2005

Developing a climate of trust during new product development: a conceptual framework

Janette K. Rowland
University of Wollongong, janetter@uow.edu.au

Publication Details
Developing a climate of trust during new product development: a conceptual framework

Abstract
A gap exists in our understanding of the role that “trust” plays within organisations that produce new products. Recent organisational research suggests that trust may play a more significant role in modern organisational structures than previously thought. Trust encourages efficient information sharing, limits defensive behaviours, encourages citizenship behaviours, leads to co-operation and teamwork, and encourages collaboration. The NPD literature has traditionally focused on “integration methods” which promote information sharing and interaction among participants with trust often being viewed as a “by product” of these approaches. A conceptual framework is proposed, with several research propositions, which highlights the importance of understanding the complexities of organisational trust and the role that management play in creating an environment conducive to the development of a climate of trust. If such a climate can be developed and nurtured, the potential outcomes are collaborative behaviours such as maximised cross-functional communication and cooperation, minimised cross-functional conflict and ultimately NPD success.

Keywords
Developing, Climate, Trust, during, Product, Development, Conceptual, Framework

Disciplines
Business | Social and Behavioral Sciences

Publication Details

This conference paper is available at Research Online: http://ro.uow.edu.au/commpapers/2389
Abstract

A gap exists in our understanding of the role that “trust” plays within organisations that produce new products. Recent organisational research suggests that trust may play a more significant role in modern organisational structures than previously thought. Trust encourages efficient information sharing, limits defensive behaviours, encourages citizenship behaviours, leads to co-operation and teamwork, and encourages collaboration. The NPD literature has traditionally focused on “integration methods” which promote information sharing and interaction among participants with trust often being viewed as a “by product” of these approaches. A conceptual framework is proposed, with several research propositions, which highlights the importance of understanding the complexities of organisational trust and the role that management play in creating an environment conducive to the development of a climate of trust. If such a climate can be developed and nurtured, the potential outcomes are collaborative behaviours such as maximised cross-functional communication and co-operation, minimised cross-functional conflict and ultimately NPD success.

Introduction

The relationship between functional specialists during the new product development process has been a heavily researched topic for decades (Jassawalla and Sashital, 1998; Lawrence and Lorsch, 1967; Burns and Stalker, 1961). Skillfully managing these relationships continues to challenge management today as tensions, conflicts and disharmonies between these groups can severely hinder new product successes (Song, Xie and Dyer, 2000; Souder, 1981). As interest in the area evolved, an important focus of the academic research became marketing’s cross-functional relationships (Ruekert and Walker, 1987; Hutt, 1995; Fisher, Maltz and Jaworski, 1997; Song, Xie and Dyer, 2000; Leenders and Wierenga, 2002). Extensive empirical research in the area found that effective integration between Marketing and other departments was shown to impact on successful new product development (Souder, 1981, 1988; Griffin and Hauser, 1996; Jassawalla and Sashittal, 1998). However, research continues into what organisational factors impact on “effective” integration and what options are available to help organisations achieve this elusive, yet desirable outcome.

Several perspectives of integration have been expressed in the literature. Initially researchers looked at integration in the form of meetings and information flows between departments (Gupta, Raj and Wilemon, 1985; Ruekert and Walker, 1987; Griffin and Hauser, 1996). More recently, some authors have suggested that there is a need to reassess these traditional measures of integration beyond information sharing and cooperation (Kahn, 1996; Jassawalla and Sashittal, 1998). Instead, they have expanded the concept of integration to “an affective, volitional, mutually shared process where two or more departments work together, have mutual understanding, have a common vision, share resources and achieve collective goals” (Kahn, 1996, p.139) and have defined it as “collaboration”, which they view as being more effective in achieving beneficial outcomes for the organisation. The research question that remains is how do companies achieve this higher order of involvement between departments?
The purpose of this study is to look beyond the work of many previous marketing researchers who have focused on the use of mechanistic integration devices to improve cross-functional relationships and have had inconclusive results as to their effectiveness (Souder and Moenart, 1990, 1994; Mukhopadhyay and Gupta, 1995; Griffin and Hauser, 1996; Maltz and Kohler, 2000; Leenders and Wierenga, 2002). This framework will consider the role that trust plays in developing the necessary organisational culture for the type of creativity and innovation required in new product development (Burns and Stalker, 1961; Damanpour, 1991; McEvily, Perrone and Zaheer, 2003). The significance of the role of trust in organisations has evolved through the work of researchers across several disciplines within the trust literature (Dirks and Ferrin, 2001), and suggests that trust is “invaluable to organisations that depend on cross-functional teams, inter-organisational partnerships, temporary work groups and other cooperative structures to coordinate work” (Williams, 2001, p.377). As all of these situations are likely to arise during the new product development process within organisations, there is clearly a need to develop a framework which incorporates trust with other organisational issues relevant for effective NPD outcomes. This research will focus on the gaps in the literature to date in making managers aware of the type of organisational factors that impact on the climate of trust achieved during the NPD process.

The Role of Trust in NPD

In today’s work environment, interacting with new managers or co-workers is becoming commonplace. This is due to a number of factors including the formation of cross-functional teams, mergers, enhanced communication technology or simply increased staff turnover (McKnight, Cummings and Chervany, 1998). The challenge facing organisational trust theorists is how to develop some level of trust in these situations to achieve positive organisational outcomes, such as collaborative behaviours. Rather than trust being based on experience, or firsthand knowledge of the other party (Shapiro, Sheppard and Cheraskin, 1992), trust in these situations relies more on institutional cues that enable one person to trust another without firsthand knowledge. In this “institution-based” trust, the parties involved “believe that the necessary impersonal structures are in place to enable one to act in anticipation of future endeavours” (Shapiro, 1987; McKnight, Cummings et al. 1998). In this type of trust development, each member must believe that the institution (or organisation) reflects the actions of the people involved and be comfortable with their own role, and the role of others in that setting. Perceptions about other group members are based on beliefs and attitudes towards particular groups, functions, or categories within the organisation rather than individual merits. The aim of the organisation should therefore be to create positive feelings about the organisation as well as the separate units within it. As NPD situations often require collaboration between cross-functional members of an organisation, these research findings suggest that developing a climate of trust becomes less dependent on interpersonal factors and more dependent on a variety of organisational factors including leadership and culture.

Culture and Climate

A culture high in trust has been found to have the most significant effect on behaviour during the NPD process (Moorman, 1995). As such, there is much to gain from any efficiency created by a “trusting environment”. Two types of trust have been considered in the context of new product development: “Interpersonal Trust” which exists between individuals (Moorman, Deshpande and Zaltman, 1993; McAllister, 1995); and “Organisational Trust” which exists between an employee and employer (Shapiro, Sheppard and Cheraskin, 1992; Lewicki and Bunker, 1996; Creed and Miles, 1996).
The widely accepted theories on interpersonal trust support the definition of trust as being both cognitive - “grounded in individual beliefs about peer reliability and dependability”, and affective - “grounded in reciprocated interpersonal care and concern” in nature (Brewer, 1981; Cummings and Bromily, 1996; Kramer, Brewer and Hanna, 1996; McAlister, 1995). Previous NPD researchers have found that interpersonal trust impacts on several issues associated with cross-functional relationships: resolving conflict and preserving harmony in cross-functional relationships (Souder, 1977, 1981, 1988; Souder and Moenart, 1990); increasing the perceived quality and use of market information between functional specialists (Maltz and Kholi, 1996); and affecting the level of cross-functional collaboration achieved (Jassawalla and Sashittal, 1998). Souder, (1988) further developed the role that trust plays in organisations by suggesting that if interpersonal distrust continues without management intervention, it can become institutionalised. This is in line with the views of early theorists in organisational trust who suggest that trust in an economic or social setting, such as in organisations, is a “collective attribute” that can be motivated either by strong positive affect or emotional trust for the object of trust, or by good rational reasons or cognitive trust, or more usually by some combination of both. This highlights the need to consider both affective and cognitive trust, not only from an interpersonal perspective but also as it relates to organisations as a whole.

Trust is, in fact one of the factors most commonly associated with organisational climate, which refers to “the feelings of… members about the level of trust and mutual supportiveness in the inter-organisational relationship” (Mohr and Nevin, 1990, p.42). Researchers have found that a “warm and trusting” climate is more likely to exist in organisations which people identify with and are proud to belong to. It can minimise interdepartmental conflict (Barclay, 1989), and improve communication effectiveness (Mohr and Nevin, 1990). The types of organisational factors that have previously been associated with climate are the attitude of management, their reward orientation, organisational identification, goal compatibility, and autonomy (Barclay, 1989; Mohr and Nevin, 1990)

The positive outcomes associated with trust at both an interpersonal and organisation level are aligned with the behaviours of bi-directional communication (Mohr and Nevin, 1990; Fisher, Maltz, 1997), mutual accommodation (Fisher, Maltz et al. 1997) and functional conflict (Menon, Bharadwaj, and Howell, 1996). NPD researchers agree that these outcomes are appropriate measures for collaborative behaviours in cross-functional relationships. This indicates a merging between researchers from the trust area and researchers in the NPD area. It seems, therefore inevitable, that further research is required to determine the causal role of trust in achieving successful new product outcomes.

Gaps in the literature

The following conceptual model (Figure 1) addresses the gaps in the literature by considering organisational trust as a function of several organisational factors. This framework differs from other research to this point, by considering how the culture of the organisation at both a management and NPD level, along with the internal volatility, can impact on the climate of trust achieved. The climate will consider the individual members’ identification with the organisation and their faith in the NPD process as a whole, and how this affects the relative perceived risk that they associate with NPD in the organisation. It will be the first time that the level of trust is explicitly considered as to its impact on the collaborative behaviours achieved during the NPD process.
Conceptual Framework

Figure 1: How organisational factors affect the climate of NPD trust achieved and the level of cross-functional collaborative behaviour.

Management Culture

The study of organisational culture has been carried out by scholars from many disciplines across a wide range of research ontology and using many and varied methodologies (Wilkins and Ouchi, 1983). These have included marketing theorists who have examined the effect of culture on cross-functional integration and NPD success (Deshpande and Webster, 1989; Barclay, 1989; Mohr and Nevin, 1990; Moorman, 1995; Fisher, Maltz and Jaworski, 1997). These researchers’ findings suggest that cultures that emphasise participation, teamwork, cohesion and the development of organisational understanding and commitment are high in trust and low in conflict. This type of culture also has the most significant effect on achieving collaborative behaviour, which is most desirable for NPD success.

Some of the cultural variables that have been shown to have an effect on NPD outcomes are specific to the management culture within the organisation and include: NPD priority and support by top management (Song, Montoya-Weiss and Schmidt, 1997; Jassawalla and Sashittal, 1998; Song Xie and Dyer, 2000); and the allocation of resources (Fisher, Maltz and Jaworski, 1997). We will also measure other factors effecting management culture such as blame placing. These variables have also been shown to impact on the level and type of inter-functional rivalry that exists within an organisation (Maltz, Souder and Kumar, 1999; Jassawalla and Sashittal, 1998; Olsen, Walker and Ruekert, 1995; Souder, Moenart, De Meyer and Deschoolmeester, 1994).

These cultural components can impact on the climate of trust within an organisation in a variety of ways: at a cognitive level by affecting individual NPD participants’ faith in the
NPD process as a whole; at an affective level through their identification with the organisation; as well as on the level of perceived risk or benefit the individual feels during the NPD process.

P1: The more supportive the management culture is of NPD, the (a) lower the level of inter-functional rivalry, (b) higher the climate of trust achieved, (c) higher the level of collaborative behaviour, (d) and higher the likelihood of NPD success

NPD Culture

Other cultural components relate specifically to the NPD culture within an organisation such as integrated rewards and incentives (Griffin and Hauser, 1996; Kahn 1996; Song, Montoya-Weiss and Schmidt, 1997; Mukhopadhyay and Gupta, 1998; Leenders and Wierenga, 2002), mutual goal setting (Griffin and Hauser, 1996; Fisher, Maltz, et al. 1997; Gillespie and Mann, 2004) and NPD ownership (Smith and Barclay, 1997). These factors can also impact on the climate of trust achieved as per the management culture.

P2: The more inclusive the NPD culture, the (a) lower the level of inter-functional rivalry, (b) higher the climate of trust achieved, (c) higher the level of collaborative behaviour, (d) and higher the likelihood of NPD success.

Internal Volatility

Another contextual consideration is the issue of “structural flux” which refers to “the rate of change within an organisation” (Maltz, 1997, p87). Maltz theorises that the internal environment can also affect the level of integration achieved within an organisation. Internal volatility is considered to impact on both rivalry and conflict between functions (Maltz, Souder, Kumar, 1999; Maltz and Kohli, 2000) both of which are considered to have a negative impact on the development of trust.

P3: The lower the perceived internal volatility, the (a) lower the inter-functional rivalry, (b) higher climate of trust achieved, (c) higher the level of collaborative behaviour, (d) and higher the likelihood of NPD success.

Conclusion

The purpose of this paper was to develop a new conceptualisation of cross-functional relationships in the NPD process that shifts the focus from “integration” as a desired outcome to “collaboration” and collaborative behaviours. Although researchers have acknowledged the role of organisation culture in understanding cross-functional relationships in organisations, previous models have focused on mechanistic approaches to achieve integration. This framework aims to develop a measurement scale for collaborative behaviours achieved through an NPD climate high in trust. The climate of trust achieved will be a function of managerial philosophy and organisational structures and the organisational context within which the functions operate (Creed and Miles, 1996), and will be measured at both an affective and cognitive level.
References


McAllister, Daniel J. 1995. Affect and Cognition-Based Trust as Foundations for
Interpersonal Cooperation in Organisations, Academy of Management Journal, 38(1), 24-59


Mukhopadhyay, Samar K., and Gupta, Anil V. 1995. Interfaces for resolving marketing, manufacturing and design conflicts, European Journal of Marketing, 32, 101-124


