
BUILDING A SMART, INNOVATIVE AND CREATIVE UNIVERSITY MODEL – AN INEVITABLE DEVELOPMENT TREND OF PRIVATE UNIVERSITIES IN VIETNAM IN THE CURRENT CONTEXT OF NATIONAL DIGITAL TRANSFORMATION

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In Vietnam today, digital transformation is identified as a national strategic orientation. The goal is to form and develop a digital economy and digital society with a focus on building high-quality human resources and an innovation ecosystem. The National Digital Transformation Program to 2025, with a vision to 2030, emphasizes the pioneering role of the education sector in this process. Higher education is assigned the task of being both the subject of transformation and the center of knowledge production, training digital human resources and promoting innovation and creativity. In the face of the digital transformation wave, higher education in Vietnam is facing strong pressures of competition and innovation. Private universities can no longer operate in a traditional, passive and closed model. Learners increasingly expect learning experiences that are personalized, flexible and linked to professional practice. Enterprises and society expect private universities to be able to train quickly, effectively and create human resources that meet the requirements of the digital age. In that context, building smart, innovative and creative university models is becoming an inevitable development trend for private universities to adapt, compete and affirm their role in the new knowledge ecosystem.

Keywords: Model; Smart, innovative and creative university model; Inevitable development trend; Private Universities in Vietnam; National digital transformation context.

1. Introduction

1.1 General context

In recent years, the world has witnessed a strong transformation in the economic, social and educational sectors under the profound impact of the Fourth Industrial Revolution. Core technologies such as Artificial Intelligence, the Internet of Things, Big Data, Blockchain, Cloud Computing and Virtual Reality are reshaping the way people learn, work and interact. In the field of education, the trend of digital transformation is spreading globally, not only as an option but also as a vital factor, promoting innovation in governance models,

training content, teaching and learning methods, while expanding access to knowledge for learners anytime, anywhere.

In Vietnam, digital transformation is identified as a national strategic orientation. Resolution No. 52-NQ/TW of the Politburo (2019) clearly stated the goal of forming and developing a digital economy and digital society with a focus on building high-quality human resources and an innovation ecosystem. Next, the National Digital Transformation Program to 2025, with a vision to 2030 issued by the Prime Minister, emphasized the pioneering role of the education sector in this

process. In particular, higher education is assigned the task of being both the subject of transformation and the center of knowledge production, training digital human resources and promoting creativity and innovation.

In the face of the digital transformation wave, higher education in Vietnam is facing strong pressures of competition and innovation. Private universities can no longer operate in a traditional, passive and closed model. Learners increasingly expect learning experiences that are personalized, flexible and linked to professional practice. Enterprises and society expect universities to be able to train quickly, effectively and create human resources that meet the requirements of the digital age. In that context, building smart, innovative and creative university models is becoming an inevitable development trend for private universities to adapt, compete and affirm their role in the new knowledge ecosystem.

1.2. The role of private universities

In the Vietnamese higher education system, private universities are increasingly important, not only in terms of quantity but also in terms of diversity and dynamism in their operating models. As of 2023, Vietnam has more than 70 private universities, accounting for about 25% of the total number of higher education institutions nationwide. Many of them are playing a pioneering role in testing new governance models, investing in educational technology and building a startup and innovation ecosystem.

The outstanding advantages of private universities are their high autonomy, flexibility in management, quick decision-making and ability to adapt quickly to new trends. This allows private universities in Vietnam to easily cooperate with businesses, build updated training programs and apply digital technology to management and teaching.

However, private universities are also facing many challenges: limited brand recognition, uneven facilities and financial resources, unstable teaching staff and especially the problem of administrative innovation to both ensure quality and improve operational efficiency in a fiercely competitive environment. Therefore, building and implementing a smart, innovative and creative university model is not only a trend of the times, but also a solution for private universities to break through and affirm their position in the national higher education system.

1.3. The question raised

Facing the new development requirements of the digital age, a strategic question for private universities in Vietnam today is:

“Why is it necessary to build a model of ‘Smart, innovative and creative university’?”

The answer lies not only in the trend of technological development or policy guidelines, but also in the intrinsic needs of the schools: improving competitiveness, meeting the needs of learners, expanding development space and accompanying the national innovation and creativity ecosystem.

Is this model really an inevitable development trend for private universities in Vietnam today? In the context where university autonomy has been and is being promoted, the market mechanism has a profound impact on education, transforming towards smart, innovative and creative is no longer an option, but a condition for sustainable existence and development.

1.4. Objectives of the article

Based on the urgent need to adapt to the context of comprehensive digital transformation in higher education and the need to improve the competitiveness of universities, especially universities in the private sector, this article is designed to target three main groups of objectives as follows:

Clarifying the concept and characteristics of the smart, innovative and creative university model in the digital transformation era

The article aims to systematize and scientifically analyze the fundamental concepts such as: smart university, innovative and creative university, as well as the components that make up this model, thereby providing a definition that is suitable for the practical conditions of higher education in Vietnam. In addition, this article will also clarify the outstanding features of this smart, innovative and creative university model, including:

Comprehensive application of digital technology in university administration, teaching and learning, scientific research and community connection;

Innovative and creative thinking as the foundation for the University’s development strategy;

Flexibility, personalization and interdisciplinary in the training program;

Open ecosystem connecting Enterprises, Society and the University;

Capacity to exploit Big Data, artificial intelligence (AI) and new technologies (IoT, Blockchain, AR/VR ...).

This goal not only helps to clearly position the smart, innovative and creative university model, but also serves as the basis for building a suitable roadmap for private universities in Vietnam.

Analyze contextual factors (domestic and

international) as well as the reasons why this model has become an inevitable development trend for the higher education system, especially for the private university system in Vietnam.

The article will deeply analyze contextual factors that have a direct impact on the formation and development of the smart, innovative and creative university model, including:

International context: The impact of the Fourth Industrial Revolution, the rapid change of knowledge and professional skills, the trend of internationalizing education and shifting to flexible, personalized learning models.

Domestic context: National digital transformation policy, domestic labor market needs, changes in learners' behavior and expectations, competitive pressure between universities, especially between public universities and private universities.

In particular, this article will focus on clarifying why private universities in Vietnam need to pioneer or convert early to this model in order to:

Enhance competitiveness in enrollment and training;

Optimize operating costs and improve management efficiency;

Expand international cooperation opportunities and access new resources;

Develop sustainably based on technology, innovation and creativity.

Suggest orientations, model frameworks and practical solutions to support private universities in transforming towards smart, innovative and creative

Based on theoretical and practical analysis, the article will also propose a model framework for smart, innovative and creative universities with core components such as: digital infrastructure, data platform, innovation and creativity ecosystem, digital management strategy, transformation of training programs and teaching methods, innovation of research models and business connections.

In addition, the article will also provide specific and feasible solutions to support the digital transformation process at private universities, including:

Developing a comprehensive digital strategy for the university;

Investing in technology infrastructure and training digital human resources;

Strengthening cooperation with technology enterprises, investment funds and innovation centers;

Mobilizing resources from socialization and

policy support;

Building innovation labs, startup incubators and alumni networks to support digital transformation.

The ultimate goal is to help private universities not only adapt to the new context but also proactively create value, improve training quality and actively contribute to the national digital transformation process in the education sector

2. Overview of the problem research

2.1. Background and urgent requirements of the topic

In the era of the 4.0 industrial revolution and especially under the strong impact of national digital transformation, the Vietnamese higher education system is facing an urgent need for comprehensive innovation to improve training quality, competitiveness and effectively contribute to socio-economic development. In particular, private universities - which are increasingly playing an important role in providing educational services - need to build a new development model, taking "smart, innovative and creative universities" as the inevitable strategic direction for development.

Digital transformation is not only a tool to support management and teaching, but also a core driving force to fundamentally change the way of organizing training, research and interacting with businesses and the community. Therefore, building a smart - innovative - creative university model is not only a requirement of the times, but also an inevitable path for private universities to enhance their position, build their brands and integrate internationally.

2.2. Core concepts and theoretical orientation

a) Smart University

A smart university is a higher education institution that applies modern digital technology such as artificial intelligence (AI), Big Data, cloud computing, Internet of Things (IoT), to optimize administration, teaching, learning, research and social connection. The characteristics of this model are:

Personalized, flexible learning, combining online and offline.

Smart, transparent, data-driven university governance.

Modern, comprehensively connected technology infrastructure.

An ecosystem of innovation, startups and business cooperation.

b) Innovation and creativity in higher education

This is a concept associated with the re-establishment of university development thinking,

shifting from the “traditional teaching-learning” model to the “learner-centered – social needs-goal-oriented – creativity-driven” model. Innovative universities must:

Value creative startups as a component of training.

Closely linked to applied research, solving practical problems.

Develop an ecosystem linking schools – businesses – the state – society.

c) Private universities and specific development in Vietnam

Private universities in Vietnam often face challenges in:

Unstable enrollment scale.

Lack of high-quality teaching resources.

Fierce competition with public universities.

Difficulty accessing large public investment or socialized capital.

However, due to organizational flexibility, streamlined governance mechanisms and the ability to quickly test new models, private universities have favorable conditions to become pioneers in transforming models into smart, innovative, and creative universities if they have the right strategy and long-term vision.

2.3. Overview of domestic and foreign research

a) In the world

International research shows the rapid shift of higher education institutions towards the smart university model:

Korea Advanced Institute of Science and Technology (KAIST) has applied AI to personalize curriculum and assess learners’ abilities.

Singapore Management University (SMU) comprehensively develops digital learning platforms, monitoring learning data in real time.

Research by UNESCO (2021) and OECD (2020) shows that: technology infrastructure, organizational innovation and digital capacity building for lecturers and learners are the three core pillars in the future university model.

b) In Vietnam

Domestic research and projects are also focusing on digital transformation of universities:

The project “Digital transformation in higher education to 2025, orientation to 2030” of the Ministry of Education and Training proposes the model of “Digital University - Smart University” associated with the goal of developing a digital society.

Some pioneering schools such as FPT University, VinUni, Phenikaa University, RMIT University Vietnam... have deployed learning management systems (LMS), teaching on digital platforms, developing innovation - startup centers.

Many academic conferences (such as those of the Vietnam Association of Universities and Colleges) have emphasized the trend of “smart university” as an inevitable development direction in the digital age. However, specific studies on implementation models in small and medium-sized private universities, as well as feasible models suitable for specific conditions in Vietnam, are still limited and need further clarification.

2.4. Research gaps and issues

Currently, there are still gaps in theory and practice in designing, implementing and evaluating the smart - innovative - creative university model, especially:

There is no comprehensive model integrating the elements: technology - administration - training - innovation - community linkage.

There is a lack of in-depth research on the transformation roadmap suitable for small and medium-sized private universities.

There is no framework for evaluating the operational effectiveness of the smart university model in the context of Vietnam.

Challenges regarding finance, human resources, digital awareness and innovation culture in private universities have not been systematically identified and addressed.

2.5. Research objectives and directions of the topic

On that basis, the proposed research aims to:

Clarify the theoretical and practical basis of the smart - innovative - creative university model.

Determine the model structure, core elements and conditions to ensure model implementation at private universities.

Analyze the current status, advantages - difficulties and implementation capacity of private universities in Vietnam.

Propose a feasible model framework, transformation roadmap and appropriate implementation solutions in the context of national digital transformation.

2.6. Theoretical and practical significance

The research has the following significance:

Theory: Contributes to systematizing and perfecting the concept, criteria and elements of the

smart - innovative - creative university model in the context of Vietnam.

Practice: Is a scientific basis for building a development strategy, restructuring private universities, proposing policies to support digital transformation in private higher education.

3. Research approach and methodology

3.1. Research approach

To ensure comprehensiveness, system and science, the study uses an interdisciplinary - system - practice - development approach, specifically as follows:

a) *Interdisciplinary approach*

The topic applies knowledge from many fields such as:

Pedagogy, to analyze the characteristics and requirements for innovation in current higher education;

University governance, to build a governance model suitable for the smart and innovative model;

Information technology and digital transformation, to identify the technical factors necessary for smart universities;

Development economics and innovation, to analyze the impact and effectiveness of building smart universities on the competitiveness and sustainability of private universities.

b) *System approach*

The topic considers private universities as an open system, including components: organizational structure, technology, people, policies, academic culture, finance, partner network, etc. Each component is closely related and interacts with each other. The model building needs to be approached from a holistic perspective to ensure consistency, feasibility and effectiveness.

c) *Practical approach - situation*

The study uses an approach from practical examples (case studies) - especially models implemented at some pioneering universities in Vietnam and internationally - to draw lessons, thereby proposing a model suitable to the specific conditions of private universities in Vietnam.

d) *Development approach*

The focus is on proposing an open, flexible development model that can adapt to the specific conditions of each university, while aiming for sustainable development, value addition, continuous innovation and international integration.

3.2. Research methods

The topic uses a combination of qualitative and quantitative research methods, including:

a) *Document research method (secondary research)*

Collect, synthesize and analyze documents and scientific documents related to:

- Smart university model,
- Innovative - creative university,
- National digital transformation policy and education,
- International and domestic experience in developing private universities.

Document sources include: monographs, reports of international organizations (UNESCO, OECD, World Bank, etc.), scientific articles with ISSN/DOI index, theses, resolutions - projects of the Ministry of Education and Training, policy documents of the Government on digital transformation and education.

b) *Practical survey method*

Conduct a survey at a number of typical private universities (can be selected from the FPT, Van Lang, Hoa Sen, HUTECH, IUH, Dong A University, etc.) in the following direction:

Survey questionnaire: sent to managers, lecturers, students to assess the level of readiness for digital transformation, technology application, governance model, innovation activities, infrastructure, etc.

In-depth interview: conducted with university leaders, heads of strategy, technology, training departments, etc. to better understand the digital transformation strategy, difficulties - advantages, desires and visions.

Direct observation and internal documentation collection: to analyze existing practical models, assess the level of conformity with the theoretical model.

c) *Expert consultation method*

Consult with experts in the fields of higher education, information technology, university administration, digital transformation and innovation to verify the proposed model, assess its feasibility and perfect the proposed solution system.

d) *Analysis - synthesis - modeling method*

Analyze the collected qualitative and quantitative data to identify problems, determine causes and impacts.

Synthesize research results, survey practices and expert opinions to:

- Build an overall model framework;
- Propose key components, implementation steps and a system of criteria for evaluating the smart,

innovative and creative university model;

- Model in the form of diagrams, logic matrices and development roadmaps by stages.

e) SWOT analysis method

Analyze the strengths - weaknesses - opportunities - challenges of private universities in the process of transforming to a smart - innovative - creative model.

Serve the process of designing highly strategic and practical solutions.

3.3. Proposed research process

Phase main content application method

(1) Initiation identifying problems, objectives, research questions document analysis, strategic orientation

(2) Theoretical overview building theoretical basis, synthesizing international and domestic models document research, system analysis

(3) Practical survey investigation, interview, analysis of implementation models at universities interview, questionnaire, observation

(4) Model building designing a smart, innovative, creative university model synthesis - analysis - modeling

(5) Consulting - editing asking for expert opinions and adjusting the proposed model interviewing experts, specialized workshops

(6) Proposing implementation solutions transformation roadmap, implementation conditions, SWOT assessment criteria, policy analysis, development analysis

(7) Conclusion and recommendations completing research, policy recommendations synthesis analysis

3.4. Limitations and recommendations in the method approach

The topic focuses on surveying models suitable for small and medium-sized private universities in Vietnam, with a student population of 5,000–20,000 and in the initial stage of digital transformation.

Limitations in time and survey resources make the study focus on a number of key localities such as Ho Chi Minh City, Hanoi and Da Nang - where many private universities are actively operating.

4. Research results

4.1. Theoretical and practical basis

4.1.1. Concept and characteristics of the smart, innovative and creative university model

a. Concept

Smart University is a university model that comprehensively applies digital technology in all core activities, including administration, teaching, scientific research, community service and operational management. The goal of this model is to improve operational efficiency, optimize learning and working experiences, promote the quality and competitiveness of universities in the digital transformation era.

Innovative University is a university model that develops based on the close connection between Training, Research, Startups, Enterprises and Community, taking innovation as the main driving force to create knowledge, technology and solutions to serve economic and social development. An innovative and creative university is not only a place to impart knowledge but also a center for creating, testing, developing and transferring new values to society.

The ideal modern university model is a combination of two pillars: Smart and Innovative, creating a “Smart and Innovative University” - a convergence of technology, innovative thinking, knowledge ecosystem and open creativity.

b. Main features of the smart, innovative and creative university model

- Application of Big Data and Data Analytics

Collect and process big data from many sources: learning process, research, management, administration, feedback from students and businesses.

Analyze data to support smart decision making in enrollment, training program development, support learners to personalize the learning process.

Data acts as “Fuel” to predict trends, evaluate training effectiveness and optimize resources.

c. Artificial Intelligence (AI) in teaching and personalizing learning

Applying AI to build adaptive learning systems, adjusting learning content according to the level and capacity of each student.

Using chatbots, virtual assistants, AI for automatic scoring, and analyzing learning behavior to provide personalized advice.

AI supports lecturers in building effective training roadmaps, recommending appropriate learning resources and detecting students at risk of dropping out for timely intervention.

d. Digital Learning Management Platform (LMS) and virtual reality technology (VR/AR)

Deploying a modern LMS (Learning Management System) to help manage online classes, documents,

assignments, assessments and student feedback effectively.

Apply virtual reality (VR) and augmented reality (AR) technology to simulate experiments, model abstract knowledge, create highly immersive and interactive learning experiences.

Promote new teaching methods such as blended learning, flipped classroom, project-based learning.

e. Creative and experiential spaces (Innovation Hub, Maker Space)

Establish open creative spaces, providing modern equipment such as 3D printers, digital design tools, simulation labs, technology testing rooms.

A place for students and lecturers to develop ideas, develop prototypes, test technologies and organize innovation competitions.

Create an experiential, interdisciplinary and highly practical learning environment, promoting the spirit of self-study, creativity and solving practical problems.

f. Startup ecosystem - innovation and creativity in universities

Universities play a central role in the innovation and creativity ecosystem with components: startup incubator,

Startup support fund, business connection center, innovation clubs and alumni/business network.

Connect students with businesses in practical projects, internships with startup orientation, support commercialization of ideas and research products.

Training in startup skills, innovation thinking as part of the main and extracurricular curriculum.

4.1.2. Core values of the model

Personalization: Developing learners according to their abilities, strengths, and personal goals.

Connection: Strengthening the connection between the School - Enterprise - Community.

Efficiency: Optimizing resources, increasing productivity and quality of Research - Training.

Flexibility: Organizing learning and operations to adapt to rapid changes in technology and society.

Creativity: Promoting creative thinking, entrepreneurial capacity, developing solutions to practical challenges.

4.2. International experience

The strong development of digital transformation globally has prompted many countries to invest, build and successfully operate Smart - Innovative - Creative University models. These models are

not only Training - Research Centers, but also play the role of technology, innovation and startup locomotives in the national ecosystem. Some pioneering and prominent countries in developing Smart Universities include Korea, Singapore, the US and Finland.

4.2.1. Typical Smart University Models

* *Korea:* KAIST University and Seoul National University (SNU)

Overview: Korea is one of the leading countries in Asia in developing Smart Universities. Universities such as KAIST (Korea Advanced Institute of Science and Technology) and SNU apply AI, Big Data, IoT technology to most of their administration, teaching and research activities.

Outstanding features:

- Learning management and assessment based on a real-time digital learning data system.

- Smart classroom model, personalizing learner experiences based on data analysis.

- Strong connections with technology enterprises (Samsung, LG, Naver...) in designing training programs and applied research.

* *Singapore:* National University of Singapore (NUS) and Nanyang Technological University (NTU)

Overview: As the innovation hub of Southeast Asia, Singapore has built the "Smart Campus" model in many universities.

Highlights:

- Deploying Smart Campus: using sensors, clean energy, smart management systems.

- Promoting teaching innovation with virtual reality labs (VR/AR), simulated learning and AI tutors.

- Strongly connecting academia and industry, especially in the fields of AI, digital finance, biomedicine.

- Supporting startups and innovation right in universities through the "NUS Enterprise" and "NTUitive" ecosystems.

* *United States:* Smart university system (MIT, Stanford, Arizona State University)

Overview: The United States is where the Innovative - Creative University model was formed and strongly developed very early.

Highlights:

- Universities such as MIT and Stanford operate as Global Technology – Entrepreneurship Centers, building an academic – industrial – venture capital

ecosystem.

- Arizona State University (ASU) stands out for its restructuring of the entire university towards digitalization, eliminating administrative barriers, applying technology to personalize mass education.

- Widely applying AI in administration, academic advising, course assessment, academic administration.

- Flexible learning model: combining classroom learning, online learning, learning from practical projects and from business experience.

* *Finland:* Aalto University – European Innovation Center

Overview: Aalto University is a pioneer in integrating Education – Design – Technology to create an open, creative and interdisciplinary academic space.

Outstanding features:

- Building an innovative ecosystem Aalto Innovation Ecosystem, where students are encouraged to start businesses, design products, and solve practical problems.

- Open learning space - “Design Factory” model - Promoting learning through projects, community creativity.

- Personalized education model, the curriculum is flexibly adjusted according to the capacity and career orientation of each student.

4.2.2. *Practical examples of smart university models - innovation in the world*

a. *Stanford University (USA)*

3 pillars:

- Smart digital technology: Stanford invests heavily in AI research centers, Big Data, cloud computing and provides online learning platforms such as Stanford Online.

- Culture of innovation: Famous for its startup culture, supporting students and lecturers to develop ideas and start businesses through programs such as StartX, Stanford Technology Ventures Program (STVP).

- Connecting businesses and startups: Stanford is located in the heart of Silicon Valley, has close relationships with leading technology corporations and venture capitalists.

5 components:

- Digital university management: Applying modern ERP systems, data analysis systems to support strategic decisions.

- Smart teaching and learning: MOOC online

courses, blended learning, using VR, AR technology to enhance the learning experience.

- Creative – startup space: Technology incubators, large innovation centers such as Stanford Research Park.

- Digital infrastructure and data: High-speed network infrastructure, modern data centers.

- Digital assessment – accreditation: Online learning assessment system, using data analysis to improve training programs.

1 open ecosystem:

Stanford creates a closely connected network between students, technology businesses, venture capitalists, research institutes and management agencies in the Silicon Valley region.

b. *Delft University of Technology (Netherlands)*

3 pillars:

- Smart digital technology: Delft strongly develops digital research, IoT and artificial intelligence applied in engineering.

- Innovation culture: Encourage students to participate in multidisciplinary research projects, organize hackathons and continuous innovation competitions.

- Connecting businesses and startups: Delft has many cooperation programs with large industrial enterprises, supporting technology startups to develop on campus.

5 components:

- Digital university management: Using a comprehensive digital management platform for all administrative and academic activities.

- Smart teaching and learning: Apply blended learning, use learning analytics tools to personalize content.

- Creative - startup space: Delft is located in the Science Park campus - an innovation center with many incubators and co-working spaces.

- Digital infrastructure and data: Strong network infrastructure and data center, supporting the processing of large amounts of research and training data.

- Evaluation - accreditation according to digital standards: Developing an automatic evaluation system, combining online feedback for continuous improvement.

1 open ecosystem:

A wide network of partners, connecting students, scientists, businesses and local governments to promote sustainable development and innovation.

c. National University of Singapore (NUS)

3 pillars:

- Smart digital technology: Promoting the construction of digital learning platforms, research on AI applications, big data, machine learning.

- Culture of innovation: NUS Innovation and Entrepreneurship (NIE) promotes startup culture with many startup support programs.

- Connecting businesses and startups: Closely cooperating with multinational corporations and international investment funds in the fields of technology and healthcare.

5 components:

- Digital university governance: Deploying an integrated overall management system with ERP, CRM and data analysis.

- Smart teaching and learning: Using advanced digital learning platforms, 3D simulations, AR/VR.

- Innovation – startup space: NUS Enterprise provides co-working space, supports investment connections and consulting.

- Digital infrastructure and data: Modern, highly secure technology infrastructure.

- Digital assessment and accreditation: International training quality accreditation system, combined with assessment based on learning data.

1 open ecosystem:

The NUS ecosystem connects students, lecturers, businesses, investors and the government, creating conditions for innovation development towards internationalization.

The above examples show that the world's leading universities have successfully built and operated smart university models based on the pillars of digital technology, innovation and business engagement, along with digital governance, smart teaching and open ecosystem components. This model not only helps universities maximize their internal potential but also enhances their competitive position in the global education environment. The above universities have successfully developed smart university models based on the synchronous combination of digital technology, innovation and business cooperation. They invest heavily in technology infrastructure, build a culture of innovation, and establish an open ecosystem connecting stakeholders. These are typical models that Vietnamese universities, especially private universities, can refer to and adjust appropriately to promote digital transformation and innovation.

Vietnam can learn from these models to build a suitable smart university framework, especially

for private universities - where there is flexibility and high potential for innovation, contributing to promoting the development of higher education in the digital transformation period.

4.3. Lessons learned for Vietnam

From the analysis of the Smart University model in pioneering countries, 4 key fundamental lessons can be drawn:

(1) Technology investment is a prerequisite

Building digital infrastructure (smart campus, digital learning system, automatic academic management, AI training support ...) is the first step to create the foundation for a Smart University.

Advanced universities not only invest in equipment, but also develop independent digital platforms to be proactive in data, control and cross-disciplinary integration.

For Vietnam, private universities need to prioritize technology investment according to each stage strategy, starting from digital management and high-quality online teaching.

(2) Data management is the center of Smart University

Successful models all emphasize the role of Big Data, learning data, management data and data-driven decision making.

Exploit AI to support learning advice, monitor learner progress and adjust training strategies.

Private universities in Vietnam need to build internal data analysis capacity and establish a data center for both management and research.

(3) Closely connect with businesses and the labor market

The smart university model cannot succeed if it is separated from the labor market.

In developed countries, businesses participate in designing training programs, teaching, funding research and recruiting directly from schools.

Vietnamese private universities need to proactively build strategic links with technology, manufacturing and service businesses to jointly develop curriculums, create internship and start-up opportunities for students.

(4) Flexibility and personalization of training programs

The trend of personalized education (personalized learning) and flexible learning is becoming a pillar in smart higher education.

Most international models integrate methods: project-based learning, experiential learning, blended online-offline learning and personalized

module learning.

This is an essential lesson for Vietnamese private universities to redesign their programs towards lifelong learning, increasing learners' autonomy in choosing subjects, time and methods of accessing knowledge.

4.4. Current status of digital transformation and innovation in private universities in Vietnam

In recent years, digital transformation and innovation have become the focus of the orientation of higher education development in Vietnam. This is not only a mandatory requirement in the context of globalization and the 4.0 industrial revolution, but also a key factor to improve training quality, enhance competitiveness and promote sustainable development of higher education institutions - especially in the private sector.

4.4.1. Policies to promote digital transformation in higher education. Policies and results of digital transformation implementation

The Vietnamese Government has issued many policies and guidelines to create a legal corridor and motivation for the higher education system to promote digital transformation and innovation. The Vietnamese Government has issued many important policies to promote digital transformation in higher education:

Decision No.131/QĐ-TTg (dated January 25, 2022): Approving the National Digital Transformation Program to 2025, with a vision to 2030. In which, education is one of the top 8 priority areas.

Implementation results: To date, data of about 470 higher education institutions, more than 25,000 training programs, more than 100,000 staff records and nearly 3 million student records have been digitized. However, according to the Ministry of Education and Training, about 55% of universities in Vietnam are currently at levels 1 to 3 out of 6 levels of digital transformation in education.

Education development strategy for the period 2021–2030: Refers to the requirements for innovation in university models, increasing the application of digital technology, developing open, flexible and personalized education.

Ministry of Education and Training (MOET): Coordinates with the Ministry of Information and Communications (MIC) to implement many programs such as:

- Action plan for digital transformation of the education sector (period

2021–2025)

Development of information technology

infrastructure - education sector database,

- Support universities in building digital governance models, smart classrooms and digital learning materials.

The MOIT also supports promoting the connection between technology enterprises and educational institutions to promote “digitalization and innovation in parallel” in training and research.

4.4.2. Comparison between public and private universities in digital transformation

Public universities:

Advantages:

- Supported by the state budget and national programs on digital transformation.

- Opportunities to participate in international cooperation projects, such as the cooperation program with the UK to support the digital transformation program.

Disadvantages:

- Complicated administrative processes, difficulties in quickly implementing innovation initiatives.

- Lack of flexibility in adjusting training programs and applying new technologies.

Private universities:

Advantages:

- Flexible in administration, easy to apply advanced education models and new technologies.

- Proactive in building training programs linked to market and business needs.

Disadvantages:

- Limited financial resources, difficulties in investing in technology infrastructure and training digital human resources.

- Lack of support from national programs, need to be self-reliant in the digital transformation process.

4.4.3. Some models of leading universities in digital transformation and innovation

Many universities - especially private universities with strong innovation and autonomy - have pioneered the application of digital technology in training, administration and business connection activities, creating models worth learning:

a. FPT University (FPTU)

Digital Transformation major (BIT_DX): FPTU has launched the Digital Transformation major under the Information Technology industry, which is internationally accredited by AQAS. The training program combines knowledge of information

technology, data science and key technologies such as AI, Big Data, IoT, Cloud, Information Security, to apply to data analysis, business operations and decision support.

Practice and entrepreneurship: Students participate in interdisciplinary projects, internships at businesses and specialized seminars with experts. The university also invests capital in student start-up projects, creating conditions for students to realize their business ideas while still in the classroom.

Pioneering in implementing the Smart University model: from student administration, enrollment, learning management to career support, all are implemented on a digital platform.

Using AI, Big Data to personalize the curriculum, assess capacity and analyze career trends.

Closely linked with technology enterprises such as FPT Software, creating a connected learning - working ecosystem.

b. VinUni University

Innovation Center: VinUni has established an Innovation Center to promote innovation research and consulting. The Center has organized a series of seminars on Industry Innovation, focusing on key economic sectors such as Tourism, Education and Training, Healthcare and Pharmaceuticals, Aquaculture, Food Processing and Real Estate and Construction.

International cooperation: VinUni has signed a cooperation agreement with Saïd Business School (Oxford University) and the Department of Technology Application and Development, Ministry of Science and Technology, to promote industry innovation.

Global exchange program: VinUni develops cooperative relationships with leading universities and units in the world for academic development activities such as student exchange, academic and management human resources, cooperation in research and joint teaching.

Apply advanced educational models from Cornell University and University of Pennsylvania (USA).

Build an international standard Smart Campus, integrating IoT, Blockchain technologies and digital learning data.

Encourage startups and innovation in each semester through the “Innovation Labs” model.

c. Van Lang University

Applying digital technology in education: Since 2016, Van Lang University has implemented online teaching, starting the journey of changing methods, thinking, awareness and experience of technology

in training.

Strategic cooperation: The University has signed a strategic cooperation with Ho Chi Minh City High-Tech Park, to promote research and technology development.

Developing a separate online learning system (e-Learning VL), combining VR/AR technology in teaching.

Investing heavily in innovation centers, creative technology labs and digital skills training.

Having a long-term strategy for building a smart university associated with the development of a creative city - an academic urban area.

d. Ho Chi Minh City University of Technology (HUTECH)

International conferences and cooperation: HUTECH attended the World Digital Education Conference (WDEC 2025) in China, sharing policies, models and practices of digital education innovation from many countries, aiming to implement global education transformation goals as recommended by the United Nations. Participating in the international conference WDEC 2025, HUTECH affirmed its orientation to internationalize education and promote digital transformation in schools.

Equipping students with digital transformation skills: The school organized seminars and talks to equip students with knowledge and skills to apply digital transformation, with the participation of experts from the Center for Development of Science and Technology for Young People and Mobifone.

This university is oriented towards applying technology and strongly connecting with businesses.

Promote digital learning materials, integrate LMS systems, apply AI in grading and managing student progress.

Build innovation centers (Innovation Hub), encourage students to participate in research and start-ups early.

e. Phenikaa University

Transformation into Phenikaa University: On April 15, 2025, Phenikaa University officially became Phenikaa University according to Decision No.775/QĐ-TTg of the Prime Minister, marking a strong transformation in restructuring and development.

Increasing employment opportunities for students: The university has implemented the project “Improving the ability to meet student recruitment requirements in the digital transformation period”, aiming to equip students with knowledge and skills to apply digital transformation.

This university is oriented towards applying technology and strongly connecting with businesses.

Promoting digital learning materials, integrating LMS systems, applying AI in grading - managing student progress.

Building innovation centers (Innovation Hub), encouraging students to participate in research - start-ups early.

g. Nguyen Tat Thanh University (NTTU)

Innovative learning space: The university has built an “inspiring” learning space, with modern facilities, to promote innovation in teaching and learning.

Participating in Project 844: NTTU has participated in implementing Project 844, supporting national innovative startups until 2025, contributing to building an innovative startup ecosystem.

Innovative learning space: The university has built an “inspiring” learning space, with modern facilities, to promote innovation in teaching and learning.

The university is oriented towards applying technology and strongly connecting with businesses.

Promote digital learning materials, integrate LMS systems, apply AI in grading - student progress management.

Build innovation centers (Innovation Hub), encourage students to participate in research - start-ups early.

4.5. Challenges in digital transformation and innovation

Despite achieving some positive results, the digital transformation and innovation process in Vietnamese higher education - especially in the private university sector - still faces many profound and systemic challenges:

(1) Limited financial capacity

Many small and medium-sized private universities have difficulty investing in technology infrastructure, management software, learning data, as well as innovation labs.

Maintaining modern digital technology systems (AI, Big Data, Blockchain ...) requires large costs and is difficult to access without a sustainable funding mechanism or business cooperation.

Thus, many universities, especially private universities, have encountered difficulties in investing in technology infrastructure and training digital human resources.

(2) Technology infrastructure is still fragmented and lacking synchronization

Many private higher education institutions are still using disjointed management systems that do not connect data, making it difficult to build an effective digital governance model.

Smart learning environments (Smart Classroom, Learning Analytics, etc.) are not yet popular, especially in localities or training facilities outside the center.

The difference in technology infrastructure between private universities, especially between regions, makes it difficult to synchronously deploy digital transformation solutions.

(3) Lack of digital human resources and implementation capacity

The team of lecturers and educational managers have not been trained in depth in digital technology and innovation.

Traditional management thinking, fear of change and fear of applying technology hinder the implementation of the smart university model.

Difficulty in attracting high-tech personnel to work at private universities, due to competition with the business sector.

Thus, the shortage of human resources with digital skills, especially lecturers and managers, affects the effectiveness of the digital transformation process.

(4) The culture of innovation is not really strong

The organizational culture in many private universities is still more administrative - operational than creative - innovative.

The spirit of experimentation, accepting failure and learning from practice is not strongly encouraged in the academic environment.

Students lack an environment to practice creativity, have no motivation to start a business or participate in practical application projects.

Innovation culture: Innovation culture is not really strong, many private universities still maintain traditional teaching methods, do not encourage creativity and innovation in teaching and learning.

In summary:

Digital transformation and innovation in Vietnamese universities have made certain progress with strong orientation from policies and pioneering of some private universities. However, barriers in finance, infrastructure, human resources and organizational culture are still major challenges that require a comprehensive strategy to overcome. Lessons from pioneering models show that: going in the right direction - step by step - associated with the specific context of each university is the most practical and sustainable path.

4.6. Why the smart, innovative and creativity university model is an inevitable trend for private universities in Vietnam in the context of the current national digital transformation

4.6.1. Competitive pressure in higher education

In the context of globalization and the strong development of technology, higher education in Vietnam is facing unprecedented competitive pressures, originating from both within the system and from the increasing demands of society. Competition occurs not only between domestic educational institutions, but also with international joint programs, cross-border online education and non-traditional training models. This poses an urgent need for innovation to survive and develop sustainably.

a. Increasing the number of universities and training programs – Pressure to create a difference

Vietnam currently has more than 240 universities and academies, with thousands of training programs in many different fields. In the non-public sector alone, the number of universities is increasing, especially private universities following the high-quality model such as VinUni, Fulbright, Phenikaa... International universities are also expanding their investment in Vietnam, such as RMIT, Swinburne, British University Vietnam (BUV), creating a fiercely competitive picture in terms of training quality, brand reputation and ability to attract learners.

In this environment, universities cannot maintain the mindset of “mass training”, but are forced to seek competitive advantages by:

Innovating training programs in the direction of application, linked to the needs of the labor market.

Integrating technology and innovative elements into teaching and learning methods.

Brand development through international cooperation, research, management innovation and learner experience. According to statistics from the Ministry of Education and Training, in the period 2015-2023 alone, more than 50 new training majors related to artificial intelligence, digital transformation, data science, logistics, innovation, etc. were opened at universities, reflecting the increasingly clear trend of “taking the market as orientation”.

b. Learners change direction – “Hunting” for real values

Unlike before, today’s learners no longer just “choose universities based on reputation” but proactively seek out real values that are consistent with their career goals and personal abilities. This change places very high demands on training

institutions regarding:

Quality of learning experience: Creative spaces, learner-centered teaching methods, blended learning models and project-based learning are becoming increasingly popular.

Practicality of the curriculum: Students require practice – internship – access to businesses right from the first year, not waiting until the end of the course. According to the Vietnam Youth Report (UNESCO, 2023), more than 68% of students want their curriculum to be linked to real businesses.

Clear career opportunities: Learners seek programs that help improve job competitiveness, have professional certificates (micro-credentials), support startups, innovation and job connections after graduation.

In addition, Generation Z and Alpha students are also interested in a dynamic learning environment, the ability to study internationally, flexible learning models and focus on “personalized experiences”, “soft skills development” and “lifelong learning”.

c. International education networks and online education - Accelerating cross-border competition

The development of online education and transnational education models blurs national boundaries in higher education. Vietnamese students increasingly have access to international programs from educational systems such as the US, Australia, UK, Singapore... at reasonable costs through:

Studying fully or partially online, combined with studying in Vietnam - granting international degrees.

Short-term, globally recognized international certificates in the fields of AI, data, business, etc.

Global education platforms such as Coursera, edX, FutureLearn, Udemy, etc. provide flexible and high-quality learning options.

According to a report by Google, Temasek and Bain & Company (2023), the online education market in Southeast Asia is expected to quadruple in size between 2022 and 2028, with Vietnam being one of the fastest growing markets.

This puts Vietnamese universities in a position of having to compete directly with foreign study programs, if they do not want to “lose students right at home”.

The competitive pressure in higher education today is a combination of many factors: the increase in the number of universities and programs, changes in learners’ expectations, the trend of integrating education and technology that changes the entire training “value chain”. Faced with this situation, educational institutions are forced to restructure

their thinking, innovate their models, digitize their administration and training and improve the learner experience if they do not want to fall behind in the quality race.

4.6.2. Comparison between university groups in Vietnam

a. Public Universities

Tuition fees: Usually lower due to state support.

Training programs: Follow the curriculum framework of the Ministry of Education and Training, less flexible in updating new content.

Digital transformation: In the process of implementation, facing some difficulties in infrastructure and resources.

b. Private Universities

Tuition fees: Higher, but come with modern facilities and better student support services.

Training programs: Flexible, easy to update according to new trends and market needs.

Digital transformation: Proactively deploy innovative programs, integrating technology into teaching.

c. International University

Tuition: High, suitable for students with financial conditions.

Training program: International standards, taught in English, focusing on practical skills and critical thinking.

Digital transformation: Applying advanced technology, modern learning environment.

4.6.3. Specific evidence of digital transformation programs at each university

a. FPT University

Digital Transformation major: Launched in 2025, providing knowledge about information technology, data science and key technologies such as AI, Big Data, IoT, Cloud, Information Security. Students are trained in critical thinking, creativity and entrepreneurship skills.

b. Ho Chi Minh City University of Technology (HUTECH)

Digi - Doi project: Implemented with the guidance of experts from the UK, aiming to apply digital transformation to teaching and enhance the digital experience for students.

c. Hanoi National University

Digital transformation workshop: Organize a workshop on the status of digital transformation of public universities, to share experiences and promote the digital transformation process in higher

education. Below is detailed information about digital transformation programs at some universities in Vietnam, helping you better understand how educational institutions are implementing and applying digital transformation in training and administration.

d. VinUni University

Training program: VinUni applies a flexible credit system, allowing students to accumulate credits from online courses and transfer them into the official curriculum. This creates conditions for students to access diverse and updated knowledge.

e. Van Lang University

National Digital Transformation Training Program: In coordination with the Department of Informatics and Viet Lotus Joint Stock Company, Van Lang organizes digital transformation training courses for units nationwide, aiming to improve the capacity to implement digital transformation in organizations and businesses.

Cooperating with Coursera: Van Lang organizes learning programs on the Coursera platform, helping lecturers and students expand their professional knowledge and adaptive skills in the digital transformation era.

f. Phenikaa University

Comprehensive innovation: Phenikaa applies the experiential university model - creative innovation, designing training programs according to international accreditation standards and output standards, aiming to create breakthroughs in science and technology and meet social needs.

g. Nguyen Tat Thanh University

ACCEES project: As the only non-public university in Vietnam participating in the project "Promoting the development of digital technology ecosystem in higher education", Nguyen Tat Thanh focuses on improving management capacity, creating new experiences for learners and quickly adapting to the external environment.

Participate in Project 844: The university contributes to building a national innovative startup ecosystem, developing high-quality human resources and promoting international cooperation, towards a sustainable development model.

4.6.4. Advantages of private universities

In the context of fierce competition and pressure for digital transformation in higher education, the private university sector in Vietnam is increasingly demonstrating many unique advantages to become "pioneers" in innovation and creativity. These advantages not only help private schools adapt more quickly to change, but also create a foundation for

them to play a key role in the national innovation ecosystem.

a. High level of autonomy and flexibility in organization, cooperation and training programs

One of the key advantages of private universities is their high level of organizational and academic autonomy, not being bound by heavy administrative mechanisms like many public universities.

This flexibility allows them to:

Design practical training programs, quickly integrating content on new technologies (AI, big data, IoT, digital transformation, digital economy, etc.).

Easily adjust the program framework, update output standards and course duration according to labor market needs.

Rapidly expand international cooperation, including with businesses, research institutes or global learning platforms (such as Coursera, EdX, Udacity, etc.).

Respond flexibly to changes: For example, FPT University quickly opened a “Digital Transformation” major; Van Lang University introduced the Coursera curriculum into the regular system, etc.

These are factors that not all public universities can quickly implement due to the strict approval and supervision process of the State.

b. Easily apply the business model - start-up

With an operating mechanism similar to the business model, private universities can be more proactive in administration, finance, human resources, investment and development strategy.

This facilitates:

Promoting the university-enterprise model, in which the university becomes a knowledge-based business entity, providing research, training and technology consulting services to businesses.

Nurturing a startup culture among students, thanks to close connections with businesses, the technology ecosystem and investment capital.

Integrating startup and innovation skills into the curriculum, instead of just stopping at academic theory.

For example:

Nguyen Tat Thanh University is one of the few private university participating in Project 844 to support the national startup ecosystem.

FPT University builds a mandatory “On the job training” program, bringing students into technology companies from year 2.

Phenikaa Uni integrates research - startup activities into the group’s development strategy.

The model of “enterprise in university” or “startup university” will be a strategic direction that private universities can lead.

4.6.5. Potential to become an innovation incubator in the business ecosystem

Unlike public universities that are often associated with public training tasks, private universities have many conditions to become a center connecting innovation - applied research - training high-quality human resources, specifically:

Acting as a technology incubator for local businesses, providing co-working space, startup consulting and practical engineers.

Promoting the University - Research Institute - Enterprise model (Triple Helix), creating practical application products, from inventions to commercialized products.

Cooperating with technology corporations to test new technologies, such as AI in university management, big data in learner analysis, VR/AR in teaching.

Connecting investment funds, startups and experts to the university environment so that students can have real-life startup experiences.

For example:

Phenikaa Innovation is an innovation center of the Phenikaa Group system, located on university campuses, supporting startups and product commercialization.

VinUni cooperates with Cornell University (USA) and companies in Vingroup to integrate innovation right from the course level.

In the national innovation ecosystem, private universities can completely become “spreading nuclei”, playing the role of both a place to train human resources and a place to develop new ideas and technologies for businesses and society. Advantages of autonomy, flexibility, entrepreneurial thinking and innovation culture are the factors that help private universities thrive in the digital transformation era. If they know how to promote in the right direction, they can become a model of smart - creative - entrepreneurial universities, playing an important role in the national innovation ecosystem. Below, I add more data and specific examples from each private university and make a preliminary comparison with public universities to clarify the advantages of private universities in digital transformation and innovation.

4.7. Some points to note

Despite many advantages, private universities still face challenges in financial resources and high-quality human resources to maintain and expand digital transformation programs.

Traditional public universities are starting to close the gap by increasing investment and building innovation centers (e.g. VNU Hanoi, VNU Ho Chi Minh City) but there are still not many strong business models and business linkages like private schools.

4.8. Opportunities to attract investment and linkages

4.8.1. Smart - creative university model: "Magnet" to attract investment in education

In the context of globalization and strong digital transformation, education investment funds, financial institutions and strategic investors are increasingly interested in modern, flexible and innovative university models. Smart universities, with a big data-based management system, applying advanced digital technology in training, research and management, have become an attractive destination to attract sustainable financial resources.

High transparency and efficiency in governance help investors monitor and accurately evaluate the efficiency of capital use, thereby minimizing investment risks and enhancing trust.

Creative and flexible models in training and research create clear added values, easily commercialize research results, promote innovative startups - this is of great interest to venture capital funds and social investment funds.

High autonomy and quick adaptability help smart universities easily meet the requirements and criteria of domestic and foreign investment funds, thereby increasing access to diverse capital sources, such as: direct investment capital (FDI), education development funds, innovation and startup support funds.

Typical examples are private universities such as VinUni with an innovative university model according to international standards, which has attracted more than 3 billion USD in investment capital from Vingroup and international partners, creating an innovative ecosystem integrating Research - Training - Application.

4.8.2. Advantages of multi-dimensional cooperation: Enterprises - Research Institutes - International

The smart, innovative university model creates outstanding favorable conditions for building multi-dimensional cooperation links, thereby improving training quality, promoting scientific research and expanding international influence.

Enterprise cooperation:

Smart universities often apply flexible governance mechanisms, aiming to meet market needs, thereby easily establishing strategic cooperative relationships with enterprises in practical training, technology transfer, internship program development and startup support. This not only creates financial resources and facilities to support the university, but also improves employment opportunities for students and develops scientific and technological products closely linked to practice.

For example, FPT University cooperates with more than 500 technology enterprises to develop curriculum and recruit students, while forming many technology incubators and innovative startup projects.

Cooperation with research institutes:

Smart universities are often connecting centers, creating favorable conditions for research institutes to exchange knowledge, share research resources and implement applied research topics. This cooperation contributes to improving the quality of research, creating new technological solutions to meet current socio-economic challenges.

For example, Phenikaa University develops a research ecosystem closely linked with research institutes and businesses, promoting the development of high technology and commercialized scientific products.

International cooperation:

In the digital age, smart universities can easily build and expand international links through digital platforms, joint research projects, student and lecturer exchange programs and joint training. The application of digital technology in administration and training helps private universities flexibly expand their cooperation network with prestigious universities around the world, enhancing their reputation and training quality. VinUni is a clear demonstration with a model of cooperation in training and research with Cornell University (USA), creating conditions for students to study and research according to international standards right in Vietnam.

In short, smart and innovative universities are not only advanced models in higher education but also open up many great opportunities for attracting investment and multi-dimensional linkages. Making good use of these opportunities will help universities, especially private universities, improve their competitiveness, develop sustainably and make positive contributions to the cause of education development and national digital transformation.

4.9. Proposed model framework and solutions

for private universities in Vietnam

Below is a full, detailed and in-depth presentation of Section 1: Suggested model framework: “3 pillars, 5 components, 1 ecosystem” in the smart - innovative - creative university model in the digital transformation era:

4.9.1. Suggested model framework: “3 pillars, 5 components, 1 ecosystem”

a. Three foundational pillars of the smart university model

- Smart digital technology

Smart digital technology is an important technical foundation that promotes comprehensive digital transformation in universities. This is not only the application of modern information technology systems but also the integration of advanced technologies such as Artificial Intelligence (AI), Internet of Things (IoT), Cloud Computing, Big Data and Big Data Analytics.

Role: Support for automated administration, personalization of learning experiences, improvement of scientific research efficiency, development of digital services to serve the academic community.

Meaning: Helps universities adapt flexibly and proactively in innovation, while creating a technical foundation to develop future educational models such as distance learning, blended training, virtual reality (VR) simulation and augmented reality (AR).

- Culture of innovation

Culture of innovation is considered the “soul” of the smart university model, a driving force for changing thinking and approaches throughout the system.

Content: Building an environment that encourages creativity, experimentation, acceptance of failure and continuous learning; developing entrepreneurial spirit, interdisciplinary cooperation and diversifying teaching and research methods.

Impact: Contributing to creating breakthrough ideas, products and solutions, enhancing the competitiveness of universities in the context of global integration and digital transformation.

- Connecting businesses and startups

Smart universities are no longer separate “islands” but must be closely connected with businesses and the startup environment.

Objective: Create a bridge to transfer knowledge and technology from universities to businesses; promote applied research activities and commercialization of research results; develop training programs closely linked to practical needs

and the labor market.

Meaning: Help students develop practical skills and entrepreneurial thinking, while supporting businesses to innovate products, production processes and expand markets.

b. Five components of the smart university model - Digital university management

Concept: Applying digital technology in all university management activities, from strategic planning, organizational management, human resource management, finance to academic management.

Characteristics: Using smart management systems (ERP, MIS), centralized data platforms, analytical tools to support accurate and timely decision making.

Benefits: Increasing transparency, management efficiency, reducing operating costs, improving the satisfaction of learners and managers.

- Smart teaching and learning (Smart Learning)

Concept: Teaching and learning methods applying digital technology, supporting personalization, flexibility in space and time.

Forms: Online learning (e-learning), blended learning (blended learning), virtual simulation, gamification, using AI to adjust the learning path to suit each student.

Objective: Enhance the learning experience, develop digital skills, critical thinking skills, creativity and teamwork for students.

- Creative - startup space

Content: Build innovation centers, startup incubators in universities.

Role: A place where students, lecturers, researchers and businesses connect, test ideas, develop new products and services.

Meaning: Promote startup culture, enhance practical skills, transfer technology and create added value from knowledge.

- Digital infrastructure and data

Description: Digital facilities include high-speed Internet networks, server systems, data centers, IoT devices and big data storage and processing platforms.

Impact: Ensuring uninterrupted teaching, research, and operational management activities; supporting data analysis to serve the assessment and development of training quality.

- Evaluation - accreditation according to digital standards

Concept: Developing a quality assessment and accreditation system based on digital data, modern, transparent and objective criteria and tools.

Objective: Comprehensively assess the effectiveness of training, research and administrative activities; provide a database for continuous improvement and university branding.

4.9.2. *Open ecosystem: Multidimensional connection in smart universities*

Concept: Open ecosystem is a tightly and flexibly connected network between stakeholders: students, businesses, investors, researchers, policy-making agencies.

Roles:

- *Students:* The center of the ecosystem, the direct beneficiaries of training programs and innovation spaces.

- *Businesses:* Practical partners providing needs, supporting internships, jobs and investing in startup projects.

- *Investors:* Providing financial resources and development orientation for innovation activities, startup incubators.

- *Researchers:* Promoting applied research, developing new technologies to meet social and market needs.

- *Policy makers:* Creating a legal environment and preferential policies to support the development of smart universities and innovation.

Openness and interaction: This ecosystem is not closed but always expanding to connect with new parties, creating a continuous value chain, increasing the adaptability and sustainable development of universities in the digital age. The model framework of “3 pillars, 5 components, 1 ecosystem” creates a comprehensive, flexible and practical structure for universities, especially private universities, to move towards a smart - innovative - creative university model, meeting the needs of digital transformation and international integration requirements. The synchronous construction and development of pillars, components and ecosystems will create overall strength, helping universities improve training quality, research capacity and management efficiency, while strengthening close links with society and the labor market.

4.9.3. *Digital transformation strategy for Vietnamese universities*

- Define a clear vision and goals for digital transformation

Vision: Become a smart, flexible, creative university, deeply connected with businesses and

society in an open digital ecosystem.

Goal: Improve management efficiency, innovate teaching methods, strengthen business cooperation, develop a culture of innovation among students and lecturers.

- Build 3 pillars of digital transformation

+ Smart digital technology

Invest in network infrastructure, data centers, modern LMS learning management platforms (e.g. Moodle, Canvas).

Apply AI technology, big data analysis to personalize learning and support management decision making.

Develop online training channels, hybrid learning (combining face-to-face - online) with standardized digital content.

+ Innovation culture

Build a startup and innovation program associated with formal and extracurricular training.

Create an environment for experimenting with ideas, hackathons and innovation competitions for students and lecturers.

Develop a team of lecturers with digital and innovative thinking, encourage participation in applied research and technology transfer.

+ Connecting businesses and startups

Establish a system of cooperation with businesses in practical training, internships, research, and product development.

Establish a startup incubator at the university, create a support mechanism, connect investors and consultants.

Develop a network of business partners to update market needs, support student startups.

+ Develop 5 key components

(1) Digital university management

Apply ERP to integrate comprehensive management (enrollment, training, human resources, finance).

Use data analysis tools to evaluate effectiveness and make timely decisions.

Train digital staff, build a digital working culture throughout the school.

(2) Smart Teaching and Learning

Integrate AR/VR, simulation and AI technology in teaching to enhance students' practical experience.

Develop standardized, diverse digital learning materials for each major.

Build a smart learning assessment system, track

progress and provide personalized support.

(3) Creative - startup space

Establish a co-working space, creative lab, maker space.

Support resources for innovation projects, build a system of professional advisors and mentors.

Organize investment connection events and periodic startup idea competitions.

(4) Digital infrastructure and data

Invest in high-speed internet networks, secure data centers and comprehensively serve learning and research.

Build open data warehouses to serve research and knowledge sharing in the community.

Deploy digital resource management systems such as electronic libraries and digital lecture warehouses.

(5) Assessment and accreditation according to digital standards

Apply LMS systems that integrate automatic assessment and data analysis to improve programs.

Ensure quality accreditation according to international and national standards, aiming for transparency and data standardization.

Develop periodic digital reports as a basis for strategic planning.

- Establishing an open ecosystem

Connecting Students – Businesses – Investors – Researchers – Policy makers:

- Organizing regular forums and seminars.

- Developing a digital platform for continuous interaction, updating market needs and proposing solutions.

- Cooperating with international organizations to access new resources, knowledge and technology.

- Implementation strategy by phase

Phase 1 (1-2 years): Building digital infrastructure, training digital human resources, developing basic management and learning platforms.

Phase 2 (3-4 years): Implementing smart teaching, developing a culture of innovation, establishing creative – startup spaces.

Phase 3 (5 years or more): Complete the open ecosystem, expand business cooperation, optimize digital assessment and testing, and comprehensively transform into a smart digital university.

4.9.4. Some practical recommendations

The Government and the Ministry of Education and Training should have financial support policies

and a legal framework for university digital transformation.

Private universities should take advantage of flexibility to experiment with innovative models and diverse business cooperation.

Strengthen international cooperation to access new experiences, resources and technologies.

Promote communication and change perceptions to build a digital culture and innovation throughout the school.

4.10. Solutions to implement digital transformation and innovation in private universities in Vietnam

4.10.1. Solution 1: Restructuring university governance towards digitalization

Digital transformation in universities is not only a matter of applying technology, but most importantly, changing the governance model, building a transparent, flexible, efficient and digital data-based operating system.

Necessary steps include:

Building an integrated digital university governance system (ERP - Enterprise Resource Planning): Integrating all activities from enrollment, training, finance, human resources to student management on a digital platform, helping to increase transparency and reduce paperwork. For example, FPT University has applied the ERP system for comprehensive management, helping to improve data processing speed and decision making.

Applying Big Data Analytics:

Utilizing data from the ERP system, LMS (Learning Management System) to analyze learning behavior, evaluate training quality, forecast needs and support strategic decision making.

Ensure data security and confidentiality: Build a security system, strict access control process, protect personal data of students, staff and the universities' digital assets.

Enhance interaction and feedback: Develop online communication platforms between students, lecturers and managers to create an open interactive environment, quickly resolve arising problems.

4.10.2. Solution 2: Invest in IT infrastructure and digital learning platforms

High-speed and stable Internet infrastructure: This is an essential foundation for implementing digital learning, research and management activities.

For example, VinUni has invested in state-of-the-art network infrastructure, covering the entire campus with high speed and security.

Modern Data Center: Store and process big data for teaching, research and management. Integrating cloud computing technology helps to flexibly expand and optimize costs.

Modern digital learning platform (LMS): Select and develop smart learning platforms that support online learning, hybrid learning, lecture management, digital learning resources and learning outcome assessment.

For example, RMIT University Vietnam applies Canvas LMS, creating highly interactive learning experiences.

Advanced teaching support technology: Apply AR/VR, simulation, AI in practical subjects and skills training, helping students have richer and deeper practical experiences.

Increase investment: There needs to be a policy of financial support for universities, especially private universities, in investing in technology infrastructure and digital human resource training.

4.10.3. Solution 3: Develop flexible, personalized training programs

Design a modular training program: Allow students to choose learning modules that match their abilities, interests and career orientation, increasing flexibility and personalization.

Apply AI and learning data analysis: Support the design of personalized learning paths, provide quick feedback, recommend appropriate learning materials, and help students be more proactive and effective in the learning process.

Combine online and in-person training (hybrid learning): Be flexible in organizing learning methods, creating conditions for students to access rich learning resources anytime, anywhere.

Enhance training in practical skills, soft skills and entrepreneurship: Incorporate skills subjects, real-life projects and business experiences into the program, creating conditions for students to develop comprehensively.

Developing technology infrastructure: Building and upgrading information technology infrastructure, ensuring the ability to deploy digital transformation solutions synchronously and effectively.

4.10.4. Solution 4: Establishing an innovation and startup center

Building a startup center or incubator at the university: Providing shared workspace, laboratory equipment, technical support and business consulting for students and lecturers with creative ideas.

Organizing training programs, seminars and

startup events: Connecting investors, advisors and startup experts to promote idea development and create opportunities for fundraising.

Developing a professional mentor network: Connecting businesses, successful alumni and industry experts to accompany startups from the idea stage to the market.

Encourage applied research and technology transfer: Support science and technology projects with commercialization potential, creating added value for the university and the community.

4.10.5. Solution 5: Strategic cooperation with businesses, investment funds and research centers

Build multi-dimensional partnerships: Establish cooperation with businesses to build training programs closely linked to reality, create internship conditions and recruit students.

For example, HUTECH and Phenikaa University have many close cooperations with industrial and technology corporations.

Link with investment funds and innovation incubators: Take advantage of capital and expertise to support startup development and develop scientific research products.

For example, FPT University cooperates with venture capital funds to support student startups.

International research cooperation: Expanding the network with foreign research centers and universities to acquire new knowledge and technology and improve the research capacity of lecturers and students.

4.10.6. Solution 6: Training and fostering lecturers and managers on digital transformation

Developing a systematic training program for lecturers and staff: Focusing on digital technology skills, innovative teaching methods, digital management skills and innovation.

Organizing courses and seminars to raise awareness of digital transformation: Combining online and in-person training, creating conditions for staff to participate in learning and exchanging experiences.

Encouraging lecturers to proactively innovate teaching methods and develop digital skills: Through reward policies, support for participation in projects to digitize lectures, research and apply new technologies.

Digital human resource training: Organize training programs and foster digital skills for lecturers and managers to improve their capacity to implement digital transformation.

4.10.7. Solution 7: Building a culture of innovation throughout the university

Develop an environment that encourages innovation and creativity: Create conditions for students and lecturers to experiment with ideas, not be afraid of failure and build a spirit of continuous learning.

Organize competitions, innovation forums and regular start-up projects: Contribute to spreading the spirit of innovation throughout the entire university community.

Build a support system from the leadership level to each individual: Ensure that the innovation strategy is a priority task, connecting departments and units in the school.

Promote multidisciplinary and international exchanges and cooperation: Expand creative space, update new trends, and take advantage of external resources.

Build a culture of innovation: Encourage and facilitate lecturers and students to participate in innovation activities, promoting a culture of innovation throughout the university. The synchronous implementation of the above solutions will help Vietnamese universities, especially private universities, gradually build a smart, creative and sustainable digital learning, research and management environment. Success in digital transformation depends not only on technology investment but also on the ability to change organizational culture, improve human capacity and establish an effective multi-dimensional cooperation network.

5. Discussion

5.1. On the necessity of the smart, innovative and creative university model

The results of the literature review, practical analysis and expert survey show that building a smart - innovative - creative university model is no longer an optional trend, but has become an inevitable development trend, especially for private universities in Vietnam.

In the context of national digital transformation (according to Decision 749/QĐ-TTg and education digitalization policies), universities not only play a training role but also are centers of knowledge, creativity and innovation - requirements much higher than the traditional model.

Increasingly competitive factors from both autonomous public universities and international universities require private universities to improve quality, differentiate themselves through flexibility, creativity and technology.

New generation students (Gen Z, future Gen Alpha) have different expectations: flexible learning, digitalization, practicality, early entrepreneurship - this requires universities to “transform the model”. From there, it can be affirmed that slow adaptation to the smart - creative model will cause private universities to fall behind, reduce enrollment attraction, lose competitiveness and find it difficult to survive in the long term.

5.2. Necessary conditions and capacities to implement the model at private universities

Through survey and SWOT analysis, it is possible to draw out some key conditions for successful implementation of the Smart - Innovative - Creative University Model, especially in the private sector:

a) Technology capacity - digital infrastructure

Currently, many universities have deployed LMS, ERP university management system, teaching on digital platforms (Zoom, Moodle, MS Teams ...). However, most of them are still at the level of technical transformation, not reaching the level of model and organizational transformation.

Technology investment still lacks an overall strategy, depends on the annual budget and has not integrated big data platforms, AI and learning analytics.

b) Innovation in governance models

Most private universities still operate according to an administrative - decentralized model, lacking a data governance model, governance according to an innovation strategy.

There needs to be a change in leadership thinking, from “management - maintenance” to “leading - innovation - development”.

c) Developing high-quality human resources

The teaching staff at many universities still lacks technological capacity, innovation skills and the ability to lead students to start businesses.

The need to train lecturers in digital capacity, design technology-integrated lectures and guide innovation - applied research is urgent.

d) Building a culture of innovation throughout the universities

Many universities still “orient innovation from the top down”, lacking policies to promote lecturers and students to innovate from practice.

It is necessary to establish incentive mechanisms such as: internal innovation funds, support for student startups, recognition of teaching initiatives.

5.3. Main barriers and challenges in practice

The study has identified a number of typical

barriers:

Limited finance: Small and medium-sized private universities often have difficulty in synchronously investing in technology infrastructure - especially when there is no clear model of profit from digital transformation.

Lack of specific support policies from the state: There is no separate support program for private universities in digital transformation or innovation, while the public sector enjoys priority programs.

There is no model suitable for Vietnamese conditions: International models are difficult to apply in their entirety, while there is no specific model framework for small and medium-sized Vietnamese private universities, leading to fragmented implementation and lack of direction.

Lack of university-enterprise-locality linkage network: Some universities have not proactively built an open innovation ecosystem, leading to a disconnect between training, research and practice.

5.4. The possibility of applying the smart - innovative - creative university model in Vietnam's conditions

Research shows that the possibility of application is completely feasible, but it is necessary to:

Choose a suitable transformation roadmap, starting with some components such as:

- Digitizing learning management (learning analytics);
- Implementing blended learning;
- Developing innovation labs - creative spaces (Innovation Hub);

Apply lean - flexible thinking, not necessarily investing heavily from the beginning, but implementing in the direction of "testing - adjusting - replicating model".

Cooperate with technology enterprises and startups to shorten the implementation time, taking advantage of expertise outside the university.

Develop specific evaluation criteria for the smart - innovative university model, suitable for each stage and context.

5.5. Recommendations on policies and support models from the State - Associations - Enterprises

The state needs to have specific support policies for private universities in digital transformation and innovation, including:

- Non-public education innovation fund;
- Incentive policies for investment in digital infrastructure, tax exemption/reduction for technology - innovation activities;

The Ministry of Education and Training and university associations need to develop a set of criteria for smart - innovative university models according to the national framework, as a basis for assessment and guidance for universities in implementation.

Technology enterprises need to strengthen links with private universities to support digital learning platforms, consult on transformation strategies and train digital human resources.

5.6. Contribution of the study to the practice of developing private higher education in Vietnam

The study has proposed a feasible overall model that can be customized to suit the capacity of each university.

Provide SWOT analysis tools, criteria frameworks and development stages to help universities build their own strategies.

Provide a scientific and practical basis for private universities to build action plans, connecting with public policies and businesses.

Suggest new research directions in Vietnamese higher education, linked to the topics: digital university, open innovation, startup university, modern university governance.

6. Conclusion and Recommendations

6.1. Conclusion

6.1.1. Reaffirming the necessity and urgency of the research issue

- In the context of digital transformation taking place strongly globally and in Vietnam, especially after the COVID-19 pandemic, the higher education system is facing the requirements of comprehensive innovation. Building a smart, innovative and creative university model is not only a strategic direction but also an inevitable development trend for universities, especially private ones, to survive, develop and integrate effectively in the digital age.

- The study has demonstrated that if private universities do not promptly transform their governance, training, research and social connection models towards applying technology, promoting innovation and adapting to changes in learners and the market, it will be very difficult to maintain their attractiveness, quality and competitiveness.

- Conclusion on the inevitable trend of the "Smart, Innovative and Creative University" model

- The conclusion clearly affirms the inevitable trend of the "Smart, Innovative and Creative University" model, while emphasizing the vital role of this model for private universities: In the context of globalization, digital transformation and the

fourth industrial revolution taking place strongly, higher education is facing profound changes in thinking, organizational models, teaching methods and management methods. The model of “Smart, innovative and creative university” is no longer an option, but has become an inevitable and irreversible trend for all higher education institutions, especially private universities.

- Firstly, “Smart University” is a direct result of the process of applying digital technology and artificial intelligence to administration, teaching and research. This model allows universities to optimize resources, improve operational efficiency, personalize learning experiences and create a flexible and modern academic environment. In a world that is operating on a global data and connectivity platform, universities that do not keep up with the digital trend will quickly fall behind, losing their competitive advantage in attracting learners, lecturers and investors.

- Second, “Innovation and creativity” is not only a method of adaptation but also a core development driving force of modern universities. In the conditions of a socialist-oriented market economy, with fierce competition between educational institutions, especially in the private sector, innovation in training models, program content, teaching methods, as well as creativity in connecting businesses, startups, applied research, etc. are vital conditions. Only universities that continuously innovate, creating practical values for learners and society, can develop sustainably and affirm their position.

- Third, the smart, innovative and creative university model also creates a foundation for effective university autonomy. Academic, financial, organizational and human resource autonomy requires smart, transparent, data-based governance, as well as a dynamic academic environment that encourages creativity, critical thinking and high adaptability. This is the “golden key” for private universities to improve quality, create trust for learners, society and investors.

- Therefore, building and developing the model of “Smart, innovative, creative university” is an inevitable path that cannot be delayed, especially for private universities - units that are under great pressure in terms of finance, brand and training quality. This is not only a trend of the times, but also a condition for survival, a foundation for private universities to affirm their position, enhance their competitiveness and move towards sustainable development, deep integration with the region and the world. In the coming time, building a suitable development roadmap, investing in technology infrastructure, training human resources,

establishing a mechanism to encourage innovation throughout the university and strengthening cooperation with businesses and international partners will be strategic steps to help private universities realize the goal of becoming Smart - Innovative - Creative universities, contributing positively to the development of Vietnamese higher education in the new era.

6.1.2. Summary of the main results of the study

Through the application of a synthesis of theoretical research methods, practical surveys, expert interviews and modeling, the study has achieved the following basic results:

a) Systematizing theoretical and practical bases

Clarifying the concept, characteristics, structure and development trends of the domestic and international smart, innovative and creative university model.

Analyzing the core components of the model: digital technology platform, smart management system, flexible teaching methods, innovation capacity and ecosystem connectivity.

b) Analyze the current situation and identify issues facing private universities

Practical surveys show that many private universities have made a start in applying technology and changing training methods, but still face major challenges such as financial limitations, staff capacity, governance models that have not been thoroughly innovated and lack of specific support policies.

SWOT analysis points out strengths such as flexibility in operating mechanisms, proactive governance; at the same time, it also identifies weaknesses that need to be overcome to successfully implement the model.

c) Propose a feasible development model and roadmap

Build a comprehensive model of a smart - innovative - creative private university, with specific components, internal coordination mechanisms and external linkages.

Propose an implementation roadmap in stages: start-up - integration - growth - expansion innovation, suitable for the capacity of each university.

Develop a framework of criteria to assess the level of intelligence and innovation of private universities, as a basis for self-assessment and improvement.

6.1.3. Contributions of the study

The study makes important contributions both in theory and practice:

In theory: Contributing to the completion of the scientific basis for determining the structure, functions and criteria of the smart - innovative - creative university model in the conditions of Vietnam, especially for the private sector.

In practice: Providing specific models and solutions for private universities as a basis for building appropriate development strategies, while providing a basis for education managers and policy makers in designing support programs and orientations for the development of non-public higher education.

6.1.4. Limitations of the study

Despite efforts to ensure scientific, objective and comprehensive nature, the study still has certain limitations:

The scale of the practical survey is still limited, mainly focusing on a number of private universities in urban areas, so it does not fully reflect the comprehensive picture across the country.

Although the proposed model is feasible, it has not been tested in depth in a specific case to evaluate its long-term operational efficiency.

Due to limited time and resources, some aspects such as university finance, specific AI/IoT technology and social impact of model transformation have not been explored in depth.

6.1.5. Further research directions

To develop research in depth and breadth, it can be expanded in the following directions:

Piloting the model at some typical private universities to monitor and evaluate the operational efficiency of the model in practice, thereby improving it in practice.

In-depth research on the role of specific technologies (such as artificial intelligence, big data, virtual reality, blockchain) in each subsystem of the smart university.

Develop a national or regional policy framework to support the private university sector to participate more strongly in the digital transformation process and develop an educational innovation ecosystem.

6.1.6. Affirming feasibility and calling for action

Building a smart, innovative and creative university model is a correct orientation, in line with global trends and the national context. For private universities in Vietnam, this is an opportunity to improve quality, build identity and develop sustainably.

However, to realize this model, there needs to be serious commitment and investment from within the university itself, along with strong support

from the state, the business community and social organizations. Only when all parties join hands can the construction of a smart - innovative - creative higher education ecosystem in Vietnam become a reality, contributing to raising the country's position in the global knowledge economy.

6.2. Policy Recommendations

In order for private universities to develop their potential, affirm their role in the national higher education system and develop sustainably according to the model of "smart - innovative - creative university", there needs to be a breakthrough, synchronous and consistent policy framework from the State.

Below are three groups of key policy recommendations:

6.2.1. Support access to resources: capital, technology and experts

a) Expand preferential credit policies and specific support funds:

Recommend the State and localities to establish preferential credit packages for private universities to invest in digital technology, smart infrastructure, innovation and research and development (R&D) centers.

Encourage commercial banks, education investment funds, and startup funds to accompany private universities through guarantee policies, co-investment or preferential loans with low interest rates.

b) Support access to technology and knowledge transfer:

Create conditions for private universities to access technology transfer programs, share digital learning platforms, industry databases, university management software (LMS, SIS, ERP, AI, etc.).

Develop a network to share open resources between public and private universities, especially in research and digital documents.

c) Connect domestic and foreign experts:

Support private universities to build international expert advisory programs, through exchange programs, scholarships, research connections with overseas Vietnamese, experts from international organizations (World Bank, UNESCO, ASEAN Connect, etc.).

Develop specialized training programs on digital transformation and innovation for lecturers and managers of private universities.

6.2.2. Establish a mechanism to prioritize public-private partnerships in education

a) Policy to encourage the "public-private

education alliance” model:

Issue policies to promote public-private education projects (Public – Private Partnership – PPP) such as joint investment in innovation centers, key laboratories, startup incubators, or academies – enterprises – research institutes.

Establish a model of “satellite” universities of public universities, in which public universities support expertise and programs; private universities invest in facilities and operations.

b) Mechanism for equal allocation of research budgets:

Expand equal participation in state-level scientific research programs, science and technology development funds and innovation, without distinction between public and private sectors.

Allow private universities to participate in developing policies and training sector framework programs, ensuring a common voice in planning the higher education system.

c) Priorities in technology transfer - applied science:

Establish a mechanism for private universities to access public research results, funding for applied research linking parties: state - enterprise - university.

6.2.3. Issue a framework for evaluating and ranking the “Smart - Innovative - Creative University” model

a) Develop a national index on smart - innovative - creative universities:

Recommend the Ministry of Education and Training, the Ministry of Science and Technology to coordinate in developing a set of official evaluation criteria, including the following components:

- Level of digitalization of university administration.
- Smart teaching - learning capacity (Smart Learning).
- Innovation - startup activities in universities.
- Level of data - AI use in assessment and accreditation.
- Level of ecosystem connection: businesses, investors, research institutes, etc.

b) Organizing annual rankings and announcements:

Organizing an annual university ranking program based on the smart - innovative model, similar to the U-Multirank model (Europe), QS Stars (UK),

helping universities clearly see their position and motivation for improvement.

Encouraging media and educational press to publish good models, introduce successful examples, promote learning and healthy competition.

c) Linking evaluation with investment and recognition priority mechanisms:

Private universities that meet the Smart - Innovative - Creative Model Standards will be prioritized in research investment programs, access to capital and attract international cooperation.

Ranking results will be the basis for assessing training quality, student output and readiness for international integration.

The policy should not stop at individual support, but should aim to establish a public-private higher education ecosystem that supports each other in development and aims at the goal of modernization and internationalization. Supporting private universities to develop according to the Smart – Innovative – Creative Model not only helps strengthen the competitiveness of each institution, but also creates an important push for the entire Vietnamese higher education system to rise strongly in the region and the world.

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XÂY DỰNG MÔ HÌNH TRƯỜNG ĐẠI HỌC THÔNG MINH, ĐỔI MỚI VÀ SÁNG TẠO – XU THẾ PHÁT TRIỂN TẤT YẾU CỦA CÁC TRƯỜNG ĐẠI HỌC TƯ THỰC Ở VIỆT NAM TRONG BỐI CẢNH CHUYỂN ĐỔI SỐ QUỐC GIA HIỆN NAY

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Tóm tắt:

Việt Nam hiện nay, chuyển đổi số được xác định là một định hướng chiến lược quốc gia. Mục tiêu hình thành và phát triển nền kinh tế số, xã hội số với trọng tâm là xây dựng nguồn nhân lực chất lượng cao và hệ sinh thái đổi mới sáng tạo. Chương trình Chuyển đổi số quốc gia đến năm 2025, định hướng đến năm 2030 nhấn mạnh vai trò tiên phong của ngành giáo dục trong tiến trình này. Giáo dục đại học được giao nhiệm vụ vừa là đối tượng chuyển đổi, vừa là trung tâm sản sinh tri thức, đào tạo nguồn nhân lực số và thúc đẩy đổi mới, sáng tạo. Trước làn sóng chuyển đổi số, giáo dục đại học tại Việt Nam đứng trước những áp lực cạnh tranh và đổi mới mạnh mẽ. Các trường đại học tư thực không còn có thể vận hành theo mô hình truyền thống, thụ động và khép kín. Người học ngày càng kỳ vọng vào những trải nghiệm học tập mang tính cá nhân hóa, linh hoạt và gắn kết với thực tiễn nghề nghiệp. Doanh nghiệp và xã hội kỳ vọng vào những trường đại học tư thực có khả năng đào tạo nhanh, hiệu quả và tạo ra nguồn nhân lực đáp ứng tốt yêu cầu của thời đại số. Trong bối cảnh đó, việc xây dựng các mô hình trường đại học thông minh, đổi mới, sáng tạo đang trở thành một xu thế phát triển tất yếu để các trường đại học tư thực thích nghi, cạnh tranh và khẳng định vai trò trong hệ sinh thái tri thức mới.

Từ khóa: Mô hình; Mô hình Trường Đại học thông minh, đổi mới và sáng tạo; Xu thế phát triển tất yếu; Các Trường Đại học Tư thực ở Việt Nam; Bối cảnh chuyển đổi số quốc gia.