

Alliance Governance: Balancing Control and Trust in Dealing with Risk

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When designing an alliance governance structure, managers have to choose between approaches based on control or on trust. This article proposes a framework to help managers decide which of the two is appropriate in a particular situation. The debate in the literature on control and trust centres on two issues: first, on the question of whether control and trust are substitutes or complements, and second on the links between control, trust and risk. This article connects these two debates. Our framework proposes that whether control and trust are substitutes or complements depends on the level and type of risk an alliance faces. We argue that in high risk situations companies use complex combinations of control and trust in a complementary way, rather than loose relationships as suggested by current thinking. In low risk situations we expect control and trust to be substitutes. In line with current contributions, we find that intermediate levels of risk require alliance governance to be based either exclusively on trust or exclusively on control, depending on the type of risk the alliance faces. These principles are illustrated by a detailed analysis of the governance structure of alliances in the financial, consumer goods, retail, construction and agriculture sectors.

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Introduction

When Philips Domestic Appliances and Douwe Egberts (a subsidiary of the Sara Lee Coffee and Tea Co.) decided to introduce an innovative way of making coffee, they faced the question of how best to design their alliance. They were completely different firms intending, with no pre-history of cooperation, on collaborating to launch a new concept into a traditional arena. How could they ensure the stability and adaptability of their alliance? Should they rely on contracts to define their relationship – or on trust? What level of control would they require? Which topics needed to be covered in the initial contract, and which things were better decided later? And how would those decisions be taken? In short: what was the right governance structure for their alliance?

Alliance governance refers to the combinations of legal and social control mechanisms which coordinate and safeguard the alliance partners' resource contributions, and define their administrative responsibilities and the division of rewards from their joint activities.¹ While the literature has paid

only occasional attention to alliance governance in recent years,² and LRP has devoted previous attention to an earlier phase in the alliance lifecycle - partner selection - and to the later phases of management and change of alliances,³ this article discusses the phase of designing the alliance governance structure.

Two general views on governance are found in the literature - the control view and the trust view – which can be summarized by the debate conducted between Williamson and Ghoshal and Moran in their sequential papers.⁴ The ideal balance of trust and control has been the subject of much research: some authors argue these approaches are complementary, others that they are substitutes. In parallel to this debate, other authors (of whom Das and Teng are typical) have developed theories about the optimal balance between control and trust in alliances depending on the level of risk these relationships face.⁵ How are managers to draw lessons from these different points of view?

this article integrates the debate between the complement and substitute views about control and trust with current understanding of risk in alliances.

This article aims to help resolve the debate between the ‘complement’ and ‘substitute’ views by integrating it with current understanding of control, trust and risk in alliances. Our detailed case analysis of alliance governance confirms that levels of control and trust in an alliance depend on the levels of the risks it faces. Das and Teng note that two elements of risk are particularly important: relational risk (that partners will deceive each other) and performance risk (that the alliance will not deliver the expected business results). We propose that a high relational risk and a low performance risk require strict alliance control, and that in the reverse situation the alliance will fare better under trust based governance. When both elements of risk are high, control and trust are complementary: when both are low, they are substitutes.

For practitioners our article highlights key governance elements that need to be addressed when designing an alliance, and points to which circumstances indicate the use of either a control- or a trust-based approach: the five distinct governance models illustrated in our case descriptions serve as frames of reference. Academics will be interested in the article’s contribution to the debate between the complementary or substitutional nature of control and trust. Our argument – that they are complementary in high risk situations – diverges from current thinking (which indicates loose relationships in such circumstances): this finding may open some new avenues for research.

In the following section control and trust are discussed and applied to alliance governance. The complement/substitute debate is then briefly summarized, and on the basis of current understanding of control, trust and risk, we present a theoretical framework to resolve this debate. Five case studies illustrate the framework, and theoretical and managerial implications are defined in the final section.

Control, trust, and risk

The theoretical foundation for the control view on alliance governance derives from transaction cost economics, and a key element concerns controlling partner opportunism.⁶ In the transaction cost tradition, relationships between companies are understood in a context where opportunism and bounded rationality characterise firms’ participation in transactions. When it comes to alliances, researchers subscribing to the control view consider the relational risk in alliances to be high because self-interested alliance partners are expected to behave opportunistically in an effort to maximize results for their firm, rather than outcomes for the alliance. Although this risk may differ depending on circumstances, self-interested and opportunistic behaviour of alliance partners are likely to be found in all alliance relationships. Therefore it has to be balanced by a formal

governance model that will prevent partners from abusing the alliance by taking advantage of opportunist possibilities. Such control based governance models are based on adequate legal and ownership safeguards, such as detailed contracts, equity investments, and strict rules agreed between the partners.

The trust view sees trust between alliance partners as an important element in understanding the nature of inter-firm alliances,⁷ and therefore sees creating and building trust as the core challenge in alliances,⁸ emphasizing the role of informal elements in alliance governance. Recent work by Bierly and Gallagher in LRP has gone into detail about the antecedents to trust, and it is not our intention here to research this area further. Behind the trust approach lies the idea that when partners are intrinsically motivated to make an alliance successful there will be less need for formal controls to prevent opportunistic behaviour, as partners will automatically act in the interest of the alliance. In contrast to the control approach, partners' shared vision and mutual trust are the 'glue' that keeps alliances together. Their shared goals for the alliance stimulate information sharing between partners, enabling them to adapt to each other in self-organized alliances.⁹ The trust view expects governance to be informal and at arm's length, and some commentators (such as Ghoshal and Moran) even hold that emphasizing control elements may lead to distrust. For example, asking for contractual guarantees may undermine the relationship by sending a signal that a company distrusts a partner: there is some empirical evidence to corroborate this view.¹⁰

A debate has emerged about the question as to whether control and trust are substitutes or complements. Some argue that they are complements, and that using both mechanisms allows companies to be able to manage complex alliance relationships better. In this view control based mechanisms - contracts, penalties and mutual hostage taking - enhance trust within the alliance by providing a level of certainty about the partner's behaviour and hence acting as a basis for closer collaboration: evidence for this view has been found in dynamic markets.¹¹ In contrast to this view, others have argued that control and trust can be seen as substitutes, and that trust often supplants formal controls. In that case, both control and trust are equally valuable governance mechanisms, and there is no 'a priori' preference for one or the other.¹²

A related debate looks at the relationship between risk and control and trust. Authors in this tradition, such as Das and Teng, distinguish between relational risk and performance risk. Relational risk is the perceived threat that a firm will behave opportunistically and consciously harm its partner's interests. Performance risk is the perceived chance that factors such as market uncertainty, competition and governmental regulation may have negative effects on alliance results. These contributions predict that when both forms of risk are high companies will avoid bilateral contract based alliances, and enter into unilateral contract based alliances such as client-supplier relationships instead. When both risks are low, companies can opt for joint ventures, an alliance structure which has many advantages, but which does not cope well with high forms of risk. Low performance risk and high relational risk require minority equity alliances, while bilateral contract-based alliances are indicated when these forms of risk are reversed.

Unfortunately our current understanding of control, trust and risk fails to take into account the substitute/complement debate. To integrate the two debates we must pay attention to two specific elements of the current view on control, trust and risk. First the typical operationalisation of alliance governance in terms of four contractual forms (unilateral contract based alliances; joint ventures; minority equity alliances and bilateral contract based alliances) is far removed from the broader concepts of control and trust put forward by Williamson and Ghoshal and Moran. Although control and trust have often been conceptualised in terms of the mode of contract employed, this appears to be inadequate to capture the essence of their operation in an alliance governance structure, and more fine-grained analysis has led to better balanced insights into the conditions under which they play a role, including looking at different ways in which control and trust may exist (or co-exist) in practice.¹³

Second, this problem becomes particularly acute where both relational and performance risks are high. Current contributions predict the use of simple subcontracting relationships in these circumstances, but (apart from the question of whether these can really be classified as alliances)

partnerships that may seem to be unilateral contract based alliances may, in reality, exhibit governance based on a complex mix of trust and control. For example, the Bayer-Millennium alliance appears contractually to be a sourcing relationship in which Millennium performs certain research for Bayer. However, the governance structure for the relationship is very elaborate, and shows a mix of the two elements.¹⁴ Practice shows other examples where the contractual form of high risk alliances is bilateral rather than unilateral: despite facing high risks in both categories, the KLM-Northwest relationship is a marriage of equals.

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 ...spreading high performance risks across partners more than offsets
 [high] relational risks.*

Many authors assume that in high risk situations bilateral alliances should be avoided, but in practice they occur regularly. It could even be argued that, in those situations, the need for such alliances is greatest, because spreading the performance risk across partners will be more than enough to offset any increase in relational risk. This agrees with other findings that long term alliances actually work better in turbulent environments.¹⁵ Of course the governance of such alliances is complex: it is in this situation that trust and control may act as complements. Elements of control need to be built into the alliance to cope with relational risk, but trust building elements are also needed to deal with performance risk. Unexpected things may happen, and a company needs to trust that its partner will not behave opportunistically if conditions change. Control elements are not very useful in volatile business environments, because it is impossible to adequately define all possible future events. The more volatile the environment, the more difficult it will be to use a control approach and the more trust-based mechanisms will need to be part of a governance structure,¹⁶ giving confidence that alliance partners will respond to environmental changes in similar ways. We can therefore expect control to be a more valid option in a stable environment with low performance risk, whereas trust is required in a turbulent environment with high performance risk.

The framework in Figure 1 integrates this reasoning with current thinking about control, trust and risk. In the high/high risk quadrant we find that trust and control mechanisms must be combined in a complex governance structure. When performance risk is low and relational risk is high, control is necessary to meet the relational risk. Control is more likely to be achievable too, because with low performance risk, agreeing on how to deal with possible future events is more feasible. In the opposite situation (low relational risk and high business risk) a trust model is made possible by the former, and made necessary because the latter makes control less effective. (Our predictions for these two quadrants echo those of others). In the low/low quadrant we expect

RELATIONAL RISK	High	<p><i>Case: Keerpunt</i> Control needed to cope with uncertainty about partner's intentions (but also makes sense in a stable environment).</p>	<p><i>Case: Senso</i> Trust and Control as Complements Both need to be applied simultaneously to deal with a demanding environment and uncertainty regarding partner.</p>
	Low	<p><i>Cases: Talentgroup Platform</i> Trust or Control as Substitutes. Either or both can be applied in an undemanding business environment.</p>	<p><i>Case: Futurestore</i> Trust needed to cope with an unpredictable environment (and is also possible when partner's behaviour is predictable).</p>
		Low	High
		PERFORMANCE RISK	

Figure 1. Control and Trust in alliances facing different risks

to find that control and trust can be substitutes. Low relational risk makes it possible to use trust, while low performance risk makes it possible to use control. Investing in both seems unnecessary and costly, and companies have the choice to opt for trust and forego control - counting on the fact that performance risk is limited - or opting for control, expecting that they will be able to solve relational issues as and when they occur.

While this framework helps shed light on the complement/substitute debate, it also points to the fact that this debate is too narrow: pure control and pure trust are also governance options that are both feasible, and may well be preferable in some cases. The framework builds on existing work, but predicts a different governance structure in the high/high quadrant where, rather than simple relationships, we expect complex relationships to cope with high risk situations. The framework will be illustrated with a number of case studies, for which the concepts of control and trust need to be operationalised.

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Operationalisation of control and trust

Companies use a variety of mechanisms to develop a governance structure. Among the mechanisms listed in the literature to create tighter control over alliances, *equity* and extensive *contractual safeguards* are the most often mentioned. *Equity* gives an organization a formal say in a partner- or in a joint-venture. It may also create a 'hostage' situation, where opportunistic behaviour by one partner against another also damages the first partner. Extensive *contractual safeguards* may include confidentiality or exclusivity agreements, as well as the right to examine the partner's books. Hence, the control approach to alliance governance tends to involve *lengthy contracts*. In a trust approach, on the other hand, there is no equity relationship and contracts are short: instead, the alliance is governed by shared vision, shared values, and trust. Another control mechanism is the use of *incentive systems* to motivate managers and personnel to contribute to the alliance. This type of motivation is extrinsic: people are motivated not by themselves or by an inspiring alliance goal, but by financial rewards or punishments. The opposite is intrinsic motivation (or volition), where people are motivated to contribute to the alliance because it enables them to learn and to be involved in something they perceive to be inherently valuable. *Boards of management* play a role in alliance governance as well: in a control situation, boards will be involved in supervising the alliance more frequently, whereas when trust mechanisms are employed, boards will intervene less often, but act as coaches for alliance managers. *Formal operating procedures* describing planning, budget cycles, and the division of revenues are used in the control approach to ensure alignment of interests and allow the partners to maintain their grip on the alliance, helping partners have confidence in each others' behaviour. In the trust approach no such formal procedures are defined, but discretion about decision-making is left to the managers in the alliance, with self-organization as the method of daily coordination. This point is reflected in the way partners in an alliance *manage changes*. The control approach uses formal changes to the contract or the alliance board, which may occur regularly. Under trust systems, contractual and board changes will be less frequent, and the emphasis is instead on informal change through mutual adaptation: partners negotiate jointly on the way forward, adapting to each other's needs. Finally the *focus of optimisation* differs in the two approaches. Under the control approach, firms will seek to optimise the results from the alliance for their own organization, and appropriation concerns lead to a focus on ensuring that revenues flow from the alliance to the individual partners. A trust based approach will focus primarily on optimising the alliance, in the expectation that what is good for the alliance will be good for the partners.¹⁷

By studying these elements (equity, contract length, incentives, board involvement, formalization, change management, and optimisation) in a specific alliance, it is possible to judge whether that alliance has a governance model based on trust, control or on a mix of both. Including an assessment of the relational and performance risks faced in the alliance will make it possible to study the relationship between control, trust and risk.

Method

Five cases are analysed below with the aim of illustrating our proposed framework and generalizing towards theory. We define a new relationship between variables to explain a certain effect, in this case a specific alliance governance form.¹⁸ This small sample of cases cannot test whether our framework applies to other (or all) settings: that would require large scale empirical research. However, the literature suggests that our finding in our high risk quadrant case - that in such circumstances control and trust can be complementary - is not an exception, but may be indicative of a range of alliances.¹⁹ Our minimum claim, therefore, is that existing theory should be applied very cautiously, as it certainly does not account for all alliance governance structures adopted in high risk situations.

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The cases also illustrate that our contribution to the complement/substitute debate – that the choice as to whether control and trust are complements or substitutes will depend on the type of risk the alliance faces - is corroborated by practice, although large-scale research is also needed to confirm whether this holds in other empirical settings. The cases were selected by theoretical sampling based on the levels of risk they face, as in our framework risk predicts the governance form. All cases were successful in achieving their goals, the main differences between them relating to their industry and the number of partners involved. The industry difference was to some extent unavoidable to ensure differences in performance risk between the cases, although further research should test whether industry differences affect governance forms independently of the level of risk they face. The difference in the number of partners per case may lead to some caution in interpreting our findings. Most of the literature has focused on bilateral alliances - multipartner alliances have not been researched in depth. Intriguingly, however, our conclusions on the multipartner cases fit with the existing literature for bilateral alliances. On the other hand the most important instance where our argument departs from existing literature is a bilateral alliance case: in the Senseo case, high risk situations are managed by complementary trust and control mechanisms, suggesting the difference in partner numbers may not be a cause of primary concern. (Further details about our method are found in the Appendix).

The Keerpunt case

The intention behind the formation in 2001 of the Keerpunt joint venture between two large Dutch insurance competitors, Nationale-Nederlanden (NN) and Fortis Verzekeringen Nederland, was to offer a more complete service package to their clients by providing reintegration services for sick employees. Employees who fall ill involve considerable costs to employers, who, under Dutch law, must continue to pay full salaries for a substantial period. Thus companies' costs can be minimized if employees can be rapidly reintegrating. For the most part, Keerpunt's clients are small and medium sized companies who have insured against employee illness with NN or Fortis, and who ask them to provide reintegration services. (Dutch law also obliges companies to do everything in their power to reintegrate their sick employees). The joint venture thus addresses a clear need of its partners' clients, as well as contributing to reducing their operating costs. Keerpunt's reintegration services lead to lower insurance claims: the sooner the company

can get somebody back at work, the lower the indemnity payments NN or Fortis have to make. Keerpunt is small, but growing rapidly – by 2006 it had 85 staff.

The Keerpunt venture is not intended to make great profits; its most important goal is to reduce costs for the partner firms involved.

Risk assessment

The Keerpunt alliance ranks high on relational risk and low on performance risk. NN and Fortis had not previously cooperated with each other in offering joint services, and in fact had little experience with cooperation in general. The partners are also direct competitors in their particular financial sector, and thus the risk of them behaving in an opportunistic manner is comparatively high. By contrast, the performance risk involved for this alliance is relatively low. Specifically, it was clear from the beginning that Keerpunt’s reintegration services fulfilled an existing market need – in effect, government regulations facilitate the venture in achieving its goal. The fact that Keerpunt faces little competition in offering its reintegration services to small and medium sized enterprises also contributes to lower the performance risk, as does the fact that NN and Fortis act as Keerpunt’s sales channels, ensuring sales by offering its services to their clients.

Governance

The cooperation between NN and Fortis is based on a formal joint venture structure where both partners hold a 50% equity stake in the newly created Keerpunt firm (see Figure 2). Control over the venture’s operations is ensured through the shareholder’s agreement, an extensive document that stipulates formal issues such as the composition of the Keerpunt Supervisory Board, exit procedures, daily management etc. The Supervisory Board, which consists of three members, one from each of the partners and one independent chairman, controls Keerpunt in a formal manner, meeting three times a year to discuss issues such as strategy, clients and services. The exit clause of the equity agreement dictates that one partner can only sell its shares to an external party with consent of the other. The daily management of the venture is handled by two independent directors.

The directors’ managerial performance is evaluated on the basis of formal planning and control systems setting targets with respect to four key performance areas: finance, personnel, client base, and sales to external parties. In addition to the Supervisory Board’s formal meetings, the partners have regular informal meetings with Keerpunt to discuss operational control issues. The level of formality in this case is high, with formal planning and control systems, clear targets and

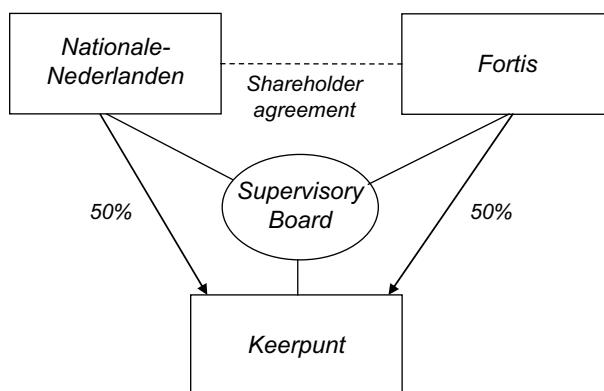


Figure 2. Keerpunt Governance structure

Table 1. Governance Elements in Keerpunt case

Governance elements	Example from the case
Equity/contractual	Equity: 50/50 joint venture
Length of contract	Extensive, stipulates formal procedures such as composition of the Supervisory Board, exit clauses, daily management.
Motivation	Extrinsic, based on formal, measurable performance indicators
Role of board	Supervisory Board directs and controls the JV in a formal manner.
Formalization	High, with formal planning and control systems, clear targets. Informal negotiation on strategy, clients, and services takes place as well.
Change management	Formal: changes agreed by the Supervisory Board lead to changes in the contractual agreement.
Optimisation	Most important goal is to reduce costs for the individual partner firms involved.

decision-making. Strategic change has to be agreed in the Supervisory Board, and any changes agreed there – the level of revenue generated from other insurers is an important issue that is discussed - lead to changes in the contractual agreement. NN and Fortis not only have a controlling interest in Keerpunt, they are also its most important customers, generating over 90% of its sales. The venture is not intended to make great profits; its most important goal is to reduce costs for the partner firms involved. The governance structure of Keerpunt is summarized in [Table 1](#).

The Senseo case

Before the Senseo coffeemaker was introduced in the Netherlands in 2001, its inventors, Philips Domestic Appliances (DAP) and Sara Lee/DE, had met informally on several occasions. Both parties needed to come up with new products to target their mature coffee and coffee-machine markets. Serious negotiations between the companies started in 1998. In a joint effort the partners developed an innovative concept of making coffee. The introduction of a brand new coffeemaker in combination with coffee ‘pods’ containing fixed quantities of various flavours of coffee, sealed to ensure high and consistent quality, was targeted at making coffee-drinking part of consumers’ daily routines. The Senseo coffeemaker was launched at a relatively low price to ensure first-mover advantages: by 2005 worldwide sales had reached ten million.

the Senseo alliance ranked high on both types of risks. The partners had no experience of how [each other] was likely to behave ..the alliance targeted joint innovation in an increasingly dynamic. market

Risk assessment

At the start of this cooperative relationship, the Senseo alliance ranked high on both types of risks. The partners had not previously cooperated with each other, so could not draw from built-up experience of how their partner was likely to behave. They also had entirely different industrial backgrounds, which added to the level of relational risk, as neither company understood much about the common modes of behaviour in the other’s industry. The performance risk was high as well, as the alliance was targeted at joint innovation and new market creation, so there was a high chance of failure. Various other coffee machines were being introduced in the market, and with coffee chains like Starbuck’s rejuvenated the industry, the coffee market was becoming increasingly dynamic.

Governance

The cooperation between Philips and Sara Lee is based on a formal contract. The lengthy, detailed contract stipulates the roles played by each partner as well as the division of revenues from the alliance. Philips receives a percentage of the sale of coffee pods by Sara Lee to compensate for the low price of the coffee machine. The contract is specifically drawn up for the portioned coffee market, the alliance's particular business arena. The motivation of those involved in the alliance was mainly intrinsic, rooted in the excitement of being involved in something new. The governance model underlying the Senseo alliance's daily operations is the 'multiple points of contact' model, with formal alliance contacts appointed at all hierarchical layers in both organizations (Figure 3 depicts the governance structure).

At the top of this formal decision structure is the International Steering Committee (ISC), consisting of three managers from each partner, which is responsible for approving the Senseo business plan and the product roadmap. As well as being in charge of Senseo's long-term development, this committee also has a controlling function, providing leadership to committees at lower hierarchical layers. Despite its important role with respect to formally approving budgets and business plans, the ISC's general involvement is arm's length, with most decision-making taking place at lower levels of the hierarchy. Below this layer, the National Steering Committees, consisting of employees from the Philips' National Sales Organizations (NSOs) and Sara Lee's national Operating Companies (OPCOs), are responsible for country-level sales. A third hierarchical layer is the joint sales teams consisting of sales representatives of both partners who visit retailers jointly. In addition, the Marketing and Equity Meeting is in charge of all issues related to the marketing of Senseo coffee makers and pods, including the creation and development of brand equity. Although Philips decides which models of the Senseo coffee maker it brings to market and Sara Lee determines which blend of coffee it introduces to the market, both partners coordinate their product development efforts at the Product Innovation Meeting (PIMM). This decision and communication structure also provides for conflict resolution through formal escalation procedures, which state when and how an issue should be moved to the next hierarchical level.

The hierarchy of communication and decision-making structures in this 'multiple points of contact' model results in a relatively high level of formalization, but, despite this, much is negotiated on a case-by-case basis. Although no formal adaptations to the original contract were made during the study period, both partners have had to informally adjust their working procedures to accommodate each other's needs. In particular, several cultural background and business procedure differences had to be bridged. For instance, Philips and Sara Lee's planning and control cycles do not run parallel, with Philips' fiscal year ending on 31 December and Sara Lee's on 30 June, which has resulted in a number of informal adaptations to budgeting and business plan reviews. As Philips

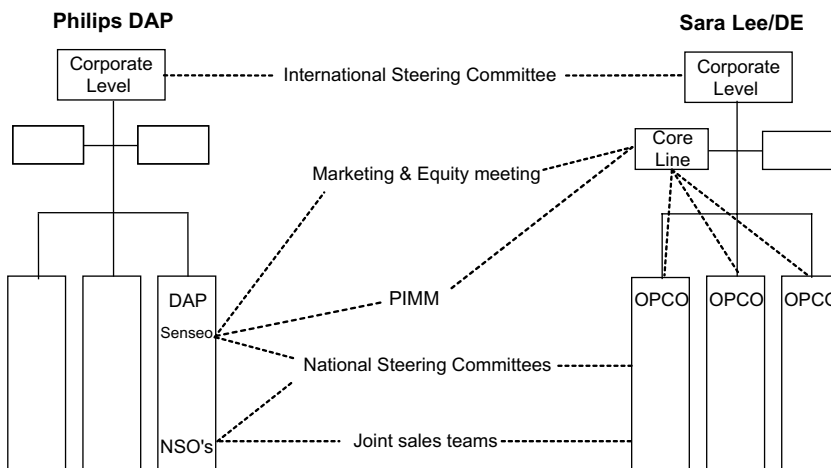


Figure 3. Senseo alliance Governance structure

Table 2. Governance Elements in Senseo case

Governance elements	Example from the case
Equity/contractual	Contract
Length of contract	Long. Detailed contract stipulating the role played by each partner and the exact value appropriation
Motivation	Mainly intrinsic
Role of board	Arm's length, but International Steering Committee formally approves budgets and business plans. Most decision-making is at lower levels.
Formalization	Medium to high. Hierarchy of communication and decision-making structures, but much is negotiated on a case-by-case basis.
Change management	Informal. No contractual changes, mutual adaptation by verbal agreement.
Optimisation	Alliance is optimised. Profit sharing arrangement provides incentive to optimise alliance.

is a major player in the market for consumer durables, it has developed long-term views on product development, and its planning cycles are thus based on long time frames. In contrast, Sara Lee operates in a market where consumer tastes can vary very quickly, and its product development cycles are focused on fulfilling short-term customer needs. This difference in focus has required a high level of mutual understanding and adaptation within the alliance. Such company differences were addressed in a cultural session between groups of Philips and Sara Lee employees, which led to higher levels of understanding of behavioural differences. The partners' formal profit sharing agreement provides incentives to both sides to optimise the alliance as a whole, automatically benefiting the individual partners. Senseo's governance structure is summarized in [Table 2](#).

The future store initiative case

METRO, the third largest supermarket chain in the world, aims to distinguish itself from competitors by being at the forefront of technology. One of the most eye-catching ways it chose to implement that strategy was to build a 'store of the future', full of the latest technologies, including RFID (Radio Frequency Identification Tags), automatic weighing scales, automatic check out, information pillars, automated personal shopping assistants, etc.. Realizing it lacked the technological knowledge and experience to be able to create the future store by itself, METRO set up an alliance - the Future Store Initiative (FSI) – and invited technology firms such as Intel, Cisco and SAP to contribute to developing this ambitious project. Over fifty partners joined, and each was asked to make a financial contribution to the alliance and contribute staff and resources as they thought necessary, remaining responsible for their own expenses and investments. The benefits for the partners would be in learning about the effect of new technologies in a real life situation (as METRO intended to implement the technologies in an existing supermarket) and in setting retail standards that would open up new markets. Metro promised the initiative would be given extensive publicity, a field in which their reputation is outstanding.

[given the very tight deadline] inviting supermodel Claudia Schiffer to open the METRO store ran the risk of an enormous publicity failure

Risk assessment

METRO invited partners it already knew to participate in this initiative, many of them existing METRO suppliers with whom they had developed numerous interpersonal relationships. For technologies in areas where they had no prior relationships, METRO asked existing partners whether they had partners who would be interesting in the Future Store, thus bringing 'friends of friends'

on board. This tactic limited relational risk – but performance risk was still high. First, as with all innovations, the risk of failure loomed large, while the level of complexity was quite high, as FSI aimed at introducing a whole variety of innovations into the retail business. Second, METRO ensured enormous publicity by inviting supermodel Claudia Schiffer to open the store: combined with a very tight deadline, the risk of an enormous publicity failure was not imaginary.

Governance

The Memorandum of Understanding between the partners that underlies the FSI is only a handful of pages long and covers few specific issues. No end date is set. The Memorandum sets out the vision of the collaboration and the resource commitments that need to be made. It includes a non disclosure agreement stipulating that the collaboration is nonexclusive, and that all proprietary knowledge companies bring into the alliance remains their property: all knowledge developed in the alliance, however is free for all partners to use.

METRO counted on a number of aspects to ensure that the FSI would progress. The first was the fun aspect: the vision of creating ‘the store of the future’ created enthusiasm among people working on the project, which ensured coordination - so all noses were in the same direction.²⁰ Second, the time pressure and the risk of high profile failure made partners mutually dependent on each other, as failure of the store to open on time would harm the reputations of them all. These two elements created a ‘macroculture’ or ‘network identity’: working for the Future Store alliance felt like belonging to a club.²¹ The FSI was governed by simple rules, and a structure depicted in Figure 4. METRO Group and its three top ‘Platinum’ partners meet regularly in the Executive Committee, which has powers to admit new partners and end relationships. The Executive Committee verbally agrees changes to the FSI, and the making of specific investments, on the basis of consensus with all the partners, and approves cash outlays from the Initiative’s fund made up of partners’ cash contributions. All partners are invited to the Marketing Committee’s two or three annual meetings, where progress is reviewed and the METRO Group shares its future plans with partners. There are also four project teams, each dedicated to one of the four innovation areas of the Future Store - comfort shopping, smart check-out, in-store information and supply chain - and each headed by a METRO Group project manager.

The role of METRO in organizing the alliance was pivotal. It did not enforce decisions on the partners, but acted as a ‘first among equals’, understanding that benefits would need to accrue to all participants if the alliance was to succeed. The level of formalization in the FSI is relatively low, and there are few working procedures in place: most work within the alliance is organized by the individual project teams themselves. The project happened very quickly: the first preliminary ideas were discussed in September 2001, by July 2002 the outline of the idea was clear so that the partner base could be recruited, and the store (at Rheinberg, Germany, a village close to METRO’S corporate head office in Düsseldorf) was opened in April 2003. There was also little up-front planning, but this lack was compensated for by thorough attention to detail in implementation. The

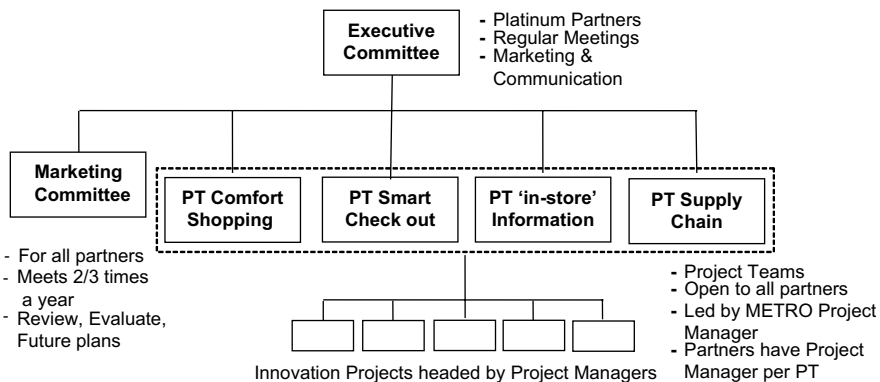


Figure 4. Future Store Initiative Governance structure

Table 3. Governance Elements in Future Store case

Governance elements	Example from the case
Equity/contractual	Memorandum of Understanding
Length of contract	Short. Only Memorandum of Understanding in place covering basics
Motivation	Intrinsic. Vision of creating a store of the future created enthusiasm
Role of board	METRO acts as first among equals
Formalization	Low. Few working procedures in place. Most work organized by project teams themselves.
Change management	Informal, mutual by verbal agreement. No further written agreements. Consensus created in Executive Committee. Changes made as implementation took place.
Optimisation	Alliance is optimised. Focus was on creating the Future Store. Implicitly this benefited the individual firms.

focus of the FSI is on optimising the alliance – its primary objective was creating the Store, which automatically benefits all the individual partners. The governance structure of the Future Store is summarized in Table 3.

The Talentgroep Montaigne case

The construction industry has undergone major changes over the past years, and the Dutch Talentgroep, a collaborative alliance between the construction company Strukton, the installation firm Imtech and the facility manager ISS, has taken a proactive approach to these changes. Specifically, the Talentgroep combines the construction, installation and servicing (i.e. catering, cleaning, and maintenance) of school buildings into single projects that are jointly carried out by the core partners, who can realize substantial synergy effects by combining their complementary skills and assets. While it is common practice in the construction industry for partners to cooperate on a temporary basis for the duration of individual projects, the Talentgroep was set up in 2001 as a long-term cooperative agreement based on commitment and mutual adjustment. Partners jointly engage in the tendering process and, once a deal is struck, create a separate alliance for each project. The first such alliance was for the construction and servicing of Montaigne College, following a successful tender to the city of The Hague. Long-term cooperation in the construction of school buildings produces important learning effects with respect to construction and building management that lead to lower overall costs, and thus higher profit levels. An example of such cost savings is the use of easy-to-maintain materials in each building project: while such materials entail high initial investments by the builder (Strukton), cheaper maintenance (by ISS) results in substantial cost savings for the alliance over time.

using easy-to-maintain materials entail high initial investments for the builder [but] cheaper maintenance results in substantial cost savings for the Talentgroep alliance over time

Risk assessment

The Talentgroep ranks low on both relational and performance risk. The partners know each other from previous projects, are not competitors, have complementary goals and a similar vision about the school construction market. Performance risk is relatively low because the collaborative projects

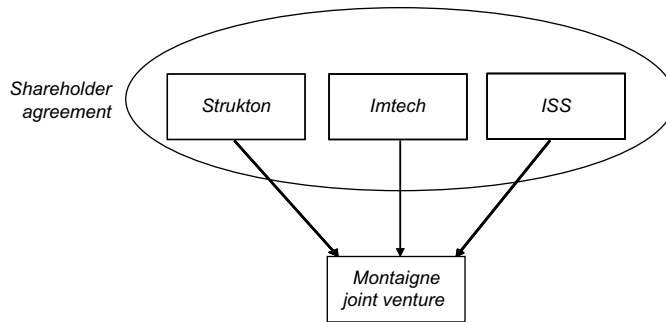


Figure 5. Montaigne alliance Governance structure

are based on experience, the core variables that determine revenue and cost are known, and, while price swings in these variables have to be managed, they can be largely charged to the client. This sharing of costs, revenues and risks has led to an extensive contract that specifies all the known variables and the way the alliance will deal with changes in them.

Governance

A legal entity for the Montaigne College construction contract was set up on the basis of equity participation by all partners, and the joint venture was based on a lengthy and detailed agreement. The equity positions of partners were supplemented by further rules for profit sharing which ensured that each would obtain a reasonable profit margin. The rationale behind this procedure is that the commitment of all partners is needed to ensure the success of this joint venture, and so it is underpinned with strict rules and procedures with regards to planning, quality and budgeting which include the definition of a number of key servicing performance indicators. Besides ensuring reasonable profits for all partners, the control approach in this alliance was also necessary because of penalty clauses for late delivery in the contract with the client. Talentgroep appointed a tender manager for the Montaigne College project, and formed two working groups - a Commercial Working Group and a Technical Working Group - staffed with employees from all three partners. The tender manager and the chairmen of these groups make up the Tender Management Team responsible for preparing the tender, a phase where the partners' boards were intensively involved. Once the deal was struck and the Talentgroep contracted to construct the school building, the formation of the separate legal entity for this project (see Figure 5) allowed the partners' main boards to remain distanced from the actual operational execution of the alliance.

Table 4. Governance Elements in Talentgroep case

Governance elements	Example from the case
Equity/contractual	Equity. Legal entity set up
Length of contract	Detailed agreements and strict control on planning, budgets, quality
Motivation	Complementary goals underpinned by detailed agreements which stipulate strict performance targets
Role of board	Elaborate contracts allow boards to remain at a distance from the actual operational execution of the alliance. Board is involved before the alliance set up.
Formalization	Formal decision-making is based on equity positions of partners, but reaching unanimity and consensus is also viewed as highly important.
Change management	Most possible changes are listed in the initial contract
Optimisation	Agreement is targeted at optimisation of profits.

The partners' equity positions can determine their influence on decision-making, but, while formal procedures exist, decisions are typically reached in an atmosphere of unanimity and consensus. The extensive initial contract provides for most possible contingencies, and is targeted at optimising profits from the alliance. The governance structure of Talentgroep is summarized in Table 4.

The Plantform case

Plantform is a cooperative of twenty-five growers of potted plants aimed at developing Enterprise Resource Planning (ERP) systems dedicated to horticulture. The growers feel an increased need to get a better grip on their production processes, as most do not know the cost price of their plants, and their production planning tends to be only intuitive. Some have reached the limits of increasing production by traditional means, and now need to delve much deeper into data to see how they can further improve their yields. Most ERP systems are too complex for SME's, and many existing systems do not take into account a number of issues specific to horticulture, such as the fact that plants change over time. But a number of growers felt it was clear they needed better software support to run their businesses. At the same time, this concept was not seen as a non-competitive issue: the growers did not perceive ownership of an ERP system as giving them a competitive advantage over other growers, and so the joint development of a system was a feasible option. Four members of the cooperative were selected whose business processes were described in flow charts defined to such a level of detail that a specific ERP system could be built from them. With a blueprint in place, the association selected two software companies to build ERP systems for two of the association's members, to spread the risk and ensure competition between suppliers. Members of the cooperative receive a discount when they buy ERP software from either of the software suppliers, who pay a licence fee to the cooperative. These fees are designed to allow the association to recoup its initial investments, beyond which it does not aim to be profitable - hence there is explicit agreement on how value is distributed. To prevent 'free-riding' by growers not making the initial investments, but trying to join Plantform later to buy software cheaply, the cooperative stopped admitting new members in early 2006.

the Plantform growers know each other, come from a small region where collaboration has traditionally been strong, and are often members of other cooperative ventures

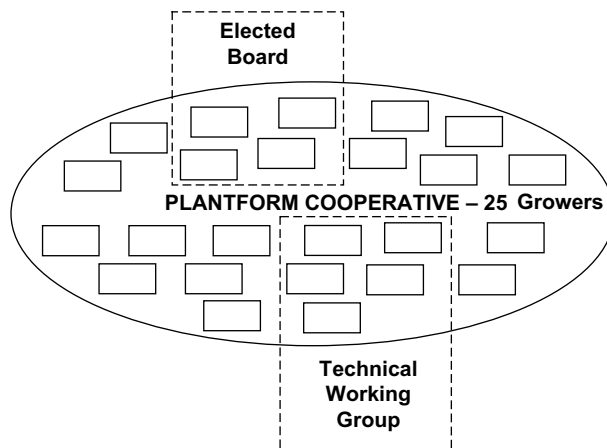


Figure 6. Plantform Governance structure

Table 5. Governance Elements in Plantform case

Governance elements	Example from the case
Equity/contractual	Contractual
Length of contract	Membership in cooperative has simple rules
Motivation	Intrinsic; need to solve own IT problem
Role of board	Core partners are heavily involved; majority of partners are at arm's length
Formalization	Low. Basic agreement with simple cost and revenue sharing rules
Change management	Largely informal, requiring consensus
Optimisation	Alliance. Optimal alliance performance automatically leads to optimal performance for the partners

Risk assessment

The relational risk was limited in this case because most of the growers know each other. They are all located in a small region where collaboration has traditionally been strong, and many run into each other as members of other cooperative ventures. The most important performance risk was that no working software would be developed, but this was limited by hiring IT specialists and building on existing software. The objective of the cooperative is narrowly defined: to create software that each grower could use individually. Thus the main risk was that the partners would lose their original investment (a membership fee to the cooperative), but this is set low enough not to cause them significant financial exposure.

Governance

The Plantform alliance is underpinned by a simple contract agreement setting up the cooperative. Membership involves agreeing the contract and paying the membership fee, which created the fund to hire IT specialists to develop the ERP blueprint. The motivation to set up the alliance was intrinsic: the growers believe they will be able to improve performance with dedicated software. There is an elected cooperative board and a technical working group of some core members who do most of the work (see Figure 6). Not all the association's members are actively involved, but the numbers involved helps create a sizeable scale for the group, allowing it raise sufficient funds to pay for the research. The less active members follow developments from a distance, leaving much of the management responsibility to the board which sends out newsletters to update growers on the association's progress.

The level of formalization in Plantform is low. The basic agreement underlying the alliance is simple, with few cost and revenue sharing rules. Major changes in the collaboration need to be agreed by a general meeting of members, which might involve voting, although the preferred mechanism for decision-making is to achieve consensus. Exit barriers are low and consensus is a more effective decision-making mechanism for keeping everyone on board. Looking at optimisation, it is in the growers' interest to optimise the alliance so that it can succeed in providing them with the new software they want: after that, it is up to them to turn the software into a profitable tool for their business. The governance structure of Plantform is summarized in Table 5.

Discussion

Table 6 summarizes the results from the cases. Although no alliance fits perfectly with the archetypes of trust and control, the results largely fit with the framework proposed in Figure 1. In the Senseo case trust and control are used complementarily to manage the high levels of performance and relational risk. The Future Store has trust-based governance, fitting with its low relational but

Table 6. Contingent views of Alliance Governance

Risk	Case 1 <i>Keerpunt</i>	Case 2 <i>Senseo</i>	Case 3 <i>Future Store</i>	Case 4 <i>Talent Group</i>	Case 5 <i>Plantform</i>
Relational risk	High	High	Low	Low	Low
Performance risk	Low	High	High	Low	Low
Governance elements					
Equity/contractual	Equity	Contractual	Contractual	Equity	Contractual
Length of contract	Long	Long	Short	Long	Short
Motivation	Extrinsic	Mainly intrinsic	Intrinsic	Mixed	Intrinsic
Role of board	Formal	Arm's length	First among equals	High involvement in early phase; arm's length later	Mostly arm's length; more formal for core partners
Formalization	High	Medium to high	Low	High	Low
Change management	Contractual changes	Verbal agreement	Verbal agreement	Formal decision-making	Largely informal
Optimisation	Partners	Alliance	Alliance	Alliance	Alliance
Overall governance structure	Control	Complementary	Trust	Largely control	Largely trust

high business risk, while Keerpunt's governance is control based, which fits with its high relational and low performance risk profile. Where both elements of risk are low, we find that governance in one case (Montaigne) is largely control oriented, while in the other (Plantform) it is mainly trust oriented.

The cases confirm some elements of existing thinking. First, it makes sense to relate governance forms to risk. Second, in situations of low/high and high/low risk our cases deliver the same results as previous research. However, our findings partly diverge from existing literature in the low/low risk quadrant. Even though control is possible here (as existing thinking predicts) trust may also be a feasible option. But neither of our 'low-risk' cases exhibits the use of 'pure' trust or control models. It may be that companies in this quadrant apply control and trust in 'light' modes to fine tune their governance to the specific requirements of their operating contexts. However, whether control and trust are really substitutes is not conclusively shown: that would require an experiment in which Plantform were managed via control and Montaigne via trust. Neither case shows any *a priori* reason why the other approach should not have been chosen, but, equally, neither group seem to have ever seriously considered doing so.

Where our findings do diverge from the existing literature is in the high/high risk quadrant: here the Senseo alliance employs both control and trust as complements. If this finding holds in other similar cases - or in large-scale research - current thinking on alliance governance in such situations may need to be adapted.

A limit of this study lies in contingencies suggested by the literature, which especially mentions culture and the management style of the organization,²² and suggests that low trust cultures will perceive partner risks as being higher, and high trust cultures will generally estimate partner risks to be lower.²³ To avoid such cultural issues, all cases were Dutch, except METRO, which was German. The prediction for a German case might be that alliances would emphasize control because of the higher power distance in German culture.²⁴ In fact, we found a trust based alliance: if culture plays a role, in this case

it was certainly overridden by other elements. As to management style, control oriented managers may opt for more elaborate controls even when trust is indicated, but the framework developed here predicts that such behaviour will be less effective when performance risk is high and relational risk is low.

Implications

Theoretical implications

In terms of the debate as to whether control and trust are complements or substitutes, the first implication is that this is contingent on the type of risk. In addition there are circumstances where control and trust are neither complements nor substitutes, but are applied in their pure forms. The debate should therefore refocus on the contingencies and broaden to include the 'pure' governance forms. The contingency of the complement/substitute debate raises further issues as to how companies can complement control and trust. What tactics do companies have to combine these two? The notion of control and trust as substitutes also raises a number of issues. Can partners just choose either type of governance by flipping a coin? Or do companies in this quadrant use other factors in deciding governance forms for their alliances?

Second, the operationalisations of trust and control that are typically used lead to some difficulties. Most authors have used a relatively crude operationalisation of alliance governance by measuring it in terms of contractual forms only, with the result that important information is lost. An operationalisation that is closer to practice gives more information about alliance governance. For example, the question of how companies trade off control and trust in certain circumstances cannot be answered just by looking at the legal structure of an alliance: it is either an equity alliance or not. Such over-simplicity masks important differences in terms of board involvement, goals, levels of formalization, etc. In particular, contractual structures, which might seem to lay the grounding for trust-based relationships, may still involve high levels of control. Further research may incorporate a more detailed operationalisation of alliance governance, which would be helpful in developing an organization design approach to alliances. Despite the vast quantity of alliance literature, the study of the organizational design approach to alliances is still in its infancy.

contractual structures, which might seem to lay the grounding for trust-based relationships, may still involve high levels of control

Third, our framework and the Senseo case make one prediction about the nature of governance in high risk situations that is completely opposite to current understanding. Current theorizing states that high risk situations will not produce intense or long-term alliance between equals, but rather unilateral alliances such as client-supplier relationships. As noted earlier, our findings suggest that this verdict may be inadequate, since our case in this quadrant shows that in these situations intense bilateral alliances *are* a viable organizational form, provided trust and control are used as complements. In fact, we would go further, to suggest that the combination of high performance and high relational risks may perhaps *only* be dealt with effectively by using all available governance mechanisms. Further research will need to clarify the extent to which our Senseo case is representative of other alliances.

Managerial implications

What guidelines can we give to assist the manager responsible for designing an alliance governance system? Our cases show that managers have to make many choices when setting up an alliance. The legal form (contract or equity) is only one of them, and not the most decisive. Contracts and equity stakes are only one part of a broader alliance governance structure, which also includes intangible

trust-based elements, although management attention is often most focused on formal aspects. At first sight, companies may also seem to face a trade-off between extensive contracts which may lead to decreased flexibility, and short legal agreements which may increase the possibility of opportunistic behaviour. However, good use of relational factors can enable a company to have the best of both worlds. The Senseo case shows that extensive contracts combined with attention to relational issues can keep an alliance flexible. The METRO case shows that, even without an extensive legal agreement, substantial alliance projects can be successfully realized when companies consciously build on trust and reputation. Hence it pays to think beyond contracts and equity stakes.

[using] standardized alliance programmes [is] sub-optimal: each alliance faces a unique set of risks, so each requires a custom made governance structure

Next, over 70% of companies have set up standardized alliance programmes which they then use to determine the governance structure for the partnerships they undertake.²⁵ While that it is sub-optimal: in fact, as each widespread practice may appear to be cost efficient, our analysis suggests that it is, in fact: sub-optimal: each alliance faces a unique set of risks, so each requires a custom made governance structure. Companies need to determine the level of relational and business risk first, and then build in the elements of governance as defined in this article, based on the amount of trust and control required.

Finally, what skills might an effective alliance manager need? The control and trust mode may require completely different personalities, and whether the same person will be equally well equipped to lead different types of alliances is doubtful. So matching the right person with the right alliance may well be critical for alliance success. Alliance management may be demanding for top management too, and they are often vitally involved. As alliances continue to grow in importance, the ability to switch between control and trust modes may be one of the core skills for the CEO of the future.

matching the right person to the right alliance may well be critical for success.

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Appendix

Method

A multiple holistic case study design is used in the expectation of finding different governance structures in different circumstances. Theoretical sampling was used to replicate the emerging framework.²⁶ Cases were selected on the basis of expected differences in relational and performance risk in each alliance. This particular case study design and selection of cases enables replication of the theoretical predictions: different results (governance structures) are expected for predictable

reasons (different relational and performance risks). Theoretical sampling aims to verify the theoretical framework and generalize theoretically, as opposed to statistically from the sample to a general population.²⁷ Five cases were selected: one for each quadrant of the framework, and two for the low/low quadrant, to show how both trust and control based alliances occur there.

A choice was made to study successful cases only, to ensure consistency in cases and make it possible to show how the governance structure fitted the needs of the different levels of risk. The focus of the cases was on the initial set up of the alliance, even though governance structures may change over time.²⁸ Key subsequent changes in the relationships have been briefly summarized.

Information was gathered from various sources. First, 33 semi-structured interviews were conducted with alliance partners - which involved a subset of all partners for the Platform and Future Store Initiative cases - between mid-2006 and mid-2007. Those interviewed were those managers accountable for the alliance in their company, and the levels above and below them. In the Platform, Future Store and Senseo cases we were also able to interview independent third parties who had acted as consultants to the alliance. Second, internal documents - company presentations, press releases and internal reports etc. - were gathered to support the analysis. Third, external documentation was also gathered, including published interviews with alliance members and press articles. This procedure helped us to check for respondent bias in three ways: the view from one partner was compared with that of another partner; the views of insiders were contrasted with those of outsiders; and oral testimony was contrasted with written sources. A detailed case description was assembled based on the sources and sent to the respondents for comments, with their feedback leading to minor factual changes in four instances. The cases in this article are based on these detailed case descriptions.

Figure 7 depicts our operationalisations and way of working. A semi-standardized questionnaire was used as a guideline for each interview. Trust and control were identified based on the governance elements as set out in the main body of our text. Relational risk was measured by studying whether previous collaborations had taken place between partners, whether their industry background was similar and whether the partners were competitors or not (elements identified previously by Bierly and Gallagher). Business risk was checked by asking respondents for their perception of the speed of change in their market, the level of competition the alliance faced, and how the alliance project compared to other projects in terms of risk and the possible damage it might do to the partners should it fail. Alliance success was checked by asking whether it had met its original goals (and checking that with these matched the goals as described in company documents) and whether managers were satisfied overall with the alliance. The types of risk and governance were classified as in Table 6 and then compared to our framework.

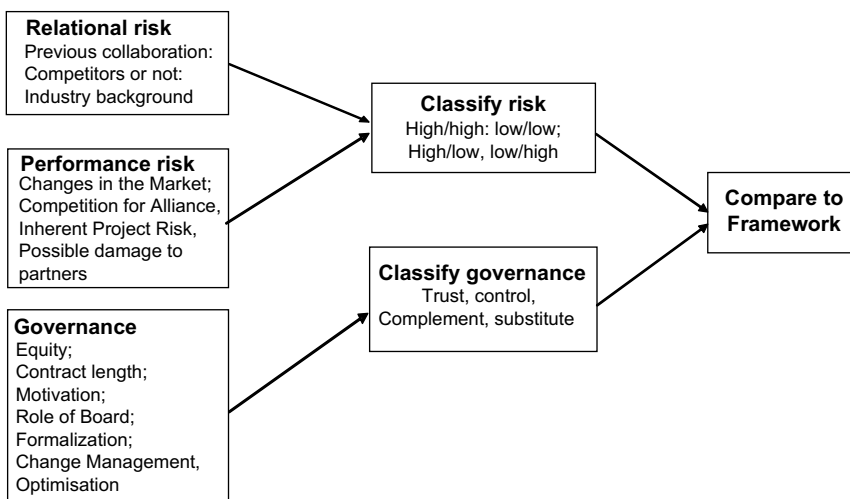


Figure 7. Operationalizations and Concepts

References

1. E. Todeva and D. Knoke, Strategic alliances and models of collaboration, *Management Decision* **43**(1), 123–148 (2005).
2. J. Bamford, B. Gomes-Casseres and M. S. Robinson, *Mastering alliance strategy*, Jossey-Bass, San Francisco (2003); R. Gulati, Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances, *Academy of Management Journal* **38**(1), 85–112 (1995); H. Hakansson and J. Johansson, The network as a governance structure, in G. Grabher (ed.), *The Embedded Firm*, Routledge, London, 35–51 (1993); A. Madhok, Opportunism and trust in joint venture relationships: an exploratory study and a model, *Scandinavian Journal of Management* 57–74 (11 March 1995); U. Staber, Inter-firm cooperation and competition in industrial districts, *Organization Studies* **19**(4), 701–724 (1998); A. Zaheer, B. McEvily and V. Perrone, Does trust matter? Exploring the effects of inter-organizational and interpersonal trust on performance, *Organization Science* **9**(2), 141–159 (1998).
3. For partner selection, see P. E. Bierly and S. Gallagher, Explaining alliance partner selection: fit, trust and strategic expediency, *Long Range Planning* **40**, 134–153 (2007); For alliance management, see W. Hoffmann, How to manage a portfolio of alliances, *Long Range Planning* **38**(2), 121–143 (2005); For alliance changes, see M. U. Douma, J. Bilderbeek, P. J. Idenburg and J. K. Looise, Strategic alliances: managing the dynamics of fit, *Long Range Planning* **33**(4), 579–598 (2000).
4. S. Ghoshal and P. Moran, Bad for practice: a critique of transaction theory, *Academy of Management Review* **21**(1), 13–47 (1996); O. E. Williamson, Economic organization: the case for candor, *Academy of Management Review* **21**(1), 48–57 (1996); P. Moran and S. Ghoshal, Theories of economic organization: the case for realism and balance, *Academy of Management Review* **21**(1), 58–72 (1996).
5. T. K. Das and B. S. Teng, Between trust and control: developing confidence in partner cooperation in alliances, *Academy of Management Review* **23**(3), 491–512 (1998); T. K. Das and B. S. Teng, Managing risks in strategic alliances, *Academy of Management Executive* **13**(4), 1–13 (1999); T. K. Das and B. S. Teng, A risk perception model of alliance structuring, *Journal of International Management* **71**, 1–29 (2001); T. K. Das and B. S. Teng, Trust, control, and risk in strategic alliances: an integrated framework, *Organization Studies* **22**, 251–283 (2001).
6. O. E. Williamson, *Markets and Hierarchies: Analysis and Antitrust Implications*, The Free Press, New York (1975); O. E. Williamson, *The Economic Institutions of Capitalism*, The Free Press, New York (1985); O. E. Williamson (1996) op. cit. at Ref. 4.
7. S. Ghoshal and P. Moran (1996) op. cit. at Ref. 4. H. Hakansson and J. Johansson, (1993) op. cit. at Ref. 2; G. Herrigel, Power and the redefinition of industrial districts: the case of Baden-Wuerttemberg, in G. Grabher (ed.), *The Embedded Firm*, Routledge, London, 227–252 (1993); J. Johansson and L. Mattsson, Inter-organizational relations in industrial systems: a network approach compared with the transaction cost approach, *International Studies of Management and Organisation* **17**(1), 34–48 (1987); M. Lazerson, Factory or putting out? Knitting networks in Modena, in G. Grabher (ed.), *The Embedded Firm*, Routledge, London, 203–226 (1993); U. Staber (1998) op. cit. at Ref. 2.
8. S. Ghoshal and H. Bruch, Going beyond motivation to the power of volition, *MIT Sloan Management Review* **44**(3), 51–57 (2003).
9. J. Johansson and L. Mattsson, (1987) op. cit. at Ref. 7; A. Madhok, (1995) op. cit. at Ref. 2; B. Nooteboom, H. Berger and N. Noorderhaven, Effects of trust and governance on relational risk, *Academy of Management Journal* **40**(2), 308–338 (1997).
10. Y. Lee and S. T. Cavusgil, Enhancing alliance performance: the effects of contractual-based versus relational-based governance, *Journal of Business Research* **59**, 896–905 (2006).
11. Y. Lee and S. T. Cavusgil (2006), op. cit. at Ref. 10; Y. Luo, Contract, cooperation, and performance in international joint ventures, *Strategic Management Journal* **23**, 903–919 (2002); L. Poppo and T. Zenger, Do formal contracts and relational governance function as substitutes or complements?, *Strategic Management Journal* **23**, 707–725 (2002)
12. J. H. Dyer and H. Singh, The relational view: cooperative strategy and source of interorganizational competitive advantage, *Academy of Management Review* **23**(4), 660–679 (1998); R. Gulati, Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances, *Academy of Management Review* **38**(1), 85–112 (1995).
13. G. E. Fryxell, R. S. Dooley and M. Vryza, After the ink dries: The interaction of trust and control in US-based international joint ventures, *Journal of Management Studies* **39**, 6 (2002).
14. K. Ziegelbauer and R. Farquhar, Strategic alliance management: lessons learned from the Bayer-Millennium collaboration, *Drug Discovery Today* **9**(20), 864–868 (2004).

15. N. Pangankar, Determinants of alliance duration in uncertain environments: the case of the biotechnology sector, *Long Range Planning* **36**, 269–284 (2003).
16. J. P. Cannon, R. S. Achrol and G. T. Gundlach, Contracts, norms, and plural form governance, *Journal of the Academy of Marketing Science* **28**(2), 180–194 (2000).
17. For equity and contractual safeguards, see S. Lui and H. Ngo, The role of trust and contractual safeguards on cooperation in non-equity alliances, *Journal of Management* **30**, 471 (2005); O. E. Williamson (1985), op. cit. at Ref. 6. For trust and intrinsic motivation, see S. Ghoshal and H. Bruch (2003), op. cit. at Ref. 8; For incentive systems, see A. L. Stinchcombe, Contracts as hierarchical documents, in A. L. Stinchcombe and C. Heimer (eds.), *Organization Theory and Project Management*, Norwegian University Press, Bergen, 121–171 (1985); S. Kumar and A. Seth, The design of coordination and control mechanisms for managing joint venture-parent relationships, *Strategic Management Journal* **19**, 579–599 (1998); For the role of Boards, see C. Sundaramurthy and M. Lewis, Control and collaboration: paradoxes of governance, *Academy of Management Review* **28**(3), 397–415 (2003); For formal operating procedures, see J. M. Geringer and L. Hébert, Measuring performance of international joint ventures, *Journal of International Business Studies* **22**(2), 249–263 (1989); A. L. Stinchcombe (1985) (above); For managing alliances change, see J. J. Reuer, M. Zollo and H. Singh, Post-formation dynamics in strategic alliances, *Strategic Management Journal* **23**, 135–151(2002); For views on optimizing alliances, see R. Gulati and H. Singh, The architecture of cooperation: managing coordination costs and appropriation concerns in strategic alliances, *Administrative Science Quarterly* **43**(4), 781–814(1998); J. P. Cannon, R. S. Achrol and G. T. Gundlach, Contracts, norms, and plural form governance, *Journal of the Academy of Marketing Science* **28**(2), 180–194 (2000).
18. R. K. Yin, *Case Study Research: Design and Methods*, Sage, London (1989); A. S. Lee and R. L. Baskerville, Generalizing generalizability in information systems research, *Information Systems Research* **14**(3), 221–243 (2003).
19. K. Ziegelbauer and R. Farquhar (2004) op. cit. at Ref. 14; J. Bamford, B. Gomes-Casseres and M. S. Robinson (2003) op. cit. at Ref. 2.
20. S. Ghoshal and H. Bruch (2003) op. cit. at Ref. 8.
21. C. Jones, W. S. Hesterly and S. P. Borgatti, A general theory of network governance: exchange conditions and social mechanisms, *Academy of Management Review* **22**(4), 911–945 (1997); J. H. Dyer and K. Nobeoka, Creating and managing a high-performance knowledge-sharing network: the Toyota case, *Strategic Management Journal* **21**(3), 345–367 (2000).
22. J. H. Davis, F. D. Schoorman and L. Donaldson, Toward a stewardship theory of management, *Academy of Management Review* **22**(1), 20–47 (1997); P. E. Bierly and S. Gallagher (2007) op. cit. at Ref. 3.
23. F. Fukuyama, *Trust*, Hamish Hamilton, London (1995).
24. G. Hofstede, *Culture's Consequences*, SAGE, London (1984).
25. Association of Strategic Alliance Professionals, *The Second State of Alliance Management Study 2007*, ASAP White Paper, (2007) Available from: www.strategic-alliances.org (2007).
26. K. M. Eisenhardt, Building theories from case study research, *Academy of Management Review* **14**(4), 532–550 (1989).
27. See R. K. Yin (1989) and A. S. Lee and R. L. Baskerville (2003) both op. cit. at Ref. 18.
28. I. Hipkin and P. Naudé, Developing effective alliance partnerships, *Long Range Planning* **39**, 51–69 (2006); J. Reuer and R. Zollo, Managing governance adaptations in strategic alliances, *European Management Journal*, **18**(2), 164–172.

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