

## Research Article

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# THE MANAGEMENT MODEL FOR HIGHER EDUCATION INSTITUTIONS IN THE DIGITAL ERA

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## Abstract

The rapid changing of the digital world demands guideline evaluation, especially in the administration of higher education institutions. This research aimed to examine the approaches involved in the administration of higher education institutions in the digital era. The research methodology employed in this study was conducted in three steps: 1) analysis of the components and management approach of the management model for higher education institutions in the digital era by literature reviews and interviewing of 7 experts, 2) developed and verified of the management model for higher education institutions in the digital era by 11 higher education experts, 3) evaluated the management model for higher education institutions by 38 higher education institution administrators. The results revealed that the management model for higher education institutions in the digital era consisted of five key components: (1) institutional objectives, (2) principles of higher education institutions, (3) scope of administrative work, (4) management processes, and (5) evaluation performance appraisal. According to the findings of this study, renowned experts regarded the management model for higher education institutions in the digital era as highly suitable. Furthermore, higher education institution administrators are of the opinion that the management model is highly feasible and offers superior benefits.

**Keywords:** Administration, Higher Education Institutions, Digital Era

## Introduction

Globalization is reshaping the educational landscape, most notably in the digital era. As a result of this phenomenon, administrators of educational institutions must devise a new approach to education management to keep pace with the transformation. Every organization is confronted with an inevitable disruptive world - a state of transition in which one thing is supplanted by another, resulting in unprecedented and rapid changes.

Technological advancements have revolutionized the conduct of educational administration. Therefore, academic administrators' viewpoints and management practices must evolve to adapt to a changing environment. This is necessary in order for educational institutions to remain viable and capable of managing education across all

domains, particularly in the digital era, which is characterized by rapid flow of communication via information technology. The dissemination of knowledge and the transmission of information emerge in society through a variety of communication formats and channels which are constantly evolving. The goal is to ensure that everyone has quick access to information at any time and from any location. The progression from industrial to digital ages can be described as a leap towards the fusion of technologies, particularly with the rise of information technology and its associated ability to manage data efficiently. Teachers and students now have greater access to knowledge resources due to technological advancements. According to the Report of Future of learning by National Innovation Agency (Public Organization) with Future Tales Lab by Magnolia Quality Development Corporation Limited: MQDC (2021), the unrestricted use of communications technology, regardless of time or location constraints, is a distinguishing feature of the digital era in many fields such as Immersive Education (Augmented: AR/Virtual Reality: VR) and Just-in-Time Knowledge and Learning. It is capable of integrating and connecting disparate networks enabling anyone to collect, store, comprehend, access, and develop knowledge for the purpose of quickly disseminating and sharing information globally.

According to the critic of Panich and Mahaisavariya (2019), future universities must provide substantial and valuable benefits, otherwise the efforts and investments will be counterproductive and futile, and as a consequence, many universities may be forced to close. To avoid this possibility, universities have to restructure their management platforms to address the changing expectations of the learners as well as the society. In order to accomplish this, it is critical to venture beyond the comfort zone and collaborate with corresponding stakeholders. With this issue in mind, the researchers conducted this study in order to develop a new management model that meets the needs of all stakeholders in the higher education institutions with the purpose of formulating policy guidelines for university administration, with a particular emphasis on digital revolution.

## Objectives of the Study

To develop a management model for institutions of higher education that is responsive to the increasing demands of the digital realm.

## Literature Review

The Higher Education Act outlines the educational management objectives that include preparing students to be proficient in a variety of academic and professional disciplines, as well as meeting societal demands. Additionally, it establishes guidelines for institutions to instill a value system in order to cultivate individuals into holistic beings who are able to sustain in a fast changing digital-age global society. According to Professor Emeritus Dr. Paitoon Sinlarat, who proposed the concept of higher education administration objectives, universities are knowledge institutions responsible for organizing programs of study with the goal of transforming the youth and community into a knowledge-based society capable of propelling the country forward. This Act contains the **Principles** of Higher Education Administration, which include: (1) Social Responsibility, (2) Academic Freedom, (3) Independence, (4) Equality, and (5) Good Governance. According to Professor Emeritus Dr. Wallapa Thephasdin Na Ayudhya's, diversity is required in higher education, and when combined with Philosophy of Sufficiency Economy,

the principles are inclusive of all dimensions. Furthermore, UNESCO (United Nations Educational, Scientific, and Cultural Organization) has emphasized the significance of scope of works for educational institutions in establishing an institutional management system that is highly effective, verifiable, and supportive of academic freedom as part of their missions.

Dubrin (2010) introduced concepts about management processes, such as planning, organizing, leading, and controlling. Rothwell et al. (2016) proposed an executive process model for establishing a transformative organization that is consistent with and responsive to the changing nature of the modern world, including the demand analysis, preparatory, and operational phases.

According to Ameen and Baharom (2019), the essential purpose of performance appraisal (PA) from organizational perspective is to help making right decisions on salaries, promotions, training, and encouraging personnel through positive feedback to improve the organization's work processes.

## Research Methodology

This scholarly thesis aims to create a management framework that will assist educational administrators in adapting to the rapidly evolving digital world. The model is composed of three steps described below:

**Step 1** Conducted an exploratory examination of the components and management approach of higher education institutions in the digital age by synthesizing available transcripts and conducting in-depth semi – structured interviews with 7 higher education experts who were chosen through purposive sampling. Then performed content analysis on the information gathered during the interview.

**Step 2** Developed and drafted a management model for higher education institutions in the digital world based on the data obtained from the first step. Then had the appropriateness of the drafted management model validated by 11 qualified individuals who were selected through purposive sampling. The data were analyzed by determining averages and standard deviations.

**Step 3** Determined the feasibility of the management model and identified its benefits through open-ended questionnaires administered to 45 chief executives chosen through purposive sampling, from 45 different higher educational institutions across 4 regions of Thailand. Averaging and standard deviation were used to analyze 38 (84.45%) data sets.

## Results of the Study

1. The management model for higher education institutions in the digital era consists of five components and success conditions, as detailed below.

**Component 1** The administration of higher education institutions in the digital era has three primary objectives: (1) to educate individuals in order for them to achieve proficiency in both academic and professional fields, (2) to cultivate moral virtues in order to become decent persons, and (3) to equip Thais with digital-age skills and to develop a global mindset at work.

**Component 2** The institutional principles of higher education management in the technological environment can be characterized by the following precepts: (1) Philosophy of Sufficiency Economy, (2) Social

Responsibility, (3) Academic Freedom and Lifelong Learning, (4) Management Independence, (5) Equality, (6) Good Governance, and (7) Internationalization.

**Component 3** The administrative responsibilities of higher education institutions in the digital era include the following aspects: (1) modern educational management that is responsive to societal needs, (2) innovative research and development, (3) academic services and social enterprises, (4) current human resource management and development strategies, (5) up-to-date budget and financial management methods, (6) the preservation of arts and culture in the new era, and (7) the management of Disruptive Technologies.

**Component 4** Managing higher education institutions in the digital era involves the following processes: (1) examination of the present conditions, issues, needs and future trends, (2) formulation of objectives and planning operations in response to the changing circumstances, (3) systematic implementation of plans, (4) continuous monitoring and evaluation of planned performance, and (5) adaptation of assessment results for improvement and establishment of operational standards in response to new situations.

**Component 5** The appraisal of higher education institution management in the digital era identified 11 assessment issues and 3 assessment methods.

**The conditions for success** include: (1) government support for institutions of higher learning should be methodical and incessant, and (2) executives at all levels, faculty members, and support personnel should be cognizant of and prepared to adapt to the changes brought about by the digital age.

2. The examination of the management model's propriety for higher education institutions in the digital age, based on the opinions of 11 qualified individuals, revealed that the model was highest propriety, as indicated in the Table.

**Table 1** The Propriety of The Management Model for Higher Education Institutions in the Digital Era

The Management Model for Higher Education Institutions in the Digital Era	Propriety		
	$\bar{X}$	SD	Level
1) Objectives of Administration	4.54	0.66	Highest
2) Principles of Administration	4.46	0.64	High
3) Scope of Administrative Responsibilities	4.46	0.69	High
4) Management Processes	4.53	0.54	Highest
5) Criteria and Methods for Evaluation	4.52	0.70	Highest
The Conditions for Success	4.53	0.79	Highest
<b>Total</b>	<b>4.51</b>	<b>0.68</b>	<b>Highest</b>

3. According to the assessment of the feasibility and utility of the management model for higher education institutions in digital era, 38 chief executives of higher educational institutions evaluated that the model was a high feasibility and highest utility, as illustrated in the Table.

**Table 2** The Feasibility and the Utility of The Management Model for Higher Education Institutions in the Digital Era

The Management Model for Higher Education Institutions in the Digital Era	Feasibility			Utility		
	$\bar{X}$	SD	Level	$\bar{X}$	SD	Level
1) Objectives of Administration	4.15	0.57	High	4.75	0.38	Highest
2) Principles of Administration	4.30	0.52	High	4.64	0.42	Highest
3) Scope of Administrative Responsibilities	4.11	0.60	High	4.73	0.40	Highest
4) Management Processes	4.23	0.50	High	4.68	0.41	Highest
5) Criteria and Methods for Evaluation	4.13	0.50	High	4.58	0.40	Highest
The Conditions for Success	3.96	0.60	High	4.68	0.50	Highest
<b>Total</b>	<b>4.19</b>	<b>0.43</b>	<b>High</b>	<b>4.65</b>	<b>0.33</b>	<b>Highest</b>

## Discussion

According to the findings, it was discovered that there are 5 components of the management models of higher education institutions in the digital era that are appropriate, beneficial and offer significant possibilities in the current setting. One of the administration's objectives is to cultivate highly qualified individuals who are proficient in their field of expertise and who work in academic or professional fields that are responsive to the needs of the country. Learners are molded into virtuous individuals and achieve complete well-being in terms of their physical, mental, intellectual, knowledge, and skills needed in the future and adapt to a changing global society. Additionally, learners must be equipped with 21<sup>st</sup> century skills with Thai attributes and with concept and work culture that adhere to Chiangkul (2016) and the Royal Thai Government Gazette (2019). Thailand's approach to education reform in the 21<sup>st</sup> century has 3 main aspects: (1) reform of teacher administrators, (2) reform of teaching curricula and assessment, and (3) reform of management structure and problem solving. These reforms develop individuals to be proficient in academic disciplines and shape them into principled human beings. Subsequently, it is essential to have principles of higher education institutions administration in the digital era that are founded on the implementation guidelines such as the philosophy of sufficiency economy, good governance, social responsibility, and academic freedom and lifelong learning. All of the principles derived from this research are in accordance with the standards set by the Office of the Civil Service Commission (OCSC).

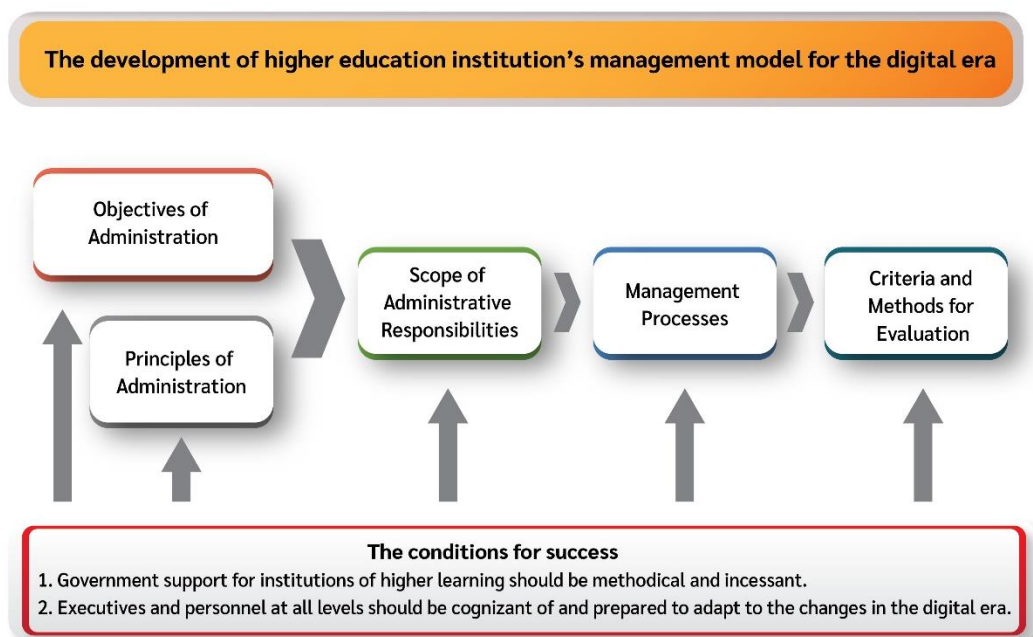
Higher education institutions' workloads are expanding in the digital age, and their work cultures must adapt to accommodate the influx of new perspectives from different disciplines. Modern education management is found to be effective and responsive to the needs of society in changing situations, which allows universities or higher education institutions to develop and compete in their respective fields of study. It is necessary to conduct research and development innovations, create academic services and social enterprises that are adaptable to the dynamic environment. Human resource management and development, and the budgetary and financial management must be restructured to counter issues involving disruptive technologies. According to Maesincee (2017), Thailand is in the 4.0 era, which will propel the country forward through modern technology, creativity, and innovation in the service sector. As a result, higher education administrations must accelerate the implementation of learning reforms.

The management model for higher education institutions in the digital era follows a five-step process that is both clear and transparent, beginning with an examination of current conditions, future needs and trends, and following with the establishment of flexible objectives and planning operations in response to sudden changes. The systematic supervision of the plan's implementation must include continuous monitoring and evaluation of the plan's performance until the assessment results demonstrate improvement and operational standards are met in the changing context, which is consistent with the ideas of Chansila (2018) and Rothwell et al. (2016).

Another significant finding is that when evaluating the administration of higher education institutions in the digital era, assessment criteria must be clearly defined including the quality of undergraduate and graduate education management, student affiliations, employability of graduates, and innovations in research that align with changing contexts. Furthermore, competency in the use of digital technology in the faculty and support personnel performance, and the management efficiency of disruptive technologies must also have precise assessment methods based on the operation reports, interviews of executives, and survey and evaluation of stakeholders. The assessment of higher education institutions' management must be comprehensive and encompass the institution's mission in accordance with Srithammarat (1998).

## Conclusion

The development of higher education institution's management model for the digital era yielded the following 5 significant components necessary for administration: (1) objectives, (2) principles of administration, (3) scope of administrative responsibilities, (4) management processes, and 5) criteria for evaluation and the conditions for success to encourage management changes in higher education institutions in order for them to remain relevant in the digital era, as indicated in the table.



**Figure 1** The management model for higher education institutions in the digital era

## Recommendations

1. Objectives and policies for the development of digital technology performance should be clearly outlined to enable the administrators, faculty members, support personnel, and learners to use digital technology effectively in their management, teaching, and learning.
2. Analysis and development of the model are necessary, as well as the creation of a manual for implementing the scope of responsibilities of the administrators of higher education institutions in the digital era, and to facilitate collaborative effort of administrators and staff members. Work system should be analyzed and developed, and manual for implementing the scope of responsibilities of the administrators of higher education institutions in the digital era should be created to facilitate collaboration among administrators and staff members.
3. Administrators and staff members should have open communication to understand administrative processes and operation of a systematic and continuous management system in higher education institutions in the digital era.

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