

DIGITAL TECHNOLOGY TRANSFORMATION IN MODERN BUSINESS

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Abstract:

The paper presents opportunities of digital transformation of business as a changes associated with the application of digital technology in all aspects of business. A research of digital business found that maturing digital businesses are focused on integrating digital technologies, such as social, mobile, analytics/big data and cloud, in the service of transforming how businesses work. The ability to digitally reimagine the business is determined in large part by a clear digital strategy supported by leaders who foster a culture able to change and invent the new. Unique to digital transformation is that risk taking is becoming a cultural norm as more digitally advanced companies seek new levels of competitive advantage. As with any emerging technology, however, there are significant challenges associated with cloud, mobile, social, and big data initiatives. The survey suggests that the primary risks preventing their wider adoption are data security issues, lack of interoperability with existing IT systems, and lack of control.

Key Words: Cloud, Mobile, Social Technologies, Big Data, Analytics, Internet of Things & Change Management

Introduction:

Digital Business Transformation is disrupting businesses in every industry by breaking down barriers between people, businesses and things. By breaking these barriers, they are able to create new products, services and find more efficient ways of doing business. These innovations are happening across organizations of all types, in every industry. But they share a common theme: The ability to transform processes & business models, Empower workforce efficiency and innovation, and Personalize customer/citizen experiences. To do this, companies need a Digital Business Platform that is outcome driven and enabled by technology. The paper research an organization's level of digital maturity and readiness for digital business transformation. Digital business transformation is a new phenomenon, and no organization can be considered yet to have achieved the end state of maturity.

Strategy before Technology:

Digital technologies - social, mobile, analytics and cloud - are impacting organizations and most areas of human activity. Organizations need to integrate these digital technologies and their capabilities to transform processes, engage talent and drive new business models to compete and thrive in the digital world. Organizational change occurs when a company makes a transition from its current state to some desired future state. Only one platform is needed to connect all business units in the organization. Without a single platform, digital transformation can't be achieved. The goal should be a seamless interaction with the customer at all touch points of business. Digital business transformation can only be successful if there is a well-founded strategy and leadership. Transformational changes are required to implement the digital transformation, which is related to strategy, leadership and organizational culture. Business practice research has shown that businesses with a successful digital-based business have a clear strategy, commitment to senior management with change, motivated employee involvement in the process, and focusing on changes to customer needs and interests.

One of the approaches to exploring digital transformation is the grouping of changes in three areas: consumer behavior, business processes and business models. The transformation of consumer experiences in the use of products and services of the organization is expressed in the in-depth study of market segments and their behavior in the marketing space, consumer behavior and loyalty, interactive communication with customers in the sales process and many digital contact points between the organization and the customers. Transformation of the business processes of the organization covers the automation of R & D, production and distribution processes. Digital business transformation is seen as a set of 7 elements: business model, organizational structure, digital skills of employees, digitization of business processes, IT infrastructure, digitization of products / services, digital channels for interaction with clients. Rapid changes in the digital environment entail shortening strategic planning times and shrinking to annual planning, careful handling of extrapolation of existing data, perception of the need for continuous change, decentralized management, etc.

Technology Aspects of Digital Business Transformation:

In some sectors, digital transformation primarily involves production processes. This is particularly typical for manufacturing companies. Reducing costs by digitizing the processes of developing, testing and producing new products is of paramount importance. Mobile applications are more important to improving the production processes and internal communications of employees than to interact with customers who are mostly not end-users. Large databases and information processing are more focused on production the

digitization of production processes opens up many opportunities for expanding business and for its internationalization / globalization.

The digital trends have led to a growing relevance of new entrants in traditional segments and creation of new segments. The speed of this transformation is governed by the advances in connectivity technology, changes in consumer behavior, the emergence of new business models, and by environmental trends and regulatory practices. The impact has been seen mostly in the aftersales stage of the value chain. However, digital is also having a significant transformational impact on R&D, procurement, assembly, marketing, and sales. In the parts segment, 10 to 15% of all global revenue will be generated online by 2025, and for parts and service retailing, China will be the most attractive market for revenue growth in digitization.

Digital transformation requires an in-depth analysis of the current state of business processes and business model in the organization. The analysis precedes the development of a digital transformation strategy. The analysis should answer questions grouped into several areas: Digital Transformation Attitude; Managing Support for Digital Business Strategy; The degree of use of digital technologies in the work of staff; The degree of use of digital communication channels; Digital infrastructure; Digital tools that meet customer needs and internal processes; Investments in digital solutions - what resources can be allocated to processes of digital transformation.

The analysis should focus on a number of key areas: users, suppliers and partners, investors, organization staff and organization leadership. The analysis should show how an organization's digitization will create more value for consumers, how it will help investor relations, how it will enhance interaction with partners, how it will change corporate culture, and how effectively the change in organization and process to digital transformation. Digital transformation also includes the provision of services of the same high quality through all access channels at any time using cloud services and mobile applications.

Cloud Computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model promotes availability and is composed of five essential characteristics (On-demand self-service, Broad network access, Resource pooling, Rapid elasticity, Measured Service); three service models (Cloud Software as a Service (SaaS), Cloud Platform as a Service (PaaS), Cloud Infrastructure as a Service (IaaS)); and, four deployment models (Private cloud, Community cloud, Public cloud, Hybrid cloud).

Mobile Technology is important part of the digital transformation technologies. Mobile technologies realize the goal of digital transformation and provide seamless interaction with the customer at all touch points with business. The growth of a mobile digital business platform based on smartphones or tablets. Business transforming society and the global economy are work mobility and digital collaboration. The benefits of mobile technologies include greater productivity, 26 percent more profitable than normal. The use of mobile technologies in business and the current level of integration between technologies entirely caused by the needs of the enterprise and focused on optimal business processes management.

Big Data and Data Analysis - The volume of business data (terabytes and increasingly petabytes of information) suggests why managing and analysing it is a challenge. It's no longer efficient for data warehouses (DWs) to manage single, homogenous workloads.

Pooling data resources in a cloud model allows for greater flexibility and faster innovation for dynamic business demand. Cloud computing has changed the parameters that have enforced the traditional relational database restrictions because it delivers dynamic resource allocation, virtualization, and dramatic economies of scale for managing large amounts of data.

Key enabling technologies include: (a) fast wide-area networks, (b) powerful, inexpensive server computers, and (c) high-performance virtualization for commodity hardware business benefits from digital technology.

- Predictable costs - cloud services are typically paid on a monthly basis or based on use with little or no upfront costs. This means that instead of making a substantial initial capital investment, technology or services are purchased by existing operating costs.
- Reduced total cost - benefits of cloud services derived from economies of scale that a service provider can achieve.
- Access to the best technology - cloud services enable organizations to benefit from the best technologies, without making any initial costs.
- Charging in use - in the model of cloud services, organizations pay for actual rather than maximum use.

Adoption of digital technology is already widespread and still growing in the EU in both the private and public sectors. Business benefits included more effective mobile working (46%), higher productivity (41%), more use of standard processes (35%), better ability to enter new business areas (33%) and the ability to open up in new locations (32%). Business predictions are that by 2025 all ICT business solutions will be realized in a cloud, which means they will use cloud technology and cloud models. More than 85% of corporate applications will be located directly in the cloud.

The Internet of things (IoT) is the inter-networking of physical devices, vehicles (also referred to as "connected devices" and "smart devices"), buildings, and other items – embedded

Conclusion:

Organizations today are looking for a good business environment that does not negatively affect corporate flexibility. One of the key success factors in the global business environment is for the company to be able to adapt quickly and effectively to changes. Rapid expansion in global connectivity is the current trend. Most dramatically, the world economy is transforming into a digital economy with a proliferation of cloud computing, big data and analytics, mobility and broadband connectivity, e-commerce, social media and the use of smart sensors and the Internet of Things. . Intersection of these powers built a foundation for digital transformation platforms.

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