
ERP Systems - Reliable Tools in Corporate Reporting of Organizations

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Abstract

In the digital age, integrated ERP solutions are the best way to efficiently manage an organization's business and resources, as they contain a number of specific modules for accounting, human resources, production, sales and purchasing. This system is designed to provide efficiency and transparency to all operations performed by organizations.

The aim of this paper is to explore how ERP systems are a reliable solution in the context of corporate reporting. The modules of this system facilitate the collection, storage, and analysis of an organization's financial and operational data, building a solid foundation for accurate and correct reporting of results, especially its performance.

The case study in this paper is summarized as a quantitative analysis based on a questionnaire, which aims to highlight the advantages and challenges of using an ERP system in the context of financial and operational reporting of organizations.

The conclusion of the paper emphasizes the importance of using ERP systems in the corporate reporting of organizations, highlighting the main benefits they bring in terms of operational efficiency, data transparency and correct decision making.

Key words: ERP systems; corporate reporting; decision transparency; reliable solution; operational efficiency; decision-making process;

JEL Classification: M15, M40, M41, M42, M54

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Introduction

The complex challenges of the digital age concern the efficient management of resources, but also the accurate reporting of results needed to identify the organization's performance. The solution identified by the organization to address these challenges was the implementation of ERP systems (e.g. SAP, WinMentor, Oracle Cloud, Microsoft Dynamics 365, NetSuite and others) representing a modular system that includes a number of department-specific modules with the aim to improve operational processes and to ensure reliable and transparent corporate reporting. ERP systems are considered integrated solutions due to the large number of functions through which many activities can be streamlined. The main functions are provided by modules such as finance-accounting, human resources, inventory management, marketing, sales, with the aim of facilitating the communication of information between departments of an organization through a single system.

The aim of this paper is to analyze the role and impact of ERP systems within organizations, mainly analyzing how corporate reporting can be achieved with the functionalities and benefits offered by these integrated systems. Another starting point in this paper is to analyze how ERP systems help to automate the information flow and reporting process in order to reduce human errors as much as possible.

The paper aims in the results analysis part to identify solutions that help accounting professionals and auditors to overcome the obstacles they face during corporate reporting. Otherwise, in the conclusion section recommendations will be proposed regarding the use of ERP systems as reliable tools for corporate reporting.

1. Literature review

The main key concepts found in this paper have been defined with the help of studies previously conducted by other authors who have dealt with this topic in their works. Brabete et al. (2024) consider that emerging technologies *"have a direct impact on the accounting profession, in the sense of redefining the role and place that accounting specialists occupy within economic entities"*. Thus, Gușe and Mangiuc (2022) defined in their paper the term digitization as *"the use of digital technologies to change a business model and obtain new opportunities for value and revenue creation"*.

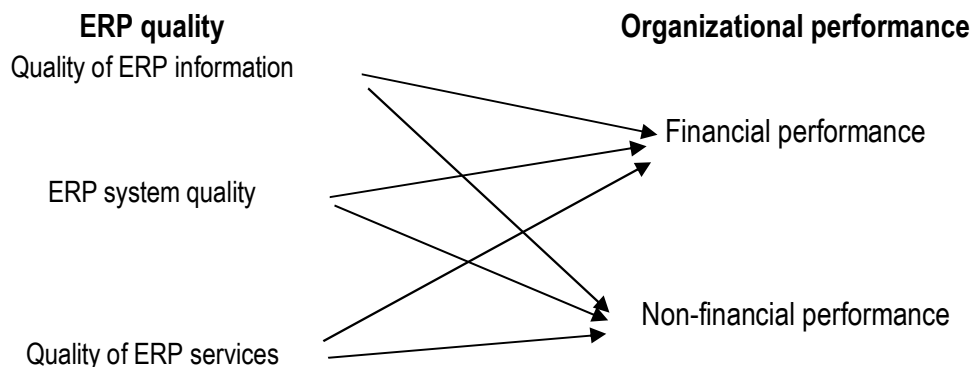
Abejo (2023, p. 2451) mentions in his paper that ERP systems are a system that *"integrates all business functions, starting from administration to financial processes"*, helping to *"integrate and increase the efficiency of business processes"*.

Alsurrayi and Alsughayer (2021, p. 56) consider corporate governance as an *"essential tool in building market trust and attracting investors to the organization globally"*. Setting corporate governance standards and procedures are essential for reducing risks and improving the performance of the organization, increasing transparency of information facilitating improved decision making and reducing conflict of interest.

Serhan and El Hajj (2019) and Balic et al. (2022), state that ERP systems provide the opportunity for the organization to streamline resources, improve their processes and performance as a result of the accuracy and quality of information processed by them. The modules incorporated by these systems optimize the work of accounting professionals and auditors as a result of centralizing data in a single database and improving the flow of information between departments. According to Sheik and Sulphay (2020) and Oyewole et al. (2024), ERP systems provide functions that enable accounting professionals and auditors to analyze and interpret data for decision making (Tarigan, Lianto, and Basana, 2018; Anto and Yusran, 2023).

According to Balic et al. (2022), the quality of ERP systems can be measured along three dimensions (*Figure no. 1*):

- *ERP information quality (ERP information quality)* - reflects the quality of information processing, including how well it meets technical requirements;
- *ERP system quality (ERP system quality)* - is the difference between customers' normative expectations and the perceived performance of the services provided by the information system support;
- *ERP service quality (ERP service quality)* - from the users' perspective, the quality of information can be understood as data that meets the user's needs and requirements.

Figure no. 1. The relationship between ERP quality and organizational performance


Source: Balic et al., 2022

In the following, the author has defined the link between the quality of ERP systems and financial and non-financial performance respectively found in **Figure no. 1**. In the case of the link between the quality of ERP systems and the organization's financial performance, authors Elbahri et al. (2019), Elsayed, Ammar and Mardini (2019) and Balic et al. (2022) mentioned that performance can be measured by profitability and sales and especially by financial indicators such as return on investment (ROI - en. return on investments), return on assets (ROA - en. return on assets), return on sales (ROS - en. return on sales) and stock returns (en. stock returns). The main reason for this is the way in which organizational resources can be allocated more efficiently. In the case of quality of ERP systems and non-financial performance of the organization, authors Elbahri et al. (2019) and Balic et al. (2022) mentioned that any organization wants to increase its agility in the market, mainly pursuing current and future benefits. The current benefits can fall into the category of process and workflow improvement and also information access. Future benefits are based on higher service quality and better customer support.

According to Gomez-Llenez, Diaz-Leal, and Angarita-Sanguino (2020, p. 146), ERP systems "help to identify the current and future situation of the business, allowing through modular structures the unification of the areas involved in the processes, characterized by the possession of a centralized and standardized database that allows interaction with other applications".

Improving the technological infrastructure of an organization by implementing ERP systems offers the opportunity to reduce costs and increase innovation so that the services provided by these organizations are of the highest quality. Allocating resources more efficiently can give organizations the chance to gain competitive advantage and reduce costs (Huang et al., 2019).

The effect of digitalization using ERP systems is enjoyed by accounting professionals and auditors because it provides a much broader perspective on the organization from analyzing key financial indicators to improving the flow of information between departments (Odoyo and Ojera, 2020; Ivanovic and Maric, 2021). Thus, Kuntum (2019) asserts that ensuring the quality of accounting information requires that it is presented accurately, having a reliable quality providing benefits to users. High quality of information can lead to the success of the organization, as the reverse can cause the failure of the organization (Bovee, 2004 cited by Kuntum, 2019; Pizzi et al., 2023).

Accounting professionals must have the ability to accept new roles such as data analysts or financial analysts, IT auditors or be able to participate in the development of information systems (Gușe and Mangiuc, 2022) to cope with the massive digitalization phenomenon. Calu et al. (2023, p. 392) are of the opinion that accounting professionals should be considered as "business advisors or partners" to ensure the smooth running of the organization. Also, Calu et al. (2023, p. 392) refer to them in their paper as "sustainability guardians" because they

have adapted a lot "to sustainability requirements, improving the accuracy of reporting and the quality of sustainable reporting" by producing integrated reports.

2. Research methodology

This section aims to present the research method addressed in this paper, which consists of a quantitative, questionnaire-based analysis that aims to highlight the advantages and challenges of using an ERP system in the context of financial and operational reporting of organizations.

This approach provides objective and measurable data that is essential for assessing the effectiveness of ERP systems in corporate reporting. The questions in the questionnaire have been specifically designed to capture the perspectives and experiences of ERP users in various organizations. The questionnaire includes both demographic questions to create a profile of the respondents and questions specific to the research topic of the paper. The distribution of the questionnaire was done through online platforms (social networks such as Facebook, LinkedIn, etc.) between 17.02.2023 and 20.04.2024, thus facilitating access to a total of 104 respondents.

The hypotheses formulated for testing the proposed regression model are as follows:

H₁: *The implementation of an ERP system has a significant positive impact on the efficiency of financial reporting processes in organizations (the relationship between the quality of information processed and the efficiency of financial reporting processes was analyzed).*

H₂: *Users' satisfaction with the ERP system is positively correlated with the quality of information generated in corporate reporting (analyzing the relationship between user satisfaction and the quality of information processed).*

In order to ensure the validity and reliability of the results provided by the tool used (PASW Statistics 18), hypotheses were created and tested using the following regression model:

$$y = a_0 + a_1 * GRD + a_2 * QLTY + a_3 * PROC + e$$

where:

GRD – user satisfaction with the ERP system

QLTY – the quality of information processed with these systems

PROC – efficiency of financial reporting processes with these systems

Through this linear regression model, the research aims to provide a clear picture of the role of ERP systems in optimizing reporting processes, thus contributing to a better understanding of the impact of information technologies on organizational performance. The results obtained will be essential for the formulation of practical recommendations for organizations wishing to implement or improve the use of ERP systems.

3. Results analysis

Section 3 aims to present the main results of this paper, highlighting in particular the importance of ERP systems in optimizing organizations' financial and operational reporting processes. These systems provide new directions on how organizations collect, analyze and report data and information in order to ensure transparency and accuracy in corporate reporting.

Regarding the demographic questions in this questionnaire, the sample of respondents consisted of 64% female and 36% male, predominantly aged between 31-50 years, residing in Bucharest and Ilfov county. The last studies predominantly completed are Master's (48%), Bachelor's (19%), Postgraduate (18%), PhD (13%) and High School (2%). The main fields in which the respondents work are: accounting (43%), audit (18%) and IT (39%), with predominantly more than 10 years of seniority in the fields in which they work.

In the following, the hypotheses formulated will be tested, following in **Table no. 1** the Pearson correlation between the variables proposed in each hypothesis.

Table no. 1. Correlation between regression model variables

		Correlations			
		Raportarea corporativa	Gradul de satisfactie utilizator	Informatiile din rapoarte sunt mult mai clare si de calitate	Eficienta proceselor de raportare financiara
Raportarea corporativa	Pearson Correlation	1	-,442**	-,248*	-,257**
	Sig. (2-tailed)		,000	,011	,009
	N	104	104	104	104
Gradul de satisfactie utilizator	Pearson Correlation	-,442**	1	,296**	,368**
	Sig. (2-tailed)	,000		,002	,000
	N	104	104	104	104
Informatiile din rapoarte sunt mult mai clare si de calitate	Pearson Correlation	-,248*	,296**	1	,483**
	Sig. (2-tailed)	,011	,002		,000
	N	104	104	104	104
Eficienta proceselor de raportare financiara	Pearson Correlation	-,257**	,368**	,483**	1
	Sig. (2-tailed)	,009	,000	,000	
	N	104	104	104	104

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Author's own creation, 2024

The Pearson correlation was analyzed based on two levels of significance, the first with a value of 0.01 and the second with a value of 0.05. Values significant in this

respect were marked with a star for significance level (Sig.) values below 0.05 and with two stars for significance level (Sig.) values below 0.01.

Table no. 2. Analysis of the significance threshold for the variables proposed in the regression model

Correlation	Sig. < 0,01	Sig. < 0,05
RAPC - GRD	x	
RAPC - QLTY		x
RAPC - PROC	x	
GRD - QLTY	x	
GRD - PROC	x	
QLTY - PROC	x	

Source: Author's own creation, 2024

As can be seen in **Table no. 2**, the probability with which the proposed hypotheses can be confirmed or refuted is, in this case, 99% for the most part. In the case of hypothesis 1 and 2, it can be said that both can be confirmed based on the correlations obtained. They denote that organizations using ERP systems benefit from better integration of information from various departments, which reduces errors and the time taken to generate reports. ERP systems also allow real-time access to data, facilitating informed and rapid decision-making. ERP

systems enable users to be satisfied with the functionality and support provided by the ERP system, as it will produce more accurate and relevant reports for business decisions and provide a solid framework for internal and external audits. Thus, organizations can strengthen their competitive position in the market.

Following the statistical analysis of the regression model using PASW Statistics 18 application, the following results presented in **Table no. 3** and **Table no. 4**, respectively, were obtained.

Table no. 3. Model summary and ANOVA analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,462 ^a	,213	,190	,309

a. Predictors: (Constant), Eficienta proceselor de raportare financiara, Gradul de satisfactie utilizator, Informatiile din rapoarte sunt mult mai clare si de calitate

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,586	3	,862	9,048	,000 ^a
	Residual	9,529	100	,095		
	Total	12,115	103			

a. Predictors: (Constant), Eficienta proceselor de raportare financiara, Gradul de satisfactie utilizator, Informatiile din rapoarte sunt mult mai clare si de calitate

b. Dependent Variable: Raportarea corporativa

Source: Author's own creation, 2024

From the results obtained in **Table no. 3**, it can be stated that the variance of the dependent variable (corporate reporting) can only be explained by 21.30% ($R^2 = 0.213$) by the three independent variables (user satisfaction, the information in the reports is much clearer and of high quality, the efficiency of financial reporting processes). Thus, it can be stated that the value of the degree of determination (R^2) tends towards 0, illustrating that there

is a weak relationship between the dependent variable and the three independent variables. The Adjusted R Square illustrates that the points are quite close to the regression line, as the value of this indicator tends strongly towards 0. The proposed regression model is valid, due to the Sig indicator. $F = 0,000 < 0,01$.

Table no. 4. Regression model coefficients and significance of variables

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	99,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1,892	,177		10,690	,000	1,427	2,357
	Gradul de satisfactie utilizator	-,125	,031	-,388	-4,029	,000	-,206	-,044
	Informatiile din rapoarte sunt mult mai clare si de calitate	-,041	,042	-,101	-,989	,325	-,151	,068
	Eficienta proceselor de raportare financiara	-,024	,040	-,065	-,617	,539	-,128	,080

a. Dependent Variable: Raportarea corporativa

Source: Author's own creation, 2024

After analyzing the results obtained in **Table no. 4**, it can be seen that only the variable "user satisfaction" remains

valid in the model, due to the significance threshold (Sig. < 0.01). The regression model is presented as follows:

$$y = 1,892 - 0,125 * GRD + e$$

Thus, it can be stated that accounting and auditing professionals are much more satisfied with the data processed for corporate reporting using ERP systems, and the efficiency and effectiveness of the ERP system in organizations can be more easily evaluated.

The functionalities offered in the modules of this system increase user satisfaction due to easy access to data and information. The prompt support offered by these systems in the preparation of corporate reports increase user satisfaction, as they can interpret the data much easier.

Conclusion

ERP systems offer a number of benefits, including transparency, flexibility and easy access to the data and information needed to carry out the work and make key decisions for an organization. Other benefits identified in the literature may refer to operational efficiency and prompt support for data processing, which aim to increase user satisfaction.

The increased degree of user satisfaction identified in the case study proposed in this article denotes that accounting professionals and auditors are much more satisfied with processing corporate data and reports using ERP systems, as a result of the numerous functions offered by these systems. The results indicated that the implementation of ERP systems in organizations can

ensure a more organized and transparent work environment, providing faster access to key data needed to perform their tasks and minimizing human errors as much as possible. This gives accounting professionals more confidence in the information they process, thus contributing to increased job satisfaction.

Collaboration and communication of essential business data between departments and having a much more complete view of the organization's objectives promotes increased satisfaction among accounting professionals, giving them a sense of belonging to the team and feeling motivated and involved in the day-to-day activities of the organizations.

The flexibility offered by ERP systems that can be used on different devices provides a sense of autonomy and confidence to employees, benefiting from a more enjoyable work experience.

In conclusion, the article points out that ERP systems are an essential tool for corporate reporting, offering organizations not only reliability, but also flexibility in managing information, allowing them to respond quickly to business challenges. The research also focuses on the impact of ERP systems on accounting professionals by tracking their satisfaction. ERP systems are designed to provide an efficient and pleasant working environment, so the satisfaction of accounting professionals is closely linked to the performance of the organization, aiming at the well-being of employees and the long-term success of organizations.

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