

Leading approaches to managing innovations in the 21st century

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Abstract This paper focuses on the leading approaches to managing innovations using the methods of modern management that became widespread and popular in the 21st century. The paper focuses on the new challenges business endeavours are facing in the new era as well as on the novel leading approaches to innovation management. In particular, we focus on the business stages development in small and medium companies and contemplate their need and approach to innovations.

Our results confirm that innovations and innovation management are becoming ubiquitous in the 21st century and there is hardly any business entity, small or large alike, that might survive on the market without them long enough. Moreover, we stress the importance of innovative activity in the company and advocate for the proper use of targeted management practices that might help to develop and foster innovations.

1 Introduction

Nowadays, with the wide availability of information and communication technologies (ICTs), technologization, globalisation, and interconnectedness, innovation and innovation management are no longer luxury goods for many business companies, organizations, and even countries, but rather necessities and means of maintaining economic development and competitiveness (Herciu and Ogreaan 2015).

In general, innovation can be defined as the implementation of newly created ideas for generating business value (Baregheh et al. 2009; Koudelková and Svobodová 2014; Nagy et al. 2016; or Strielkowski et al. 2019). While innovating is an important aspect of innovation processes, it is also the ability to seek and identify relevant external innovations, to apply existing innovations to new contexts, to understand and absorb unfamiliar external innovations in order to link different innovation bodies and to integrate them with the everyday business practice (Laursen and Salter 2006).

Due to the high demand for innovations, there are attempts to foster their development in the so-called “innovation labs”. An innovation lab is a physical environment in a company where innovation programs and activities are created for a company's employees (Cohen et al. 2016). They can meet and work on innovative ideas to bring something new with new networks, technologies and knowledge (). However, one needs to realise that there is no standard framework that will guarantee a successful innovation process. However, there are some methods that have been proven to deliver effective results. Both dimensions are required, and both must be studied and learned separately in order to develop a systematic approach to innovation.

In diffusion, the company accepts the innovation, and in the implementation, everything is set up that is necessary for the development and use or production of the innovative idea. The diffusion theory tries to identify the aspects that influence the acceptance rate of an innovation. According to the theory of management, the main aspects that affect the dissemination of a new idea or innovation are time, communication and social systems, also referred to as takeover categories (Frambach and Schillewaert 2002).

The robust processes and tools that enable a company to consistently create successful innovation management concepts on a consistent basis and through an iterative approach are key to maintaining leadership and growth while continuously delivering innovation.

This contribution is structured as follows: Section 2 focuses in the new business challenges for a company that has to operate in highly innovative environment and competitive market. Section 3 discusses management and innovations for the 21st centuries bringing some relevant implications. Finally, Section 4 provides some conclusions and implication for further research on this topic.

2 Innovation management approaches

Managing innovations, especially today, requires following the right procedures, pathways, and carefully selected approaches. Innovation management which represents the mix of managing innovative processes and novel approaches to chain management and offers approaches and tools that enable managers and subordinates to work on common goals might be of a great help here (Matzler et al. 2015).

For many authors, the structure of an innovative organization should vary according to the innovation strategies chosen, as there is no single standard structure suitable for all kinds of innovations defended by, for instance, Foss and Saebi (2018) in the general context. The strategies guide the innovation efforts, while the structure justifies the innovation process (Ehrenberger et al. 2015).

The right way of innovating always depends on the individual situation of the respective organization. Successful innovation management, however, is usually the result of all four aspects of innovation management, which are coordinated and described by the economic theory (see Figure 1).

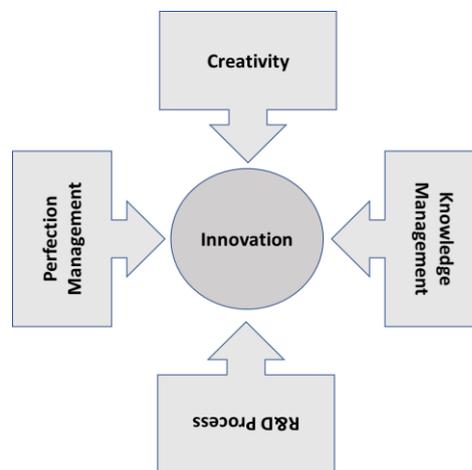


Fig. 1. Four aspects of innovation management
Source: Own results

Therefore, the importance of managers in business companies who are aware of the innovation processes should be emphasized. The company has created a space for innovation, delivering results from past years' investments with the launch of new lines of action and smart innovation.

In general, there are different ways to promote innovation, depending on context, industry and company structure. It is important to stress how important it is to coordinate structural, strategic and innovation systems. The results in the biological and pharmaceutical industry point to an overall good innovation ability of the management, with different impressions of the philosophy innovation by the enterprises. Nearly half of the companies involved in the research would pay more attention to the philosophy of innovation. Some surveys in this industry also show that most companies design, and redesign management systems based on different market strategies (Franca et al. 2017). In terms of culture and innovation environment, companies in this industry are mobilized to develop new ideas, and corporate focus is used as part of an ideal management for focusing and structuring. Businesses need to think about the strategies that drive the development and implementation of innovation, and thus make innovation management a competitive advantage or maintain it. The strategies and structures in the field of innovation belong to the management, as well as the way their processes are organized. Given the need to understand the critical aspects of enterprise innovation management in order to gain a sustainable competitive advantage, the proposal explores how innovation management is structured and how innovation processes in many cases appear as coherent alternatives to understanding innovation. Indications are that all automotive companies are willing to set favourable rules for innovation and to adopt different types of innovation strategies based on different market strategies. In addition, all companies pay close attention to the elements of culture and environmental innovation that they consider to be very important to their development. Technological innovations also play an important role in the innovation management process.

The approach can differ across industries. Under "total management innovation," companies in the biological and pharmaceutical industries assess the importance of management innovation within the five elements. Interestingly, the perspectives of institutional innovation, organizational and structural innovation as well as cultural and environmental innovation are the same in companies. Under the umbrella of organizational and structural innovation, employees within the industry can quickly adapt to the new organizational structure. The results we found focus on enterprise innovation management capabilities. Most selected companies feel that their innovation capacity is above average in the industry. The innovation metrics should always support these characteristics and align your initiatives with a more innovative corporate culture. Some of the key supporting input metrics in this category could be the number of new ideas and initiatives coming directly from employees versus management, or the time spent by all organizational levels for development versus operation. The output metrics that support an innovative corporate culture may include employee participation in innovation activities, as well as employee evaluation of the organization's innovation capability.

Management of innovation enables managers to expand their main areas of responsibility to deliver superior team performance. In this way, management innovation can help to improve organizational goals. Development of innovation strategy and planning of innovation activities, for example with an innovation roadmap. All in all, innovation process to transform an idea into a successful innovation: concept development, business plan, solution development, prototyping, implementation, as well as marketing

2 New business challenges

Any new company that enters the market needs help from the parent to develop an independent identity. New companies are rarely designed to ensure a comfortable transition to the established organization, and the department leaders they inherit are not trained in the requirements for a successful handover (Vyas and Zhu 2017). Too much independence leads to a related problem which is a lack of organizational learning.

Sometimes new companies develop strategic and operational innovations that are expected to be passed on to other parts of the business if successful. Few managers are willing to take responsibility for projects they privately view as distractions. In other cases, the pressure to start a new business is so great that the company is overwhelmed. The classic example of this problem was Enron in the late 1990s, rewarding executives for their ability to open new trading businesses in line with the successful natural gas business. Too often executives and small business owners do not focus enough on generating cash flows. To tackle this problem, companies must either have adequate capital and build up liquidity reserves to meet all the necessary commitments and to deal with possible downturns and emergencies. Cash management becomes more important in recessionary times when cash flows more slowly and creditors have less time to pay.

For small businesses, accounting and tax accounting may be at the discretion of business owners, but professional help is generally a good idea. While this shared focus can make a company's growth difficult, it can make it impossible for a business to grow when there is no more money available. Money management becomes even more important when cash flows into the business and the owner (Karadag 2015). Although corporate accounting and tax accounting are reserved for most business owners, professional help is generally a good idea. Proper money management can be a challenge for companies of all sizes, as business accounts involve much more than just adding up all the expenses and deducting the grand total from all revenue. If one wants to avoid financial glitches in her or his small business, she or he might need to keep accurate accounts of every single item that goes in and out of their business accounts.

Nowadays, there are many powerful online accounting programs that can help one to control the finances of even the small business. The next thing to managing small business finance is to invest in technology and understand all the terms associated with one's business to be number one in the enterprise market. Sometimes it is much better to use online software to keep track of your finances and accounts and build an online presence to attract more customers. In fact, one can also use accounting software to pay taxes and understand the financial health of your business and develop budgets.

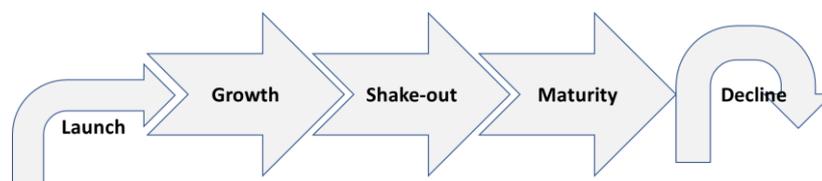


Fig. 2. Stages of business life cycle
Source: Own results based on Dempsey (2018)

As the small business grows, its strategy needs to adapt to the changing circumstances (Teece 2018). For example, the focus is likely to change from attracting new customers to building profitable relationships and maximizing growth with existing customers. Existing business relationships often have greater profit potential and can also provide reliable cash flow.

A small business can remain saturated and profitable forever becoming a small business without any ambitions to proceed further. Finding opportunities for growth often becomes a major challenge for small businesses which, if left unchecked, can lead to cuts, downsizing and survival struggles. One of the best ways to counteract the problem of growing your small business is to think more as an entrepreneur. In large companies, the challenge in the area of human resources is the policy and ability to participate in the workplace. However, in terms of small businesses, these are the personalities and abilities. The key is to learn how to deal with different personalities, find out what drives each individual team member, and adjust your management accordingly.

Despite high unemployment, many companies struggle to find the right talent with the right skills for their business. Small business owners often face management problems because they lack training or experience. Many business owners have special expertise in manufacturing products or providing services. However, administrative management tasks can be a challenge for business owners.

3 Management and innovations in the 21st century

The ability to communicate with business leaders is beneficial to the all parties involved in modern business processes in many ways, for example in gathering business practice information, awareness of research opportunities, and suggestions for changes in the curriculum. Given the positive outcomes of this meeting, it seems useful for future meetings to address other current business concerns and find new ways to improve the dialogue. For example, issues related to external influences (e.g. government interventions or international competition) on business practice and the implications for the development of mid- and higher-level managers would be open for discussion. In addition, it may be helpful for practitioners to familiarize themselves with the managerial and business-oriented practical research.

The biggest challenge for stakeholders is reconciling their diverse interests both in the short term and long term (Sealy et al. 2017). The management concept has evolved for almost a century and is based on a complex mix of assumptions and paradigms formulated in response to emerging challenges. In the 21st century, management issues have become more urgent due to a profound change in the economy and the world economy. In this regard, particular attention should be given to analysing changes in the global economy and to changes in management practices in order to define problems and obstacles to management development.

Rather, they should be more concerned with the strategies that allow managers to face and adapt to the challenges of the new century. All these aspects apply to the rapid globalization process, which triggers technological progress and the creation of new communication channels.

As a result, the role of business and government is enormous, provided management strategies and approaches address policy issues. After all, the management challenges of the 21st century are closely related to human resource management. Today, the acquired knowledge is efficiently used in action plans whose main function is to transform organizations in terms of external conditions.

Despite the nature of the organization, human capital and human values are at the centre of successful management. In terms of the existing global context, human and social diversity comes into play as it highlights new trends in the design of management issues in the 21st century. This is what modern managers and planners have to remember.

4 Conclusions

All in all, it appears that managing innovations in the global and hectic business and social environment of the 21st century requires novel approaches and ideas. This is where principles of innovation management that offers a toolbox for managers and decision makers might come handy.

In addition, principles of modern management also appear to be very useful in managing innovations. These principles are slowly but gradually adapted by business companies and public organisations putting the stress not on monetary incentives but on human resources motivation and recognition.

It may seem difficult at first to find the right process for innovation management. This is due to the fact that it is not about religiously following only one of them. Instead, it might take some time to test the most promising and combine various features that best suit the purposes of a given company. Innovation management processes do not differ from other processes in the sense that they are most likely to evolve over time.

One can see that the right way of managing innovations always depends on the individual situation of the respective organization. Successful innovation management, however, is usually the result of all four aspects of innovation management, which are coordinated and balanced.

While innovation is the key to improving processes, avoiding wastage, improving productivity, and increasing employee satisfaction, we note in our advisory work that few companies have a comprehensive system to deliver results through innovation. Given the fact that most organizations have systems for all the other important functions, there is usually no system for innovation. An effective, comprehensive innovation system addresses the three primary levels of living systems in a company: individual, team, and organization. Capabilities is an umbrella term for the various capabilities and resources the company has to create and manage innovation.

Quite in the number of cases, it may be too early to form a centralized organization for managing cognitive projects, but leaders who sponsor or consider cognitive projects need to learn from each other. In many cases, it may be too early to form a centralized organization for managing cognitive projects, but leaders who sponsor or consider cognitive projects need to learn from each other. Our findings demonstrate that even a very ambitious projects that push the boundaries of cognitive technology are most likely to fail.

It seems that various novel managerial processes such as leadership development, knowledge management, project management might be of a great importance for the building the viable managerial practices that would be capable of dealing with the challenges presented by innovations in the 21st century and the capacities for their handling and harnessing.

Our results might be of a special interest for managers of business and public companies, stakeholders and policymakers of all sorts, as well as decision-makers whose job is to channel the right tactics and strategies that all companies and organisation are facing today.

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