

# Fundamentals of Integrated Management: Analysis of Innovation

**Sergey Krylov**

 <https://orcid.org/0000-0001-6750-085X>

*Ural Federal University, Russia*

## INTRODUCTION

As we can see from the experience of developed countries, a high level of economic development is ensured by a number of conditions, the accumulated scientific, technical, industrial and investment potential, institutional factors of the technical progress and state support of innovative transformations being the main ones.

The contemporary market economy has no alternative but to go down an innovation development path, which boosts the need for research into the theory, methodology and methods of the innovation component of management analysis. This, in turn, makes it possible to take adequate and effective decisions as regards innovation management by an economic agent (organization, enterprise, firm, company).

The innovation development concept is gradually turning into a center of attraction for most natural and technical branches of science and humanities. Economics plays a special role in the study of the multi-faced influence of innovations on various sides of life in contemporary society. The present need to speed up the transition of a particular country to an innovation-driven economy calls for the intensification of research into the problems of innovative development that ensures the formation and strengthening of competitive advantages for each economic entity in the contemporary transformational world, which, in its turn, is one of the key tasks of ensuring its survival and prosperity. The level and effectiveness of innovation that the economic entity has achieved largely determines the effectiveness of addressing this task. Competition pushes economic entities to ensure an economic safety margin both via a more reasonable use of production and financial resources and by attracting investors for the upgrade or expansion of business. This is preceded by innovation activities aimed at developing capital investment options designed to reveal and support competitive advantages. Such advantages mean fewer risks, higher return on investment compared to rivals in a specific market niche. The market niche may mean a particular kind of activity aimed at creating consumer values, or a geographic area, but in any case potential business propositions require a relevant innovation substantiation based on a clear information database and convincing analytical calculations.

The importance of the issues mentioned above calls for improvement of analytical support of the management decision-making process as regards innovation (in its broad sense, that is, including investment and marketing), which, in the authors' opinion, is the most important part of an organization's economic activities under the current conditions.

In view of the above-mentioned, the authors suggest using integrated management analysis of innovation that they have designed as a tool of building analytical support of innovation management.

DOI: 10.4018/978-1-6684-7366-5.ch024

*This article, published as an Open Access article in the gold Open Access encyclopedia, Encyclopedia of Information Science and Technology, Sixth Edition, is distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.*

## **METHODOLOGY**

The methodological framework of the research the results of which are presented in this article is based on the following elements:

1. A conceptual approach to the integration of processes that make up the organization's innovation activity.
2. The conceptual foundations of business-specific kinds of management analysis used for the study of innovation.
3. The concept of the Balanced Scorecard (its innovation component)

Let us take a brief look at each of them.

Under the current conditions, innovation activity is seen as a process that ensures market success thanks to the transformation of the results of scientific and technical achievements and research into new or improved kinds of goods (works, services) and technologies. What is positive about this approach is that it implicitly reflects the process of the creation of innovations and implies that companies that generate innovations may use them. However, the idea that improved products and technologies can be considered an innovation is disputable.

Innovation is more effective if it is implemented as the main kind of activity by specialized organizations engaged in the development of new products for sale in the innovation market. However, in practice, a wide range of non-specialized organizations tend to develop new technologies for the production of standard goods using insourcing.

We define innovation is the process of finding and using scientific and technical achievements with the help of R&D efforts which make it possible to create and introduce innovations that result in certain effects inside the company and/or in the domestic and/or foreign market.

Speaking about the place and the role of innovation in the contemporary market economy, the assessment of integrative processes in the field of innovation acquires critical importance. The problem is that innovation yields the maximum effect if it is closely integrated with investment, the setting up of new production facilities, design and financing. If so, it not only reduces the general innovation cycle but also triggers a synergistic effect, i.e., an additional effect caused by close partnership interaction of all parties involved in a single technological conveyor.

It is noteworthy that in the first formative years of innovation its stages were not normally separated from each other and were usually implemented within the same organization: a company independently designed a new product, improved the product until it could go into batch production, acquired (or made) necessary equipment, expanded production facilities, found financial resources for carrying out works at all the stages mentioned above. At the early stages of industrial development such kind of universalization increased the effectiveness of innovation complex management and helped relatively reduce the execution period of interrelated works.

However, an insufficient level of functional specialization that is typical of such organizational-technological scheme reduced the quality of some works and their overall efficiency, so in the course of time differentiation of innovation took place. At present, the following kinds of works are distinguished in innovation, which are, as a rule, implemented by organizations specializing in the following trades: science and technology, innovation, innovation and investment engineering, financial intermediary, organization and coordination of innovation project implementation.

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/fundamentals-of-integrated-management/320494](http://www.igi-global.com/chapter/fundamentals-of-integrated-management/320494)

## Related Content

---

### Which Review Can Make You Engage?: The Effect of Reviewer-Reader Similarity on Consumer-Brand Engagement

Senhui Fu, Qing Yan, Guangchao Charles Feng and Jiamin Peng (2021). *Journal of Global Information Management* (pp. 1-27).

[www.irma-international.org/article/which-review-can-make-you-engage/280583](http://www.irma-international.org/article/which-review-can-make-you-engage/280583)

### The Role of Power Distance and Explanation Facility in Online Bargaining Utilizing Software Agents

John Lim (2004). *Journal of Global Information Management* (pp. 27-43).

[www.irma-international.org/article/role-power-distance-explanation-facility/3605](http://www.irma-international.org/article/role-power-distance-explanation-facility/3605)

### To Choose or Not to Choose: Exploring Australians' Views about Internet Banking

Kristy Williamson, Sharman Lichtenstein, Jen Sullivan and Don Schauder (2008). *Global Information Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 1973-1984).

[www.irma-international.org/chapter/choose-not-choose/19087](http://www.irma-international.org/chapter/choose-not-choose/19087)

### Mobile Communications and Mobile Commerce: Conceptual Frames to Grasp the Global Tectonic Shifts

Nikhilesh Dholakia, Morten Raskand Ruby Roy Dholakia (2008). *Global Information Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 804-814).

[www.irma-international.org/chapter/mobile-communications-mobile-commerce/19007](http://www.irma-international.org/chapter/mobile-communications-mobile-commerce/19007)

### E-Service Quality and Trust on Customer's Patronage Intention: Moderation Effect of Adoption of Advanced Technologies:

Muhammad Sabbir Rahman, Md Afnan Hossain, Mahmud Habib Zaman and Mahafuz Mannan (2020). *Journal of Global Information Management* (pp. 39-55).

[www.irma-international.org/article/e-service-quality-and-trust-on-customers-patronage-intention/242965](http://www.irma-international.org/article/e-service-quality-and-trust-on-customers-patronage-intention/242965)