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Abstract
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Keywords
general, npd, framework, during, interface, trust, process, role, r, marketing

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The Role of Trust in the Marketing and R&D Interface during the NPD Process: A General Framework

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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 plays a more significant role in modern organisational structures than previously thought. Trust encourages efficient information sharing, it limits defensive behaviours, encourages citizenship behaviours, it leads to co-operation and teamwork, and encourages collaboration. The NPD literature has traditionally focused on "integration methods" which promote information sharing and interaction amongst participants. Trust has been viewed as a "by product" of these approaches. A framework is proposed which highlights the important role that management play in creating an environment conducive to the development of interpersonal and organisational trust. We argue that the traditional "integrating mechanisms" used by management for bringing together functional specialists should be used with a greater focus on building high levels of trust throughout the organisation which ultimately leads to greater collaborative behaviour amongst participants.

Keywords: collaboration, cross-functional relationships, trust, new product development

Introduction

The task of effectively integrating functional specialists during NPD activities has been the focus of NPD researchers (Weber 1947) and company management for many decades and still remains and elusive goal for many organisations. Research has clearly shown that effective functional integration does impact on new product success rates with empirical evidence suggesting a positive relationship between the level of integration and successful new product outcomes (Griffin and Hauser, 1996; Jassawalla and Sashittal, 1998; Ruekert and Walker, 1987). However, what also emerges from a review of the integration literature is that firstly, NPD researchers have conflicting views regarding the success of many of the traditional integration mechanisms used by management to achieve functional integration (Souder 1988, Olsen, Walker, and Ruekert 1995), and, secondly, there is confusion regarding the expected outcomes of integration mechanisms in terms of functional integration achieved (Kahn 1996, Jassawalla and Shashittal 1998). Recently, several authors (Kahn, 1996, Kahn and Mentzer 1998, Jassawalla and Shashittal 1998), have also suggested that "integration" which has emphasized the use of communication in the form of meetings and information flows between departments (Griffin and Hauser, 1996, Reukart and Walker 1987) as an outcome is not sufficient for NPD success. They have extended the concept of integration to include a higher order of involvement, known as collaboration. Kahn (1996) defines collaboration as "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 p.139". Jassawalla and Shahittal (1998) found that high levels of *interpersonal trust*

were found amongst functional managers who had achieved collaboration. In particular, they found that managers in high trust NPD processes "more eager to share information, more likely to admit their confusions and ask for assistance, and more likely to take the risk of voicing new creative ideas p.248".

It seems that the emerging "collaboration" view of organising NPD activities (Kahn 1996; Kahn and Mentzer, 1998; Jassawalla and Shashital, 1998) and recent management literature (Dirks and Ferrin, 2001; McEvily, Perrone and Zaheer, 2003) seem to be converging to the same conclusion, that "collaboration" or its equivalent in the management literature "teamwork and cooperation", are very desirable processes for performing organisational activities.

Addressing the Gap in the NPD literature

To overcome this confusion in the NPD literature regarding the goals and desired outcomes of functional integration the framework proposed here (Figure 1) aims to shift the focus of future CFR research away from "integration mechanisms" used to achieve "information sharing and co-operation", to the use of "integration methods" for achieving the more beneficial organisational outcomes of "collaboration" and "collaborative behaviours" between NPD participants. Specifically, the proposed framework presented here highlights (1) the importance of the contextual situation within the organisation both at an organisational and participant level, on generating trust within an organisation (2) identifies the most common processes or "integration mechanisms" that have been used to facilitate cross-functional relationships and divides them into both organisational level and participant level mechanisms (3) clearly highlights the mediating role that trust plays on collaborative behaviour both at the individual and organisational level and (4) highlights the role that collaborative behaviour plays in achieving NPD success. The following sections provide the theoretical justification for the proposed framework.

The Role of Trust in Developing Collaborative Behaviours in Organisations which Develop New Products

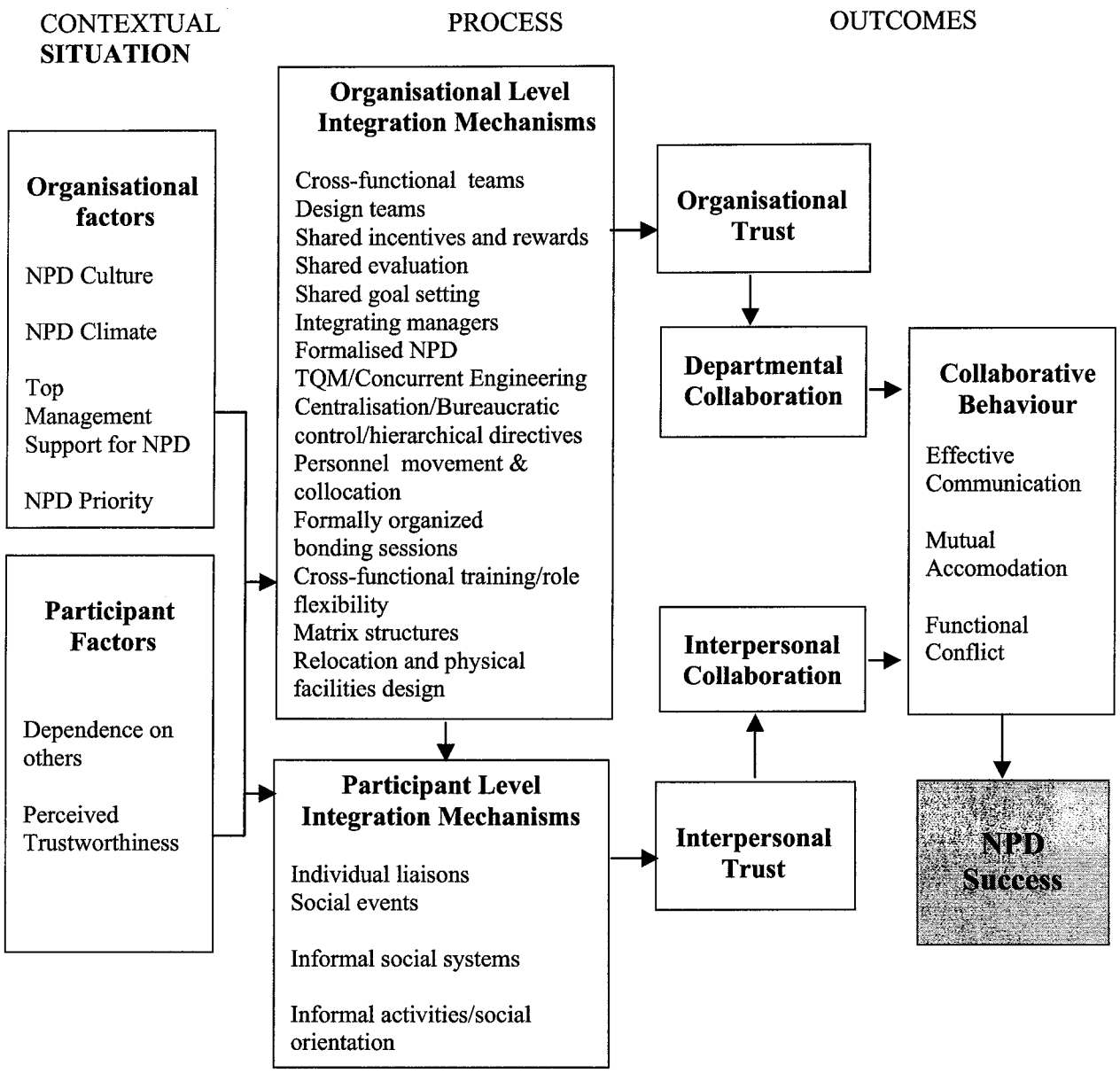
New product development is one of the riskiest processes within many companies, not only for the possible corporate outcomes but also for the individuals involved in the process. As such this process has much to gain from any efficiencies created by a "trusting environment". Two types of trust are considered important in the context of the NPD, "interpersonal trust" exists between individuals, both affective and cognitive in nature (Moorman, Deshpande and Zaltman, 1993; McAllister, 1995) and "organisational trust" is the trust that exists between an employee and an employer (McAllister, 1995). Williams (2001) states that "trust can facilitate cooperation and coordinated social interaction, it reduces the need to monitor others' behaviour, formalize procedures and create specific contracts. It also facilitates informal cooperation and reduces negotiation costs, it is invaluable to organizations that depend on cross-functional teams, interorganisational partnerships, temporary work groups, and other co-operative structures to coordinate work p.377".

Trust has been clearly acknowledged as leading to cooperative behaviour among individuals, groups and organisations, yet what is the actual effect it has on their behaviours? Dirks and Ferrin (2001) in an exhaustive review of the trust literature examine two different perspectives

of trusts' role in organisational settings. Firstly, trust is examined as a main effect, and secondly, as a "moderating/mediating" effect. They provide an excellent summary of past research findings regarding the role that trust has played on behaviours between individuals, superiors and the organisation. By examining these past research findings, they conclude that trust clearly performs an important role in developing beneficial behaviours (i.e., cooperation, collaboration, organisational citizenship behaviour) for the organisation. What is not as clear is the organisational situations where trust has a main or moderating/mediating effect. They therefore propose two models of trust, where the concept of "situational strength" will delineate which model applies. Organisational "situations" are considered "strong" to the extent that they provide guidance and incentives to behave in a particular way (this is particularly appropriate when considering the NPD process). In "weak" situations they do not provide guidance or incentives to behave in a particular way, and do not provide clear or powerful clues that lead individuals to interpret events in a similar way. They conclude that when there is a "weak" situation, trust has a main effect, but where there are "strong" situation of clear direction and many clues, trust has a moderating/mediating effect. Further, Dirks and Ferrin (2001) propose that trust has main, mediating and moderating effects dependent on the level of organisational direction and clues given to organisational members. This viewpoint has potential significance for the study of NPD activities. Both strong and weak NPD situations exist throughout organisations. Strong NPD situations exist in highly formalised NPD processes (Hauser and Clausing, 1988; Griffin, 1992, Moenart, et al 1994), weak situations exist in decentralised, matrix organisations. Management need to be able to identify their "situation" and understand the effect that trust has in those circumstances, strong situations will need high levels of organisational trust, weak situations will rely on high both high levels of organisational trust and high levels of interpersonal trust.

The following section will highlight that organisations involved in NPD have focussed traditionally on the basic aspects of relationships i.e., information flow and basic co-operation, by using many of the "integration methods" (Figure 1) and have neglected the development of "trust" between NPD participants and with the organisation. Trust development should be seen as a primary goal of management actions. McEvily, Perrone and Zaheer (2003) extend the role of trust in organisations even further by suggesting that trust be viewed as an "organizing principle". Specifically, through the two causal pathways of "structuring" and "mobilizing" which affect the behaviour of actors. Structuring is "the development, maintenance, and modification of a system of relative positions and links among actors situated in a social space. The result is a network of stable and ongoing interaction patterns, both formal (e.g., routines and organisational units) and informal (e.g., cliques and coalitions) p.94). Whereas "mobilizing" is the "process of converting resources into finalized activities performed by interdependent actors ..... Mobilizing involves motivating actors to contribute their resources, to combine, coordinate, and use them in joint activities, and to direct them towards organisational goals. P97". They argue that by viewing trust as an organizing principle, that organisations can become more organic and do not have to rely exclusively on mechanistic coordination devices and impersonal rules to manage interdependence in the face of uncertainty. Research findings in the NPD provide evidence that these "mechanistic coordination devices and impersonal rules" such as highly formalised NPD processes and approaches to NPD organisation are not effective in producing successful NPD outcomes (Moenart et al 1994; Griffin 1992; Song, Xie and Dyer, 2000). There is a need to develop a framework which explains the modern NPD task environment faced by management and the organisational issues that are relevant for effective NPD outcomes.

Figure 1: An Integrative Framework for Developing Cross – Functional Collaboration during the New Product Development Process



A Framework for Developing Cross - Functional Collaboration during the NPD

The flatter organisational structures that now exist in many organisations have resulted in greater levels of decentralisation and project work when developing new products and services. Rather than focussing on integration gaps as previous NPD integration models have (Gupta and Raj, 1988; Griffin and Hauser, 1996) this framework draws upon the trust literature and views NPD success as an outcome of "trust" and collaborative behaviours at both a departmental level and an interpersonal level. Also drawn upon is the system – structural perspective (Van de Ven 1976) which holds that a social system can be examined

by exploring the interrelationships among its environment, its organisational structure and processes, and its outcomes.

The environment for innovation in organisations can be attributed to senior management, as such organisational factors play a significant role in shaping NPD participants views of the organisational "situation" (Dirks and Ferrin, 2001). Top management wishing to facilitate 'collaborative behaviours" during the NPD need to make their decisions regarding the selection of "integrating mechanisms" on the basis of which ones or combinations, are more likely to achieve high organisational trust and high interpersonal trust outcomes. Management must appreciate the role that NPD climate and culture play in establishing the correct environment for cooperative behaviours and rewarding trusting behaviour (Deshpande and Webster, 1989; Ahmed 1998). Top management support for NPD activities is also seen as important for developing organisational trust, where participants see that their superiors are supportive of their efforts by providing the necessary resources for NPD activities (Cooper and Klienschmidt, 1997; Jassawalla and Shashittal, 1998). We propose that where participants perceive there to be a positive organisational climate and culture for NPD activities, high levels of management support, and NPD is seen as a priority, that the use of organisational level integration mechanisms are more likely to produce high levels of organisational trust, which in turn produce collaborative behaviours at the departmental level.
Top management need to be aware of the role that participant factors play in achieving effective individual level cross – functional relationships (CFRs). Perceived trustworthiness is a key antecedent of CFRs (McAllistair 1995), Management should provide the opportunity for interpersonal trust to develop by using a combination of participant level and organisational level mechanisms which allow both cognitive based trust and affect based trust to develop. The perceived interdependence of one NPD participant on another is based on resource dependence theory (Gupta, Raj and Wilemon, 1986; Ruekert and Walker, 1987) and it affects the level of cooperation between people. Where there are perceptions of high interdependence developing high trust relationships can lead to collaboration at the interpersonal level. The framework shows that both levels of trust, interpersonal and organisational trust, generated by these integration mechanisms will lead to "collaboration" which involves effective communication (bi-directional, quality and open communication), mutual accommodation and understanding, and functional conflict.

Conclusions and Implications for Future Research

A framework has been developed to better conceptualise the role that organisational factors under the control of management, and the decisions that management make regarding the "integration mechanisms" they use, can play in developing interpersonal and organisational trust, and lead to collaborative behaviours which from empirical evidence lead to successful NPD outcomes. Functional integration needs to be re-examined from a participants' perspective incorporating the role that their trust perceptions plays in shaping their behaviours at a departmental and interpersonal level. The constantly changing organisational environment that exists in many organisations, often referred to as "structural flux" (Maltz 1997) confronts many functional managers and has them developing "non-trusting" defensive behaviours which keep them intact from adverse organisational outcomes. A high trust organisation where NPD participants are not fearful of top management or other NPD participants because trust exists and operates, will lead to collaborative behaviours which enhance the speed and quality of decision making in what is a very risky activity, developing new products.

References

Ahmed, P. K., 1998. Culture and Climate for Innovation. European Journal of Innovation Management. Vol 1, No 1, p 30 –43.

Cooper, R.G., and Kleinschmidt, E.J., 1987. New Products: What Separates Winners from Losers. Journal of Product Innovation Management, 4, 169-184.

Deshpande, R., and Webster, F.E., 1989. Organisational Culture and Marketing: Defining the Research Agenda. Journal of Marketing, 53 (January), 3-15.

Dirks, K.T., and Ferrin, D.L., 2001. The Role of Trust in Organizational Settings. Organization Science. Vol. 12, No. 4 July – August. p 450 – 467

----- and Hauser, J. R. 1996. Integrating R&D and Marketing: A Review and Analysis of the Literature. Journal of Product Innovation Management, 13:191-215.

Gupta, A.K., Raj, S.P., and Wilemon, D. 1986. A Model for Studying R&D-Marketing Interface in the Product Innovation Process. Journal of Marketing 50 (2):7-17 (April)

Gupta, A.K., and Wilemon, D. 1988. The Credibility- Cooperation Connection at the R&D-Marketing Interface. Journal of Product Innovation Management 5;20-31

Hauser, John R and Clausing, Don. 1988. The House of Quality. Harvard Business Review. 66:63-77.

Jassawalla, A.R., and Sashittal, H.C. 1997. An Examination of Collaboration in High-Technology New Product Development Processes. Journal of Product Innovation Management, 15:237-254

Kahn, K. 1996. Interdepartmental Integration: A Definition with Implications for Product Development Performance. Journal of Product Innovation Management. 13:137-151.

----- and Mentzer J.T. 1998. Marketing's Integration with other Departments. Journal of Business Research. 42, 53-62

Maltz, E. 1997. An Enhanced Framework for Improving Cooperation between Marketing and other Functions: the Differential Role of Integrating Mechanisms" Journal of Market-Focused Management, 2, 83 –98.

McAllister, D. J. 1995. Affect and Cognition - Based Trust as Foundations for Interpersonal Cooperation in Organisations. Academy of Management Journal, Vol 38, No1, 24 -59.

McEvily, B., and Perrone, V., and Zaheer, A. 2003. Trust as an Organizing Principle. Organization Science. Vol. 14, No.1, January-February, pp.91-103.

Moenart, R..K., and Souder, W.E., DeMeyer, A., and Deschoolmeester, D. 1994. R&D-Marketing Integration Mechanisms, Communication Flows, and Innovativeness. Journal of Product Innovation Management 11(1);31-45.

Moorman, C., Deshpande, R., and Zaltman, G. 1993. Factors Affecting Trust in Market Research Relationships. Journal of Marketing, Vol. 57 (January), 81-101.

Olson, E. M., O. C. J. Walker, and Ruekert R.W. 1995. Organizing for effective new product development: The moderating role of Product Innovativeness. Journal of Marketing 59(1): 48.

Ruekert, R.W., and Walker, O. C. 1987 . Marketing's Interaction with other Functional Units: a Conceptual Framework and Empirical Evidence. Journal of Marketing, 51:1-19 (January).

Song, M. X and Xie. J and Dyer, B. 2000. Antecedents and Consequences of Marketing Managers' Conflict Handling Behaviours" Journal of Marketing. Vol 64, Jan, 2, p.50 –66.

Van de Ven, A., 1976. On the Nature, Formation, and Maintenance of Relations Among Organizations. Academy of Management Review. 4 (October), 24-36.

Weber, Max. 1947. The Theory of Social and Economic Organisations. New York: oxford University Press.

Williams, M. 2001. In Whom we Trust: Group Membership as an Affective Context for Trust Development. Academy of Management Review. Vol 26, No. 3, p.377 – 396.