

# Financial Accounting in the Digital Era: Literature Review

Maryam Alkhajah

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January 8, 2023

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# FINANCIAL ACCOUNTING IN THE DIGITAL ERA:

# LITERATURE REVIEW

# STUDENT: MARYAM ADEL AHMED A-KHAJAH ID: 202210139 ACC 510

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#### Introduction

The major practices of financial accounting refer to the practices that record the practices of a specific brand of finance that records and summarizes the transactions occurring in the businesses. The information stored by the financial accounting department refers to the generation of better ideas for decision-making for businesses. The advancement of digital technologies has impacted the overall practices related to finance and businesses. The effects also have caused the practices and techniques used in financial accounting to change. The implementation of advanced technologies in financial integration has majorly bought changes in the processes used for recording the changes. The current study collected literature based on the changes and the technologies that caused these changes to occur for understanding the effect of the digital era on Financial Accounting.

#### The current condition of financial accounting in the digital era

The analysis of the current trends in the digital era helps to understand that there are several trends in financial accounting practices directly influenced by the implementation the digital technologies in financial practices. The analysis of the financial accounting current trends shows that there has been the involvement of Artificial intelligence in the system. On the other, the analysis of the benefits generated by the inclusion of Artificial intelligence in the system justifies the implementation to the fullest.

AI technology helps the system with making the calculations and identification quick. AI technologies provide Finance accounting with improved efficiency and Increased clarity in the practices. Other than that, the implementation of AI technologies simplifies practices and helps to reduce human errors effectively with automation. According to Mosteanu (2019), the

implementation of accounting software in the system is another benefit the system gathers from the advanced digital era. This software allows the transactional data to be Standardized and data from multiple sources to be merged easily in multiple different formats. These benefits help the RPA to be Successful. The analysis of the companies with financial accounting shows,36% of the companies with financial accounting requirements have shown the chances of implementing cloud-based in the near future. On the other hand, Mosteanu & Faccia (2020) argued that the development of a system for enterprises that helps with resource planning shows the potential of integrating the organizational software with the financial data along with other important factors of the business such as the supply chain, and production management of the business. this practice potentially provides businesses with a better understanding of their progress and more opportunities with more useful insight into the business.



#### Figure 1: Technologies in Digital era for Financial Accounting improvement (Source: Wu & Huang, 2022)

One of the major contributions of the digital era to the financial accounting of businesses is the introduction of different forecasting tools and data analytics for better business outcomes. Over the past few years, the analysis of the changes within the business practices in both small and big businesses has been identifying that there is a significant role played by the data analytic tools and the forecasting tools as they are the most impactful technologies for helping the businesses with better description making. This equips businesses with critical thinking and technologies and skills.

#### Development of financial accounting with the digital aspects

The Digital transformation of the Entire business system is the major benefit generated by the businesses to the system of financial accounting for businesses. Embracing digital technologies is one of the most effective decisions made by the finance and accounting practices that helped the overall system to advance.

The key aspects of digital transformation of financial accounting involve several benefits the digital technologies imposed on business practices. According to Mhlanga (2020), the implementation of digital innovative technologies from the 4th generation technologies in businesses has helped industries achieve better sustainability for the businesses. The analysis of the digital innovations impacting businesses shows that these innovations can work as catalysts for businesses and also can work as enablers for business sustainability. The implementation of innovative technologies from the 4th industrial technologies can help the business achieve its goal of sustainability. On the other hand, Wu & Huang (2022) stated the biggest contribution of digital technologies to businesses is generated by data analytic tools. The digital finance implemented in the businesses and the associated tools of financial practices potentially help the business with gathering the benefits such as the right design ad execution of the business analytics with the help of improved business quality helps the businesses to gather the benefits of great quality of the financial audit and efficiency along with the increased value of the financial statement audits.

Data analytics generate businesses with several beneficial factors, apart from that the benefits generated by AI technologies and Machine learning practices to the financial practices advanced the business growth through effective financial descriptions with great efficiency. with the help of strategic decision making and also benefits by mitigating barriers such as cost related issues, insufficiency of proper infrastructure and the poor quality of implemented data. Blockchain technologies also facilitate businesses with the advantages like providing security to the financial information crucial to the businesses. Financial institutions have been implementing these blockchain technologies for enhancing their accuracy and improving the way of sharing information within financial services. The implementation of these advanced technologies in the financial practices of businesses has been advancing financial accounting practices through improving the overall services.

#### Issues faced by customers and accounting managers due to the digitalization

The digital technologies included in the business and their financial practices have both positive and negative effects on the accounting managers and the customers of the businesses. According to Kohtamäki *et al.* (2020), the implementation of digital technologies in businesses facilitates businesses with the benefits such as increased efficiency of financial calculations and finding information, enhanced accuracy of the calculation, and increased effectiveness of financial decisions. Along with these benefits, the implementation of AI technologies in the

practices also helps businesses to gather the benefits of increased accuracy of financial decisions by reducing human error from the practices. The implementation of the technologies in financial accounting facilitates the customers and the accounting managers with the benefits such as increased efficiency of financial accounting and increases the accuracy of the decisions resulting in the development of better services. On the other hand, Eller (2020) argued that the implementation of digitalization technologies in the financial accounting of medium and small businesses also arouses several challenges for the customers and the financial managers. The technologies used in small and medium businesses for financial accounting are complex in nature, for the current implementation of the technologies in the system all the stakeholders being well aware of the technologies is very much required. In the majority of cases, the challenges for digitalization of the financial accounting system arises due to the lack of digital literacy in the financial managers and the customers.



#### Figure 2: Increasing adaptation of Digitalization for business growth to influence better financial accounting (Source: Statista, 2022)

The implementation of digitalization in the organizations have been potentially increasing the spending of the businesses in digitalization practices. The analyzed data from 2022 shows that the spending of the businesses on digital transforming reached 1.6 trillion (Statista, 2022). The analyzed rate of the growth helps to assume that the spending will reach 3.4 trillion U.S dollars in the year 2026 (Statista, 2022).

The lack of knowledge regarding the technologies challenges financial managers and affects their performance and effectiveness. This helps in understanding the importance of digital literacy in the customers of businesses with digital technologies implemented in their financial accounting practices. Customers with a lack of knowledge regarding the technologies such as AI technologies, Automation, and Blockchain technologies find it difficult to understand the services. The lack of expertise in digital technologies causes the business and the associated stakeholders to face demerits that impact their financial conditions. The decreased efficiency and accuracy cause businesses to make wrong financial decisions. This causes businesses to encounter financial loss making the implemented advanced technologies on financial accounting ineffective for the businesses.

#### Actions need to be taken for the growth of financial accounting

The analysis of the current scenario of financial accounting practices helps to analyze that there are several challenges the financial practices of the businesses have been encountering for the digitalization of the system. Digital technologies such as Artificial Intelligence technologies, Automation technologies, technologies like Big data, Blockchain, and others facilitate businesses and their financial accounting practices with several benefits. Even after all the beneficial areas of these technologies, there are several changes these technologies can arouse in the businesses if they are not implemented with proper technique or not being monitored effectively after being implemented. This is the cause that generates the need to address ways to improve the implementation of these technologies in financial accounting for gathering the maximum benefit for businesses.

There are different opinions identified among the experts regarding the ways to improve the implementation of these technologies. According to Moll & Yigitbasioglu (2019), the improvement of the implementation of digital technologies requires the users or the individuals affected by the implementation to be well aware of the mechanism of these technologies. Conducting training programs in the organizations can potentially help the organizations to improve the digitalized practices and implementation of these technologies in the system. conducting training programs in the organizations and conducting other awareness programs inside and outside the organization will help the businesses grow along with growing the implementation the Digital technologies in the businesses. These practices are being adopted by all businesses with the requirements of digital technologies in their businesses. On the other hand, Ulas (2019) argued that focusing on making the technologies simple and understandable for the users will help in increasing the implementation of these technologies in businesses and gather the benefits of digitalization. Focusing on making future digital technologies less complex will help the implementation of these technologies become easier and will also contribute to the growth of digital technologies for growing financial accounting practices.

#### Theory and model

#### Adoption-Diffusion Theory (ADT)

Application of the ADT theory in the system of digitalization is potentially helpful for the system to increase the effectiveness of digitalization in financial accounting practices. The

implementation of innovative technologies in the replacement of the previously used technologies in the system for financial accounting. The Implementation of the theory also helps to explain the way the compatibility of financial accounting practices increases with the inclusion of innovative technologies.

The theory of Adoption-Diffusion also helps with explaining the complexity of the innovation. The complexity of the innovation focuses on the implementation of these advanced technologies in the system. ADT being implemented in the digitalization of the financial accounting system also helps to understand how complex the innovative technologies are in terms of being implemented and also being used in businesses, specifically medium and small businesses. Another important factor related to the implementation of innovation and terms of advanced technologies the implementation of this technology helps is triability. This factor refers to the extent the which innovative technologies can be tested before the technologies are entirely adopted by the businesses. Lastly, this theory also helps to accumulate an idea about the observability of this technology. The implementation of these innovative technologies has an extent to which these technologies can provide the financial accounting system of businesses to achieve tangible results.





#### (Source: Ulas 2019)

This theory helps to understand that the generation of the idea of implementing innovative technologies in businesses for better financial accounting is not simultaneous. Rather the application of this theory helps to understand that the generation of the idea results in a process where the system analyzed the requirement to implement technologies to advance the financial accounting of the businesses for better and more advanced activities resulting in the accuracy of the decisions made for the businesses for growth. This theory also provides information about different adopters' categories. Innovators are the first-row interested individuals with the interest to experience the benefits of implemented technologies in the system. On the other hand, the second category of adopters is the ones who represent the opinion leaders. these adapters are addressed as Early Adopters, these are the individuals in the business who enjoy the role of leading and adopting the change with high acceptance. The next category of adopters this theory helps to identify is the early majority, these adapters are the rally leaders of the business. Comparing their adaptation with others shows that these adopters accept the new innovative technologies and ideas prior to others. The theory also indicates the adopters with

skeptical nature towards the change. Lastly, the theory also helps to identify the adopters known as Laggards. These adapters are the last to adopt and they often struggle to adopt the advanced technologies and ideas associated with financial accounting. The major cause behind this case is laggards are bound to the traditional methods and are not open to changes.

#### Unified Theory of Acceptance

The application of this theory helps to identify the acceptance of the theory for digital technologies. the implementation of this theory helps to understand the different perspectives of the users. this is one of the most useful theories to analyze the effectiveness of the implemented digital advanced technologies in business practices. On the other hand, the analysis of the different perspectives of the users helps to define the proper strategy for the businesses and analyze the technologies to be implemented for the businesses. The implementation of this theory in the system allows the financial accounting system to gather benefits of better implementation by improving different factors related to innovation. the implementation of this theory helps financial accounting to achieve relative advantages from the implementation of innovation. relative advantages refer to the degree to which innovation of the financial system with the implementation of Digital technologies is found to be more effective while implemented than the idea it is being replaced with.



## **Conceptual framework**

#### **Figure 4: Conceptual framework**

#### **Research** gap

Analyzing the literature collected for the study helped to identify areas that require more focus for better implementation of innovative technologies in the business. The literature has clearly stated the areas that reflect what the financial accounting system of the businesses require to improve the practices from the traditional system as the other business practices are advancing and becoming complex. But the literature fails to state the required consideration of the individual requirements of different businesses.; the way of operating financial practices in different businesses is the same. There are several factors that impact businesses and the methods used in financial accounting. the factors such as the size of the organization matter while defining the required technologies for the businesses. this is one of the major gaps determined from analyzing the requirement of financial accounting of the businesses. The implementation of the same technologies in large enterprises will not necessarily address the requirements of small or medium enterprises. In such a scenario the implementation of the same strategies for all types of businesses arises challenges and causes the businesses to fail. This gap in the literature limits businesses to gather sufficient information regarding their requirement for technologies. The benefits generated by the implementation of this theory have the potential to help businesses to improve their financial accounting with the help of the right technologies.

#### Conclusion

The analysis of the current study addresses the areas of the financial accounting practices in the businesses for lacking because of implementing the traditional techniques in the financial management of the businesses. The research also analyses the technologies the businesses can implementation to mitigate the limitations caused by the previous traditional technologies. Through the analysis of the areas that benefit from digitalization of the financial accounting practices, current research helps businesses with the ambition to improve their businesses with digitalization. The elaborated discussion on the factors that influence businesses to implement innovative technologies helps the readers to accumulate an idea about the requirement of the businesses to generate benefits to the financial accounting practices. On the other hand, the research also benefits from discussing the challenges of financial accounting management in businesses because of the implementation of innovative technologies in the businesses. The overall analysis of the challenges and benefits of the business practices influenced by the implementation of innovative technologies helps the readers to active technologies in the businesses. The overall analysis of the challenges and benefits of the business practices influenced by the implementation of innovative technologies helps the businesses to gather benefits of clear ideas regarding the implementation of advanced technologies.

#### References

- Eller, R., Alford, P., Kallmünzer, A., & Peters, M. (2020). Antecedents, consequences, and challenges of small and medium-sized enterprise digitalization. *Journal of Business Research*, *112*, 119-127. Retrieved on: 30<sup>th</sup> November, From: https://www.sciencedirect.com/science/article/pii/S0148296320301600
- Kohtamäki, M., Parida, V., Patel, P. C., & Gebauer, H. (2020). The relationship between digitalization and servitization: The role of servitization in capturing the financial potential of digitalization. *Technological Forecasting and Social Change*, *151*, 119804. Retrieved on: 30<sup>th</sup> November, From:

https://www.sciencedirect.com/science/article/pii/S0040162519313356

- Mhlanga, D. (2020). Industry 4.0 in finance: the impact of artificial intelligence (ai) on digital financial inclusion. *International Journal of Financial Studies*, 8(3), 45. Retrieved on: 30<sup>th</sup> November, From: https://www.mdpi.com/782264
- Moll, J. & Yigitbasioglu, O., 2019. The role of internet-related technologies in shaping the work of accountants: New directions for accounting research. *The British Accounting Review*, *51*(6), p.100833. Retrieved on: 30<sup>th</sup> November, From:
  <a href="https://www.sciencedirect.com/science/article/pii/S0890838919300459">https://www.sciencedirect.com/science/article/pii/S0890838919300459</a>
- Moșteanu, N. R. (2019). International Financial Markets face to face with Artificial Intelligence and Digital Era. *Theoretical & Applied Economics*, *26*(3). Retrieved on: 30<sup>th</sup> November, From: <u>http://store.ectap.ro/articole/1408.pdf</u>

- Mosteanu, N. R., & Faccia, A. (2020). Digital systems and new challenges of financial management–FinTech, XBRL, blockchain and cryptocurrencies. *Quality-Access to Success Journal*, 21(174), 159-166. Retrieved on: 30<sup>th</sup> November, From: <u>https://core.ac.uk/download/pdf/326518997.pdf</u>
- Statista.com, 2022. Digital transformation spending worldwide 2017-2026. Retrieved on: 30<sup>th</sup> November, From: https://www.statista.com/statistics/870924/worldwide-digital-transformation-market-size/
- Ulas, D. (2019). Digital transformation process and SMEs. *Procedia Computer Science*, *158*, 662-671. Retrieved on: 30<sup>th</sup> November, From:

https://www.sciencedirect.com/science/article/pii/S1877050919312712

Wu, Y., & Huang, S. (2022). The effects of digital finance and financial constraint on financial performance: Firm-level evidence from China's new energy enterprises. *Energy Economics*, *112*, 106158. Retrieved on: 30<sup>th</sup> November, From: https://www.sciencedirect.com/science/article/pii/S0140988322003127