

Open innovation



**ASSIGN
BUSTER**

Open Innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology. Open Innovation processes combine internal and external ideas into architectures and systems. Open Innovation processes utilize business models to define the requirements for these architectures and systems. The business model utilizes both external and internal ideas to create value, while defining internal mechanisms to claim some portion of that value.

Open Innovation assumes that internal ideas can also be taken to market through external channels, outside the current businesses of the firm, to generate additional value. The open innovation paradigm treats research and development as an open system. Open Innovation suggests that valuable ideas can come from inside or outside the company and can go to market from inside or outside the company as well. This approach places external ideas and external paths to market on the same level of importance as that reserved for internal ideas and paths to market in the earlier era.

Open Innovation is sometimes conflated with open source methodologies for software development. There are some concepts that are shared between the two, such as the idea of greater external sources of information to create value. However, open innovation explicitly incorporates the business model as the source of both value creation and value capture. This latter role of the business model enables the organization to sustain its position in the industry value chain over time. While open source shares the focus on value creation throughout an industry value chain, its proponents usually deny or downplay the importance of value capture.

Chapter 5 in this volume will consider these points at greater length. At its root, open innovation assumes that useful knowledge is widely distributed, and that even the most capable R&D organizations must identify, connect to, and leverage external knowledge sources as a core process in innovation. Ideas that once germinated only in large companies now may be growing in a variety of settings - from the individual inventor or high tech start up in Silicon Valley, to the research facilities of academic institutions, to spin-offs from large, established firms.

These conditions may not be present in every business environment, and scholars must be alert to the institutional underpinnings that might promote or inhibit the adoption of open innovation. The Open Innovation Paradigm

The book *Open Innovation* (Chesbrough, 2003a) describes an innovation paradigm shift from a closed to an open model. Based on close observation of a small number of companies, the book documents a number of practices associated with this new paradigm. That book was written for managers of industrial innovation processes, and the work has received significant attention among managers.

To the extent that such managers are able to assess the utility of new approaches, Open Innovation has achieved a certain degree of face validity within at least a small portion of high technology industries. Open Innovation has taken on greater saliency in light of the debate about globalization and the potential for the R&D function itself to become outsourced, as the manufacturing function was 20 years earlier. | 3 Figure 1. 1 shows a representation of the innovation process under the previous Closed model of innovation.

Here, research projects are launched from the science and technology base of the firm. They progress through the process, and some of the projects are stopped, while others are selected for further work. A subset of these are chosen to go through to the market. This process is termed a "closed" process because projects can only enter in one way, at the beginning, and can only exit in one way, by going into the market. AT&T's Bell Laboratories stands as an exemplar of this model, with many notable research achievements, but a notoriously inwardly focused culture.