

#Managing Innovation Process from The Research Perspective

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Q1:

A1: A company that does not innovate or bring in new products cannot survive in nowadays competitive world. For example, google started with the search engine which was a brilliant idea on that time, however, it needed other products to keep up with the rise of Yahoo Search and MSN Search. To confront the competitors and defend its market share, Google innovated itself, while it also brought in new products such as productivity tools, mobile software, google maps, cloud computing, etc.

Q2:

A2: Open innovation focus on using valuable ideas coming inside and outside a company. These ideas can go to market from inside or outside the company. For example Cisco, had or still have a small R&D team and budget compared to Xerox, however, Cisco profited more from external ideas coming from Xerox compared to Xerox heavy investment in R&D. This demonstrates that, unlike Xerox, Cisco took advantage of Xerox ideas by using Open innovation approach is its management style.(from Open Innovation: The new imperative for creating and profiting from technology).

Q4:

A4: Efficiency means doing things in the right way, while effectiveness means doing the right things. Over time, efficiency has an exponential increase at the beginning, while it later increases smoothly and asymptotically. On the other hand, effectiveness, starts at the highest level, and decreases almost exponentially at the beginning, and tends to zero as the time elapses.

Q5:

A5: Running a IPR background study prior to starting a R&D project allows a company not only to prevent patent infringements, but also it allows to get a broader view which competitors/other research have been developed on the topic. It also allows to inform the company which companies/organizations can we make partnership/alliance with.

Q6:

A6: When developing a new product, the R&D group work together with the marketing group which will market the new product, the sales group that will sell it to the customers, with the manufacturing group that will produce it, with the management that if the need it requires will raise money to ensure that the new product reaches the market, the environment and legal groups that study the regulatory status...etc.

Q7:

A7: Successful joint-ventures and strategic alliances have the following characteristics:

- (1) Their differences are well understood and respected.
- (2) Each company/partner makes complementary contributions.
- (3) They share cultural values
- (4) They have similar and consistent management styles.

Q8:

A8: A VOT is not a technical description of a product, it is instead, a map that describes a product in a broader view. This includes the product name itself, the method of manufacture, the strengths of our product as well as the product weaknesses. This also informs which threats our product will have, as well as the IPR, and the regulatory status. It also describes which companies are our main competitors, and which companies provide us with the necessary means to manufacture our product.

Q9:

A9: The third and fourth generation R&D are more effective in creating commercial value because they incorporate a set of characteristics then nonexistent in the 1st and the 2nd generation. For example, in the 4th, uses open innovation which allows a company to use valuable internal and external ideas to create a new set of products. There is a sense of urgency, and well as, there is fast recognition of unmet customer needs.

Q10:

A10: Familiarity Matrix is the "process of mapping R&D projects based on the extent of knowledge about technologies and markets".

The Familiarity matrix helps a company to understand the success or the risk of failure of a product. In cases of an unfamiliar markets and unfamiliar technologies, a careful study of the FM prevents a company from falling into the suicide square. This box/square represents a product with almost 0% success in the market.

Q11:

A11: When signing a contract, a special attention must be paid for to the following items:

- (1) rights to results, (2) confidentiality obligations, (3) warranties, (4) publication, (5) restrictions, and (6) rights to use.

Q12:

A12: Value proposition is the leverage a company has in order to sell the product that is proposing to a segment of the market. It includes a set of features/advantages of the new product to its customers/users that makes them to adopt the new product(yours) instead of the old ones or from other competitors.

A market segment is a set of (or group of) customers that a company targets with a product (specific or not).

A market segment can be specialized if the customer needs are specific, or need to be reached through specific channels. For example Daimler-Benz produces Maybach for a very specific market segment (very rich) whose needs include cars with status and not costing less than 200K USDollars.

Q13:

A13: Established companies have many ways to counter an emerging company.

For example, if the new company's products depend on products of the established companies, they can require extra licensing. They can also sue the new company just to avoid investors investing in the new company.

They also can do market dumping, i.e. sell their products at prices well below the market price to put your company out of the market in a short time. They can afford losing money, however, the goal is to guarantee that your company does not survive in the market, so that they can still maintain their dominating position without any new competitor.

Q14:

A14: Stage-gate control allows for a set of initial ideas, to sort out the most feasible ones that should progress into the next stage gate. It allows for example to refine a product/projects so that the most likely to attain a commercial success are selected for the next stage.

Q15:

A15: The components that go into evaluating projects in portfolio analysis are:

(1) technical success, (2) commercial success, (3) reward, (4) business leverage, and (5) strategic fit. For example, if a company wants to have a strategic advantage over its competitors, the study of a company's portfolio analysis would recommend the company to increase its investment in R&D.