عنوان مقاله:

A Conceptual Framework for Data-Driven Digital Transformation from the Perspective of Cyber-Physical-Social Systems Thinking

نویسندگان:

Milad Padidarfard - *Knowledge and Information Science, Management and Economics, Tarbiat Modares University, Tehran, Iran*

Mostafa Amini - *Knowledge and Information Science, Mangement and Economics, Tarbiat Modares University, Tehran, Iran*

Bita Garshivaz - *Islamic Azad University, Central Tehran Branch, Tehran, Iran*

خلاصه مقاله:

Purpose: The purpose of this study is to answer the main question of what is meant by the concept of data-driven digital transformation from the perspective of cyber-physical-social systems' thinking.Method: Comparative Evaluation method is used in this study. In this method, after identifying different definitions and interpretations of the digital data-driven transformation and also cyber-physical-social data, these definitions are compared based on this method. Based on this analysis, then a conceptual concept from the perspective of the notion of cyber-physical-social systems for the concept of data-driven digital transformation is proposed.Findings: Based on this research, the concept of digital transformation has different definitions and interpretations. Some of these definitions focus on "what" and some on "how". But the complex nature of the concept of transformation has not been noted enough. Now we're cyber-physical-social systems as a platform for data creation and data flow. The nature of these systems is based on transformation and the digital data-driven transformation is achieved by data flow management in these systems.Digital data-driven transformation is a concept based on digital convergence between social, physical, cognitive, and cyber systems. These systems are the context of creating big data, and data flow management requires data-driven notions and analytics, which is essential for the transformation and sustainability of societies.Conclusion: According to the proposed framework, data-driven digital transformation is a concept based on digital convergence between social, physical, cognitive, and cyber systems. These systems are the context of creating big data, and data flow management requires data thinking and analytics which are necessary for the transformation and sustainability of societies.

کلمات کلیدی:

Data-Driven Digital Transformation, Cyber-Physical-Social systems, Sociocybernetics

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/1697192