, pp. 167–175, 2021.
- [22] Michelle and Sfenrianto, "The effectiveness factors of enterprise architecture information system implementation," *J. Theor. Appl. Inf. Technol.*, vol. 99, no. 21, pp. 5003–5017, 2021.
- [23] W. Mia, Rony; Abdullah, Al Mamun Md; Hui, "Research Prospects, Higher Education and World University Ranking in China: A Review," *James Nicholas Publ.*, vol. 21, no. 2, pp. 59–73(15), 2021.
- [24] Y. Zhang, Y. Xiao, J. Wu, and X. Lu, "Comprehensive world university ranking based on ranking aggregation," *Comput. Stat.*, vol. 36, no. 2, pp. 1139–1152, 2021.
- [25] J. O. Fernando García, Francisco Guijarro, "A Multicriteria Goal Programming Model for Ranking Universities," *MDPI*, 2021.
- [26] T. Meepung, P. Nilsook, and P. Wannapiroon, "Conceptual Framework for High Performance Digital Entrepreneurial University," in *In 2021 5th International Conference on E-Society, E-Education and E-Technology (ICSET 2021)*, 2021, pp. 47–53.
- [27] M. Sarstedt, C. M. Ringle, and J. F. Hair, *Handbook of Market Research*, no. July. 2020.