Bimodal IT: Predictability versus Exploration

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Abstract

In response to strong business demand for agility and innovation, companies have been driven to adopt Information Technology (IT) processes with different velocities. It has become commonplace to establish a business-oriented IT operation mode that enables faster responses to changes and innovations, and in parallel, a more traditional IT mode focused on controlling critical systems for business support. The practice of simultaneously managing and controlling these two distinct IT modes is being called Bimodal IT.

While Digital Transformation has a significant impact on the IT department, related researches such as structuring IT to provide digital technologies effectively are still rare. In this way, this talk wants to discuss this gap in current literature, focusing on the relationship between Bimodal IT and good practices of IT governance. The acceleration of innovations in information and communication technologies has been transforming the behavior of individuals and organizations. Consumers, especially digital natives, have transformed the way they select and consume products and services. This movement has implied structural changes in traditional markets and the creation of new markets, with a great innovation bias. In addition, digital technologies, driven by mobility, collaboration, and the internet of things, have allowed companies to improve their performance and competitiveness.

In recent years, banks, insurance companies, telecommunication organizations and some other sectors have undertaken a number of initiatives to exploit the benefits of digital technologies and to meet the demands of this new consumer profile. Technological change and innovation, as well as the rapid adoption of digital products, have resulted in increased demand for digital sales and communication channels and the complete digitization of corporate products and services that replace or increase physical offerings. Such initiatives, often conducted within a Digital Transformation program, have involved consistent changes in organizations, affecting processes, structures, leadership, people and even their culture.

The term Bimodal IT was defined as the practice of managing two separate but coherent styles of work: one focused on predictability and the other on exploration. Mode 1 is optimized for areas that are more predictable and well understood. Mode 2 is exploratory, experimenting to solve new problems and optimized for areas of uncertainty.

But, there is no single recipe for implementing a Bimodal IT. Studies carried out in companies with some bimodality characteristics show that the division of IT activities between traditional and agile modes can vary in intensity, ranging from the simple creation of an agile process for systems development to the physical division of the IT department in two distinct areas, which will work independently, with specific teams and processes. The greater the intensity of change, the greater the impact on IT governance processes in organizations.