

DIGITAL TRANSFORMATION AT NON-PUBLIC UNIVERSITIES: CHALLENGES AND OPPORTUNITIES

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Abstract:

Effectively implemented step by step for many years, digital transformation in non-public higher education institutions has recently been getting more exciting. This is an inevitable trend that cannot be reversed and non-public higher education needs specific and appropriate policies and plans to ensure education quality and ensure equality in access to education with different learners. The article focuses on studying the challenges and opportunities of digital transformation in non-public higher education, gradually forming a team of digital lecturers and digital students.

Keywords: *The current context of the industrial revolution 4.0; Non-public universities; Digital transformation; Challenges; Opportunities.*

1. Introduction

The fourth industrial revolution, in which digital transformation plays a central role, is having a profound impact on all aspects of socio-economic life of the whole humanity.

In the past few years, people have mentioned more and more about the term "Digital Transformation", especially in the economic, business and service sectors. In non-public higher education, it was not until the global outbreak of the Covid-19 pandemic that halted all socio-economic activities, students could not go to school and digital transformation really took place,

became a vibrant process whose result was a completely new face of non-public higher education with new methods, techniques, tools and media.

The Covid-19 pandemic has had an unprecedented impact on non-public higher education worldwide over the past two years. With universities forced to close and teaching and learning moving online, faculty and students must transform and adapt to the use of technology like never before. Higher education in general and non-public higher education in particular must fundamentally and comprehensively change to meet the

requirements of the times. This article will identify and analyze challenges and opportunities for non-public higher education in the digital age and propose a system of solutions to develop digital transformation at non-public universities in the current period.

Digital transformation in non-public higher education focuses on two main contents, which are:

- Digital transformation in school administration: Including digitization of non-public higher education information, creating a system of interconnected large databases, deploying online public services and applying digital devices.

- Digital transformation in teaching, learning, testing, assessment and scientific research. Examination and assessment include: Digital library, online training system, digital chemistry materials (electronic lectures, electronic textbooks, lecture archives, multiple-choice question banks), laboratories. virtual, build virtual universities...

2. Research overview

Author Ha, T. with the article "Promoting digital transformation among students" emphasizes: due to the prolonged impact of the Covid-19 epidemic, teaching and learning with teachers, teachers and students has a great disturbance in study time and space and especially a change in habits and routines; changing from approachable thinking to specific actions in "teaching and learning", this is a big challenge for teachers, teachers and students. Digital transformation is an inevitable trend, which has been identified by the Party, Government and Prime Minister as a solution to improve capacity, competitive advantage, survival and development. The interdisciplinary, interdisciplinary approach through STEM education is a suitable approach to enhance the knowledge and skills of digital transformation for young people. Currently, digital transformation has become a

changing trend of global society. It broke the old principles and opened a new page that brought more efficiency and awakened the development of mankind. The trend of applying digital technology in teaching and learning is also expanding. The education industry has developed an online teaching model so that learners can learn anywhere, anytime, actively in learning more effectively. For the first time, an industry database was formed. Accordingly, the education sector has completed digitization and assigned identifiers to more than 53,000 educational institutions, 24 million pupils, students and 1.4 million teachers. At the same time, building and developing a shared digital data warehouse (including open learning materials) with about 5,000 e-learning lectures, 2,000 video lectures on television, 200 virtual experiments, 200 textbooks, 35,000 multiple choice questions and over 7,500 doctoral theses. At the same time, due to the impact of the Covid-19 pandemic, the driving force for digital transformation has become stronger than ever. The form of online teaching and online examination has been positively evaluated. The PISA report of the Organization for Economic Cooperation and Development (OECD) commented: Vietnam's online learning for Covid-19 prevention and control has many positive points compared to other countries and territories. Vietnam has 79.7% of students learning online. This rate is higher than the overall average of OECD countries (67.5%). At the university level, more than 50% of educational institutions also offer distance learning, many of which are fully online and some combine online and face-to-face training. Online teaching has helped shorten the real time of teaching when students return to school, enhancing the coordination between families, schools and society in educating students. This form of teaching also helps teachers and students

familiarize themselves with and strengthen information technology skills, adapting to new learning forms of advanced education in the 4.0 technology era.

Author Lung, P.T. has the article "Digital transformation in education - What are the opportunities and challenges of digital transformation in education?" emphasized: Digital transformation in education is the application of modern information technology by the education sector to the learning and teaching of students, students and lecturers in order to meet increasing learning needs; thereby creating a sustainable learning environment that connects students to schools based on modern technology. Digital transformation in education is an intelligent ecosystem that combines elements: technology, services and security to bridge the digital gap; create interactive, collaborative, connected, and personalized experiences. Digital transformation in education is not only about renewing the method of updating equipment and technology, but also about culture and people. Currently, the epidemic is a big challenge for the whole society in general and the education industry in particular. Therefore, in order to achieve the goal of creating an engaging and effective educational process, both teachers and students must improve their skills and work together to overcome difficulties, turning "danger" into "muscle" and get good results.

Author Quan, V.H has an article: "Digital transformation in higher education" emphasized: Digital transformation is now an inevitable part of the development of higher education. Simply put, digital transformation is "a change in the way an organization operates to improve the quality of products and services by exploiting the application of technology and data". For higher education, this goal is to improve the effectiveness of governance, improve the quality of training

and serve the development of the country. In essence, digital transformation does not change the core values or model of a higher education institution, but transforms core operations through technology and digital platforms and seizes opportunities, that they bring. In other words, digital transformation is the intersection of technology and training strategy.

It would be one-sided to consider digital transformation merely as distance teaching via webcam, but it is necessary to consider digital transformation as a whole modern training ecosystem with many new challenges and new opportunities. The most important skill for learners is "learning how to learn". We've gone from a period of lack of information to the age of the digital boom, from sitting all night in the library every week to sorting through google search results. In that context, implementing digital transformation is considered an indispensable activity to respond to change, improve governance effectiveness, and improve training quality.

Author Hong, N. has an article: "Digital transformation in higher education: Many obstacles and challenges" emphasized: Digital transformation in education is not only about renewing the method of updating equipment and technology, but also about culture and people. The digital transformation applied education era will open up learning opportunities at a lower cost and more effectively than in the past because schools will have to spend less to pay for issues related to digital transformation. premises, facilities, equipment...In the process of digital transformation, many universities are facing many challenges in terms of strategy, cost, technology resources, human resources for deployment, in changing pedagogical methods and teaching programs and related legal and data security issues.

Author Lien, N. has an article: "Challenges

of digital transformation in higher education" emphasized: According to experts, besides the benefits brought to teaching and learning, digital transformation at universities still faces many obstacles and challenges.

The first is a strategic challenge. Schools have not yet developed and implemented a long-term digital transformation strategy.

Second, the challenge of investment costs.

Third, the challenge of technological resources. To implement online education, all inputs to the educational process must be digitized, the most important of which are learning materials, documents and textbooks. All data about learners also needs to be digitized to implement the learner management process and evaluate the learning process and results.

3. Research methods

Conduct theoretical research, practical research on digital transformation in the context of the current industrial revolution 4.0 and use mathematical statistics to process, in-depth analysis of the obtained results.

4. Challenges and opportunities of digital transformation in teaching and administration of non-public universities and digital transformation in non-public higher education are turning challenges into opportunities.

4.1. Open non-public higher education - Open and diverse learning resources - Open public science

4.1.1. Digital transformation in the context of the global Covid-19 pandemic

Simply put, digital transformation is also a change in the way an organization operates in order to improve the quality of products and services by exploiting the strengths of technology and data applications. Whether. For non-public higher education, this goal is to improve the effectiveness and efficiency of governance, improve training quality, and serve the country's socio-economic

development. In essence, the College has not changed the core values or model of a non-public higher education institution, but only transformed core operations through new technology and digital platforms and at the same time, seize the opportunities they bring.

In other words, digital transformation is the intersection between new technology and training strategy. Digital transformation is now an inevitable part of the development of non-public higher education. It would be one-sided to consider digital transformation as merely distance teaching via Webcam, but it is necessary to consider digital transformation as a whole new and modern training ecosystem with many new challenges and new opportunities.

Digital transformation is certainly not a story of just yesterday. Since the past two decades, when information technology and the Internet have been widely used in training, non-public higher education, digital transformation has been set out, but somewhat vague, because there is no real reasons to do it. Advances in information and communication technology and the penetration of the Internet have led to open non-public higher education initiatives with the emergence of courses on MOOCs online platforms such as Coursera , Udemy, edX, about open learning materials with the advent of Adaptive Learning and Assessment Apps such as Acellus, IXL, Mathletics and open science with research databases Open Access Databases for free online scientific research. The advent and growing market and technology for these platforms shows that "Digital Non-Public Higher Education" has a reason to exist and has full potential. However, while there are still other options, traditional education is still possible, there is still a reason to refuse digital transformation, online non-public higher education is still only a supplement when non-public universities have or lack certain

conditions.

The year 2020 witnessed developments that can be said to be unprecedented in the history of the modern world. Many social activities have been delayed locally, nationally and globally due to the Covid-19 pandemic. When non-public higher education has long been an obvious need to be met, we are suddenly faced with the question: "How to get non-public higher education?". Deploying non-public higher education activities is not only a personal matter, but also a matter of survival for non-public schools and management agencies and the functioning of society. When direct non-public higher education in schools is not possible, the problem of digital transformation becomes the solution at many levels from micro to macro. Of course, in this situation, digital transformation cannot be superficial and superficial, but must be considered comprehensively, fully and accurately... in order to bring the desired results. Digital transformation is not simply the digitization of resources, but also includes hardware transformation, leading to changes in the management of resources for education and training.

4.1.2. Digital transformation in non-public higher education will need to transform what?

A big question is that digital transformation in non-public higher education includes transformation in what areas, aspects and how much is the implementation? The answer is not the same for individuals, organizations and countries, because the starting point of digital transformation is very different. One thing in common is that digital transformation must allow non-public higher education to be fully and comprehensively implemented, without meeting, face-to-face communication, that is, mode of higher education delivery. Online training is obviously not a new and strange thing, but online training in a situation where

there is absolutely no choice for direct access leads to changes in many other aspects, requiring many conditions.

First, changes in the inputs. For online non-public higher education to be possible, all input to the non-public higher education process must be digitized, of which, most importantly, learning materials, reference materials, textbooks . All data about learners also needs to be digitized in order to implement the process of managing learners and making assessments of their learning progress and results. One of the biggest problems with online training is the authenticity of the training process. How to ensure training, assessment, testing, recognition of results and issuance of degrees and certificates to the right audience? How to authenticate the identity of learners and test takers? The latest technologies have aided this, but ensuring the rigor of traditional testing is still left open.

Moreover, when training methods change, equipment and facilities for training and education also change. Digital transformation in non-public higher education is not simply the digitization of resources, but also includes hardware transformation, leading to changes in the management of resources for education and training. .

Second, the non-public higher education process has undergone fundamental changes. Changing methods lead to traditional pedagogical methods and techniques that are no longer effective. The method of implementation and implementation of the method must change, requiring creativity, flexibility in the application and use of equipment and technology features so that the teaching achieves the expected results. want. Digital transformation is not only the digitization of lectures or the application of software to prepare lessons, but also the transformation of the entire way, teaching

methods, classroom management techniques, pedagogical interactions between students and teachers, between learners and learners... in digital space. The problem needs to exploit information technology to organize successful teaching. This job requires the research and application of Neuroscience, AI - artificial intelligence in content design as well as teaching implementation tools, taking advantage of the strengths of technology, to personalize the non-public higher education program, which is not possible with traditional face-to-face training with a large number of students (50-60 students/class). In addition, all data on the student's learning process will also be tracked and stored by technology, not through a conventional record-keeping system.

Third, digital transformation must ensure that examination and evaluation are carried out in the process of non-public higher education, including evaluation of training results. Not only the evaluation results are digitized, but the evaluation process must also be implemented by applying technology on computers. Lecturers at non-public universities need to focus on teaching work and need to be freed from administrative and paper work such as making books and managing learners' study records.

Fourth, regarding the non-public higher education environment, it is necessary to have a policy system at the system level and at the level of non-public higher education institutions in order for online training to be recognized as legal. Policy formulation and enactment requires thorough and scientific research, but fundamentally, is not a big challenge. The main challenge lies in the implementation of the policy, because in order for the policy to come to life, it is necessary to have a system of tools to monitor, manage and ensure the quality of online non-public higher education. to ensure the validity of this form of training. That is, the institutions that

facilitate non-public higher education need to be converted to digitization both in terms of implementation, from taking input data to extracting output data. In summary, digital transformation in non-public higher education is a process, where the change does not lie in the participants in the educational process or stakeholders, but in the method of education implementation. non-public university. The change in methods inevitably leads to changes in teaching and training methods, methods and techniques. Most of the inputs also change to accommodate new methods and methods and techniques, and outputs can therefore change accordingly. When implementing digital transformation, it can be said that the whole process of education reform and non-public higher education will be organized, implemented and managed. The non-public higher education experience will be different, which will make some of the learners' output competencies and skills no longer available, but at the same time some new competencies and skills will be formed. At the heart of digital transformation is that the learner experience will be radically changed. Educational management thinking needs to be transformed, more open and flexible to be able to visualize and capture intangible elements.

4.1.3. Digital transformation at non-public universities: what does it take to succeed?

It can be seen that the digital transformation affects many different stakeholders, in which, directly and the most affected are students and lecturers, followed by the office administration team, the management team, who must directly manipulate and operate the system. Leaders and senior decision-makers in the education sector also need to change management thinking.

Firstly, digital transformation requires new technology infrastructure, new equipment for students, lecturers, non-public higher education institutions and management

agencies. Accompanying hardware devices are software applications, platforms for all non-public higher education activities and management of all levels to take place on it. If the application of ICTs in non-public higher education mainly refers to separate, separate programs and software, then digital transformation requires that all these individual things be compatible and connected, interconnected, integrated and “accessible” on the same platform. The platform enables teaching, management, learning, testing, assessment, examination, learner management and teaching activities, as well as all interaction between students and faculty and lecturers. A stable Internet connection is a must-have for this Platform to operate regularly, continuously and effectively.

Digital transformation will also not be successful if the people who directly conduct the training are not skilled enough to use the technology. Instructors need to imagine how they would “see” their students learning if they did not meet face-to-face and that they can grasp and evaluate what the learners are saying. Of course, in this process, they always have to have the support and companionship of technical staff and technology experts to ensure smooth and fluent teaching. They also need new skills to organize teaching activities, “keep” students in “virtual classrooms”, maintain students’ attention and interest in learning tasks and activities. Students will be the first and most important factor determining the success of online training and digital transformation today. When implementing large-scale online training, some administrative positions are no longer available, instead there is a need for a team of technicians. Of course, schools always have a solution to outsource this service, but the allocation of expenses often changes, leading to changes in school financial management

and management practices.

Second, an important factor that determines the meaning of digital transformation is the willingness of learners. When the 2019-2020 school year was disrupted by the Covid-19 pandemic, we conducted a survey of “readiness for online learning” with faculty and non-public university students. Survey results have shown that students have a much lower level of readiness to learn online than teachers. Up to 75% of students surveyed (from many industries and different provinces and cities) are not ready for online learning, for many reasons. Besides technical reasons such as equipment and telecommunications infrastructure, there are problems because the teaching methods and techniques of lecturers are not convincing to students.

Third, digital education environment - digital education culture, including issues of learning attitude, understanding of academic ethics, self-discipline, sense of lifelong learning (Lifelong Learning) as well as need built and developed in the community of learners and people in general. For face-to-face training, control of the training process largely rests with non-public higher education institutions and instructors, while for online training, learners must also share this task. Regarding the educational environment, appropriate system-level and non-public higher education institution-level policy systems are needed for online training to be legally recognized.

4.1.4. Challenges: Who can be left behind when it comes to digital transformation?

Firstly, it is easy to see that digital transformation in non-public higher education requires telecommunications infrastructure in non-public universities to develop to a certain extent, which is closely related to socio-economic development level of each locality. Non-public higher education cannot go alone, but must accompany and coordinate with other

sectors.

Second, digital transformation depends greatly on contextual factors, it is an opportunity for this target group, for this locality or country, but a challenge for another local and national.

The way and process of digital transformation does not have a common formula, requiring leaders of non-public universities to devise their own digital transformation strategies, solutions and roadmaps, without much interference, reference from experience and practice from other industries, other countries.

Third, digital transformation in non-public higher education is expected to help maximize training efficiency. But if the problem of network infrastructure, equipment and technology solutions is not fully met, the problem of capacity transformation of lecturers is not solved, the "digital learning experience" for lecturers is not solved. and students can become a disaster. A series of risks will arise such as learning behavior may be deviant, educational activities will not be controlled; quality of non-public higher education may be lax. It would be very dangerous if we "dropped", "lost learners" in the vast virtual space.

Fourth, how will digital transformation relate to the story of inequality in non-public higher education. We simply think that digitizing non-public higher education will bring about "Digital Equity" thanks to the advantage of access to technology that will not be limited in space and time. However, this may further deepen the inequality in access to non-public higher education between regions and students with very different socio-economic conditions. Students who do not have access to good telecommunications infrastructure in mountainous or rural areas, remote areas, areas with special difficulties...will risk being left behind, not

only in accessing higher education high-quality non-public education, but also basic non-public higher education as there will be a lack of important learning resources and materials for learning. Students from poor families who do not have minimum equipment or cannot afford the cost of telecommunications services will also be at risk of falling behind. Students with disabilities (hearing-impaired, visual-impaired or with motor disabilities that interfere with the operation and control of equipment) are also at great risk of experiencing disparities due to input-related problems. (books, documents, languages, equipment...) with the non-public higher education process (manipulating controls, communicating with equipment, software, lecturers...). For example, the digitization of documents and learning materials for the target group that must use their own language system such as sign language will certainly still have many limitations, not be prioritized, causing many disadvantages and disadvantages for the group of learners. Finally, digital transformation facilitates the development of professional learning communities for teachers and education administrators on a large scale through online forums. In addition, there are many good tools to help teachers design materials and build lessons. This is considered a very good professional development opportunity for the teaching staff, but these technology tools also make it possible to copy and duplicate records, lesson plans, essays, even assessment.

Digital transformation is the process of total and comprehensive change of individuals and organizations in the way of living, working and production methods based on digital technologies. This is the next step in the development of computerization, thanks to the outstanding progress of breakthrough new technologies, which will literally be the impact

for people to change their thinking about working, operating the machine system, from there, will find ways to apply it to each specific activity of the business.

In the context of a strong digital transformation trend in the world in general and Vietnam in particular, non-public universities have rapidly transformed, turning challenges into opportunities for development, defining transformational transformation. Digital transformation is inevitable and the way to the future of non-public higher education.

However, this process needs to consider the existing conditions in terms of technology infrastructure, funding, and synchronization. It must be admitted that these platforms are still fragmented, not connected in the whole system, have not fully exploited the advancements of technology to serve training, have not really supported the management work. management, management and have not met the increasing requirements of learners, etc. Currently, under the impact of the Covid-19 pandemic, the role of distance learning and online training is to "cannot stop working. learning" is seen more clearly than ever.

According to experts, promoting digital transformation in non-public higher education institutions is very important not only in the education sector but also in spreading to other areas of the economy and society.

Firstly, digital transformation brings efficiency to the non-public higher education institutions themselves, which will encourage the school to review all processes, from ideas on governance, room operation, teaching staff, strengthen the capacity of lecturers and administrators to increase efficiency in teaching, scientific research and international cooperation in the school. As such, digital transformation brings positive value to stakeholders, especially students benefit the most.

Second, when non-public higher education institutions change from traditional teaching methods to using information technology and software systems to jointly create an external higher education database. Public education has been digitized is a great contribution, supporting not only the administration in the school, but also the state management of non-public higher education in general.

Third, when the non-public higher education system increases the level of digital transformation, it also contributes to improving the capacity and quality of non-public higher education, creating products that contribute to different sectors in the national economy and at the same time, contribute to the realization of socio-economic goals in the socio-economic development strategy in the new period of Vietnam.

In summary, when conducting digital transformation in non-public higher education, we face the following challenges and opportunities:

- Challenges in digital transformation: Technology infrastructure; Management thinking and capacity; Skills in using technology; Learner's willingness to receive; Inequality in education.

- Opportunities that digital transformation brings: Developing digital equity in learning; Have the opportunity to experience; Opportunity to study anywhere, anytime; Building Modules in Learning; Train a generation of high-quality instructors.

5. Discussion

5.1. What is Chat GPT?

Chat GPT (Chat Generative Pre-training Transformer) is a chatbot developed by Open AI based on Google's Transformer model. This is an AI (Artificial Intelligence) that assists you in creating automated conversations and answering questions on a variety of topics and fields.

Chat GPT is considered one of the most

advanced language models today with the ability to automatically learn and work with big data types. It is equipped with outstanding features such as automating conversations, answering questions, generating automated responses and improving the self-learning ability of the model.

5.2. Characteristics of Chat GPT

So what are the outstanding features of Chat GPT "friend" that can create a big storm in the global technology world?

- Deployers: Chat GPT is capable of deploying on multiple platforms, including web, mobile and others.
- User Assistant: Chat GPT can assist you in finding information, solving problems and answering general questions.
- Deep understanding: Chat GPT is trained on a large amount of data, so it has the ability to gain insights into many different fields.
- Fast processing speed: Chat GPT can answer users' questions quickly and accurately.
- Multi-language support: Chat GPT is trained in multiple languages, enabling world wide user support.

5.3. Chat GPT - When the parallel benefits are limited

5.3.1. Benefit

Chat GPT deserves to be a "effective assistant" for you no matter who you are, at any age, in any profession or in any country. Some of the benefits of Chat GPT can be mentioned as follows:

- Answer questions in all areas: Chat GPT can answer most of the user's questions on a variety of topics, including knowledge, geography, history, economy, politics, culture, chemistry and much more.
- Automated Content Generation: Chat GPT can be used for automated content creation, including writing articles, creating stories and creating other types of content.
- Solve customer support problems: Chat

GPT can be used to solve customer support problems and provide information to users quickly and accurately, thereby improving service quality.

- Automate processes: Chat GPT can be used to automate and solve manual tasks thereby increasing the productivity and efficiency of businesses and organizations.
- Data and statistical analysis: Chat GPT can be used to analyze data and statistics, helping businesses and organizations improve operations and manage data effectively.
- Create better user experiences: Chat GPT can help create better user experiences by providing accurate and fast information to users.

5.3.2. Limit

Chat GPT also has a lot of potential harm:

- The appearance of phishing software: When Chat GPT was born, some malicious users used the chatbot's programming ability to create fake software with the purpose of attacking and stealing information. Chat GPT can even use its own code to perform more sophisticated phishing methods.
- Inaccuracy: Chat GPT is trained on large databases but is still inaccurate in some cases.
- Distortion of information: Chat GPT can misrepresent or misrepresent information, especially when trained on stale or incorrect data.
- Impede creativity: Using Chat GPT can reduce people's creativity as they may become too dependent on computers to solve problems.
- Impact on information search: Chat GPT can impact people's information search because they can easily get answers without searching for natural information.
- Potentially replacing some professions: Chat GPT's scary editorial capacity and modern chatbot tools can easily threaten the jobs of some industries such as copywriters, programmers, editors, etc. screenwriter,

graphic designer,...

Chat GPT is not connected to the Internet and it can sometimes give incorrect answers. It has limited knowledge of the world and events after 2021 and may also occasionally include malicious instructions or misleading content.

5.4. How is Chat GPT superior to Google? Will Google be replaced?

When Chat GPT appeared, users were able to chat directly with AI and get answers in a "second" instead of having to search for information on Google. Chat GPT is capable of deep understanding in many areas, so users' questions can be answered quickly. Most of all, it acts as a question and answer session between two people.

Will Google be replaced? At the current stage, the answer is probably no. Because it's clear that Chat GPT has only recently launched, its reliability is definitely not as high as Google Search. In addition, it may bring up information that is quite old, outdated and not applicable at the present time.

6. Conclusion

For non-public higher education, digital transformation is all about transforming what it takes to be able to launch non-public higher education online. There is no specific formula for this process, but it is possible to apply the non-public higher education performance evaluation frameworks as well as the non-public higher education quality assurance frameworks to guide the orientation. The role of leadership, organization, coordination and resource mobilization at the system level will be the key to determining the shape of the new non-public higher education. In addition to

ensuring the effectiveness of non-public higher education, equal access to non-public higher education for all learners, including poor and disabled students, so that no one is leaving behind is an important goal that digital transformation must achieve.

In the context of the current Industrial Revolution 4.0, digital transformation in non-public universities will focus on three main contents:

- (1) Digital transformation in school administration;
- (2) Digital transformation in teaching, learning, testing, assessment, scientific research, international cooperation, printing, publishing textbooks, documents...;
- (3) Development of digital learning resources.

In the coming time, non-public universities will have specific plans to strengthen the implementation of digital transformation, including changes in the legal basis; focus on digitizing management information, creating large sets of synchronous and interconnected databases; building a number of digital technology application models in the teaching and learning space; converting national and international seminars to online form and still ensuring the plan...

Digital transformation in non-public higher education is a process of changing the traditional method of higher education with modern higher education methods, including facilities and educational methods, teaching methods, educational management methods, making the most of technology towards high-quality non-public higher education.

References

Bumann, J. (2019). Action fields of digital transformation: A review and comparative analysis of digital transformation maturity models and frameworks. *Digitalisierung*

und andere Innovationsformen im Management: aktuelle Perspektiven auf die digitale Transformation von Unternehmen und Lebenswelten.

- Clark, E. (2020). *Digital Transformation: What Is It? and Leading the digital-transformation of higher education*. North Carolina State University, USA.
- Mark R. (2020). *Digital transformation to the core - Enhancing leadership capacity for industries, businesses and yourself*. Information and Communication Publishing House.
- Ministry of Information and Communications. (2020). *Digital Transformation Manual*. Information and Communication Publishing House.
- Ministry of Science and Technology. (2017). *Report on the fourth industrial revolution*.
- Hong, N. (2022, Oct 11). *Chuyen doi so trong giao duc dai hoc: Nieu tro ngai va thach thuc*. Bao Dien tu Dai bieu Nhan dan. Retrieved Jan 26, 2023, from <https://daibieunhandan.vn/giao-duc--y-te1/chuyen-doi-so-trong-giao-duc-dai-hoc-nieu-tro-ngai-va-thach-thuc-i303256/>.
- Prime Minister. (2020). *Decision No. 749/QĐ-TTg dated June 3, 2020 of the Prime Minister approving the "National digital transformation program to 2025, orientation to 2030"*.
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CHUYỂN ĐỔI SỐ Ở CÁC TRƯỜNG ĐẠI HỌC NGOÀI CÔNG LẬP: THÁCH THỨC VÀ THỜI CƠ

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Tóm tắt

Chuyển đổi số trong giáo dục đại học ngoài công lập đã được thực hiện từng bước có hiệu quả từ nhiều năm qua và đặc biệt sôi nổi trong vài năm gần đây. Đây là xu thế tất yếu không thể đảo ngược và giáo dục đại học ngoài công lập cần có những chính sách, kế hoạch cụ thể, phù hợp để đảm bảo chất lượng giáo dục, đảm bảo sự bình đẳng trong tiếp cận giáo dục đối với các đối tượng người học khác nhau. Bài viết tập trung nghiên cứu những thách thức, thời cơ về chuyển đổi số trong giáo dục đại học ngoài công lập, dần hình thành đội ngũ giảng viên số và sinh viên số.

Từ khóa: *Bối cảnh cách mạng công nghiệp 4.0 hiện nay; Các trường đại học ngoài công lập; Chuyển đổi số; Thách thức; Thời cơ.*