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Implementation Of Agile Planning And Accounting In The Era Of Digital Information

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ABSTRACT

Agile, flexible and responsive business processes can provide more value to clients and quickly adapt to changes in the business environment to meet client needs and create a competitive advantage. This disruptive situation is not a new case for the accounting sector. Even before the pandemic, this sector was already disrupted due to the rise of digitalization which threatened business continuity. Accountants' jobs have a 98% chance of being computerized. As a result, journal keeping, report data entry, report reconciliation, auditing, and risk assessment that were previously done manually, are slowly being replaced by accounting software with Artificial Intelligence or machine learning technology that is gaining popularity. These things make accounting service companies no longer monopolize accounting knowledge because accountants are not the only ones who can collect data and summarize financial reports. Introduction. This research was made with the main purpose of wanting to know how the application of business agility can affect the company and how information technology can affect business agility, especially in the field of accounting and business planning itself. The study is based on the concept and philosophy of Agile, whose theoretical basis has been formed in the investigation of Taipaleenmäki, J. (2017) and best reflects the principles and consequences of the methodology in accounting systems. The most common effect of Agile implementation in accounting systems is the optimization of costs for financial results. Qualitative effects of the implementation of this concept include the integration of accounting processes in all subsystems: suppliers, customers, personnel, the embodiment of innovations in the company; accounting acts as a mediator.

Keywords: Agile Leadership, Accounting, Digital Era

INTRODUCTION

In the current era of globalization, technological developments are driving the shift towards digitalization. Digitalization can be said to be the use of digital technology to change business patterns and create new sources of income and value opportunities through the process of shifting to the digital business realm. Digitalization is closely related to information technology (IT) which plays a very important role in achieving company goals effectively. It is undeniable that a company's ability to adapt to dynamic market changes and continuously provide market needs is the key to gaining a competitive advantage. IT capabilities in this case are very important in helping business processes become more responsive and helping companies create competitive advantages. According to Benitez, Ray & Henseler (2018), Wong, Tseng & Tan (2014), and Chen, Wang, Nevo, Jin, Wang & Chow (2014), information technology can help business processes become more responsive and flexible, so they can more quickly respond to changes in client needs.

Agile, flexible and responsive business processes can provide more value to clients and quickly adapt to changes in the business environment to meet client needs and create a competitive advantage. Efficient and concise business processes can improve results (Ahmad & Arshad, 2014) and have a superior value chain (Nadarajah, Kadir & Khalid, 2019). In addition, IT can simplify business process re-engineering with new constraints according to market conditions. IT also helps reduce communication barriers between functional lines so that information can be distributed more easily and decision making becomes faster (Huang, Lee, Chiu & Yen, 2015).

Companies are faced with an increasingly dynamic and digitized business environment. Information technology (IT) mechanisms have begun to be implemented to transform traditional business models into a digital era (Hanelt et al., 2021). Companies invest in IT resources with a significant portion of the company's capital investment. The company's budget for IT can represent 50% of the company's budget to implement the digital transformation strategy. The proportion of the budget puts pressure on management to measure and generate business benefits from IT investments. Management is beginning to be directed towards an increased focus on establishing effective processes and mechanisms to decide what IT resources and initiatives should be implemented and how and who should make and contribute to these decisions. The company's concern about the threat of non-strategic use of IT makes management work together to minimize these risks (Benitez et al., 2018).

Business agility is a key ability that allows companies to be able to see environmental changes and act effectively to maintain and improve sustainable performance (Marhraoui et al., 2019). This means that they must have the necessary skills to analyze current and future situations to be able to make the right decisions to manage uncertain future events (Hajevar & Kharazian, 2016). The impact of agility on a company not only allows the company to survive in an uncertain environment but can also have a greater impact on the company (Hajevar & Kharazian, 2016). Several factors driving agility in companies force organizations to remain agile with market changes, changes in competition, changes in customer preferences, technological changes, changes in social factors, and economic changes (Žitkienė & Deksnys, 2018). Beberapa faktor yang mempengaruhi kelincuhan bisnis yaitu Teknologi Informasi (TI), sumber daya manusia, proses, manajemen pengetahuan, inovasi, dan struktur organisasi. Sehingga dapat dikatakan bahwa kelincuhan bisnis atau kelincuhan organisasi adalah kemampuan perusahaan untuk melihat perubahan dan peluang sehingga perusahaan dapat bertindak dengan cepat dan efektif untuk bertahan, berkembang, dan bersaing dalam lingkungan bisnis global yang saling terhubung dan bergejolak (Marhraoui & Manouar, 2017).

According to research conducted, 73.5% of research journals write that business agility is one way for companies to be able to face, respond, and adapt quickly to changes and competition in the market (Baškarada & Koronios, 2018; Cai et al., 2019; Darvishmotevali et al., 2020; Martínez-Caro et al, 2020; Zaini et al., 2020). Companies must be able to deal with change. Companies can create and change strategies and tactics related to business agility so that companies can use them to cope with fluctuating internal and external changes (Barlette & Bailleite, 2020; Qosasi et al., 2019). In addition, there are two aspects that must be considered in business agility, namely internal and external aspects (Crick & Chew, 2017). The internal aspect is the company's ability to reconfigure its resources so that it can respond in a timely, effective, and efficient manner. Meanwhile, the external aspect is the environment that creates the need for changes around the company (Pahala et al., 2021). One business in the industrial services sector that is very interesting to research is accounting services. Accounting services consist of public accounting firms and accounting services offices. Accounting firms are one of the businesses affected by the pandemic due to the increasing complexity of workloads with increasing

reporting regulations, taxation and new financial regulations currently being issued by the Indonesian Government, followed by huge disruptions in the business sector.

According to the Indonesian Institute of Accountants, remote auditing is one of the disruptions in this business field. This disruptive situation is not a new case for the accounting sector. Even before the pandemic, this sector was already disrupted due to the rise of digitalization which threatened business continuity. According to (Frey & Osborne, 2017), accountants' jobs have a 98% chance of being computerized. As a result, journal keeping, report data entry, report reconciliation, auditing, and risk assessment that were previously done manually, are slowly being replaced by accounting software with Artificial Intelligence or machine learning technology that is gaining popularity. These things make accounting service companies no longer monopolize accounting knowledge because accountants are not the only ones who can collect data and summarize financial reports. Currently, client companies need accountant services to help them develop several strategic plans & business management and design IT systems in client companies (Amirul, Mail, Bakar & Ripain, 2017). To face disruption due to the era of computerization and digitalization, it is very important for KAP in Indonesia to improve IT capabilities by following the development of new technologies so as not to be overtaken by increasingly sophisticated technology.

Artificial intelligence systems in the enterprise computing infrastructure are focused on developing systems that are able to run and interact like humans, and perform various tasks such as problem solving, planning, and learning. This type of system has the ability to overcome the problems and obstacles that exist in conventional management accounting systems. Nowadays, artificial intelligence has also helped in the development of smarter decision-making systems. By analyzing historical and recent data, artificial intelligence systems can provide better recommendations in terms of resource allocation, budget planning, and overall business strategy. This helps managers make more targeted decisions and potentially reduce the risk of errors in planning and execution.

The agility of a company not only allows the company to survive in an uncertain environment, but can also have a tremendous impact on the company. The application of machine learning technology in management accounting practices will optimize the productivity of accountants' tasks. Processes such as financial data collection, data processing, and performance analysis are routine and monotonous tasks performed by accountants. Machine learning allows management accounting systems to process and analyze large and complex amounts of data quickly and accurately (Muhammad Akmaluddin; Totok Dewayanto, 2023).

The implementation of agile business planning and accounting plays a crucial role in a company's success. The development of digital financial technology has changed the business landscape, affecting the way companies plan and manage their finances. Management accounting is concerned with the manual analysis of financial and operational data to produce information that supports and assists in decision-making. Proper management of financial and strategic information is necessary for companies to make timely and effective decisions. However, data processing and analysis in accounting often require considerable time and resources, especially if done manually. This process is also potentially vulnerable to human error, but with the application of information technology (IT) such as artificial intelligence and machine learning, this paradigm has undergone a major change (Muhammad Akmaluddin; Totok Dewayanto, 2023).

This research was made with the main purpose of wanting to know how the application of business agility can affect the company and how information technology can affect business

agility, especially in the field of accounting and business planning itself. In addition, this research also wants to see the results of previous studies related to factors that affect business agility, who plays an important role in carrying out business agility, and why information technology information technology is needed in a business. Through a deeper understanding of these aspects, it is hoped that it can make a valuable contribution in supporting the success of companies in the ever-evolving digital era.

METHOD

The study is based on the concept and philosophy of Agile, whose theoretical basis has been formed in the investigation of Taipaleenmäki, J. (2017) and best reflects the principles and consequences of the methodology in accounting systems. Based on the qualitative-empirical approach of Fuchs, C. (2019), the efficiency of Agile methods in accounting has been analyzed. The basic hypothesis of this study centers on the Agile method application by the company in the accounting system indirectly through its integration into the production, supply, marketing systems. Therefore, the impact of applying Agile methods automatically refers to the accounting system of the enterprise. The analysis of the conducted publications made it possible to conceptualize the impact of using Agile methods in the management of accounting projects and accounting systems.

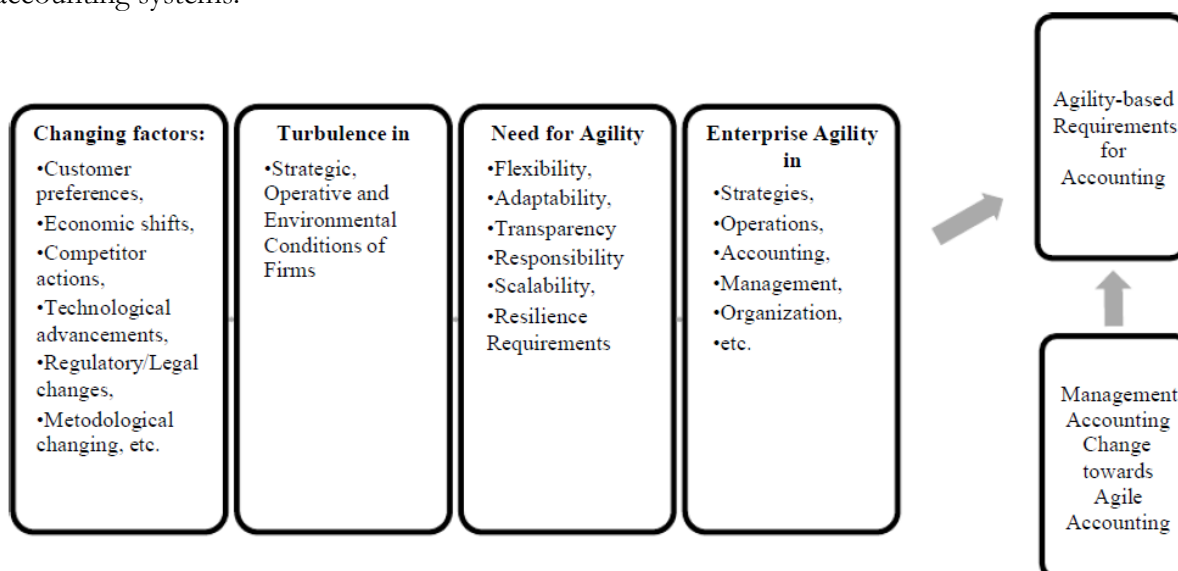


Figure 1 Transformation path of applying Agile concepts in accounting.
 Source: Taipaleenmäki, J. (2017)

Agile philosophy changes the management system based on bookkeeping, financial and tax accounting. The conducted analysis made it possible to formulate the definition of Agile Accounting as a concept, philosophy of flexibility of accounting systems, based on the principles of transparency, adaptability, responsibility of elements, scalability, taking into account the requirements of system stability in conditions of environmental uncertainty.

RESULTS AND DISCUSSION

Changing environmental conditions will affect the company and require the entity to implement a method of new resources. Here breakthrough innovations, management accounting systems and management control systems emerge, based on the concept of flexibility (Coller, G., Frigotto, M.L., Costa, E., 2018). In turn, this will drive a transformation of the accounting system, for example in corporate strategy and especially cost optimization. The Agile philosophy ultimately changes the management system based on bookkeeping, financial and tax accounting. This condition gave rise to the concept of "Agile Accounting", which is a philosophy of

accounting system flexibility based on the principles of transparency, adaptability, elemental responsibility, scalability, by focusing on the importance of system stability in conditions of environmental uncertainty.

The company's accounting system conforms to the principles of the Agile philosophy, and the accounting process becomes flexible due to the company's need to make quick decisions. The results of the study of the effectiveness of the application of Agile methods in enterprise accounting show the implementation and integration of concepts in different subsystems of the accounting system (Table 1). The accounting system automatically changes under the influence of changes in business processes in the subsystems of production (transition from mass to flexible), relationships with customers (from mass marketing to personalization), suppliers and personnel. The control system is changed through a personalized approach and a flexible approach of the company in working with suppliers and customers as a result of Big Data, Internet of Things concepts. Big data flows require flexibility. As a result, companies are moving from data management to knowledge management: data about customers, suppliers, staff. Startups, "agile organizations" are created (Oliva, F. L., Couto, M. H. G., Santos, R. F., Bresciani, S., 2019); their services are centered on solving corporate problems in knowledge management systems and Agile integration into corporate activities.

More and more companies are transforming into knowledge-based companies (Gupta, KM, Gunasekaran, A., 2005); evolutionary evolution of cost and performance indicators is carried out; management accounting systems based on cost assessment systems and efficiency evaluation. The Agile concept provides for the formation of value, in particular in the accounting system of the enterprise, which is considered not from the point of view of cost management, income and financial results, but from the point of view of a flexible knowledge system for decision-making in management. Intellectual capital is formed to ensure value creation and sustainable development (Al-Htaybat, K., Hutaibat, K. and von Alberti-Alhtaybat, L., 2019). Bookkeeping accounting has become a form of intellectual capital, particularly through Agile methods and technologies.

Consequently, the most common effect of Agile implementation in the accounting system is the optimization of costs for financial results. The qualitative effects of the implementation of this concept include accounting integration of accounting processes in all subsystems: suppliers, customers, personnel, the embodiment of innovations in the enterprise; accounting acts as a mediator in the implementation of innovations, as a link documenting innovations, reflecting the material side of innovations; introduction of a flexible financial accounting system; adaptation of hybrid roles of accountants (strategic and operational); implementation of advanced analytics in the accounting system; expanding the skills and competencies of accountants. The application of the Agile Accounting method provides benefits including:

1. Increase the speed of decision making.
2. Data alignment.
3. Simplification of processes so that the flexibility of the information accounting system increases.
4. Creation of financial leaders.
5. Effective resource management.
6. Expanding skill sets and competencies.

CONCLUSION

The work of the accounting department involves assessing the cost of innovation and the value of new processes and methods. For example, an accountant measures the cost of introducing new technologies. Automatically, the accountant integrates into the team, provides cost flexibility, optimizes expenses, participates in the financial financial decision-making process (Goncalves, M., Heda, R., 2010). Thus, accountants become people who are responsible for the company's financial strategy combined with operational goals. The conducted research confirmed the hypothesis about the indirect impact of Agile methods in the accounting system through their integration into the production, supply, marketing systems. The accounting system automatically changes under the influence of business processes" changes in production subsystems (transition from mass to flexible), relationships with customers (from mass marketing to personalization), suppliers and staff. The control system is transformed through the personalized and flexible approach of the company when dealing with suppliers and customers as a result of the emergence of Big Data, Internet of Things concepts. As a result, the most common effect of Agile implementation in accounting systems is the optimization of costs for financial results. Qualitative effects of the implementation of this concept include the integration of accounting processes in all subsystems: suppliers, customers, personnel, the embodiment of innovations in the company; accounting acts as a mediator.

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