

THE USE OF ERP SYSTEMS IN THE CONTEXT OF THE COVID-19 PANDEMIC

Laura – Eugenia – Lavinia Barna¹

Abstract

The evolution of ERP systems in the last decade has allowed a series of facilities for users of financial - accounting information from the stage of data processing to the stage of their analysis, thus helping to substantiate the decisions taken by the company's management. The current article aims to analyze the benefits offered by ERP systems to users of financial-accounting information in the context of the COVID-19 pandemic.

The research method used was based on a quantitative research, analyzing the main benefits of ERP systems in the context of the COVID-19 pandemic.

Among the results obtained by the author were the increase in the degree of automation of the daily tasks performed by the users of financial-accounting information, as well as the reduction of the inefficient consumption of resources.

Keywords: ERP systems, COVID-19 pandemic, automation, financial-accounting data

JEL classification: M15, M40, M41

1. Introduction

In 2019, the COVID-19 pandemic appeared in Wuhan, a deadly virus that spread very quickly and caused people to die. So that at the beginning of 2020, this virus spread throughout the world, causing, in addition to the large number of illnesses and deaths, a series of difficulties in people's daily activities as a result of the lockdown (both in the field of education, as well as in the business field).

Thus, in order to be able to continue the activity, it was necessary to move it to the online environment. More and more communication platforms (Teams, Zoom, Google Meet) have been improved to ensure continuity of activities (Shazad et al., 2021), including ERP systems that ensure efficient data processing and centralization.

The purpose of this article is to show the main benefits of ERP systems in the context of the COVID-19 pandemic.

The article is structured as follows: a review section of the specialized literature where the concepts were defined, a section presenting the research method approached, a section analyzing the results obtained as a result of the research method used and presenting the conclusions of the article.

2. Review of specialized literature

Digital evolution has led to the improvement of a large number of activities carried out by people, a concept that has developed even more as a result of the outbreak of the COVID-19 pandemic (Acosta, 2020). According to Kruszynska-Fischbach et al. (2022), the COVID-19 pandemic has forced many countries to implement a variety of restrictions to prevent the spread of this deadly virus. This was also confirmed by the authors Obrenovic et al. (2020) and Neumann et al. (2021). Thus, the evolution of digital transformation has determined the creation of new business models, but also significant changes in the organization of the activities carried out by companies.

According to Buk and Wiercioch (2021), "the COVID-19 pandemic accelerated the digitization process" of the activities carried out by companies (Demirci et al., 2020).

Acosta (2020) states that new technologies aim to "replace repetitive manual tasks". Al-Okaily (2021) is of the opinion that new technologies (such as ERP systems) have the role

¹ Bucharest University of Economic Studies, PhD student

of processing and centralizing data, so as to better substantiate managers' decisions regarding the resources used and the company's activity.

Companies have always tried to adopt a procedure for streamlining and improving processes (Wanasida et al., 2021). Thus, more and more companies decide to implement ERP systems because they allow the storage of data processed by different departments in a single database (ERP systems database).

ERP systems are defined as an integrated IT system used to manage a large volume of both data and resources (Pareek, 2014; Hrishev, 2020; Kitsantas, 2022). ERP systems offer a series of benefits, among which the following can be listed and these are presented on figure 1:



Figure 1. The benefits of ERP systems
Source: Pareek, 2014

3. Research methodology and results analysis

The research method used was a quantitative analysis, focused on a questionnaire distributed to students and employees in the financial - accounting field. The sample of respondents consists of 112 people aged between 20 and 65 years. The data were collected between October 20, 2022 - November 7, 2022.

The residential environment from which the respondents come is mostly in the urban area (figure 2).

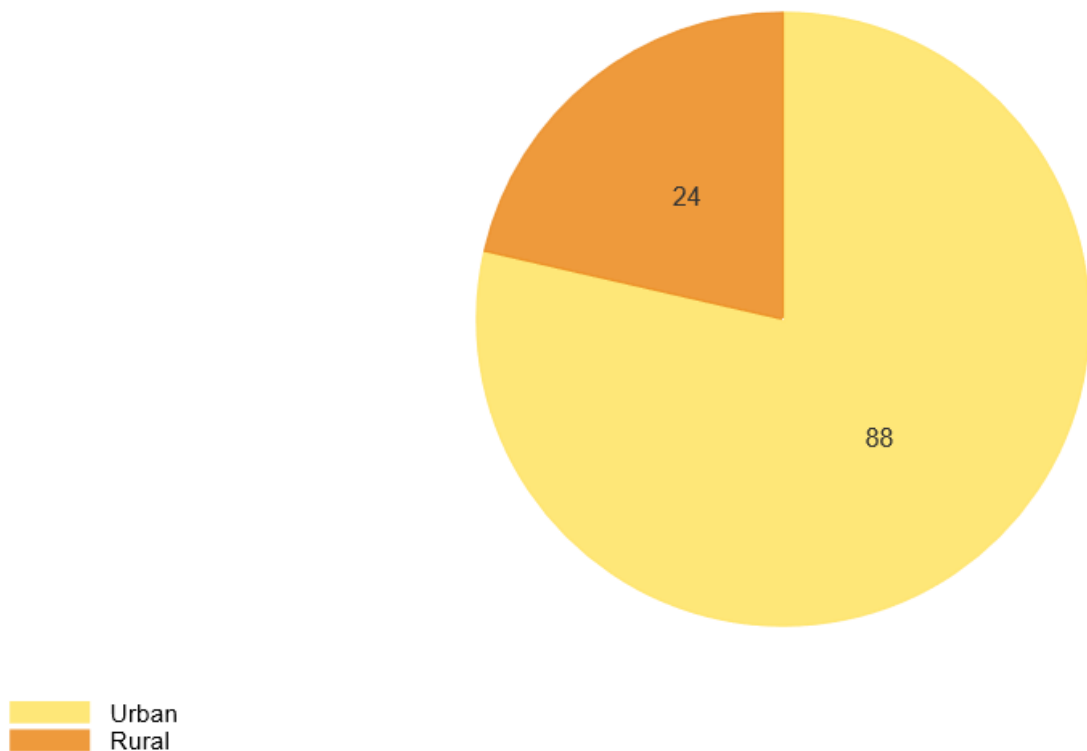


Figure 2. Residential environment
Source: Author's creation

Approximately 71% of the respondents have completed bachelor's studies, 26.5% have completed master's studies and only 2.5% have completed PhD studies. Following the survey, we noticed that the sample of respondents consists of 72.3% people who are employed in the economic field (approximately 77%), IT (8%) and the rest in other fields of activity.

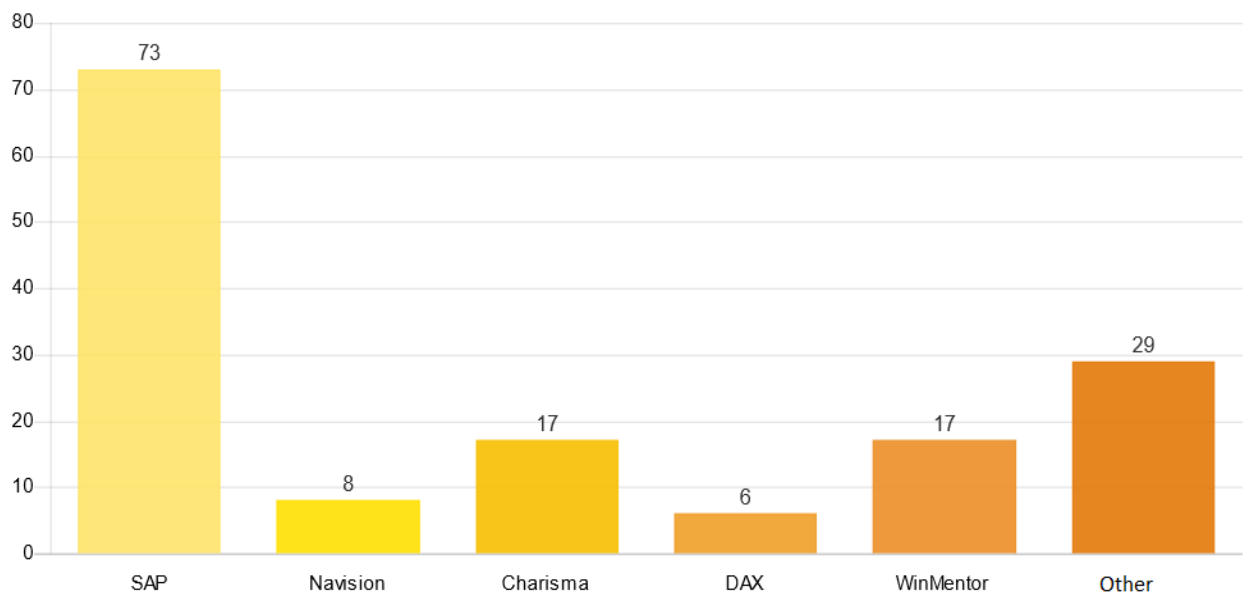


Figure 3. The ERP systems used by the respondents
Source: Author's creation

The most used ERP system by the respondents is SAP, they consider that the interface and modules ensure easy access to the processed information.

In the "Other" section, they said that they used B-org, Saga, Sage, Ciel, Sun System, Windone, Oracle etc.

As a result of the COVID-19 pandemic, where most activities have "migrated" to the online environment, the respondents noticed that these systems were improved to ensure efficiency in working from home, improving the performance of both employees and the company and improving work productivity. The tasks performed with the help of ERP systems were evaluated by the respondents as being automated in a percentage of 75%. Manually processed data has been reduced as a result of the use of ERP systems.

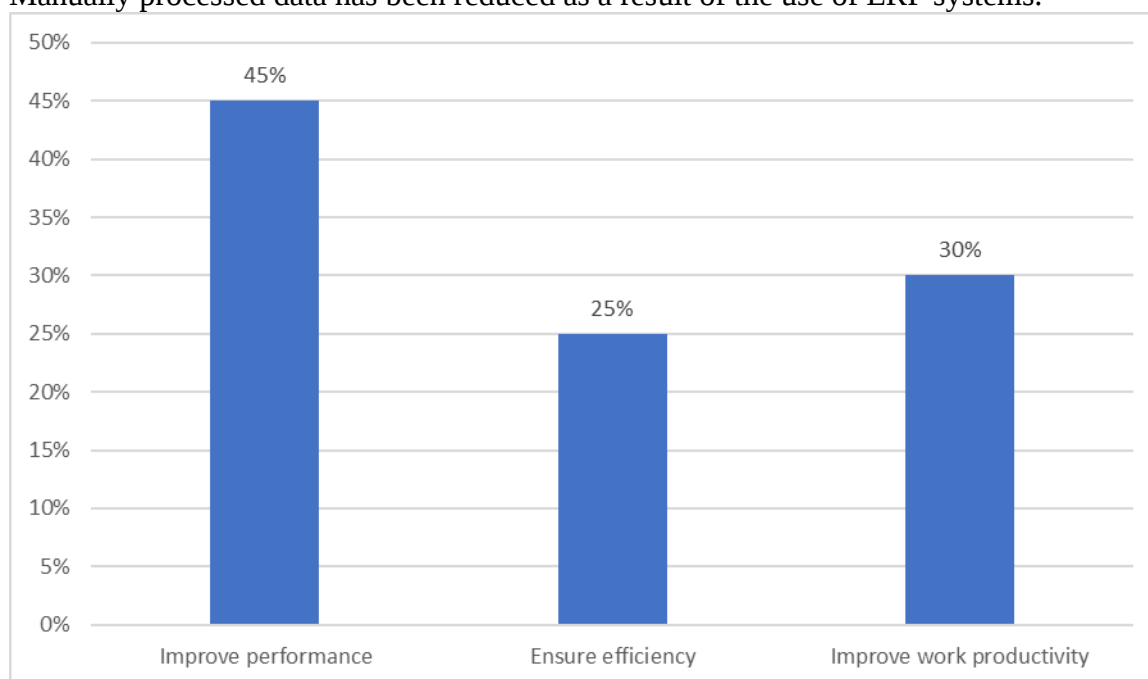


Figure 4. Aspects identified by the authors

Source: Author's creation based on sample

The companies tried to ensure a place as favorable as possible for employees, with the aim of ensuring that all their needs are met and that the activity is carried out in good conditions.

The future of occupations after COVID-19 pandemic are presented in figure 5:

The mix of occupations may shift by 2030 in the post-COVID-19 scenario.

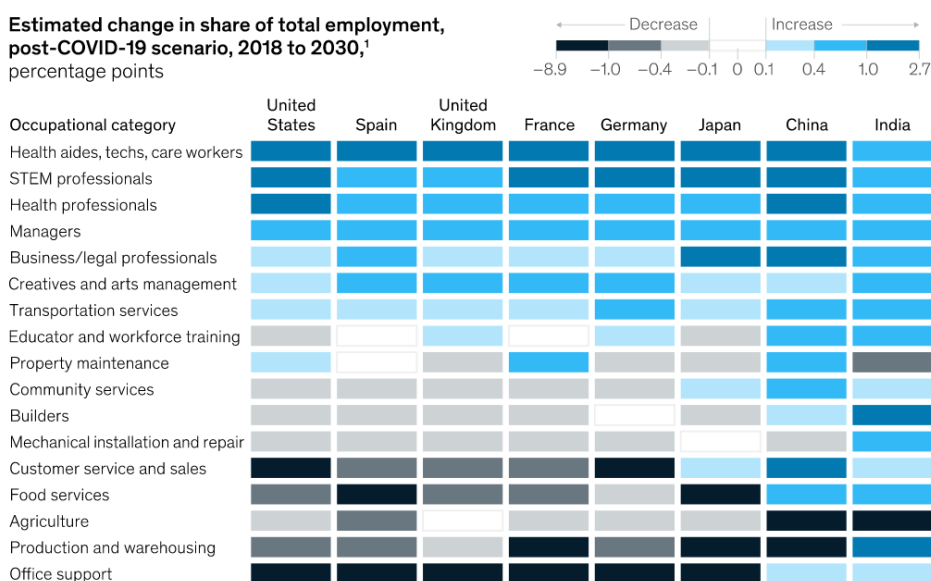


Figure 5. The mix of occupations may shift by 2030 in the post-COVID-19 scenario
Source: McKinsey Global Institute analysis, 2021

Other respondents are of the opinion that in the case of the COVID-19 pandemic, many of them felt the lack of colleagues or the decrease in productivity at work. Also, as a result of working from home, many people have developed depression or anxiety states, a greater degree of nervousness, sadness and other symptoms that they believe they developed as a result of the lack of physical interaction at the office.

As a result of the COVID-19 pandemic, many companies have identified the opportunity to thus reduce energy consumption and resources consumed in the office, thus trying to become green businesses. So that many companies have engaged in various sustainable development projects, providing training programs to employees. Thus, the employees were very receptive and agree with the idea that their company should develop sustainably.

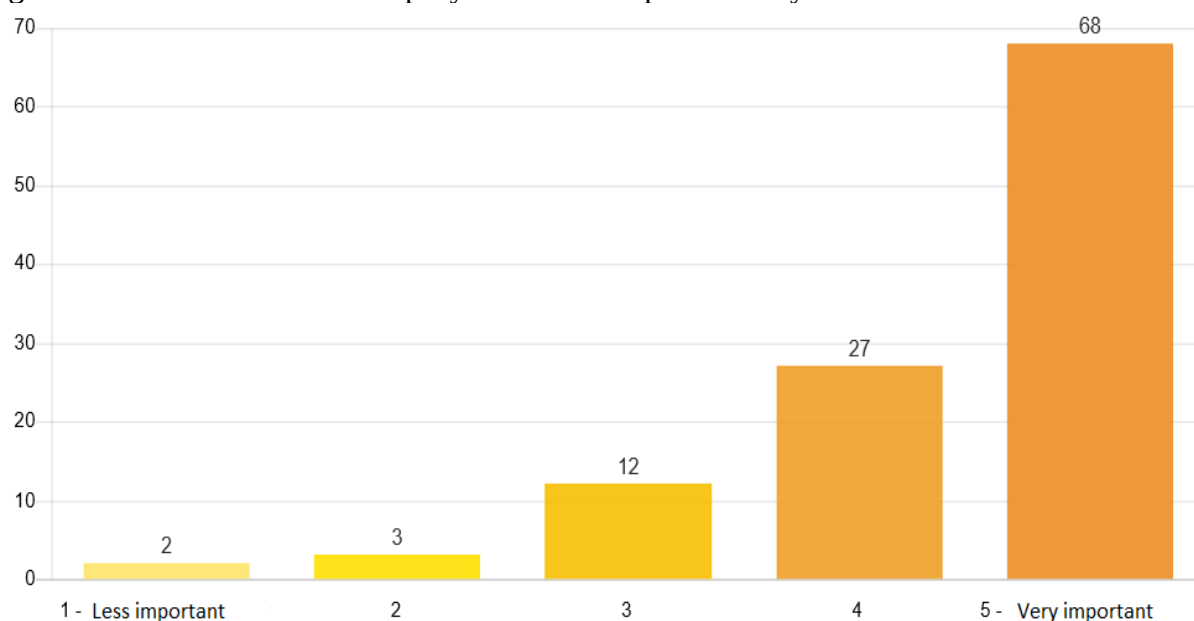


Figure 6. Appreciating the idea of protecting the environment and conserving resources
Source: Author's creation based on sample

Most respondents agreed on a scale from 1 to 5, with the maximum score of 5 representing that they agree with the idea of protecting the environment and preserving resources.

To the question "Do you think that sustainability should receive more attention within companies?", 62 of the respondents gave the highest score, resulting in an average of approximately 4.38 on a scale from 1 to 5.

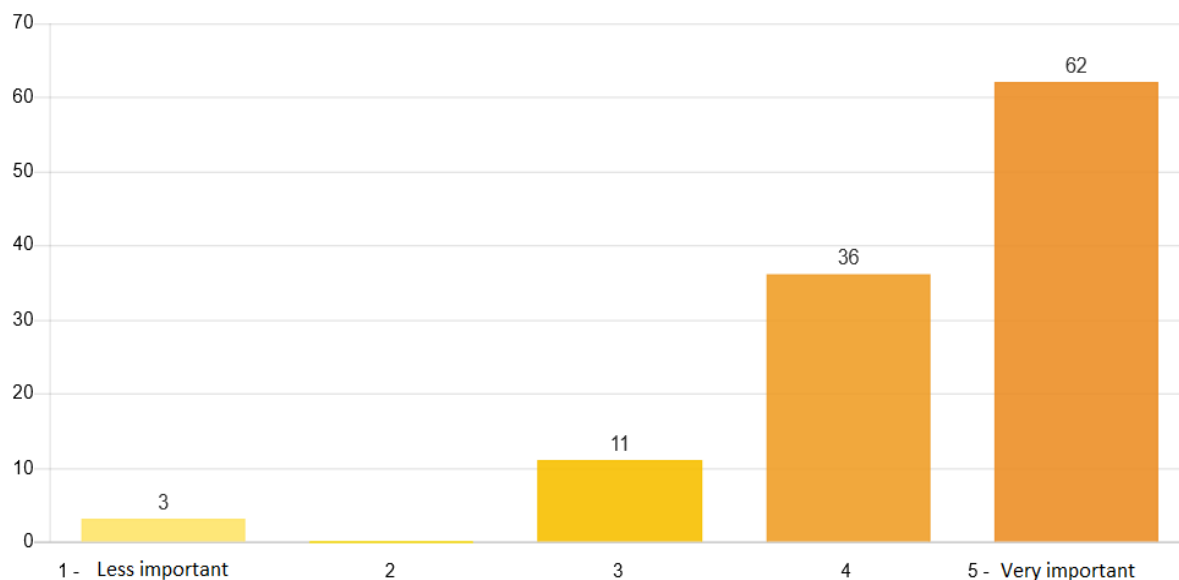


Figure 7. Sustainability should receive more attention within companies

Source: Author's creation based on sample

In the next section, author present the final conclusion based on the results of the survey and the articles studied.

4. Conclusion

The COVID-19 pandemic has affected most areas of activity, in some cases even forcing the digitization of a large number of activities. The digitalization of business processes determined a different impact of the way in which the company's activities were approached in the past.

Many companies decided during the COVID-19 pandemic to implement ERP systems, as a result of the multiple benefits offered by these systems. The modular structure of ERP systems allows each module to easily adapt to each department within the company. All data processed with these systems are stored in the system's database, ensuring quick access to information for the company's employees. Access to the data stored in the database of the ERP system is based on a user name and a password, so as to ensure the security of this data.

As a result of the results obtained with the help of the survey, the author came to the conclusion that ERP systems have the ability to increase productivity and work efficiency.

In conclusion, the use of ERP systems during the COVID-19 pandemic brought many benefits to users and companies, both from the perspective of data processing and storage, and from the perspective of the advantages offered to the company to develop sustainably.

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