STRATEGIC ALLIANCES: ALLIANCE CONTRACTING AND TRUST IN AN EVOLUTIONARY PERSPECTIVE.

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ABSTRACT

In this paper we will identify the contract dimensions of alliance contracts directed at joint development of new products or services. We will determine to what extent these contract dimensions are adaptable to future needs and insights. We will also provide insight into the contingency of these adjustable contract dimensions upon competence trust, the build-up of alliance experience and cooperation intensity.

The results demonstrate that the adaptability of the risk and revenue distribution lags behind the adjustability of other critical contract dimensions like the scope definition, determining the input of assets and the anticipated efforts of alliance partners. This contrast in adaptability can result in an early demise of alliances. On the other hand there is evidence that alliances create such a dependency that alliances, especially those directed at joint development, tend to create a lock-in or prisoner dilemma.

Keywords: strategic alliance, alliance contracting. re-negotiation, adjustability, competence trust,

1. THEME - OPEN INNOVATION, USER DRIVEN INNOVATION AND NETWORKED INNOVATION

Our research is aimed at innovation and acquiring competences in strategic interorganizational collaborative arrangements. The focus is on the adaptability of alliance contracting and its contingency upon competence trust (amongst others).

2. THEORETICAL BACKGROUND AND RELEVANCE

Contracts provide legal safequards in situations in which organizations have no other common ground for putting trust in each other's behavior (Sako, 1992; Posner, 1993). Sako refers to this type of trust as contractual trust (Sako, 1992). Formal contracts also contribute to mutual expectations regarding performance levels and make these more explicit. Especially in situations in which the organizational partners are not familiar with each other's competences. But formal contracts can hamper the accomplishment of mutual commitment or goodwill trust (Sako, 1992; Sitkin and Roth, 1993).

In order to rule out risks contracts tend to be rigid with respect to contributions and intended results as well as the risk and reward distribution (Doz and Hamel, 1998). Their research shows that alliances with no flexibility towards readjusting mutual contributions as well as the distribution of risks and rewards, tend be to be less durable. Gulati (1995) arrives to the conclusion that alliance contracts tend to become more flexible as the partner organizations become more familiar with each others competences and processes.

Acquaintance with partner organizations (based on prior contacts) therefore generates trust and diminishes their need for detailed contracts. Less detailed contracts are also less costly (Crocker and Reynolds, 1993; Ring and Van de Ven, 1994; Dyer and Singh, 1998).

Recent research however comes to opposite results (Poppo and Zenger, 2002). They observe that contracts (formalization) do not become less extended as the relation between partner organizations is prolonged and deepens. Instead the contracts become more specific (Mayer and Argyres, 2004). Ryall and Sampson (2006) even establish that earlier work experience with alliance partners will result in more detailed contracts. They conclude that it has become easier to draw up detailed contracts, because they have more knowledge about the partner organization and they have become more experienced in drawing up contracts. Contracts are not only used to reduce uncertainty, but they also enable partners to make task allocations and other work arrangements. Therefore contracts are also a viable tool to coordinate alliance activities (Mayer, 2006).

3. **Research objective, problem and hypotheses**

The short literature review in paragraph 1 indicates there is a lively debate among relevant scholars addressing the flexibility (Gulati, 1995) and the degree of formalization (detailed nature) (Poppo and Zenger, 2002; Mayer and Argyres, 2004; Mayer, 2006; Ryall and Sampson, 2006) of alliance contracts. Although several studies discuss renegotiation of contracts, there is hardly any attention paid to the distinction between:

- strategic alignment between (potential) alliance partners concerning goals / objectives, synergy, risk and revenue distribution, versus;
- issues concerning coordination of activities, adaptation to current market conditions (like pricing), forecasting, etc.

This is remarkable since organizations involved in recurrent business tend to use framework contracts or agreements (Van Weele, 1999). In strategic procurement (although adversarial in nature) such framework contracts provide a context (an umbrella so to speak) for more detailed project contracts. We expect organizations intending to start a strategic alliance, possibly extending for many years, to use a similar contract structure in order to strike a balance between current insights (at the onset of an alliance) and future uncertainty.

Against this background our **research problem** is focused on the aspects / dimensions addressed in (the framework part of) an alliance contract. This generates a number of more specific research questions to be covered in this paper.

Research questions

1. What kind of aspects or dimensions are covered in alliance contracts?

Hypothesis

We expect that alliance contracts will at least cover those aspects facilitating goal alignment, establishing inputs and efforts, as well as the distribution of risk and revenues. We will look into these aspects or contract dimensions more closely in paragraph 3.

2. To what extent are the dimensions in alliance contracts re-adjustable during the lifetime of the alliance?

Doz and Hamel (1989) have established that standard contracts, that do not offer opportunities to realign earlier arrangements regarding contributions as well as the risk and reward distribution during the alliance, will seriously impede mutual contentment and therefore the durability of the alliance.

Hypothesis

The collaborative intensity in product innovation alliances requires contracts which offer more flexibility and possibilities for future adjustment.

3. Upon which factors or variables is the adjustability of alliance contract dimensions contingent ?

Hypothesis

The adjustability is likely to be contingent on the following variables:

- the intensity with which alliance partners are cooperating;
- familiarity with the potential alliance partners. Familiarity between the relevant organizations is likely to generate competence trust and will reduce uncertainty with respect to the behavior and competences of potential partners. This will reduce the inclination towards stringent and rigid formalization and therefore foster flexibility.
- increasing experience with strategic alliances will provide potential alliance partners with an insight in best practices and possible pitfall's of strategic alliances. This will induce them to apply more adjustability to alliance contract dimensions.

4. **RE-ADJUSTABLE DIMENSIONS OF ALLIANCE CONTRACTS**

Often, research on alliance contracts, is not very specific as to the dimensions of the contracts which tend to be re-adjustable (re-negotiable, re-bargaining). It is obvious that in more or less operational supply chain settings, re-negotiations address aspects like pricing (in relation to benchmarking, forecasting, volumes, quality assurance and variations in demand specifications) (Van Weele, 1999). Pricing and its related aspects are associated with procurement (ibid). Other scholars however emphasize the importance of contract clauses which promote non-adversarial relationships, introduce incentives for performance and its measurability, better define risk and its allocation and last but not least, address attaining changing strategic objectives in an alliance contract (Bennett and Jayes, 1998).

But in alliances intentionally covering a long or not limited lifespan, partner organizations are likely to use alliance governance using separate projects in terms of milestones. In such alliance designs individual project contracts will cover detailed project objectives as well as coordination and roles of alliance partners, as these aspects are subject to progress being made during the lifespan of the alliance.

This implies that an over-arching alliance contract can be confined to the essential strategic dimensions of an alliance.

In our survey we found that a large majority of the alliances (72%) use over-arching alliance contracts and further elaboration of these alliance contracts in detailed project plans and supporting contracts for smaller, subsequent projects.

Therefore we have aimed our research at the dimensions in the over-arching alliance contract.

Here we will discuss these dimensions.

• area of cooperation / scope definition

The scope definition will also encompass the goals of the strategic alliance. These goals are strategic in nature, because the alliance will try to establish goals which can not be accomplished or very difficultly by the individual organizations. The definition of the scope (or the area of cooperation) is essential, because the alliance partners usually also have a portfolio of other activities. Demarcation as well as synergy can be issues but also the alignment of the alliance and its goals in the individual business plans of the organizations. An adequate alignment in business plans is conditional to a lasting commitment of the organizations towards the alliance and its goals.

• input of alliance partners

Organizations will be selected as alliance partners because they either have financial resources, specific competences, existing solutions (products, services), equipment, a relevant clients base and/or service or distribution network It has to be determined to what extent these assets can be used in the alliance and how they should be valued in view of the goals of the alliance, as well as the competences and assets of the other alliance partners. Especially in alliances dedicated to the development of new products or services, it is often extremely difficult to assess the value of these inputs at the start of an alliance.

• expected contributions of partners in the alliance

The contributions of the alliance partners and the arising costs are one of the prime variables in determining the revenue distribution. To this factor also applies that assessment of these contributions in a co-specialisation alliance aimed at joint development can be very difficult at the onset of the alliance.

• distribution of rewards / revenues

Especially in strategic alliances devoted to development of new products or services, it can be hard to make adequate predictions of market success and a calculation of returns. This does not only apply to the calculation of actual returns but also to the distribution of revenues among the alliance partners. This distribution tends to vary with inputs and contributions which have been made, but also to the extent in which alliance partners took part in investment and risk sharing.

• risk sharing

Strategic alliances tend to be extremely risky. This applies especially to alliances focused on development of new products or services. It has been demonstrated that a large number of product innovations tends to fail (Dwyer and Sivadas, 2000). Despite the increasing importance of strategic alliances many of these alliances fail to accomplish the intended goals. Failure rates ranging from 60 to 80% percent are registered in studies (Spekman e.a., 1996; Dacin e.a., 1997; Das and Teng, 1999; Duysters e.a., 1999; Dyer e.a., 2001; De Man, 2006). Therefore it is evident that many alliances from the outset are inherently more risky than the activities of individual organizations. Therefore alliance partners will take risks and its distribution into account when determining the sharing of revenues.

• property rights Determining property rights is usually dependent on inputs (assets), the contributions being made, but alo on the financial investments and risk sharing of the alliance partners. Property rights are relevant with respect to a possible demise of the alliance, exit strategies of individual alliance partners and valuing the assets of an alliance.

• using (development) results outside the domain of the alliance The first dimension we discussed, referred to the demarcation of the area of cooperation or the scope definition of the alliance. Usually this scope definition provides coverage of the alliance partners activities only to some extent. Therefore it is relevant to determine whether it is allowed to use outcomes of the alliance outside the domain of the alliance, and if so, what conditions and terms have to be applied.

5. METHODOLOGY – SURVEY SAMPLE, DATA COLLECTION AND DATA ANALYSIS

The research data were collected in 2007. The research data were collected through a survey. The population consisted of Dutch private companies as well as non-profit organizations. We used databases originating from HAN University, the Dutch organizations for Quality management (INK and NNK). The persons registered by these organizations received requests by mail, email and news notifications to participate in the survey. The potential respondents also received information regarding purpose, context and survey topics. This letter enabled the respondent organizations to determine which persons in their organizations would be versed best, with respect to affinity, knowledge and experience.

The survey-design consisted of a two-stage design. In a preliminary survey we established whether the organization already has one or more strategic cooperation, which might consist of a bilateral nature (diade) or a multilateral shape (interorganizational network). We also charted a number of key data regarding the respondent organization. In the main survey we used separate surveys for organizations with and without strategic cooperation. This paper will focus on the survey outcomes for organizations having one or more strategic alliances. The survey population consisted of 46 organizations. The sectoral distribution shows that 65 percent of the participating organizations can be classified as private commercial organizations. The remaining 35 percent consists of non-profit or not-for-profit organizations.

Considering the size distribution the organizations with up to 100 employees account for 64% of the sample population. Organizations with 100 to 500 employees account for 18% of the sample population and the larger organizations (> 500 employees) also contribute for 18% to the sample population.

In view of the small number of respondents we were not able to use multivariate analysis and association measures to test our hypotheses. Instead we used basic crosstabs to identify association between variables.

Apart from the re-adjustable contract dimensions we distinguished in the preceding paragraph, we expect that the possibility for adjustment of alliance contracts varies considerably with three variables:

• degree to which alliance partners are familiar with each other (competence trust). Basically we determine whether the alliance partners were acquainted which each other before entering the alliance and if they had a prior work relationship.

- experience with setting-up strategic alliance contracts and the actual cooperation in strategic alliances. We use a proxy for this variable. It consists of the number of strategic partnerships an organization is involved in;
- the intensity with which alliance partners cooperate in strategic alliances. We distinguish between intensive or very intensive cooperation and situations in which alliance partners can execute their contributions more or less independently.

6. SURVEY RESULTS

In paragraph 3 we dug into those dimensions of alliance contracts which often, at the start of an alliance, can not be adequately valued or assessed. Quite often the assessment or valuation of these dimensions also tends to change during the course of an alliance.

Dimensions of alliance contracts	Over-all survey results		Adjustment as function of joint product or service development			
			intensive / very intensive cooperation	slightly or no cooperation		
Scope definition / area of cooperation	61%	N = 36	75%	14%	100%	N = 35
Input of alliance partners (expertise, equipment, assets)	61%	N = 33	68%	43%	100%	N = 32
Anticipated partner contribution	62%	N = 34	65%	57%	100%	N = 33
Distribution of rewards / revenue	34%	N = 35	41%	14%	100%	N = 34
Distribution of risks	27%	N = 34	35%	0%	100%	N = 33
Sharing intellectual property rights	29%	N = 34	39%	0%	100%	N = 33
Use of results outside the domain of the alliance	47%	N = 33	50%	43%	100%	N = 33

 Table 1. Alliances with adjustment possibilities to specific dimensions of alliance contracts

Fixing the content of these dimensions at the start of an alliance can therefore result in a serious mismatch with the actual course in the alliance, which can result in an early break-up of the alliance.

The over-all survey results in table 1 describe which of these dimensions are subject to adjustment during the course of an alliance. The over-all results indicate that the majority of the respondents have made three dimensions re-adjustable. It involves:

- the scope definition / area of cooperation;
- the input of alliance partners;
- the anticipated partner contributions to the alliance.

In about 60% of the alliances these dimensions are re-adjustable. On the other hand, the distribution of risks and rewards (revenues) is only re-adjustable in a minority of the alliances. As stated at the start of this paragraph, this mismatch can result in tensions between alliance partners, which can hamper the cooperation in the alliance and its continuation.

In order to determine what the potential consequences are, we had to determine whether the respondents perceive the distribution of revenues in accordance with the efforts they have made in the alliance.

A mismatch between a re-adjustable partner contribution and a non-adjustable revenue distribution applies to a small subset of the survey population (11 respondents). We have asked whether the actual revenue distribution is in accordance with contributions being made, or not. This is clearly a sensitive subject, since 4 respondents did not want or could not answer the question. Only 4 respondents indicated that the distribution of revenues is in accordance with efforts being made. The other respondents recorded a serious mismatch.

Nevertheless 8 respondents assessed governance and control of the alliance positively. Also 8 respondents stated that the alliance is likely to be prolonged (for at least 3 years), when current practice and governance remain unchanged. Obviously, this outcome can only be accounted for in view of the fact that the alliance enables its partners to realize goals which they can not or hardly accomplish otherwise. No less then 9 respondents (out of 11) indicated that the alliance is still the best option to accomplish their strategic goals.

This demonstrates that alliances can create a high degree of dependency. Especially alliances in which partners are involved in development and subsequent production and marketing of new products or services, the dependency tends to increase over time (Doz and Hamel, 1989). This dependency can, in view of unfavorable terms or conditions (alliance contract), result in a lock-in situation or a so-called prisoner dilemma situation. Our research did not enable us to determine what the exact tipping-points in such alliances tend to be. Of course these tipping-points will relate to the balance between efforts and anticipated goals / revenues. But the assessment of this balance also tends to be highly situational and subjective.

In the remainder of this paragraph we will look at the factors influencing the adjustability contract dimensions.

The first factor influencing the adjustability of contract terms, concerns the intensity with which alliance partners work together in the development of new products or services (table 1). We have established that the majority of respondent organizations have established strategic alliances to develop new products and/or services. Unlike

operational supply-chains joint product development often requires an operational interface in which alliance partners work closely together and activities and processes are heavily intertwined.

	Adjustment	Familiarity of a		
	of contract dimensions	Alliance partners knew each other	Alliance partners did not know each other	Total
Scope definition / area of cooperation	yes	68 %	29 %	59 % N = 19
	no	32 %	71 %	41 % N = 13
		100 % N = 25	100 % N = 7	100 % N = 32
Input of alliance partners (expertise, equipment, assets)	yes	70 %	17 %	59 % N= 17
	no	30 %	83 %	41 % N = 12
		100 % N = 23	100 % N = 6	100 % N = 29
Anticipated partner contribution	yes	70 %	29 %	60 % N = 18
	no	30 %	71 %	40 % N = 12
		100 % N = 23	100 % N = 7	100 % N = 30
Distribution of rewards / revenue	yes	33 %	14 %	29 % N = 9
	no	67 % 86 %		71 % N = 21
		100 % N = 24	100 % N = 7	100 % N = 31

Table 2. Adjustment of contract dimensions as a function of
familiarity between alliance partners

This requires the build-up of competence trust (a thorough insight into the competences of alliance partners). Apart from that, development of new products also implies that required efforts, the engineering of processes and equipment as well as the anticipated results are difficult to describe and assess at the start of the alliance. These aspects are subject to progressive insight and regular changes.

	Adjustment of contract	N			
	dimensions	1-3	4 -5	≥6	Total
Scope definition / area of cooperation	yes	25 %	75 %	67 %	60 % N = 18
	no	75 %	25 %	33 %	40 % N = 12
		100 % N = 8	100 % N = 16	100 % N = 6	100 % N = 30
Input of alliance partners (expertise, equipment, assets)	yes	57 %	50 %	69 %	62% N= 18
	no	43 %	50 %	31 %	38% N = 11
		100 % N = 7	100 % N = 6	100 % N = 16	100 % N = 29
Anticipated partner contribution	yes	50 %	67 %	63 %	60 % N = 18
	no	50 %	33 %	37 %	40% N = 12
		100 % N = 8	100 % N = 6	100 % N = 16	100 % N = 30
Distribution of rewards / revenue	yes	0 %	33 %	44 %	30 % N = 9
	no	100 %	67 %	56 %	70% N = 21
		100 % N = 8	100 % N = 6	100 % N = 16	100 % N = 30

Table 3. Adjustment of contract dimensions as a function of
the number of strategic partnerships

Therefore we can expect that alliances involved in joint development will provide for more adjustability of contracts. Table 1 shows us exactly that kind of outcome. But we can see that the adjustability of the risk and reward distribution lags behind the adaptability of other dimensions (scope, input and contributions).

The familiarity between the alliance partners prior to the start-up of the alliance, is the second factor under consideration. The hypothesis is, that if alliance partners are already familiar with each other and have worked with each other, this generates trust. Obviously, the positive experience from the past constitutes a foundation for an emerging alliance. In other words, this familiarity with the other parties gives an insight into their trustworthiness, the way in which they operate and other relevant behaviour.

This is often referred to as the build-up of competence trust (Sako, 1992). Our hypothesis is that this familiarity with future alliance partners will generate a readiness to use more flexible alliance contracts adapted to demands of joint working practice. Table 2 gives us an insight how adjustability of contract terms varies with prior familiarity between alliance partners. All dimensions show a positive relationship but it is evident that adjustability of rewards or revenue distribution lags behind. Unfortunately our current research does not provide any explanations for this finding.

The third and last factor under consideration is the number of strategic partnerships an organization is currently involved in. This variable operates as an indicator of the expertise / competence organizations have acquired with respect to forging strategic alliances. This covers bringing the alliance partners together, establishing the strategic fit and alignment, establishing the alliance contract and setting up the alliance with its structure, processes and control mechanisms and governance. We have confined ourselves to review the most critical dimensions.

Table 2 demonstrates that all dimensions tend to vary under the influence of the number of strategic partnerships. Increasing experience with strategic alliances is positively effecting the adjustability of alliance contracts. Especially the scope definition and the distribution of rewards / revenue are influenced by increasing experience / competence. Especially this last aspect is promising, although the adjustability is still lagging compared to other dimensions of alliance contracts. We have to bear in mind that the majority of the respondent organizations were acquainted with their current alliance partners before setting up the alliance. They knew each other and/or had done business witch each other. But this also implies that they used to do business with each other, using traditional contracts essentially suited for adversarial or arms-length contract situations. This practice has evolved into a partner relationship but the terms of the contracts haven't been adequately rebalanced yet.

7. DISCUSSION AND FURTHER RESEARCH

Prior research has looked at repetitive alliance contracts in the context of operational supply chains (Mayer and Argyres, 2004; Ariño c.s., 2006). Instead, we have looked at strategic alliances predominantly focused towards the joint development of new product or services. This joint development requires more close cooperation between alliance partners but it entails more uncertainty about inputs (assets), efforts and required investments and is inherently more risky with respect to the accomplishment of the anticipated goals. This is reflected in the readiness of alliance partners to make alliance contracts more adaptable to future needs and insights.

But the devil is in the detail. Although critical dimensions of alliance contracts become increasingly adaptable (under the influence of alliance experience, competence trust and the close cooperation in joint development), the adaptability of the risk and revenue distribution among the alliance partners lags behind. Although this discrepancy is fuelling discontent, there are no signs this will lead to an early demise of the alliances in the immediate future. The majority of the involved organizations remain satisfied with governance in the alliance and consider the alliance to be the best possible solution to achieve the intended strategic objectives.

Still half of the relevant organizations is unsatisfied with the unbalance between the adjustment of scope, inputs and efforts whereas the risk and revenue distribution could not be adjusted.

Our current research does not provide any answers to clarify the observed discrepancy, and we can only guess at the consequences and possible side-effects of this mismatch. Future research can address the issue whether removing this discrepancy in adaptability of contract dimensions can improve the performance of strategic alliances.

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