### Governing temporary interorganisational projects

by Prof Leon Oerlemans and Prof Tinus Pretorius

Prof Leon Oerlemans and Prof Tinus Pretorius collaborated on a research project in which 45 interorganisational projects in South Africa were analysed to determine whether there are different types of temporary organisational projects, what characteristics they have and how they are governed.

There has recently emerged a small, but growing body of literature that studies temporary collaboration between organisations (Jones and Lichtenstein, 2008). These are defined as goal-directed temporary systems of legally autonomous but functionally interdependent firms that coordinate their efforts for the accomplishment of a service or product in a limited amount of time (Sydow and Staber, 2002: 216). Whereas some industries have already had a long tradition of temporary, project-based collaborations, such as film-making, theatre and construction, a myriad of other industries are increasingly adopting this mode of operation, including software development, advertising, biotechnology, consulting, emergency response, fashion, television and complex products and systems. However, little is known about the way these projects are managed.

The objective of the study was thus to increase the knowledge on the management and organisation of temporary projects involving the participation of multiple partners, which could either be organisations (such as firms and associations) or individuals (such as individual professionals) in South Africa.

Data on 50 temporary interorganisational projects was collected. The survey was developed in the context of an international research project, entitled 'Knowledge, Governance and Projects', under the leadership of the Centre for Research on Business Organisation of Bocconi University (Italy). Other project members, besides the Graduate School of Technology Management (GSTM) at the University of Pretoria (South Africa), were the Copenhagen Business School (Denmark), Louis Pasteur University (France), the Universities of Cologne and Bonn (Germany), the University of Sussex (United Kingdom) and Tilburg University (the Netherlands).

## Types of temporary interorganisational projects

To determine whether there are different types of interorganisational projects, the researchers made use of dimensions of temporary organisations as proposed by Lundin and Söderholm (1995), namely time, task and team. As far as time is concerned, the aspects taken into consideration were project duration (in weeks) and whether or not the organisations participating in the project had collaborated in the past (prior ties). The existence of prior ties, also labelled as the 'shadow of the past', is often regarded as an indicator of the development of trust between partners. Two aspects of the task of the interorganisational project were taken into account: the degree of newness of the products developed in the project and the financial resources available for the project. Regarding the team dimension, two aspects served as focus: the number of organisations participating in the temporary project and the number of persons working on the project.

All aspects were entered into a latent class cluster analysis (Vermunt and Magidson, 2002), which resulted in a two-cluster solution<sup>1</sup>. The characteristics of the two types of temporary interorganisational projects are presented in Table 1 on the following page.

<sup>1</sup> N = 45; lowest AIC = 90; lowest Npar = 18; p-value = 0.128 (> 0.05), all indicating highest model fit. Due to missing data, five cases were deleted from this analysis.

#### Table 1. Types of temporary interorganisational projects and their characteristics

Characteristic	Type I (N = 22)	Type II (N = 23)
Project duration in weeks (time): Average	64.6	234.7
Prior ties (time): Yes	65.2%	72.7%
Degree of product innovativeness (task): Standard	21.7%	13.6%
Variation on existing product	21.7%	27.3%
New generation of existing product	39.1%	18.2%
New product to partners	13.0%	18.2%
New product for the industry	4.3%	9.1%
New product to the world	0.0%	13.1%
Project budget (task): Average (ZAR)	3 284 700	230 100 000
Number of organisations (team): Average	4.6	13.4
Number of persons involved (team): Average	47.5	538.1

Type I temporary projects last on average 1.2 years, and in about two thirds of the cases the partners also collaborated in the past. In a majority of projects, tasks were directed at incremental product innovation (82.5%), indicating that these temporary projects have an exploitation orientation aiming for refinement, improvement and standardisation. Average project budget size is relatively small (R3.3 million), whereas an average of 4.6 organisations form a temporary project network.

In many regards, Type II temporary interorganisational projects are the opposite of Type I projects. They last much longer (average of 4.5 years) and often have prior ties. A very distinct feature of this type is its task: generating product innovations with a high level of newness (Type II: 40.4% versus Type I: 17.3%), clearly indicating an exploration strategy characterised by experimentation, novelty and search (Voss et al, 2008). Also very distinct is its much larger size, indicated by the large budget and the relatively high number of organisations and persons involved.

In summary, a typical Type I project is a relatively small, short-termed interorganisational project with incremental product innovation as its main task, whereas a typical Type II project is a long-lasting, large interorganisational project aiming for radical innovation.

# The governance of interorganisational temporary projects

The second research question concerns the way in which the projects are governed. Cacciatori and Furlotti, 2006, distinguish between two broad categories of governance: internal and external. 'Internal governance' refers to those aspects of governance that are agreed upon (explicitly or implicitly) by the project partners, in particular by contracts (contractual governance) and by administrative instruments (extra-contractual governance) that are not specified in the contracts. 'External governance', or institutional governance, refers to the norms and rules (both formal and informal) used for a project that stems from its environment (for instance, industry

standards of good workmanship or provisions in the civil law that, although not explicitly included in the formal contract, apply to the project). These three types of governance were included in the questionnaire.

Concerning contractual governance, participants were asked to what extent a number of project-related issues were specified in written, legal and enforceable contracts. The results for the two types of temporary interorganisational projects are presented in Table 2<sup>2</sup>. What immediately catches the eye is that the level of specification in formal contracts in almost all cases is higher in Type II projects.

The only exception is the specification of tasks, which is higher for Type I projects. A second finding is that in Type I projects, the highest level of specification is found for tasks (77.3%) and for prices, fees and royalties (72.7%), whereas for Type II projects, prices, fees and royalties, duration and property rights over assets and output are highly specified in contracts.

<sup>2</sup> Answer possibilities were: (1) Not specified; (2) General principles specified; (3) Extensive specification of rights and obligations; (4) Complete specification of rights and obligations. In Table 2, the scores of the last two possibilities are combined.

#### Table 2. Types of temporary interorganisational projects and contractual governance

	Extensive to complete specification of rights and obligations	
	Туре І	Туре II
Property rights over assets and outputs (e.g. shares or equity, equipment, brands, patents, products)	50.0%	80.0% (3)
Decision and control rights (e.g. positions in boards, direction roles)	50.0%	68.4%
Specification of tasks (e.g. job descriptions, technical capitulates)	77.3% (1)	68.4%
Definition of duration (e.g. final delivery dates, extensibility clauses)	68.2% (3)	84.2% (2)
Separation procedures	38.1%	63.1%
Warrantees and indemnities	63.6%	79.0%
Prices, fees and royalties	72.7% (2)	94.7% (1)

#### (#) indicates rank

As to extra-contractual governance, participants were asked to what extent a number of project-related issues were specified in written internal charts, procedures and job descriptions in the relation between the key partners. Table 3 presents the findings<sup>3</sup>.

#### Table 3. Types of temporary interorganisational projects and extra-contractual governance

	Extensive to complete specification of rights and obligations	
	Туре І	Туре II
Property rights over assets and outputs (e.g. shares or equity, equipment, brands, patents, products)	45.5%	52.4%
Decision and control rights (e.g. positions in boards, direction roles)	45.4%	68.2% (3)
Specification of tasks (e.g. job descriptions, technical capitulates)	77.3% (1)	61.9%
Definition of duration (e.g. final delivery dates, extensibility clauses)	77.3% (1)	72.7% (2)
Separation procedures	38.1%	63.7%
Warrantees and indemnities	50.0% (3)	72.7% (2)
Prices, fees and royalties	77.2% (2)	76.2% (1)

#### (#) indicates rank

<sup>3</sup> Answer possibilities were: (1) Not at all; (2) General principles specified; (3) Extensively; (4) Completely. In Table 3 and Table 4, the scores of the last two possibilities are combined. The findings are highly similar to the level of specification in contracts. Type II projects are, in comparison to Type I projects, characterised by higher levels of extra-contractual specification. Moreover, in Type II projects, much emphasis is on specifying prices, fees and royalties, and on detailed specification of warrantees and indemnities. Detailed non-contractual specification of task and duration seems to be of importance to Type I projects. Comparing the scores on the items in Table 2 and Table 3 leads to the conclusion that the level of specification in contracts is in general higher than in extra-contractual arrangements. To investigate institutional governance, participants were asked to what extent a number of projectrelated issues were regulated by the norms, habits and practices of the industry or by ad hoc specific informal agreements among the parties in a project, rather than being written into a contract or into internal documents.

#### Table 4. Types of temporary interorganisational projects and institutional governance

	Extensive to complete specification of rights and obligations	
	Туре І	Туре II
Property rights over assets and outputs (e.g. shares or equity, equipment, brands, patents, products)	31.8%	42.9%
Decision and control rights (e.g. positions in boards, direction roles)	18.1%	42.9%
Specification of tasks (e.g. job descriptions, technical capitulates)	31.8%	47.6%
Definition of duration (e.g. final delivery dates, extensibility clauses)	31.8%	61.9% (1)
Separation procedures	19.0%	38.1%
Warrantees and indemnities	47.6% (2)	47.6%
Prices, fees and royalties	50.0% (1)	52.4% (2)

(#) indicates rank

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Again, the same pattern emerges from the data: in Type II projects, higher levels of specification are used as compared to Type I projects. Also similar is the emphasis on the specification of duration and prices, fees and royalties in Type II projects. Finally, it can be observed that regulation of projects by rules and norms is less frequently used than the other two forms of governance distinguished in this study.

#### Conclusions

The analyses of 45 South African temporary, interorganisational projects revealed that two groups of projects could be distinguished: relatively small and short-termed interorganisational projects aiming for incremental product innovation, and larger-scale, longer-lasting projects on radical product innovations. These findings add to the view that there is variation in types of temporary projects and oppose the often held idea that temporary projects are per definition short-termed and focused on non-routine tasks (see, for example, Palisi, 1970).

The use of contractual governance is clearly the most intensive form of governance, especially in Type II projects. Institutional governance is less popular among project partners. This is an interesting finding, given the high proportion of prior ties (70%) have collaborated with the same organisations in the past), which are thought to generate trust among partners (Jones and Lichtenstein, 2008). Apparently the balance between the wish to prevent misbehaviour and trust among project partners shifts to the former. Probably, the size of the projects, the level of newness of the tasks and the context in which they operate produce these patterns. •

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