

**Resource – Activity Dynamics:
On the Mobilization of Trust and the Essence of Trusting**

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Lars Huemer
Associate Professor
Norwegian School of Management
Department of Strategy
Elias Smith's vei 15
Box 580, N 1302, Sandvika
Norway
Telephone: + 47 67 55 72 76
Fax: + 47 67 55 76 77
E-mail: lars.huemer@bi.no

Abstract

Whether an organization creates value and enjoys a competitive advantage depends fundamentally on how it mobilizes its resources and perform its activities. Intangible resources have recently been emphasized when explaining the origins of competitive advantage, and trust is an example of such a resource. In order to create value from trust, like any other resource, an organization must put its resources into action. The study takes a dynamic perspective on the interplay between resources and activities and describes trust as a resource coexisting with and dependent upon an organization's additional resource constellation. Trusting is seen as a dynamic 'meta' capability with the potential to redefine roles and relationships. The empirical approach is qualitative and based on a case study. By inquiring into the mobilization of trust is suggested that present conceptualizations fail to emphasize the essence of trusting. Mainstream argumentation claims that if trust is to be sustained and hence a resource of continued benefit, organizations are advised to perform their activities in accordance with present routines and procedures. This advice is foremost relevant when building trust, whereas trusting in the case studied implied a deviation from traditions, conventions and what was regarded as 'business as usual'. In contrast with contemporary arguments, trusting signified a reduction of predictability. This view justifies recent claims stressing that trust is good for learning and innovation. Finally, it is suggested that a continuous interplay between resources and activities may help explaining the origin of long-term competitive advantage.

Introduction

Prior research indicates that the effects of trust can be far-reaching. Trust may function as a lubricant (Arrow 1974) and as a glue (Jarillo 1988) in relationships. It reduces transaction costs and can enhance transaction value (e.g. Zajac and Jones 1993). Strategy scholars' interest in trust is further justified by recent empirical research indicating that trust has a positive impact on relationship performance (e.g. Zaheer et al. 1998, Davis et al. 2000). The purpose of this paper is to contribute to the ongoing debate on trust's value creating potential.

The paper takes a dynamic and complementary perspective on the resource-and-activity interrelationship (cf. Dierickx and Kool 1989, Ghemawat and Pisano 1999), with a particular focus on the mobilization of trust and the implications of trusting. It is suggested that the essence of trusting remains obscure due to an insufficient distinction between building and mobilizing trust. The problem at hand is that trust appears to enhance value under particular conditions. Specifically, trust creates value when the trustor can anticipate the trustee's behavior (Rousseau et al. 1998), and when involved parties are aware of the rules, routines, and procedures that each needs to follow (Gulati et al. 2000). When in the process of building trust, these arguments provide valuable guidance. When mobilizing trust, i.e. when the resource trust is translated into trusting action, the same guidance may lead firms into a predictability trap that is counterproductive to value creation. Trust is presented as a resource coexisting with and dependent upon an organization's additional resource constellation. Trusting is seen as a dynamic 'meta' capability with a potential to redefine roles and relationships, for instance by affecting other capabilities such as alliancing and decision making (see Eisenhardt and Martin 2000).

The empirical study builds on qualitative data from the construction firm Skanska and its experiences with a new approach to construction work. The trusting that took place between the organizations studied implied a deviation from traditions, conventions and what was regarded as 'business as usual'. In contrast with contemporary arguments, trusting signify a reduction of predictability. Whereas research with the resource-based tradition implicitly has focused on if trust can bring Ricardian rents by possessing a 'superior trust', the empirical study shows that trusting may enable

activities that generate Schumpeterian rents. This view is consistent with recent claims stressing that trust may facilitate learning and innovation processes. However, despite their importance, the paper concludes that neither trust nor trusting are sources of long-term competitive advantage. Its origin explicitly comes from a continuous interplay between resources and activities.

The first section presents an opening illustration of the paper's main arguments by analyzing Disney's version of the Chinese saga Mulan. The saga illustrates the distinction between building and mobilizing trust, and it captures the essence of trusting. Prior research of trust is thereafter discussed, and it is suggested that trusting actions that go beyond today's procedures are those that are most interesting from a value creation perspective. The paper's research model is presented in a section discussing resources and activities, and a methodological section follows. Skanska's experience with the Project Alliance approach to construction work is presented thereafter, and implications from the case are drawn by following the logic of the research model. Conclusions and suggestions for future research end the paper.

Mulan: an opening illustration

In Disney's (1998) film version of 'Mulan', the viewer finds a young woman who has a hard time living up to the expectations of her family and the traditional Chinese society. Mulan is meant to bring honor to her family by behaving correctly, foremost by becoming a good wife. But she dresses incorrectly, she cannot even pour tea into a cup properly. Basically, she does not find her place in the society that is waiting for her.

When the Hun leader Shan Yu invades China, the emperor calls for one man from each family to protect the country. To her family's despair, Mulan, takes her aging father's place by acting as Ping, a young man who successively becomes a great soldier in the emperor's army. The process wherein Ping develops into a trained warrior has much in common with the guidance given when building trust. Mulan pays careful attention when trying to follow rules, routines, and procedures that are explained by her captain Li Shang. Despite certain obstacles, she manages to become 'one of the guys' by learning to act according to her superiors' expectations.

During a critical encounter with the enemy, Mulan saves her captain, Li Shang, and her entire group, by starting an avalanche that buries most of the Huns. This combat is central to the story, because Mulan's previous efforts now result in her possessing a valuable resource: Li Shang, addressing the man he knows as Ping, says - "from now on, you have my trust". However, Ping is wounded, and after proper treatment it is discovered that Ping is a young woman.

If we look at the situation from Li Shang's point of view after this discovery, the likelihood for continued trust for Mulan is low. It is one thing that Mulan has problems becoming a good wife, but by acting as a man in the emperor's army, she commits herself to a crime that carries a death sentence. She has not followed the rules of the game, her level of behavioral predictability is indeed low.

Mulan is not executed after the discovery of her true identity, but she is isolated from her group, left alone on the mountain. If the saga had ended there, it would have been in line with the common arguments stressing that trust depends on predictability. It exists and flourishes in line with established norms and routines. But the saga continues. Mulan realizes that Shan Yu, the Hun leader, has survived the avalanche, and so has some of his companions. China and its emperor are still in danger.

Mulan not only manages to reach the palace, but she also participates and guides Li Shang and his group during the final battle when saving the emperor from the surviving Huns. In terms of performance, this battle has little resemblance with what was learned in the training camp. This is where the distinction between building and mobilizing trust becomes critical, specifically in terms of creating some kind of value.

The point is that contrary to the situation when building trust, Mulan now mobilizes the trust resource in order to perform activities that deviate from the existing knowledge structures. Trust is mobilized to break with habits and conformities. Without breaking with the traditions, Li Shang and the rest of the group's acceptance of Mulan's role would not have been possible. Li Shang is not placing his trust in Mulan's predictability. The other soldiers are not only focusing on the risks involved, but are actually trusting by giving Mulan freedom to act. This freedom is the essence of trusting. The following section suggests that contemporary research on trust

insufficiently portrays this claim. It is argued that the bulk of trust typologies that recently have emerged overdo trust's dependence on predictable behavior.

Trust and Trusting

An ongoing debate concerns whether actions should be regarded as part of trust's definition. Lewis and Weigert (1985) suggest that various qualitative mixes of cognitive, emotional and behavioral content make it possible to differentiate between different types of trust, an approach adopted by Zaheer et al. (1998). Marketing scholars identify two views of trust, one which regards trust as a belief, confidence or expectation about an exchange partner's trustworthiness that results from that partner's expertise, reliability or intentionality. The other view regards trust as a behavioral intention or a behavior that reflects a reliance on a partner, which involves vulnerability and uncertainty on behalf of the trustor. Limited trust exists if a partner is found trustworthy but still unwilling to rely on the other partner (Moorman, et al. 1993). In contrast, Morgan and Hunt (1994) argue that one's willingness to rely on another should be viewed as an outcome or potential indicator of trust, and not part of its definition. Mayer et al. (1995) have a similar standpoint on the relationship between trust and risk. Trust is not risk taking per se, but rather a willingness to take risk. One does not need to risk anything in order to trust. However, one must take a risk in order to engage in trusting action. The fundamental difference between trust and trusting behaviors is between a willingness to assume risk and actually assuming risk. In line with this study's approach, Rousseau et al. (1998) suggest that trust is an underlying psychological condition that can both cause or result from actions. As will be argued, what kinds of action trust, or actually trusting, cause, depends on how the resource is mobilized.

It was indicated above that qualitative mixes of cognitive, emotional and behavioral content make it possible to differentiate between different types of trust, and recent research has resulted in a plethora of trust typologies. The rational approach to trust and the social perspective capture the bulk of these typologies (see e.g. Tyler and Kramer 1996, Rousseau et al. 1998).

Trust typologies

Although there are substantial differences between the trust presented in the rational and the social perspectives, they also share essential characteristics. A first observation is that both rational trust and social trust are intimately linked to activities. A second observation is that trust, specifically and preferably, is linked to activities that are predictable in nature. These claims are illustrated below.

In rational versions, the trustor seeks information about the trustee, as much as is deemed necessary, in order to avoid the hazards of trustee opportunism. Deterrence based, calculus based and cognitive trust forms depend on the predictability of one's expectations, the consistency of expected behavior sustained by the threat of punishment, peer dependability and/or environmental predictability. Risks are coped with, and costs are reduced by the possibility of threats, by the asymmetry and dependence between strong and weak parties, and by the fact that it is rather clearly established what the trustor actually is expecting. Trust is based on the confidence in the predictability of one's expectations (see e.g. Shapiro et al. 1992, Gulati 1995, Lewicki and Bunker 1996, Sheppard and Tuchinsky 1996, Ring and Van de Ven 1994, McAllister 1995, Ring 1996). Trust is seen as a function of self-interest and the establishment of a superior reputation in the community involves conformity to its obligations. The predictability of social life can be seen as an issue of rule following, and trust is therefore a necessary condition for routine social life to be possible (Misztal 1996).

The social view of trust stresses people's desire to maintain respectful relations, and emphasizes emotions and social bonds where different parties identify with one another (e.g. Young 1992, Tyler and Degoey 1996). Related trust typologies include identification-based trust (Shapiro et al. 1992), where one can act for the other without surveillance and monitoring (Lewicki and Bunker 1996). Moralistic trust (Kramer et al. 1996) is presumed to be explicitly predicted on general ethical convictions and intrinsic values. Strong form trust (Barney and Hansen 1994) builds on values, principles and standards of behavior that have been internalized by parties to an exchange. McAllister's (1995) affect based trust (cf. Lewis and Weigert 1985) builds on social similarity. Ring (1996, p. 156) building on Barber (1983), emphasizes the 'persistence and the fulfilment of the natural and social moral orders'.

Consequently, social trust does not build or depend on threats or deterrence for its existence. Such mechanisms are not responsible for creating the predictability deemed necessary for social trust. Social trust is akin towards predictability by normative integration, similarity and conformity. It is predicted on general ethical convictions, such as the general expectation of natural and social moral orders (Barber 1983), or in trust as a basic fact of social life (Luhmann 1979). Social trust, although disagreeing with the self-interested view of economic man, regards motivation to co-operate as a result of collective norms being reinforced by the mechanism of social control. Social trust forms employed in a business setting often find inspiration from research on trust within families, where trust, according to Baier (1986) does not have to be won, it is blind and uncritical. The perception of social trust is occasionally akin to the employment of a behavioral assumption of trustworthiness, i.e. open, other-regarding behavior rather than an assumption of opportunistic behavior (Ring and Van de Ven 1992).

The predictability trap

Predictability seems not to be sufficient to characterize the everyday meaning of trust. It is seen as a necessary but not sufficient condition for trust, but to be meaningful, trust must go beyond predictability (Deutsch 1958, Young 1992, Mayer et al. 1995). Lewis and Weigert (1985) argue that trust is a combination of feeling and rational thinking. Excluding the former would lead to prediction, whereas excluding the latter would be faith. Yet, although contemporary research does not equal trust with predictability, trusting actions depend on predictability in both perspectives.

Zaheer et al's (1998) definition of trust highlights reliance to fulfil obligations and the importance of predictable behavior. Institutionalized practices and routines that shape activities create a favorable, i.e. stable, context within which interorganizational and interpersonal trust develop. Rousseau et al. (1998) interpret trust in terms perceived probabilities, and when summarizing recent thoughts on trust the authors suggest that "In a knowledge based economy, a trustee's competence, ability, and expertise become increasingly important as an indicator of his or her ability *to act as anticipated*" (1998, p. 402 emphasis added). Similarly, Gulati et al. (2000, p. 210) argue that trust is important primarily not only because it reduces transaction costs,

but also because trust functions as a lubricant which enhances the value created in a relationship. However, the value created, as far as trust is concerned, depends on a mutual awareness of the rules, routines, and procedures that each needs to follow.

Strategy scholars' interest in trust is justified by the argument that trust may facilitate value creation in relationships. Whereas the traditional focus has been on trust's capacity to lower costs and reduce risks, recent research suggests that trust enhances value or increases capabilities (e.g. March and Olsen 1990, Ghoshal and Bartlett 1994, Wicks et al. 1998, Gulati et al. 2000). Similarly, Zaheer et al. (1998) speculate that the enhancement of transaction value such as cooperation and the exploration of new information and coordination technologies, new market opportunities, and product and process innovation may account for the link between interorganizational trust and exchange performance.

However, the arguments stressing the importance of stability, routines and predictability, and those suggesting trust's capacity to facilitate the exploration of new activities, create a conceptual dilemma. If trusting actions are to create benefits such as the exploration of new information and product and process innovation, we need to relax our emphasis on fulfilling specific obligations and the necessity of acting predictably. Trusting in predictability is basically a belief in consistency between the things said and those done. Trusting in predictability represents an expectation that familiar things will remain stable. Habit is a means of reducing social complexity, and can therefore be seen as playing the same role as this kind of trusting (cf. Misztal 1996). This implies that trust is qualitatively similar to inductive conclusions one may draw about other things, for example, if what a person normally says is true and consistent, that person will be regarded as a trustworthy person. But if trust merely is constructed out of inductive reasoning, it will be nothing more than reliance on machines or natural phenomena. It does not necessarily establish trust between a trustor and a trustee, a relationship-specific trust. Breaches of trust involve something more than just an inconsistency between word and deed. The point is not that trust is unconditional in the sense that it never fails. It may come to an end, but, rather, there are no conditions specified in advance under which trust may end (Lagerspetz 1992). It is suggested that a dynamic perspective on the establishment of trust, the mobilization of the resource, and an active trusting, represents one way of dealing

with this dilemma. A research model that acknowledges these aspects is outlined below.

Resources and activities

Ghemawat and Pisano (1999) point out that in the analysis of value creation and the origins of competitive advantage there is an ongoing debate about whether valuable resources or activity systems have most to offer in this endeavour (e.g. Barney 1991, Porter 1991). A type of resource commonly regarded as particularly important is the intangible or invisible resource, of which trust is an example (e.g. Itami 1987). However, resources have no intrinsic value, an argument made already by Penrose (1959). She pointed out that the service rendered by a resource that is the primary concern.

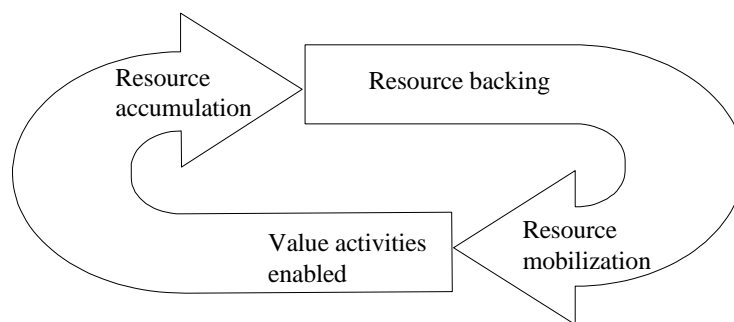
Linking resources, i.e. what a firm has, with its activities, i.e. what a firm does, is therefore crucial for understanding value creation processes. Dierickx and Kool (1989) makes a valuable but not sufficiently acknowledged distinction between resource stocks and resource flows. The stocks are seen as the current set of resources held by the firm at a given point in time and the flows are the activities that use resources and which change the stocks over time. The notion of resource mobilisation involves a transformation process whereby resources are applied and combined into activities with the aim of creating value. Mobilisation involves complementary resources, and the value of a resource is dependent upon whether the firm is able to bundle and connect it with other resources (Haanæs 1999). The notion of mobilisation is similar to the emphasis stressed by Porter's (1991) activity perspective. Porter moves the unit of analysis from the resource to the activity and argues that resources are only valuable if they help a firm to perform activities.

However, there is a lack of prior studies focusing on the resource-and-activity interrelationships. Studies made include Haanæs and Løwendahl (1997), who link a unity of activity analysis with the resource-based view. The study builds on Porter's (1991) emphasis on activities and how they interrelate, but extends it by stressing external and co-operative ventures as well as in-firm activities. Haanæs (1999), study how resources are turned into value creation and suggests that focusing on firm activities may represent an appropriate way to learn more about resources. Løwendahl

et al (2001) approach value creation and knowledge development in professional service firms by combining a focus on resources, value creating activities and the firm's domain choice. Research on dynamic capabilities (e.g. Teece et al. 1997) differs from the resource based view in that capabilities must be developed rather than being taken as given. Skill acquisition, learning and capability accumulation are pertinent in the dynamic capabilities approach. Assets should be strategically deployed in coordinated ways in order to create differentiated capabilities. Dynamic capabilities are the processes that organizations set in motion to integrate, reconfigure, gain and release resources. Eisenhardt and Martin (2000) regard dynamic capabilities as a set of processes such as alliancing and decision making. They use the concept of dynamic capabilities to enhance the resource-based view and suggest that the value for competitive advantage lies in resource configurations, not in the capabilities themselves.

The following research model emphasizes the interrelationship and the complementarity between activities and resources.

Figure 1: Resource Activity Dynamics



Following on Itami (1987) the Resource-Activity Dynamics model (RAD) emphasizes that a firm must have sufficient resource backing to carry out its strategy. In line with the resource-based view is further implied that value creation cannot be understood by analyzing resources as singular and distinct entities-resources are bundled. The issue of mobilization is central and concerns whether the firm's current

strategy effectively utilizes its resources. Resources can be activated in various ways and will, depending on the choice taken, enable certain activities. Whether activities create value and accumulate resources for the future depends not only on what particular activities actually takes place, but also on how activities are performed. The notion of resource accumulation emphasizes that strategy is concerned with not only using a firm's resources and capabilities but also with building the firm's resource base (Itami 1987, Dierickx and Kool 1989). The model implies that a key difference between dynamic and non-dynamic firms is their ability to accumulate resources and to create value from their chosen activities. Specifically, the dynamic dimension refers to a continuous interplay between resources and activities. Constellations of resources back up the strategies of today, which if properly mobilized enable activities that create value and accumulate new resource constellations. This notion is similar to that of Teece et al. (1997), referring to 'dynamic' as the capacity to renew competencies.

A qualitative approach to trust and trusting

The empirical data originates from a case on developments in the on-shore construction business. The case describes two cycles in the RAD model. In the first cycle the parties are building trust by learning routines and procedures that are new to them. In this sense a mutual awareness of the rules is important, but the main activity of the first cycle nevertheless takes the participating parties into a situation that is less predictable than had they stayed with the traditional way of conducting construction work. An essential issue is what is made out of trusting, and in this case trusting implies letting go of what is familiar. In the second cycle the parties continue to mobilize their trust into a trusting that allows them to redefine their roles and relationships on the construction site. This has a significant impact on the organizations' performance.

The presentation focuses on the construction firm Skanska's experiences with a new contractual set-up. Skanska was founded in 1887 and engages in construction-related services and project development. Skanska does everything from small building service contracts to assuming total responsibility for identifying and solving the customers long-term needs of construction-related services. The firm's turnover is

approx. SEK 100 billion. Skanska employs about 80,000 people and have operations in more than 60 countries. It is Sweden's largest construction company.

By employing in-depth interviews and using a semi-structured approach, senior managers of Sweden's four largest construction firms were interviewed in 1996. During 1998 and 1999 senior managers and purchasing managers of Skanska were interviewed once again. During both rounds of inquiry the discussions focused on the firms' international strategies, their industrial recipes (cf. Spender 1989), perspectives on home markets, the significance of being a local actor, and the role of learning. Additional follow-up interviews have been carried out during 2000, and so far 24 interviews have been conducted, lasting between one and a half to two and half-hours.

The objective of a qualitative approach commonly is to mould something in a way which makes alternative or new meanings visible (Larsson 1994). Qualitative work is characterized by a focus on meanings and interpretations. Moreover, it implies watching and interacting with people in their own territory by using their own language (Kirk and Miller 1986). From a positivistic view of research, the case approach should yield testable hypotheses and theory that is generalizable across contexts. Non-positivists are concerned that a rich and complex description of specific cases evolves, allowing for nuances and particularities (Eisenhardt 1989). Lincoln and Guba (1985) suggest that the case study method is appropriate for reconstruction of the informants' constructions. It provides 'thick' description necessary for judgements of transferability, which depends on a sufficient knowledge base for both sending and receiving contexts. Transferability is the naturalistic alternative to the traditional conception of external validity.

Unstructured or semi-structured interviews are preferred when the purpose of an interview is to receive information from the informant's point of view (Spender, 1989). Kvale (1996) argues that the kind of guidance that results from an interviewer's knowledge, for instance expressed in an interview-guide, is an advantage in qualitative research. It provides additional opportunities for the informants to express themselves. Kvale further argues that an interview provides a good opportunity for semi-structured inquiry with a focus on the informant's opinions and views of a particular subject. The interviewer directs the interviewee towards

particular subjects or aspects of a subject, but does not direct the opinions of the interviewed concerning these aspects. Construction management problems are multifaceted and require, from a methodological standpoint, various approaches (Wing et al. 1998). The merits of an interpretative approach in a construction setting have been recorded previously (e.g. Seymore and Rooke 1995).

By drawing on inspiration from an interpretative research method is implied that recognizing the viewpoints of practitioners can contribute to our understanding of the 'real' world (cf. Wing et al. 1998). The 'results' or 'findings' from the case are not constructed but emerged from an interpretative process based on an interaction between researchers and informants (cf. Kvale 1996). The data has been analyzed according to the RAD model and implications from the case are presented according to its logic.

Changing the rules of the game

The strategies employed by an organization are both guided and constrained by the industry's recipe or industrial wisdom (Spender 1989, Hellgren and Melin 1992). Rules, routines and procedures containing the logic of a particular business make up an industrial recipe. One way of looking at the developments experienced by Skanska is to see the transformations as part of a changing industry recipe. The actions taken by larger Swedish construction firms have traditionally been guided strongly by their previous experiences. Examples are the preference to act according to local market requirements and risk-aversion (Östergren and Huemer 1999). The case begins by presenting the traditional ways of dealing with and distributing risks. The transformation that takes place involves another way of looking upon risk, and the basic question is what made this change possible?

Contracting on risk and reward

The culture of construction business has been, and partly still is, characterized by short-term financial considerations, reflected in uncooperative and suspicious attitudes (Seymore and Rooke 1995). According to the conventional industrial wisdom, risks should preferably not be shared but distributed to other parties. Construction projects are commonly treated strictly as economic coalitions with almost exclusive attention to formal forms of contract. The formal contract assumes

special significance in construction management due the cost, complexity, novelty and uncertainty in many projects. Therefore, construction projects often involve several different parties experiencing different levels of risk. A central issue thereby becomes how rights and responsibilities should be allocated (Seymore and Rooke 1995).

Parties involved in construction work are used to work with a variety of different contractual agreements. A common denominator is that the recipe's guidelines with respect to risks are followed, i.e. the focus is upon transferring and not sharing risks. In one end of the spectrum is the cost-plus contract. It builds on the idea that the client takes 100% of the risk, and 100% of the reward. The contractor thereby gets an agreed fee based on its costs. The client retains all cost savings resulting from efficiency or work-scope simplification. From the contractor's perspective, this contractual arrangement commonly leads to reactive and inefficient behavior, besides a general lack of motivation. Alternatively, the parties employ a fixed-price contract. The basic idea is that the contractor takes 100% of the risk, and consequently 100% of the reward. The contractor's internal efficiency is maximized, since it is obliged to complete the work at a fixed price. All savings will be credited to the contractor. However, under similar circumstances, the contract is usually governed by penalties and the contractor is seen to take a protective stance that usually results in a 'claims mentality'. Simultaneously, the influence of the client in the construction process is usually minimized.

Another implication of cost-plus and fixed-price contracts is that they create several firm-specific contracts. Different parties on a construction site thereby tend to optimize their own contract, often resulting in a sub-optimal way of organizing construction activities. The contractual set-up, as perceived by the informants, helps explaining some of the conflicts common in large international construction projects. Despite these shortcomings, this has been the traditional way of working for Skanska, in accordance with the recipe's guidance to good business practice. However, as a response to the problems just mentioned, the Project Alliance contractual form started some 10 years ago and has successfully been employed in the offshore industry. The approach is usually adopted on large scale, complex projects, with a lot of different competencies involved. The Project Alliance idea deviates from the traditional recipe

in that the attitude towards risk and risk sharing is different. The ambition is to make all parties think and act as one unit, since risks and rewards among three or more parties are shared. Participating actors in a Project Alliance could be a client, an engineer/consultant, and a number of contractors. Representatives from each alliance member are integrated into a management team who has responsibility for the operational performance of the alliance. Decision making authority is thereby shifted from the client and/or engineer representing the client to the Project Alliance steering groups. Instead of sub-optimization of a number of individual contracts, the Project Alliance's structure facilitates the advancement of the whole project. The basis of sharing risks and rewards is that problems and opportunities among participants are integrated. A basic idea is to get the members to feel that they are part of the same company and that disagreements are settled as if done within their own company. Consequently, the Project Alliance concept facilitates close relations between the client, the engineer/consultant, and the contractors.

The Jumbo Brewery Project

The construction of the Jumbo Brewery in Kenya is an example of a Project Alliance work site (Sandberg et al. 1998). There were five participating parties in the project; the end customer, South-African Breweries, the engineer Brown & Root representing South-African Breweries, and Skanska, being one among three main contractors. Skanska was responsible for civil engineering work, the other two contractors for transportation/logistics and mechanical work.

The contractual process in the Jumbo Brewery project started according to conventional tendering where the participants were accepted upon individually fixed-price contracts. The preferred bidders were however invited to South Africa, where the Project Alliance idea was introduced by the representatives from Brown & Root. The engineer had first convinced South-African Breweries that adopting the Project Alliance concept could lead to significant improvements for the participating parties, and were now about to address the preferred bidders. The contractors were initially very suspicious. As one informant stated: "Contractors are always very careful, there is the fear of being conned, but also the risk of being open and sharing revenue estimates". The contractors had previous knowledge and experience of cost-plus and

fixed-price contracts. Now they were asked to become responsible also for how others acted and performed, and skepticism flourished among them.

The Brown & Root representative had scheduled an entire week for presentation of the alliance idea. A week is a lot of time, but changing working routines is a tricky matter, as one of the contractors said. During the week a process began involving careful explanation of the mechanisms involved in the alliance concept. The engineer provided examples of how the concept had worked previously, but the process involved several additional steps. The risks involved were experienced differently by the parties, due to different cultural background, varying competencies and previous experiences. This required a lot of communication, being humble and listening to other parties' perceptions of the situation. As one contractor stated, once trust had started to be developed, they also started to review each other's financial estimates of the project. Trust was perceived as important, since they were evaluating to enter a project and to take a common risk. They therefore felt that they wanted to understand the other parties' estimations, that they were reasonable, and that they have covered essential matters. It was also very important, according to the interviewed informants, to get to know the individuals participating there and then. During the week, all individuals stayed together in a smaller place in the suburbs of Johannesburg, they enjoyed breakfast together and spent the evenings in the pub. The social part was perceived as important, and developing these relationships took several days.

At the end of the week the contractors were given an opportunity to participate according to the Project Alliance approach. Turning down the new concept did not equal removal from the project, but participation according to traditional tendering, in this case in line with the fixed-price contract already signed. However, the contractors had successively developed an interest in the Project Alliance approach and a new complementary alliance contract was signed.

Deviating from the known

The effects of changing the interpretation of the traditional recipe with respect to risk sharing were significant at the construction site. The engineer, Brown & Root, could initially remove 15 persons who, under 'normal' circumstances, would have worked as controllers on behalf of the client. The Project Alliance concept enforces and

facilitates internal control. It also became easier for the participating parties to adapt to changing circumstances. An engineer was previously not very motivated to accept a change suggested by a contractor, the risk of deviating from blueprints and already agreed upon construction schedules was considered too large in relation to the advantages that could be gained. However, if a contractor realizes that a different technology or working method will improve the construction in some way (although possibly complicating the work for some other party), the engineer has an incentive to accept the suggestion as long as it benefits the project as a whole. Working in line with the Project Alliance philosophy implies that everyone is affected by individual suggestions. Changes, such as simplified working routines, are thereby more readily accepted. Contrary to previous logic, alterations were noted directly on the drawings after being approved by the engineer. Copies of the drawings were sent to the architect who made the changes accordingly. This flow minimized production disturbances. Resources were shared and combined which resulted in less need for office space. The contacts between the contractors at the site were also described as 'exceptionally good', although most individuals had no previous experience of each other. The parties enjoyed working together more than ever. They shared responsibility for hosting regular parties, they socialized in a manner not previously experienced. The frictions involved in traditional form of tendering had been removed.

It is possible to look at the changes as developments of both organizational and individual identities. On the organizational level, the project alliance concept transforms the emphasis from the well being of the individual firm to the well being of the entire project. This implies a transformation of focus from the firm to the joint product. The concept also facilitates a change of personal roles, e.g. with respect to control. An example is the client's representative at the Jumbo Brewery construction site. The representative was a former officer from South Africa, a large weather-beaten man described as being used to be in charge. His previous role, in line with the ruling recipe, was to control and command the contractors. A contractor was so to speak 'the enemy', at least that is how contractors perceived it, and it was the former officer's job to make sure that they corrected their mistakes along the construction process. In this particular situation, it took some time for the representative in question to adjust to his new role. The client actually volunteered to replace him, but the contractors accepted to wait and see for a while. The former officer turned out to

become excellent in his new role, a role that had shifted from control to co-ordination and support of one team - a team he also was part of. The Jumbo projects resulted in cheaper target price and faster completion than expected.

Interpretation and Implications

The case illustrates two cycles in the RAD model. During the first cycle, the participants are gathered in South Africa. The one-week seminar embodies the resource constellations used and the activities performed in order to reach the objective of the meeting in Johannesburg-to gain acceptance for a new contractual form. Essential resources are brought to the site by the Brown & Root engineer, including knowledge and experience from other Project Alliance settings. Socialization among the actors represent particularly important activities in order to build trust. The trust that was built enabled the participants take a step towards something that was unknown. As one informant put it: “Trust increased during that week, maybe not to 100%, but enough to dare trying working differently”. For trust to be established, the parties had to reach an understanding of the situation and learning about the others participating in the alliance. This process involved, as stressed in prior research, a careful explanation of the routines, rules and procedures that were to govern the new approach. Trust was not built naively by the parties entering the scene with some kind of global belief in an all-embracing trustworthiness. The interactions taking place during the week were not affection based, and on a personal basis the parties had no previous familiarity to build on. Neither was trust built by the calculativeness described by the rational school. Trust forms such as deterrence trust, or ‘simple’ power-dependence does not capture this process. Instead, the parties joined in with a mindful, heedful approach, where they wanted to learn about the alliance idea and about each other. The relationship learning that takes place during the week in Johannesburg is similar to Sabel’s (1993) studied trust, it is not a generalized trust but a trust linked to specific others (cf. Granovetter 1985).

Successively, trust was built. The following question is what was made out of this trust? It was mobilized, i.e. it was put in use by facilitating an activity essential for the actual construction work to be carried out in Kenya-the signing of the Project Alliance contract. By this act, the parties’ mutual trusting took them from routines, rules and procedures that they knew, to something much less predictable. That is the essence of

trusting. Predictability was further decreased since a Project Alliance organizations often have a fast track schedule that usually includes a design-while build element. New demands will arise that cannot be clearly defined at the start of the project. The contract embodies the important resource accumulated by the first RAD cycle in Johannesburg. By constructing a community of common interest (Sabel 1993) the parties managed to mobilize trust and engage in trusting action. In summary, the first cycle involved building trust from the present resources and by performing activities that familiarized the parties with each other. The final trusting action that took place increased ambiguity and decreased predictability.

When the second RAD cycle begins in Kenya, the parties possess a central resource in the new contract. Explicitly stressed values, or intangible resources, in a Project Alliance like the Jumbo example are trust and a 'best for the project' attitude. In order to live up to the intents of the Project Alliance idea, they must continue to mobilize trust in order to enable value-creating activities on the construction site. The major difference between the previous ways of working is that flexibility and adaptation are at the core of the new rules, routines and procedures.

Prior research on trust may disagree in many respects, but if there is a consensus its probably that the twin of trust is risk (e.g. Deutsch 1958, Luhmann 1979, Lewis and Weigert 1985, Coleman 1990, Mayer et al. 1995, Das and Bing-Sheng 1998). During the week in Johannesburg, the parties were aware and preoccupied with the risks involved. But once they started actively trusting on the construction site in Kenya, the awareness of the risks involved seemed to change to a focus on freedom of action.

It appears as if the effects of the Project Alliance approach can give significant gains. By organizing and regarding one another differently, it becomes possible in the construction business to jointly participate and shape product developments, to brainstorm with one's partner and maybe come up with solutions neither party would have discovered on their own. New attitudes emerged at the Jumbo site, attitudes that promoted learning and affected the actual construction activities. When working in accordance with the historical recipe on risks, there were fewer incentives to coordinate the work on a construction site. Each party would have its schedule, and the progress or problems of other parties would be of no concern. By changing the

interpretation of the recipe, the parties increased communication, adjusted their working schedules depending on the needs and ideas of others. Mobilizing trust was essential for the transformation of industry logic to occur. Trusting made possible deviations from routines, practices, basically the norms and values that traditionally have governed rational construction work. The traditional recipe on risks created situations in line with the traditional view of trust. Predictability and conformity were important, and there were little incentives to accept change. Whereas trusting made possible to let go of the familiar ways of working with cost-plus or fixed-price contracts in the first RAD cycle, the second cycle made possible new construction activities that had an impact on Skanska's performance.

Cost reduction is central to the Project Alliance idea and the contractual design implied that Skanska was entitled to a minimum of 16% of all cost savings achieved in the project. The participating parties shared responsibility for completion of the whole project, and the maximum risk taken was to make zero profit. But equally interesting is the new type of value creation logic that is the result from working differently. There is a new division of labor involving a systematic redefinition of roles and relationships among key actors (cf. Norrman Ramirez 1993). Low cost is important but misses the point of the true significance of this example of business innovation wherein trusting is suggested to be central. The third cycle in the RAD model seem to take Skanska from Kenya to the headquarters in Stockholm, where 'the believers' currently are working on convincing other members at home that this approach should be made more common. The guidance given by this study is that this will require another cycle of mobilized trust and active trusting. This means that the trusting that has taken place so far will not generate any long-term competitive advantage for Skanska.

Implications

Resource backing

The attitudinal resource trust at time t1 is a result of an organization's resource constellation and its prior activities. If trust has been built, that probably means that there is an understanding of rules and procedures among the participating parties.

Predictability can ease the establishment of trust but does not mean that all situations, people and problems will be equally approached (Zaheer et al. 1998, Badaracco and Ellsworth 1989). If there is no such understanding, and no possibility to predict at all, there will be no platform of knowledge and familiarity for trust to rest on. Without such a platform, trust would equal naïveté, although prior research finds no such connection (Rotter 1980). Kipnis (1996) argues that it is bothersome to trust, this paper's suggestion is that there is nothing inherently bothersome about trusting actions if a proper resource backing exists. What is proper depends on how much is asked of trust, what one intends to accomplish with it. In other words, how the trustee intends to mobilize trust.

Mobilizing trust

Resources must be mobilized to create value, so also trust. A trustee may choose to mobilize trust passively, i.e. trying to increase predictability by following existing standards. The passive trusting present in both rational and social trust forms develops future trust resources and enables activities by following rules and complying with expectations that are more or less predefined.

An active trusting, here regarded as the essence of trusting, involves a trust that depends on less traditional, less rigid and less hierarchical relationships in the economic sphere (Giddens 1994, p. 187). An active mobilization of trust provides the possibility of deviating from what is regarded as 'business as usual'. The idea of an active mobilization of trust is not incompatible with norms of equity (Ring and Van de Ven 1992), or norms of co-operation (Bradach and Eccles 1989). However, the argument is that something is lacking in a trusting activity that only builds on established routines and habits - a trusting that can cope only with the already specified ways of handling a relationship.

It is suggested that a trust interpreted in terms of perceived probabilities, expected outcomes, consistent behavior etc, will only enable value creation that exploit or single loop previous activities. The consequences of passive and active trusting are addressed next.

Value activities enabled

The single loop learning discussed by Argyris and Schön (1996) is instrumental learning in which an organization adapts within existing knowledge structures. A negative aspect of this kind of ‘learning by doing’ is that it does not contribute to organizational renewal (Cohen and Levinthal 1990). Double loop learning takes place outside established frameworks of working routines. The essence of exploitation is, according to March (1991), the refinement of existing competencies, technologies and paradigms. Moreover, its returns are predictable. Exploration on the other hand, involves experimentation with new alternatives, and its returns are uncertain. Translating this focus on learning to strategic activities makes it possible to link up with Porter’s (1996) distinction between operational effectiveness and strategy. Operational effectiveness implies performing similar activities better than competitors. Porter’s view of strategy means that firms are performing different activities from rivals, or performing similar activities in a different way.

It is suggested that if organizational members’ trusting only allow them to perform within existing knowledge structures and improving operational effectiveness, they may want to reconsider their mobilization of the trust resource and engage in active trusting.

Resource accumulation

The traditional focus among RBV scholars is to stress that resource heterogeneity brings Ricardian rents (Peteraf 1993). Such rents originates from the possession of superior resources, i.e. the returns earned by resources over and above that required to bring it into production. This study suggests (1); that the resource trust must be mobilized to create rents, and (2), that an active trusting may lead to Schumpeterian rents, i.e. by gaining acceptance for innovations by combining new resources or by combining resources in new ways.

Defining trust and trusting

Like any other intangible resource, trust is difficult to define. Paraphrasing Kreiner’s (1999) discussion on knowledge it can be argued that the definition of trust cannot be premised on fixed definitions but must develop its own conceptions in due course.

That someone trust's another is however interesting from a strategic perspective since there exists a resource that can be mobilized. Building on the implications of this study, trust is defined as a psychological state comprising tolerance of another's freedom of action under ambiguous circumstances.

Trusting is seen as a dynamic capability, i.e. trusting actions are inherent in processes that organizations set in motion to integrate, reconfigure, gain and release resources. It is a 'meta'-capability due to its potential impact on other dynamic capability processes such as alliancing and decision making, which was indicated in the Skanska case. The capability of trusting is defined as the actual giving of freedom of action to another under ambiguous circumstances. Hence, whereas the twin of trust is risk, the twin of trusting is freedom of action.

Sources of competitive advantage

The idea of a sustained competitive advantage constitutes the nirvana of the strategist. Porter (1980, 1991) suggests that competitive advantage comes from a unique position in an industry and from linking activities in the value chain. Resource based scholars such as Barney (1997) stresses the importance of valuable, rare, inimitable, and organized resources. Eisenhardt and Martin (2000) suggest that the potential for long term competitive advantage lies in the way that dynamic capabilities are being used in order to reconfigure resources. This is in line with RAD analysis, with the addition that the newly reconfigured resources must be mobilized and utilized in new value creating activities generating a never ending interplay between resources and activities. Long-term competitive advantage cannot lie neither in the dynamic capabilities nor in the resource configurations they 'produce', but in a *continuous interplay* between resources and activities. Consequently, despite their importance, neither trust nor trusting are sources of long-term competitive advantage.

Conclusion

Trust appears to enhance value when a trustee follows rules, routines, and procedures thereby making it possible for a trustor to anticipate the trustee's behavior. Truly important value creation activities are however explorative in nature, and that means

that they are, per definition, hard to predict, anticipate and interpret in terms of perceived probabilities. This creates a value creation dilemma for trust.

The paper suggests that previous research has failed to highlight the essence of trusting. Predictability is arguably important foremost when trust is to be built. However, trust is not an interesting resource by the nature of things, and must be mobilized to create value. The essence of trusting is suggested to the capability of gaining acceptance for actions that deviate from customs and conformities, thereby reducing predictability.

Future research needs to take account of the processes wherein trust is built, mobilized and redeveloped. It is certainly so that routines, standards and the possibility of prediction matters for trust. However, we need to know more about when to follow routines and when not to, which one's that matters for trust and when and how it is possible to deviate from them by mobilizing trust actively. When the trust resource is mobilized properly, the capability of trusting will have a greater impact on an organization's value creation by enabling activities that are explorative rather than exploitative in nature.

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