

# Ključni dejavniki digitalizacije procesov v oskrbni verigi

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## Povzetek

**Raziskovalno vprašanje (RV):** V raziskavi nas zanima kateri so ključni dejavniki sprememb ob digitalizaciji procesov v oskrbni verigi in kako vpliva digitalizacija na organizacijo?

**Namen:** Raziskali bomo, vpliv digitalizacije na oskrbovalno verigo. Cilj je prepoznati ključne dejavnike digitalizacije in ugotoviti potrebne spremembe procesov, ki so povezani z njenim uvajanjem v oskrbovalno verigo.

**Metoda:** Za namen raziskave smo uporabili kvalitativno metodo. Naredili smo študijo literature ter analizirali pridobljene podatke.

**Rezultati:** Raziskava je pokazala, da podjetja dajejo velik pomen digitalizaciji. Ta še posebej vpliva na njihove oskrbovalne verige. Dodatno je pojav epidemije Koronavirus (SARS-CoV-2) še pospešil širjenje digitalizacije. Delo od doma (izven sedeža podjetja) na področju oskrbovalnih verig je praktično nemogoče izvajati brez ustrezne digitalizacije procesov. Podjetja v svojih procesih uvajajo oblačne rešitve informacijske podpore, ki omogočajo povezovanje tudi v okviru oskrbovalnih verig. S pomočjo novih tehnologij IoT povezujejo procese v enoten sistem. S sodobnimi računalniki, ki omogočajo obdelavo množice podatkov lahko oskrbovalne verige sproti dobivajo informacije za svoje poslovanje. Evidentirali smo ključne dejavnike in podporo, ki jo s svojim spodbujanjem dajejo posamezne države in njihove institucije.

**Organizacija:** Raziskava omogoča slovenskim podjetjem boljši pregled nad dejavniki digitalizacije ter daje napotek kako se strukturirano lotiti teh procesov. Podjetja bodo z raziskavo dobila pregled nad različnimi modeli digitalizacije in njihovo uporabo.

**Družba:** Podjetja z investiranjem v informatizacijo s področja oskrbovalnih verig ter vlaganjem v povezovanje in izmenjavo podatkov med partnerji prispevajo k hitrejšemu in trajnostnemu razvoju. S pomočjo digitalizacije se pospeši in poceni poslovanje ter s povezovanjem in deljenjem podatkov tudi pospeši razvoj.

**Originalnost:** V raziskavi smo predstavili ključne dejavnike digitalizacije procesov, ki pripomorejo k lažji in hitrejši gradnji oskrbovalnih verig. Podjetja imajo v veliki meri odpor do spreminjanja procesov in tudi do izmenjave podatkov. O digitalizaciji na splošno je veliko napisanega. Nismo pa zasledili njene obravnave v povezavi s potrebno spremembo procesov še posebej v oskrbni verigi.

**Omejitve/nadaljnje raziskovanje:** Raziskovanje je bilo omejeno na zbrano in pregledano literaturo iz področja oskrbovalnih verig v proizvodnih podjetjih. Raziskavo bi bilo smiselno nadaljevati oz. jo razširiti z večjem številom intervjuvancev, vključitvijo tehnike kodiranja in obdelavo pridobljenih podatkov.

**Ključne besede:** digitalizacija, e poslovanje, informacijski sistem, oblačne rešitve, IoT, procesi, sodelovanje, komunikacija.

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# Key factors of digitization processes in the supply chain

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## Abstract

**Research Question (RQ):** At this research, we are interested in what are the key factors of change during the digitization of processes in the supply chain and how does digitalization affect organizations?

**Purpose:** We will explore how digitization affects the supply chain. The aim is to identify the key factors of digitization and the necessary changes in the processes associated with its introduction into the supply chain.

**Method:** We used qualitative method research. We made a study of the literature and analysed the obtained data.

**Results:** Research has shown that companies and their supply chains attach great importance to digitalization. Additionally, the outbreak of the Coronavirus epidemic (SARS-CoV-2) has further accelerated the spread of digitization. Working from home (outside the company's headquarters) in the field of supply chains is practically impossible to carry out without proper digitization of processes. In the processes of material management, companies are introducing cloud solutions of information support, which enable external integration. With the help of new IoT technologies, they integrate processes into a single system. With modern computers that enable big data analysis, supply chains can receive information for their business practically on the spot. We recorded key factors as well as the support that countries and their institutions also provide through their promotion.

**Organization:** The research provides Slovenian companies a better overview of the factors of digitalization and provides guidance on how to tackle these processes in a structured way. The companies will through research get an overview of different models of digitalization and their use.

**Society:** By investing in informatization in the field of supply chains and investing in the connection and exchange of data between partners, companies contribute to faster and more sustainable development. With the help of digitalization, business is accelerated and economically, and development is also accelerated by connecting and sharing data.

**Originality:** In the research, we presented the key factors of digitalization processes that contribute to easier and faster construction of supply chains. Businesses have a great deal of resistance to process change and data sharing. Much has been written about digitization in general. However, we did not see its treatment in connection with the necessary process change, especially in the supply chain.

**Limitations / further research:** The research was limited to the collected and reviewed literature for supply chains in manufacturing companies. It would make sense to continue the research or expand it with interviewees of supply chain experts, the inclusion of coding techniques, and the processing of acquired data.

**Keywords:** digitalization, e-business, information system, cloud solutions, IoT, processes, cooperation, communication

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