

EXPENDITURE CYCLE: TRADITIONAL VS DIGITAL ACCOUNTING INFORMATION SYSTEMS ERA IN PHARMACEUTICAL INDUSTRY AND IMPLEMENTATION OF INTERNAL CONTROL PROCEDURES THAT ENABLE COST SAVINGS IN DEALING WITH THREATS IN THE CYCLE

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Abstract

This research is a study that explains the differences that occur in an expenditure cycle, after the digitization of accounting. These changes occurred very significantly and had a huge impact on the development of the accounting information system. The purpose of this study is to see how the digitalization of accounting influences developments in the expenditure cycle. The rapid development of accounting digitization certainly raises efforts to be made in controlling its application, namely the role of an internal auditor in a company is required. The research method used in this study is a descriptive method, namely that the researcher only studies the literature and then develops it into a piece of writing. The results of this study explain that there is a very large impact on the implementation of accounting digitization in the expenditure cycle, accounting digitization is able to minimize costs in the expenditure cycle and requires supervision that must be carried out by an internal auditor within a company to overcome various existing problems. The rapid development of accounting digitization provides a very good outlook for every company or industry, which basically must be prepared carefully and must be able to adapt well to all developments that occur, so that the company can survive and continue to grow.

Keywords: Expenditure cycle, Digitalization of Accounting, Internal Control.

Introduction

Expenditure cycle is a cycle that explains the costs that must be incurred for the purchase of goods and services that will be used by a company to meet its production needs (Manteghi & Jahromi, 2012). The main purpose of the existence of the expenditure cycle is to determine the procurement of goods and services needed in a company (Dănescu et al., 2012). Basically, there are many ways that can be done to buy or procure goods and services (Asatiani et al., 2019). But the simple analogy is that the goods and services referred to here do have the appropriate interest capacity for production activities within a company (Nguyen et al., 2021). Then, when we talk about the procurement of goods and services, what must be known is that there are expenses in the form of cash or recognized as costs to obtain the need for goods and services used for these production activities (Brandas et al., 2015).

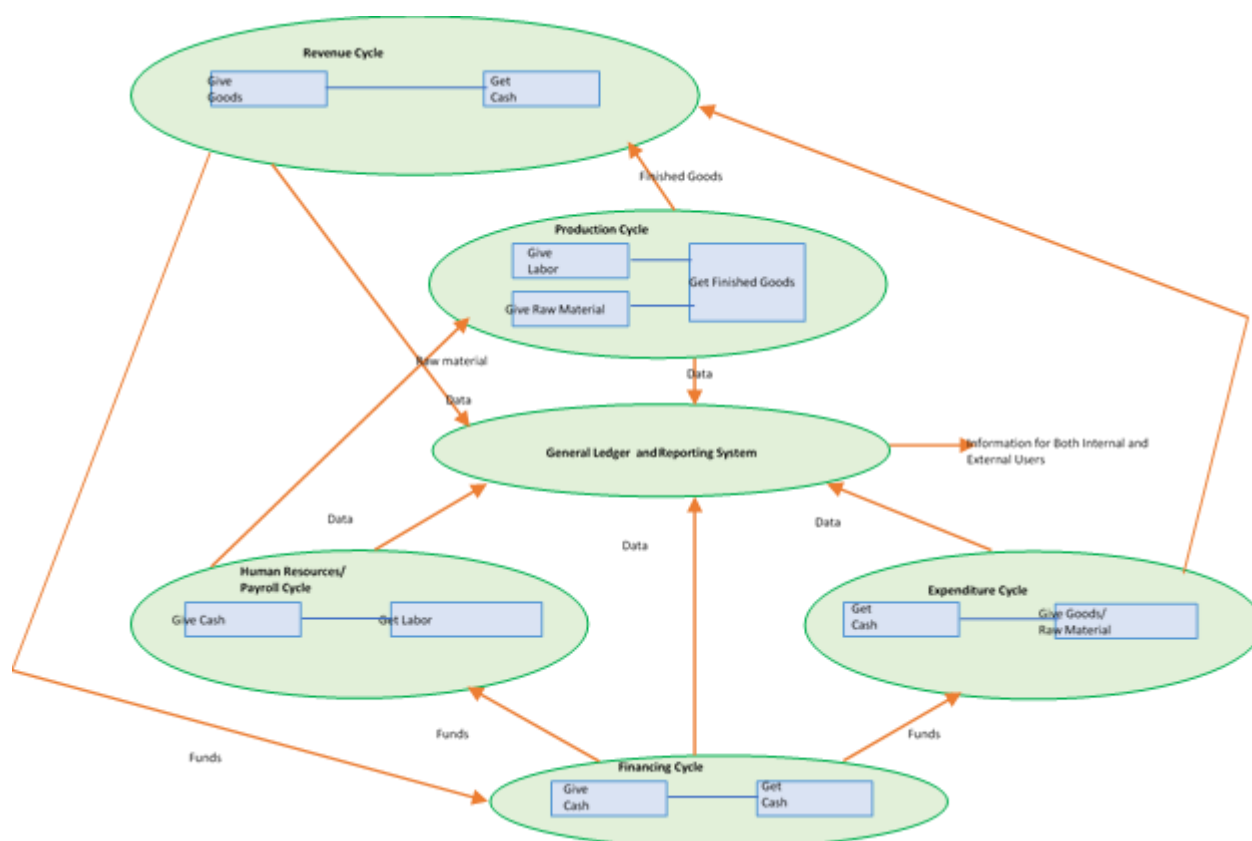
General activities carried out in this expenditure cycle include the following: making requests for goods and services to be purchased, preparing, receiving and sending proof of purchase to suppliers, receiving goods and services and completing proof of purchase, placing goods in stores, receiving invoices from invoices from suppliers, update accounts receivable, receive invoices from suppliers for payment, make payments to suppliers for purchases of goods and services, update accounts payable, prepare company management reports and so on (Belfo & Trigo, 2013). Expenditure cycle is a very important cycle in the mechanism of selling and buying activities in a company (Olsson et al., 2022). Although in the accounting cycle there are also funding cycles, human resource cycles, production cycles, general ledger and reporting cycles and also revenue cycles (Xiwen et al., 2021).

Each company has different accounting information system conditions, including those related to expenditure cycles. For example, in a service company when compared to a trading company or a manufacturing company, of course, it has a different accounting information system cycle (Trigo et al., 2016). However, these differences will certainly provide a certain view with respect to the accounting information system implemented in the company concerned (de Bresser et al., 2021). Thus, the expenditure cycle must have a clear recognition of its existence (Zhang et al., 2022). What this means is that the expenditure cycle does have a sufficiently adequate interest in a company concerned because this cycle has a very important role for the company's activities (Chiu et al., 2019).

In addition, of course, adequate internal control is needed to increase the capabilities of the expenditure cycle (Knudsen, 2020). The simple analogy is of course the expenditure cycle is a part that is very likely to give rise to a phenomenon of fraud or misappropriation in connection with the use or utilization of funds owned by the company (Kocsis, 2019). Thus, it really needs an adequate study of the existence of internal control within a company (Kumar et al., 2020). Thus, this supervision will increase the level of confidence one has in the intended expenditure cycle (Lashgari et al., 2015).

In addition, the expenditure cycle will provide a view regarding things that must be maximized so that they are able to properly support the activities carried out by the production cycle (Trigo et al., 2016). Thus, the expenditure cycle will certainly relate to cash disbursements or trade payables for the procurement of goods and services (Li et al., 2021). Of course, in the current era, the rapid rate of progress in information technology provides a very strong and significant view of digitalization of accounting, of course, including how to purchase goods and services in accordance with technological developments, using the transfer method, electronic money and so on (Ritchi et al., 2021). Thus, the expenditure cycle also has a fairly rapid development with respect to the procurement of goods and services (Amran et al., 2014). The following presents an image that explains the accounting information system applied to each cycle.

Figure 1. The AIS and Its Subsystems



The following figure explains the existence of an expenditure cycle in a company which is quite simple but has a very important role in the company (Oprean, 2014). Thus, the expenditure cycle referred to here has an existence that must be acknowledged (Lashgari et al., 2015). In addition, digitization of accounting will provide a very adequate capability in connection with this expenditure cycle, the difference in payment methods in the past when compared to the development of payment methods at the present time certainly has a big difference (Ramli & Iskandar, 2014). Without realizing it, this is a challenge that must be faced in a company concerned. Have a broader understanding in the use of technology (Duan et al., 2022). (Plant et al., 2022) Based on the background of the problems related to the development of accounting information systems and specifically the study in this research paper is related to the expenditure cycle, the problems in this study are as follows:

1. Does digitizing accounting in the implementation of the expenditure cycle have a big impact?
2. Can digitizing accounting in the implementation of the expenditure cycle minimize costs?
3. Does digitizing accounting in the implementation of the expenditure cycle require the existence of an internal auditor?

Literature Review

The emergence of ERP (Enterprise Resource Planning) which is an information system model that allows organizations to automate and integrate their main business processes (Xiaowen, 2012). ERP breaks the deadlock over traditional functional barriers in organizations by facilitating sharing/various data, multiple information flows, and introducing/channeling common business practices among all users in the organization (Zhang et al., 2022). The bottom line is that ERP provides a very good view of the importance of an integrated accounting information system, so that it will provide savings in the use of time and costs (Kocsis, 2019). However, it remains that a company that uses it must have strict supervision in its management (Chiu et al., 2019). In this regard, the use of ERP provides a new view that it turns out that the use of an integrated system provides convenience even

though at the beginning its implementation will provide difficulties for various parties who are reluctant to adapt to a new technology. (Kumar et al., 2020).

ERP system implementation can be a massive undertaking that can take up to several years (Knudsen, 2020). Due to the complexity and size of ERP systems, only a minority of organizations are willing or able to deploy multiple physical and financial resources and take the risk of developing an ERP system in-house (Kanta et al., 2021). Therefore, basically all ERP systems are commercial products. Products that are considered and recognized as leaders in the market are SAP, Oracle, Baan, J.D. Edwards & Co., and PeopleSoft Inc (Ndayikeza, 2021). However, the existence of ERP provides great convenience and benefits as well (Pashkevich et al., 2023). The point is that there is a balance between the costs incurred, the complexity that is owned and the benefits obtained in implementing ERP in a company (Nugraha et al., 2021). ERP packages are sold to various client organizations in the form of modules that support standard processes. Some common ERP modules include:

- Asset Management (Manajemen aset)
- Financial Accounting (Fico atau keuangan)
- Human Resources (SDM)
- Industry-Specific Solutions
- Plant Maintenance
- Production Planning (Perencanaan produksi)
- Quality Management (Manajemen mutu)
- Sales and Distribution (Penjualan dan distribusi)
- Inventory Management (Manajemen persediaan)

One of the problems with standardized modules is that they may not always match organizational needs exactly (Potjanjaruwit, 2022). For example, one textile factory in Indonesia implemented an ERP package only to find that extensive, unexpected, and costly modifications had to be made to the system. (He et al., 2022). ERP will not allow the user to assign two different prices to the same two clothes (Hoai et al., 2022). The factory applies the same type of price for the domestic market, but a different price (four times higher) for the products it exports. Unfortunately, such specialized ERP systems do not provide a way to assign two prices to the same item while maintaining an accurate inventory count (Chen et al., 2021).

Organizations wishing to implement ERP successfully will need to modify their business processes to suit the ERP, or modify the ERP to suit their business, or, more likely, modify both. (Dănescu et al., 2015). Often, additional software applications need to be connected to the ERP to handle unique business functions, especially certain types of tasks (business processes) specific to certain industries (Al-smadi, 2022). Such applications, usually referred to as 'bolt-ons', are not always designed to connect/communicate with ERP packages (Hu et al., 2021). The process for making it fit across the board can be very complex and can sometimes fail, resulting in heavy losses for the organization (Manteghi & Jahromi, 2012). ERP packages are very expensive, but the savings in efficiency must be significant. Organizational management must exercise great care in deciding, if anything, the best ERP for them (Antonietti et al., 2022). The following is a diagram that explains the development of accounting information systems after the existence or use of the ERP.

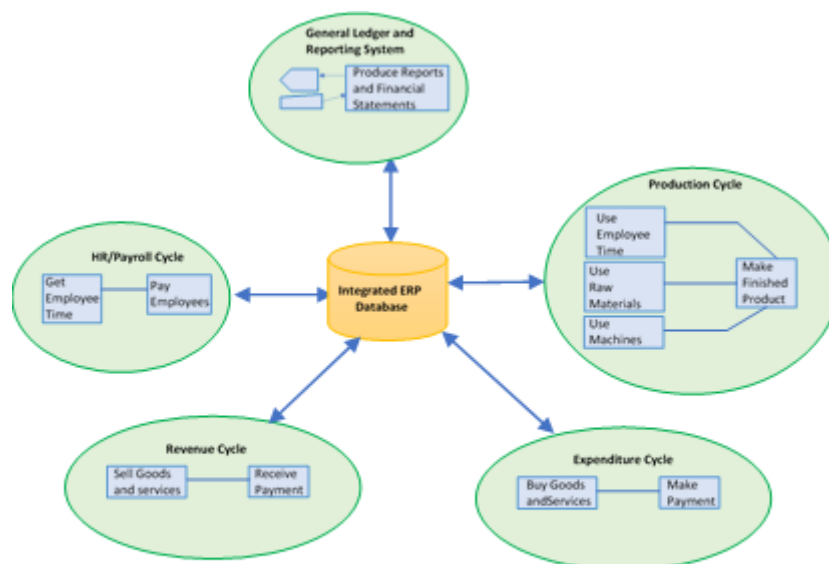


Figure 2 Integrated ERP System

The figure explains that there are significant differences for certain cycles with respect to ERP implementation (Manteghi & Jahromi, 2012). The main company is that there is only one data center that is able to integrate all the data needed by each department contained in each cycle of the company (Brandas et al., 2015). Thus, there will be no problems related to obstacles related to the supply of data which will indeed take a long time to manage the data when the required data is hampered in its acquisition (Dănescu et al., 2012). Thus, a statement that is always expressed in data management is that data has a very expensive value in its acquisition, so that the final output is in the form of processing data into a report that can be used in the decision-making process, very often experiencing very significant obstacles (Antonietti et al., 2022). However, through ERP all of this can be overcome, including data problems related to the expenditure cycle (Nguyen et al., 2021).

Utilization of ERP requires enormous human resources, costs and supervision (Asatiani et al., 2019). Thus, in its utilization must provide maximum supervision (Kyriacou, 2016). The existence of an internal auditor in a company or SPI (Internal Supervisory Unit) is needed in a company (Yang et al., 2022). ERP will be able to minimize human resources, because all data is integrated, so the ERP system helps in processing data and of course will reduce workforce capacity (de Bresser et al., 2021). However, supervision carried out by an internal auditor will be a very interesting challenge, so that the system can run properly and smoothly without experiencing any obstacles (Cattaneo et al., 2022). Internal auditors must be able to overcome this challenge, provide good and perfect supervision, for this purpose an internal auditor should also be able to understand ERP operations well, especially for the intended expenditure cycle (Olsson et al., 2022).

Methods

The method of data analysis carried out is by conducting descriptive analysis by analyzing various literature, both from various sources, books, journals, and so on in connection with accounting information systems, especially for the expenditure cycle (Bove et al., 2017). The method used in this research is descriptive analysis method or descriptive research. Through the descriptive analysis method, the researcher tries to explain clearly based on the results of the research that has been carried out. According to the statement (Xiwen et al., 2021) "Descriptive research is research that seeks to describe a symptom, event, incident that has occurred at the present time (at the time the research was carried out)". With the descriptive analysis method, the researcher tries to record all the symptoms or events that occurred during the implementation of the creative method in the field and then presented them as they were to answer all questions. Related to the descriptive method of analysis (Trigo et al., 2016) explained as follows:

The data obtained (in the form of words, pictures, behavior) is not set forth in the form of numbers or statistical figures, but is still in a qualitative form which has a richer meaning than just numbers or frequencies. The researcher immediately conducted data analysis by giving a description of the situation under study in the form of a narrative description. The essence of exposure is like knitting, each section is examined one by one, by answering the questions what, why, and how a phenomenon occurs in the context of its environment. The objectivity of exposure must be maintained in such a way that the research subject in making interpretations can be avoided (Li et al., 2021).

As expressed by (Chiu et al., 2019) This research method aims "to make systematic, factual, and accurate information regarding the facts and characteristics of a particular population or area". The descriptive method of analysis is a method that intends to make an awareness (description) of situations or events (Rabuisa et al., 2018). Descriptive research using basic accumulated data in a descriptive way, there is simply no need to seek or explain relationships, test hypotheses, make predictions or derive meanings and implications, although research aimed at finding these can also include descriptive methods (Sikubwabo et al., 2020).

The analytical descriptive research method used in this study seeks to describe the research that has been carried out and the results obtained are carried out with a qualitative approach expressed in words or symbols (Gunn et al., 2020). This method can be described as outlined in words that can clarify and describe the actual situation in the field or during research. The analysis used in this method is by using interviews, observation, and action tests. This is done because as a support to make it easier during research (Trigo et al., 2016).

Result and Discussion

Result

The results of this study are to explain the existence of a very large influence with respect to digitization of accounting in the implementation of the expenditure cycle in a company. Thus, the results of this study are able to answer the problems contained in this study, including the following:

Digitalization of accounting in the implementation of the expenditure cycle has a big impact

Accounting digitalization provides a lot of convenience to every system user in a company (Herath & Mittal, 2022). In implementing an expenditure cycle related to the procurement of goods and services, purchasing goods and services, using invoices and so on which of course uses so many documents that will play a role in the process of accounting information systems within a company, of course digitization will make everything be simpler (Amran et al., 2014 and Mustika, 2021). Reducing the amount of time needed and even the costs incurred will also be able to decrease, time is efficient and cost effective (Pashkevich et al., 2023). Everything will be easier when everything is electronically based and this is part of the intended accounting digitalization effect. There are so many documents that must be issued or owned by the expenditure cycle department, but with the digitization of accounting, everything will have only one integrated data center, of course this is part of the role of digitizing accounting which has a huge impact on a company. Although, the reality is that starting to implement this accounting digitization at an early stage is not an easy matter and of course requires quite a large amount of money (Trigo et al., 2016).

Digitizing accounting in the implementation of the expenditure cycle is able to minimize costs

Digitizing accounting is not something that is easy to implement, there will be many challenges in the form of trials that must continue to be made as much as possible in order to obtain an effective result (Kumar et al., 2020). The digitization of accounting will of course ultimately provide convenience to accounting users, in the process

of producing accounting evidence, making reports and even understanding in relation to the intended accounting cycle (Yulisfan et al., 201 and Potjanajaruwit, 2022). Savings on human resources and the time used in managing them is the most appropriate answer in connection with the cost savings that occur in the operationalization of the company concerned (Dănescu et al., 2012). Thus, digitizing accounting will of course provide very significant cost savings for an expenditure cycle, it does not require a lot of resources in the process and of course even the acquisition of goods and services is currently very dominant by using e-catalogs which make it very easy for various parties (Hoai et al., 2022).

Digitizing accounting in the implementation of the expenditure cycle requires the existence of an internal auditor

Accounting digitization is an excellent breakthrough, which of course will be implemented optimally in its application (Hu et al., 2021). However, of course, good supervision is needed in its management. Internal auditors are an internal supervisory unit within a company that has enormous authority in monitoring and controlling the implementation of this digital accounting. In fact, this is a new challenge in a company that provides a very good picture of the company's maturation process (Reegu et al., 2022). Thus, it is hoped that the convenience provided by digitizing accounting will provide a lot of good for the company, minimizing fraud and all things that can create fraud by using technology (Xiwen et al., 2021). Thus, the existence of an internal auditor is expected to be able to provide a very good picture to accompany the ongoing implementation of digital accounting, especially for the development of the expenditure cycle in this study (Bove et al., 2017).

Discussion

The digitization of accounting provides so many changes in the science of accounting, very rapid development, a positive response from its users, although it is not uncommon for some people to reject these changes (Zhang et al., 2022). But basically, everyone involved in the world of accounting, must be able to make adjustments properly. Learn and adapt to these developments (Asatiani et al., 2019). In this case what is meant is that in fact the development of accounting is very useful for the application of the accounting cycle, including the expenditure cycle which is being studied in this study (Kanta et al., 2021). Digitalization provides convenience, effectiveness and efficiency which are currently being felt and the development of accounting science has begun to be given since college (Cattaneo et al., 2022). Various companies or industries that always use accounting in the implementation of their activities, of course, always expect convenience in every implementation. Do your best how the costs incurred can be properly minimized and of course this is a challenge (Brandas et al., 2015).

Through this research it can be understood that digitization of accounting has a very positive impact on minimizing accounting costs incurred by the expenditure cycle (Lashgari et al., 2015). Simpler and easier stages in the implementation of the cycle, of course, are able to minimize the role of human resources, this is due to the digitalization of accounting (Knudsen, 2020). Salary costs incurred will be minimized properly, ERP system financing will be allocated as best as possible, then a good evaluation will also be assisted by internal supervision carried out by the internal auditors (Manteghi & Jahromi, 2012). There will be a lot of human labor reduced when an integrated system can be implemented properly (Duan et al., 2022). Thus, there will be a number of costs that should have been incurred by the expenditure cycle, then these costs can be stored properly for use in the operationalization of the company concerned (Knudsen, 2020). Every development will have positive and negative impacts, but it cannot be denied that each of these developments will certainly cause us to be able to adapt properly so that the implementation can be carried out perfectly (Chen et al., 2021).

Conclusion

This research is a research with descriptive analysis which is still very simple (Kumar et al., 2020). However, this research is able to explain the existence of an expenditure cycle which is very important and must be able to adapt

to the development of digital accounting (Dănescu et al., 2012). Thus, there will be many costs that can be saved and allocated for other purposes, when a company is able to answer a challenge in implementing digital accounting (Hu et al., 2021). Expenditure cycle, will give a positive response in the implementation of the digitalization of accounting (Plant et al., 2022). Many differences are felt, especially for documenting various data within a company, when an integrated system is used, it will become simpler. (Yang et al., 2022). Expenditure cycle does not require a lot of human resources when you are already using an ERP system. Various costs in the process of ordering, picking up and so on can be minimized through digitization of accounting implemented in a company (Bove et al., 2017).

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