

# **DIGITAL TRANSFORMATION IN THE ORGANIZATION OF TRAINING ACTIVITIES AT SAO DO UNIVERSITY**

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## **I. Question**

Digital transformation in the organization of training activities is a change in the way conducted training activities, and at the same time improving the quality of training by exploiting the application of technology and data. Digital transformation is the intersection of technology and training strategy. There are three factors promoting digital transformation at a university in general and Red Star University in particular: (1) decreasing state budget; (2) increasing expectations of learners; (3) developing technology more and more. Three basic components of the digital transformation process include (1) people; (2) strategy; (3) technology. Four expected effects when implementing digital transformation are (1) improving training quality, (2) improving research efficiency, (3) appearing new training methods/models, and (4) increasing financial resources.

Digital transformation is an inevitable trend, happening very quickly, especially in the context of the current Industry 4.0 revolution. Vietnam's education and training sector in general and Sao Do University, in particular, are facing many opportunities and challenges. Many policies have been issued and positively impacted the digital transformation process in training activities. In the coming time, digital transformation is identified as a breakthrough, an important task that needs to be focused on deploying resources to improve the quality of training in response to new requirements and challenges of the trend of international integration.

Red Star University with the mission "Training associated with research, application, and transfer of science and technology. Learning goes hand in hand with practice, theory with practice, and school with business. Graduates with good health; comprehensive competencies and skills; confident, creative; If you have a job with a stable income and opportunities for advancement", it is necessary to implement digital transformation in training activities, contributing to improve the quality of training and affirming the school's brand.

## **II. Content**

### **1. The trend of digital transformation in the organization of training activities at Sao Do University**

Digital transformation in the organization of training activities is the process of changing the method of education implementation, which inevitably leads to changes in methods, methods, and techniques of teaching and training. Most of the inputs also

change to accommodate new methods and techniques, and the output products also change accordingly. Other educational experiences will make learners form some new competencies and skills.

Digital transformation in the organization of training activities means that the school renews its teaching and management organization model, the lecturers innovate the content and teaching methods based on e-lessons, and students learn more actively, and experience more through interaction in the digital environment, thereby capturing knowledge more easily and improving the quality of education; Thanks to digital learning materials and that digital learning environment, the model and teaching method are innovated more effectively. The digital transformation process in schools goes through four levels: spontaneous digital transformation, basic digital transformation, full digital transformation, and smart schools [4].

Digital transformation in training is the transformation of teaching, learning, administration, and management of training activities based on digital technology towards a high-quality, low-cost, and accessible education system. easy for all students. It can be seen that the digital transformation affects many different stakeholders, which the most direct and most affected are students and lecturers, followed by the office administration team, and management team, who must directly manage, organize and serve the training activities of the school.

Digital transformation in training activities at Red Star University is an inevitable trend today because:

*First, the impact of the industrial revolution 4.0*

The Industrial Revolution 4.0 has been taking place rapidly and strongly, making a profound impact on all areas of social life. In the digital age, education and training will change profoundly from the educational environment, the role of teachers and learners to teaching methods. Currently, not only Vietnam but many countries around the world are facing the big challenge of a shortage of highly qualified and skilled labor. The Industrial Revolution 4.0 creates opportunities as well as poses an inevitable requirement to build 4.0 education. Accordingly, education becomes an ecosystem where everyone can learn together anytime, anywhere with connected devices. The educational organization becomes an individual creative product-creation ecosystem, with the individual's own knowledge and capacity for innovation and creativity. Education 4.0 has a big change in training goals and methods, shifting from imparting knowledge to the masses to unleashing potential, and empowering individuals to create. The teacher will move into a new role of designer, catalyst, mentor, and creator of the learning environment. With digitized learning content, learners will have a separate learning path, can choose content suitable for training goals. The digital learning system also provides feedback on learning performance along with suggestions for further learning content.

### *Second, the impact of the digital transformation trend*

Around the world, many countries have been implementing national strategies for digital transformation such as the UK, Australia, Denmark, Estonia... The content of digital transformation is very broad and diverse, but shares some key contents. including digital government (online public services, open data), digital economy (digital finance, e-commerce), digital society (education, health, culture), and digital transformation in industries (agriculture, tourism, electricity, transportation). In the context of global integration, Vietnam and the education and training industry in general, Sao Do University in particular also needs to take advantage and follow the general trend of the world.

### *Third, the impact of the COVID-19 pandemic*

In 2020, in the face of the complicated situation of the COVID-19 epidemic, together with the whole country, the whole education sector has actively participated in the prevention and control of the COVID-19 epidemic. The recent COVID-19 pandemic has put pressure on education, but at the same time, it also created a stronger impetus for digital transformation; creating opportunities and motivation for teachers and students to adapt and apply online teaching methods [3].

Faced with that reality, Sao Do University has timely and well-organized online work and online teaching for students. The Covid - 19 epidemic is a catalyst to promote the digital transformation in training activities at Red Star University to take place faster and more drastically. Currently, digital transformation is identified by the school as a breakthrough, an important task to focus on implementing in the coming years.

2. The current situation of digital transformation in the organization of training activities at Sao Do University

#### *2.1. The process of digital transformation in the organization of training activities*

Sao Do University has had a digital transformation orientation since 2010. The school has used a very effective software system in the management of training, human resource, and financial activities. Since 2020, when the Covid-19 epidemic has greatly affected education and training, the school has promoted digital transformation so that the training process is not interrupted. The school has implemented synchronously solutions to upgrade technology, foster staff, develop digital learning resources, and change and supplement policies in a timely manner, specifically:

*Firstly*, "digital chemistry" is an important part of the "digital transformation" process, especially in online teaching and learning. In which, documents and textbooks for teaching and learning are updated, supplemented and digitized in the digital library by the school. In addition, the school also deploys to put electronic lectures and review questions of each module on the E-learning system for students to study, review and self-test. The school has developed its own work management system; online learning portal Red Star University SDU E-Learning, online admission portal...[5].

In the process of digital transformation, schools focus on the management and organization of the teaching-learning process and scientific research; building software systems for management in areas such as job management, training management, human resource management, material management, financial management... and deploying online public services online has helped the process of operating activities in the school quickly and accurately.

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Instructors and students connect easily by sharing materials, learning insights, or helping students develop new knowledge. With the E-learning system, the digital library has over 1,000 documents, textbooks, electronic lectures, and banks of multiple choice questions and tests to support teaching-learning and scientific research.

*Secondly*, implementing argument transfer is associated with ensuring network security: ensuring network security is one of the most concerned tasks at the university with many items that have been effectively implemented such as Investment in the firewall system of the university. CISCO, is equipped anti-virus software for computers performing professional work. The school has also developed regulations on account security for accessing online systems such as email, electronic libraries, training management software, etc.

*Third*, training personnel for digital transformation: The university's teaching staff of 248 people, of which 208 people have doctorate and master's degrees (accounting for 83.9%) are pioneers and pioneers in practice. now convert numbers. In the school year 2020-2021, the school has organized 2 training sessions for all lecturers on online teaching methods, making learning materials according to SCORM standards, and using online teaching tools, and specialized software. of each industry [5]. For the staff of managers and specialists, training is organized on the use of professional software such as training management software, accounting software, enrollment software...; training in communication skills with students in cyberspace for homeroom lecturers, academic advisors, and communication teams, and student affairs departments. The team of IT technicians serving digital transformation is also trained in network administration, maintenance, and security of information technology systems.

## ***2.2. Requirements and challenges when implementing digital transformation in training activities at Sao Do University***

Since 2010, Sao Do University has transformed digitally in training activities such as academic management systems, digital libraries, etc. However, these platforms

are still fragmented and not connected to the whole world. a system has not fully exploited the advances of technology to serve training, has not really supported the administration and management, and has not met the increasing requirements of learners and the trend of the times. grand. In fact, the digital transformation process in training activities at Red Star University has posed a number of requirements and challenges.

About request:

1) Must have an adaptive mindset to fast changes and accept change, from habits to business processes.

(2) Must have basic knowledge about using technology in both administrators, lecturers and learners.

(3) Technology infrastructure (network and computing systems), equipment, and software for teaching and learning must be improved.

Challenges:

(1) Ability and readiness for digital transformation, understanding the meaning and core values of lecturers, students and stakeholders about digital transformation in training activities.

(2) The initial investment cost for digital transformation is high compared to the initial efficiency.

(3) Limitations on transmission lines, bandwidth and software and equipment to support teaching and learning.

### **3. Some solutions to promote digital transformation in the organization of training activities at Sao Do University today**

The process of digital transformation in training activities at universities in general and Red Star University, in particular, is a mandatory requirement, in line with the inevitable trend of the times. Stemming from the actual implementation process as well as the requirements and challenges, the author boldly proposes a number of solutions to promote digital transformation in training activities, specifically:

#### ***First, maintain the continuity and adaptability of the training activity***

Digital transformation is to maintain continuity and adaptability of training. To achieve this goal, digital transformation needs to satisfy the following conditions:

- All subjects need to be compiled with content that can be taught both online (online) and face-to-face (onsite). Course outlines and materials must be fully updated before a new course begins.

- Ensuring to meet the minimum requirements for transmission lines, bandwidth, and necessary equipment. There is a plan to support students in terms of learning facilities. Organize training programs for lecturers and staff on how to operate and operate in the digital environment.

- Adding to the training program several compulsory basic subjects on technology to provide the minimum knowledge to help learners integrate into the digital education environment.

- Establishing a working group on digital transformation to define standards and criteria; choose the implementation method; formulating and promulgating rules and regulations.

### ***Second, teaching methods meet high-tech - highly interactive requirements***

An important component of the digital transformation process in training activities is the blended learning model. This model is learner-centered, promoting self-study, self-study, and the ability to ask and discuss, helping learners develop necessary skills to meet the requirements of employers questions, practical to industry. However, in order to implement the mixed teaching model, it is necessary to have a massive open source material repository (MOOC) with a pre-compiled, pre-compiled system of highly interactive lectures, exercises, and documents. This is a big challenge in the initial stage of digital transformation because, besides the investment cost to implement, it also requires the perseverance of the lecturers. To perform well in the mixed training model, it is necessary to meet 2 requirements:

- Taking advantage of digital tools and platforms to provide knowledge continuously, anytime, anywhere for learners.

- Providing opportunities for learners to approach the real environment through co-training with enterprises. With this approach, learners will experience new learning models: learning by practical experience, learning by problem-solving methods, learning how to integrate into the real environment...

### ***Third, developing a teaching staff to meet high-tech - highly interactive requirements***

Teaching staff needs to be equipped with skills in technology and pedagogy to implement a digital transformation, including teaching methods according to new approaches, methods of operating digital tools/environments, and methods. This is a long-term strategy, which should be prepared step by step when implementing digital transformation, through the following activities:

- Organizing training courses: teaching with technology, teaching in a mixed model, training on using digital tools and platforms...

- Organizing the design/re-compile of subjects according to mixed teaching model, open learning model, interactive lessons... Some subjects can refer to or use learning materials and documents from advanced universities in the country.

- Promoting the form of rewarding lecturers with excellent teaching achievements, forming a network of excellent lecturers so that they can guide colleagues in their departments/subjects.

***Next, expanding the audience of learners, expand access to technology for learners***

With the availability of digital classrooms, digital documents, and open learning materials, students of Red Star University will no longer be constrained by the limitations of the school's area or the geographical distance from there. training targets and the advantages in enrollment of increased.

In order to improve the ability to access technology, students need to have conditions to approach and interact with the digital environment in both online and face-to-face learning.

- Establishing practice rooms, interactive technology experiments with full equipment, and necessary support tools for students to realize their ideas or projects.

- Building extracurricular clubs, popularizing necessary technical knowledge for new learners.

- Integrate virtual reality, augmented reality, and mixed reality into the learning environment. This is an effective assistant for learners to experience technology.

- Minimizing the release of traditional books/documents. Instead, provide digital learning materials, an open repository of learning materials for learners.

- Open a 24/7 channel to answer general questions and provide technical support for studying at school.

***Finally***, promoting the implementation of online public services for training activities in schools such as: making all kinds of records, books, and electronic school records in schools; continue to effectively use the software management system for training management and student management.

### **III. Conclusion**

Over the past years, Sao Do University has accelerated the digital transformation process, has built a database initially serving training activities, E-learning lectures, promoting online teaching, especially In the context of the impact of the COVID-19 pandemic, digitizing management information, creating interconnected large database systems. However, there are still many difficulties such as weak infrastructure for digital transformation, difficulties in digital transformation human resources... Therefore, in order to promote digital transformation, it is necessary to propagate and raise awareness about digital transformation. in training activities; perfecting policies on management and use of databases, perfecting information infrastructure, developing digital data warehouses, deploying online public services in education and training, and actively fostering human resources. digital conversion service.

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