

**When the world is not the same: a new adaptation of the university must happen.**

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### **ABSTRACT**

The real mission of Thai Higher Education therefore, it is a new mission, in addition to taking into account the guidelines related to the four main missions of higher education institutions set by the Office of the Higher Education Commission. University personnel in the era of Education 4.0 will have to unravel the concept of the old framework that has been done and is working on to a new adaptation to be consistent with the current situation because higher education institutions are academic centers as a flag for society and is the foundation of the country's thinking to drive development in various fields. Up in the country, especially in the Thailand 4.0 era, the world is not the same world anymore.

The true mission of Thai higher education These are the production of graduates 4.0, research 4.0, academic services to society 4.0, and the preservation of arts and culture 4.0, which must accelerate the insertion of latent missions in the form of applying innovations or information and communication technologies in teaching and learning management. To be in line with the context of the world 4.0 and education 4.0. This is to encourage personnel in higher education institutions in the era of Education 4.0 to unravel their concepts from the original framework that had been done and is being worked on to a new adaptation to be consistent with the current situation because higher education institutions are academic centers as a flag for society, especially in the Thailand 4.0 era, the world is not the same world anymore. And in order to be in line with the Thailand Education 4.0 era, which is considered the era that has entered the 21st century, Thailand must look at productivity in a manner that can keep up and move forward.

**KEYWORDS:** mission of Thai Higher Education, new adaptation of the Thai University

Received: 09/08/2022

Revised: 16/09/2022

Accepted: 17/09/2022

**Introduction.** The determination of the main missions of higher education institutions in Thailand by the Office of the Higher Education Commission (2015) states that the main missions that higher education institutions must perform are 4 main things: produce graduates, researching, providing academic services to society and preserving arts and culture. It is a strict practice that universities across the country must carry out such missions which is a broad mission framework. If the context should be taken into account especially in the context of time because in the present era. The environment of tertiary education has changed dramatically, especially when entering the Education 4.0 era.

As Paitoon Sinlarat (2016) said, Education 4.0 is the education in the productive era. It is an era that requires as many products or products as possible for the benefit of one's own community and other communities with educational skills that focus on doing and doing and then come out as a product. Moreover, Thai education 4.0 is also considered an era entering the 21<sup>st</sup> century where Thailand must look at productivity in a manner that can keep up and move forward.

Therefore, the real mission of Thai Higher Education therefore, it is a new mission, in addition to taking into account the guidelines related to the four main missions of higher education institutions set by the Office of the Higher Education Commission. University personnel in the era of Education 4.0 will have to unravel the concept of the old framework that has been done and is working on to a new adaptation to be consistent with the current situation because higher education institutions are academic centers as a flag for society and is the foundation of the country's thinking to drive development in various fields. Up in the country, especially in the Thailand 4.0 era, the world is not the same world anymore.

### **Legacy mission of Thai Higher Education**

**Graduate production:** The first task that is compulsory for university professors in Thailand in addition to doctoral studies is entry into academic positions. This is a mission that is halfway between the production of graduates and research. It is indirectly producing graduates. In addition to entering academic positions, the role of thesis advisor is also one of the main tasks of university professors. And the mission of being a supervisor for an internship or cooperative education of students is another role of university professors culminating in an entry into a management position.

**Research:** Entering academic positions with research results, writing teaching materials, teaching documents for the course, composing academic textbooks or a collection of academic works and academic books for the course. It is the primary role of university professors in research missions.

**Academic Services:** Research tool review mission including the mission of being a qualified person to consider research articles or academic articles. It is an important mission when it comes to academic service or academic service to society that university professors have acted on behalf of the university and on behalf of the academic network or being a consultant to government agencies, business organization and civil society groups.

Preserving Arts and Culture: This concludes with entry into administrative positions appointed by the University that are directly related to the preservation of arts and culture due to the vast majority of its activities. It is the role of supporting department that is not the teaching mission of line a personnel.

#### **Thailand 4.0**

Talking about Thailand 4.0 is like talking about the changing times of the world society, that is, starting from the 1.0 era is the world of agriculture, the 2.0 era is the industrial world, and the 3.0 era is the information and communication technology world, and The 4.0 era is a post-information and communication technology world.

Thailand in the past has had continuous economic development since Thailand 1.0 focuses on agriculture, Thailand 2.0 focuses on light industry, Thailand 3.0 focuses on heavy industry and exports, Thailand 4.0 focuses on innovation-driven economy, with the main idea being: Shifting from product manufacturing to innovative products (Suwit Maesincee, 2016) Thailand 4.0 has thus transformed the country's propulsion from the industrial sector to drive by technology creativity and innovation and shifting from focusing on the manufacturing sector to focus more on the service sector

Developing the country under the concept of Thailand 4.0, the government has determined the project to strengthen the public power as a driver by focusing on the participation of the private sector Finance and Banking Sector People's Sector Educational Institution Sector Universities and research institutes brainstorm Join forces to drive through projects, memorandums of cooperation, activities or research by the operations of various civil state groups, namely group 1 , upgrading of innovations and products, amending laws and government mechanisms. Developing the industrial cluster of the future and attracting investment and the development of infrastructure; group 2; development of modern agriculture; and development of foundation and civil-state economy; group 3 , promotion of tourism and miles monetization and stimulating government spending, group 4 , Basic Education and Leadership Development, or Pracharath Schools including the upgrading of professional quality and group 5 promotion of exports and foreign investment including promoting new entrepreneurs each group is laying out a system and formulating guidelines for intensive policy driving.

#### **Thai Higher Education 4.0**

If we consider the context of today's world, there is a code (Code) for different eras happening in the world It started with the world in the 1.0 era, which refers to the agriculture era, 2.0 is the industrial age, 3.0 is the information and communication technology, while the 4.0 is the post-information and communication technology world. The direction in which the world is moving has pushed all circles to follow be it political, economic, social, and national and international level

Toffler ( 1980 ) referred to the First wave or the first wave of humanity. It is an agricultural society that has existed for thousands of years, beginning from the first day that humans stopped hunting expeditions. turned to farming and raising animals which is considered a big turning point in life resulting in the formation of groups, creating a society, developing into a culture And it's time to build up, corresponding to the 1.0 second wave era, Toffler said, is a post-industrial revolution that focuses on

large-scale production and markets. Use machines to make lots of items. By having influenced many changes in the way of life of people. Third wave or the wave that it is the era of connectivity and access to information systems from all over the world. Under the linkage of basic elements that must have technology to support both computers and telecommunication structures born into a community be a network It is the starting point for the transition and the emergence of a new economy.

This is consistent with Case (2016) that the first wave in terms of information and communication technology (ICT) is from 1985-1999, the second wave is from 2005-2016. Third, from 2016 onwards, Case sees that the Internet has expanded greatly from 1986 to the present. and will play many roles in working for the global society whether education public health or even tackling terrorism, solving global warming and solving poverty.

Jeera Hongladarom (2016) said that the first period was the period when the Internet was not very new, but after the year 2000, there were new IT products such as Search Engine, Google, Yahoo or Facebook that expanded greatly climb but Steve Case's third wave is the Internet of Things. The role of the Internet will expand to the people widely object point And can be connected to a lot of robots, Internet of Things, but there will be Internet or Software that can do a lot including thinking and having emotions Human-like intelligence, perhaps the third wave of the Internet was called the Fourth Industrial Revolution or the Fourth Stage Industrial Revolution.

It can be seen that the direction in which the world is moving has pushed all circles to follow whether it is political, economic, social, especially in the education field which is a source of human resource incubation for various circles including government organizations, state enterprises, private sector, industrial sector, business sector, trade, commerce, financial and banking sector and other sectors Therefore, administrators of higher education institutions in the Thailand 4.0 era must be executives with a vision that is up to date with the rapidly changing era school in the new era Has moved a long way through the management style of old projects and paradigms.

### **When the world isn't the same: a new university adaptation must happen.**

Higher education in Thailand 4.0 era amid rapidly changing situations in politics, economy, society, and cross-cultural concepts that are big trends in the context of globalization. Especially the knowledge of robots or Robotics, which is a new trend in the economy which has applied concepts, theories and research related to robots to be applied in a variety of disciplines, as Phu Iamcharoenying (2017) said about teaching and learning about robots that the robot market will grow a lot. The main reason is the rapid and continuous development of technology. If humans had better tools, they were robots. It will help save more labor and increase productivity. We need these technologies to increase productivity optimize and reduce operating costs these are the keys to increasing competitiveness and will be able to reach lower costs by working with more efficient and smarter processes can create new innovations To help drive the economy Many countries around the world are paying particular attention to this issue because he sees this as the heart of the future competition therefore turned to

support the study of robotics Programming and STEM (Science Technology Engineering Mathematics) to the fullest by bringing these subjects to school from elementary school.

Not counting unmanned aerial vehicle technology or Drone Technology and Autonomous Cars Technology or Automatic Cars and 3D Printing Technology or 3D Printing (2017), which are classified as a type of industrial robots, refer to the processes used to create three-dimensional objects by There is a layer of material next to it together under the control of the computer These objects come in many shapes, such as geometric shapes which has the same working principle as 2D printing technology that is printed in plane or X-axis and Y-axis by adding part of the Z-axis to create a 3<sup>rd</sup> dimension in printing

In line with the Kasikorn Research Center (2016), which has discussed the use of robotics technology to help financial analysis, known as FinTech, a combination of Financial + Technology that literally means Financial Analysis. Financial Technology In the future, FinTech will become one of the key mechanisms driving the financial system in the digital era. The global growth of FinTech will lead to the development of many new forms of financial services. especially the services in the 3 main financial transaction groups related to general consumers Including transactions related to payments/transfers personal finance management and credit and funding Today, examples of outstanding FinTech-based financial services can be seen in each of the major financial transaction segments invest more thoroughly especially those with young incomes and who are interested in modern technology. Due to the advantages of low service fees from the use of computer software to operate primarily, it reduces the cost of opening branches and hiring a large number of personnel as in traditional service providers. There is also a minimum investment limit set. or no minimum investment limit As a result, investment/financial advisory services are no longer limited to high-income groups as in the past.

Corresponding to Jakkrit Siririn (2017) who mentioned the meaning of Web 4.0 technology that the meaning of Web 1.0 (1990-2000), which is the beginning of the Web. Broadcasting or One-way Communication until the Web 2.0 era (2000-2010) is the current time of Social Network, Web 3.0 (2010-2020) or the Semantic Web will have the characteristics of a semantic network or a Semantic Network such as an Intelligent Agent or Semantic Search and Web 4.0 (AD 2020-2030), which is a Symbiotic Web or a website that works like Artificial Intelligence (AI) or artificial intelligence An example that has emerged is how the Siri program works on the iPhone.

In the current era, it is Web 3.0 era (2010-2020), or Semantic Web era, has applied Semantic-based Knowledge Management. This is the idea of John Davies, Marko Grobelnik and Dunja Mladenic (2009) in the book Semantic Knowledge Management: Integrating Ontology Management, Knowledge Discovery, and Human Language Technologies main mission Semantic-based Knowledge Management is the acquisition of in-depth knowledge, or Deep Knowledge, with the aim of applying knowledge in a specific field or Domain Knowledge, especially when linked into a computer system in the Web 4.0 era. Knowledge Management is the precursor for building a knowledge base for computer programs. Ontology, which refers to the domain knowledge model, has two components from knowledge: Knowledge Engineers and Domain Experts the purpose of Ontology is to apply knowledge in a specific field to create a knowledge base for application in a variety of computer programs by technology,

knowledge engineering, or Knowledge Engineering, which is responsible for system development, collection and arrangement. Collect and share knowledge from field experts applied to computer technology Especially Internet technology or Web 4.0 in order to manage knowledge for running more intelligently and with is more automatic at present There are several Ontology programming languages for sharing and exchanging Web-based data, such as OWL (Web Ontology Language) standards, RDF standards (Resource Description Framework, XML Languages (Extensible Markup Language)), and URI (Uniform Resource Identifier) reference standards. And today, at least two leading academic institutions have created tools to support the development of Ontology: Stanford University's Protege program and Osaka University's Hozo program.

### **The real mission of Thai Higher Education**

At present, although the main missions of higher education institutions by the Office of the Higher Education Commission are based on four things: producing graduates, research, and providing academic services to society and preserving arts and culture, but in the context of the 4.0 era, higher education institutions or universities in the big picture It is necessary to accelerate the creation of new missions. This is considered a new standard and quality that universities must turn to focus on the hidden mission in the form of bringing innovation or advanced information and communication technology to be part of the four main missions, namely graduate production, research, providing educational services. academic to society and preserving arts and culture by presenting in the form of new knowledge to society by applying innovation or information and communication technology in teaching and learning management Whether it is robot technology or Robotics Technology, which includes unmanned aerial vehicle technology or Drone Technology and driverless car technology or Automatic Cars, there is also 3D printing technology (2017).

Including requiring providing teaching and learning in a new way, taking into account the concept of FinTech or financial technology. Combined with theories about Web 4.0 or Symbiotic Web with Semantic-based Knowledge Management or Semantic Knowledge Management. To integrate in the management of education in the 4.0 era, the main point is that Higher Education 4.0 will not become a forgotten field of higher education can only be considered when adding new missions in innovation or information and communication technology to be integrated into the main mission of higher education institutions by the Office of the Higher Education Commission society and the preservation of arts and culture, which means producing graduates 4.0, research 4.0, providing academic services to society 4.0, and nurturing arts and culture 4.0 by inserting hidden missions in the form of bringing innovation or information and communication technology to be applied in teaching and learning management In addition to being in line with the context of the world 4.0 era, higher education institutions or universities in the big picture is also consistent with the phrase When the world is not the same: a new adaptation of the university must happen, too.

**Conclusion.** The true mission of Thai higher education These are the production of graduates 4.0, research 4.0, academic services to society 4.0, and the preservation of arts and culture 4.0, which must accelerate the insertion of latent missions in the form of applying innovations or information and communication technologies in teaching and learning management. To be in line with the context of the world 4.0 and education 4.0, whether it is robot technology or Robotics Technology, Unmanned Aircraft Technology or Drone Technology, Autonomous Car Technology or Automatic Cars, 3D Printing Technology or 3D Printing Financial Technology or FinTech theory Web 4.0 or Symbiotic Web using Semantic-based Knowledge Management to help manage knowledge. This is to encourage personnel in higher education institutions in the era of Education 4.0 to unravel their concepts from the original framework that had been done and is being worked on to a new adaptation to be consistent with the current situation because higher education institutions are academic centers as a flag for society And it is the foundation of the country's mindset, which is what higher education institutions can bring to the country's progress as well as the world's leading universities whether it be Harvard University or Oxford University to drive development in various fields Up in the country, especially in the Thailand 4.0 era, the world is not the same world anymore. And in order to be in line with the Thailand Education 4.0 era, which is considered the era that has entered the 21st century, Thailand must look at productivity in a manner that can keep up and move forward.

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