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Management Accounting Organization Conditions for Industrial Innovation: Research at Garment Enterprises in Hanoi

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Abstract

Management accounting is considered one of the effective management tools in the market economy, because of the flexibility and timeliness of accounting information to serve the internal management requirements of businesses. In other words, management accounting is a part of an organization's information system, playing a key role in providing information to support managers in making decisions and controlling operations. However, in the context of the explosion of technological innovation, traditional management accounting methods are gradually no longer suitable, but instead there is a close, inseparable

combination of technology and management accounting. Treat. The article is based on survey data of 56 garment enterprises in Hanoi, including 18 large-scale enterprises and 38 small- and medium-sized enterprises to evaluate the current state of technological innovation and organization. Management accounting in the context of technological innovation. From the research results, some implications are given to improve the organization of management accounting at Vietnamese Garment enterprises in Hanoi to meet the information needs of administrators in the context of technological innovation.

Keywords: Technological Innovation, Management Accounting Organizations, Garment Enterprises in Hanoi

1. Introduction

Management accounting is the collection, processing and provision of information for people inside the business to use, helping to make decisions to operate the business and plan for the future. Consistent with business strategy and tactics. Information provided by management accounting is largely intended to serve the decision-making function of administrators. Therefore, management accounting provides flexible, timely and systematic information, on the basis of which options are analyzed to make decisions on the most optimal option. However, in the context of the explosion of technological innovation, traditional management accounting methods are gradually no longer suitable, but instead there is a close, inseparable combination of technology and management accounting. Treat. According to accounting experts, technological innovation is increasingly influencing the accounting process in general and management accounting in particular. Even today, accounting operations rely substantially on information technology, and it is technology that makes accounting activities in firms more productive, transparent, and professional. As a result, automated procedures and artificial intelligence developed via technology innovation enable accountants in general, and management accountants in particular, to simplify the calculating process. The successes of technology progress will make management accounting job easier, faster, and more timely, allowing management accounting to become an integral instrument in corporate management and operations. Management accountants may now gather accounting information without being constrained by geographical boundaries thanks to technological advancement such as the Internet of things system.

In the digital age, information from various applications and databases will be gathered via the Internet of Things and cloud computing, and artificial intelligence will be used to provide solutions. Report right away. In the discipline of management accounting, automation is likewise viewed as a promising technological advancement that may be utilized to automatically extract data, provide choices, and create reports or presentations. Large amounts of unrestricted information storage are made possible by cloud technologies. Thanks to technological advancement, management accountants may now store vast volumes of data in an organized, scientific manner. Large volumes of data may be processed using this technology, which can also handle several activities at once to provide the intended outcomes.

Businesses must adapt how management accounting is organized to achieve the best possible management efficiency in line with advancements in science and technology. In light of technological advancement, this essay examines the existing state of affairs and suggests ways to improve management accounting organization. The research was carried out in Hanoi's apparel industries.

2. Theoretical Background

Technology innovation

Schumpeter (1934) contended that innovation in technology is a byproduct of corporate action, wherein novel amalgamations of preexisting resources arise. Innovation, for instance, might be defined as the fusion of production elements to produce new goods and services or to implement novel manufacturing, marketing, and organizational strategies for businesses. An organization's degree of innovation is mostly determined by the innovations it has made, yet invention and innovation are two quite different things. An invention is a new idea, a new scientific discovery or a technological novelty (not yet realized and widespread), while innovation refers to a tradable characteristic of an invention, which is result of the integration of invention into economic and social practice (Malerba & Orsenigo, 1997). The implementation of invention leads to the need for innovation; Inventions can come from different economic and social environments, but innovation is mainly the result of business operations. The process of implementing inventions may require additional inventions and innovations for the innovation process to be successful (Diaconu, 2011). Pavitt (1987) notes, most technologies are complex and cumulative, and to use an invention and turn it into innovation, businesses must effectively combine information, human resources, finance, facilities and systems to perform distribution functions.

Furthermore, there are several other perspectives for comprehending technological advancement. According to Malerba & Orsenigo (1997) technological innovation is an idea, a new discovery related to technology; According to Patel & Pavitt (1997), technological innovation is the ability to access and absorb production process knowledge of an enterprise, creating a competitive advantage for the enterprise; According to Walsh & Linton (2002), technological innovation is a unique technique or production process owned by an enterprise, allowing the enterprise to respond quickly to changes in the business environment. According to Archibugi & Coco (2005), technological innovation is the ability to access and absorb external knowledge to convert into some unique skills or knowledge of the enterprise. On a broader scale, Azubuike (2013) believes that technological innovation is part.

Management accounting organizations

Professor Robert S. Kaplan of Harvard Business School (HBS), an American management accounting institution, states that management accounting is a component of the management information system that managers in firms depend on. "To organize and manage the organization's operations."

According to this perspective, management accounting is closely linked to the management activities of organizations. Management accounting plays an important role for organizations in developing estimates, planning policies and controlling all organizational activities.

According to the American Association of Accountants (1982), Management Accounting is the process of formatting, measuring, synthesizing, analyzing, tabulating, explaining and communicating financial data and financial costs. For the Board of Directors to plan, evaluate and monitor the implementation of plans within the enterprise, to ensure the effective use of assets and strict management of these assets.

According to this perspective, management accounting is an indispensable tool for administrators when making business decisions to improve the efficiency of capital and asset use.

According to Accounting Law No. 88/2015/QH13 dated November 20, 2015, "Management accounting is the collection, processing, analysis and provision of economic and financial information according to management requirements and decisions." economics and finance within the accounting unit".

Thus, management accounting aims to provide information about the internal operations of the enterprise, such as: Cost of each department (cost center), each job, product; Analyze and evaluate the implementation situation with the plan on revenue, costs and profits; management of assets, supplies, capital, and debt; Analyze the relationship between costs, volume and profits; Select appropriate information for short-term and long-term investment decisions; Prepare production and business budget estimates;... to serve administration, inspection and economic decision making. Management accounting is the job of each enterprise. The State only guides the principles, methods of organization, and the main contents and methods of management accounting to create favorable conditions for enterprises to implement.

Trends in organizing management accounting in enterprises during the period of technological innovation

Recent years have been a period of explosive development in information technology, with all activities associated with digital technology. Therefore, the accounting field is also oriented to develop in the direction of applying technological innovation, to ensure maximum reduction of human labor, while still bringing the highest economic benefits to businesses. Specifically in the field of accounting, the application of digital technology helps accounting work be done anytime, anywhere while still ensuring efficiency. Data collection, processing, calculation and reporting are done quickly and promptly. For the application of technology to be effective, a team of accountants is required to grasp how to apply technology in accounting activities.

The accounting industry's current development trend is replacing conventional processing techniques with ever-smarter and more complex technologies, such as big data and cloud computing-enabled smart software. The following are the evolving trends in the accounting sector generally, and management accounting specifically in light of technology innovation:

First, a lot has changed with accounting software. The advent of several specialist accounting software programs made accounting work—which had previously been done mostly using Excel—more efficient and precise in all aspects of recording and calculating. The software services that accountants value most, such process optimization and the reduction of manual duties, are included in these

software platforms. This guarantees excellent accuracy and saves time when creating bookkeeping papers.

Second, the support of AI technology. In Vietnam, accounting work previously had to be done entirely manually, depending heavily on the accountant's carefulness and meticulousness with many accounting books and tables according to certain standards. In recent decades, with the strong development of scientific and technical achievements and modern technology, AI has gradually been introduced into the field of accounting. This allows businesses to cut costs, automate a variety of processes, as well as boost business profits. At the same time, the impact of technology is drastically changing the accounting industry in businesses. AI machines take on the burden of performing repetitive and time-consuming tasks. Artificial intelligence in accounting reduces human intervention. AI technology has the ability to handle many standard accounting tasks faster and more efficiently. AI technology handles many manual, repetitive tasks, leaving accountants with more time to focus on other aspects of their work, such as consulting and data analysis. Instead of spending hours completing manual tasks, accountants will be able to use and analyze data provided by AI to make the most reasonable decisions.

AI technology will improve data entry accuracy and reduce liability risks for accountants; more effective in detecting fraud; provides real-time data, allowing accountants to provide real-time solutions; the ability to analyze large amounts of data instantly; Evaluate past successes and failures to plan for the future. Specifically, one of the major applications of AI in accounting is machine learning. Machine learning can encode accounting entries, can analyze contracts. The new field of automation is a means of supporting useful decisions, such as through machine learning, which can identify unusual transactions in recording arising economic operations. It can help accountants access unstructured data, becoming an effective virtual assistant for the work of accounting, auditing, transactions, and taxes to identify areas of risk or need analysis. Additionally, thanks to the context recording function, machine learning has smarter analysis.

Thirdly, accounting is done automatically. Complex operations can be made simpler with the use of technology, as opposed to performing several manual tasks. Accountants are able to concentrate on significant, deliberate, and thorough activities. Other jobs can be carried out by automated technologies. Systems for banking and accounting can be integrated with current software. This renders outdated invoicing techniques. It only takes a few clicks to produce an invoice that is flawless. While some client data must be entered, the most crucial thing is that there be no mistakes.

Fourth, traditional accounting systems are progressively replaced with cloud-based ones. Businesses that use traditional on-premises accounting solutions must set up a physical data center. This implies that in order to deploy and maintain the solution, firms must invest a significant sum of money in hardware, staff, and time. Cloud accounting, meanwhile, uses distant computers on the cloud platform to keep company data. As a result, consumers may easily obtain crucial financial data from any location at any time. Everyday duties may be managed by users at any time and from any device. Additionally, all data is instantly retrievable from the cloud and is immediately preserved there.

Furthermore, the solution can also flexibly expand or contract immediately depending on needs, without requiring businesses to spend investment costs, so cloud accounting is a suitable solution for businesses. businesses of all sectors and sizes. At the same time, cloud accounting provides businesses with an overall picture of the business's most recent activities, automatically updates financial transactions, allows users to monitor business performance and helps Management makes more informed decisions based on real-time financial information and status. In addition, users can easily search for invoices, contracts, and track payment status, helping businesses maintain good relationships with suppliers, distributors, employees, and business partners.

Fifth, investigate trends on blockchain for potential uses in the future. In contrast to traditional accounting practices, which need an accountant to record duplicate entries, blockchain technology just requires a single entry that may satisfy all parties' information demands without sacrificing authenticity. Even if the owner of the accounting system wants it, accounting records recorded on the Blockchain cannot be altered or amended once they are saved. The integrity of financial records is ensured as every everyday transaction on the Blockchain network is documented and verified. Because blockchain is a technology that enables safe data transmission based on an incredibly complicated encryption mechanism, comparable to an accounting ledger where Cash is continuously controlled, it helps safeguard accounting information.

3. The extent to which Hanoi's garment companies have integrated technological innovation into their management accounting structure

An overview of Hanoi's garment companies

There are about 500 clothing companies in Hanoi, employing more than 60,000 people. Including participating state-owned, private, and more than 20 foreign direct investment companies. Strong clothing products from Hanoi include knitted items from companies like Dong Xuan Knitting Company, Hanoisimex, Minh Tri, shirts from May 10 and May Thang Long, bedding from companies like Havico and Ghome, etc.

Today's top businesses in Hanoi's apparel sector are Garment 10, Garment Duc Giang, Garment Ho Guom, and Garment Chien Thang. These are state-owned businesses with equity that generate more over 1,000 billion VND in revenue annually. The garment sector in Hanoi has experienced rapid growth and intense rivalry, with over 30 garment firms reaching a manufacturing scale of over 100 billion VND in sales annually. Foreign clients have rated several clothing companies in Hanoi as having numerous benefits in terms of labor prices and skill levels.

Due to its poor productivity, the once-very-popular Hanoi technique of outsourcing sewing has become less common. The manufacturing model of purchasing raw materials and selling finished goods has become increasingly prevalent among Hanoi's apparel firms. Several clothing companies in Hanoi, in particular, have had success after transitioning to producing goods under their own labels and attaining greater economic efficiency. Many Hanoi-based clothing companies have recently placed a strong emphasis on in-depth development with an emphasis on design, style, and quality. Vietnamese textile and garment products exported to the world market are under a lot of competitive pressure in

terms of price, production costs and environmental safety standards. For the textile industry in general and garment enterprises in Hanoi in particular, there are even greater challenges in terms of labor supply, because this is an industry that requires a lot of labor at low cost, but currently this labor source does not meet the required quantity. One of the solutions to solve these difficulties is that textile and garment enterprises must increase investment in modern technology and equipment innovation and training to improve human resource skills to increase productivity. Labor, reduce production costs, avoid falling behind in the context of increasing labor costs and imported raw material prices.

The management accounting organization's current state in relation to technological innovation

In 2023, research samples were collected from clothing companies in Hanoi. The Vietnam Textile and Apparel Association estimates that Hanoi is home to over 500 clothing companies. The author splits the firms into two groups. The first category consists of big businesses. The second category consists of small and medium-sized businesses. The survey sample was stratified and chosen at random. The author chose 56 companies to survey, sending questionnaires to 18 large-scale companies and 38 small and medium-sized companies.

Using Google Drive, the author sends survey questionnaires to administrators, including Deputy Directors, Chief Accountants, and Accountants in Hanoi's garment enterprises. The author also conducts in-depth interviews and direct interviews. Noi.

Only 58% of small and medium-sized garment firms in Hanoi are arranging accounting administration, compared to all large-scale garment enterprises that are organizing management accounting, according to the author's survey. However, businesses have concentrated on investing in facilities (mean = 3.5863), mostly in large-scale garment manufacturers, in accordance with the degree of technical advancement.

Table 1: The table describes the variables measuring the level of technological innovation of garment enterprises in Hanoi (Descriptive Statistics)

	N	Mean	Std. Deviation
MD. PT1.Companies are drawn to research and development.	56	2.6925	.53295
MD. PT2.Increase investment in facilities for R&D	56	3.5863	.62725
MD. PT3.Knowledge and skills of human resources for R&D	56	3.8172	.68521
MD. SP1.Boost manufacturing procedures	56	3.9851	.59581
MD. SP2.Improve product quality	56	4.0314	.58328
MD. SP3.Expand product portfolio	56	3.8263	.61026
MD. SP4.Take your company's activities into new markets.	56	2.4109	.53982
MD. SP5.Change production and business activities of the enterprise	56	2.9074	.52057
Valid N (listwise)	56		

Source: Author's calculations

Along with technological innovation in production and business activities, it also requires garment enterprises in Hanoi to adjust their management accounting organization in those conditions. Research results show that most businesses have innovated their accounting software.

Accounting data in general and management accounting in particular are stored in the cloud. This will help retrieve information and store information better.

Table 2: Table describing variables measuring the level of application of technological innovation in management accounting organizations at garment enterprises in Hanoi (Descriptive Statistics)

	N	Mean	Std. Deviation
MD. UD1.Improve the knowledge and abilities of accounting personnel	56	2.7825	.58295
MD. UD2.Businesses always update accounting software	56	3.2963	.62725
MD. UD3.Application of blockchain technology	56	3.0532	.68521
MD. UD4.Building automated management accounting processes	56	3.1539	.59581
MD. UD5.Application of cloud accounting system	56	2.7126	.58273
Valid N (listwise)	56		

Source: Author's calculations

4. Conclusion

One may argue that as technology advances at a rapid pace, there are increasing issues with how laws and regulations can act to swiftly control behavior given the variety of business models that are available. There are new companies opening up. Management agencies may better understand information and methods to handle the digital era by forecasting trends and developing a sensible strategy for handling it without getting in the way. To the way businesses operate. High degrees of information technology proficiency are necessary to fully comprehend and perform the duties assigned to them by state management agency authorities as well as accounting staff members of businesses.

Solutions to innovate management accounting organizations in the context of technological innovation:

- Focus on innovating and establishing new accounting processes, from collecting, processing and entering accounting data to processing and rendering information; Improve the usefulness of accounting information through the application of information technology in analyzing and evaluating accounting information; Create favorable conditions for accountants and auditors to exploit and use accounting data sources quickly and effectively.
- Focus on developing technology infrastructure to serve the development of products and services of financial institutions and financial institutions; at the same time, develop policies to encourage financial institutions, financial institutions, and organizations providing accounting services to develop financial and accounting products and services in general and management accounting. Specifically based on digital technology.
- Pay attention to promoting the development of accounting human resources and consider this a mandatory task because no matter how much technology develops, the key role is still the human factor. Therefore, it is necessary to combine the training of highly qualified human resources with the application of high technology; improve information technology skills and grasp new technologies, especially learning about Blockchain technology and its applications in accounting and auditing.

In addition, in the context of digital technology, the role and standards of accountants in the context of digital technology are different than today. Specifically, to adapt to increasingly fast and powerful technology, accountants in the digital age need to be equipped with the necessary skills including: Technology skills; ability to accept change; communication and proficiency in English along with a set of critical thinking, strategic and analytical skills.

- Fully assess the risks of losing information and accounting data when connecting to the internet. The financial system must have more social responsibility, pay more attention to safety and privacy in financial and accounting information, and have new defense methods to ensure safety, security and confidentiality. Network. Financial institutions, accounting and auditing service companies, securities companies, businesses. In addition to equipping new tools and security measures, need to pay more attention to building a backup database system and raising awareness about information security and protection throughout the system.

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