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## **IMPLEMENTATION OF INTERNAL CONTROL WITH REFERENCE TO THE APPLICATION OF "IT" IN COMPANIES OPERATING ON THE PRINCIPLES OF THE GREEN ECONOMY**

### **SUMMARY**

The process of introducing internal control in the operations of companies that operate with the introduced principles of environmental protection and principles based on the green economy is inextricably linked. The process of introducing internal control depends on the decision made and the will of the company's top management to implement the control system in its regular operations. The implementation of the internal control system is a long process. Its practical application should be carried out by motivated and professional staff who are maximally determined to use the achievements of the IT sector, as well as the application of international accounting standards, financial reporting standards and external and internal audit standards. In this paper, the authors pointed out that only the connection of several sectors in the company is subject to the work of internal control from the beginning to the end of the process of making business decisions and decisions related to management at all levels of management in these companies. Internal control should use new knowledge in its work and make the most of the advantages of the application of the dynamically developing IT sector, especially in the last decade in all economies.

**Keywords:** internal control, green economy, company sectors, IT.

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## INTRODUCTION

The main players in rural development are for instance, factors as impact of technologies, development of domestic and foreign markets, benefits in communication and transport and population migration (Dudić *et al.*, 2020). Modern management of companies, regardless of the activity in which the company operates, requires top management to apply and introduce internal control mechanisms (Wyatt, 2004; Wu *et al.*, 2016, Popović, 2015; Popović *et al.*, 2015; Rodriguez *et al.*, 2019; Radović *et al.*, 2019) into the regular business of the company.

The functioning of the work of an internal auditor in a company that functions according to the adopted principles of green economy in companies in the Republic of Serbia should be viewed as a process (Popović *et al.*, 2020). Management based on the application of internal control requires the engagement of motivated workers in the control sector who will use modern technology and especially the application of IT (Toković, 2011) to organize internal control (Radović *et al.*, 2011) in all parts of the company, to improve control of all parts of the company, i.e. with the aim of improving control in all sectors of the company.

In addition to the application of new innovative solutions in the establishment of internal control, companies strive to make important business decisions by top management, the same and introduce the practical application of already adopted standards in business, such as international accounting and other standards (Daske *et al.*, 2008; Han, 2017; Popović *et al.*, 2017).

The application of standards in production is particularly pronounced in agricultural production (Bojović *et al.*, 2019; Terzić *et al.*, 2019; Rajičić *et al.*, 2020; Ljubičić *et al.*, 2021; Ugrenović *et al.*, 2021; Jovović *et al.*, 2021). Within agricultural production, the goal of introducing internal control is to reduce all risks in production (Popović, 2015) in order to achieve the best possible business, financial and other business goals (Cheng *et al.*, 2013).

It is important to point out that the entire process of implementing the introduction of internal control in companies is a long and comprehensive process (Damodaran, 2007; Cantino, 2009; Lee, 2019) which requires the application of long-term solutions that will adopt top management in business and implementation in future production and business periods business.

Viewed in this way, the top management of the company, i.e. top management that has a clear vision of long-term development of a modern company with the application of internal control has a chance to achieve general business success.

Top management should adopt general and important postulates of basic company management (Williams, 2010) in order to achieve the best possible business results in business. The connection between internal controls should be viewed in the context of linking internal control and internal audit (Radović *et al.*, 2019a) as a factor that will contribute to increasing the business security of a large number of very heterogeneous companies.

In this paper, the authors draw attention to the importance of observing internal control, the application of which can improve performance, especially in agriculture, but also in companies that operate according to the adopted principles of the green economy.

The aim of the author was to present internal control as a mechanism by the application of which top management will be able to significantly improve the business of companies in companies in which it performs the function of management.

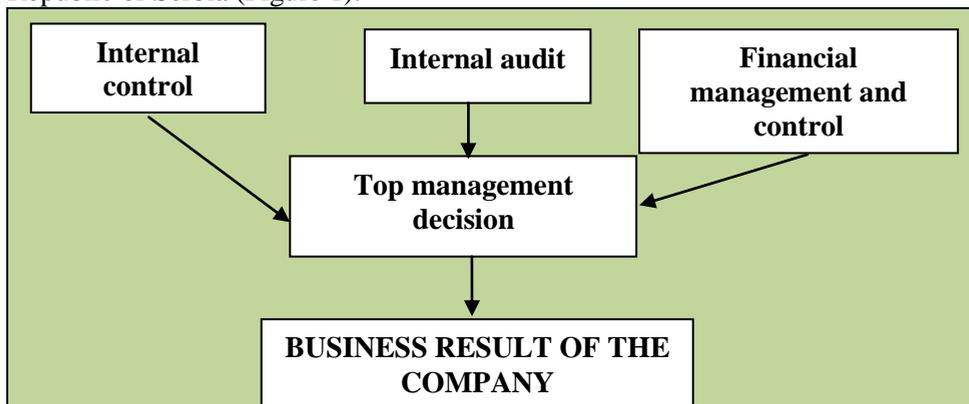
## MATERIAL AND METHODS

In preparing this study, the authors used the already stated views of the authors on issues of corporate governance. The previously stated views of the authors especially referred to those companies that had introduced some form of internal control mechanisms in their regular business (Banaszevska, 2017; Chen et al., 2017).

The essential authors of this study have already accepted the so-called generally accepted attitudes of the authors regarding the use of primarily internal control in the regular operations of the company (this referred to the discovery of the benefits of using internal control, especially regarding achieving positive overall business results in the company and reducing the overall risk to the company). Using the methods of collecting real data from the top management of the company, they are classified into units that correspond to the established functions in the company.

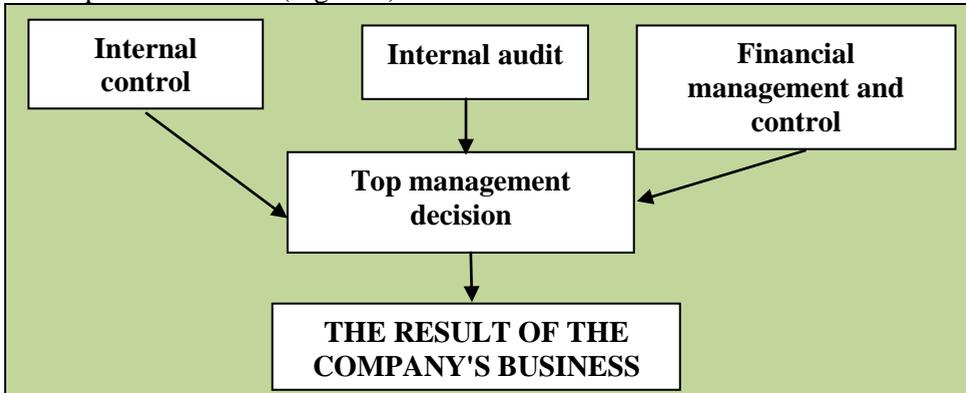
## RESULTS

Successful top management is looking for finding a model of internal control organization that will be close to optimal management in companies. Respecting the above, the authors gave an overview of a possible model in which the key phases of internal control mechanisms are given, which is important for business decision-making in companies in a transition country such as the Republic of Serbia (Figure 1).



**Figure 1.** A model that applies the work of internal control mechanisms in the decision-making process of top management in companies that have accepted the principles of the green economy. **Source:** Authors (2021).

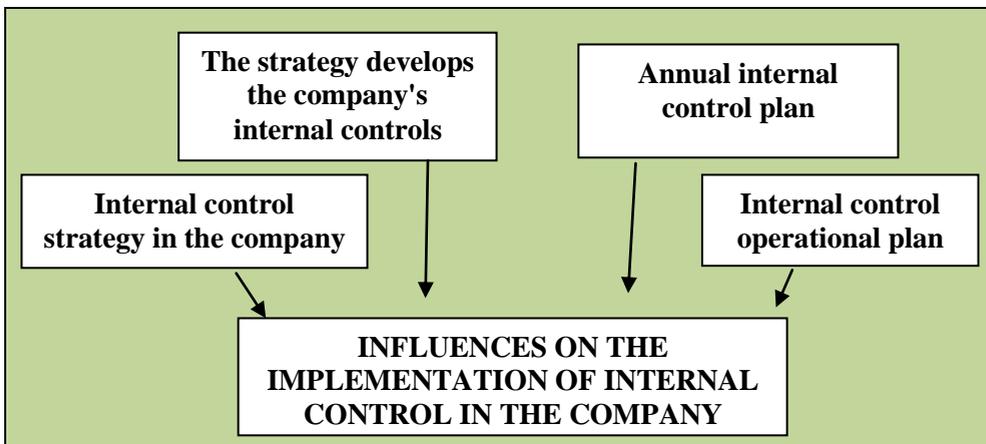
Improvements in companies' operations in terms of implementation of internal control mechanisms and internal control depend on the existence of the application of numerous standards in companies' operations. The authors presented the possible application of standards in business and work of internal control mechanisms in companies that accept the principles of green economy in the Republic of Serbia (Figure 2).



**Figure 2.** A model based on top management with the use of standards in the management of companies that have accepted the principles of the green economy.

**Source:** Authors (2021).

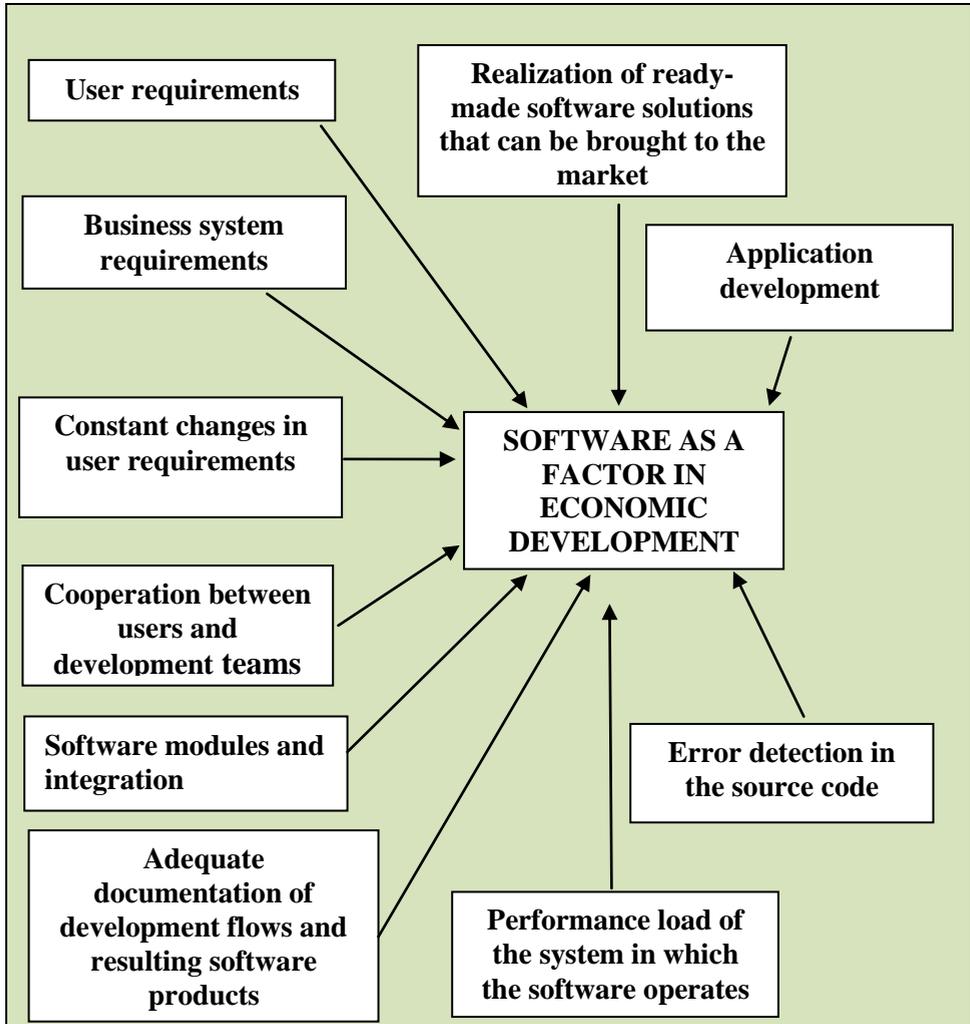
In the following, the authors gave a possible schematic presentation of the impact on the adoption and implementation of the policy of implementation of internal control in a company that wants to operate on the principles of green economy, which is shown in Figure 3.



**Figure 3.** Model based on respecting the influence of external and internal factors on the decision-making process of internal control in the management of companies that have accepted the principles of the green economy.

**Source:** Authors (2021).

The application of software in companies that mainly perform activities in the field of environmental protection and the so-called green economy should be viewed as a dynamic system. Such a system in which the key components change dynamically is constantly evolving and is subject to change and adaptation to the requirements of users and top management.



**Figure 4.** An overview of the possible impacts of software on the economic development of companies operating in the field of green economy.

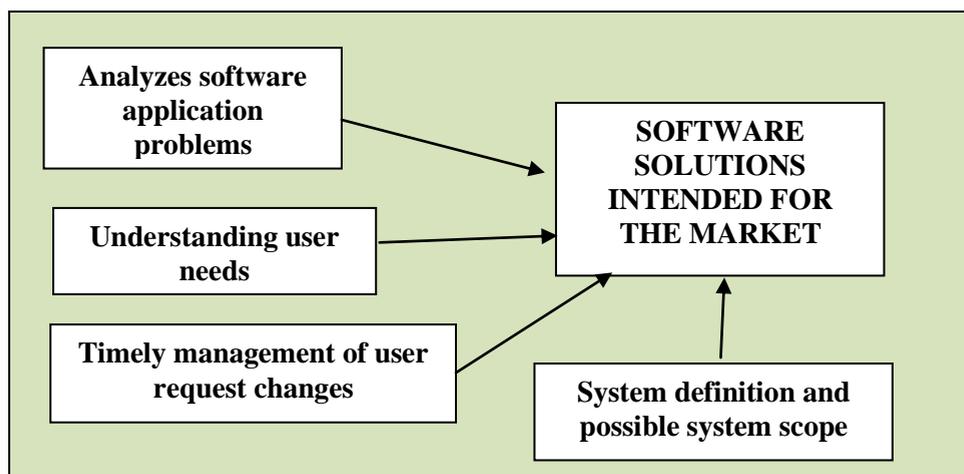
**Source:** Authors (2021).

Software development implies the development of continuous processes that are essentially innovative and development for the entire company. If they develop in a large number of such and other companies, there is a better life in the

country and the economic development of the country moves in the direction of rapid development that is dynamic and fast.

The authors reinforced the above on the basis of the presentation in Figure 4, where they gave an overview of possible impacts on the development of the economy, i.e. the observation was done primarily by observing the development of companies that mainly perform activities in the field of green economy.

In the following, the authors provide an overview that explains the connection between software development and practical requirements of software users or buyers, which in companies dealing with the green economy practically means that the requirements of top management of these companies are shown in Figure 5.



**Figure 5.** An overview of possible user requirements, ie requirements sent by top managers of companies that perform the predominant activity in the field of green economy.

**Source:** Authors (2021).

Based on the overview given in Figure 5, it is clear that there are a large number of heterogeneous requirements that can be placed by top managers of companies before software development companies.

## DISCUSSION

The obtained basic results obtained by the authors of the study are presented in the form of possible models that could be practically used primarily in terms of the implementation of internal control in the operations of companies operating on the principles of green economy.

The results obtained by the authors of the study are presented in the form shown in Figures 1-3. They are compatible with the already published views (Alibegović *et al.*, 2018) because they essentially group the control functions in the company within the real possible model of behavior of the top management of the company.

The stated views were strengthened with the obtained research results, which referred to the presentation of the software and its practical application for the business of the mentioned companies.

The presentation of the results regarding the application of software obtained by the authors of the study are given in the form of the presentation in Figures 4-5. The results obtained by the authors of the study coincide with the already published views (Toković, 2011) and essentially reflect the expression of the importance of the practical application of software in the business of companies that operate according to the principles of the green economy.

It is important to note that these companies must develop the required software performance in accordance with user requirements at the optimally required level. Software development should be viewed as a continuous process that is constantly in the process of finding the best innovative solutions. The development of software in companies that base their existence on the principles of the green economy should be aimed at meeting the essential needs of companies that will be able to compensate the costs of creating a software solution for the company as a customer.

## CONCLUSIONS

The functioning of internal control mechanisms, primarily internal control in companies that operate according to the adopted principles of green economy in companies in the Republic of Serbia, should be exclusively in the form of a continuous process mechanism introduced by top management in companies.

Top management companies have an interest in developing a system of internal control mechanisms.

The first conclusion would be that the authors emphasized the importance of implementing internal control as a system that will be able to improve the business of companies operating in the field of green economy.

Another conclusion would be that the authors in this paper pointed out the existence of increasing importance of the implementation of internal control as a mechanism that can give positive results in the regular business of companies.

The third conclusion that can be pointed out after the presentation in the paper would be that companies based on the requirements of top management in their business should fulfill the objectivity, expertise and responsibility of business where the development of software solutions will certainly contribute as a key auxiliary mechanism of overall management.

Finally, the authors emphasize the comprehensive position arising from this paper that companies that have not yet conducted internal control should create the conditions for its introduction, because there are essentially many benefits within which top management will have as an imperative to introduce internal control mechanisms, especially internal controls as a factor by which it will be possible to develop better, safer and generally acceptable management in companies that predominate in the field of green economy.

## REFERENCES

- Alibegović, D., Hodžić, S. & Bečić, E. (2018): Limited Fiscal Autonomy of Croatian Large Cities, *Lex Localis – Journal of Local Self-Government*, 16(1): 107 – 128.
- Banaszewska M. (2017): Stabilność polityki fiskalnej w polskich województwach, *Research papers of Wrocław University of Economics*, 482: 9–16.
- Bojović, R., Popović, V., Ikanović, J., Živanović, Lj., Rakašćan, N., Popović, S., Ugrenović, V. & Simić, D. (2019): Morphological characterization of sweet sorghum genotypes across environments, *The Journal of Anim. Plant Sciences*, 29 (3): 721-729.
- Cantino, V. (2009): Korporativno upravljanje, merenje performansi i normativna usaglašenost sistema internih kontrola, Beograd, Data Status.
- Chen, H., Wang, D. & Zhou, N. (2017): A Comprehensive and Quantitative Internal Control Index: Construction, Validation, and Impact, *Review of Quantitative Finance and Accounting*, 49: 337-377.
- Cheng, M., Dhaliwal, D. & Zhang, Y. (2013): Does Investment Efficiency Improve after the Disclosure of Material Weaknesses in Internal Control over Financial Reporting?, *Journal of Accounting and Economics*, 56: 1-18.
- Damodaran, A. (2007): Korporativne finansije: teorija i praksa, Podgorica, Modus.
- Daske, H., Hail, L., Leuz, C. & Verdi, R. (2008): Mandatory IFRS Reporting Around the World: Early evidence on the economic consequences. *Journal of Accounting Research*. 46: 1085-1142.
- Dudić, B., Dudić, Z., Pejanović, R., Škatarić G., Saxunová D. & Peráček T. (2020): The rural policy of Slovakia after joining the EU. *Agriculture and Forestry*, 66(3):33-51.
- Han, Y. (2017): Has the “Non-Clean” Internal Control Audit Opinion Received Sufficient Attention?—Evidence from the Perspective of Creditors, *Journal of Central University of Finance and Economics*, 8:57-64.
- Jovović, Z., Dolijanović, Z, Spalević, V, Dudić, B, Przulj, N, Velimirović, A. & Popović, V. (2021): Effects of Liming and Nutrient Management on Yield and Other Parameters of Potato Productivity on Acid Soils in Montenegro. *Agronomy - Basel*. 11 (5): 980. <https://doi.org/10.3390/agronomy11050980>
- Lee, J. (2019): Regional heterogeneity among non-operating earnings quality, stock returns, and firm value in biotech industry. *Agric. Econ. – Czech*, 65: 10-20.
- Ljubičić, N., Popović, V., Ćirić, V., Kostić, M., Ivošević, B., Popović, D., Pandžić, M., El Musafah Seddiq & Janković, S. (2021): Multivariate Interaction Analysis of Winter Wheat Grown in Environment of Limited Soil Conditions. *Plants–Basel*. 10 (3): 604; <https://doi.org/10.3390/plants10030604>
- Popović, D., Vitomir, J., Jokić, M., Arnautović, I., Vrhovac, D., Barović, N., Vujinović, K. & Popović, S. (2020): Implementation of internal audit in companies intending to operate on the principles of green economy in the Republic of Serbia. *Agriculture and Forestry*, 66 (2): 93-98.
- Popović S, (2015): Implementacija heterogenih rizika u radu interne revizije, Revizor 69/2015, Institut za ekonomiku i finansije, Beograd.
- Popović, S., Ugrinović, M. & Tomašević, S. (2015): Upravljanje menadžmenta poljoprivrednog preduzeća preko praćenja ukupnih troškova održavanja traktora, *Poljoprivredna tehnika*, 2: 101-106.
- Popović, S., Novaković, S., Đuranović, D., Mijić, R., Grublješić, Ž, Aničić, J. & Majstorović, A. (2017): Application of international accounting standard-16 in a public company with predominantly agricultural activities, *Economic Research-Ekonomska Istraživanja*, 30(1):1850–1864.

- Radović, M., Vitomir, J., Laban, B., Jovin, S., Nastić, S., Popović, V. & Popović S. (2019): Management of joint-stock companies and farms by using fair value of agricultural equipment in financial statements on the example of IMT 533 Tractor, *Economics of Agriculture*, 1: 35-50
- Radović, M., Vitomir, J. & Popović, S. (2019a): The Importance of Implementation of Internal Audit in Enterprises Founded by the Republic of Serbia, *LEX Localis-Journal of Local Self-Government*. 17 (4), 1001–1011.
- Radović, M., Vitomir, J. & Popović, S. (2021): Impact of internal control in enterprises founded by local self-government units: the case of Republic of Serbia, *Inzinerine Ekonomika-Engineering Economics*, 32(1): 82–90.
- Rajičić, V., Popović, V., Perišić, V., Biberdžić, M., Jovović, Z., Gudžić, N., Mihailović, V., Čolić, V., Đurić, N. & Terzić, D. (2020): Impact of Nitrogen and Phosphorus on Grain Yield in Winter Triticale Grown on Degraded Vertisol. *Agronomy – Basel*, 10 (6): 757-767. <https://doi.org/10.3390/agronomy10060757>
- Rodriguez, M., Miguel, Sanchez, L., Cejudo, E. & Antonio, C. (2019): Variety in local development strategies and employment: LEADER programme in Andalusia. *Agric. Econ. Czech*, 65: 43-50.
- Terzić, D., Popović, V., Malić, N., Ikanović, J., Rajičić, V., Popović, S., Lončar, M. & Lončarević, V. (2019): Effects of long-term fertilization on yield of siderates and organic matter content of soil in the process of recultivation. *The Journal of Anim. Plant Sciences*. 29 (3): 790-795.
- Toković, T., (2011): Softverske komponente u razvoju arhitektura poslovnih aplikacija - Magistarska teza, Ekonomski Fakultet u Subotici, Univerzitet u Novom Sadu.
- Ugrenović, V., Popović, V., Ugrinović, M., Filipović, V., Mačkić, K., Ljubičić, N., Popović, S. & Lakić, Ž. (2021): Black Oat (*Avena strigosa* Schreb.) Ontogenesis and Agronomic Performance in Organic Cropping System and Pannonian Environments, *Agriculture*, 11(1): 55.
- Williams, C. (2010): Principi menadžmenta, Data Status, Beograd.
- Wyatt A, (2004): Accounting professionalism: they just don't get it! *Accounting Horizons*, 18: 45–53.
- Wu, X., Yang, Y.L. & Chen, X.X. (2016): Is the Market Response of “Non-Clean” Internal Control Audit Opinion? M. (2017): Stabilność polityki fiskalnej w polskich województwach, *Research papers of Wrocław University of Economics*, 482: 9–16.