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# The Influence of Integrated Systems on Company Performance and Sustainability

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## Abstract

*In this paper, the authors investigated the evolution of ERP-type integrated information systems and analysed the presentation of their main concepts and features, limited to the performance and sustainable development of the enterprise.*

*Integrated ERP systems play an important role in managing and conducting the day-to-day business of an organization (irrespective of being small, medium or large companies). The research method used to justify the impact of ERP systems on the performance and sustainability of the organization was the archive analysis (review of the literature), doubled by a quantitative empirical research based on a questionnaire. The analysed information was collected from over 20 papers by Romanian and foreign authors, published in various scientific journals, specialized books and conference proceedings, as well as based on the answers received based on a questionnaire intended to prove that the integrated ERP systems contribute to improving the sustainable development and performance of the organization, by reducing costs and protecting the environment, increasing the quality of decision-making, productivity and data volume management. Following the study, the authors concluded that the evaluation of the processing of the volume of data generated by ERP systems, as well as the consistency, quality and clarity of information are representative factors on the impact of ERP systems on the sustainable development of organizations, in order to ensure the performance of the organization in the short, medium and long term.*

**Key words:** accounting; ERP systems; evolution; performance; sustainability; audit mission;

**JEL Classification:** C88, M15, M40, M41, P42

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## Introduction

The economic environment has evolved over time and has become very dynamic and the information has become paramount in substantiating and making decisions. The business environment presents many risks, some of which are inevitable, while others can be controlled by the organization. For an organization to be successful and survive in a dynamic economic environment, managers must find optimal solutions and make radical innovations in an uncertain environment to maintain and grow their business. Thus, the organization must invest in IT systems that add value to business processes.

The main objective of this paper is to highlight the importance and main features of integrated ERP systems, as well as the evolution of these systems in an attempt to optimize the processes specific to the company's functions.

According to Ionescu et al. (2009, p. 335), the evolution of the economic environment has led to the appearance of "substantial changes in the way the financial and accounting activity is designed" in an organization. Today, it is no longer necessary to demonstrate that information has an important role "in economic and social development" so that information must be "collected, stored, processed and transmitted to managers to become useful" and to substantiate the decisions taken by managers (Pascari, 2015).

According to Synapsa (2020), IT systems that integrate the functions of the enterprise (ERP systems) have been created to meet the needs of managing the activity of organizations. The main purpose of these information systems is the automatic processing of the accounting information underlying the decision-making process. Senior Software (2020) states that ERP systems contain "areas specific to various areas such as: sales, procurement, production, finance, accounting and others." All processed information is stored in a common database, so that users of financial accounting information have easy access to information. The role of these information systems is to bring together "a multitude of processes and businesses" (Oracle Romania, 2020).

In Transart's vision (2021), ERP (Enterprise Resource Planning) systems are defined as "a single platform, useful for monitoring, control and integrated management of all activities, processes and operations

carried out by a company." The main role of ERP systems is to significantly improve the flow of information between departments, leading to process automation and streamlining activities within the organization. With these systems, data can be more easily shared between departments, eliminating duplication of daily tasks, all information being stored in a "common, complex and up-to-date database" (Transart, 2021).

In the following sections, we will present the main concepts and features related to integrated ERP systems, based on which we developed a research methodology that focuses on quantitative analysis based on the questionnaire, followed by the presentation of results that identify the main ERP systems used and analysis of the main value-adding functionalities for company's functions. Finally, the paper summarizes the main conclusions regarding the use of integrated ERP systems in terms of improving the decision-making process to ensure the performance and sustainability desired by managers.

## Literature review

In this section, we will present the main concepts and features of ERP systems. In the article we used a research method focused on archival analysis (literature review) to present the issues listed above, but also the questionnaire where we identified the main ERP systems used and the main impact on the organization in terms of using these systems.

The main questions of the research were related to the definition of integrated systems in the literature, the analysis of their components, as well as their influence on performance.

The increased business pace determined the need to have quick access to key data of the organization. Jituri, Fleck and Ahmad (2018) concluded that to perform the tasks on time and make the right decisions of good management, a high-performance computer system must be used, which should meet the main requirements of the activity carried out by the organization.

Organizations now need to integrate data into a common database. The role of ERP systems is to bring together the work and flow of information within an organization and to "eliminate duplication of tasks", all being stored in a "correct, complete and updated database" (Transart, 2021). Elragal and Haddara (2012, p. 22) consider that the database stores and shares essential data for

different departments, but also business functions. All data and information collected and processed from different activities, departments can be accessed by users of ERP systems in that organization, providing a "unitary and integrated perspective" (Transart, 2021).

Through integration, management and external stakeholders obtain the information needed for planning, control and decision-making.

With the evolution of accounting information systems and information technology, the needs of the organization have increased and are now achieved by using integrated systems called Enterprise Resource Planning (ERP) systems. Elragal and Haddara (2012, p. 22) observed that ERP systems are the most used "information technology solutions in organizations".

According to Mihai (2018), the concept of ERP systems consists of the following elements:

- **Enterprise** – "economic unit or activity";
- **Resource** – provides information about the "material, financial, human and informational potential" that the organization has; and
- **Planning** – "establishing policies and procedures for better management of the organization".

These ERP systems combine several subsystems such as: accounting, production, human resources, sales, marketing focusing on the business processes of an organization. ERP systems contain interfaces to financial functions necessary to carry out the activities of the organization. The main reasons why the organization uses ERP systems are:

1. The evolution of the external environment of the organization;
2. Problems identified by management in the decision-making process; or
3. System problems (architecture, functionality), such as situations in which some tasks were performed manually.

Gronwald (2017, p. 59) defines ERP systems as those systems that manage all business processes in an organization. Desai and Srivastava (2013, quoted by Gronwald, 2017) stated that "organizations can implement best practices in the system, and the ERP system" is perceived as a business tool, not as an IT tool. Magal and Word (2012, p. 25) consider that ERP systems focus on intracompany processes (consider all

operations performed within an organization) and consider the integration of all functional and multifunctional business processes. Bradford (2015, p. 1) considers ERP systems to be business systems that "integrate and streamline data" across the organization into a "complete system that supports the needs of the entire enterprise". The purpose of these ERP systems is to improve all operations and key activities of an organization in areas such as: accounting, procurement, production and sales.

ERP systems are focused on business processes, the information processed and provided by the system being clear, complete and logical.

ERP systems offer various advantages and benefits for the organization. The role of ERP systems is to help the organization "share and transfer data and information" (Elmonem, Nasr and Geith, 2016) within the organization (between departments) and outside the organization, but also to provide support for process optimization and automation business. The exchange of data and information between departments leads to faster fulfilment of the various objectives of the organization. Sørheller et al. (2018) consider that ERP systems have the role of "reducing working time for a specific task". According to Elmonem, Nasr and Geith (2016, p. 1), the results of implementing ERP systems could be in the form of higher quality, shorter marketing time, much more efficient communication between departments, much more correct decisions and much higher productivity.

Any module / component is used for a specific business area or department. The advantage of ERP systems is that they offer the possibility to implement one or more modules, which correspond to the requirements of the entire organization or department. According to the B-org website (2021), the most used modules are: accounting, payroll, sales and inventory management. The same analysis states that an ERP system should contain the following modules: inventory management, procurement management, sales and distribution management, customer and supplier portfolio management, production management and planning, inventory management, accounting and salary.

In **Table no. 1**, we made a comparison regarding the modules contained in two integrated ERP systems (SAP R / 3 and Dynamics AX 2012 R / 3).

**Table no. 1. SAP R/3 module and Dynamics AX 2012 R/3 module**

No.	Module	SAP R/3	Dynamics AX 2012 R/3
<b>I FI -Financial</b>			
1	General Ledger	X	X
2	Accounts Receivable	X	X
3	Accounts Payable	X	X
4	Asset Management	X	X
5	Treasury	X	X
6	Investment management	X	
7	Controlling	X	
8	Budgeting		X
9	Travel and expense		X
10	Compliance and internal controls		X
<b>II LO – Logistics</b>			
1	Material Management	X	
2	Inventory management		X
3	Procurement and sourcing		X
4	Sales and Distribution	X	X
5	Master planning		X
6	Production Planning	X	X
7	Plant Maintenance	X	
8	Warehouse management		X
9	Transportation management		X
10	Service Management	X	X
11	Quality management or Production control	X	X
12	Project System	X	
13	Retail and retail essentials		X
14	Trade allowance management		X
15	Call center		X
16	Data import export framework		X
<b>III HR –Human Resources</b>			
1	Personnel Management	X	X
2	Payroll	X	X
3	Personnel Time Management	X	
4	Personnel Development	X	
5	Organizational Management	X	X
6	System administration		X

Source: Own creation, based on information from Mihai (2018) and Microsoft (2014)

According to **Table no. 1**, we noticed that the two ERP systems have 11 common modules (these modules may differ from one ERP system to another), the rest of the modules (16 modules) being specific to each ERP system. Based on the identified modules, we deduced the main functions of integrated systems.

The functions of integrated systems, as presented by B-org (2020), have the role of:

- reducing duplication of data and tasks;
- help to comply business processes with tax legislation;

- automate the business processes of the organization;
- generate data from the database in real time (example: checking balance, account statements, purchase journals, sales journals, accounting notes, etc.);
- automatically configure the interval between the document date and the due date of the invoice;
- "records the financial history of each client";
- report and analyse data from the entire organization;

- data protected due to "access rights established for each department and person";
- achieve a management of human resources, sales, stock;
- provide data transparency;
- automatic taking over of quantity and prices from other documents (Ciel, 2021); and
- data import.

ERP systems have a technical architecture that helps users interact more easily with the system. Magal and Word (2012, p. 24) state that ERP systems have "a 3-tier client-server architecture or a service-oriented architecture".

Currently, ERP systems can also be used in the Cloud, with licenses being purchased or rented on a software-as-a-service (SaaS) subscription (Softone, 2020).

ERP systems operating in the Cloud have the advantage of a low cost of ownership, because they use "an internet browser and do not require investment in infrastructure" and are implemented very quickly. Cloud ERP offer users the opportunity to access the ERP system via the Internet (Acumatica, 2008).

The concept of Cloud computing has expanded greatly as a result of digitalization and the "rapid evolution of the mobile market" (Tudoran and Ionescu, 2014, p. 295), but also the penetration of integrated systems that increasingly use cloud technology. Digitalization aims to reduce the inefficient consumption of resources within an organization, hence the emergence of the concept of sustainability.

In the following, we have chosen to present the concept of sustainability related to the business environment, which is an essential economic component for managers and entrepreneurs, because this component has the role of sustainable business development. As long as an organization has a sustainable behaviour towards the environment in which it operates, it will obtain various advantages (e.g. funding from this program) (Dona, 2020).

Danciu (2013) argues that sustainability "becomes a model of development only if countries, economic sectors, companies and

citizens are aware, learn and use its principles." Sustainability can also be seen as an essential strategy for the future. If an organization wants to develop sustainably, it must consider the 3 dimensions of sustainability: environmental sustainability, social sustainability and economic sustainability. Environmental sustainability is the organization's ability to use and allocate resources as long time as possible and to control waste. Social sustainability involves the way in which social interactions within the organization are observed and maintained. Economic sustainability can be understood as "the organization's ability to make a profit, in order to survive and benefit from local, national and global economic systems" (Danciu, 2013). Any organization must ensure that "the principles for understanding, developing and achieving all the proposed objectives are respected" (Ikerd, 2013 quoted by Danciu, 2013). The principles used to ensure the sustainability of the organization are represented by holism (close relationships between sustainable components) and diversity (a variety of different elements, strategies and solutions addressed by the organization).

If we refer to the definition of the concept of sustainability of a business plan, we can say that it represents a development of a long-term strategy. Ensuring the sustainability of an organization means protecting it from various problems and economic crises of the organization. In the process of sustainability, modern technologies and investments are essential for a sustainable development of the organization.

Organizations need integrated solutions for "collecting, integrating, automating, and monitoring information to ensure sustainability" (Brooks et al., 2012 cited by Chofreh et al., 2014), such as sustainable ERP systems (S-ERP). The role of such systems is to integrate all information and processes of an organization (accessing, collecting and storing information, interpreting and using information). Integrated ERP systems offer several advantages for the sustainable development of the organization, which we will present in **Table no.2**.

**Table no. 2. The sustainability of the organization is ensured using ERP systems**

No.	Activity	Effect on the sustainability of the organization
1	Customization of the ERP system according to the specifics of the organization	Costs are reduced with the implementation of a new system that meets the requirements of the organization.
2	The flow of information is much clearer because the information is stored in a common database, easily accessible by any user within the organization.	Increasing long-term operational efficiency, rapid accessibility to information
3	Quick query of the database to obtain information needed by a specific department	The electronic use of information reduces the consumption of printed / photocopied paper.
4	Faster information processing with detailed interfaces	Reducing costs, working time on various transactions and thus electricity consumption (Lofty, 2015; Nicolaou, 2004 quoted by Nicolaou and Bhattacharya, 2006)
5	Recognition of previously processed data (example: for a previously processed fiscal receipt, its details can be subsequently recognized by querying the database, these data being useful for processing a bank statement)	
6	Processing a large volume of information	Provides scalability and flexibility
7	Generating clear, precise, relevant information using ERP systems	Managers make much more correct decisions regarding the organization and set reliable, quantifiable goals for the future.
8	Correctly reports based on information generated by the ERP system (Chofreh, 2018)	
9	Efficient inventory management using the ERP system	Avoiding waste of resources (Frazee, 2012)

Source: Own creation

Watson et al. (2010, cited by Bradford, Earp and Williams, 2012), believe that ERP systems can provide a “multifunctional view of the entire organization” by providing support for good sustainable practices.

To verify the concordance of the ERP-type integrated systems with the managers' requirements and the needs of the organization, an audit of the ERP systems must be planned periodically, but also on the accounting information and supporting documents. During the audit engagement, auditors will verify the correctness and compliance of the data processed and generated, their efficiency, effectiveness and confidentiality. Auditors must collect information about the ERP systems used and the IT controls implemented to observe the issues presented above. Considering the guidelines included in “Information systems audit guide” [from Rom. *Ghidul de audit al sistemelor informatice* (2012, p. 10)], the stages of an information systems audit mission are: “audit planning, conducting the audit, reporting and reviewing the audit”.

In the process of auditing the organization, most supporting documents are in electronic format. Thus, the auditor must “change his audit method” (Gheorghe, 2006), using the following techniques: verifying the correctness of the accounting processing performed by the ERP system, testing the security measures of the ERP systems used by the organization, identifying and

assessing the risks could be subject to the organization, evaluation of internal control, verification of the integrity of files generated by the ERP system, analysis of information through complex database queries, verification of the credibility of information provided by the ERP system, verification of financial statements and reports based on information generated by the ERP system” (Gheorghe, 2006).

To verify the aspects presented above, an auditor must first evaluate and know the ERP system, then apply various detailed tests “to collect the necessary evidence” (Bîciin, 2016) to justify his opinion and prepare the report. audit.

## Research methodology and analysis of results

Our research aims to analyse the influence of integrated information systems on the performance and sustainability of the organization. As presented in the previous section, organizations carry out the same activities on a monthly basis: data processing and collection, storage of supporting documents useful in audit missions, as well as for the preparation of balance sheets, preparation of tax returns and preparation of monthly reports.

The research methodology we addressed in this paper is quantitative based on the statistical analysis of the data collected based on the questionnaire using Microsoft Excel, as well as the collection of information presented in the literature review. The information used for documentation and stated in the previous section was taken from various databases such as: ScienceDirect, Proquest, Emerald and other specialized sites which contain scientific journals, as well as various specialized books. We also designed a questionnaire as an empirical quantitative method, where we identified the main ERP systems used and the main impact on the organization in terms of the use of these systems (the main effects of ERP systems on the performance and sustainability of the organization). The questionnaire contains 23 questions and was published on the

isondaje.ro platform (being distributed online to respondents), between November 13, 2020 - December 20, 2020, to which 112 respondents answered, these being in a percentage of 20.5% students enrolled in the Academy of Economic Studies (bachelor's degree (70.5%), master's degree (25.9%) or doctorate (3.6%)), 72.3% employees (in economics, IT, banks, finance and education), 5.4% entrepreneurs and 1.8% retirees, residing in urban areas (78.6%) or in rural areas (21.4%).

The questionnaire distributed to respondents contains two sections: a section containing questions on the profile of respondents and a section specific to the research conducted on ERP systems.

Table no. 3 presents the distribution of respondents by age, gender and area of residence.

**Table no. 3. Distribution of respondents by age, gender and place of residence**

Age (years)	Women		Men		Total (respondents)
	Urban area	Rural area	Urban area	Rural area	
20 - 30	63	14	10	6	93
31 - 40	7	-	-	1	8
41 - 50	2	1	-	1	4
51 - 60	5	-	-	1	6
61 - 70	-	-	1	-	1
>71	-	-	-	-	-
<b>Total</b>	<b>77</b>	<b>15</b>	<b>11</b>	<b>9</b>	<b>112</b>

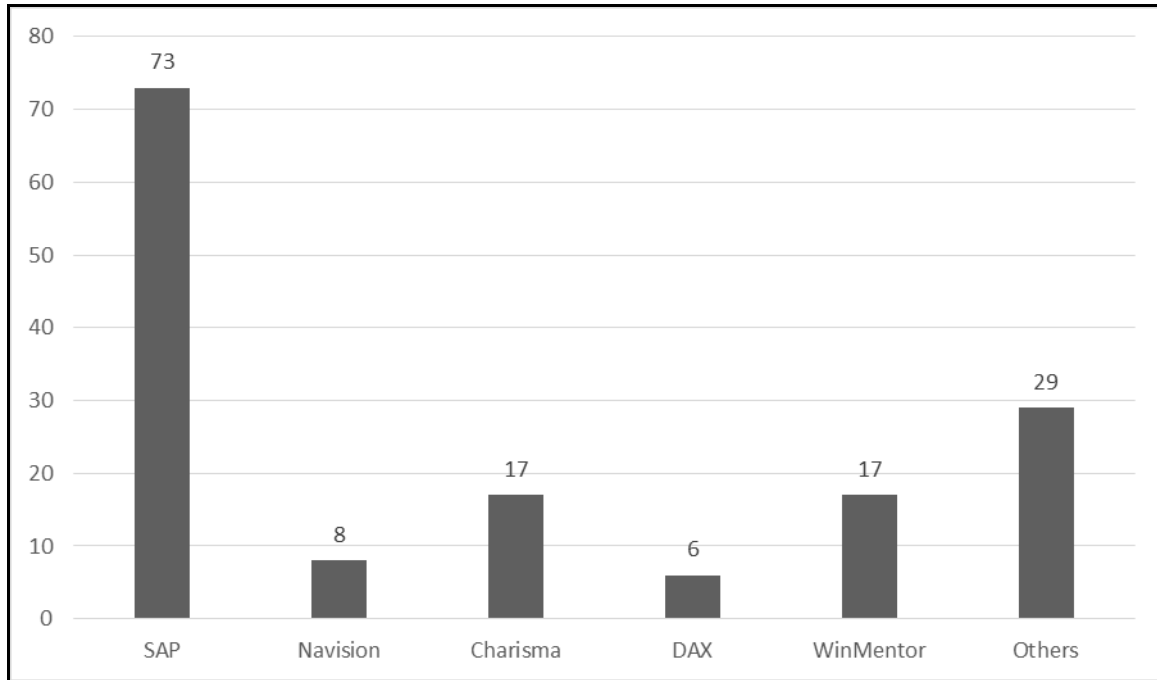
Source: Authors' research

As can be seen in Table no. 3, most respondents were between 20 and 30 years old (83.04%, i.e., 93 respondents), followed by those aged between 31 and 40 years (7.14%, i.e. 8 respondents) and then those aged between 51 and 60 years (5.36%, i.e. 6 respondents), most respondents being female (82.14%, i.e. 92 respondents), because according to a study by ANS (2020) the number of students enrolled in bachelor's, master's and doctoral programs are predominantly female.

In the second part of the questionnaire, we analysed the impact of ERP systems on the performance and sustainability of the organization.

Following the questionnaire, it was found that 70.5% of respondents used ERP systems. Figure 1 shows the most relevant ERP systems. According to Figure no. 1, respondents chose SAP system (48.7%, i.e., 73 respondents), followed by Charisma (11.3%, i.e., 17 respondents) and WinMentor (11.3%, i.e., 17 respondents).

**Figure no. 1. ERP systems used by respondents**



Source: Authors' research

Mentioned as "Other" were systems such as: Saga, Sun System, People Soft, B-org, Oracle, Axapta, Ciel, etc.

In the questionnaire we also included a question about

the experience of respondents with the ERP systems. The results obtained for this question are presented in **Table no. 4.**

**Table no. 4. Respondents' experience in using ERP systems**

Respondents' experience	Number of respondents
< 6 months	54
6 months – 1 year	26
1 – 5 years	26
5 – 10 years	3
>10 years	3
<b>Total</b>	<b>112</b>

Source: Authors' research

If we refer to the influence of ERP systems on the performance of the organization, the respondents stated in a percentage of 60.7% that these systems have the role of improving the performance of the organization. Other respondents believe that ERP systems increase labor productivity (27.7%), reduce costs (5.4%) and improve the company's image (3.6%).

41.1% of the respondents also believe the usage of an ERP system bring automation to daily tasks by 75%, while other 39.3% believe that daily tasks are actually automated only in proportion of 50%, while c. 8% of respondents feel that their daily tasks are 100% automated by using an ERP system. Regarding the *degree of data processing generated by ERP systems,*



respondents gave a grade of 3 meaning average on a scale of 1 to 5, where 1 is "Very little" and 5 is "Very much".

When asked about the organization in which the respondents work if it has entrepreneurial initiatives, 67.9% of the respondents agreed. Moreover, 97.3% of respondents believe that an organization should conduct training programs on employee involvement on the sustainability side (sustainable development) of the organization. Thus, on a scale of 1 to 5 (1 representing very few and 5 representing very many), respondents gave a grade of 3 meaning neither very many nor very few. If we refer to the training related to the professional development of the employees, the respondents stated that they benefit from many training programs.

Regarding the idea of modernizing ERP systems to ensure environmental protection and resource conservation, respondents gave a grade of 4 meaning

"largely" on a scale of 1 to 5, where 1 represents "to a very small extent" and 5 represents "to a very large extent."

Regarding the attention paid to sustainability by the organizations, the respondents gave on a scale from 1 to 5 (1 representing to a very small extent, and 5 to a very large extent), note 4 meaning "to a large extent".

Regarding the formulation of research-specific questions, we used the 5-value Likert scale, where respondents had to specify their agreement or disagreement with the questions in the questionnaire. Using these Likert scales, averages and standard deviations can be calculated to compare different categories of subjects. The questions contain factors that we have identified in the literature regarding the impact of ERP systems on the sustainability of organizations. These factors are presented in Table no. 5.

**Table no. 5. Representative factors regarding the impact of ERP systems on the sustainability of organizations**

Factors	Code
Decreased electricity consumption	SC1
Reducing the number of printed documents	SC2
Consistency, quality and clarity of information	SCAL
Increasing labor productivity	SW
Evaluation of the data volume processing generated by ERP	SVOL

Source: Own creation

In order to derive more insights into the data collected based on the questionnaire, we performed **correlation tests and regression analyses**. The purpose of the regression analyses performed was to identify the relationship between the variables chosen for the analysis and the degree of intensity of the relationship, as well as to establish the shape and meaning of this relationship. Through multiple regression analysis we evaluated the extent to which the dependent variable (Use of an ERP

system contributes to the sustainable development of the company - US), can be determined using independent variables (Decrease in electricity consumption - SC1, Reducing the number of printed documents - SC2, Consistency, quality and clarity of information - SCAL, Increasing labour productivity - SW, Evaluation of data processing generated by ERP - SVOL).

We formulated some research hypotheses that we presented in Table no. 6.

**Table no. 6. Research hypotheses formulated**

Research hypotheses	Relationship
H <sub>1</sub> ERP systems help improve the sustainability and performance of the organization	US and SC1, SC2, SCAL, SW, SVOL
H <sub>2</sub> There is a significant relationship between the use of an ERP system that contributes to the sustainable development of the company and the decrease in electricity consumption.	US and SC1

Research hypotheses		Relationship
H <sub>3</sub>	There is a significant relationship between the use of an ERP system that contributes to the sustainable development of the company and the reduction of the number of printed documents.	US and SC2
H <sub>4</sub>	There is a significant relationship between using an ERP system that contributes to the sustainable development of the company and increasing the quality and clarity of decisions.	US and SCAL
H <sub>5</sub>	There is a significant relationship between the use of an ERP system that contributes to the sustainable development of the company and the increase of labour productivity.	US and SW
H <sub>6</sub>	There is a significant relationship between the use of an ERP system that contributes to the sustainable development of the company and the evaluation of the volume of data generated by the ERP.	US and SVOL

Source: Own creation

In **Table no. 7**, we presented for the multiple regression model, the value of the regression coefficient (R), the coefficient

of determination ( $R^2$ ) and the standard error. Irrelevant values in the model increase the standard error.

Table no. 7. Regression model	
Multiple R	0.9597
R Square ( $R^2$ )	0.9211
Adjusted R Square	0.9088
Standard Error	1.0410
Observations	112

Source: Authors' research

Following results presented in **Table no. 7**, the value of the regression coefficient (R) is 0.9597 (a value close to 1) which shows that between the US dependent variable (Using an ERP system contributes to the sustainable development of the company) and the 5 independent variables (Decreasing electricity consumption - SC1, Reducing the amount of printed documents - SC2, Consistency, quality and clarity of information - SCAL, Increasing labour productivity - SW, Evaluation of data processing generated by ERP - SVOL) there is a very strong relationship, in the sense that ERP systems influence within the organization the decrease of

electricity consumption, the reduction of the quantity of printed documents, ensures the consistency, quality and clarity of information, the increase of labour productivity and the process of evaluating the processing of the volume of data generated by ERP. This is also confirmed by the coefficient of determination ( $R^2$ ) which shows that 92.11% (a value close to 100%) of the variation of the US dependent variable is explained by the independent variables (SC1, SC2, SCAL, SW, SVOL). To verify that the multiple regression model is valid, we performed the ANOVA analysis. The obtained results are presented in **Table no. 8**.

Table no. 8. ANOVA					
	df	SS (Sum of Squares)	MS (Mean Square)	F	Significance F
Regression	5	1355.03	271.01	250.05586	5.65806E-57
Residual	107	115.965	1.0838		
Total	112	1471			

Source: Authors' research

Considering the following significant indicators from **Table no. 8** to determine the

validity of the multiple regression model we found that:

$$F = 250.05586$$

$$\text{Significance } F = 5.65806E-57 < 0.05$$



Because the significance F is less than 0.05 it follows that the constructed multiple regression model is valid

In **Table no. 9**, we identified the value of the coefficients from the multiple regression model.

Table no. 9. Coefficients of independent variables								
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95%	Upper 95%
Intercept	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
X <sub>1</sub> – SC1	0.078	0.083	0.932	0.353	-0.087	0.243	-0.087	0.243
X <sub>2</sub> – SC2	0.041	0.141	0.289	0.773	-0.239	0.321	-0.239	0.321
X <sub>3</sub> - SCAL	0.308	0.159	1.934	0.046	-0.007	0.624	-0.007	0.624
X <sub>4</sub> - SW	0.208	0.166	1.249	0.214	-0.121	0.537	-0.121	0.537
X <sub>5</sub> - SVOL	0.286	0.081	3.551	0.0005	0.126	0.446	0.126	0.446

Source: Authors' research

The multiple regression model is as follows:

$$y = 0.078 \cdot X_1 + 0.041 \cdot X_2 + 0.308 \cdot X_3 + 0.208 \cdot X_4 + 0.286 \cdot X_5 + e$$

Where:

X<sub>1</sub> - Decreased electricity consumption – SC1,

X<sub>2</sub> - Reducing the number of printed documents – SC2,

X<sub>3</sub> - Consistency, quality and clarity of information – SCAL,

X<sub>4</sub> - Increasing labor productivity – SW,

X<sub>5</sub> - Evaluation of data processing generated by ERP – SVOL

According to the data presented in **Table no. 9**, we calculated the significance of each independent variable, these data being presented in **Table no. 10**.

Table no. 10. Significance of independent variables		
Independent variables	Variable significance calculation 100% – (p-value*100)	Significant / Insignificant
X <sub>1</sub> – SC1	64.64% < 95%	Insignificant
X <sub>2</sub> – SC2	22.73% < 95%	Insignificant
X <sub>3</sub> – SCAL	95.40% > 95%	Significant
X <sub>4</sub> – SW	78.57% < 95%	Insignificant
X <sub>5</sub> - SVOL	99.94% > 95%	Significant

Source: Authors' research

According to the data in **Table no. 10**, the regression model would remain only two terms, because they are significant (between the independent variables SCAL and SVOL and the dependent variable US is a

significant relationship), and the regression model would look like this:

$$y = 0.308 \cdot X_3 + 0.286 \cdot X_5 + e$$

Where:

X<sub>3</sub> - Consistency, quality and clarity of information – SCAL

X<sub>5</sub> - Evaluation of data processing generated by ERP – SVOL

The reason for which only two factors were identified as significant in the regression model (i.e., consistency, quality and clarity of information, as well as the evaluation of data processing generated by ERP), while the others were not selected by the respondents might be due to the large number of young respondents at the beginning of their careers.

Regarding the role of ERP systems, respondents stated that they have a major impact on production and services, then on business infrastructure and then on business processes.

To the open question "Other comments", the respondents did not have any other comments.

## Conclusion

The aim of this paper is to highlight the impact of ERP systems on the performance and sustainability of small, medium or large companies, given the evolution of information systems and information technology, in which the organization must implement integrated ERP systems as efficient as possible to achieve the desired results and meet their set goals in time (example: performance goals, sustainable development goals). At the same time, ERP systems must meet the requirements of the organization and provide real-time financial information - accurate and complete

accounting. As long as ERP systems provide accurate and complete financial-accounting information, managers will make the best decisions.

The results obtained from the questionnaire show that the representative factors (X<sub>3</sub> - consistency, quality and clarity of information - SCAL, X<sub>5</sub> - evaluation of data processing generated by ERP - SVOL) have a significant influence on the dependent variable (y - Use of an ERP system contributes to the sustainable development of the company - US). Based on the information and analysis performed, we can conclude that ERP systems have a key role in improving financial activity (this is confirmed by the independent variable in the regression model called "consistency, quality and clarity of information") and in the sustainable development of small, medium or large firms.

ERP systems have the role of automating accounting activities, ensuring transparent information to substantiate managers' decisions, but also to ensure the sustainable development of small, medium or large companies. Thus, we consider that ERP systems are indispensable for any organization in carrying out its activities, especially since based on the information provided by these systems important decisions are made by managers. Thus, no manager can ignore the importance of ERP systems in the organization, because information technology is constantly evolving, especially in the future it is expected that the technology "online accounting will change the accounting profession" (Ionescu, Prichici and Tudoran, 2014, p 15).

In conclusion, integrated ERP systems are very useful in any organization and can help improve their performance and sustainability.

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