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Curriculum Development Based on Digital Supply Chain Management in Learning Supplies Management Majoring in Office Administration

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Abstract : Planning, monitoring, and assessing an organization's inventory management processes—often referred to as supply and supply chains—involves learning about supply chains and infrastructure or supplies. We acknowledge, however, that supply management is currently rudimentary and falls short of the demands of Indonesia's expanding appointment market. This study's main goal is to raise the caliber of potential personnel who will handle supplies and equipment in a business. Design Thinking in advance was the methodology utilized in this study. It consists of five steps: empathy, definition and idealization, prototyping, product testing, evaluation, and preparation. This study's findings are integrated supply chain learning that is cloud-based. The introduction of various learning features including LMS, inventory, supply chain, and IoT tracking. There are also some instructions on how to practice bidding based on the case studies given due of the inventory feature. Students are given content for cognitive learning through LMS. Prospective employees' quality, particularly that of professional students studying organizational needs and materials management, can be raised by employing these tools. The creation and deployment of an integrated learning cloud related to subjects on a larger scale can be the focus of this research's continuation the following year.

Keywords : Curriculum, Integrated Supply Chain Learning, Cloud, Supply Chain, Supplies

I. INTRODUCTION

Learning about supply chains and infrastructure involves learning about how to improve the management of the organization's current infrastructure. In an organization—often referred to as a supply chain—inventory management processes are planned, managed, and evaluated in this course. The industrial world is experiencing a very rapid expansion of utility and infrastructure asset management, starting with the development of digital infrastructure asset management and progressing through digital inventory and equipment management, supply chain management, and other simple to complex digital phases. However, educational institutions, in this case, future workforce providers, are unable to comprehend this since current learning in procurement management is still out of step with current industry needs and is not evolving quickly enough to meet future industrial needs.

The construction of web-based learning with an inventory system is one of the learning solutions that are available in Indonesia for learning media materials, such as those done by Nefolena in 2021 (Kiki Nefolena & Churiyah, 2021). There hasn't been a lot of research on learning materials and supply chains in Indonesia, unlike other studies on technology-based learning such integrated supply chain learning (Yang et al., 2019) and blockchain technology in supply chains (van Hoek, 2019). The most recent technology is used to establish supply chains abroad (M. Li et al., 2018). Professional-level learning, particularly the management of purchasing materials, namely offices, has not been extensively researched or developed in the learning process of supply management in Indonesia, and university-level purchasing management learning and management research are still not very developed.

The seamless flow of commodities, organizational facilities, and infrastructure are the primary determinants of organizational quality and organizational success, even though supply chain and delivery management alignment is crucial. The management of facilities and supplies in compliance with organizational requirements is essential for achieving organizational goals, which are related to the major objectives of business organizations and underscore the significance of this management. Based on these issues, academics started creating a supply management curriculum and a list of digital supply chain systems in order to enhance learning and create a workforce that is dependable for the Industrial Management 4.0 future.

This study's main goal is to raise the caliber of prospective workers who will handle the organization's supplies and supplies. Quality improvement is assessed from a variety of angles, starting with the most fundamental technical management and progressing in complexity to better managerial thinking. Critical thinking-based delivery and supply chains can assist

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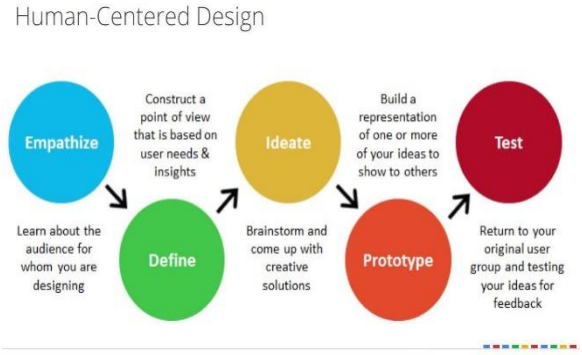
students better meet the problems of the industrial world, particularly supply chain management.

Due to the critical role that effective management plays in advancing one of the organization's primary objectives, this research is critically needed. Clear and effective management of shipments and inventory is the best way to support the main goal. This study is crucial for enhancing corporate operations. Because purchasing is a part of an organization that, of course, also has many interests and demonstrates that other sectors or organizations when managed they are problematic and inefficient, purchasing is part of an organization that must be able to compete directly, especially in the industrial world, and avoid things that hinder the development of the industrial world.

II. METHODS



Picture 1. Design Thinking for Educator

The best method used is design thinking for educators, which can be used (Suputra et al., 2021). The research method used in the development of this study is the design thinking process (Wrigley et al., 2018); the development of digital curriculum-based CBC research is carried out in office management education. This approach is ideal for use in creating a technologically enhanced learning environment, particularly in the field of education (Tu et al., 2018). The following 5 steps make up this development process:

a. Understanding and defining

The analysis of the learning requirements for purchasing and supply chain management at the SMC level, particularly in the area of office automation, begins with this phase.

b. Idea

In this stage, the researcher clearly expresses their study concepts and designs a solution. He or she is required to create at least one workable product at this point that has been created with the user management supply chain curriculum in mind and may be used as design validation material. verified by subject-matter specialists (N She et al., 2021).

c. Prototype

Researchers and curriculum designers work together to create supply chain learning programs for technology in this phase. In this instance, valid results have been obtained that are anticipated to fully validate the findings of the preliminary development work undertaken (Nakano et al., 2018).

d. Test

Product trials are conducted in this phase, which can be used in following phases and can be done on a small size, field scale, or big scale at many schools (Nakano et al., 2018).

e. Finishing

The researcher now moves on to the assessment stage, which includes everything from writing the final report, compiling the results of the processing, and data analysis, to publishing the work in indexed international journals and compiling the intellectual property rights. At this point, the researcher also assesses the final report draft. platforms (Kim and colleagues 2019).

III. RESULTS AND DISCUSSION

The following are research findings that address the two pressing issues the study drew attention to: enhancing the caliber of job candidates for managing organizational supplies and inventory and meeting industrial needs in the supply chain.

RESULTS

Curriculum for supply chain management that uses cloud learning Supply chain learning is a multifaceted form of integrated learning. Learning materials are being added as this product continues to develop. These features, such as learning product excerpts and learning options, are included in this membership package. Researchers created an inventory system based on case studies from industry cases for learning systems based on cloud supply chain practicum based on website e. The subscription feature is displayed in the following.

This modern learning system is designed to meet the demands of the industrial sector. In this instance, there are supply chain-based cloud learning systems that are simple to access and utilize. There are various learning options available on this menu, including LMS, inventory, supply chain, and IoT tracking. Learners can get content cognitive learning through LMS.

Researchers create an inventory system based on case studies from industrial instances and a supply chain that has been designed to meet the demands of the industrial sector using a website-based practicum mode. It is

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possible to apply the development of tracking systems learning in decision-making in inventory management, which is quite dynamic today, especially in the field of business development, up to a curriculum based on cloud-based futures supply chain development.

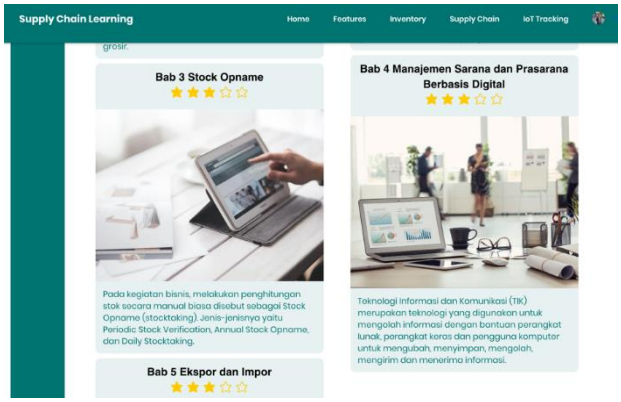
There are a number of useful learning tools based on the offered case studies in this inventory feature. Many institutions have confidence in this learning system and have utilized it to handle office education in a contemporary manner across a variety of industries. There are several educational institutions that work with this technology, and one of them is the SMK vocational school, which offers majors in office automation and management.

DISCUSSION

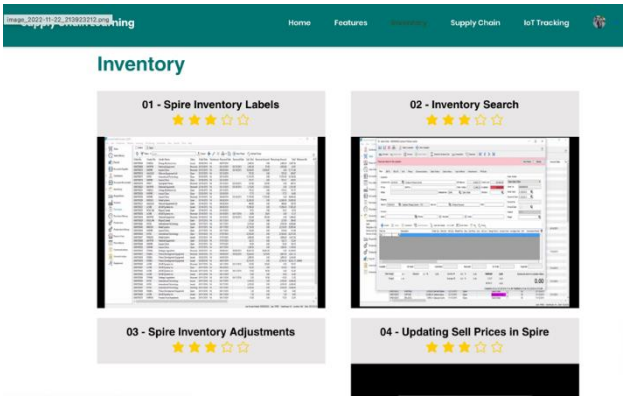
Based on the results of this development, which have been explained in the discovery of the results of making supply chain management teaching media which is equipped with an integrated curriculum, the developer and writer as well as the inventor have succeeded in developing a curriculum in the field of supply chain management. This curriculum manages to balance the development of learning systems in supply chain learning, through research results that have been published by (Adhi Dharma, et al 2022) with research results A concise recapitulation of the validation data is how the findings of the validation are obtained (Adams & Wieman, 2011). The study's findings include a summary of the data to make understanding easier. According to (Anindo Saka Fitri et al., 2022), data recapitulation is a step in the abbreviating or recapturing process of data analysis. According to Louangrath and Sutanapong (2018), the percentage of validation findings from media experts is 96%, while the percentage of validation results from material experts is 96%, indicating that the material has a strong value or is deserving of usage as research development material.

According to MacLean Correspondence et al. (2006), percentages with more than 80% were judged as strong, 60-79% as neutral, and less than 60% as weak. Based on the findings of expert validation and the outcomes of hypothesis testing, it is clear that the creation of an office management simulation learning system can enhance the standard of learning supply and inventory management procedures through the use of inventory systems that are integrated with educational objectives and market demands.

Picture 1. Curriculum Supply Chain Management



Picture 2. Curriculum Supply Chain Management



Picture 3. Curriculum Supply Chain Management

Through the development of a digital supply chain management curriculum, which consists of learning integrated supply chain learning and supply chain management by discussing components of one of the systems information that serves as the fulfillment of customer needs, especially in businesses related to manufacturing, retail, and wholesale, the curriculum was developed to produce high validation and be published in

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the Q3 Scopus-indexed scientific journal. Of course, there are several supply networks in business. The supply chain of a big business is more extensive than it is in a startup. In the simplest form, there are only businesses, customers, and suppliers. The supply chain management approach is covered in the second curriculum, with discussions beginning with consumers or clients who place orders for products from manufacturers. The customer includes details about the purchased item while placing an order. The information provided can take the form of the quantity of products requested and the date these products will be delivered. The following topic covered in this curriculum is stock taking, including a discussion of the discrepancy between the turnover figures achieved with products kept in warehouses, maybe as a result of the presence of defective or unsaleable goods. Performing manual stock counts is commonly referred to as stock-taking (stocktaking) in business activities.

Information and communication technology (ICT), which is a technology used to process information with the help of software, hardware, and computer users to change, store, process, send, and receive information, is another topic of discussion in the management of digital-based facilities and infrastructure (Fauziah, 2010 and Martin, 1999). ICT, according to Fauziah and Siahaan (2010), encompasses computer and information communication devices. ICT equipment is made up of three components: hardware, software, and the people who use Brainware computers to run them. By the time the curriculum was finished, it was based on an export and import curriculum, with discussions of the export and import program focusing on activities involving international trade or trade between nations. According to Government Regulation Number 10 of 2021, the act of withdrawing goods from the customs area is considered an export. The Customs area is a Republic of Indonesian region that encompasses all specific areas inside the Exclusive Economic Zone (EEZ) as well as land, water, and the air.

Based on an industry-based curriculum developed in supply chain learning management, the results of measuring the application of this curriculum to the application of supply chain learning tools have proven successful in providing positive and significant, and valid results from the expert validator level. Based on this, this discussion shows the effectiveness of the developed curriculum which succeeded in increasing the capacity and quality of student learning outcomes in the field of supply management.

IV. CONCLUSION

An integrated supply chain curriculum built on cloud learning serves as the study's conclusion. Numerous courses based on case study inventory methods have been taught using a variety of learning resources, including the LMS, inventory, supply chain, and IoT tracking, as well as hands-on learning about inventory skills. Students are given cognitive learning tools by LMS. The usage of this media has been helpful in raising prospective employees' abilities to manage organizational resources and equipment, particularly among students. The development of integrated cloud learning relevant to the subject and its application, even if on a modest scale, can be continued in the ensuing year along with this study.

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