

A STUDY OF INNOVATION MANAGEMENT AND PROCESS OF INNOVATION MANAGEMENT

PROF. SACHIN K. JADHAV

SSVPS's Arts, Commerce and Science College,

Shindkheda, Tal:- Shindkheda, Dist- Dhule

E-Mail:- jadhavsk@india.com, jadhavsk555@gmail.com

ABSTRACT

Innovation is the development of new customer's value through solutions that meet new needs, inarticulate needs, or old customer and market needs in value adding new ways. The paper is based on the conceptual study. Innovation is the hook that will connect a company to the consumers in this segment. What they want in a product – quality, service, and other values in addition to affordability – is often not available. Innovation is needed to come up with the prize. Businesses must assess their innovation capabilities and identify gaps in their culture and process. Companies must indeed be innovative to bring all that to market in a profitable way. For large companies, the hunt should be on to find a small innovative partner, one that has an efficient cost structure and can be the source of disruptive innovations. One very effective strategy that successful businesses utilize repeatedly is limiting the resource pool available for developing innovative products. The information and data is collected through various journals, books, periodicals and also using various websites.

Keywords: Innovation, Sources of innovation, Invention vs. Innovation: the difference, Innovation management, 8 phases of an innovation management process.

INNOVATION

The term innovation is derived from the Latin word *innovatus*, which is the noun form of *innovare* “to renew of change”, stemming from in-“into” + novus-“new”. Although the term is broadly used, innovation generally refers to the creation of better or more effective products, process, technologies, or ideas that are accepted by markets, governments, and society. Innovation differs from invention or renovation in that innovation generally signifies a substantial positive change compared to incremental changes. In a social context, innovation helps create new methods for alliance creation, joint venturing, flexible work hours, and creation of buyers' purchasing power. Innovations are divided into two broad categories:

1. Evolutionary innovations (continuous or dynamic evolutionary innovation) that are brought about by many incremental advances in technology or processes and
2. Revolutionary innovations (also called discontinuous innovations) which are often disruptive and new.

Innovation is synonymous with risk-taking and organizations that create revolutionary products or technologies take on the greatest risk because they create new markets. Imitators take less risk because they will start with an innovator's product and take a more effective approach. Examples are IBM with its PC against Apple Computer, Compaq with its cheaper PC's against IBM, and Dell with its still-cheaper clones against Compaq.

Innovation is the development of new customer's value through solutions that meet new needs, inarticulate needs, or old customer and market needs in value adding new ways. This is accomplished through more effective products, processes, services, technologies, or ideas that are readily available to markets, governments, and society.

Innovation differs from invention in that innovation refers to the use of a better and, as a result, novel idea or method, whereas invention refers more directly to the creation of the idea or method itself. Innovation differs from improvement in that innovation refers to the notion of doing something different rather than doing the same thing better.

OBJECTIVE OF STUDY

1. To know the concept of innovation.
2. To study the difference between Invention and Innovation.
3. To study the concept of Innovation management.
4. To study 8 phases of an innovation management process.

RESEARCH METHODOLOGY

The paper is based on the conceptual study. Research methodology is a way to systematically achieving objective of the study. The information and data is collected through various journals, books, periodicals and also using various websites.

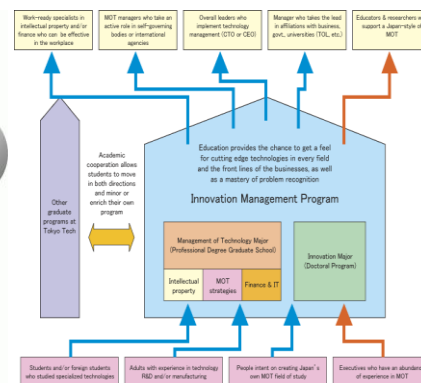
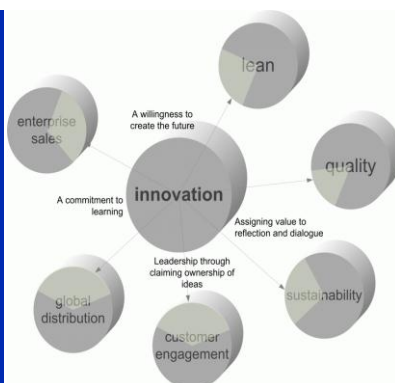
SOURCES OF INNOVATION

There are several sources of innovation. According to Peter F. Drucker the general sources of innovations are different changes in industry structure, in market structure, in local and global demographics, in human perception, mood and meaning, in the amount of already available scientific knowledge, etc. also internet research, developing of people skills, language development, cultural background, skype, Facebook, etc. In the simplest linear model of innovation the traditionally recognized source is manufacturer innovation. This is where an agent (person or business) innovates in order to sell the innovation. Another source of innovation, only now becoming widely recognized, is end-user innovation. This is where an agent (person or company) develops an innovation for their own (personal or in-house) use because existing products do not meet their needs. In addition, the famous robotics engineer Joseph F. Engelberger asserts that innovations require only three things:

1. A recognized need,
2. Competent people with relevant technology, and
3. Financial support.

The Kline Chain-linked model of innovation places emphasis on potential market needs as drivers of the innovation process, and describes the complex and often iterative feedback loops between marketing, design, manufacturing, and R&D. Innovation by businesses is achieved in many ways, with much attention now given to formal research and development (R&D) for "breakthrough innovations." R&D help spur on patents and other scientific innovations that lead to productive growth in such areas as industry, medicine, engineering, and government. Yet, innovations can be developed by less formal on-the-job modifications of practice, through exchange and combination of professional experience and by many other routes. The more radical and revolutionary innovations tend to emerge from R&D, while more incremental innovations may emerge from practice – but there are many exceptions to each of these trends.

An important innovation factor includes customers buying products or using services. As a result, firms may incorporate users in focus groups, work closely with so called lead users or users might adapt their products themselves. The lead user method focuses on idea generation based on leading users to develop breakthrough innovations. In most of the times user innovators have some personal record motivating them. Sometimes user-innovators may become entrepreneurs, selling their product, they may choose to trade their innovation in exchange for other innovations, or they may be adopted by their suppliers. Nowadays, they may also choose to freely reveal their innovations, using methods like open source. In such networks of innovation the users or communities of users can further develop technologies and reinvent their social meaning.



INVENTION vs. INNOVATION: THE DIFFERENCE

In its purest sense, "invention" can be defined as the creation of a product or introduction of a process for the first time. Invention is the "creation of a product or introduction of a process for the first time." Thomas Edison was an inventor. "Innovation," on the other hand, occurs if someone improves on or makes a significant contribution to an existing product, process or service. Consider the microprocessor. Someone invented the microprocessor. But by itself, the microprocessor was nothing more than another piece on the circuit board. It's what was done with that piece - the hundreds of thousands of products, processes and services that evolved from the invention of the microprocessor - that required innovation. Innovation happens when someone "improves on or makes a significant contribution" to something that has already been invented. Steve Jobs was an innovator.

Invention and Innovation

There is a subtle difference between these two words, but it is an important one for Business Studies students.

- Invention is the formulation of new ideas for products or processes
- Innovation is all about the practical application of new inventions into marketable products or services

INNOVATION MANAGEMENT

Innovation management is the discipline of managing processes in innovation. It can be used to develop both product and organizational innovation. Without proper processes, it is not possible for R&D to be efficient; innovation management includes a set of tools that allow managers and engineers to cooperate with a common understanding of goals and processes. The focus of innovation management is to allow the organization to respond to an external or internal opportunity, and use its creative efforts to introduce new ideas, processes or products. Importantly, innovation management is not relegated to R&D; it involves workers at every level in contributing creatively to a company's development, manufacturing, and marketing. By utilizing appropriate innovation management tools, management can trigger and deploy the creative juices of the whole work force towards the continuous development of a company. The process can be viewed as an evolutionary integration of organization, technology and market by iterating series of activities: search, select, implement and capture.

Innovation processes can either be pushed or pulled through development. A pushed process is based on existing or newly invented technology, that the organization has access to, and tries to find profitable applications to use this technology. A pulled process tries to find areas where customer's needs are not met, and then focus development efforts to find solutions to those needs. To succeed with either method, an understanding of both the market and the technical problems are needed. By creating multi-functional development teams, containing engineers and marketers, both dimensions can be solved. The lifetime (or

product lifecycle) of new products is steadily getting shorter; increased competition therefore forces companies reduce the time to market. Innovation managers must therefore decrease development time, without sacrificing quality or meeting the needs of the market.

MEASURING INNOVATION MANAGEMENT

The measure of innovation at the organizational level relates to individuals, team-level assessments, and private companies from the smallest to the largest. Measure of innovation for organizations can be conducted using surveys to establish internal benchmarking. There is now an emerging body of work around the Management Innovation Index as an effective analytic that uses regression analysis enabling the measurement of organizational innovation that focuses on the four organizational pillars of innovation - culture and environment, strategy, innovation practice and the personal traits, beliefs and attitudes of managers to creativity and innovation. In addition, the Management Innovation Index maps the flow of creative inputs through the organization's operating system that produces the organization's innovation, i.e. the creative outputs.

THE 8 PHASES OF AN INNOVATION MANAGEMENT PROCESS

The innovation management process has become an important part of the operations of many businesses, as the recognition of the importance of initiatives towards innovation has become much more common. That said, while many companies do attempt to have a solid approach to creativity and innovation, too few actually focus on it as a single function. Instead, they seem to hold many separate activities in isolation, such as brainstorming sessions, pilot projects and campaigns, and vague communication with the market, and simply keep fingers crossed that it will come together in the end. While this has worked for some in the past, it is far from the ideal way of performing this important task. Instead, the best way to accomplish this is to have a set innovation activities which integrates the activity into the regular cycle of our business. The list below shows the phases in innovation management process, which will help our organization to put it all together as one process.

1. Setting the goals for the process

Innovation always begins with a goal in mind. It is many times based on finding the solution to a problem. Once we have this goal, it should be discussed among everyone in the problem solving team. It may involve others such as our customers (who can provide suggestions and feedback based on their own experience with our product or service) or other stakeholders in the business. When we establish the team for this process, make sure that we have someone representing all the parts of the process from start to the end.

2. Cooperation

The innovation team should work together so that instead of trying to come up with an idea separately, they can bounce ideas off one another and create a collaborative solution. This can include the use of online tools, attendance of events such as trade shows that can be inspiring and informative, or simply consist of brainstorming sessions. We might consider having a trained business coach facilitating the discussions. There are many online tools available for real-time document sharing that might help teams that are geographically separated to still have intense cooperation.

3. Combination of ideas

Once the ideas are in, choose the best ones and then consider whether they can be combined to create an even greater idea. Often, strong ideas will be complementary to one another and will join well to create an even better result. As we know, the whole result can be bigger than its individual parts. And for this combination to work well, we need representatives of all parties involved in the process, because they for sure have ideas that people from other departments could not come up with. Business coaches may be useful here for making sure that all the angles of innovative aspect are covered.

4. Evaluation of innovation

This is an important and yet all too frequently overlooked aspect of the innovation management process. When the best ideas have been combined, fine-tuned, and polished, it is time to subject them to evaluation based on peer reviews. This helps to ensure that any ideas that have a promising veneer but that are poorly thought out will be identified before resources, funding and time have been poured into them. It also helps to select the ideas with the greatest potential from among several that appear equally capable of being successful. It is cheap to change our innovation at this stage compared to later stages. Each step we take forward will cost us more...

5. Testing the ideas

Once the ideas with the greatest potential have been identified, they can be tested so that they can be better developed. One of the most common means of testing a product or service idea is to create a prototype or test group. This allows the team, as well as customers and investors to have a better look at how the product will function and what changes can be made to it so that it will be even further improved. Make sure that the product or service not only raises interest but is able to generate orders also. If people say that they are interested in it, then ask them if they give us the order right away.

6. Execution of innovation implementation

The ideas that survive the testing process can be further developed and altered until they are ready to be executed as a part of the business offerings. The execution of implementation is a step that is unique to our business and, unless our new product causes us to have to drastically alters the typical way that our go-to-market strategy functions, then this part of the innovation management process should be relatively commonplace in our organization. It should be easier for us to move from testing to execution if we were able to generate orders already in testing phase.

7. Assessment of innovation life-cycle

After the execution of an idea, its implementation needs to be carefully monitored and assessed in terms of a number of milestones that should be set. Should a milestone not be reached, then changes will need to be made or the idea will need to be shut down. Remember to keep always customer in our mind also in execution phase and design our measuring systems so that they measure added value for the customer.

8. The next step in the process is simply to start again, always finding new needs, inspiration, solutions and taking them through the cycle until they can be offered by our company. Here are some reflective questions that we can use to evaluate innovation management process in our organization:

- Do we have a clearly defined innovation management process?
 - a. If yes, is it effective?
 - b. If no, how do we see that clearly defined innovation management process could help our organization to achieve goals better?
- Are all the people in our organization working together towards great innovations or do they do things on their own?
- Do we always properly evaluate and test our innovations before taking them to market?
- Do we measure execution of providing services or products from customer's perspective?

CONCLUSION

Innovation is everywhere. Innovation is discussed in scientific and technical literature, in social sciences such as sociology, management and economics, and in the humanities and arts. Innovation is also a central idea in the popular imaginary, in the media and in public policy. Innovation is the conversion of knowledge and ideas into new or improved products, processes, or services to gain a competitive advantage. To facilitate the innovation process effectively, organizations need a solution that allows them to manage innovation in an objective, strategic, and scalable manner. Because organizations often lack the resources



necessary to act on all contributed ideas, they must manage innovation through a systematic process that facilitates the selection of optimal ideas which have the highest strategic value.

REFERENCES

- i. http://articles.businessinsider.com/2012-04-02/strategy/31273754_1_entrepreneurs-pebble-big-wave#ixzz2K8H16gT6
- ii. <http://www.pbs.org/idealab/2012/03/the-difference-between-invention-and-innovation086.html>
- iii. <http://www.tutor2u.net/business/production/invention-and-innovation.htm>
- iv. <http://www.bpmleader.com/2012/05/22/the-8-phases-of-an-innovation-management-process/>
- v. <http://en.wikipedia.org/wiki/Innovation>