

Chapter 28

The New Product Development Process as a Communication Web, Part I: Introduction, Concepts, and Spanish Context

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ABSTRACT

This chapter contributes towards existing literature by analysing the innovation activities of Spanish companies and by proposing New Product Development (NPD) as a communication web. We propose a model, based on literature reviews, that relates the external communication of cross-functional teams to the performance of NPD programmes. The composition of NPD teams and the external communication activities thereof are a core competency for companies and can provide them with major competitive advantages.

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INTRODUCTION

Technological advances, competitive pressures and changes in consumer preferences mean that achieving good new product performance is of vital importance to the survival of businesses. In a study regarding successful factors in new product development (NPD), Brown and Eisenhardt (1995) identified a line of research characterised by considering NPD as a communication web. This trend emphasises the importance of variables relating to the external communication of NPD teams and the use of information from various areas of the firm¹. As indicated by Ancona and Caldwell (1997), achieving adequate performance requires a high degree of coordination between the different operating units participating in the process and an optimal sharing of information within the organisation.

Firms usually respond to the above requirements by entrusting the NPD process to cross-functional teams, believing that they present considerable advantages over single-function groups when it comes to the development of successful products.

In order to achieve their goals, NPD teams must also gather information from several sources, from both inside and outside the organisation (Kleinschmidt et al., 2010). Thus, Allen (1970, 1984) verified that in successful R&D projects some individuals acted as *technological gatekeepers*, establishing links between the team and the technological environment and gathering technical information from outside and incorporating it into the group.

A broader framework of roles was developed by Roberts and Fusfeld (1981), who believe that the successful finalisation of a development project required five different roles². The two roles most closely related to the interaction between the team and the outside are that of the previously mentioned “gatekeepers,” and that of *product champions*: individuals who emerge spontaneously from within an organisation, actively and

enthusiastically push each stage of the innovation process forward and contribute decisively to the company’s success (Lichtenthaler & Ernst, 2009; Schön, 1963; Tushman & Nadler, 1986). The aforementioned roles have both been positively linked to the performance of development projects (Allen, 1970; Katz & Tushman, 1981; Markham & Griffin, 1998).

Although some studies (Allen 1970, 1984; Markham & Griffin, 1998; Roberts & Fusfeld, 1981) have shown the importance of communication beyond the boundaries of the NPD team and have identified various roles in this process, the external communication of NPD teams has not received enough attention, nor has its impact on new product performance been sufficiently tested (Ancona, 1990).

Another aspect that is associated with NPD success and that is directly related to the external communication of NPD teams is the consideration of *lead users* in the NPD process. Lead users are defined as users that already possess the characteristics that the majority of consumers will present in the future. For businesses, these individuals are great predictors of the trends and needs that will sooner or later emerge in the market (Droge et al., 2010; Spann et al., 2009; von Hippel, 1986).

The aim of this study is therefore to examine the impact of the cross-functional composition of NPD teams, and of their external communication activities, on new product performance. In order to do so, we propose a model in which new product programme performance is influenced by: (1) the cross-functional character of the team responsible for NPD; (2) the presence of product champions in the NPD process; (3) the presence of gatekeepers in the NPD process; and (4) the consideration of lead users in NPD.

When the composition of NPD teams and the external communication activities thereof positively influence new product performance and the success of innovation activities, the company is provided with a core competency, which competitors find difficult to emulate.

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