Organization Studies

Towards a Dialectic Perspective on Formalization in Interorganizational Relationships: How Alliance Managers Capitalize on the Duality Inherent in Contracts, Rules and Procedures

Paul W. L. Vlaar, Frans A. J. Van Den Bosch and Henk W. Volberda

The online version of this article can be found at:

Published by:

$$SAGE Publications$$

http://www.sagepublications.com

On behalf of:

European Group for Organizational Studies

**Additional services and information for *Organization Studies* can be found at:**

Email Alerts: http://oss.sagepub.com/cgi/alerts

Subscriptions: http://oss.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations (this article cites 83 articles hosted on the
SAGE Journals Online and HighWire Press platforms):
http://oss.sagepub.com/cgi/content/refs/28/4/437
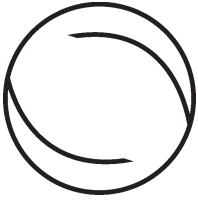
Towards a Dialectic Perspective on Formalization in Interorganizational Relationships: How Alliance Managers Capitalize on the Duality Inherent in Contracts, Rules and Procedures

Paul W.L. Vlaar, Frans A.J. Van Den Bosch and Henk W. Volberda

Paul W. L. Vlaar
Vrije Universiteit
Amsterdam, The
Netherlands

Frans A. J. Van Den Bosch
RSM Erasmus
University, Rotterdam,
The Netherlands

Henk W. Volberda
RSM Erasmus
University, Rotterdam,
The Netherlands

Abstract

The mainstream literature on contracts, rules and procedures presumes that formalization is directed at coordination and control, and that its influence on performance is contingent upon firm, transaction and contextual characteristics. In response to recent calls for inquiries into dialectics in interorganizational relationships, and in an effort to provide managerial choice with a more prominent position in research on formalization, a complementary perspective is here being developed. We propose a framework in which formalization is presented as a duality, involving trade-offs between its functions and dysfunctions, and eventuating in dialectic tensions with which managers have to cope. In line with this, we argue that researchers should not only be preoccupied with assessing the 'rightness' of governance solutions, but also with the trade-offs and tensions associated with them. Our framework is illustrated by a case study of an alliance between a major European financial services firm and one of the world's leading retailers. The alliance managers in this particular relationship attempted to reduce or capitalize on the tensions associated with formalization by: (1) adopting a semi-structure, in which outcomes were formalized, but behaviour was not; (2) justifying formalization through referring to factors that were beyond their control, and; (3) alternating their emphasis on different requirements by each of the partner firms. The article shows that a dialectic perspective on formalization in interorganizational relationships offers a promising complement to the mainstream literature.

Keywords: formalization, trade-offs, dialectics, interorganizational cooperation

Introduction

Researchers in the field of interorganizational management have become increasingly interested in the concept of formalization and its many manifestations, such as contracts, rules and procedures (e.g. Grandori 1997; Sampson 2003). Hitherto, the majority of their studies have exhibited a rather deterministic character. Transaction cost economics, agency theory and contract theories, for example, all presuppose that the degree of formalization has to be aligned with firm, transaction or contextual characteristics to achieve appropriate levels of coordination, control and, eventually, interorganizational performance (Foss

and Foss 2005; Gulati and Singh 1998; Madhok 2002). As is shown in Figure 1, contributions based on these theories either focus on the relationship between formalization and its antecedents, or on its relationship with interorganizational performance (Anderson and Dekker 2005; Sobrero and Schrader 1998).

In such relatively 'deterministic' approaches, management's role is confined to making the 'right' choices; choices that render optimal alignment. Nonetheless, the literature is infested with examples in which managers make sub-optimal decisions regarding formalization (e.g. Anderson and Dekker 2005; Sampson 2004), and in which they attempt to attenuate the tensions emanating from formalization, instead of simply accepting them (see Blau 1955; Cardinal et al. 2004). This raises the question as to *how our understanding of formalization in interorganizational relationships would change, if more attention were granted to managerial choice*. Consistent with conceptualizations of formalization as being affected by trade-offs (Galbraith 1977) and managerial choice (see Child 1997), and in response to recent calls for dialectic perspectives on interorganizational cooperation (e.g. Das and Teng 2000; De Rond 2003; De Rond and Bouchiki 2004; Vieira da Cunha et al. 2002), we therefore develop a complementary view on formalization in interorganizational relationships.

The article's contributions to the literature are twofold. First, we reintroduce managerial adaptation in this research field, and elucidate how it complements the relatively deterministic viewpoints on formalization currently prevailing in the literature congruent with Hatch (1999) and Vieira da Cunha et al. (2002). We thereby add a theoretical layer to existing conceptualizations of interorganizational structuring efforts. Second, we move beyond the current emphasis in the literature on formalization's coordination and control functions (e.g. Foss and Foss 2005; Gulati and Singh 1998; Madhok 2002). By illuminating its linkages with cognition and learning, for example, we elucidate that formalization has partly assumed new meanings, which may explain why it is still a relevant concept in today's business environment.

The article is organized accordingly. First, we introduce a conceptual framework by which we explain how a dialectic perspective on formalization in interorganizational relationships complements more 'traditional' views prevailing in the literature. Subsequently, we provide an overview of formalization's functions and dysfunctions, which stand at the basis of such a dialectic perspective. We then illustrate the framework with a case study of an alliance between a

First research stream
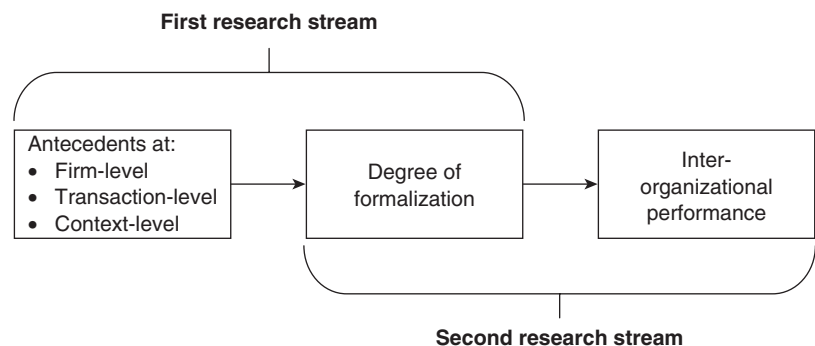

Figure 1.
Traditional Perspectives on the Relationship between Antecedents, Formalization, and Interorganizational Performance

Antecedents at:
- Firm-level
- Transaction-level
- Context-level

Degree of formalization

Inter-organizational performance

Second research stream

major European financial services firm and one of the world's largest retailers. Finally, we elaborate on the insights provided by the study, its theoretical and practical implications, some of its limitations and avenues for future research.

Traditional versus Dialectic Perspectives on Formalization

Before explaining how traditional perspectives on formalization in interorganizational relationships differ from a dialectic perspective on formalization in interorganizational relationships, we offer a more comprehensive definition of formalization. As with most concepts ending in '-tion', formalization is ambiguous with regard to process and outcome — 'between the way one gets there, and the result' (Baum and Rowley 2002: 1). It both refers to the *process* of codifying and enforcing outputs and behaviours (Ouchi 1979), and to the *outcomes* of this process, in the form of contracts, rules and procedures (Hage and Aiken 1966). Codification suggests that formalization pertains to explicit, systematic procedures that facilitate the classification of phenomena (Boisot 1998). Enforcement signifies that codified agreements are 'in force', permitting parties to make believable promises to each other so that the execution of agreements can ultimately be exacted (Schwartz and Scott 2003). As Ouchi (1979) indicates, formalization can pertain to outputs, as well as behaviour. Katz and Kahn (1966: 298), for example, propose two major categories of formalization: 'the formulation of organizational goals and objectives, and the formulation of strategies and procedures for achieving and assessing progress towards such goals'. Similarly, Simon (1997: 307) contends that someone 'may be told what to do, but given considerable leeway as to how [he or she] will carry out the task'. To recap, following Ouchi (1979) and Hage and Aiken (1966), we define formalization as *the process of codifying and enforcing output and/or behaviour, and its outcomes in the form of contracts, rules and procedures.*

Researchers adhering to 'traditional' views on formalization, as depicted in Figure 1, generally strive to determine single best governance solutions, depending upon given firm, transaction and contextual characteristics (Eisenhardt 1989a; Ghoshal and Moran 1996; Cardinal et al. 2004). By using differentiation models, they polarize costs and benefits, or functions and dysfunctions of various governance options, in an effort to ascertain the 'right' choice or decision (Peng and Nisbett 1999). Transaction costs economics, for example, explains the degree of formalization in interorganizational relationships by referring to transaction-characteristics, such as the levels of uncertainty and asset-specificity, and the frequency with which goods or services are exchanged (Klein et al. 1978; Williamson 1985). Agency theory, constituting another example, claims that the degree of formalization should be aligned with the measurability of transactions, and with partners' abilities to specify tasks (Eisenhardt 1989a).

Such perspectives fit well with our natural inclination to assume irreconcilability of apparent inconsistencies, implying that a particular degree of formalization is either appropriate or inappropriate. However, they fail to sustain the tensions inherent in most managerial problems (Das and Teng 2000; Volberda 1998). While focusing on the origins of structuring choices, these perspectives neglect the consequences of selecting certain governance solutions, and they

reduce the role of managers to making 'right' decisions (Blau 1955; Merton 1957). We complement these views by introducing a dialectic perspective on formalization, in which interorganizational relationships are regarded as a unity of opposites, and in which managers are confronted with contradictory values that compete with each other (Das and Teng 2000; Van de Ven 1992). We thus replace either–or conceptions of interorganizational governance with both–and constructions, and we recognize the tensions accruing from the simultaneous existence of formalization's functions and dysfunctions, something that conforms to descriptions of apparent inconsistencies by other authors (see Eisenhardt 2000; Lewis 2000; Van de Ven and Poole 1995).

In developing such a perspective, we observe the principles of *simultaneity*, *locality*, *minimality* and *generality* (Benson 1977; Vieira da Cunha et al. 2002). This implies (1) that a dialectic perspective on formalization is grounded on the interplay between its functions and dysfunctions; (2) that managers have to cope with the tensions arising from formalization in their daily activities, and that these cannot be completely solved or forestalled by clever organizational design; (3) that extreme levels of formalization are less desirable than intermediate levels (see also Luo 2002; Mintzberg 1994), because they do not offer room for managers to manoeuvre or cope with tensions, or because they create tensions that are hardly amenable to management; and (4) that any prescriptions used for managing tensions have to apply to a large range of situations. Juxtaposing such a perspective alongside the mainstream literature complements 'traditional' views on formalization with insights into managerial choice and into the roles that managers assume when structuring their collaborative relationships. It provides the theoretical depth that is needed to fully exemplify the competing forces that are evident in interorganizational relationships (Das and Teng 2000), and it promises to yield a more comprehensive and integrative picture of interorganizational structuring practices than hitherto available (Das and Teng 2000; Quinn 1988).

As the conceptual framework depicted in Figure 2 shows, we maintain the notion stemming from more 'traditional' perspectives on formalization that firm, transaction and contextual characteristics affect the need and the ability to formalize. However, we also emphasize that managers need to make trade-offs, as formalization consists of a duality between its functions and dysfunctions, and that they have to cope with or capitalize on the resulting tensions (see De Rond and Bouchiki 2004). Concerning trade-offs, we propose that managers do not just balance 'competition' with 'cooperation', or 'flexibility' with 'control' (Das and Teng 2000; De Rond and Bouchikhi 2004; Volberda 1998), but we suggest that they poise entire sets of functions and dysfunctions of formalization. The trade-offs that managers make are dependent upon their perceptions of firm, transaction and contextual characteristics, and on their knowledge of and experience with formalization. These factors influence the extent to which they are able to anticipate various functions and dysfunctions of formalization, something coinciding with more general arguments in the alliance capabilities literature, indicating that parties which have more experience and that institutionalize their experience may achieve superior performance (Kale et al. 2001).

The trade-offs involved do not necessarily have to be made by alliance managers, and they may stem from designed as well as emergent processes (see Ring

Figure 2. A Dialectic Perspective on the Role of Formalization in Interorganizational Relationships[a]
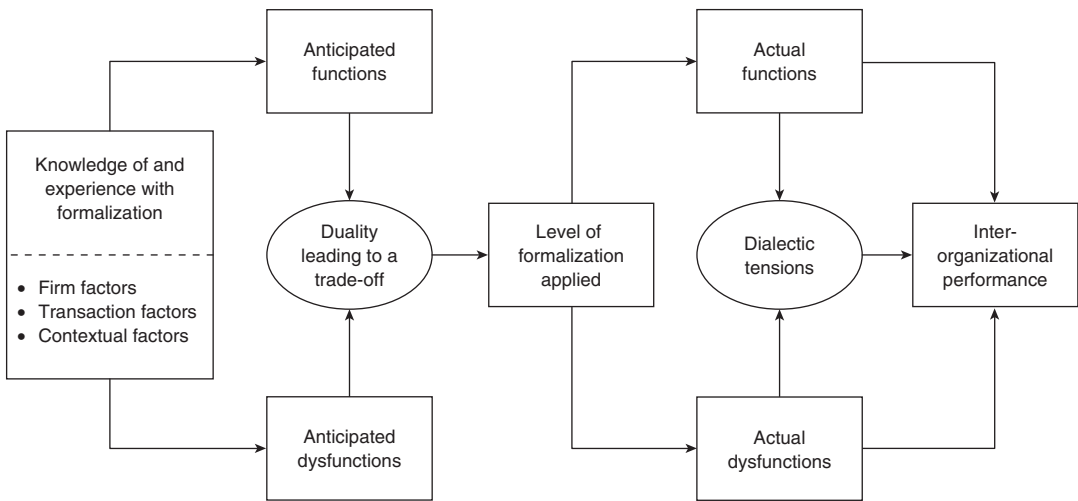
[a]See Tables 1 and 2 for the functions and dysfunctions of formalization.

et al. 2005). Participants at various levels in the alliance make different trade-offs, and they anticipate different functions and dysfunctions of formalization. The degree of formalization that ensues is therefore likely to be the joint result of trade-offs made by various participants in a relationship, bargaining processes, and the extent to which alliance managers are willing and able to enforce particular levels of formalization. Formalization may *emerge* throughout the relationship, but it may also be *imposed* on participants by the managers that are held responsible for the performance of the alliance.

Actual degrees of formalization pertaining to relationships entails functions as well as dysfunctions, including several *unanticipated* or latent consequences (see Balogun and Johnson 2004; Blau 1955; Cardinal et al. 2004; Mintzberg 1994; Yu et al. 2005). Formalization thus generates contradictory forces that are present simultaneously — beyond the will or power of management — and that have to be recognized and managed (Clegg et al. 2002b; Huxham and Beech 2003). When managers apply a certain degree of formalization, because it enables them to control their partner, for example, they may simultaneously introduce rigidity in decision-making, and increase another party's inclination to cover itself against all kinds of risks. Similarly, when they use formalization to minimize the negative effects of potential employee turnover, they may concurrently evoke distrust by partners and reduce their willingness to adapt to changes.

From a traditional perspective, formalization's influence on interorganizational performance is then represented as the net effect of its functions and dysfunctions (Katz and Kahn 1966; Luo 2002; Mintzberg 1994). A dialectic perspective, however, suggests that managerial efforts may affect the relationship between formalization and performance. Blau's (1955: 13), who already indicated that 'social action is more constructive and less patient. People attack troublesome conditions, even if they cannot, or will not eliminate the factors

that produced them, and without waiting for a negative balance of their consequences.' Congruently, a dialectic perspective on formalization in interorganizational relationships suggests that performance is also influenced by the accuracy with which managers make trade-offs, and by their abilities to capitalize on the tensions between formalization's functions and dysfunctions (see also De Rond and Bouchiki 2004).

Functions and Dysfunctions of Formalization

A dialectic perspective on formalization not only emphasizes the role of managerial choice, but it also stresses the duality inherent in formalization, which involves the coexistence of its functions and dysfunctions. A review of the literature on both the intra- and the interorganizational level discloses that formalization has a variety of functions and dysfunctions (see Tables 1 and 2), with functions being consequences 'that change existing conditions in the direction of socially valued objectives', and dysfunctions referring to 'consequences that interfere with the attainment' of certain objectives (Blau 1955: 11). Although the literature is dominated by articles on formalization's coordination and control functions (e.g. Foss and Foss 2005; Gulati and Singh 1998; Madhok 2002), our review suggests that it may also enhance legitimacy and facilitate sensemaking.

Table 1.
Functions of
Formalization

Functions	References
1. Coordination: formalization as a means to achieve concerted action	
Division of labour	Singh 1997; March & Simon 1958
Common language/communication	Grimaldi and Torissi 2001; Simons 1995
Signalling device	Langley 1988; Milewicz & Herbig 1996
Fuel interaction processes	Mintzberg 1994; Simons 1995
2. Control: formalization as a means to restrain or direct behaviour	
Control of the partner organization	Masten 1996; Oxley 1997; Williamson 1985
Control of deviation from objectives	Delmar & Shane 2003
Control of progress/pace setting	Weick 2001; Simons 1995
Control from a distance	Gouldner 1954
Option to forgo control	Gouldner 1954; Langley 1988
Trusting the partner	Poppo & Zenger 2002
3. Legitimacy: formalization as a means to persuade and convince stakeholders	
Internal legitimacy	Meyer & Rowan 1977; Walsh & Dewar 1987
External legitimacy	Kale et al. 2001; Sitkin & Bies 1993
4. Cognition and learning: formalization as a means to make sense	
Accuracy expectations	Cooray & Ratnatunga 2001; Shenkar & Zeira 1992
Degree of ambiguity	Lui & Ngo 2004; Simonin 1999; Weick 1995, 2001
Focusing attention	Delmar & Shane 2003; Langley 1988; Weick 1995
Completeness and consistency	Katz & Kahn 1966; Ketokivi and Catañer 2004
Force people to reflect and think	Sampson 2003; Vlaar et al. 2006; Zollo & Singh 2004
Governability of the relationship	Clegg et al. 2002a; Rose & Miller 1992
Anticipation and mind-stretching	Kale et al. 2001; Kotabe et al. 2003
Target for contraction	Stinchcombe 2001; Zollo & Singh 2004
Induce collective learning	Avadikyan et al. 2001; Zollo & Singh 2004
Generation of new ideas	Langley 1988; Simons 1995; Vlaar et al. 2006

Table 2. Dysfunctions of Formalization	Dysfunctions	References
	1. Inhibiting	
	Creativity	Ireland et al. 2002;
	Innovation	Mintzberg 1994;
	Flexibility	Volberda 1998
	Mutual accommodation	
	2. Reducing	Balogun & Johnson 2004;
	Commitment and aspirations	Gouldner 1954; Jap & Ganesan 2000;
	Initiatives that fall beyond specifications	Hendry 2002; Katz & Kahn 1966
	3. Driving out	Fehr & Falk 2002;
	Intrinsic motivation	Kreps 1997
	4. Inducing the risk of	Klein et al. 1978;
	Areas of unilateral dependence	Lusch & Brown 1996;
	Hold-up problems	Macneil 1980
	5. Imposing	
	High costs	Klein et al. 1978;
	Incompleteness	Masten 1996;
	Limited enforceability	Williamson 1985
	6. Creating the conditions for	
	Data manipulation	Marginson & Ogden 2005;
	Organizational strife,	Schweitzer et al. 2004
	Short-termism	

Coordination: Formalization as a Means to Achieve Concerted Action

Formalization's role in ameliorating coordination assumes several forms (March and Simon 1958). Formalization is associated with the division of labour, and diminishes the interdependence between partners, while helping them to translate complex problems into clear and understandable terms (Singh 1997). Formalization further entails efficient information processing (Galbraith 1977) and a common language (Grimaldi and Torrisi 2001; Simons 1995), enabling interorganizational participants to communicate their goals and permitting them to check on each other's perceptions. Besides, it is used to signal preferred outcomes and behaviours, thereby bringing partners' expectations in accordance with each other, and eliminating inefficiencies and misunderstandings (Milewicz and Herbig 1996). Finally, formalization enables coordination by fuelling and punctuating interaction processes (Mintzberg 1994).

Control: Formalization as a Means to Restrain or Direct Behaviour

The control function of formalization has primarily been emphasized by transaction cost economists (c.f. Masten 1996; Oxley 1997; Williamson 1985) and agency theorists (c.f. Eisenhardt 1989a). These authors contend that relationships are characterized by information-asymmetry, conflicting interests and ambiguity, so that formalization becomes necessary to circumvent, alleviate or mitigate opportunistic behaviour (Carson et al. 2006; Williamson 1985). Analogue to controlling partners, formalization enables control from a distance (Gouldner 1954), control of progress (Simons 1995; Weick 2001) and control of deviation from objectives (Delmar and Shane 2003). Moreover, formalization facilitates

control by serving as a bargaining instrument; formal agreements can be given up or they can be used (Gouldner 1954; Langley 1988). Finally, formalization facilitates control in the form of trust building. It assists parties in demonstrating their competence and knowledge, and it reduces their uncertainty about the motives that others have for engaging in interorganizational relationships (Poppo and Zenger 2002; Vlaar et al., forthcoming).

Legitimacy: Formalization as a Means to Persuade and Convince Stakeholders

A third function of formalization draws on the concept of legitimacy, stemming from institutional theory (Baum and Rowley 2002). From this perspective, contracts, rules and procedures offer acceptable accounts of interorganizational activities, which enhance the legitimacy of collaborative relationships. Formalization helps parties to demonstrate their competence and professionalism, and it offers a legitimate basis for managerial intervention (Langley 1988; Sitkin and Bies 1993; Walsh and Dewar 1987). It thereby increases the resources available for cooperation and augments the survival chances of cooperative endeavours (see Meyer and Rowan 1977). By increasing the legitimacy of collaborative relationships, formalization also heightens the commitment of both internal participants and external constituents. This is particularly critical for relationships that are embedded in dynamic and discontinuous business environments (Kale et al. 2001).

Cognition and Learning: Formalization as a Means to Make Sense

A fourth function of formalization involves cognition and learning. This function refers to formalization's role in facilitating sensemaking (Ring and Van de Ven 1989, 1994; Vlaar et al. 2006), and in generating stable and comprehensible expectations and collective structures from which participants in interorganizational relationships can construct their actions (Cooray and Ratnatunga 2001; Shenkar and Zeira 1992; Weick and Roberts 1993). Formalization reduces ambiguity (Adler 1993; Lui and Ngo 2004), and thereby fulfils basic human needs for stability and role clarity (Marginson and Ogden 2005; Ring and Van de Ven 1989). Furthermore, it acts as a binding mechanism and focusing device, holding events together in people's heads, and providing them with meaning and direction (Langley 1988; Simons 1995; Weick 1995, 2001). Formalization also facilitates sensemaking by increasing the completeness and consistency with which issues are covered, and by reducing the effects of individual biases and errors (Ketokivi and Cataãer 2004; Katz and Kahn 1966; Mintzberg 1994). In addition, it forces people to reflect and think, resulting in deeper insights about the potential causal factors underlying observed outcomes (Gouldner 1954; Katz and Kahn 1966; Vlaar et al., 2006; Zollo and Singh 2004). This enhances the 'governability' of interorganizational relationships (Clegg et al. 2002a; Rose and Miller 1992). Finally, formalization propels learning processes, including the maintenance of existing knowledge, the improvement of previous know-how, and the creation of totally new knowledge (Avadikyan et al. 2001). It not only acts as a target for contraction (Stinchcombe 2001; Zollo and Singh 2004), but also entails mind stretching, possibly resulting in new insights, ideas and strategies (Kale et al. 2001; Kotabe et al. 2003; Vlaar et al., 2006).

Dysfunctions of Formalization

During the last few decades, the dysfunctions of formalization have received abundant attention in the literature (see Table 2), which possibly results from a shift in perspective on organizational entities from rational to natural and open systems (Scott 2003), and from researchers' heightened attendance to issues of trust, social capital, flexibility and relational capabilities. Scientific inquiries have particularly emphasized formalization's retarding effect on creativity and innovation, and its role in inhibiting the flexibility that is needed for coping with complex, ambiguous and unstable task environments (Mintzberg 1994; Nooteboom 1999; Volberda 1998). Formalization has also been argued to stifle mutual accommodations (Ireland et al. 2002), and to limit opportunities for adaptation (Nooteboom 1999). Furthermore, it has been found to increase the extent to which conflicts arise and to reduce partners' commitment to relationships (Jap and Ganesan 2000). In addition, formalization is known to entail the risk of reducing performance and aspirations to minimum standards (Gouldner 1954; Katz and Kahn 1966), and to limit the scope for initiatives beyond those specified in agreements (Hendry 2002). Balogun and Johnson (2004: 532), for example, found that the introduction of contracts in cooperative endeavours sometimes made things worse, 'with individuals only doing exactly what was specified and nothing else'. Formalization may then gradually degenerate into formalism (Mintzberg 1994; Scott 2003).

Moreover, in case formalization incorporates extrinsic incentives, this may lead to reduced intrinsic motivation experienced by the cooperating parties (Fehr and Falk 2002; Kreps 1997). In addition, formalization entails the risk that areas of unilateral dependence (Lusch and Brown 1996; Macneil 1980) and hold-up problems arise (Klein et al. 1978), while formalization's efficacy may be questioned when the costs of composing formalities, their necessary incompleteness (Williamson 1985) and the limited opportunities for enforcement are taken into account (Masten 1996; Stinchcome 2001). Finally, the advantageousness of formalization may be diminished by issues such as short-termism, interdepartmental and interorganizational strife, and data manipulation (Marginson and Ogden 2005). Goals set in formal documents, for example, sometimes give rise to unethical behaviour, including overstatement and false claiming of accomplishments (Schweitzer et al. 2004).

Part of the functions and dysfunctions of formalization described here may only surface over time, because contracts, rules and procedures assume the character of an interorganizational memory (De Boer et al. 1999; Mayer and Argyres 2004). Formalization can, for example, enable coordination in later stages of cooperation by reducing relationships' vulnerability to fallible memories and to the turnover of personnel (De Rond 2003). It may also facilitate learning in other relationships, as formal documents are transferred relatively easily to novel relationships (Kale et al. 2001).

Illustrative Case Study of the STEADY–QUICK Alliance

The case study exemplifies how the dialectic perspective on formalization that is central to this paper complements more traditional, deterministic perspectives

on this phenomenon. It concerns an interorganizational relationship between a large global retailer, STEADY, and a European-based financial services firm, QUICK. This case has been selected for three reasons. First, the size of both parent firms in terms of employees and turnover was large, which increased the likelihood that formalization would be an issue in the alliance (Zeffane 1989). Second, both companies offered us unique access to the enormous amount of documentation that was produced during the relationship, and to their employees. Finally, the alliance required innovative activities. Coupled with the potentially high demands for formalization — arising from firm sizes, and the legitimacy, accountability and control required for financial services (Vermeulen 2001) — this increased the likelihood that tensions would arise from the coexistence of formalization's functions and dysfunctions.

Data Collection

The most important data collection characteristics are captured in Appendix 1. We conducted 22 semi-structured interviews between June 2002 and July 2004. Before doing so, an interview guideline was developed, which outlined the issues that were to be explored and which served as a checklist during the interviews (McCracken 1988). The majority of the interviews took place with participants from STEADY, as this firm employed the lion's share of the 90 persons working for the relationship. All but one of the interviews was tape-recorded and subsequently transcribed verbatim, resulting in 458 pages of interview text. Transcribed interviews were coded in QSR NUD*IST Vivo (see Bazeley and Richards 2000).

During the data collection, descriptive and interpretive validity were secured through tape-recording the interviews, producing verbatim transcriptions, and performing accuracy checks with respondents. The reported findings were reviewed and commented on during a workshop and in individual feedback-meetings. Beyond interviews, extensive archival data were collected, including 743 documents containing service level agreements, project handbooks, reports, memos, letters, web pages, annual reports, agendas, status reports and minutes from alliance meetings. These additional sources of information facilitated the triangulation of evidence (Eisenhardt 1989b; Strauss and Corbin 1998; Yin 1994). In analysing the data, we started with factual or descriptive coding (see Strauss and Corbin 1998) in order to categorize text fragments in the interview transcripts and documents along the functions and dysfunctions of formalization that we distinguished in Tables 1 and 2. Text fragments pointing at trade-offs made by participants in the relationship were categorized as 'trade-offs', whereas indications of alliance managers' attempts to cope with tensions between formalization's functions and dysfunctions were accumulated under the category 'tension management'. Text fragments hinting at the performance of the relationship were coded under the category 'interorganizational performance'. Subsequently, we used axial coding procedures (see Strauss and Corbin 1998) to relate different categories and subcategories to each other. We then developed a case narrative, in which we present interview fragments from various categories to illustrate the research framework.

General Introduction to the Case Study

The objective of the alliance between STEADY and QUICK was to deliver financial services in a retail environment, which could radically change the financial services landscape in the country in which the relationship was initiated. Potential services related to the provision of savings accounts and insurance packages. Complementarity between the partners' resources seemed high, with STEADY having a retail channel and a huge customer base, and QUICK possessing a banking-licence, a back-office infrastructure and legitimacy as a provider of financial services. Negotiations on the alliance began in March 1999. The first round, which led to a contract-frame, took around six months. Drafting the complete contract absorbed almost a year. Although the presence of lawyers sometimes led to polarization, negotiations were generally constructive. Parallel to the negotiations, a business case and an interorganizational structure were being developed by a group of eight persons, four from each firm. The structure designed for the alliance is depicted in Figure 3. As can be seen from the chart, the alliance was supervised by a reference group, while its daily management was in the hands of the alliance managers of both firms. Operational activities at STEADY, which primarily pertained to information technology and marketing, were subdivided over six workgroups. As QUICK needed to perform fewer activities, these were concentrated in one workgroup.

Figure 3. Interorganizational Structure of the QUICK-STEADY Alliance
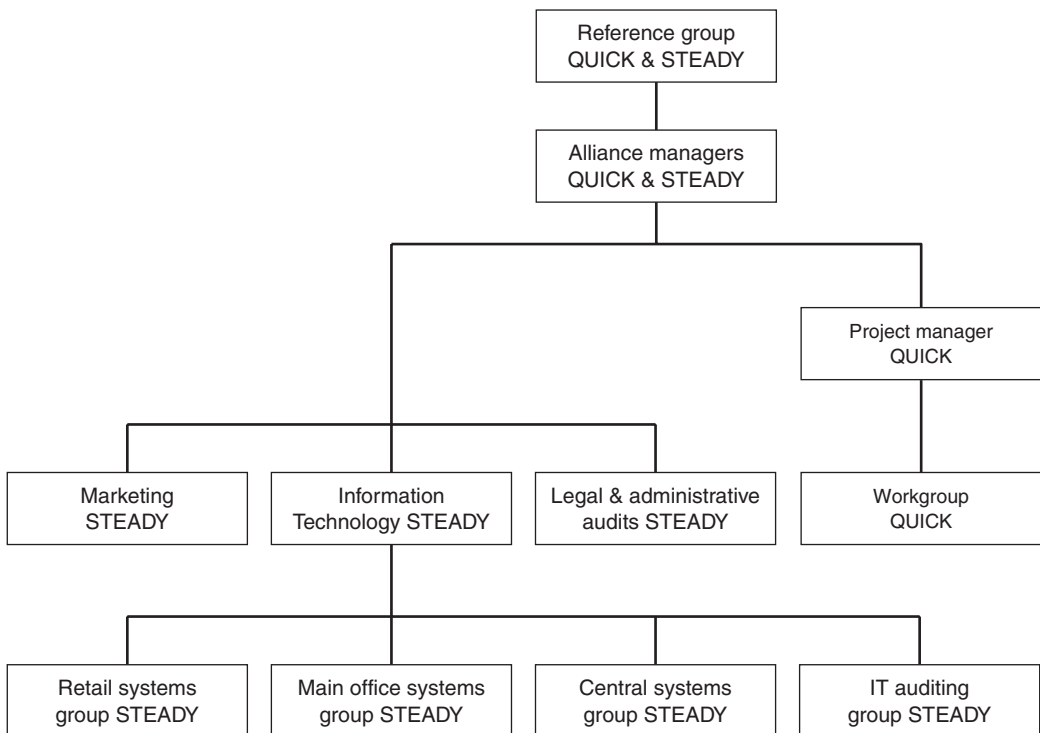
Communication and coordination frequently assumed the form of formal documentation and weekly meetings with all project managers guaranteed mutual adjustment. The alliance managers, service-level managers and several other key stakeholders met each other at least four times a year in pre-scheduled meetings, whereas most other participants had bilateral contacts with their counterparts in the other firm at least once every week.

At the beginning of 2001, the first financial services were distributed through STEADY's shops. After one month, the alliance served almost 100,000 customers. At the outset of 2003, this number had nearly tripled, leading STEADY's alliance manager to state that the alliance represented 'the most successful introduction of a new financial service in the last 10 years' (Interview with alliance manager STEADY, 4 June 2002). As can be seen from Appendix 2, most other participants also evaluated the relationship's performance positively. Following this general introduction to the case study, we now illustrate how a dialectic perspective on formalization in interorganizational relationships, as it was described in the framework that we presented earlier, complements more traditional, deterministic perspectives.

From Firm, Transaction and Contextual Characteristics to Trade-offs

The interviewees referred to a large number of firm, transaction and contextual characteristics that collectively invoked a relatively high need for formalization. They pointed to, among other things, the internal organization of STEADY, which already worked according to formal rules and procedures, the complexity of the alliance, and the institutional context (e.g. Central Bank and regulatory bodies), which demanded legitimate accounts of the activities undertaken in the alliance. Nonetheless, the alliance managers of both firms indicated that the trade-offs that *they* made were based on a small subset of the functions and dysfunctions that were later attributed to formalization by themselves and other interviewees. They primarily decided to sacrifice creativity and flexibility for a high pace of development, and for certainty about the rigour and consistency with which work would be carried out in the alliance, and expressed this as follows:

'Formalization removes creativity and flexibility from a project. That is the downside. The upside is that it guaranteed that the things that we developed worked nearly faultlessly.' (Interview with alliance manager QUICK, 28 January 2003)

'I think that to make sure a project proceeds at a certain pace, one has to be clear about the desired outcomes … We had to formulate what we wanted and how the result should look like. On the one hand, that infused speed in the project and simplified decision-making to a large extent. On the other hand, it increased the risk that was taken by us as commissioners, because if things went wrong, it would clearly be our problem.' (Interview with alliance manager STEADY, 6 January 2003)

Degree of Formalization

During the alliance, both partners worked along formal lines and a standard-methodology. They developed multiple business cases, conceptual designs, impact-analyses, functional designs and technical designs. Documentation from prior stages served as a basis for subsequent phases, and compatibility of

documents was continuously monitored by the alliance's management. It is hard to assess to what extent formalization was due to managerial intentionality and to what extent it reflected the context of the alliance, as both are intricately related. The fact that formalization was relatively high and that this had its origins in firm, transaction and contextual characteristics *as well as* managerial choice becomes obvious from comments issued by a CRM-analyst and by STEADY's alliance manager:

'They [formal procedures] are handled strictly. Also a functional design needs to be signed by everybody. And even if somebody comes with a dodge or a trick that requires adaptation, then these things need to be changed very formally, via change requests.' (Interview with CRM-analyst, 18 November 2002)

'Of course it started rather vaguely, but it entered a funnel and became more and more formalized and structured.' (Interview with alliance manager STEADY, 5 August 2002)

'This formal approach has been partly instigated by the IT-organization. They said: *this is how we want it*. This is the best way to work for us, *especially as this will become a complex project.*'' (Interview with alliance manager STEADY, 5 August 2002)

Participants from QUICK were not used to acting in such a formal way, but their experience with STEADY's approach, combined with the intention to transform QUICK into a customer-oriented organization, gradually led them to adopt a more formal working style. This hints at the co-evolution of partner firms and interorganizational relationships (Koza and Lewin 1998; Lewin and Volberda 1999; Volberda and Lewin 2003), something that is supported by participants from QUICK:

'Because I came from QUICK, I was working very ad hoc myself and I paid little attention to recording things; just the things I thought that they were really important. Because of the alliance, I have started to record and describe everything. If anything is added, an instruction is made for it, or an education plan is being developed … I have adopted a lot of the working practices of STEADY.' (Interview with customer service manager, 3 December 2002)

'And it has led to a little more formalization of things. Nowadays, we have agreed on certain procedures, which people have to comply with. You see that the organization is maturing. The realization that that was necessary has arisen during the alliance. STEADY has been the trigger for that.' (Interview with process and systems analyst, 12 December 2002)

Functions of Formalization

Other participants in the alliance emphasized different functions and dysfunctions of formalization than those included in the trade-offs made by the alliance managers. Following Tables 1 and 2, each of these will be discussed briefly. Formalization's *coordination function* became apparent from the fact that formal documents accompanied the division of labour between different workgroups in the relationship, serving as input for socialization between them. A comment from the project leader for central IT applications is illustrative:

'After you have made a functional design, it is sent to both the builders and the testers. The testers then define their test cases, while the builders are building the applications at the same time.' (Interview with project leader central applications, 21 November 2002)

Related to this, the formal structure adopted in the alliance reduced the complexity that was perceived by participants in the relationship, as these needed to 'solve' smaller parts of the 'problems' that had to be tackled. This became evident from the response of a project leader when he was asked whether he regarded the alliance to be complex or not:

'Complex? No, not really. Because the structure was well devised, it actually was not as complex as it seemed. The structure was really good.' (Interview with project leader infrastructures, 15 November 2002)

Formalization's *control function* appeared in the form of monitoring progress and preventing frequent stretching of the scope of the alliance. This became obvious from a remark by QUICK's service-level manager:

'One has to prevent looking backwards by making a list of decisions made. One has to look forward by means of an action list. If you keep those sharp, things proceed.' (Interview with service-level manager, 8 November 2002)

At the same time, the project leader for retail systems indicated that a higher level of formalization by QUICK at the beginning of the relationship would have increased STEADY's trust in its partner:

'The status [progress] was verbally communicated, but was not supported by documents that were put on the table, from which it became evident that that was really the status. That would have helped. There would have been less distrust then. It was easy to say: we are now at this stage, and in two weeks things are finished.' (Interview with project leader retail systems, 15 December 2002)

Formalization functioned as a means to increase the *internal and external legitimacy* of the relationship as well. Within the alliance, the mere existence of formalities legitimized rule observation, whereas detailed documentation helped in legitimizing the relationship towards governmental bodies, witnessing a comment of STEADY's service-level manager:

'I suspect that the detailed documentation has helped to win institution X over. We said: "Listen, have a look at how precisely we deal with these things." I think that has helped.' (Interview with service-level manager STEADY, 11 November 2002)

Concerning *cognition and learning*, formalization enabled partners to set expectations, and to clarify implicit assumptions. It lay bare potential conflicts and tempered extreme confidence in the alliance (see also Sampson 2003), as is illustrated by comments from a project leader and an in-company legal counsellor:

'At the moment you make your plan, you try to limit uncertainties. You describe the things that you do not know for certain, possibly with alternative directions for solutions … If you do not do that, you can be certain that the final product will not become what everybody expects.' (Interview with project leader central applications, 21 November 2002)

'Just put it on the table and discuss it. Then you avoid a lot of problems in the future. By putting it on paper you pave the way for good cooperation. It enables you to estimate what issues you will be confronted with, and how these need to be resolved. Furthermore, it makes clear what you expect from each other. I think many people do not realize that.' (Interview with in-company legal advisor, 30 January 2003)

Moreover, remarks by one of STEADY's project leaders and its alliance manager hinted at the supportive role of formalization in enabling contraction, and in making sure that specifications were complete, accurate and consistent:

'Many documents have been produced here, which have led us to state: *that should be included for subsequent projects!*'' (Interview with project-leader infrastructure, 15 November 2002).

'The good side is that they [formal documents and procedures] kept us sharp with respect to the accuracy and completeness of the specifications.' (Interview with alliance manager STEADY, 6 February 2004)

Besides, formal processes fuelled the interaction between participants in the relationship. According to the project leader of the administrative organization, formalities functioned as simultaneously enabling and constraining structures, which triggered debate among participants in the relationship.

'During the process it worked as a red line from one meeting to another meeting: to measure progress, to provide a kind of glue, and to communicate to others within the meetings. In my opinion, it is just for the process: keeping everybody on one line. Also to inform people and to record what should happen.' (Interview with project leader administrative organization, 21 November 2002)

Finally, formalization had several positive consequences in *the long-run*. It functioned, among others, as a memory device, reducing the vulnerability of the alliance to personnel turnover and fallible memories:

'My experience is that if you do not produce action lists, lots of things disappear. Because (a) persons forget things, and (b) after a week you might remember that you need to do something, but you possibly have a different interpretation of the task than at the moment at which the issue originated.' (Interview with service-level manager QUICK, 8 November 2002)

'The documentation warrants knowledge preservation, which is electronically accessible and on which people can build in a following project. Because people leave … you name it … Those are not stable factors.' (Interview with service-level manager STEADY, 11 November 2002)

Dysfunctions of Formalization

Respondents also pointed at several dysfunctions of formalization. First, employees from STEADY used formalization to cover themselves against all kinds of risks. This resulted in stiffened and rigid relations between its IT-departments and its business department, witnessing quotes from STEADY's business commissioner and one of QUICK's process and systems analysts:

'Employees from STEADY keep their own alley clean. They are very precise. That becomes obvious when one considers the fact that they record everything in the minutes. One can also read between the lines in the progress-reports. They put problems aside, on the plates of others. Moreover, they connect problems to choices that have been made by others … They also have a standard list with the risks of the project, from which you can percolate exactly how they try to cover themselves.' (Interview with alliance manager STEADY, 6 January 2003)

'When there was a hitch in the cable, people at STEADY sometimes tried to keep their own alley clean … At QUICK we say, some things go wrong and you have to solve them, but that can happen. I had the impression that they thought, they cut our heads off, if

something goes wrong. I have to make sure that it is not my fault.' (Interview with process and systems analyst, 12 December 2002)

Another negative consequence of formalization consisted of the administrative burden it brought along and the time it consumed. Eventually, this almost turned formalization from a means towards an end in itself. Comments from the general IT project manager and the CRM manager are illustrative:

'The vision is lacking with respect to why something is formalized. It has to be done like this because somebody says that it should be done like this.' (Interview with general IT-manager, 6 January 2003)

'One saw tension at STEADY, where behaviour was very formal. They did not give any space to think about something when it had been previously defined. Exaggerating it a bit, it was as follows: Why do you do it like this? We do it like this, because it is like this on paper. Not because it is best, but because it is written on paper. So, we do it like this.' (Interview with CRM-analyst, 18 November 2002)

Coping with Tensions

The alliance managers attempted to prevent and cope with the tensions arising from the coexistence of formalization's functions and dysfunctions in three ways. First, they developed a kind of semi-structure (Brown and Eisenhart, 1997), in which some features were prescribed or determined, but others were not. Meyer and Rowan (1977) provide an example of such a semi-structure, indicating that hospitals and schools have highly specific and rigid rules of administration, while the professionals working in them may have a high degree of freedom in how they approach their work. Analogously, syndicates in the venture capital industry adopt investment agreements that enshrine the rights and obligations of participants, but hardly specify behaviour (Wright and Lockett 2003). Such an approach provides people with arenas for action, while it leaves the specific means to achieve outcomes open, enabling an improvised and energized flow of activities (Dougherty and Takacs 2004). This approach was also evident in the alliance, where objectives, goals and expected outcomes were codified and enforced strictly, whereas employees were granted considerable latitude in how to accomplish these. STEADY's alliance manager explained why they adopted such a semi-structure:

'The role that one chooses as a commissioner is either having them do their work as they wish it themselves, with their own control and consultation structures, and planning-cycles. In that case, you only provide input as to what you want them to realize [outcome formalization]. Or you also stand as a kind of project manager, prescribing how they have to work [process formalization]. We have not done the latter, because you will not succeed in doing this with two persons. So we had them use their own working and planning methods, while providing them with input, telling them what we wanted the output to look like … If you provide them with limited freedom concerning *what* they should do, then you should not also interfere with *how* they do that, with *how* they should structure that process. That will take away all the fun they have in managing such a project.' (Interview with alliance manager STEADY, 6 January 2003)

This finding conflicts with assertions of Koza and Lewin (1998: 260) that, 'ceteris paribus, the greater the exploration intent of an alliance, the greater the reliance on behaviour and process controls'. As contingencies are hard to identify in

advance and because this type of relationships requires mutual adaptation, behavioural control is inappropriate (Carson et al. 2006; Madhok and Tallman 1998). It takes away the ability of individuals to exercise their judgment (Goold and Quinn 1990), reduces their motivation, and results in boredom, alienation, job dissatisfaction and diminished output (Nygaard and Dahlstrom 2002).

Second, the alliance managers tried to cope with the tensions between formalization's functions and dysfunctions by referring to factors that were beyond their control, such as demands imposed by their own supervisors or regulatory institutions, and the enormous impact that 'mistakes' would have on the reputation and image of both organizations. They thus attempted to persuade and convince others to work along formal lines by accentuating the external constraints imposed on the alliance instead of underlining their own preferences for little interference of pressure groups, or their desire to have everyone work according to their own plans, which is congruent with work from Shaw et al. (2003) and Sitkin and Bies (1993). The following comments hint in this direction:

'Before any money is spent, the board wants to know in broad lines what the plan is and what the financial consequences are. Ideally, they also want to be able to shoot three out of four plans.' (Interview with alliance manager STEADY, 6 January 2003)

'We have a stick behind the door, because we are a bank now. So, many things cannot be discussed anymore, but simply have to happen.' (Interview with alliance manager STEADY, 6 January 2003)

'Everyone realized that nothing should go wrong. We could not afford to lose money which was put in a savings account ... That has to happen once or twice and you are on the front-page of a national newspaper and you have a serious problem.' (Interview with alliance manager QUICK, 28 January 2003)

Under the guise of demands from supervisory boards, reference groups and external institutions, and by adducing the magnitude of image risks, the alliance managers were able to maintain high levels of formalization and forestall the development of insurmountable tensions at the same time. This finding complements results from earlier studies on justification and persuasion as influence tactics adopted in mergers (Steensma and Milligen 2003) and during the implementation of auditing systems (Walgenbach 2001).

Finally, they used differences in the degree of formalization to which both organizations were accustomed to propagate speed in certain areas and stages of collaboration, and to enhance control in others. Although dissimilar levels of formalization at parent organizations are generally believed to hamper cooperation (Lane and Lubatkin 1998), the opposite occurred in this alliance. When QUICK was not working thoroughly and accurately enough, STEADY's performance standards and codification requirements were emphasized. In situations in which participants from STEADY were moving too slowly, they were confronted with the fact that their progress was far behind that of QUICK, as expressed by one of the alliance managers.

'I think that the dissimilarity between the two firms eventually ensured that the project became a success. They were used to a completely different way of working. There was much more entrepreneurial spirit in the blood of participants from QUICK compared to those from STEADY. Persons from STEADY, instead, had a much stronger instigation to have everything documented, reported and crystallized out up to the final detail, compared

to participants from QUICK. And this is what happened … We sometimes have, consciously or unconsciously played these characteristics of the two parties off against each other. I certainly did it myself, as I had to take care of QUICK living up to its promises. I regularly went to people from QUICK to say: "Guys, it's all okay what you are doing, but I want to have it on paper, because I cannot go to STEADY with this piece of paper. If you do that here, that is all right with me, but this is an external party, so the standard needs to be raised". If we needed something done, we could use QUICK to convey strength and speed towards STEADY, whereas STEADY was more of a controlling and auditing master.' (Interview with alliance manager QUICK, 28 January 2003)

Managerial action thus reduced the likelihood that vicious circles were formed, in which either the functions or dysfunctions of formalization received exacerbating attention (see also Volberda 1998). By recognizing the dangers inherent in taking extreme positions on the formalization continuum, and by prolifically capitalizing on the tensions at intermediary positions, the alliance managers tried to amplify interorganizational performance.

Discussion

The case study, which has been analysed along the framework presented in Figure 2, exemplifies that a dialectic perspective on formalization offers a valuable complement to the mainstream literature. It shows that formalization entails a duality, which requires managers to make trade-offs and manage dialectic tensions. In the case study, managers attempted to deal with this duality by: (1) applying semi-structures in which either outcomes or behaviour are formalized; (2) justifying particular levels of formalization by referring to factors that appear to be beyond their control, and; (3) alternating their emphasis on different formalization requirements by each of the partner firms.

Although one could argue that our conclusions may have been driven by retrospective sensemaking and by the attribution of success to managerial action instead of external events (e.g. see Kelley and Michaela 1980; Weick 1995), several factors reduce the likelihood that this was actually the case. First, in our interview transcripts, we found several comments that clearly suggested that managerial intentionality played a significant role with respect to formalization in the alliance. One of the alliance managers, for example, mentioned that

'it was the conviction of the director of STEADY that the company should pursue innovative projects in a more systematic and formal way, as the lack of a professional approach in similar projects had led to failure before.' (interview alliance manager STEADY, 8 August 2002).

Second, we also found more 'objective' support for some of the means that were used by the alliance managers to suppress potential tensions. Regarding their frequent referrals to requirements set by external institutions, for example, we note that the minutes of a general alliance meeting of 3 September 1999 already mentioned that 'the Central Bank approved the concept-design for the alliance', and that the report that was conferred to and approved of by the Central Bank 'would function as a basis for the relationship'. This suggests that there was no reason to stress the demands of the Central Bank during the remainder of the relationship to

a greater extent than the points of attention reflected in this report. Nonetheless, more than 70% of the interviewees advanced the requirements of regulating bodies and the Central Bank as an important motive for formalization. In this respect, the alliance manager of QUICK stated that he may have

'frightened the participants in the alliance too much in the beginning. Particularly due to the fact that the Central Bank consisted of unknown territory for most participants in the alliance, they may have thought that it was better to raise the degree of formalization instead of reducing it.' (Interview with alliance manager QUICK, 28 January 2003)

Third, some of the interviewees of STEADY experienced large problems with the alliance managers, which reduced the likelihood that they would incorrectly attribute success to their actions. Nonetheless, these interviewees still credited the alliance managers for the structure and the degree of formalization that was adopted in the relationship, and for the way in which they coped with the resulting tensions. The general IT-manager, for example, indicated that a misunderstanding between him and the alliance managers 'escalated in such a way that they had to defend each other's viewpoints in front of the direction of STEADY'. At the same time, this manager praised the ability of the alliance managers to 'set expectations' and to 'keep the alliance going in case problems arose' (Interview with overall IT-manager, 6 January 2003).

Theoretical and Practical Implications

Our research has several significant implications for research on formalization in interorganizational relationships. First, it suggests that formalization can no longer be depicted as being solely determined by firm, transaction and contextual characteristics. It also appears to be contingent on the extent to which managers anticipate the functions and dysfunctions of formalization, and on the appropriateness of the trade-offs that they make. The case study shows that these trade-offs may be preceded by limited considerations of the entire array of functions and dysfunctions of formalization that may eventually occur in such relationships. In our case, the alliance managers particularly made little reference to (sub-)functions of formalization that seem harder to anticipate, such as 'forcing people to reflect and think', and those factors that may affect performance in more remote futures, such as 'the use of formal documents as an interorganizational memory'. This may be the result of bounded rationality and limited foresight, but it may also derive from a lack of knowledge of and experience with formalization, or from the organizational position of alliance managers. Trade-offs may be biased, for example, towards managers' own, immediate needs. Furthermore the case study illustrates that alliance managers may not only be preoccupied with making the 'right' governance choices, but also, and perhaps primarily with the trade-offs and tensions that respectively precede and follow them. This underscores the significance of the managerial action involved with structuring choices, and it suggests that the relationship between formalization and performance as it is frequently proposed in the literature, in the form of an inverted U-shape (e.g. Luo 2002), is probably affected by managers' abilities to cope with dialectic tensions.

A second theoretical implication concerns the functions that can be attributed to formalization (see Table 1), which are more diverse than generally acknowledged in the literature. More specifically, we propose that theoretical explanations for observed levels of formalization should not only focus on its 'coordination' and 'control' functions (e.g. Foss and Foss 2005; Gulati and Singh 1998; Madhok 2002), but also on its relationships with 'legitimacy' and 'cognition and learning' (see Vlaar et al. 2006). These functions may help to explain why, despite a changing and probably more turbulent environment, formalization is still endemic in modern business (Hatch 1999). Moreover, their coexistence suggests that monocausal explanations for interorganizational structuring efforts based on single theoretical lenses are likely to be inappropriate (Adler 1993; Klein Woolthuis et al. 2005). The managerial implications of our study concern managers' awareness and understanding of the numerous functions and dysfunctions through which formalization influences interorganizational performance (see Tables 1 and 2), and their inclination to apply a dialectic management style. This article shows that managers can ameliorate interorganizational performance by simultaneously holding and exploring opposing views (Eisenhardt 2000) and by capitalizing on the tensions emanating from interorganizational governance solutions.

Limitations and Future Research

We have depicted formalization as being the result of trade-offs by alliance managers and other participants in interorganizational relationships, and we have suggested that formalization may be an emergent process, or a requirement imposed by higher management (see Ring et al. 2005). This indicates a need for research on the extent to which the degree of formalization applied in interorganizational relationships is affected by organizational positions and bargaining processes between stakeholders. In addition, we illustrated the relevance of a more managerial perspective on formalization in interorganizational relationships with only one case study, which restricts the external validity of our study. Our data do not permit us to assess to what degree formalization and its relationship with interorganizational performance are influenced by managerial choice. We therefore encourage researchers to combine questionnaire and interview techniques to study traditional and dialectic perspectives side by side. Finally, as the consequences of (not) instituting formalities may differ for various stages of cooperation (Cardinal et al. 2004), future research needs to address the timing of formalization, and potential variations in emphasis on different functions during the evolution of alliances.

Conclusion

We started this paper by asking how our view on the role of formalization in interorganizational relationships would change, if more attention was paid to managerial choice. To address this question, we complemented traditional, relatively deterministic perspectives on formalization with a view in which

dualities, trade-offs and dialectic tensions occupy a more central position. The coexistence of formalization's functions and dysfunctions, it was argued, entail trade-offs and dialectic tensions. We illustrated such a dialectic perspective on formalization with a case study of a cross-industrial strategic alliance, and we exemplified how managers of interorganizational relationships may diminish the tensions stemming from formalization or convert them into productive forces. By doing so, we have shown that a dialectic perspective on formalization in interorganizational relationships offers a promising complement to the mainstream literature on this topic. In particular, we have elucidated that researchers and managers should not only be preoccupied with the 'rightness' of governance structures, but also, and perhaps primarily, with the trade-offs and dialectic tensions associated with them.

Note

References

Adler, Paul
1993   'The learning Bureaucracy: New united motor manufacturing' in *Research in organizational behavior*. B. M. Staw and L. L. Cummings (eds), 15: 111–194. Greenwich, CT: JAI Press.

Anderson, Shannon, and Henri Dekker
2000   'Management control for market transactions: The relation between transaction characteristics, incomplete contract design and subsequent performance'. *Management Science* 51: 1734–1752.

Avadikyan, Arman, Patrick Llerena, Mireille Matt, Anne Rozan, and Sandrine Wolff
2001   'Organizational rules, codification and knowledge creation in inter-organisation cooperative agreements'. *Research Policy* 30: 1443–1458.

Balogun, Julia, and Gerry Johnso
2004   'Organizational restructuring and middle manager sensemaking'. *Academy of Management Journal* 47/4: 523–549–549.

Baum, Joel, and Tim Rowley
2002   'Companion to organizations: An introduction' in *The Blackwell companion to organizations*. J. A. C. Baum (ed.), 1–34. Oxford: Blackwell.

Bazeley, Patricia, and Lyn Richards
2000   *The NVivo*
1977   'Organisations; A dialectical view'. *Administrative Science Quarterly* 22: 1–21.

Blau, Peter
1955   *The dynamics of bureaucracy*. Chicago: University of Chicago Press.

Boisot, Max
1998   *Knowledge assets*. New York: Oxford University Press.

Brown, Shola, and Kathleen Eisenhardt
1997   'The art of continuous change: Linking complexity theory and time-based evolution in relentlessly shifting organizations'. *Administrative Science Quarterly* 42/1: 1–34.

Cardinal, Laura, Sim Sitkin, and Chris Long
2004   'Balancing and rebalancing in the creation and evolution of organizational control'. *Organization* Science 15/4: 411–431.

Carson, Stephen, Anoop Madhok, and Tao Wu
2006   'Uncertainty, opportunism and governance: The effects of volatility and ambiguity on formal and relational contracting'. *Academy of Management Journal* 49/5: 1058–1077.

Child, John
1997 'Strategic choice in the analysis of action, structure, organizations, and environments: Retrospect and prospect'. *Organization Studies* 18/1: 43–476.

Clegg, Stewart, Tyrone Pitsis, Thekla Rura-Polley, and Marton Marosszeky
2002a 'Governmentality matters: Designing an alliance culture of inter-organizational collaboration for managing projects'. *Organization Studies* 23/3: 317–337.

Clegg, Stewart, João Vieira da Cunha, and Miguel Pina e Cunha
2002b 'Management paradoxes: A relational view. Human Relations 55/5: 483–503.

Cooray, Janek, and Shiran Ratnatunga
2001 'Buyer–supplier relationships: A case study of a Japanese and western alliance'. *Long Range Planning* 34: 727–740.

Das, T. K. and Bing-Sheng Teng
2000 'Instabilities of strategic alliances: An internal tensions perspective. *Organization Science* 11/1: 77–101.

De Boer, Michiel, Frans Van den Bosch, and Henk Volberda
1999 'Managing organizational knowledge integration in the emerging multimedia complex'. *Journal of Management Studies* 36/3: 379–398.

Delmar, Frédéric, and Scott Shane
2003 'Does business planning facilitate the development of new ventures?' *Strategic Management Journal* 24: 1165–1185.

De Rond, Mark
2003 *Strategic alliances as social facts*. Cambridge: Cambridge University Press.

De Rond, Mark, and Hamid Bouchiki
2004 'On the dialectics of strategic alliances'. *Organization Science* 15/1: 56–69.

Dougherty, Deborah, and Helen Takacs
2004 'Team play: Heedful interrelating as the boundary for innovation'. *Long Range Planning* 37: 569–590.

Eisenhardt, Kathleen
1989a 'Agency theory: An assessment and review'. *Academy of Management Review* 14/1: 57–74.

Eisenhardt, Kathleen
1989b 'Building theories from case study research'. *Academy of Management Review* 14/4: 532–550.

Eisenhardt, Kathleen
2000 'Paradox, spirals, ambivalence: Language of change and pluralism'. *Academy of Management Review* 25/4: 703–705.

Fehr, Ernst, and Armin Falk
2002 'Psychological foundations of incentives'. *European Economic Review* 46: 687–724.

Foss, Kirsten, and Nicolai Foss
2005 'Resources and transaction costs: How property rights economics furthers the resource-based view'. *Strategic Management Journal* 26: 541–553.

Galbraith, Jay
1977 *Organizational design*. Reading, MA: Addison-Wesley.

Ghoshal, Sumantra, and Peter Moran
1996 'Bad for practice: A critique of the transaction cost theory'. *Academy of Management Review* 21: 13–47.

Goold, Michael, and John Quinn
1990 'The paradox of strategic controls'. *Strategic Management Journal* 11: 43–57.

Gouldner, Alvin
1954 *Patterns of industrial bureaucracy*. New York: Free Press.

Grandori, Anna
1997 'An organizational assessment of interfirm coordination modes'. *Organization Studies* 18/6: 897–925.

Grimaldi, R., and S. Torrisi
2001 'Codified-tacit and general-specific knowledge in the division of labour among firms: A study of the software industry'. *Research Policy* 30: 1425–1442.

Gulati, Ranjay, and Harbir Singh
1998 'The architecture of cooperation: Managing coordination costs and appropriation concerns in strategic alliances'. *Administrative Science Quarterly* 43: 781–814.

Hage, Jerald, and Michael Aiken
1966 'Organizational alienation: A comparative analysis'. *American Sociological Review* 31/4: 497–507.

Hatch, Mary Jo
1999 'Exploring the empty spaces of organizing: How improvisational jazz helps redescribe organizational structure'. *Organization Studies* 20/1: 75–100.

Hendry, John
2002 'The principal's other problems: Incompetence and the specification of objectives'. *Academy of Management Review* 27/1: 98–113.

Huxham, Chris, and Nikolas Beech
2003 'Contrary prescriptions: Recognizing good practice tensions in management'. *Organization Studies* 24/1: 69–93.

Ireland, Duane, Michael Hitt, and Deepa Vaidyanath
2002 'Alliance management as a source of competitive advantage'. *Journal of Management* 28/3: 413–446.

Jap, Sandy, and Shankar Ganesan
2000 'Control mechanisms and the relationship life cycle: Implications for safeguarding specific investments and developing commitment'. *Journal of Marketing Research* 37: 227–245.

Kale, Prashant, Jeff Dyer, and Harbir Singh
2001 'Value creation and success in strategic alliances: Alliancing skills and the role of alliance structure and systems'. *European Management Journal* 19/5: 463–471.

Katz, Daniel, and Robert Kahn
1966 *The social psychology of organizations*. New York: John Wiley.

Kelley, H. H., and J. L. Michaela
1980 'Attribution theory and research'. *Annual Review of Psychology* 31: 457–501.

Ketokivi, Mikko, and Xavier Cataãer
2004 'Strategic planning as an integrative device'. *Administrative Science Quarterly* 49: 337–365.

Klein, Benjamin, Robert Crawford, and Armen Alchian
1978 'Vertical integration appropriable rents, and the competitive contracting process'. *Journal of Law and Economics* 21/2: 297–326.

Klein Woolthuis, Rosalinde, Bas Hillebrand, and Bart Nooteboom
2005 'Trust, contract and relationship development'. *Organization Studies* 26/6: 813–840.

Kotabe, Masaaki, Xavier Martin, and Hiroshi Domoto
2003 'Gaining from vertical partnerships: Knowledge transfer, relationship duration, and supplier performance improvement in the US and Japanese automotive industries'. *Strategic Management Journal* 24/4: 293–316.

Koza, Mitchell, and Arie Lewin
1998 'The co-evolution of strategic alliances'. *Organization Science* 9/3: 255–264.

Kreps, David
1997 'The interaction between norms and economic incentives: Intrinsic motivation and extrinsic incentives'. *American Economic Review* 87/2: 359–364.

Lane, Peter, and Michael Lubatkin
1998 'Relative absorptive capacity and interorganizational learning' *Strategic Management Journal* 19: 461–477.

Langley, Ann
1988 'The roles of formal strategic planning'. *Long Range Planning* 21/3: 40–50.

Lewin, Arie, and Henk Volberda
1999 'Prolegomena on coevolution: A framework for research on strategy and new organizational forms'. *Organization Science* 10/5: 519–534.

Lewis, Marianne
2000 'Exploring paradox: Toward a more comprehensive guide'. *Academy of Management Review* 25/4: 760–776.

Lui, Steven, and Hang-Yue Ngo
2004 'The role of trust and contractual safeguards on cooperation in non-equity alliances'. *Journal of Management* 30/4: 471–485.

Luo, Yadong
2002 'Contract, cooperation and performance in international joint ventures'. *Strategic Management Journal* 23: 903–919.

Lusch, Robert, and James Brown
1996 'Interdependency, contracting, and relational behavior in marketing channels'. *Journal of Marketing* 60: 19–38.

McCracken, Grant
1988 *The long interview*. Newbury Park, CA: Sage Publications.

Macneil, Ian
1980   *The new social contract: An inquiry into modern contractual relations*. London: Yale University Press.

Madhok, Anoop
2002   'Reassessing the fundamentals and beyond: Ronald Coase, the transaction cost and resource-based theories of the firm and the institutional structure of production'. *Strategic Management Journal* 23: 535–550.

Madhok, Anoop, and Stephan Tallman
1998   'Resources, transactions, and rents: Managing value through interfirm collaborative relationships'. *Organization Science* 9/3: 326–339.

March, James, and Herbert Simon
1958   *Organizations*. New York: John Wiley.

Marginson, David, and Stuart Ogden
2005   'Coping with ambiguity through the budget: The positive effects of budgetary targets on managers' budgeting behaviors'. *Accounting, Organizations and Society* 30: 435–456.

Masten, Scott
1996   'Empirical research in transaction cost economics: Challenges, progress, and directions' in *Transaction cost economics*. J. Groenewegen (ed.), 43–64. Boston: Kluwer Academic Publishers.

Mayer, Kyle, and Nicholas Argyres
2004   'Learning to contract: Evidence from the personal computer industry'. *Organization Science* 15/4: 394–410.

Merton, Robert
1957   *Social theory and social structure*. Glencoe, IL: Free Press.

Meyer, John, and Brian Rowan
1977   'Institutionalized organizations: Formal structure as myth and ceremony'. *American journal of Sociology* 83: 340–366.

Milewicz, John, and Paul Herbig
1996   'Differences in market signaling behavior between manufacturers and service firms'. *Journal of Professional Services Marketing* 14/2: 3–23.

Mintzberg, Arthur
1994   *The rise and fall of strategic planning*. Hemel Hempstead: Prentice Hall.

Nooteboom, Bart
1999   *Inter-firm alliances: Analysis and design*. London: Routledge.

Nygaard, Arne, and Robert Dahlstrom
2002   'Role stress and effectiveness in horizontal alliances'. *Journal of Marketing* 66: 61–82.

Ouchi, William
1979   'A conceptual framework for the design of organizational control mechanisms'. *Management Science* 25: 833–848.

Oxley, Joanne
1997   'Appropriability hazards and governance in strategic alliances: A transaction cost approach'. *Journal of Law Economics and Organization* 13: 387–409.

Peng, Kaipeng, and Richard Nisbett
1999   'Culture, dialecticism, and reasoning about contradiction'. *American Psychologist* 54: 741–754.

Poppo, Laura, and Todd Zenger
2002   'Do formal contracts and relational governance function as substitutes or complements?' *Strategic Management Journal* 23: 707–725.

Quinn, Robert
1988   *Beyond rational management: Mastering the paradoxes and competing demands of high performance.* San Fransisco: Jossey-Bass.

Ring, Peter, and Andrew Van de Ven
1989   'Formal and informal dimensions of transactions' in *Research on management of innovation: The Minnesota studies*. A. H. Van de Ven, H. L. Angle, and M. S. Poole (eds), 171–192. New York: Ballinger.

Ring, Peter, and Andrew Van de Ven
1994   'Structuring cooperative relationships between organizations'. *Strategic Management Journal* 13/7: 483–499.

Ring, Peter, Yves Doz, and Paul Olk
2005   'Managing formation processes in R&D consortia'. *California Management Review* 47: 137–156.

Rose, Nikolas, and Peter Miller
1992   'Political power beyond the state: The problematics of government'. *British Journal of Sociology* 43/2: 173–207.

Sampson, Rachelle
2003   'The role of lawyers in strategic alliances'. *Case Western Law Review* 53/4: 909–927.

Sampson, Rachelle
2004 'The cost of misaligned governance in R&D alliances'. *Journal of Law, Economics and Organization* 20/2: 484–526.

Schwartz, Alan, and Robert Scott
2003 'Contract theory and the limits of contract law'. *Yale Law Journal* 113/3: 541–619.

Schweitzer, Maurice, Lisa Ordóñez, and Bambi Douma
2004 'Goal setting as a motivator of unethical behavior'. *Academy of Management Journal* 47/3:422–432.

Scott, Richard
2003 *Organizations: rational, natural and open systems*. Upper Saddle River, NJ: Prentice Hall.

Shaw, John, Eric Wild, and Jason Colquitt
2003 'To justify or excuse? A meta-analytical review of the effects of explanations'. *Journal of Applied Psychology* 88/3: 444–458.

Shenkar, Oded, and Yoram Zeira
1992 'Role conflict and role ambiguity of chief executive officers in international joint ventures'. *Journal of International Business Studies* 23/1: 55–75.

Simon, H. A.
1997 *Administrative behavior*. New York: The Free Press.

Simonin, Bernard
1999 'Ambiguity and the process of knowledge transfer in strategic alliances'. *Strategic Management Journal* 20: 595–623.

Simons, Robert
1995 *Levers of control: How managers use innovative control systems to drive strategic renewal*. Boston, MA: Harvard Business School Press.

Singh, Kulwant
1997 'The impact of technological complexity and interfirm cooperation on business survival'. *Academy of Management Journal* 40/2: 339–367.

Sitkin, Sim, and Robert Bies
1993 'The legalistic organization: Definitions, dimensions, and dilemmas'. *Organization Science* 4: 345–351.

Sobrero, Maurizio, and Stephan Schrader
1998 'Structuring inter-firm relationships: A meta-analytic approach'. *Organization Studies* 19/4: 595–615.

Steensma, Herman, and Femke van Milligen
2003 'Bases of power, procedural justice and outcomes of mergers: The push and pull factors of influence tactics'. *Journal of Collective Negotiations in the Public Sector* 30/2: 113–134.

Stinchcombe, Arthur
2001 *When formality works: Authority and abstraction in law and organization*. Chicago: University of Chicago Press.

Strauss, Anselm, and Juliet Corbin
1998 *Basics of qualitative research: Techniques and procedures for developing grounded theory*. London: Sage Publications.

Van de Ven, Andrew
1992 'Suggestions for studying strategy process: A research note'. *Strategic Management Journal* 13: 169–188.

Van de Ven, Andrew, and Marshall Poole
1995 'Explaining development and change in organizations'. *Academy of Management Review* 20: 510–540.

Vermeulen, Patrick
2001 'Organizing product innovation in financial services'. Doctoral dissertation.

Vieira da Cunha, João, Stewart Clegg, and Miguel Pina e Cunha
2002 'Management, paradox, and permanent dialectics' in *Management and organization paradoxes*. S. R. Clegg (ed.), 11–40. Amsterdam: John Benjamins.

Vlaar, Paul W. L., Frans A. J. Van Den Bosch, and Henk W. Volberda
2006 'Coping with problems of understanding in interorganizational relationships: Using formalization as a means to make sense'. *Organization Studies* 27/11: 1617–1638.

Vlaar, P.W.L., Frans A.J. Van Den Bosch, and Henk W. Volberda
forthcoming 'On the evolution of trust, distrust, and formal coordination and control in interorganizational relationships: towards an integrative framework'. *Group and Organization Management*.

Volberda, Henk
1998 *Building the flexible firm*. Oxford: Oxford University Press.

Volberda, Henk, and Arie Lewin
2003 'Co-evolutionary dynamics within and between firms: From evolution to co-evolution'. *Journal of Management Studies* 40/8: 2111–2136.

Walgenbach, Peter
2001   'The production of distrust by means of producing trust'. *Organization Studies* 22/4: 693–714.

Walsh, James, and Robert Dewar
1987   'Formalization and the organizational life cycle'. *Journal of Management Studies* 24/3: 215–231.

Weick, Karl
1995   *Sensemaking in organizations*. London: Sage.

Weick, Karl
2001   *Making sense of the organization*. Oxford: Blackwell.

Weick, Karl, and Karlene Roberts
1993   'Collective mind and organizational reliability: The case of flight carrier operations on an aircraft carrier deck'. *Administrative Science Quarterly* 38: 357–381.

Williamson, Oliver
1985   *The economic institutions of capitalism*. New York: Free Press.

Wright, Mike, and Andy Lockett
2003   'The structure and management of alliances: Syndication in the venture capital industry'. *Journal of Management Studies* 40/8: 2073–2102.

Yin, Robert
1994   *Case study research: Design and methods*, 2nd edn. Thousand Oaks, CA: Sage.

Yu, Jisun, Rhonda Engelman, and Andrew Van de Ven
2005   'The integration journey: An attention-based view of the merger and acquisition integration process'. *Organization Studies* 26/10: 1501–1528.

Zeffane, Rachid
1989   'Centralization or formalization? Indifferences curves for strategies of control'. *Organization Studies* 10/3: 327–352.

Zollo, Maurizio, and Harbir Singh
2004   'Deliberate learning in corporate acquisitions: Post-acquisition strategies and integration capability in US bank mergers'. *Strategic Management Journal* 25/13: 1233–1256.

Paul W. L. Vlaar

Paul W. L. Vlaar is Assistant Professor at the Department of Management and Organization of Vrije Universiteit Amsterdam. His research interests include intra and interorganizational governance structures, management of interorganizational relationships, inter-firm contracting practices and alliance capabilities. His work has appeared or is forthcoming in books published by Elsevier and Palgrave, and in journals such as *Group and Organization Management* and *Organization Studies*.
Address: Department of Management and Organization, Faculty of Economics and Business Management, Vrije Universiteit Amsterdam, De Boelelaan 1105, 1081, HV Amsterdam, The Netherlands.
Email: pvlaar@feweb.vu.nl

Frans A. J. Van Den Bosch

Frans A. J. Van Den Bosch is Professor of Management at the Department of Strategic Management and Business Environment of RSM Erasmus University. His current research interests include strategic renewal, intra and interorganizational governance structures, and corporate governance and corporate responsiveness. He has published several books and in journals such as *Academy of Management Journal*, *Journal of Management Studies*, *Long Range Planning*, *Management Science*, *Organization Science*, *Organization Studies* and *Business and Society.* He is co-director of the Erasmus Strategic Renewal Center (ESRC) and fellow of the Erasmus Research Institute of Management (ERIM). He is an editorial board member of journals, including the *Journal of Management Studies* and *Long Range Planning*.
Address: RSM Erasmus University, Rotterdam, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands.
Email: fbosch@rsm.nl; www.rsm.nl/fvandenbosch

Henk W. Volberda   Henk W. Volberda is Professor of Strategic Management and Business Policy, Chair of the Department of Strategic Management and Business, and Vice-Dean of RSM Erasmus University. His research interests include strategic flexibility, new organizational forms, and strategic management of innovation. He has published several books and in journals such as *Academy of Management Journal*, *Journal of Management Studies*, *Long Range Planning*, *Management Science*, *Organization Science and Organization Studies.* He is Co-Director of the Erasmus Strategic Renewal Center (ESRC) and President of the Hay Group Vision Society. He is also Senior Editor of *JIBS* and *LRP,* and a member of the Editorial Board of *Journal of Management Studies, Organization Science,* and *Organization Studies*.
Address: RSM Erasmus University, Rotterdam, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands.
Email: hvolberda@rsm.nl; www.rsm.nl/hvolberda

Appendix 1
Overview of key characteristics data collection

- Twenty-two semi-structured interviews held between June 2002 and July 2004. All interviews were tape-recorded and transcribed ad verbatim, resulting in 458 pages of interview text.
- Interviewees included:

    - Alliance manager (QUICK)
    - Commissioner on the business side, who later became the manager of the alliance (STEADY)
    - Two project leaders for central IT applications (STEADY)
    - General project leader for IT (STEADY)
    - Project leader for the IT infrastructure (STEADY)
    - Project leader for the shops (STEADY)
    - Project leader for the administrative organization (STEADY)
    - Analyst of customer relationships (STEADY)
    - Two process and system analysts (QUICK)
    - Two Service level managers (QUICK and STEADY)
    - Director shop-systems (STEADY)
    - In-company legal advisor (STEADY)
    - System maintenance manager (STEADY)
    - Customer service manager (QUICK)

- More than 700 documents were analyzed using QSR NUD*IST Vivo, including formal requests & change requests (13), evaluation reports (9), spreadsheet files (74), memos and notes (8), minutes of alliance meetings (178), different versions of service level agreements (18), conceptual-, functional-, technical-, and test-designs (318), presentations (19), progress reports (24), interview transcripts (22), and others (82).

Appendix 2

Exemplary comments of interorganizational participants on the alliance's performance

> Efficiency: 'STEADY and QUICK are both very cost-conscious companies. So if you see how the project is put up [...]. The way in which we have knocked together this infrastructure is simply magnificent […]. Other companies [names have been deleted] would have spend an amount of money that is probably tenfold as high'.
>
> End-result: 'It is very positive that a system has been developed that is reasonably bug-proof. In other words, that everything has been gone through in a structured way and that with respect to IT-issues no or hardly any problems came up at STEADY'.
>
> End-result: 'It resulted in a very stable, robust, reliable environment, that does what is should do. I am quite happy about that. And you also see that when considering disturbances'.
>
> Creating an image of uniqueness and innovativeness: 'A lot has been written about it, and it has raised a lot of dust. I think that has contributed to STEADY's image of renewal. It has shown once again that it is an innovative company that can create an innovative product within a short period of time'.
>
> Enhancing customer loyalty: 'Of course it also fits within the strategy of one-stop-shopping, in which you provide a total package and the client does not need to go to other firms. The client does everything in one hand. He can save, shop, and withdraw money. On the basis of that strategy it fits perfectly well'.
>
> Improving efficiency: 'A positive point is that we now have the possibility to enhance the efficiency of processes related to the loyalty program of STEADY. They become cheaper, and faster.'
>
> Difficulty to imitate: 'This product can not be copied. If you take a bag of potatoes, and you make a good price, it is easily copied by a competitor. This is much more difficult to copy'.
>
> Possibility of sequel products: 'What also makes it interesting is that sequel products could be introduced in a short period of time, that enable you to create additional turnover and margin on few square meters'.
>
> Expectations not completely met: 'The market is more difficult. Interest rates have come done to a level at which saving is not regarded to be attractive. Our competitive position has become worse, because of the high interest rates of our competitors. But they sacrifice profits. That influences the flow of new customers'.
>
> Loss of productivity: 'With the current means that we have at the cash register, it means that we encounter some productivity losses'.

Appendix 2 (continued)

Loss of productivity: 'I expect that the alliance has reduced the efficiency of the operation in the shops. I have to say that as a consumer I also think each time 'ah, shit'.

Project-management: 'In terms of project management the final result can be called a success, because it suffices the demanded functionality and specifications. We have produced what was requested'.

Experience spin-off: 'The knowledge and experience that we have built up to do this enable us to do similar projects faster and cheaper in future […]. I think we have learned a lot from this alliance. For example, that you need to improve communication, put things down in writing, and come to agreements before you start. That is what we have learned from it and what we now do in another project'.

Data-encryption spin-off: 'The knowledge that has been built up with respect to data encryption is now possibly deployed again. We are working on a new project in which that also plays a role'.

Calibration of business cases spin-off: 'we have acknowledged that there are a couple of things which require more attention and better organization. Calibration of business cases for instance… I am convinced that if the alliance would not have taken place, other projects might have been started that were doomed to fail. So that is a spin-off of not-effectuated investments or costs that would not lead to successes'.

Processing spin-off: 'In the framework of the alliance, the monitoring of the processes in the nightly hours has become much more extensive than we were used to within QUICK. And, as soon as you are monitoring, you do not only do that for the alliance, but you can also signal when something goes wrong within QUICK. So the monitoring of the systems has also improved for QUICK's transactions'.

Documentation spin-off: 'that document-database is also being used within a new project. So that is an advantage for other projects in similar joint ventures or extensions of such ventures. We were very busy with standardizing the documentation and there were no templates available at that time that fulfilled our new demands'.

Interorganizational structure spin-off: 'We will get more and more environments in which we have decoupling points and in which we have to work together with partners in a rather intensive way. I see that happening in the shops and we have started to develop a reasonable structure for that. And that means that maneuvering becomes easier. At this point in time, we communicate with parking systems, sales machines, loyalty-organizations, QUICK, online loyalty-servers, delivery services…. You develop a very organic environment in which external partners can be connected easily'.

Appendix 2 (continued)

> Infrastructure, technology and products spin-off: 'What is the benefit for QUICK? The fact that the products and infrastructure used in this relationship can be re-used in other partnerships. […]. The technology behind the security modules is probably being used in a new cash register environment. That is a global project. A few of the pieces written on programming are also e-used within the loyalty environment'.
>
> Project approach spin-off: 'I think that a spin-off for QUICK has been the example in the area of formalization of documentation, like Service Level Agreements. There have been made a number of steps in the professionalization of certain processes'.