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INNOVATION AND DIGITISATION: TOWARDS BETTER FIRM PERFORMANCE AND SUSTAINABILITY

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Abstract: Innovation and digitisation are crucial in driving better firm performance and sustainability. Innovation involves creating new products, processes, or services that offer value to customers, while digitisation involves converting analogue information into digital format. By embracing innovation and digitisation, companies can improve their efficiency, increase transparency, and reduce costs. The results show that these concepts can contribute to sustainability by reducing waste, increasing energy efficiency, and improving access to information and transparency. We conclude that companies committed to innovation and digitisation are more likely to remain competitive and sustain their growth while contributing to a more sustainable future.

Keywords: sustainability, digitisation, innovation.

Introduction

Digitisation and innovation have become buzzwords in recent years as businesses strive to stay competitive and relevant in an increasingly digital world. In the European Union (EU), firms are increasingly adopting digital technologies to improve their performance and sustainability. The widespread adoption of digital technologies has led to improved efficiency, reduced costs, increased competitiveness, and greater sustainability. The current paper aims to explore the relationship between digitisation and firm performance in the EU and to understand how these two concepts contribute to a more sustainable future. The analysis will include an overview of the current state of digitisation in the EU and a discussion of how digitisation impacts firm performance. Finally, the study will examine the relationship between digitisation and sustainability and explore how firms use digital technologies to contribute to a more sustainable future.

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Literature review

Innovation and digitisation are two key concepts that have recently gained significant attention. With advancements in technology and the increasing demand for digital solutions, firms realise the importance of adapting to these changes to remain competitive and sustain their growth.

Innovation is the process of creating new products, processes, or services that offer value to customers (Hafeez et al., 2020; Calof, 2018). In the context of business, innovation can refer to the introduction of new products and services, the development of new processes, or the implementation of new technologies. Companies that can innovate continuously are more likely to remain relevant in their respective markets and improve their overall performance.

Digitisation, on the other hand, refers to the process of converting analogue information into digital format (Meghişan-Toma et al., 2022; Mandl et al., 2018). It includes everything from scanned documents and photographs to audio and video files. In business, digitisation improves efficiency, increases transparency, and reduces costs. With the growing trend of digitisation, firms are increasingly relying on digital solutions to meet their business needs.

Innovation and digitisation are essential not only for improving performance but also for promoting sustainability (Paiola et al., 2021; Ardito et al., 2021). In today's world, sustainability has become a major concern for businesses, governments, and individuals alike. Companies committed to sustainability can reduce their environmental impact, increase their social responsibility, and improve their reputation.

The relationship between innovation, digitisation, firm performance and sustainability has been the subject of much research and discussion in recent years (Marin-Garcia et al., 2022; Xu et al., 2022; Ghobakhloo & Fathi, 2020; Tohãnean et al., 2020). As businesses strive to stay competitive and relevant in an increasingly digital world, many are turning to innovation and digitisation to improve their performance and contribute to a more sustainable future.

Studies have shown that the widespread adoption of digital technologies can lead to improved efficiency, reduced costs, and increased competitiveness for firms (Jorge-Vázquez et al., 2021; Laitsou et al., 2020). Digitisation positively impacts firm performance, contributing to increased competitiveness and improved outcomes.

On the other hand, research shows that innovation also plays a crucial role in firm performance and sustainability (Medrano et al., 2020). It can contribute to improved performance by enabling firms to differentiate themselves from their competitors and better meet their customers' needs. As for digitisation, it can play a critical role in promoting sustainability by enabling firms to reduce their environmental impact and increase their use of renewable energy sources (Schneider, 2019).



Finally, exploring the academic studies on the relationship between innovation, digitisation, and firm performance, we found that the effective use of innovation and digitisation can contribute to improved firm performance and sustainability by enabling firms to meet the needs of their customers better and to reduce their environmental impact (Ungerman et al., 2018).

The relationship between innovation, digitisation, firm performance and sustainability is complex and multifaceted. However, the studies reviewed here provide strong evidence that innovation and digitisation can contribute to improved firm performance and sustainability. As such, businesses that embrace these concepts are likely to be better positioned for success in an increasingly digital world.

Results

Innovation and digitisation can contribute to sustainability in several ways. For example, digital technologies can help to reduce waste and increase energy efficiency. It can be achieved through digital tools such as sensors and monitoring systems, which can help companies track their resource usage and make more informed decisions. Additionally, digitisation can help companies to understand their supply chains better and make more sustainable choices, such as choosing suppliers that use renewable energy or have sustainable business practices.

Innovation and digitisation also contribute to sustainability by improving access to information and increasing transparency. Companies committed to sustainability often face challenges in communicating their sustainability initiatives to stakeholders. Digitisation can help companies better communicate their sustainability goals and track their progress towards these goals.

As a result of the study, we have summarised some general trends that have been observed in the EU:

- Increased use of digital technologies: In recent years, there has been a significant increase in the use of digital technologies in the EU. It has been driven by advancements in technology, as well as the increasing demand for digital solutions.
- Improved performance: Companies that have embraced digitisation have reported improved performance, including increased efficiency, reduced costs, and improved customer satisfaction.
- Increased competitiveness: Companies that have adopted digital technologies are better positioned to compete in the global marketplace. It is because digital solutions allow companies to reach new markets, increase their reach, and improve their overall competitiveness.
- Greater sustainability: Digitization has also been associated with greater sustainability in the EU. It is because digital technologies can help companies to reduce their environmental impact, increase their social responsibility, and improve their reputation.



These are general trends that have been observed in the EU. Still, the impact of digitisation on firm performance may vary depending on several factors, such as the size of the company, the industry in which it operates, and the specific digital technologies it adopts.

Conclusion

Innovation and digitisation are essential drivers of better firm performance and sustainability. Companies that continuously innovate and adopt digital solutions are more likely to remain competitive and sustain their growth while contributing to a more sustainable future. By embracing innovation and digitisation, companies can improve their performance and reputation and contribute to a more sustainable future for all.

References

- Ardito, L., Raby, S., Albino, V., & Bertoldi, B. (2021). The duality of digital and environmental orientations in the context of SMEs: Implications for innovation performance. *Journal of Business Research*, 123, 44-56.
- Calof, J. (2018). Enhancing Innovation Performance in Companies. *Dopcaŭm*, 12(3), 30-33.
- Ghobakhloo, M., & Fathi, M. (2020). Corporate survival in Industry 4.0 era: the enabling role of lean-digitised manufacturing. *Journal of Manufacturing Technology Management*, 31(1), 1-30.
- Hafeez, S., Arshad, N. I., Rahim, L. B. A., Shabbir, M. F., & Iqbal, J. (2020). Innovation in Chinese internet companies: A meta-frontier analysis. *PloS* one, 15(5), e0233278.
- Jorge-Vázquez, J., Chivite-Cebolla, M. P., & Salinas-Ramos, F. (2021). The digitalisation of the european agri-food cooperative sector. Determining factors to embrace information and communication technologies. *Agriculture*, 11(6), 514.
- Laitsou, E., Kargas, A., & Varoutas, D. (2020). Digital competitiveness in the European Union era: The Greek case. *Economies*, 8(4), 85.
- Mandl, T., Schwab, E., Heuwing, B., & Womser-Hacker, C. (2018). Digitalisierung in Unternehmen. *Information-Wissenschaft & Praxis*, 69(4), 190-200.
- Marin-Garcia, A., Gil-Saura, I., & Ruiz-Molina, M. E. (2022). Do innovation and sustainability influence customer satisfaction in retail? A question of gender. *Economic Research-Ekonomska Istraživanja*, 35(1), 546-563.
- Medrano, N., Cornejo-Cañamares, M., & Olarte-Pascual, C. (2020). The impact of marketing innovation on companies' environmental orientation. *Journal of Business & Industrial Marketing*, 35(1), 1-12.
- Meghişan-Toma, G. M., Puiu, S., Florea, N., Meghişan, F., Bădîrcea, R., & Manta, A. (2022). Sustainable Transformation of Romanian Companies through

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Industry 4.0, Green Production and Environment Commitment. *Amfiteatru Economic*, 24(59), 46-60.

- Paiola, M., Schiavone, F., Grandinetti, R., & Chen, J. (2021). Digital servitisation and sustainability through networking: Some evidences from IoT-based business models. *Journal of Business Research*, 132, 507-516.
- Schneider, S. (2019). The impacts of digital technologies on innovating for sustainability. *Innovation for Sustainability: Business Transformations Towards a Better World*, 415-433.
- Tohãnean, D., Buzatu, A. I., Baba, C. A., & Georgescu, B. (2020). Business model innovation through the use of digital technologies: Managing risks and creating sustainability. *Amfiteatru Economic*, 22(55), 758-774.
- Ungerman, O., Dedkova, J., & Gurinova, K. (2018). The impact of marketing innovation on the competitiveness of enterprises in the context of industry 4.0. *Journal of competitiveness*, 10(2), 132.
- Xu, J., She, S., & Liu, W. (2022). Role of digitalisation in environment, social and governance, and sustainability: Review-based study for implications. *Frontiers in Psychology*, 13.