

Chapter 4

A Structural Model for the Design and Implementation of Open Innovation

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ABSTRACT

With the recent developments of open innovation as a formal management discipline, many organizations today are struggling to form effective internal competencies that can be leveraged to generate measured success. Many companies are using a trial-and-error approach that too often leads to unnecessary cost overruns and even failure. The model presented in this chapter provides readers with a simple, yet elegant structure necessary for the design and implementation of a successful open innovation program. The chapter explores the leading causes of failure in a new open innovation program, and offers guidelines and criteria that open innovation leaders and practitioners can use to avoid these pitfalls, and to establish a program that generates tangible returns, while motivating participants to achieve more desirable innovative behaviors.

INTRODUCTION

Open Innovation has become increasingly popular over the past decade, and is being considered one of the most exciting new management trends of our time for small, medium and large enterprises alike. Promises of reduced product development cycles and costs, as well as enhanced innovation capacity are increasing the momentum behind this current phenomenon. As practitioners begin their

journeys in this promising new space, many harsh realities can be encountered that were otherwise not anticipated, often leading to perceptions of over-promising and under-delivering. Many of these issues can be avoided if the proper attention is given at the onset of the open innovation program. With the right level of awareness, structure and discipline, open innovation can lead to reduced innovation costs, earlier new product introductions and an inspired organizational culture that is aligned around the notion of innovation excellence across the entire value chain.

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This chapter discusses some of the key challenges that practitioners often encounter when attempting open innovation for the first time, and what they can do to establish an effective and sustainable open innovation program. The author provides a proven framework for the design and implementation of an integrated innovation process that incorporates and assimilates new knowledge from within the organization (i.e., other departments, business units, etc.), the organization's ecosystem of third-party suppliers and partners, and the expansive global innovation community.

BACKGROUND ON TODAY'S OPEN INNOVATION ENVIRONMENT

Although "Open Innovation" is a relatively new term, the concept has its roots back in the early stages of the Industrial Age. Until the early 20th century, most manufacturers relied heavily on external research laboratories and inventors to supply them with ideas for new products and product enhancements. As management theory advanced, giving way to such practices and disciplines as division of labor and the five year strategic plan, companies began to safeguard their intellectual property from the outside world, with the fears that competitors would pick up on their new ideas and copy them, or somehow use this competitive intelligence against them. The idea of the research and development department became increasingly popular through the 1900's, allowing companies to retain their ideas, knowledge and assets within the physical boundaries of the organization. With the slow pace of information dissemination and employee turnover throughout most of the 20th century, this idea of guarding intellectual property worked just fine.

As information technology began to skyrocket in the late 1900's, many things began to change, thus creating a disturbance in this once stable system. The Internet suddenly provided a means

of rapid dissemination of new information, giving access to online publications, patent information and other sources of knowledge (Chesbrough, 2006).¹ Knowledge workers and technology-based markets began to become more transient, and information was exposed at an unprecedented rate. Management was no longer able to rely on the safety net that their corporate boundaries once provided. A fork in the road was eminent, and corporate leaders had to choose between one of two options: Find new ways to safeguard intellectual property, or accept the fact that information is no longer as safe as it once was, and focus instead on the *acceleration* of innovation. With the recent emergence of open innovation, the latter was obviously the choice of many.

The early adopters of open innovation had a tremendous impact on building momentum behind this new idea (Lichtenthaler, 2008).² Companies like Procter & Gamble touted their success stories of how open innovation helped them to achieve higher overall returns for less R&D investment (Huston & Sakkab, 2006),³ and new case studies began to surface as more companies adopted this new practice, providing some anecdotal evidence that open innovation was a worthwhile investment. However, with the absence of a generally accepted list of best practices, companies took it on their own to implement open innovation programs, with mixed results. While some were able to realize immediate success, others struggled to demonstrate any tangible value from their new efforts. Most companies found it difficult to reach beyond their ecosystems of existing suppliers, partners and university contacts (Davis, 2009).⁴ Other companies that were able to make valuable connections were unable to demonstrate their success in terms of financial gain, because they failed to implement the proper metrics and key performance indicators. With the lack of visibility and reporting capabilities, many open innovation programs were forced to shut down or drastically reduce their budgets and staff sizes at the first sign of recession.

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