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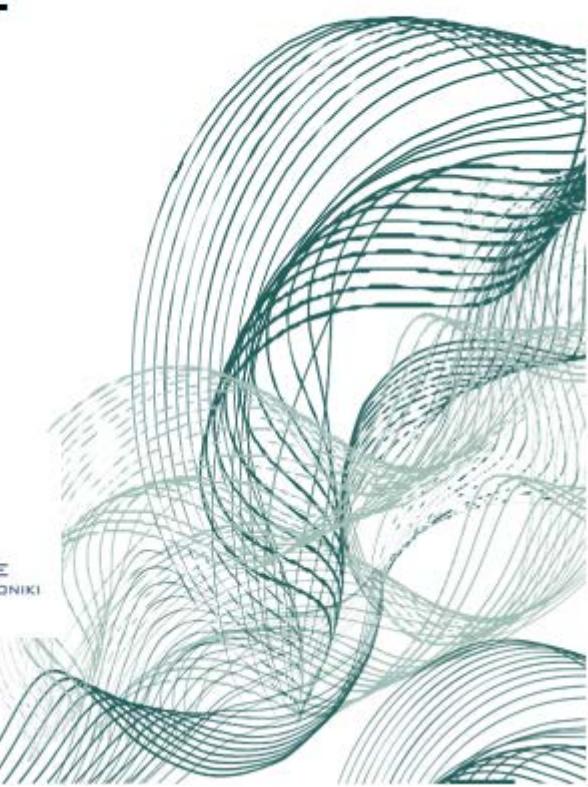
Information and Communication Technologies Management in Digital Libraries

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This study aims examine the critical factors that should be considered by Digital Libraries in managing the complexity of the lifecycle of their resources for information systems, cloud computing infrastructure and information technology governance with a focus on organizational performance. The use of complex network technology is evolving toward comprehensive solutions to manage IT using a single repository and a single interface, dramatically reducing the costs and complexity of managing their computational resources. Faced with the emergence and speed of growth in the information economy, organizations have an urgent need to adopt IT governance best practice. The main drivers of the digital transformation are the globalization of markets, products, and resourcing; electronic information and knowledge intensity; and the geometric increase in the level of complexity of networking and connectivity. Information technology is involved with all operational procedures of the organization and, increasingly, is affecting the ability to offer services, influencing the efficiency, quality innovative capacity. The ability to leverage the potential of the technology is becoming increasingly critical to the success of Digital Libraries operations. The main tool to acquire this ability is to develop an effective organization of IT, Figure1, focusing on three key areas:
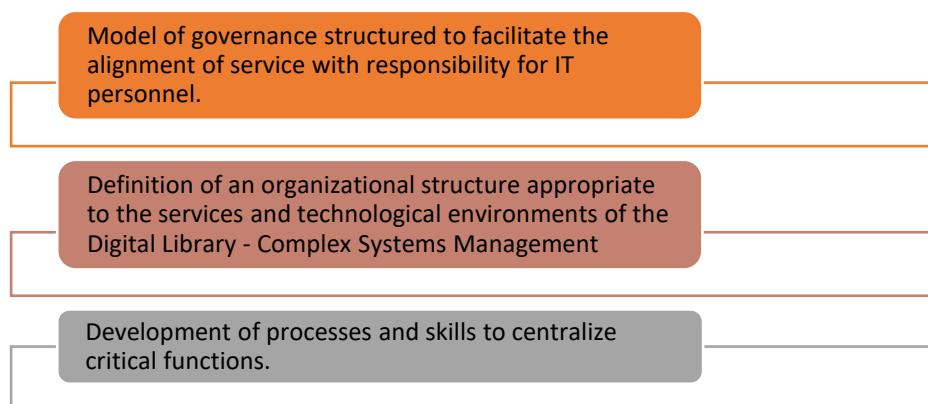

Figure 1 - IT Organization Focus and Complex Systems

This research proposes to examine the critical factors that should be considered by Digital Libraries in managing the lifecycle of their resources for information technology, cloud computing infrastructure and IT governance with a focus on complex networks systems.

Keywords: Information and Communication Technologies Management. Complex Networks. Information Systems. Digital Library. Technology Governance.

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