Idea Management in the System of Innovative Management

Azat Rafailovich Sadriev

Kazan (Volga Region) Federal University
Russian Federation, 420008, Kazan, Kremlyovskaya Street, 18

Oksana Vladimirovna Pratchenko

Kazan (Volga Region) Federal University
Russian Federation, 420008, Kazan, Kremlyovskaya Street, 18

Doi:10.5901/mjss.2014.v5n12p155

Abstract

Increased non-price competition on world markets of goods and services predetermines great demand for modern systems of control which provide qualitative increase of effectiveness of innovative activity in companies. Systems of idea management, the use of which allows to build up and to direct purposefully the innovation development processes, are an integral part of the idea management. The article considers prerequisites of origin of the systems and analyses modern practice of their application in the work of different companies. Special attention is paid to software support of generation technologies, to appraisal and support of innovation ideas.

Keywords*: innovation management, innovation ideas management, models, methodological approaches, software programs.*

1. Introduction

Transition of world economy to innovative development model predetermines gradual de-emphasis of price factors of competitiveness and strengthening of the role of unique competitive benefits connected with organizational, technological, product and social innovations [1, 2]. At that the use of modern management technologies by companies (which have greater influence on progress than new inventions) becomes very important condition which causes efficiency of innovation activity in companies.

Among all applied management technologies the systems of formation of innovative potential which become the main instrument of competitive growth of business, have a special place. The achieved level of innovative potential of this or that company is characterized by the number of patents obtained which are the evidence of effectiveness of innovative processes in the company. The more Чем более effective these processes are, the more number of patents the company can claim to. The company "IBM" which annually replenishes its assets by almost 5000 titles of protection is the world leader by the number of patents got in the American patent authority.

However, to support such high innovative activity and, moreover, to provide its continuous growth demands qualitative increase of effectiveness of functioning of innovative infrastructure of the company. Integration of the idea management systems aimed at search, assessment, support and implementation of long-range initiatives in the company, as well as out of it, is the problem to be solved in the first place.

2. Idea Management Systems: History

In the middles of the 1980s sociologists found out that under certain conditions a group of people is able to generate much more ideas than the cleverest person of this group. However, to use this phenomenon in business sphere always seemed to be a difficult task. In 1984 innovation consultants of the "Kodak" company Kenneth Rosenfeld and Jenny Servo said that failures of big corporations in using of innovative ideas are connected, first of all, not with decreased creative activity of their employees, but with lack of the system of internal communications. For many years the problem of creation of such system has been in the center of attention of specialists in the management sphere, and the so-called "suggestion box" appeared in on the Scottish dockyard "William Denny & Brothers" is one of the first attempts to solve it (table 1).

Table 1: Stages of development of the idea development systems

Initial period	Name	Characteristics	Advantages	Shortcomings
1910-1920 гг.	Suggestion box	Collecting of ideas considered by top management from time to time	Effectiveness on the initial stage of innovative process	Lack of feedback with authors of ideas. Bulkiness of the system
1995 г.	Web-forms of suggestions in the form of data base	Put on the web form of suggestions with the following download into electronic data base	Convenient processing of incoming ideas	Unstable feedback with authors of ideas
1998-2000 гг.	First software solutions for idea management	Innovative platform for organizing brain storms, holding the meetings, etc.	Automation of some idea management procedures. Reference to motivation systems. Quick feedback	Complicated use
2003 г.	Integral programs for idea management	Combination of processes of generation of ideas and their implementation	System automation of all idea management procedures	High cost. Complicated use

Then every employee of the enterprise was able to present his ideas to company management team that paid remuneration to him in case of its successful implementation. Suggestion boxes got further distribution in the American and European industry during World War II, and then they became the part of the developed in Japan concept of total quality management [3]. Nevertheless, the main advantage of this approach connected with of its simple use, with time became its main weak point. First, effectiveness of procedures of selection and review of suggestions of employees became to go down because of increasing difficulty of providing objectiveness and competence of their implementation. Second, suggestion box did not have the chance of public discussion of ideas by all company team and its implementation of all employees concerned. Third, a lot of programmers did not have information about results of evaluation and introduction of proposals; it had an impact on motivation of their further creative work.

However, the above-mentioned drawbacks did not become the reason of complete refusal from the system of suggestions which now continues to be popular in a modified form. Now these systems are called " rationalization suggestion", "Kaizen-suggestion", "improvement suggestion", "open door policy", etc. (Fig. 1). All of them are aimed at, first of all, search of ways of optimization of manufacturing and organization processes, insufficient effectiveness of which in many companies makes sense concerning integration of such systems. At present one average offers up to 20-30 rationalization suggestions a year, while on Russian enterprises this figure is still much smaller – only 1,5 suggestions [4].

High activity of staff of Japanese companies is explained by common use by them the idea management systems, in which the main focus is not on individual creativity but on collective work in the frames of teams of continuous development.

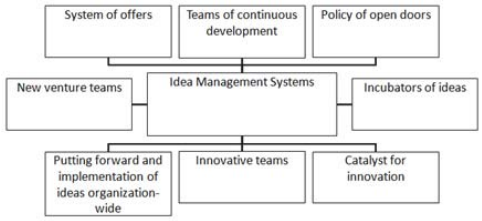

Fig. 1. Modifications of the Idea Management System

This model is implemented, for example, in the company "Toyota" for creation of the so-called "quality circles" which join employees of different departments into informal groups [5]. Systematic development of manufacturing processes which is in the center of such quality circles, caused high operating performance of the company. деятельности этой компании. Complexity of such model of idea management for development of large product innovations is its drawback. However, this drawback is overcome in the process of creation of special venture teams and incubators of ideas, professional participants of which are aimed at search of breakthrough ideas in the company, their integration and promotion.

Alongside with search of organizational mechanisms of involvement of enterprises' staff into innovative activity process of creation of special methods revealing immediate logic of actions aimed at formation and development of innovative ideas was on. Brain storm, method "Mind mapping", morphological analysis, method of focal objects, synectics

method, Theory of Inventive Problem Solving, method based on recombination of ideas and knowledge, "Six Thinking Hats", method "Catchball" and others are the most famous among them [6, 7].

3. Idea Management Systems: Modern Times

Increasing complexity of tasks connected with innovative activity of companies staff was the reason of appearance of the new senior management in the system; new managing directors were immediately responsible for processes of idea management, such as Chief Information Officer, Chief Knowledge Officer, Chief Learning Officer, Chief Talent Officer and so on. Priorities in the work of new corporate managing directors are constantly changing. If initially the company's staff was in the center of their attention, with time emphasis shifted to the side of business partners, including, first of all, organizations which perform contract work in the frames of outsourcing model of interaction [8]. However, today this approach gives place to corporative systems which search for innovative ideas for companies at global level. For instance, performance of one of the biggest American manufacturing enterprises – the company "3M" which in the middle of 1990s faced the problem of increase of share of revised products and services in overall production and sales with simultaneous reduction in it share of innovative products is the example of successful implementation of this approach. In the result of search of solutions it was found that many commercially successful products of company are planned and created not by manufacturers, but by their potential users. Further research showed that such products are often developed by the so-called "leading users", i.e. organizations or even individuals, whose needs are much higher than needs of an average customer. The results of this research allowed to the company "3M" to transform complicated and labor-intensive process of manufacturing of innovative production into activity of search of leading users who have already developed some elements of innovative solutions, and use of their experience [9].

In this situation the fact that the vast majority of leading users agree to cooperate with companies with hope mainly not for financial benefit, but because of wish to see their ideas implemented, is the most interesting. As Robert Tucker, one of the outstanding research workers in the sphere of innovative management, says that very often aspiration of people for creation is not understood or underestimated. In his opinion, invitation for participation in new project is already reward for a person. Thus, the company for relatively little assets spent for organizing meetings with leading users and small bonus payment to them gets the whole set of innovative users and suggestions which can be successfully implemented in the process of improvement of exterior of production, providing new functional content or even manufacturing of new products. All this finally leads to the situation when many companies start to reorganize their business-processes and to hold re-engineering of their innovative infrastructure, intentionally aimed it at organization of work with external environment.

4. Software programs "Idea Management": Secrets of Success

Increasing complication of idea management in companies caused appearance and wide distribution of special software programs of "Idea Management" class which automate main procedures of this process [10]. Specific character of these programs which is in the fact that their use is in remote access mode when users – not having the program physically – are able to implement only their functional possibilities, refers these programs to the so-called "cloud service". All variety of these software programs can be divided into three main groups (Fig. 2). The first group unites programs based on using the method of social rating that implies public discussion of suggestions, their evaluation and ranking depending on results of voting. Possibilities of programs of this group allow to single out the most important and interesting ideas and, rating them accordingly, to make their implementation more priority-oriented.

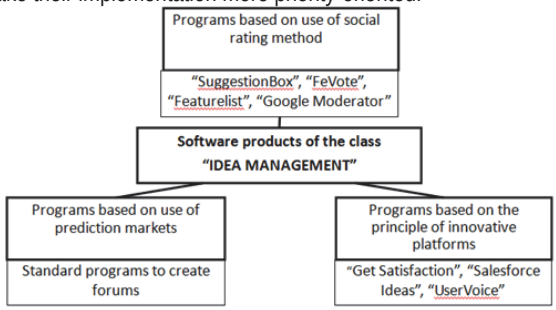

Fig. 2. Software products to support of idea management

The second group of programs are based on selection of ideas by bidding on the so-called forecasting stock markets which deal with different forecasts and obtaining on their basis information concerning, for example, change of customer values and market expectations. General ideology of software programs which deal with forecasting stock markets consists in development of the resource, with the help of which stakes of participants concerning possibility of this or that event are taken. At that rather high forecast accuracy which is sometimes even 100 %, is reached. In the opinion of experts, it is explained by the fact that average collective forecast of a large number of people is often closer to the mark than the point of view of skilled experts. Effectiveness of software on the basis of forecasting stock markets determined its wide use in the work of many big companies. Finally, the third group of programs functions as innovative platforms which provide access to functions to users concerning organization of brain storms, holding meetings, close groups sessions, entry to different databases, etc.

It is necessary to say that matching of idea management systems to motivation systems which provide interest of company employees to take an active part and to display creative activity, is the most important condition of successful integration of idea management system, including the ones implemented on the base of special software programs [11]. Implementation of talent management instruments in the work of innovative companies is one of solutions of this problem. The companies “SuccessFactors” and “Taleo” which actually determine standards in this field are the leading programmers on the market of the relevant software.

Functional capabilities of software products of the company “SuccessFactors” allow to evaluate achievements of the company’s employees and to control their professional growth. There is the web page in the system for every employee on which he is able to see his goals and to control the process of their achievement. At that employees have clear idea concerning possible material reward or career promotion in case of achievement of definite results.

5. Conclusion

Thus, summing up, it is possible to say that the problem of idea management starts to play an important role in the system of corporate management, and search of ways of its solution becomes the most important condition so to provide competitiveness of modern companies.

References

Westerski, A., T. Dalamagas, and C.A. Iglesias, 2013. Classifying and comparing community innovation in Idea Management Systems. Decision Support Systems, 54 (3): 1316-1326.

Melnik, A.N., L.V. Lukishina and R.R. Khabibrakhmanov, 2013. Methodological Foundations of the Formation of the Energy Strategy of an Enterprise. World Applied Sciences Journal, 23 (8): 1085-1089.

Liker, J.K., 2004. The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer. McGraw-Hill, pp. 330.

Markov, V.A., Bagautdinova, N.G., Yashin, N.S. Improvement of instruments of the state cluster-based policy in the contexts of economic entities interrelation asymmetry // World Applied Sciences Journal, 27(13), 2013, 130-134.

Johansson, F., 2006. The Medici Effect: What Elephants and Epidemics Can Teach Us About Innovation? Harvard Business Review Press, pp. 224.

De Bono, E., 1990. Lateral Thinking: Creativity Step by Step. Harper Colophon, pp. 304.

Sarkin, A.V., Bagautdinova, N.G., Averianov, B.A. Development of science-intensive strategy in machinery-building company in contemporary Russia// World Applied Sciences Journal, 27(13), 2013, 24-28.

Averianov, B.A., Bagautdinova, N.G., Sarkin, A.V. Estimation of manufacturing enterprise development risks in process of operational activity // World Applied Sciences Journal, 27(13), 2013, 202-206.

Gobble, M.M, 2013. Innovating the corporation. Research Technology Management, 56 (6): Pages 61-65

Von Hippel, E., S. Thomke and M. Sonnack. 1999. Creating Breakthroughs at 3M. Harvard Business Review 77 (5): 47–57.

Panasyuk M.V., Pudovik E.M., Sabirova M.E. Problems of labor market of modern Russia in conditions of stable economic growth. Life Science Journal 2014; 11(6s): 487 – 489.

Gaimon, C. and J. Bailey, 2013. Knowledge management for the entrepreneurial venture. Production and Operations Management, 22 (6): 1429-1438.

Aagaard, A., 2013. A theoretical model of supporting open source front end innovation through idea management. International Journal of Business Innovation and Research, 7 (4): 446-465.