

SOCIAL IMPACT ON TRAFFIC SAFETY OBSERVED THROUGH THE PROCESS OF APPLICATION OF DIGITALIZATION IN A SOCIETY DIRECTED TO TRANSITION PROCESSES LIKE THE REPUBLIC OF SERBIA

Tamara Dragic¹

Abstract: The process of applying digitization is a continuous process of translating an object, image, sound, document or signal (usually analogy) into a digital form, which is widely used in numerous economic activities and therefore also in the traffic industry. This is of particular importance for transition economies like the Republic of Serbia. The result of the digitization process is a digital object, i.e. a digital image for an object, or a digital form for a signal that is increasingly used in traffic as an economic activity. Literally speaking, digitization is the recording of an analogy signal in digital form. What would mean for the document that the image of the object follows the visual identity, frames and structure of the object itself, in this case it is about converting and directing digital images in the process of traffic as an economic activity, which should generally be seen as a factor of social influence and importance for the economy in particular transition economies.

Keywords: *Digitization, traffic, security, transition economy, application.*

1. INTRODUCTION

Digitization is a process that should be viewed as a continuous process of development primarily in the context of improving management decisions both at the level of business operations and at the level of economic activities [1-8]. The digitization process belongs to relatively new and applicable innovative processes that cannot be viewed separately from the set goals of business both in individual legal entities and within the economy as a whole [9-14]. The process of digitization should be viewed as a total social process where the influence essentially comes to the fore, namely the social influence on

¹Megatrend University 11070 New Belgrade, Bulevar Mihajla Pupina 117, Republic of Serbia, E-mail: univerzitet@megatrend.edu.rs



many social relations in the business operations of numerous subjects in a primarily developing economy [15-17].

In this way, digitization and its impact affects the business of a large number of legal entities, especially in certain economic activities such as transport [18-25], but also other activities that we primarily observe and appreciate as development activities of great importance for transitional countries such as the Republic of Serbia.

2. THE SIGNIFICANCE OF SOCIAL INFLUENCE ON TRAFFIC SAFETY AS AN BUSINESS BRANCH IN TRANSITION ECONOMIES

The importance of the social impact on traffic safety as an economic branch in transition economies is gaining more and more importance, which can be measured primarily through the overall social influence on the operations of the transition economy first of all. Social influence in the area of traffic safety is defined through:

1. Traffic conditions (size and structure of traffic flow, traffic density, presence of other traffic participants, traffic regime, etc.),

2. Traffic relations (tolerance, concession of priority, ability to satisfy different interests, patience in satisfying one's interests, etc.),

3. General personality characteristics (psychophysical health, general education, traffic education, level of traffic culture, etc.),

4. Social environment (work and family environment, interpersonal relationships, etc.),

5. Legal system (organization, functionality, flexibility, etc.).

A significant number of studies have pointed to the connection between traffic offenders and place of birth. Namely, it was observed that the length of stay in rural areas has an impact on the speed of adaptation to the urban environment, and thus on traffic behaviour. This is indicated by the fact that when changing one's place of residence, a considerable period of time is needed to adapt to the new conditions of the environment, and this adaptation is often more difficult if the length of stay in an area with underdeveloped traffic was longer. T. Dragic; Vol.8.Iss.3. (Oct.2024) 15 - 22 https://doi.org/10.52576/TEMEL2483015d



Technology | Engineering | Management | Entrepreneurship | Learning | International Journal

Based on previous research, a reliable conclusion about the influence of the level of education on traffic behaviour has not been obtained, although there is an assumption that a low level of education can have an unfavourable effect on slower navigation and mastering of complex traffic situations. A large number of psychological research and findings have indicated that conflicts in the family have a significant impact on the behaviour of drivers in traffic. Under the influence of problematic relationships in the family, road users become irritable, have difficulty concentrating, are intolerant towards other road users and do not take into account regulations and traffic behaviour.

An illustration of the impact of the overall social impact on the safe functioning of traffic in one country is given in Figure 1.

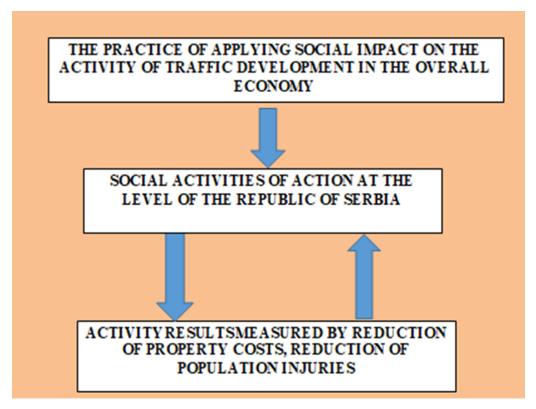


Fig. 1: Presentation of the results of the culture-traffic connection through the process of reducing traffic accidents, the costs arising on that basis. Source: Author, 2024.



3. COMPREHENSIVE OBSERVATION AND CHARACTERISTICS OF TRAFFIC IMPACTS THROUGH RESPECTING NUMEROUS HETEROGENEOUS IMPACTS ON TRAFFIC DEVELOPMENT IN THE REPUBLIC OF SERBIA

The comprehensiveness of the observation and features of the impact on traffic through the consideration of numerous heterogeneous influences on the development of traffic in the Republic of Serbia depends on the defined strategy and operational plans for the implementation of the improvement of traffic itself as an economic activity in the Republic of Serbia but also in other countries individually. In order for society to properly direct its actions and achieve efficiency in work results, it is necessary to have a defined traffic safety strategy. The traffic safety strategy should define the program and work plan, taking into account the specificities of the territory and available capacities. When analyzing the social impact on a person as a traffic participant, special attention must be paid to sociodemographic characteristics, and in particular:

- 1. Place of birth and residence,
- 2. School preparation,
- 3. Occupation,
- 4. Family status,
- 5. Economic income,
- 6. Indebtedness of the population,

7. The age of the population and others. first of all, socio-economic factors affecting the development of individual economic activities, and therefore traffic.

The social framework of the impact on the development of traffic can be shown through figure 2.

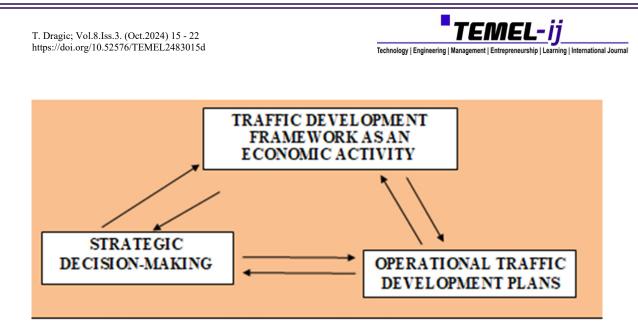


Fig. 1: Presentation of traffic development framework as an economic activity. Source: Author, 2024.

4. CONCLUSION

From the aforementioned research of the author, it is possible to see the directions of action of the companies in order to improve traffic safety, where a special emphasis is placed on the modern innovative approach of improving traffic through the application of the digitalization process. The basic help that society can and must provide is reflected in the impact of institutions on the family, preschool and school institutions, high schools and higher education institutions, as well as on the system of driver education for driving motor vehicles, while accepting the general possible impacts on society, activity, etc. All this can be achieved much more easily by applying digitization, because a large number of images, information, data related to traffic, performed controls, display of vehicle numbers, etc. are stored.

REFERENCES

[1] Bakmaz, O., Dragosavac, M., Jestrović, V., Radaković, M., Davidov, T., Bjelica, B, Brakus, A., Popović, D., (2023). Management of plant production (narcissus l.) Through the application of non-standard growing methods in order to increase the financial value of production, Economics of Agriculture, Year 70, No. 2.

[2] Popović, S., Laban, B., Vukasović, D., Ivić., M., Popović, V. (2018). Internal and external audit as a factor in improving the management of the Agricultural enterprise, Poljoprivredna tehnika, 4: 8–12.

[3] Popović, S. (2015). Implementacija heterogenih rizika u radu interne revizije, Revizor 69: 7-19.

[4] Bjelica, B., Bakmaz, O., Mijić, R., Popović, S. & Popović, V. (2017). The implementation of heterogeneous risk to the company's operations and transition countries respecting the behavior of agricultural enterprises in the republic of Serbia. Annals of the "Constantin Brâncuşi" University of Târgu Jiu, Economy Series, 3/2017, 207-213, ISSN 2344 – 3685/ISSN-L 1844 –7007.

[5] 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.

[6] Popović, S. (2014). Socio-ekonomski faktori ograničenja razvoja agrara, monografija, Fimek, Novi Sad.

[7] Bakmaz, O., Anđelić, S., Dragosavac, M., Grublješić, Ž., Nastić S., Popović, D., Tubić M. & Popović S. (2024). The importance of determining the efficiency of business of agricultural farms in relation to the use of credits in agriculture, the example of the Republic of Serbia, Agricultural Engineering, No. 1, 10-16.

[8] Popović, S., Tošković, J., Majstorović, A., Brkanlić, S. & Katić, A. (2015). The importance of continuous audit of financial statements of the company of countries joining the EU, Annals of the "Constantin Brâncuşi" University of Târgu Jiu, Economy Series, Special Issue, 241-246.

[9] 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.

[10] Ivaniš., M. & Popović., S. (2013). Altmanov Z-Score model analize, Ekonomija-teorija i praksa br.2, Fakultet za ekonomiju i inženjerski menadžment, Univerzitet Privredna akademija u Novom Sadu, 47-62.

[11] Arnautović, I., Davidov, T., Nastić, S. & Popović, S. (2022). Značaj donošenja racionalne poslovne odluke top menadžmenta u poljoprivrednim preduzećima u Republici Srbiji, Poljoprivredna tehnika, 1-8.

[12] Majstorović, A. & Popović, S. (2015). Revizija poslovanja poljoprivrednog preduzeća, Računovodstvo, 1: 77-85.

[13] Tamas-Miškin, S., Vitomir, J., Dragosavac, M., Medan, N., Radaković, M., Vitomir, G.,



Technology | Engineering | Management | Entrepreneurship | Learning | International Journal

Davidov, T. & Popović, S. (2022). The significance of archiving documentation and assessment quality of archiving financial documentation given by top managers, Economics of Agriculture, Year 69, No. 4, 2022, (pp. 949-1252),

[14] Popović, S., Vitomir, J., Tomaš-Miskin, S., Davidov, T., Nastić., S., Popović, V., Popović, D., Vitomir, G. (2021). The importance of a realistically determined amount of tax on property rights relating to the ownership of agricultural land in the Republic of Serbia adopted by tax authorities of local selfgovernment units, Ekonomika poljoprivrede, Economics of agriculture, Vol.LXVIII, 4: 1029-1042.

[15] Popović, D., Vitomir, J., Tomaš-Miskin, S., Davidov, T., Popović, S., Jovanović, M., Aćimić-Remiković, M., Jovanović, S. (2021). Implementation of internal control with reference to the application of it in companies operating on the principles of the green economy. Agriculture & Forestry, Vol. 67 Issue 2: 261-269.

[16] Bakmaz, O., Dragosavac, M., Brakus, A., Radaković, M., Arnautović, I., Samardžić, V., Krstajić, G. & Popović, S. (2024). Financial security and invoicing in management of public enterprises whose founders are local self-government units, example Republic of Serbia, Lex localis-Journal of Local Self-Government, 22:2, 198-218.

[17] Popović, S. (2015). Implementacija heterogenih rizika u radu interne revizije, Revizor 69: 7-19.

[18] Popović, Laban, B., Popović, V., Jovin, S., Grubljesić, Ž., Filipović, V. (2018). Management by respecting the provision of conditions for the commencement of procurement and monitoring of implementation in agricultural enterprises, Poljoprivredna tehnika, 2: 30–35.

[19] Bakmaz, O., Bjelica, B. & Vitomir, J. (2023). Application of software solutions in companies that strive to achieve increased financial stability in their regular business, Temel-IJ, 7:1, 13 - 20.

[20] Popović, S., Anđelić, S., Dragosavac, M., Bakmaz, O., Nastić, S., Popović, D., Tubić, M. & Grublješić, Ž. (2024). Ocena vlasnika poljoprivrednih gazdinstava po pitanju primene softvera u poslovanju, sa ciljem unapređenja upravljanja, Agricultural Engineering, No. 2, 1-1.

[21] Bakmaz, O., Đuranović-Miličić, J., Dugonjić, D, Brakus, A., Gligović, D., Grublješić, Ž. & Popović, S. (2024). Management of non-standard agricultural equipment based on assessments of farm owners and management of healthcare organizations based on common use for patient treatment needs, poljoprivredna tehnika, issn 0544-5587.



[22] Popović, S., Ranko, M., Grublješić, Ž. (2014). Interna kontrola i interna revizija u funkciji menadžmenta, Škola biznisa, 1/2014, 95-107.

[23] Popović, S.(2014). Valuation of Computer Equipment and Telephone Equipment in Order for Reports to Manage Companies, Communications in dependability and QM, IC 17;2, 47-52.

[24] Popović, S., Grublješić, Ž., Mijić, R. (2014). Procena vrednosti opreme u upotrebi u preduzeću sa pretežnom poljoprivrednom delatnošću, Agroekonomika, 43:.61-62, 80-89.

[25] Popović, S., Tošković, J., Grublješić, Ž. (2014). Environmental-Economic Model of Developing Composters in Parks, Protected Areas and City Limits in the Republic of Serbia, ProEnviroment 7: 213-217.