

Leading approaches for the management of industrial enterprises

Svetlana Vasilyeva

Togliatti State University
Belorusskaya str. 14, 445020 Togliatti
Russian Federation
e-mail: svetlana23s@mail.ru

Raisa Krayneva

Department of Management and Marketing
Moscow Social and Economic Institute
Kashirskoye shosse, 12, bld.1, 109472 Moscow
Russian Federation
e-mail: raisa-krayneva@yandex.ru

Svetlana Chinahova

Department of Undergraduate (Economic and Management Programs)
Togliatti State University
Belorusskaya str. 14, 445020 Togliatti
Russian Federation
e-mail: chinaxova@mail.ru

Abstract This paper focuses on assessing the leading approaches for the effective management of industrial enterprises. Moreover, it studies the problems of theory and practices of leading and curating these enterprises to achieve profit and success.

The paper describes the leading role of service innovations and innovative policies and tools for the smooth and operational guidance of the business enterprises in general and industrial business enterprises in particular. It assesses the role of business managers and their influence over the modelling and controlling business processes in industrial enterprises. Overall, the paper creates a framework that studies and briefly describes the current trends, embeds and assesses the leading approaches that can be applied for using the effective instruments for managing industrial enterprises and would be useful to follow by the practitioners. Our results might be of a special interest and use for the industry captains, business managers, as well as stakeholders, policymakers and business and industry regulators.

1 Introduction

The issue of industrial enterprises' management and effective guidance gained special importance in today's globalized world. With the world rapidly changing and the new technologies and approaches emerging, the traditional way of enterprise management is being replaced by the new, more advanced techniques (Kobersy et al. 2015). With regard to the above, one would agree that knowledge acquisition and sharing are becoming the key aspects of innovations required for managing modern-day enterprises (Dudin 2014; Koudelková and Svobodová 2014).

In general, management of industrial enterprises has always been the topic in the centre of attention of economists that attracted a number of different theoretical perspectives from such diverse areas as organizational theory, systems analysis, economics, psychology, as well as anthropology (see e.g. Buvik 2001; Ridley-Duff and Bull 2015; Kull et al. 2018).

At nominal value, structural theory could provide insight into the relationship between individual micro-level activities and macro-level processes and social system practices, in which the relationship between such systems and the practice of individual agencies is a major concern for structural theory. Therefore, stronger theoretical links with structural theory will help industrial marketing research to better understand the relationship between acting skills of network operators and the coercive power of network structures. In industrial management, we have an example of social exchange theory (which sees social change) and stability as a process of inter-party trading as a widely used mid-range theory (Luo et al. 2012). The evolution of management models has been a long-going process that origination from the Schumpetrian theory (Bodrožić and Adler 2018).

Our paper described the leading approaches to managing business enterprises and industrial enterprises. It highlights the role of innovations and innovative policies, as well as the leading roles and positions of business managers who are becoming the leaders in steering and guiding the others using the toolbox of modern techniques and approaches to modern management. The paper is organized into six separate sections with each section analysing a separate aspect of the issues that were highlighted above and the last section providing conclusions and closing remarks.

2 Leading approaches to managing business services

The mechanism for managing business services innovation is a complex social system consisting of various elements, due to the role of service innovation in the form of an organic whole (Abrham et al. 2015; Hong et al. 2018; Hilkevics and Semakina 2019; or Slávik et al. 2019). The objectives of the management innovation management service, i. e. the management of business services, are to achieve the desired results or to achieve the goal, are the basis for managing innovation and business activities (Valenta 2007).

There are various management theories about the purpose of the office's management activity (Demsetz 1983). Managers who understand systems theory well also tend to understand how employees influence the system around them and how different systems influence employees.

Service innovation is a source of business development, rather than a service innovation for the development of the target, the role of a management mechanism in the company is through a series of guidance and control mechanisms, thus providing innovation as a source of business development. The restriction mechanism refers to the company by evaluating innovative activities, the more scientific allocation of enterprise innovation resources. Service innovation can be also defined as a combination of multiple innovations in business models, technology, social organization and the need to improve existing systems, create new value propositions or create new systems (Teece 2010)

In general, innovative features in the enterprise can be viewed from the point of view of novelty, innovation of services to create an unprecedented service, by taking the initiative to promote competitive implementation, the above-mentioned creation or enhancement can make the consumer experience the value of a service to improve service (Zeibote et al. 2019).

Enterprise service innovation as a primary entity, creation of a company or organization of products and services that have never been seen before, innovative companies, combining their strengths and weaknesses, creating effective and practical mechanisms to promote and achieve the development of service innovation.

Emerging industries, such as the reliance on service delivery to survive the e-commerce industry, innovation in business services is relatively radical to a large extent, the survival and development of businesses are all consistent with user innovation, as well as innovative implementation and development perspectives.

In addition, the process of corporate innovation in the internal multisectoral involvement, mutual collaboration and the value chain between enterprise collaboration and upstream, successful service innovation requires a wide range of participation and support, and innovation is often a complete innovation.

Enterprise service innovation should focus more on using advanced technology and management concepts, placing a lot of emphasis on research and development of new technologies, seeking scientific and technological innovations and major advances, advanced management concepts and modern communication technologies for innovation in business services play an important role in promoting and achieving business innovation.

In the past, mass production and the Industrial Revolution have created new demands for human and process management. Classical management theory focuses on operations and standards to increase production. The theory of scientific management is very early on, with the aim of minimising waste and reducing production times. Over time, the universal vision of the application of management theories and principles has been questioned by the unforeseen vision.

Many scientists believe that the problem of management practice in less developed economies is the lack of indigenous theories, and effective management practices will be largely achieved if local theories are developed to capture local circumstances as a basis for decision making and management in other aspects and management functions (Čábelková et al. 2015). Managers in transition economies believe in adopting the thinking and practices from more developed countries as a means of effective and efficient resource management (Šabić-Lipovača et al. 2016).

Nevertheless, one should not forget about the human factor here. Human resources management is just as important part of managing a successful industrial enterprise as its other elements described above. And this is something a good manager (and leader) should not forget. There is no doubt that the motivation of employees in industrial companies represents one of the most important principles of modern management which also reflects in the operation of any leading and successful industrial enterprise. The current trends in local and national demography have deepened the existing and established new global demographic trends which have received a new historical reasoning, requiring in-depth research into the impact of the multifactorial global dimension of modern society.

3 Business processes in industrial enterprises

Process industries move towards a culture and business model in which decisions are based on the analysis of operations and data on business processes (Białowas 2018; Kita and Šimberová 2018). Business companies implement optimization solutions for such elements of the production process as construction, storage, energy and materials management and resource use. Complex tools for optimizing plants, including dynamic simulation templates that use high fidelity models and predictive asset management (APM) solutions are not only possible, but also easier to manage and deploy via cloud-based approaches (Bromiley et al. 2015).

There are many technological innovations that are on the market to help the good manager in her or his solutions. For example, advanced process control, including multi-channel and model prediction control, is being implemented in an increasing number of production facilities because it is able to improve and calculate profits to support investment. Production functions, such as purchasing materials and energy, product quality and production management, are carried out by external suppliers through software as a service (SaaS).

With IT-OT convergence, enterprise-class IT vendors offer integrated business applications that capture and analyse real - time transaction data using memory platforms. It is particularly true for IIoT to successfully adopt the latest automation and information technology that is enabled by IIoT can challenge traditional production companies.

Business processes take place at all levels of the organization and may or may not be visible to customers. Other processes produce products that are invisible to external customers, but necessary for the effective management of the company. According to Rummier and Brache (2012), the typical characteristic feature of a successful process-based organisation is the lack of secondary activity in the primary value flow generated by customer-oriented processes.

The workflow involves procedures, people and tools that are involved in every step of the business process. Very often statistical methods are used for improving business processes and thus reducing performance defects. Technological progress over the years has changed the business processes within and between companies. Automated business processes are now being carried out mainly in corporate data centres and, more recently, in the cloud. For example, data collected from sensor networks must be analysed and assimilated locally, whereby aggregated data and high-level business events are spread to central processes and services in data centres or in the cloud.

However, even today, most business processes involve human workflows, with some IT systems intertwined to perform part of the automated processes. Many companies have started to reengineer their business processes, and techniques and tools. Business processes are often integrated into applications and systems used to run a business.

In addition, we have to observe that today's business processes are complex, with a wide range of tasks and activities, some are performed by people, some by machines (such as machines) and others by other physical equipment (such as trucks, etc.). Industrial enterprises of all kinds are increasingly using technology partners, channel partners, contract manufacturers, warehouses and logistics partners, fixed - term service partners and other external services to manage all or part of the business process. Control systems that are composed of sensors, meters, measuring instruments, measuring instruments, actuators and control units have been used to manage real-time operations in industries such as manufacturing, energy exploration and distribution, chemical plants and transport.

4 Innovation as a tool for managing industrial enterprises

Data is a significant manufacturing resource for an enterprise. As a consequence, the sum of information needed grows exponentially. Becoming in a position to look up data from some other departments easily can save a manager lots of time and help a company develop in the ideal direction.

Industrial enterprises are likely to make the most of critical innovations. Apart from sector and its size, all sorts of company will detect the shift positive. Throughout collaboration and the interconnection of also the increase of portfolios of goods and also the parts of the search model, businesses identify market niches, boost market shares and provide gains with the supply of one-of-a-kind products in high need. Many businesses are broadcasting live. Companies such as Google or Amazon are on the correct track implementing those solution for their customers.

Solution providers provide their customers availability to one copy of an application that was created for SaaS distribution. Better still, services or consultants offer you a solution to a business demand. Enable an outstanding user experience by utilizing the mobility of services is about empowering the enterprise clients, staff and organisational requirements.

If one had to put this very simple, there are two important aspects - governance and management – that constitute the essence of any enterprise mobility plan. Direction is crucial for each organization and the manner of direction might vary in line. Even though it pervades the whole organization, it is the job of the management cadre

to initiate and maintain consistency within management's practice. Because the growth of the variety of thoughts as well as innovations keep growing, therefore the transition accelerates into the upcoming technological degree. In a worldwide market, it is not wrong to say that software development is just among the quickest growing phenomena. The execution of the plan can be viewed as a challenge, especially in the event the sum of digital transformation from the business is low.

The importance of optimal solutions and decisions taken by the manager is in the fact that they make certain about the execution of the business procedure of company and enhance the efficiency and productivity of their client support. In truth, it attracts a good deal of business chances. The experience might help a good and experienced manager to discover the right solution. Knowledge is presently being applied to purposefully and systematically define what needs to be achieved to earn knowledge successful and what knowledge is necessary although it is possible. It has come to be the resource as opposed to a resource. Every successful manager needs to learn and grow and seek advice and knowledge from a number of sources to lead the industrial enterprise well.

5 Conclusions and discussions

Overall, it is apparent that technological advancements coupled with innovative approaches and policies reinforced by the guiding hand of managers prepared to take the lead all form the prerequisites of the success of industrial enterprises.

There are many business solutions offered on the market that might increase the effectiveness and the operation of any business enterprise. Moreover, there are many theoretical approaches offered in the research literature. However, one should be very careful about applying them in a given country since some national and geographical specifics might have an influence on the successful implementation and the achievement of the desirable results.

Our results demonstrate that business processes in industrial enterprise can be controlled and maintained using a handful of methods. Modern technologies and well as Internet and communication technologies offer many ways to improve and optimize the results of a company that should not be ignored.

With all that, the personal values and the social aspects should not be neglected too. The management of human resources at the industrial enterprise is just one of the key aspects of its successful functioning. True leader should not neglect it.

In addition, it becomes clear that mobilization of savings and financing of profitable business opportunities is essential for improving intermediation and management efficiency. Future studies can acquire more samples of appropriate size to assess the best examples of effective management in industrial enterprises that employ novel technologies and approaches.

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