

Impacts of Digital Transformation Caused by the Growth in Online Trade Volume on Accounting Processes

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Abstract

In this study, the impacts of the growth in online trade volume caused by digital transformation on accounting processes, records within accounting processes, and the tracking of these records are thoroughly examined. As digital transformation accelerates and online trade becomes more prevalent, the need for businesses to transition to digital methods in accounting practices is increasingly growing.

The aim of the study is to uncover the effects of rapid growth in online trade on accounting processes and to evaluate these changes. In this context, the transition processes of businesses from traditional accounting methods to digital accounting and the effects of digital transformation on accounting processes are discussed.

Through an extensive literature review, a knowledge base is established on the effects of online trade on accounting processes, the impacts of digital transformation on accounting processes, and digital accounting practices. The numerical data obtained are evaluated with regression analysis, and the results reveal the effects of digital transformation on accounting processes.

The study indicates that the effects of digital transformation on accounting processes will increase with the rapid growth of online trade. To adapt to these changes, businesses must adopt digital technologies in their accounting processes and maintain accurate and reliable financial records.

This study can be considered an important resource for understanding the effects of online trade on accounting processes and helping businesses adapt to digital transformation. To prepare businesses for future digital

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transformations, further examination of the effects of digital transformation on accounting processes caused by the growth in online trade volume is necessary.

INTRODUCTION

This study investigates the impacts of the digital transformation triggered by the growth in online commerce volume on the accounting process, and discusses the effects of digital transformation on the accounting process as businesses transition to a digital environment due to the increase in online commerce volume.

The aim of this study is to reveal the impact of the rapid growth of online commerce on transactions within the accounting process and to examine the changes caused by these effects. With the rapid spread of online commerce, awareness has been formed that those businesses need to use digital accounting methods instead of traditional accounting methods to keep their financial records. This study aims to explore the effects of this transformation process on the accounting process.

Understanding the effects of online commerce on the accounting process is crucial for businesses to adapt to digital transformation. The problems encountered by businesses in the digital transformation process with the rapid growth of online commerce and the impacts of these problems on the accounting process highlight the importance of this study.

An extensive literature review was conducted in this study. This review includes studies on the effects of online commerce on the accounting process, the effects of digital transformation on the accounting process, and digital accounting practices. This information from the literature forms the primary data of the study.

The numerical data obtained were analyzed through regression analysis. The results of the regression analysis have clarified the impacts of the digital transformation caused by the growth in online commerce volume on the accounting process. The effects of the digital transformation caused by the growth in online commerce volume on the accounting process, including the impacts on the preparation and collection of transaction documents, recording and tracking of stocks, recording and tracking of accounts receivable and payable, recording and tracking of orders, daily records, recording and tracking of financial statements, and end-of-period transactions, have been extensively addressed.

The results of this study clearly reveal the impacts of the growth in online commerce volume on the digital transformation of the accounting process.

With the digitization of businesses' financial records, significant changes have occurred in transactions within the accounting process. These changes affect the preparation and collection of transaction documents, recording and tracking of stocks, recording and tracking of accounts receivable and payable, recording and tracking of orders, daily records, recording and tracking of financial statements, and end-of-period transactions.

Many businesses are transitioning from traditional accounting methods to digital accounting methods and are feeling the effects of online commerce in their accounting process. The data obtained in this study shows that the effects of digital transformation on the accounting process will increase with the growth in online commerce volume.

This study is important to establish an understanding of new accounting processes and the digitalization process that arise with the rapid growth of online commerce. Businesses should adopt digital technologies in their accounting processes to adapt to these changes and to keep their financial records accurately and reliably.

In conclusion, this study can be used as a guide to understanding the effects of online commerce on the accounting process. By understanding these effects, businesses can adapt to the digital transformation process and keep their financial records accurately. Further study of the impacts of the digital transformation caused by the growth in online commerce volume on the accounting process will help businesses to be prepared for future digital transformations.

1. METHOD AND METHODOLOGY:

This study investigates the impacts of the digital transformation caused by the growth in the volume of online commerce on the accounting process. The study examines the effects of the increasing volume of online commerce, both globally and specifically in Turkey, on accounting processes, accounting records, and their tracking. The methods and techniques used are as follows:

- A comprehensive literature review has been conducted. This review includes the effects of online commerce on accounting processes, changes occurring in accounting processes with digital transformation, and digital accounting applications.
- Numerical data obtained have been evaluated with regression analysis. This analysis reveals the impacts of the digital transformation caused by the growth in online commerce volume on the accounting process.

- The study emphasizes the necessity for businesses to use digital accounting methods instead of traditional accounting methods to keep their financial records.
- The study is aimed at understanding the effects of online commerce on the accounting process to assist businesses in adapting to digital transformation.
- The impacts of the digital transformation caused by the growth in online commerce volume on the accounting process have been addressed by focusing on the preparation and collection of transaction documents, the recording and tracking of stocks, receivables, orders, daily records, financial statements, and end-of-period transactions.
- The study emphasizes that businesses need to adopt digital technologies in their accounting processes and keep their financial records accurately and reliably.

2. TRENDS IN THE GROWTH OF ONLINE COMMERCE VOLUME GLOBALLY AND SPECIFICALLY IN TURKEY

In today's world, with the rapid development of internet technologies, the volume of online commerce is also rapidly increasing. This increase has significant implications, particularly in the financial sector. The increase in online commerce volume significantly impacts payment systems and financial institutions in the financial sector. This impact can be better understood by comparing the situations of the volume of online commerce globally and in Turkey (McKinsey and Company, n.d.).

The rapid increase in the volume of online commerce globally has a significant impact on financial institutions and payment systems. Especially during the pandemic period, when people were unable to leave their homes, the volume of online commerce increased rapidly. This increase has necessitated the development of online payment systems by financial institutions. Moreover, the security of payment systems and transaction speed have also gained importance. In this context, it is necessary to examine the impacts of the volume of online commerce on the financial sector in detail (United Nations Conference on Trade & Development, 2020).

In Turkey, too, the volume of online commerce is rapidly increasing. This increase seems to be parallel with the digitalization process that has taken place in recent years. Comparing Turkey's share in the volume of online commerce with the global situation also reveals Turkey's position in the digitalization process. In this context, examining Turkey's share in

the volume of online commerce helps measure Turkey's progress in the digitalization process (eCommerce Foundation, 2020).

Table-1 presents numerical data showing the increases in the volume of online commerce globally and specifically in Turkey:

Table-1: Change in the Volume of Online Commerce Globally and Specifically in Turkey Between 2015-2022.

Years	Global (Trillion \$)	Turkey Specific (Trillion \$)
2015	1,55	0,00833
2016	1,86	0,008176
2017	2,3	0,011227
2018	2,84	0,011585
2019	3,46	0,013883
2020	4,28	0,030999
2021	4,92	0,027548
2022	6,4	0,065125*

*** 2022 data is estimated.*

(Made using the annual averages of the Central Bank of the Republic of Turkey. Therefore, there may be differences from real exchange rate values.)

Source: (World Bank, 2023) and prepared by me.

With the rise in global online trade volume, a regression analysis will be conducted using the global and Turkey-specific data specified in Table: 1, to determine which factors are influencing the growth of Turkey's online trade volume. Regression analysis is a statistical method used to measure the effect of one variable on another.

Our data display the global and Turkey-specific online trade volumes between the years 2015 and 2022. Globally, the online trade volume, which was 1.55 trillion dollars in 2015, has risen to 6.4 trillion dollars in 2022. In Turkey-specific data, the online trade volume, which was 0.00833 trillion dollars (8.33 billion dollars) in 2015, has increased to 0.065125 trillion dollars (65.125 billion dollars) in 2022.

In our regression analysis, the Turkey-specific online trade volume variable will be selected as the dependent variable, while the global online trade volume variable will be used as the independent variable. Through this analysis, the effect of the increase in global online trade volume on Turkey's online trade volume will be determined.

Furthermore, the coefficients obtained from the regression analysis will also determine the growth rate of Turkey's online trade volume relative to

the global online trade volume. This will enable the calculation of how much more or less the increase in Turkey's online trade volume is compared to the increase in global online trade volume.

The regression analysis to be conducted on the global and Turkey-specific online trade volume data specified in Table-1 will determine the effect of global online trade volume on Turkey's online trade volume. This analysis plays a significant role in identifying the factors that trigger the growth in Turkey's online trade volume.

Table-2: Regression Analysis of the Growth in Turkey's Online Trade Volume in Conjunction with the Increase in Global Online Trade Volume

<i>Regression Statistics</i>	
Multiple R	0,925918
R Square	0,857325
Adjusted R Square	0,833546
Standard Error	0,678941
Observation	8

<i>ANOVA</i>					
	df	SS	MS	F	Significance F
Regression	1	16,61932	16,61932	36,05364	0,000961
Residual	6	2,765766	0,460961		
Total	7	19,38509			

	Coefficients	Standard Error	t Stat	P-value	Lower %95	Upper %95	Lower 95.0%	Upper 95.0%
Intercept	1,697002	0,378122	4,487979	0,004157	0,771772	2,622232	0,771772	2,622232
X Variable 1	79,34499	13,21432	6,004468	0,000961	47,0107	111,6793	47,0107	111,6793

Source: (World Bank, 2023) and prepared by me.

The data in Table-2 were obtained using regression analysis to examine the relationship between Turkey's online trade volume and global online trade volume. The regression statistics obtained as a result of the analysis are highly significant:

- The Multiple R coefficient has been calculated as 0.926: “This indicates a strong positive correlation between Turkey’s online trade volume and the global online trade volume.”
- R Square has been calculated as 0.857: “This demonstrates that 85.7% of the variance between Turkey’s online trade volume and the global online trade volume is explained.”
- The Adjusted R Square has been calculated as 0.834: “This indicates that the model is in an improved form and shows a high level of reliability in the relationship between Turkey’s online trade volume and the global online trade volume.”
- The Standard Error has been calculated as 0.679: “This reflects the accuracy of the model.”
- According to the ANOVA results, the F-value for the regression has been calculated as 36.054, and the significance level (p-value) is less than 0.001: “This indicates that the regression model is significant, and the relationship between Turkey’s online trade volume and the global online trade volume is statistically meaningful.”
- In the coefficients table, the coefficient calculated for the intercept is 1.697, and the coefficient calculated for the X variable is 79.345: “These are the coefficients in the equation used to explain the relationship between Turkey’s online trade volume and the global online trade volume. The coefficients table also includes the standard errors, t-statistics, p-values, and 95% confidence intervals for both coefficients. The coefficient calculated for the intercept, 1.697, suggests that other factors not included in the model may also affect Turkey’s online trade volume. The coefficient calculated for the X variable, 79.345, suggests that every 1 billion dollars increase in Turkey’s online trade volume will lead to a 79.345 trillion dollar increase in the global online trade volume. The standard errors for both coefficients are quite low, indicating the reliability of the coefficients.”

From this analysis, it is concluded that there is a strong positive relationship between Turkey’s online trade volume and the global online trade volume, that increases in Turkey’s online trade volume cause increases in global online trade volume, and that this relationship is statistically significant. This data shows that Turkey’s growth in the field of online trade is effective on a global scale and that this trend could continue in the future.

3. THE IMPACT OF GROWTH IN ONLINE TRADE VOLUME GLOBALLY AND SPECIFICALLY IN TURKEY ON ACCOUNTING PROCESSES

The growth experienced in online trade volume leads to significant changes in accounting processes. This study aims to analyze the effects of growth in online trade volume worldwide and specifically in Turkey on various accounting processes from 2015 to 2021. These analyses have been handled through a comparative method:

3.1. Effects on the Preparation and Collection of Transaction Documents in the Accounting Process:

Today, online trade volume is growing rapidly, and this growth has various effects on accounting processes. The preparation and collection of transaction documents is one of these affected processes. In this study, the effects of the growth in online trade volume worldwide and specifically in Turkey on the preparation and collection of transaction documents in accounting processes have been examined comparatively.

Global research indicates that the increase in online trade volume complicates the preparation and collection of transaction documents (Jansen & Karaman, 2018). This situation could affect the accuracy and reliability of accounting records. However, digital tools used in recording online sales transactions can facilitate the process of preparing and collecting transaction documents, thereby enhancing the accuracy of records (Li & Su, 2019).

Studies in Turkey examine the effects of the growth in online trade volume on the preparation and collection of transaction documents. These studies suggest that the increase in online trade volume complicates the preparation and collection of transaction documents and could decrease the reliability of accounting records (Özdemir & Türker, 2017). However, the rapid progress of companies in Turkey in digitization allows for the increased use of digital tools that facilitate the preparation and collection of transaction documents, thereby enhancing the accuracy of accounting records (Erdoğan & Durmuş, 2020).

However, the effects of the growth in online trade volume worldwide and specifically in Turkey on the preparation and collection of transaction documents vary. The global growth complicates the preparation and collection of transaction documents even further, whereas the digitization process in Turkey facilitates the preparation and collection of transaction documents.

In this context, the rapid progress of companies in Turkey in digitization should ensure the more widespread use of digital tools in the preparation and collection of transaction documents to enhance the accuracy and reliability of accounting records. Also, companies worldwide should increase the use of digital tools to facilitate the preparation and collection of transaction documents. In this way, the difficulties in preparing and collecting transaction documents can be reduced, and the accuracy of accounting records can be enhanced.

3.2. Effects on the Recording and Tracking of Stocks:

In recent years, online trade volume has grown rapidly worldwide and in Turkey. This growth has significant impacts on accounting processes in terms of recording and tracking stocks. In this study, the effects of the growth in online trade volume on the recording and tracking of stocks in accounting processes will be compared worldwide and specifically in Turkey.

The online trade volume worldwide has rapidly increased in recent years. E-commerce companies use automated systems for recording and tracking stocks. These systems provide faster and more accurate results compared to manual operations. The recording and tracking of stocks carry great importance in accounting processes. The use of automated systems enhances the efficiency of accounting processes (Öztürk, 2017, p.10; Azmi et al., 2019, p.80).

Online trade volume in Turkey has also grown rapidly in recent years. However, e-commerce companies in Turkey still prefer manual operations for recording and tracking stocks. This situation could reduce efficiency in accounting processes and lead to errors. Companies in Turkey could enhance the efficiency of accounting processes by using automated stock tracking systems (Aytekin et al., 2020, p.230; Köseoğlu & Hacıoğlu, 2017, p.19).

E-commerce companies worldwide have begun to use artificial intelligence and machine learning-based automated accounting software for recording and tracking stocks. This software enhances the efficiency of accounting processes by enabling the automatic recording and tracking of stocks. E-commerce companies in Turkey can also adopt a similar approach and improve their accounting processes by using automated stock tracking systems. This way, errors stemming from manual operations can be reduced, and accounting processes can be made more accurate and faster. Moreover, the use of technological advancements like artificial intelligence and machine learning in the stock tracking process can further increase efficiency in accounting processes. The adoption of these advancements by e-commerce

companies in Turkey is important in terms of implementing change in accounting processes (Bilge et al., 2021, p.56; Yılmaz, 2020, p.15).

However, the use of technological advancements in the process of recording and tracking stocks also creates some challenges. Specifically, there are concerns about data security and privacy. The use of artificial intelligence and machine learning-based systems requires companies to be more cautious about the security of customer data. Moreover, the installation and maintenance of these systems can also be costly. E-commerce companies in Turkey can use automated stock tracking systems by considering these challenges and making appropriate budget and resource planning (Kara & Çolak, 2019, p.245; Özdemir & Şimşek, 2018, p.192).

3.3. Impacts on the Recording and Tracking of Accounts Receivable:

In recent years, the volume of online trade has increased significantly worldwide and in Turkey. This growth has many effects on accounting processes. In this study, the effects of the growth in online trade volume on the recording and tracking of accounts receivable in accounting processes will be compared globally and specifically in Turkey.

The volume of online trade worldwide has increased rapidly in recent years. E-commerce companies use automatic systems to maintain and track the records of customers' accounts receivable. These systems provide faster and more accurate results compared to manual operations. The recording and tracking of accounts receivable is of great importance in accounting processes. Therefore, the use of automated systems increases the efficiency of accounting processes (Sözbilir & Şanlı, 2016, p. 438; Aktaş & Öztürk, 2018, p. 165).

The volume of online trade in Turkey has also increased significantly in recent years. However, the systems used for accounting processes in Turkey are less developed compared to the technological advancements worldwide. Therefore, e-commerce companies in Turkey still prefer manual operations for the recording and tracking of accounts receivable. This situation can reduce efficiency in accounting processes and lead to errors (Kaya & Atay, 2018, p. 85; Şahin & Alver, 2019, p. 110).

E-commerce companies worldwide have started using artificial intelligence and machine learning-based automated accounting software for the recording and tracking of accounts receivable. These software applications increase the efficiency of accounting processes by enabling the automatic recording and tracking of accounts receivable. E-commerce companies in Turkey can also

adopt a similar approach and improve the process of recording and tracking accounts receivable using automated accounting software. This can reduce errors resulting from manual operations and make accounting processes more accurate and faster.

With the increase in digitization, e-commerce companies worldwide have started adopting digitization in the process of recording and tracking accounts receivable. For instance, with the use of artificial intelligence and machine learning technologies, the recording and tracking of accounts receivable has become automated, mitigating human errors. Additionally, customers making payments using digital payment systems like credit cards ensure the fast and accurate recording of accounts receivable.

E-commerce companies in Turkey have also started adopting digitization for the recording and tracking of accounts receivable. However, due to reasons such as insufficient technological infrastructure and cultural differences, this process is progressing more slowly. Therefore, the adoption of digitization by e-commerce companies in Turkey and the use of automated accounting software can speed up and increase the accuracy of the recording and tracking process of accounts receivable.

3.4. Impacts on the Recording and Tracking of Orders:

In recent years, the volume of online trade has increased significantly worldwide and in Turkey. This growth has many effects on accounting processes. In this study, the effects of the growth in online trade volume on the recording and tracking of orders in accounting processes will be compared globally and specifically in Turkey.

The volume of online trade worldwide has increased rapidly in recent years. E-commerce companies use automatic systems to maintain and track the records of customers' orders. These systems provide faster and more accurate results compared to manual operations. The recording and tracking of orders is of great importance in accounting processes. Therefore, the use of automated systems increases the efficiency of accounting processes (Sözbilir & Şanlı, 2016, p. 438; Aktaş & Öztürk, 2018, p. 165).

The volume of online commerce in Turkey has also significantly increased in recent years. However, the systems used for accounting processes in Turkey are less advanced when compared with global technological developments. Therefore, e-commerce companies in Turkey still prefer manual operations for recording and tracking orders. This situation can reduce efficiency in accounting processes and lead to errors (Kaya & Atay, 2018, p. 85; Şahin & Alver, 2019, p. 110).

E-commerce companies globally have started to use automated accounting software based on artificial intelligence and machine learning for recording and tracking orders. These software applications facilitate the automatic recording and tracking of orders, thereby enhancing the efficiency of accounting processes. E-commerce companies in Turkey could adopt a similar approach and improve the processes of recording and tracking orders by using automated accounting software. This could reduce errors stemming from manual operations and render accounting processes more accurate and faster.

Furthermore, the proliferation of digital payment systems can play a significant role in the processes of recording and tracking orders. Digital payment systems enable faster and safer payments and minimize errors in the order recording and tracking process. Therefore, e-commerce companies in Turkey could make their accounting processes more efficient by promoting the use of digital payment systems (Gupta et al., 2017, p. 118; Wang & Wang, 2016, p. 745).

3.5. Impacts on Daily Records in Accounting Process:

In recent years, the volume of online commerce has been rapidly increasing globally. This increase has significant impacts on accounting processes and particularly yields various outcomes in the management of daily records. This paper will comparatively examine the effects of the growth in global and Turkish online commerce volume on accounting processes and daily records between 2015 and 2022.

The increase in global online commerce volume has caused significant changes in the management of accounting processes and daily records. This increase impacts daily records due to reasons such as the growth in transaction volume, diversification of data sources, and increased variability in sources (Chen, Zhang, & Wang, 2016). Therefore, many companies worldwide are using ERP software to better manage their accounting processes and daily records (Mintz & Chen, 2015). ERP software plays a significant role in recording transactions, managing data storage, and reporting processes.

The growth in online commerce volume in Turkey also affects accounting processes and daily records. However, a majority of companies in Turkey still face challenges in managing accounting processes and organizing daily records using traditional methods (Aksoylu & Unal, 2016). Companies in Turkey need to manage their accounting processes and daily records more effectively along with the increase in online commerce volume.

Most companies globally are managing their accounting processes and organizing daily records using ERP software with the increase in online commerce volume. However, more research is needed for companies in Turkey to adopt this method (Chen et al., 2016). Chen and others (2016) indicate that a large part of SMEs in Turkey still use traditional methods with the increase in online commerce volume. This situation leads to challenges in organizing daily records and managing accounting processes specifically in Turkey.

It could be suggested that companies in Turkey use ERP software to manage their accounting processes and daily records more effectively along with the growth in online commerce volume. ERP software provides many advantages such as the automation of transaction processes, accurate and reliable recording of financial data, data analysis, and reporting (Mintz & Chen, 2015). However, it seems there are some obstacles for SMEs in Turkey to adopt ERP software. These obstacles may include the lack of adequate technological infrastructure, limited financial resources, and staff training (Aksoylu & Unal, 2016).

As the volume of online commerce increases globally, the impacts on accounting processes and daily records also escalate. To counteract this surge, companies need to leverage advanced technologies to make their accounting processes and daily records more efficient. This is particularly important in Turkey, where small and medium-sized enterprises (SMEs) need to adapt to evolving business practices. In this context, it is advisable to provide support and training to SMEs in Turkey on ERP software to better manage their accounting processes and daily records. This way, SMEs in Turkey can keep pace with the growth in online commerce volume. Moreover, enhancing accounting education in Turkey and raising the value of the accounting profession can contribute to better management of accounting processes.

3.6. Impacts on the Recording and Tracking of Financial Statements:

The volume of online commerce is rapidly increasing worldwide, affecting accounting processes, and the recording and tracking of financial statements. In this paper, the impacts of the growth in online commerce volume on accounting processes, and the recording and tracking of financial statements worldwide and specifically in Turkey, will be examined and compared.

The increase in global online commerce volume leads to changes in accounting processes and the recording of financial statements. Chen, Zhang, and Wang (2016) suggest that these changes affect the recording

and tracking of financial statements due to factors such as the growth in transaction volume, diversification of data sources, and increased variability in these sources. Hence, many companies worldwide are using ERP software to better manage the recording and tracking of financial statements (Mintz & Chen, 2015).

The growth of online commerce volume in Turkey also affects the recording and tracking of financial statements. However, a significant majority of companies in Turkey still face challenges managing the recording and tracking of financial statements using traditional methods (Aksoylu & Ünal, 2016). This situation leads to difficulties in the recording and tracking of financial statements in Turkey.

As the volume of online commerce increases globally, the impacts on accounting processes and the records of financial statements also escalate. This is particularly important for SMEs in Turkey to adapt to evolving business practices. In this context, it is advisable to organize training for SMEs in Turkey and implement financial reporting standards more rigorously to better manage the recording and tracking of financial statements. Additionally, encouraging Turkish companies to use more ERP software, apply data analysis techniques, and transition to digital accounting practices can aid them in managing the recording and tracking of financial statements more effectively (Atak, 2020).

3.7. Impacts on Period-End Transactions of the Accounting Process:

The rapid growth of online commerce has been a significant topic of discussion regarding its impacts on period-end transactions of accounting processes worldwide and specifically in Turkey. This paper will compare the impacts of the growth in online commerce volume between 2015-2022 on period-end transactions of accounting processes worldwide and specifically in Turkey.

Globally, as the volume of online commerce grows rapidly, accounting processes also strive to keep pace. Especially large companies are digitizing their period-end transactions in the accounting process due to the increase in online sales, thus accelerating transactions and making them more efficient (Akkaya, 2019).

In Turkey, however, despite the rapid growth in online commerce volume, period-end transactions in accounting processes are still conducted using traditional methods. This slows down companies' operations and leads to erroneous results (Altay & Aydın, 2021). Small and medium-sized

enterprises (SMEs) in Turkey are struggling to keep up with the increase in online commerce volume due to these traditional methods in period-end transactions of accounting processes (Akkaya, 2018).

Globally, the increasing digitalization of companies, particularly accelerating their end-of-period transactions in accounting processes and enhancing their efficiency, also boosts the application of data analysis techniques (Koç & Türk, 2018). Big data analysis methods facilitate better management of data in accounting processes, optimize corporate decision-making processes, and make the records of financial statements more accurate (Yılmaz & Şahin, USA).

In Turkey, delays in the digitalization processes related to end-of-period transactions in accounting processes necessitate Turkish accounting professionals to be more knowledgeable about digital transformation (Akgün & Taş, 2021). This requirement, which necessitates Turkish accounting professionals to be more knowledgeable about digital transformation, also highlights the importance of training (Akkaya, 2018). Training for SMEs can assist them in keeping up with the increase in online trade volume, thereby enhancing their efficiency in end-of-period transactions (Akkaya, 2018). Therefore, it is essential for companies and accounting professionals in Turkey to be more aware of digitalization and data analysis and receive training on these topics (Altay & Aydın, 2021).

The utilization of digitalization and data analysis techniques in end-of-period transactions by companies worldwide contributes to making accounting processes faster and more efficient. This, in turn, enables companies to keep records of their financial statements more accurately and base their financial decisions on more reliable information (Koç & Türk, 2018). Companies in Turkey need to expedite their end-of-period transactions, enhance the accuracy of their financial statements, and become more efficient by utilizing digitalization and data analysis techniques (Altay & Aydın, 2021).

CONCLUSION:

Online trade has rapidly grown in recent years, both globally and specifically in Turkey. The growth in online trade volume is rapidly increasing in recent years, both globally and specifically in Turkey. This growth has significant impacts on accounting processes. This study examines the impact of the growth in online trade volume on accounting processes comparatively, globally, and specifically in Turkey, and investigates the impact of online trade volume on accounting processes.

Our study demonstrated a strong positive correlation between Turkey's online trade volume and the global online trade volume, as calculated by the multiple R coefficient. The R-square indicates that 85.7% of the variance between Turkey's online trade volume and the global online trade volume can be explained. The adjusted R-square shows that the model is in an improved form and that the relationship between Turkey's online trade volume and the global online trade volume is highly reliable. According to Anova results, the significance level of the regression model is high, and the relationship between Turkey's online trade volume and the global online trade volume is statistically significant.

The coefficients table includes the coefficients and standard errors of the equation used to explain the relationship between Turkey's online trade volume and the global online trade volume. These coefficients are reliable and have shown that every 1 billion dollar increase results in a 79.345 trillion dollar increase in the global online trade volume in Turkey's online trade volume. These results indicate that there is a high correlation between Turkey's online trade volume and the global online trade volume, and the impact of the online trade volume on accounting processes is significant. Primarily, we examined the effects of the growth in online trade volume on the preparation and collection of transaction documents from accounting processes and compared them globally and specifically in Turkey.

Between the years 2015 and 2022, research conducted worldwide has shown that the increase in online trade volume has complicated the preparation and collection of transaction documents, potentially affecting the accuracy and reliability of accounting records (Jansen & Karaman, 2018). Another study has noted the negative impacts of online trade on the quality of accounting information (Li & Su, 2019).

Similar results have been observed in Turkey. Özdemir and Türker (2017) pointed out that the increase in online trade volume has made it more difficult to prepare and gather transaction documents, potentially undermining the reliability of accounting records. However, another study in Turkey indicated that the increase in online trade volume has eased the preparation and collection of transaction documents for Turkish companies rapidly advancing in digitalization (Erdoğan & Durmuş, 2020). Thus, while the global growth in online trade volume complicates the preparation and collection of transaction documents, the digitalization process in Turkey eases it. Companies worldwide should enhance the use of digital tools to facilitate the preparation and collection of transaction documents.

The growth in online trade significantly affects accounting processes, particularly the recording and tracking of inventory. The increase in global online trade volume has made the processes related to inventory recording and tracking even more critical. Therefore, online shopping sites strive to perform accurate inventory tracking, inventory management, and financial reporting by using suitable accounting software. In Turkey, the growth in online trade volume has had positive effects on the processes related to inventory recording and tracking. Online shopping sites in Turkey continually follow technological advancements to make the recording and tracking of orders more efficient (Ercan, 2017). However, online trade brings some challenges. Tracking inventory can become more difficult when multiple sales channels are used (Cheng & Cheng, 2016).

The impact of the growth in online trade volume on accounting processes has made the processes related to inventory recording and tracking even more critical. Therefore, the use of appropriate accounting software is vital to accurately perform inventory tracking, inventory management, and financial reporting.

In our study, we also compared and discussed the effects of the growth in online trade volume from 2015 to 2022 on the recording and tracking of receivables in accounting processes worldwide and specifically in Turkey.

The volume of online trade globally has grown rapidly in recent years and has accelerated with the pandemic. As the number of customers of online shopping sites worldwide increases, problems may arise in the recording and tracking of receivables. This issue is one of the biggest challenges faced in the accounting processes of online shopping sites (Wang & Wang, 2016, p. 398).

In Turkey as well, the volume of online trade has been growing rapidly in recent years. The increase in online shopping during the pandemic has accelerated this growth even further. However, the volume of online trade in Turkey is still low compared to the rest of the world. Therefore, the accounting processes of online shopping sites in Turkey are less complex compared to the rest of the world. However, as the number of customers of online shopping sites increases, problems may arise in the recording and tracking of receivables (Çalışkan & Ersoy, 2017, p. 146).

The problems encountered in the recording and tracking of receivables hold a significant place in accounting processes. These issues complicate the accurate recording and reporting of financial data of online shopping sites. Therefore, online shopping sites need to increase the use of suitable

accounting software for receivable account tracking, recommend the use of automated inventory tracking systems, and increase the use of technologies such as artificial intelligence and machine learning (Al-Mudimigh & Zawawi, 2019, p. 97; Cheng & Cheng, 2016, p. 157).

Upon examination, it has been observed that the increase in the volume of online trade has a significant impact on accounting processes, especially in terms of recording and tracking orders; this impact has increased the use of automated systems for recording and tracking orders due to the growth in the volume of online trade worldwide. These systems produce faster and more accurate results compared to manual processes. Therefore, the use of automated systems enhances the efficiency of accounting processes (Sözbilir & Şanlı, 2016; Aktaş & Öztürk, 2018).

However, in Turkey, the growth in online trade volume often leads to a preference for manual processes for order recording and tracking due to the less developed systems used for accounting processes compared to global technological advancements. This situation may decrease efficiency in accounting processes and cause errors (Kaya & Atay, 2018; Şahin & Alver, 2019).

E-commerce companies worldwide have started to use artificial intelligence and machine learning-based automated accounting software for recording and tracking orders. These softwares ensure automatic recording and tracking of orders. E-commerce companies in Turkey can adopt a similar approach and improve the process of recording and tracking orders by using automated accounting software. This can reduce errors originating from manual processes and make accounting processes more accurate and faster (Aktaş & Öztürk, 2018; Kaya & Atay, 2018).

The study comparatively analyzes the effects of the growth in online trade volume on accounting processes and daily records between 2015 and 2022, both globally and specifically in Turkey. Globally, the increase in online trade volume has led to changes in daily records of accounting. Chen, Zhang, and Wang (2016) suggest that these changes affect daily records due to reasons such as growth in transaction volume, diversification of data sources, and increased variability in sources. Hence, many companies worldwide utilize ERP software to manage their accounting processes and daily records more effectively (Mintz & Chen, 2015).

In Turkey, however, a large majority of companies are still using traditional methods and facing challenges in managing accounting processes and organizing daily records (Aksoylu & Unal, 2016). This situation leads to

difficulties in managing accounting processes and organizing daily records specifically in Turkey. In this context, it may be advisable to provide SMEs in Turkey with support and training on ERP software to manage accounting processes and daily records more effectively. This could help Turkish SMEs keep up with the growth in online trade volume.

The increase in online trade volume both globally and specifically in Turkey is causing changes in accounting processes and in the records of financial statements. The growth of online transaction volume worldwide, the diversification of data sources, and the increased variability in these sources affect the records and tracking of financial statements (Chen, Zhang & Wang, 2016). Hence, many companies are using ERP software to manage the records and tracking of financial statements more effectively (Mintz & Chen, 2015).

The growth of online trade volume in Turkey also affects the records and tracking of financial statements. However, a majority of companies in Turkey are still facing challenges in managing the records and tracking of financial statements using traditional methods (Aksoylu & Ünal, 2016). Greater use of ERP software by Turkish companies, applying data analysis techniques, and transitioning to digital accounting applications could assist in managing the records and tracking of financial statements more effectively (Özcan, 2021).

In addition to changes in accounting processes, the growth in the volume of online commerce is affecting financial reporting standards. Financial reporting standards, such as the International Financial Reporting Standards (IFRS) and Turkish Accounting Standards (TAS), are constantly being updated due to the growth in the volume of online commerce (Gürbulak & Bozkurt, 2019). Hence, it is crucial for companies to keep up with and implement these updates in financial reporting standards.

Our study has examined and compared the impacts of the growth in the volume of online commerce between 2015 and 2022 on accounting processes, including end-of-period transactions, globally and specifically in Turkey.

As the volume of online commerce grows rapidly worldwide, accounting processes are striving to adapt. Large corporations, due to the increase in online sales, are digitizing their end-of-period transactions in accounting processes, accelerating their operations, and making them more efficient (Akkaya, 2019). This digitization also increases the use of data analysis techniques. Big data analysis methods are improving the management of data

in accounting processes, enhancing companies' decision-making processes, and making the recording of financial statements more accurate (Yılmaz & Şahin, USA).

In Turkey, however, despite the rapid growth in the volume of online commerce, end-of-period transactions in accounting processes are still conducted using traditional methods. This slows down companies' operations and leads to erroneous results (Altay & Aydın, 2021). Small and medium-sized enterprises (SMEs) in Turkey are struggling to keep up with the growth in the volume of online commerce due to these traditional methods used in end-of-period transactions in accounting processes (Akkaya, 2018).

In conclusion, the growth in the volume of online commerce worldwide necessitates companies to digitize their accounting processes. This digitization increases efficiency in accounting processes and allows for more accurate information to be used in financial decisions. However, in Turkey, accounting processes are still conducted using traditional methods, making it difficult for small and medium-sized enterprises to keep up with the growth in online commerce. Therefore, it is essential for companies and accounting professionals in Turkey to be aware of digitization and data analysis, and to receive training in these areas. In the process of digitization, data security is also a crucial issue, and companies need to take appropriate measures to minimize risks.

The impact of the growth in online commerce on inventory records and tracking in accounting processes is a significant issue. To mitigate these impacts and to make the processes more efficient, future works could include the following:

- It is recommended to increase the accuracy and reliability of transaction documents by automating their preparation and collection.
- The growth in online commerce could lead to issues with the quality of information affecting the accuracy and reliability of accounting records. Therefore, stricter control measures and updates to regulations are suggested.
- Recommendations include increasing the use of appropriate accounting software for inventory tracking and records, automating inventory tracking systems, enhancing the use of artificial intelligence and machine learning, improving business processes, increasing employee training and awareness, and conducting data analysis.
- Suggestions such as automating daily records, wider use of ERP software, standardizing daily records, using data analysis techniques,

and organizing accounting trainings could help manage accounting processes more efficiently and effectively.

- Measures recommended also include automating end-of-period transactions, accelerating digitization processes, raising awareness of digitization among SMEs in Turkey, taking measures for data security, conducting more research, and preparing training programs for accounting professionals.
- The standardization of financial statement records has become even more important due to the growth in online commerce.
- Due to the difficulties faced by SMEs in Turkey in the recording and tracking of financial statements, training could be organized for SMEs.
- It is recommended for companies in Turkey to transition to digital accounting applications, utilize data analysis techniques, employ expert personnel, and standardize accounting processes.
- The use of big data analysis methods is becoming increasingly crucial. These measures will simplify the accurate recording and reporting of financial data from online shopping sites and minimize issues related to the recording and tracking of receivables in accounting processes.
- The need for companies in Turkey to adhere to International Financial Reporting Standards has gained even more importance. In this regard, it is necessary to ensure that companies' financial reports are prepared in compliance with international accounting standards.
- There is a need for more comprehensive research on the impact of online commerce on accounting processes, keeping abreast of innovations in the sector, and constantly updating practices. This way, a more effective and efficient working environment can be achieved in the fields of accounting processes and financial reporting.
- Lastly, it is important to raise the level of awareness about the impact of online commerce on accounting processes and to provide regular training for accounting professionals to adapt to the digital transformation process. In doing so, adaptability to changes in accounting processes can be ensured, and a more efficient working environment can be created.

In summary, there are many measures that can be taken regarding the impact of online commerce on accounting processes. Suggestions such as the automation of transaction documents, the use of suitable accounting software for inventory tracking and records, the acceleration of digitalization

processes, and compliance with International Financial Reporting Standards can minimize the impact of online commerce on accounting processes. Additionally, by increasing the level of awareness through regular training, accounting professionals can be enabled to adapt to the digital transformation process.”

In conclusion; the worldwide increase in online trading volume is affecting accounting processes and daily records. In order to minimize this impact and increase the accuracy and reliability of accounting records, companies need to adapt rapidly to the digitization process. Suggestions such as the use of appropriate accounting software, the use of automated inventory tracking systems, the use of artificial intelligence and machine learning, the improvement of work processes, the training of employees, and the enhancement of awareness levels can assist in managing accounting processes in a more efficient and effective manner. However, data security is an important issue in the digitization process, and companies need to take appropriate measures to minimize risks. Training should be organized for SMEs in Turkey to adapt to changing business practices, and financial reporting standards need to be applied more strictly. Thus, the accuracy and reliability of accounting records can be increased, financial reporting can be improved, and companies can operate more efficiently by avoiding data loss, errors, time loss, and costs.

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