

CONFIGURATIONS DRIVING NPD PERFORMANCE FIT WITH MARKET DEMANDS AND TIME CONSTRAINTS

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ABSTRACT

The research reported in this paper is aimed at developing knowledge on organizing NPD systems to optimize their contribution to performance. To this end, a systems approach to fit is used to explain the context-structure-performance relationships for NPD performance, specifically in terms of fit with market demands of the product concept and fit with time constraints of the development process. From a sample of 164 US firms, the top 15 % performers in terms of *both fit with market demands and fit with time constraints* have been identified. An optimized ‘Ideal Profile’ for the organization of NPD systems, formed by a consistent pattern of: NPD Process, NPD Project Structure and Management, Innovation Climate, and NPD Goal Setting and Portfolio Management, followed from the analysis of the NPD configuration of these top performers. For the calibration sample (the other 85%) significant deviation from the ideal profile on all elements of the configuration was found, the correlations between NPD Performance Fit with Market Demands and Fit with Time Constraints and total Euclidean distance are also significant. Overall, these results provide evidence for the proposition that (1) new product success is a function of a set of NPD development system decisions and (2) to truly understand the impact of those decisions, they must be considered as a holistic system.

The contribution of this research is in the empirical validation of the internal consistency of an ideal organizational profile for NPD systems achieving both a high NPD performance in terms of market acceptance of their new products as well in terms of the satisfactory level of the development times of those products. By also examining ideal profiles for each of these NPD performance dimensions separately, the conflicting demands created by multiple performance metrics are highlighted as well as the organizational trade-offs necessary for optimal performance. In terms of managerial implications, this also gives direction for organizational redesign to firms either wanting to maximize their product concept (Fit with Market Demands) or development process (Fit with Time Constraints) performance.

INTRODUCTION

A variety of studies have explored the factors that drive successful new product development (e.g., Brown and Eisenhardt 1995; Cooper and Kleinschmidt 1995; Ernst 2002; Griffin 1997; Griffin and Page 1993; 1996, Kahn *et al.* 2006; Montoya-Weiss and Calantone 1994). These studies have tended to focus on the relations between *single* success factors and performance. Drazin and Van de Ven (1985) have argued that this type of analysis assumes that the “anatomy of an organization” is “decomposable into elements that can be examined independently. The knowledge gained from each element can then be aggregated to understand the whole organizational system” (Drazin and Van de Ven 1985, p. 519). In contrast, the systems approach advocated by Miller (1981) and Van de Ven and Drazin (1985) emphasizes the search for patterns of contextual and structural variables that influence performance. They assert that the understanding of context-structure-performance relationships can only advance by addressing simultaneously the many contingencies, structural alternatives, and performance criteria that must be considered holistically to understand organizational design. The systems approach emphasizes the need to adopt multivariate analysis to examine patterns of consistency among dimensions of

organizational context, structure and performance. The consistency analysis in the systems approach uses the central concept of 'Fit' as being the "internal consistency of multiple contingencies and multiple structural characteristics, it affects performance characteristics" (Drazin and Van de Ven, 1985, p. 515). In this study performance will be intermediately measured by determining fit. Already in their 1995 study Brown and Eisenhardt by contrasting the impact of both product concept effectiveness as well as process performance on financial performance, highlighted the importance of multiple performance dimensions. In this study we pick up this challenge by focusing on two sets of NPD performance dimensions that are potentially conflicting and need balancing. Brown and Eisenhardt (1995) did further decompose their product concept and development process performance constructs into various forms of fit, pointing at market acceptance of the new product (labeled 'Fit with Market Demands) versus development times of the NPD process ('Fit with Time Constraints').

Our research is guided by the following central question: What is the relationship between an organization's profile of NPD practices and NPD performance in terms of (1) market acceptance of their new products (Fit with Market Demands), as well in terms of (2) the satisfactory level of the development times of those products (Fit with Time Constraints)? To answer this question, we begin in the next section by reviewing the literature to define a set of best practices in organizing NPD, and we further operationalize the concepts of Fit with Market Demands and Fit with Time Constraints. Using data collected from 164 firms, we then identify the highest-performing firms on *both* performance dimensions and use their data to define an ideal NPD profile, following the systems approach advocated by Miller (1981) and Drazin and Van de Ven (1985). We establish the deviation from the ideal profile for the calibration sample to determine whether this is significant. We also examine how the ideal profile varies depending on the performance metric used to identify high-performing firms. Methodology, results, discussion and conclusions are presented in consecutive sections below.

LITERATURE REVIEW

NPD Configuration

A review of the literature indicates that an ideal NPD system has the following characteristics:

1. A formally documented, staged *process* with overlapping fluid stages and 'fuzzy' stage decisions (Griffin and Page 1996; Griffin 1997);
2. A multifunctional 'heavy weight' *team structure* with a *project manager* having primary responsibility or even full control over resources (Clark and Wheelwright 1993; Brown and Eisenhardt 1995; Hobday 2000);
3. An *innovative climate* with emotional involvement, freedom to define one's own work, time & support to develop unplanned new ideas (Glick 1985; Ekvall 1996; Isaksen & Lauer 2002);
4. A formal *NPD strategy* and project portfolios aligned with *business strategy* (March 1991; O'Reilly and Tushman 2004), Cooper *et al.* 2004); and
5. A clearly articulated role of NPD in achieving *business goals* combined with systematic *project portfolio management* (Cooper and Kleinschmidt 1995; Cooper *et al.* 2004)

NPD Performance

The peculiarities of NPD success and performance assessment is a recurring theme in NPD literature. NPD performance literature lacks standard definitions of constructs (Blindenbach-Driessen et al, 2005). An increasing number of authors have referred to and make use of the constructs proposed by Brown and Eisenhardt (1995) in their meta review. Brown and Eisenhardt distinguish between 'product concept effectiveness' and 'process performance'. As an important indicator for product concept effectiveness they identify 'Fit with Market Demands', which points

at the degree of market acceptance of the new product. Process performance is on the other hand largely influenced by ‘lead-time’ or speed, which can be labeled as ‘Fit with Time Constraints’. Measuring NPD performance in terms of these constructs or performance dimensions, does justice to tensions occurring in new product development, such as between the quality or novelty of a product (fit with market demands) and the speed/throughput time of the development process. Pursuing both simultaneously poses conflicting demands upon the organizational structure and (inter)actions for innovation in which NPD projects are being embedded (Van Looy, Debackere and Bowen, 2002).

In general, high performance of the NPD function – as a consequence of Fit with Market Demands – should be reflected in higher sales and profits (financial performance, De Brentano and Kleinschmidt, 2004), but also customer satisfaction, timeliness (time to market), product price and quality (Chiesa et al, 1996). Griffin and Page (1993) regard the speed of decision making, and the commitment to these decisions as measure for the speed of the development process, which is crucial for Fit with Time Constraints. Kessler and Barely (2002) point at the relevance of assessing speed relative to schedule.

Hypothesis

We define the ideal NPD profile as the profile of the highest-performing firms in our sample. We define a firm’s “ideal profile fit” as the degree to which a firm’s actual profile of NPD practices approximate the ideal profile as outlined above. We then examine the impact of “ideal profile fit” on the two NPD performance dimensions. Our primary research hypothesis addresses the impact of deviation from the ideal profile on performance, and is formulated as follows:

H1: The more a firm’s NPD profile resembles the ideal profile, (1) the higher the level of market acceptance for the firm’s new products (Fit with Market Demands) and (2) the more satisfactory are the development times of those products (Fit with Time Constraints).

METHODOLOGY

Data Collection

Our sampling frame consists of 500 randomly selected firms from all nonservice firms listed in the *World Business Directory*. We sent a pre-survey letter to all 500 firms requesting pre-approval of participation. A total of 186 firms agreed to participate and provided a contact person, while 36 companies declined to participate, 42 letters were returned due to invalid contact person or addresses, and 236 companies did not respond.

In administering the final survey, we followed the total design method for survey research (Dillman 1978). The first mailing packet included a personalized letter, the survey, a priority postage-paid envelope with an individually-typed return-address label, and a list of research reports available to participants. The package was sent by priority mail to 422 firms (186 firms agreeing to participate and 236 non-responding firms from the pre-survey). We asked the contact person (president, division manager, strategic business manager, new business program manager, or R&D director) to distribute the questionnaire to a manager involved in developing new products in their organization or having knowledge of overall new product programs in their organization.

To increase the response rate, we sent four follow-up mailings to the companies. One week after the mailing, we sent a follow-up letter. Two weeks after the first follow-up, we sent a second package with same content as the first package to all non-responding companies. After two additional follow-up letters, we received usable questionnaires from 164 firms, representing a response rate of 39% (164/422).

The industries represented in the final samples are: Chemicals and Related Products; Electronic and Electrical Equipment; Pharmaceutical, Drugs, & Medicines; Industrial Machinery & Equipment ; Telecommunications Equipment; Semiconductors & Computer Related Products; and

Instruments and Related Products. The annual sales of respondent firms ranged from \$500,000 to \$461 million and the total number of employees in the business unit ranged from 11 people to 1,017 people.

Variables

The Appendix contains the scales used to measure the different dimensions of the NPD profile. Fit with Market Demands involves the degree of market acceptance, the degree to which the products generated by a NPD program are valued by the market. Our measures of market acceptance are based on the innovation scorecards developed by Chiesa *et al.* (1996), and scales developed by De Brentani and Kleinschmidt (2004). Fit with Time Constraints involving the satisfaction level of new product development process times we used scales based on the work of Kessler and Bierly (2002) and Griffin and Page (1993).

Descriptive Statistics

Table 1 contains the descriptive statistics for the variables in our study.

Table 1
Descriptive Statistics: Means and Standard Deviations (N=164)

	Mean	Standard Deviation	Reliability (Cronbach alpha)
NPD PROCESS	4.73	1.35	n/a
GOALS & PORTFOLIO	4.42	1.41	0.99
NPD STRATEGY	4.54	1.38	0.99
INNOVATIVE CLIMATE	4.65	1.19	0.85
FIT WITH MARKET DEMANDS	5.09	1.33	0.90
FIT WITH TIME CONSTRAINTS	3.70	1.75	0.96

RESULTS

High Fit with Market demands AND High Fit with Time Constraints

In this section we first present the results of our data analysis testing our main hypothesis (H1), which consisted of three steps. First, we identified the top 15% of the firms in our sample that exhibited high performance on both the “Fit with Market Demands” and “Fit with Time Constraints” NPD Performance dimensions. Second, we calculated differences between the profile of individual firms and the ideal profile using the Euclidian distance metric. Third, we correlated the calculated distances with our two performance measures.

The first two numerical columns in Table 2 describe the NPD profile of the 15% of sample exhibiting high performance on both NPD Performance metrics. We will refer to this sub-sample as the “Ideal Profile” sample. Each of the firms in this sample were in the top 33% of firms ranked by market acceptance, and also in the top 29% of firms ranked by new product development process time. (The two percentages are not equal because of ties in the rankings).

The adjacent two columns describe the NPD profile of the remaining firms in our sample (which we will refer to as the calibration sample). The last two columns describe the degree to which the calibration sample firms deviate from the ideal profile sample. Notice that none of the Euclidean distances for the individual NPD dimensions are significantly different from zero (in all four cases, the mean divided by the standard deviation is less than one). However, the total Euclidean distance is significantly different from zero ($(2.83/1.28) = 2.21$). Thus a “one at a time” analysis of the four NPD profile variables in Table 2 suggests that the two samples do not differ, but a holistic analysis of the pattern of relationships reveals that the two samples differ significantly.

Table 2
Comparison between top 15 % and calibration sample
(in both Fit with Market Demands and Time constraints)

Construct	Top 15 % 'Ideal Profile' (n=26)		Calibration Sample (n=138)		Euclidian distance	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
NPD PROCESS	5.58	0.76	4.57	1.38	-1.01	1.38
GOALS & PORTFOLIO	5.00	1.48	4.32	1.38	-0.68	1.38
NPD STRATEGY	4.90	1.24	4.47	1.39	-0.43	1.39
INNOVATIVE CLIMATE	5.34	1.12	4.52	1.17	-0.82	1.17
Total Euclidian distance					2.83	1.28

Table 3 reports the correlation between performance and the total Euclidean distances of the firms in the Calibration sample. Both correlations are negative and significant, suggesting that our main hypothesis is confirmed.

Table 3
Correlations between Performance and Total Euclidean Distance

	Total Euclidean Distance
Market Acceptance/Fit with Market Demands	-0.36
NPD Process Time/Fit with Time Constraints	-0.45

Table 4 reports the number of firms using each of four different types of Project Structure Management (these are defined in the Appendix). Notice that half of the firms in the ideal sample used so-called tiger teams, in which the project manager has *full control* over resources. In contrast, in the calibration sample the spread over all for types was almost even, with the number of tiger teams being the lowest. A chi-square analysis indicates that the between-sample difference in the number of tiger teams is significant ($\chi^2 = 11.83$, $p < 0.01$).

Table 4
Most Common Team Structure

TEAM STRUCTURE	Top 15% 'Ideal Profile' (n=26)		Calibration Sample (n=138)	
	Frequency	Percent	Frequency	Percent
Functional	3	11.54	36	26.09
Light-weight	3	11.54	39	28.26
Heavy-weight	7	26.92	37	26.81
Tiger	13	50.00	26	18.84

High Fit with Market Demands

We already mentioned that we focus in our study on two performance dimensions that are potentially conflicting and need balancing, viz. 'Fit with Market Demands' and 'Fit with Time Constraints'. Although it seems from the above results that indeed an optimized Ideal Profile has been identified, it would be very interesting to know exactly which trade-offs have been made in the organization design to accommodate the balanced performance fit. For this reason we also performed the patterns analysis procedures for the top 15% NPD systems excelling purely in Fit

with Market Demands (focusing on market acceptance). Results as can be seen in Table 5 are especially interesting when looking at the role of the NPD process, and NPD strategy (with a significantly higher mean and lower standard deviation).

Table 5
Comparison between top 15% and calibration sample
(Fit with Market Demands)

Construct	Top 15% 'Ideal Profile' (n=25)		Calibration Sample (n=139)		Euclidian distance	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
NPD PROCESS	5.80	0.50	4.53	1.37	-1.27	1.37
GOALS & PORTFOLIO	4.78	1.44	4.36	1.40	-0.42	1.40
NPD STRATEGY	5.44	1.23	4.38	1.34	-1.06	1.34
INNOVATIVE CLIMATE	5.25	1.14	4.54	1.18	-0.71	1.18
FIT WITH MARKET DEMANDS	6.83	0.16	4.77	1.20	-1.27	1.37
FIT WITH TIME CONSTRAINTS	5.40	0.94	3.39	1.69	-0.42	1.40

Table 6
Most Common Team Structure
(Fit with Market Demands)

TEAM STRUCTURE	Top 15% 'Ideal Profile' (n=25)		Calibration Sample (n=139)	
	Frequency	Percent	Frequency	Percent
Functional	6	24.00	33	23.74
Light-weight	2	8.00	40	28.78
Heavy-weight	8	32.00	36	25.90
Tiger	9	36.00	30	21.58

High Fit with Time Constraints

Also significant differences were found between the Ideal Profile and the organizational profile of NPD systems excelling mainly in Fit with Time Constraints, (focusing on NPD Process Time), see table 7. Here, the relative higher importance of innovative climate is remarkable, as is the lower score for the role of the NPD process. Also, in the top 15 % the 'tiger team' comes back as the most often used NPD project Structure and Management form.

Table 7
Comparison between top 15% and calibration sample
(Fit with Time Constraints)

Construct	Top 15% ‘Ideal Profile ‘ (n=24)		Calibration Sample (n=140)		Euclidian distance	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
NPD PROCESS	5.29	1.20	4.63	1.36	-0.66	1.36
GOALS & PORTFOLIO	5.10	1.55	4.31	1.36	-0.79	1.36
NPD STRATEGY	5.06	1.17	4.45	1.39	-0.61	1.39
INNOVATIVE CLIMATE	5.44	1.11	4.51	1.16	-0.93	1.16
FIT WITH MARKET DEMANDS	6.16	0.67	4.90	1.33	-0.66	1.36
FIT WITH TIME CONSTRAINTS	6.31	0.45	3.25	1.48	-0.79	1.36

Table 8
Most Common Team Structure
(Fit with Time Constraints)

TEAM STRUCTURE	Top 15% “Ideal” Profile (n=24)		Calibration Sample (n=140)	
	Frequency	Percent	Frequency	Percent
Functional	5	20.83	34	24.29
Light-weight	3	12.50	39	27.86
Heavy-weight	6	25.00	38	27.14
Tiger	10	41.67	29	20.71

DISCUSSION AND CONCLUSION

The contribution of this research is in the empirical validation of the internal consistency of an ideal organizational profile for NPD systems achieving both a high level of market acceptance for the firms’ new products as well as a satisfactory level of the development times of those products. By also examining ideal profiles for each of these NPD performance dimensions separately, the conflicting demands created by multiple performance metrics are highlighted as well as the organizational trade-offs necessary for optimal performance. In terms of managerial implications, this also gives direction for organizational redesign to firms either wanting to maximize their product concept (Fit with Market Demands) or development process (Fit with Time Constraints) performance.

However, NPD systems are not just confronted by contradictory demands reflecting in their *current* performance. NPD systems striving for *sustained* innovation and longer-term competitive advantage are in the organization of their NPD efforts confronted with additional balancing issues, viz. short versus long term perspectives. This for example is reflected in organizational choices with regard to the combination of radical and incremental innovation, or exploration versus exploitation. Researching ideal profiles for this type of balancing is subject for further research.

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Appendix A
Measurement of the constructs
 NPD PROCESS:

Please check the box that most closely describes your business unit’s development processes.
 Please tick one answer.

- No standard approach to new product development.
- While no formally-documented process is followed, we have a clearly understood path of the tasks to be completed in product development.
- We have a formally-documented process where one function completes a set of tasks, then passes the results on to the next function which completes another set of tasks.
- We have a formally-documented process where a cross-functional team completes a set of tasks; management reviews the result and gives the go-ahead for the team to complete the next set of cross-functional tasks.
- We have a formally-documented process where a facilitating “process owner” helps cross-functional teams move through stages and management reviews.
- We have a formally-documented process where a cross-functional team uses a staged process with overlapping, fluid stages and “fuzzy” or conditional stage decisions.

NPD GOALS & PORTFOLIO:

In this section please indicate your level of agreement with each statement

	Strongly disagree			Strongly agree				Don’t know
The role of NPD in achieving business goals is clearly articulated.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
Systematic project portfolio management is in place.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>

NPD STRATEGY:

In this section please indicate your level of agreement with each statement

	Strongly disagree			Strongly agree				Don’t know
There is a formally stated NPD strategy.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
The project portfolios are aligned with the business strategy.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>

INNOVATIVE CLIMATE:

In this section please indicate your level of agreement with each statement regarding your overall innovative climate

	Strongly disagree			Strongly agree				Don't know
People are emotionally involved in goals set.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
People have freedom to define their own work.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
There is a high level of trust between people.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
There is time for people to develop unplanned new ideas.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
There is a high level of conflict.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
There is a strong support for further development of new ideas.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>

MARKET ACCEPTANCE:

Please indicate your level of achievement on following objectives:

	Not at all achieved			Very well achieved				Don't know
Our new products meet customer requirements.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
Our new products are delivered on time.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
The cost of our new products is satisfactory.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
The quality of our products is good.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
The impact of our NPD program on our sales level is positive.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>

NEW PRODUCT DEVELOPMENT TIME:

Please indicate your level of achievement on following objectives:

	Not at all achieved			Very well achieved				Don't know
Our new products are launched on schedule.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>

Scheduled time is in line with total development time (TT).	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
Our Development Time (DT) is satisfactory.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
Our Concept to Customer Time (CTC) is satisfactory.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>
Our Total Time (TT) is satisfactory.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	<input type="checkbox"/>

TEAM STRUCTURE¹:

Please indicate which of the structures pictured and described in the next figure is the most common NPD structure within your business unit. Tick one option.

¹ **Relating team structures to literature** (this note was not included in questionnaire):
 Team structure A: functional team structure *without* overall project manager
 Team structure B: light-weight team structure with project *coordinator*
 Team structure C: heavy-weight team structure with *overall responsible* project manager
 Team structure D: tiger teams with project manager with *full control* over resources

