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The value of trust in project business

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Abstract

The paper works towards establishing value for trust in project business, particularly the financial value of trust to project business. Concepts of trust are revisited. Rational explanations of trust are shown wanting, calculations of trust and danger being misrepresentations of how the willingness to trust is formed. The paper argues for the need to establish the interpretative and socially constructed nature of trust, primarily based upon prior experiential and psycho-motive learning in relation to current situational factors. Trust and its relationship to forming expectations and generating confidence are considered. Empirical findings are mobilised to show how trust contributed to value in a financial sense. Value is not an absolute in this context for value is empirically and theoretically shown to relate directly to expectations. Value is defined as an asset and is thus part of social capital for projects and in embedded in firms.

Keywords: Confidence; Judgment; Learning; Project business; Trust; Value

1. Introduction

This paper addresses the question of the value of trust in project businesses, particularly the value trust brings to projects. The aim is to work towards establishing value for trust on the supply side and to the customer. One of the obstacles to doing so originates with the theoretical approach to conceptualising trust in the positivist tradition, so trust theory is revisited in this paper. The objectives of the paper are to: (i) argue that trust is not a rational judgment, thus, not a calculation; (ii) show trust is socially constructed from learning and subjectivity; (iii) to show judgements informed by trust provide a realistic and viable basis for developing confidence; (iv) show trust provides a realistic and applied basis for proceeding with business decisions. The paper rallies empirical data to show that subjectivity indeed informs the willingness to trust and is mobilised by actors to make judgments about other parties as part of sound business decision-making.

The first section considers the context of project businesses and projects in relation to trust. This provides a basis for revisiting the conceptual basis of trust in the next section. A range of empirical research of project examples is then reviewed and a more in-depth analysis, based upon theory and a range of data is considered to tease out the value of trust. The paper concludes with a brief summary and recommendations for further research and management practice.

2. Context: the case of project business

Projects are becoming more complex. The areas of uncertainty and attendant risk are proportionately increasing. Thus, demands from customers upon suppliers are greater than at any previous time. Whilst the "credit crunch" may arrest, even temporarily reverse this trend,

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the long-term growth in complexity appears unchallenged. The consequence is that projects have more complex and intangible requirements that are difficult to articulate and make explicit for customer and hence supplier without cooperative dialogue (Edkins et al., 2008). The technical scope is growing and thus specialist requirements have driven the trend towards outsourcing to a wide range of suppliers, which has the perceived benefit of risk spreading. In turn this increases demands upon systematic integration of solutions and poses problems for cooperation to identify and deliver added value with "joined up thinking". One example, frequently heralded as a successful construction project is the recently completed Terminal 5 at London Heathrow Airport (although the post-completion opening did not mirror the level of collaborative rigor of the project).

Suppliers are expecting higher rewards from successful management of such projects. Premium profits overall pose particular problems on projects of high complexity and uncertainty, compared to standard service packages and product manufacture. However, premium profit on added value components of the project service and 'product' are not unreasonable or unachievable in most project markets. It is recognised that some project markets are highly competitive and contested. In these circumstances rates of profit may not increase, yet opportunities for repeat business and referral business are enhanced by adding service and 'product' value. Many of the repeat business customers are sophisticated procurers. Whilst using market power to drive down prices through competitive tendering and stringent negotiations, recognition that an element of premium profit and high repeat business levels are accepted, especially where cooperative behaviours lead to greater (shared) efficiency gains and improved effectiveness. Most sophisticated project customers have come to expect added value and are used to these parameters across the full range of procurement activities (Pryke and Smyth, 2006).

On the one hand, successful technical developments and improved management techniques and applied concepts (e.g. just-in-time, lean and agile production) have helped increase commoditisation and standardisation of services and products. Although this has not been so dramatic for projects due to the inherent complexities and uncertainties, some progress has been made on these fronts. On the other hand, the inherent nature of most projects, coupled with the increased demands for added value is in parallel also increasing the need for tailoring the services and 'product', in ways that are informed by the "soft" and more intangible goals that strategically inform and drive the project as the solution to societal and organisational problems.

The consequence of these long-term trends and inherent features is that complex systems are being developed, which are interacting technically, managerially and inter-organisationally. These interactions are frequently generating unforeseeable consequences, typically coincidences, combinations or the 'collision' of various critical events (Storbacka et al., 1994; Pryke and Smyth, 2006). Indeed, many projects are characterised by the management of these critical configurations. At a micro-level of analysis, many project managers spend most of their time addressing and resolving these types of issues. This generates tasks, actions and activities that are beyond the scope of most project bodies of knowledge and project programming models.

One of the main features in addressing these tasks and managing the critical configurations is the cooperative effort within organisational project teams and the cooperative effort generated across temporary multi-organisational teams (Cherns and Bryant, 1984) and project coalitions (Winch, 2002). Such organisational and inter-organisational cooperation operates to a large degree upon trust. Therefore, the effectiveness and efficiency of these tasks and activities is also dependent upon the depth of trust. Trust is necessary between organisations in order to preserve and develop quality in the project in the face of unforeseen events. The mobilisation of trust to help manage these issues is closely related to how much trust has been developed prior to events. The amount of trust that has been developed prior to such events is related to the extent to which trust is present by 'accident' or 'happy coincidence', how much individuals have taken personal responsibility (in aggregate) to ethically manage their behaviour to build trust, and how much management of the respective organisations and for the project have actively invested in, facilitated and directly develop trust.

The management of trust is beyond the scope of this paper, yet the value of trust in project businesses and dyadic trust with customers is clearly related to the extent of active trust management (Gustafsson et al., 2009). It is recognised that there are counter-veiling forces, not least market factors and market power of the organisations concerned. At one level these remain present and operate in terms of equity. Trust can be developed and managed in such environments and indeed is necessary for market functioning (Smyth, 2008); however, trust tends to develop quicker and to deeper levels in environments of equality. The same applies within organisations and within teams. Market power, organisational hierarchy and associated management control are the issues of equity rather than equality, creating tension. Tension can induce conflict; yet can provide checks and balances in the overall outworking of management with trust as a necessary component.

This analysis sets the context for conceptualising and defining trust in the project business sector. Trust theory is therefore the next area to be examined in this paper.

3. Trust theory overview

The search for absolutes and imperatives in philosophy has meant that trust has not been a central part of philosophy over many centuries. Trust has tended to serve what is dominant in culture and activity through relationships. Towards the end of the last century this began to change.

Trust was beginning to occupy a more central position, particularly filtering through from psychology (e.g. Gilligan, 1982), sociology (e.g. Luhman, 1979), theories of organisational behaviour (Gambetta, 1998; cf. Baier, 1994) and some parts of economics, for example transaction cost analysis and game theory (e.g. Rachels, 1985; Donaldson, 1989).

Two traditions have emerged epistemologically. There have been those that believe trust is an important element in all relationships and those that believe it is foundational to relationships. The neoclassical tradition tends towards adoption of the former position, thus a considerable body of theoretical and empirical work has sought to identify antecedents to trust (e.g. Dirks and Ferrin, 2002; Bijlsma, 2003 in management; Wong et al., 2000 in projects). The problem is, despite author claims to build upon previous work, the findings are frequently conflicting and contradictory, leading to the conclusion that these factors are contextual rather than recurring antecedents (Smyth and Thompson, 2005). In contrast interpretative traditions tend towards seeing trust as foundational in forming and maintaining relationships (Baier, 1994 regarding managing relationships; Smyth, 2008 for managing project relationships). Seeing trust as foundational does not mean trust is either an absolute or a categorical imperative in philosophical terms. As a relationship foundation, trust serves any absolute and categorical end through relationships. It also serves other ends, such as nurture and care, for example seeking compromise to preserve a relationship in a given context (Gilligan, 1982).

As with many key concepts, there is no agreed definition. Arguably, Rousseau et al. (1998) provide the most commonly quoted in recent times, albeit with a rather psychological emphasis. Development of a definition to reduce the psychological content, although influenced by Rousseau et al. (1998), for a project setting and enhance the market and legal context is reproduced below:

> *Trust is a disposition and attitude concerning the willingness to rely upon the actions of or be vulnerable towards another party, under circumstances of contractual and social obligations, with the potential for collaboration.* (Edkins and Smyth, 2006, pp. 84)

This is not proposed as definitive in the sense of requiring adoption. It provides a point of definitional departure for this paper and a shared basis of understanding, yet there is still work required to identify the source of trust (Gustafsson et al., 2009). Whilst project-related research frequently looks back to make detailed assessments of trust formation (e.g. Swan et al., 2001; Thompson, 2003) and its presence (Hannah, 1991; Smyth, 2005), trust is also looking forward (Good, 1988; Gustafsson, 2004). In other words, being willing to be vulnerable is looking forward to outcomes that have yet to take place and cannot be known. There is uncertainty about outcomes, but there are expectations of the possibilities. The sense is that trust is needed where there are uncertainties, the belief in the other party being a sound basis on which to proceed to seek positive or good outcomes. Therefore, trust is not some rational or irrational risk calculation (Dasgupta, 1988; Luhmann, 1988; Williamson, 1993) trust informs an assessment of a situation and an important part of the way judgment – an evaluation of an event and those involved rather than an assessment or opinion which is held onto (Smyth, 2008) – about another party is conducted (Lagerspetz, 1998). In other words, a judgment is dependent upon a range of factors. The presence of another party engaged with those factors is helpful, potentially reducing uncertainties and attendant risks. How helpful the other person is depends upon, for example, their competency and social skills, that is, how the other party can effectively engage with the situation at hand. In between the trustor and the situation is the other party. Between the trustor and the other party is a relationship. This is a contextual issue and the quality of the relationship becomes part of the judgment. How helpful the other person is depends also upon the expectations in and judgment about the relationship. Trust directly informs this. There are two elements to this information. First is the disposition and attitude of the trustor, which is informed by their personal history, and affects their willingness to be vulnerable. Second is the question of perspective of the trustor of both the situational factors and the relationship factors. This is a matter of subjective interpretation by the trustor. Interpretation is necessary to give meaning and understanding to the factors, including uncertainties and ambiguities. Any interpretation will be influenced by attitude and disposition. Such interpretation is typically conducted intuitively, that is "gut feel", rather than through some rational and thus cognitive process. Parties are not always fully aware that such judgments about trustworthiness are being made.

This twofold process of informing a judgment is therefore not calculative, as used in transactional cost analysis (e.g. Williamson, 1993), in the sense of an objective or subjective yet cognitive weighing up of the personal balance sheet of another party's trustworthiness. It is sometimes wholly and usually mainly intuitive and a judgment tends to be at the extremes – the person or team can or cannot be trusted. A finer grain of calculative analysis is seldom present. Such judgment of extremes does not imply inflexibility. Relationships are iteratively assessed and reviewed in this way and views change. A lack of tacit or explicit evidence may result in proceeding with caution until sufficient evidence is perceived to be present, but this is not a fine grained calculative analysis required in transaction cost analysis and game theory. The trustor may not even be conscious of a cautious process of arriving at a view of the other party's trustworthiness.

Thus, the willingness to trust is informing a judgment. It is not a judgment *per se* (cf. Dasgupta, 1988; Luhmann, 1988; Williamson, 1993), based on previous personal experience and largely experiential assessment of the situation. This is intuitive and subjective, just as the relationship between trustor and trustee is subjective. In other words,

the way trust is informing a judgment is based upon prior learning, such learning producing tacit knowledge in a highly intangible form. To further put the willingness to be vulnerable in order to be able to assemble evidence and make an intuitive judgment in a way that calculative defensive action based upon fear constrains into a context, conceptually learning provides a useful mode of examination. One way of classifying learning is *cognitive* (head knowledge and learning), *experiential* or *affective* ("university of life" and "gut feel" which includes emotional engagement), and *psycho-motor* learning (repetitive in the sense of physically learning to ride a bike or management coaching – learning by doing again and again). Most literature sees trust as a positive and rational construct that is largely derived from cognitive learning and assessment. The problem with this traditional view is that trust is perceived as 'dangerous' in much of the literature, that is, vulnerability is problematic and invokes fear where certainty is highly desirable. In reality uncertainty and ambiguity prevail, especially in projects. In the reality the presence of the other party, as stated, is generally an improvement upon the absence of anyone or any trust. Therefore, the other party is not creating danger *per se*. How the other party or parties behave as individuals and in teams is important. The behaviour provides the raw material and the relationships the medium in which the intuitive judgments of trustworthiness are made. Intuition relates to how people feel. Thus judgments around trust are emotional and based on experiential learning, repeated patterns acting in psycho-motor learning that helps gives rise to a predisposition to trust.

The misguided yet more frequent analytical emphasis is upon cognition. Cognition is embedded in positivism, partly because epistemologically positivism sees the world constituted according to what we cognitively know. However, things exist whether we know them or not. Objects of study cannot always be formed or necessarily known cognitively, trust being an example. People are the way they are and the closest we can get to see how they are is by looking at their interaction and association with other people. Trust is in evidence indirectly through behaviour and is experientially assessed. The calculative position is therefore misconstrued.

This challenge to seeing trust as calculative as part of positivist cognition, also raises a challenge the predominance of self-interest regarding trust. Self-interest is undoubtedly present, including self-interest with guile. Yet even self-interest is not as calculative as management science and economics typically require in order to support their assumptions and analysis. The ultimate logic of self-interest is that all our actions become mechanistic, deterministic, even Skinnerian (Skinner, 1971), and ultimately meaningless along with related terms such as egoism or altruism. These common terms, including self-interest (especially with guile à la Williamson) are used to describe behaviour deviating from the norm in some way. However, the underlying assumption that there is a 'norm' or neutral zone between good and bad behaviour is a misconception of the human condition. A neutral norm takes the argument back to either mechanistic meaninglessness or the reverence of a non-thinking emotionless society where deviation from the norm is to be sanctioned or eradicated. 'Neutral' behaviour only exists when informed by values, attitudes, beliefs and knowledge. Neutral behaviour is therefore an option rather than a norm. Rationally and logically informed behaviour and action is far from neutral; it is positive.

Simple selfishness and defensive action can also be intuitively informed and formed. Of course such actions can be intuitively picked up by other parties as part of a judgment about trustworthiness. Moreover and importantly, many actions are not informed by self-interest or by self-interest below. Ghoshal and Rocha (2006) argued that many actions cannot be boiled down to self-interest nor matter how Herculean the reductionism applied. Self-love may lead us to do socially orientated and sometimes sacrificial acts. Even though these acts may make us feel of value or increase our self-worth in some way, this can never be pure self-interest as cognitive calculation would not lead us into these acts alone. This social orientation is recognised in some economics (Lyons and Mehta, 1997) and it is important that remains ascendant as a social orientations provides a source of co-created value as social capital (Prahalad and Ramaswamy, 2004a,b).

The classical cognitive argument is therefore epistemologically weak. The cognitive argument that customers defect can be traced back to Hobbes is a philosophical misunderstanding that behaviour is based upon suspicion and doubt (Gustafsson, 2004), yet, as Wittgenstein (1992) points doubt is based good reasons. While projects are uncertain environments and people do not always behave in predictable ways, a presumption of doubt is based upon fear and insecurity rather than rationality or intuitive reading of the situation. People do not perform well under prolonged conditions of insecurity and fear, so this is a recipe for poor behavioural and project performance. Whilst some people may predominately operate out of insecurity (informed by their personal history), many first look for good reasons to trust (or at least not distrust) rather than doubt, which is reinforced by any contract of exchange and must be based on an element or foundation of trust to take place – a pragmatic line of thought that epistemologically stresses fallibility and anti-scepticism (Putnam, 1999; Toulmin, 2001) or a critical realist epistemology that stresses the ontology of relationships and trust being causally mediated by contextual conditions and contingencies (see Smyth and Morris, 2007; Smyth, 2008). Thus this line of argument rests on the assumption that there are different kinds of suppliers, some are good some are bad. The character of the supplier is largely experientially formed in the customer relationship and evolves continuously. In this setting, if for example the supplier has consistently performed in a committed and trustworthy manner, doubting his intentions would seem unreasonable. In fact, as Lagerspetz

(1998) points out it is considered a measure of sanity not to hold certain suspicions. Consequently, trusting the supplier is not particularly risky, being blind nor gullible – it sane, reasonable and even rational – and is part of the iterative sense making process during the life of supplier–customer interactions.

Therefore, the intuitive position, which combines experiential and psycho-motor learning, is more pervasive and provides a more realistic basis for understanding trust development and the formation of associated social capital. In this sense these factors of trust formation lead to the willingness to be vulnerable, which becomes a social investment. However, it is not an investment that carries the same risk profile that prevails with traditional economics and transaction cost analysis. The possibility of trust reduces the likelihood of risk being manifested in contrast to the misconstrued 'rational' approach that perceives trust as inherently dangerous and hence risky (Gustafsson et al., 2009). Furthermore, social and moral capital appreciates with use, whereas investment in other things depreciates with use (Baier, 1994; Smyth, 2008) – trust therefore tends to create a virtuous and reinforcing spiral, which tangible feeds into value as demonstrated later.

The argument leads us to explore a new definition of trust. It is proposed as being comprehensive and complex, reflecting the dynamic and complex tangible nature of activities and events – engaging with and mediated through personal and organisational relationships – and the intangible nature of trust in terms of direct observation:

> Trust is a current conviction that another party is willing to take individual and organisational interests into account within the context and under possible events. Trust is intuitively, sometimes part-cognitively, assessed concerning the other party from recent past performance and longer term reputation through the lens of personal history hence experiential disposition to trust, coupled with organisational capability (cultural, systemic and procedural path dependency) to accommodate trusting relations. The presence of a trusted party: (i) reduces perceived (interpreted or 'subjective') risk; (ii) renders the relationship, organisational and project context more conducive to further (real or 'objective') risk reduction; (iii) creates organisational and project opportunities to improve the service and content quality.

If the trustor senses the other party is not to be trusted, then distrust prevails. Distrust is not necessarily negative even though selfish opportunism may flow from the other party. Awareness of distrust simply allows the trustor to take other measures to mitigate the distrust. The only 'dangerous' position is where the situation is judged incorrectly and the way the judgment is informed leads to mistrust, but the error lies with the trustor and not the other party.

In business this is moderated by the organisational context, particularly the norms and routines embedded in the culture and operational systems that inform the dyad (see stage 1 in Fig. 1). Trust may then be explored and inform a judgment (see stage 2). Interpretative factors come into play in stage 3 as the relationship matures which are informed by both stage 1 and the unfolding of stage 2, plus expectations for subsequent stages. As positive evidence arises in the relationship, the weight of iterative evidence does give rise to experiential assessment that trust exists and is prevailing, including some calculations of probabilities. This calculative element occurs where the weight of evidence is sufficient to turn expectations about future behaviour and action into confidence. During stage 3 intuitive judgment may evolve into more conscious judgments in the form of subjective interpretation. Interpretative factors may accelerate of retard this conversion, as depicted in stage 3. Tangibility is increasing, justifying the transition to confidence if the relationships are positive experiences (see stages 3–4).

Confidence matures towards stage 4, Fig. 1. Confidence is more cognitive, hence the probability element. Whilst rational positivists tend to conflate trust and confidence (Luhmann, 1979; Williamson, 1993), it is not surprising given the cognitive emphasis. The experiential and psycho-motor dimensions of trust aid the distinction between trust and confidence. The presence of confidence allows expectations to rise and trust to potential move to higher levels – see stage 5 (see Edkins and Smyth, 2006; Smyth, 2005, 2008). Even if trust started as mutual self-interest to secure supply and a contract, as trust develops and confidence builds a switch occurs from primarily self-interest to having a greater social orientation (Lyons and Mahta, 1997) – looking to the other party in the future relationship on a project of for repeat business (Baier, 1994; Smyth, 2008).

Unlike trust seen through rational positivism, this does not proceed with calculative or mechanical precision or determination. It is open to subjective interpretation, which can be a mix of current tacit and explicit perceptions. Interpretations are also affected by previous project track

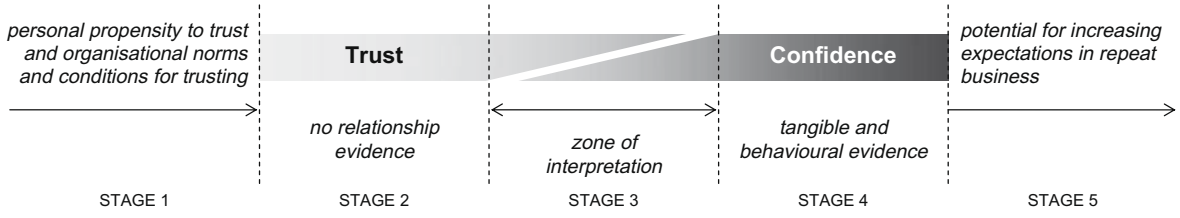


Fig. 1. Dynamic aspects of trust development.

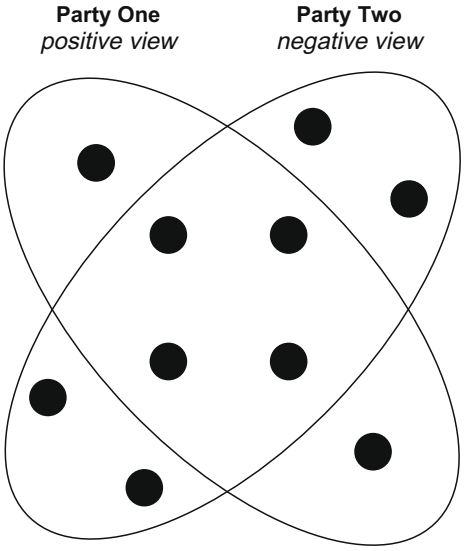


Fig. 2. Differing views of supplier's project track record.

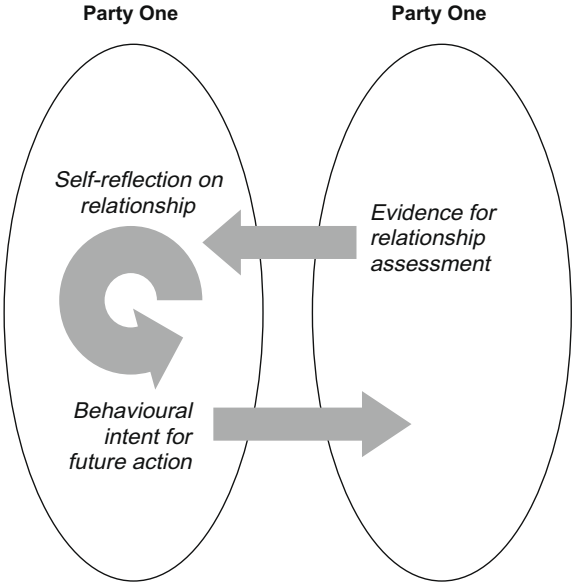


Fig. 3. Self-reflection for relationship trust.

record. For example, two actors may view the same pattern projects undertaken by a single supplier in a different way, informing their judgment of the other party (Fig. 2).

In Fig. 2 both parties share the same perception of the core four events or projects. It is the outlying events or projects and the interpretation of them that give rise to the positive and negative views. The outlying events may even be the same for both parties, yet the interpretations differ. These aspects also render the assumptions of game theory based upon rational calculations superfluous to analysis. The bounded rules of game theory do not conform to reality, and the intuitive and experiential aspects of judgments further undermine game theory applicability (Rachels, 1985; Donaldson, 1989).

This whole process is also influenced by prevailing conditions in the external environment, in the project as well as relational factors discussed (Butler, 1991; Thompson, 2003). These conditions are affected by investments in certain inputs, which are behavioural intents that can become organisational capabilities or competencies for the supplier: integrity, receptivity, loyalty, discretion and openness. These inputs are designed to produce outputs that enhance value for the customer: consistency in service provision and product quality, promise-fulfilment, fairness, competence, and availability (Smyth and Thompson, 2005).

One party can make a judgment in a number of ways about contextual conditions that are in a relationship and that impinge upon a relationship, including organisational factors. Such judgments can effect future perceptions and interpretation (which aligns with Fig. 2), in turn effecting behaviour towards the other party (aligning with stage 3 in Fig. 1). If the judgments are too positive they can lead to interpretations that overlook detrimental behaviours and performance outcomes, whereas negative judgments without forgiveness and tolerance can set the other party up for failure in advance of the next project (Smyth, 2008). As Gustafsson (2004) makes clear, it is therefore more useful if self-reflection is used rather than blame (Fig. 3). This is important in understanding the dynamics of trust, yet also important for investment in and proactive management of trust. Self-reflection is part of the process of turning the relationship generally and trust specifically into social capital, that is, trust as part of the relationship value, hence asset to the customer, and trust as goodwill and reputation in the wider marketplace. Whilst there is a clear value implication from proactive management, the purpose of this paper is to unpack the value of trust in project businesses, rather than set out prescriptive action.

Such self-reflection provides linkage and a basis to other conceptual areas for further management development. For example, it links in with notions of service development and the professional development of project management through Schön's work on the reflective practitioners (Schön, 1983). It links in with the resourced based view of the firm (Penrose, 1959; Wernerfelt, 1984) and the allocation of resources to develop trust as a dynamic capability or core competency (Hamel and Prahalad, 1994; Teece et al., 1997). It also provides a basis for developing particular types of relationship and organisational behaviours, for example codes of behavioural conduct (Smyth, 2008), which are potential avenues for prescriptive and normative actions beyond the scope of this paper.

The next section examines evidence of trust in project business and a range of project situations.

4. Trust on projects and in project business

Numerous studies have considered trust as a factor on projects. Few studies have analysed trust as one project fac-

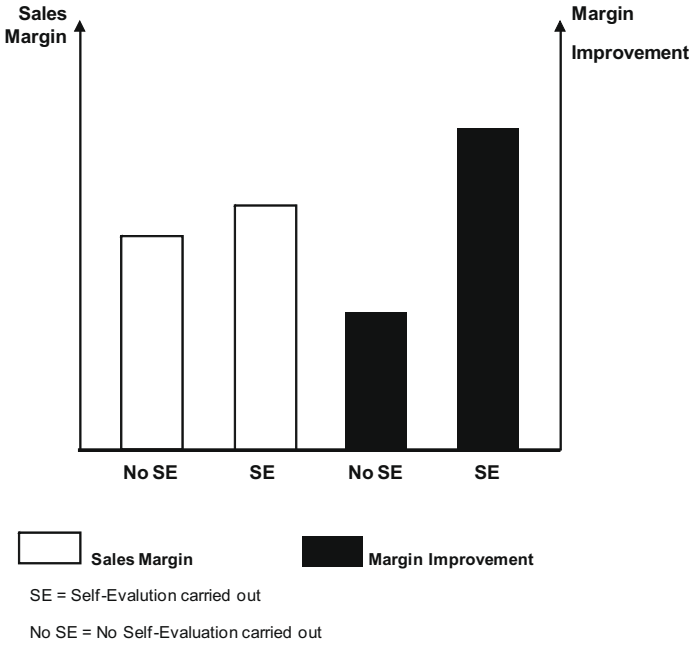
tor and value has been neglected. Some of the studies of trust *per se* have alluded to value issues, for example, on the one hand high trust levels across a project design team and with the client was perceived to be reducing transaction costs and maximising creativity and problem solving (Smyth, 2005), whilst on the other hand a lack of investment in trusting relationships across a series of PFI projects was starting to directly increase transaction costs and indirectly increase operational costs (Smyth and Edkins, 2007; see also Edkins and Smyth, 2006).

The empirical data on value is drawn from research into project supplier–customer relationships. The data is from two sources. The first source is qualitative and quantitative data from ongoing research, known as CROL©, of large and complex international projects – CROL© is a process for managing business relationships which is used globally by a number of project business companies and is operated by the Research Institute for Project-based industry (PBI) as an independent research institute. The second source is data from large complex projects collected through 333 interviews from around the world. The data concerned a range of issues, including trust and trust-related issues (Gustafsson, 2002).

In the literature review and analysis it was shown that trust is neither something that arises through cognitive calculation nor from antecedents, but that it is a foundational issue in relationships. The CROL© data demonstrates that project businesses who invest in nurturing relationship or have a culture plus norms that foster trusting behaviours have higher rates of profit than those that do not – see Fig. 4.

Therefore, having an outwards focus of a social orientation as a company and through individual behaviour in order to serve the interests of the customer, also serves to yield higher profit levels for the supplier. Whilst this is not proof of high levels of value delivered to the customer and potentially higher levels of customer satisfaction, this does show the financial value to the supplier, which has been echoed in other recent work (cf. Chambers et al., 2009).

Drawing upon the interview data, attention to customer benefits in general and value in particular is the main focus. The following three project examples from the interview data set illustrate the formation and effects of trust in project business in contrasting ways. Both cases take place in isolated tropical locations. The first project had suffered a high number of technical breakdowns and safety incidents. The installation had been out of operation for long periods of time, which had impeded business operations. Yet the customer was very satisfied. The reason was that the response from the supplier had been very positive with the supplier keeping staff at the installation for long periods to work on the installation. The customer came to trust the supplier, as there was evidence that the supplier was focusing upon the interests of the customer. This trust was established through the management approach and individual behaviour, even though it could have been argued that technical competence was lacking which may be a source of eroding trust. Behavioural competence appears to be stronger than technical competence for this customer. This customer focused, socially orientated behaviour signalled a strong commitment from the supplier.



Source: Keynote address by Ole Johansson, CEO Wärtsilä at IPMA World Congress, Helsinki June 15th 2009

Fig. 4. The effect of reflection through self-evaluation (SE) on sales margin and margin improvement in the delivery phase.

The second case took place nearby and involved a single and small incident. The incident took place during a test run and had not impeded business operations. However, the customer was very dissatisfied. The reason was that the supplier had from the start taken a very defensive approach and dismissed the customer's analysis of the situation, preferring to blame the customer for the incident. The response from the supplier was also very slow according to the customer. At the end the supplier admitted that the customer was right in faulting the equipment. But this was only after months of arguments and additional costs from investigations, which could have been avoided altogether in the first place had the supplier not been so defensive. The transaction costs were extremely high, especially in comparison to the size of the incident. This self-interested and defensive behaviour signalled a lack of commitment from the supplier.

However, a strong response is not enough to secure the customer relationship. The third example involves a customer who had suffered a series of breakdowns. The response from the supplier had been very positive. The supplier had flown in staff that had spent long periods and at one point, according to the customer, even built a copy of the installation at the factory to solve the problems. But the problems persisted and finally the customer came to think that the supplier, for all good intentions, simply did not have the technical capability to deliver a functioning installation. In this case as in the first example, the customer seemed looked to the behavioural competence first. However, the long-term evidence of the lack of technical competence eroded the relationship, demonstrating that trust is a configuration of hard and soft issues. Yet, this case suggests, soft issues seem to prevail in the short and medium term, adding weight to trust being foundational to socially constructed relationships.

The examples illustrate ways in which customer perceptions of the suppliers evolve. The customer view of the supplier if largely formed on the basis of performance, yet service performance of the supplier took precedence over technical performance. This accentuates the socially constructed nature of business relationships in general and the specific importance of trust. The cases implicitly confer significance to the intuitive development of the supplier–customer relationships. Metrics based upon cognitive evidence would have led to contrary calculations compared to some key the decisions taken in the three cases. The evidence in these cases does confirm how social capital develops in relationships. It was argued in the analysis that responsible and ethical behaviour is an appreciating asset as it is used, contrary to the traditional economic view that assets depreciate. When the customer holds a positive view of the supplier, then a positive event accentuates the view held whereas a negative event is dismissed and vice versa, thus forming a virtuous or vicious circle. The circle can be broken but that requires a sequence of events such as in the third case where the customer eventually changed from positive to negative, faced by a considerable weight of evidence. The change in perception means that a new interpretation based on a different pattern of events becomes the prevailing one and positive events are merely seen as deviations from the rule, as depicted in Fig. 2.

The evolving view of the customer has a direct financial connection in that it forms a basis for how the future is seen. In case one the customer looked to the future with confidence. Not only had the supplier performed well under normal circumstances, when the "going got tough the supplier really got going". The customer could therefore reasonably expect the supplier to perform well during future incidents as well. In cases two and three, the future did not look bright. In both cases they expected the supplier either to lack the necessary commitment as in case two or the necessary technical skill illustrated in case three. How customers perceive the future is illustrated in Fig. 5. The figure shows how the perceived value of the project evolves over time. At the outset of sales negotiations the customer maybe unsure which supplier to choose or whether to proceed with the project. During the negotiations the customer view of the supplier is strengthened

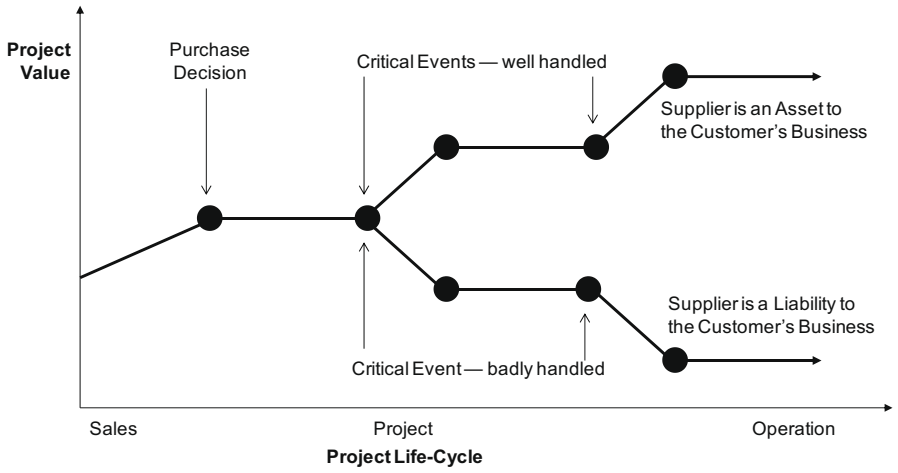


Fig. 5. The evolution of the customer's view of the supplier and the perceived value of the project.

and the project seems increasingly feasible, profitable and a purchase decision is made to go-ahead). The project proceeds as expected, but then an unforeseen problem arises – a critical event. The supplier handles the problem well and the customer forms the view that the supplier is able to present a good case and perform as expected. This increases the perceived value of the project as the customer discounts the future problems (the upper line in Fig. 5). Alternatively the supplier does not handle the situation well. The perceived value of the project then decreases as the customer, based on the view of the supplier, discounts the future problems of the installation (the lower line in Fig. 5). That there will be future problems and challenges is in both cases inevitable. Yet the effect on the business outlook is significant. The customer has made the investment, is sitting with an installation and a supplier relationship, which can either be an asset (case one and the upper line) or a liability (cases two and three and the lower line).

5. Establishing the value of trust

The section above shows some positive financial attributes to trust and certainly the negative value due to low levels of trust through high transaction costs and to a lack of trust. Establishing a more concrete argument beyond the perceptions of certain customers is necessary and the purpose of this section. Whilst trust is intuitively assessed, which is mediated in the context specific interpretations for any event, relationship or project, across the market or in a market segment customers and suppliers, the assessment is far from subjective. Customers and suppliers aggregate their subjective experiences to take informed and more objective decisions, that is, based upon confidence and probability calculations.

The financial impact of how the supplier is seen by the customer can be seen in the following market analysis, which was carried out in two phases. Analysis was conducted of the correlation between 408 customers purchasing behaviour and feedback given to the supplier as part of CROL©. The data included customers from about 30 countries representing about 20% of the supplier's annual sales or about €200 m. The purchasing data included data for two consecutive years. The purchasing data was related to the size of individual customer operation in order to identify sales in relation to potential sales. Feedback data covered two consecutive years and included both customer feedback and customer-specific self-evaluations done by the sales personnel of the suppliers. The data was analysed for clusters and correlations using Matlab. Semi-structured interviews were conducted with 23 customers regarding how they saw the supplier and its role in their business model. The customers interviewed were from North, Central and South America, the Middle East and South Asia. The interviews were recorded, transcribed and analysed together with the customer's purchasing history. The numerical analysis showed four clusters among the customers (Fig. 6).

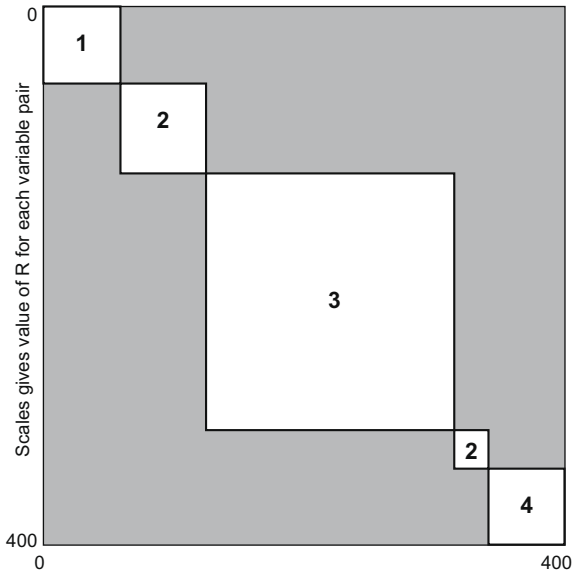


Fig. 6. Four customer clusters or market segments.

The five boxes in Fig. 6 indicate similar patterns, the dark area indicating differentiated responses. Further analysis revealed that the five boxes indicated four different types of response as to how customers saw their suppliers, which constitute market segments:

1. the supplier is someone you can turn to with your needs;
2. the supplier is a reliable provider of components;
3. the supplier is one of many component suppliers;
4. the supplier is one you can entrust with your problems.

These segments were also instructive concerning purchasing decisions. The biggest customer group in the sample, segment 3, represented 47% of the customers yet only 7% of sales. Segment 2 represented 26% of customers yet represented 53% of sales (Fig. 7). Therefore segment 2,

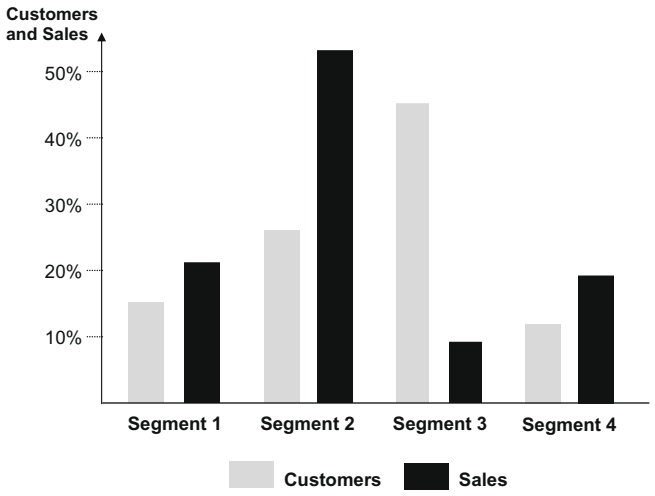


Fig. 7. Percentage of customers and total sales for the different segments.

spanning two boxes in Fig. 7, were the customers with the largest projects and the most repeat business. Furthermore, the customers in segment 3 had the more positive view of suppliers and tended to seek robust relationships of trust – see Fig. 8.

The difference in purchasing behaviour cannot simply be put down to differences in satisfaction. The customers were all more or less equally satisfied. The difference was rather one of expectations or more precisely trust. The customers in segment 3 simply did not expect very much from the supplier apart from providing components. High-quality components were the prerequisite yet there are many providers of high-quality components. The customers in segments 1 and 4 on the other hand had very high expectations of the supplier. In fact, dissatisfied customers could be found in these groups. The differences in views were evident in the way the different customers discussed the supplier. Repeat business customers discussed the supplier in the following terms:

- Giving useful advice on how to improve the performance of the installation.
- Having the expertise to say which parts and components to use, which is a reason for buying sub-supplier parts from the supplier.
- Having the latest and best knowledge regarding engines and power production.
- Taking into consideration the customer's business.
- Paying attention to the general state of the installation, which is a reason to buy maintenance services from the supplier.

These terms concern the supplier having an outward focus, that is, perceived as socially orientated rather than self-interested. Customers who purchased little on the other hand discussed the supplier in the following terms:

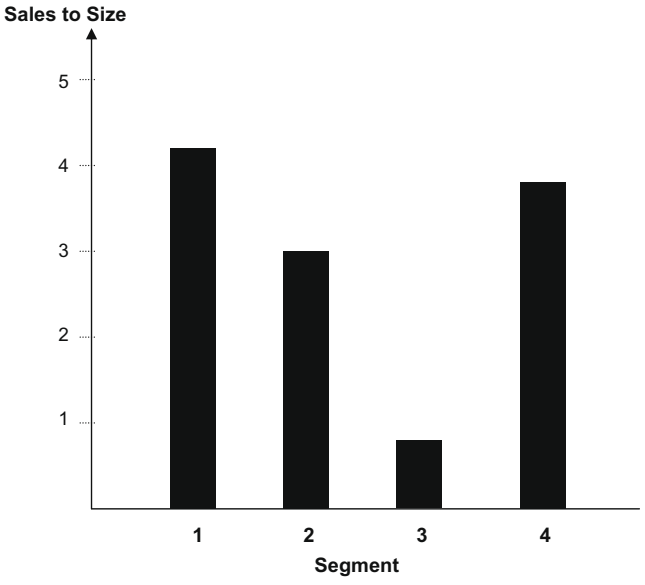


Fig. 8. Average sales relative to the size of the customers' operations.

- Very good technical products and competence in services.
- Communication with the supplier is good.
- Supplies the customers with the correct parts at the right time.
- Actions on installations are made according to the supplier's recommendations.

The way in which the supplier is discussed is important because it shows how the supplier is seen and thereby how the customer interacts with the supplier. The customer operates in an environment of high uncertainty where many different changes can arise anytime, for example:

– technological advances;
– changes in the customer's main field of business;
– ad-hoc situations such as breakdowns;
– changes in the energy supply chain;
– changes in the logistical supply chain.

The customer knows events related to the above will take place at some point and that they can influence significantly project progress and the profitability of the customer business. However, the customer does not know when any of these events will occur or what these changes will look like. Nevertheless, once they arise the challenges will have to be handled in a way that adapts the operations and the investment to the changing environment. Here the role of the supplier in the customer business model is central. A supplier that is not seen as particularly capable or committed cannot be counted on in an uncertain environment. A capable and committed supplier on the other hand can be very useful in such an environment. For example, future breakdowns form a much smaller risk with a well-established business relationship with a supplier that is an expert on the technology in question and has the necessary organizational focus and commitment. Trust is foundational to such a relationship and coupled with customer service focus the supplier is an asset to the customer.

Thus the difference in purchasing was not so much based on a calculation or expectations. The difference was found in the how the supplier was perceived and this was largely based upon the trusting relationship that is socially constructed, that is, based upon iterative intuitive judgment, which assesses trust until sufficient weight of evident permits confidence to build and a more calculative element emerges and trust potentially can move to a higher level regarding setting and serving customer expectations. This contrasts with the customers in segment 3, who were the most 'calculative' and did not expect the supplier to be anything special in the first place. This was reflected both in how they purchased from the supplier and also in the role the supplier played in the customer business model.

The customers in segments 1 and 4 had a completely different view of the supplier with expectations. Just as with segment 3, this was also reflected in how they purchased and in the role the supplier played in their business models.

To customers in segments 1 and 4 the supplier relationship was an asset. This analysis clearly illustrates the theoretical points about trust. Trust is intuitively developed informing judgments about suppliers. The judgments act as criterion for making aggregated rational and calculative decisions on the type of suppliers they strategically require and inform individual decisions on the choice of a supplier for any one project. Calculation or rational justification is only carried at a market or segment level and where sufficient evidence of trust has given rise to good levels of confidence for individual suppliers. Prior stages engage experiential learning and emotions in the willingness to trust which are then fed into individual judgments and aggregated assessments of the market.

The analysis has shown that individual judgments include the formation of expectations of suppliers that look into the future. In this way trust is a socially constructed asset and becomes a constituent of social capital. The measurement of the value of trust is far from simple. It only has precise meaning in relation to expectations, which tend to be amended and renegotiated. Whilst this may seem slightly unsatisfactory at the level of the customer–supplier dyad, it is as precise as say trying to discern exactly how project profit was made from elements of technical operations and efficiencies. It has been argued that trust is foundational to relationships and how these are managed effects asset and liability perceptions. The relationship value of a project customer to supplier is beginning to be measured as an integral part of a business model.

The analysis has also shown that the classical assumption of rational economics that people act in their own interest is unfounded. As seen from the customer perspective there clearly are different kinds of suppliers. There are those who are trustworthy, whose contribution is a valuable asset to the customer and for which the customer is ready to pay a premium. There are those not considered particularly trustworthy, whose contribution is not seen as particularly value-adding, who the customer buys from mainly on price and who in other respects are more or less expendable. There also exists a third group of suppliers who by their actions have proven to be untrustworthy from which the customer cannot easily disconnect because of previous (often physical) investments. Interview evidence confirms customers do not calculate the extent of trust on the basis of hypothetical or economic cognitive factors but on the basis of the sense of relationship history with the actor and other past experiences. Even market or third party reputation, which lends itself the most calculative, is often assessed within the realm of experiential rather than cognitive learning. The relationship history forms a basis for future expectations within a certain spectrum of reasonable expectations. If the supplier does not perform as expected then the events are either dismissed as irrelevant or the view held of the supplier is changed. Although negative events arise, in most cases customers typically do not assess them using calculative probability since they did not reasonably fit with the picture of the supplier. Even though there are cases of betrayed trust, the data overwhelmingly shows such cases are insufficient cause for judging all suppliers suspiciously, defensively or with mistrust (Smyth and Fitch, 2009).

Therefore, the value of trust has been established from the data derived from a range of project business customers and suppliers in their dyadic relationships. Whilst some evidence does not show high levels of trust, there are certain segments of customers constituting the greatest market spend that benefit from trusting relations in terms of the asset value trusting relations contributes to their business.

6. Conclusion and recommendations

The paper has considered the value of trust as a conceptual construct. The objectives set out in the introduction of the paper were to:

(i) to argue that trust is not a rational judgment, thus, not a calculation;
(ii) to show trust is socially constructed from learning and subjectivity;
(iii) to show judgments informed by trust provide a realistic and viable basis for developing confidence;
(iv) to show trust provides a realistic and applied basis for proceeding with business decisions.

Each of these objectives are addressed.

It has been argued that trust is not primarily a cognitive matter of rational judgement. In particular the socially constructed nature of trust as part of experiential and psycho-motive learning has been presented, contrasting with much of the literature upon calculation, rationality and the 'danger' of an absence of trust. Despite the ascendancy of subjective and intuitively understood conceptions of trust, the maintenance of this position is demanding as it is always a 'lazy' option to consciously or inadvertently fall back upon the cognitive approach that leads to the domination of misconstrued calculative trust in the past. Yet business management tends to be more sympathetic to the importance of soft issues assessed by experience and "gut feel". The success of business models relies in part on proceeding in this way.

Thus trust is socially constructed and is developed iteratively in largely intuitive ways that are frequently unconscious and intangible. However, the role of management is to bring a more conscious element to project business, not so much that it becomes tangible and more cognitive but rather to facilitative its development and create more awareness of its importance and value in much the same way that branding or relationship marketing is managed in service organisations. It forms part of learning within project organisations. This argument has supported the second objective of the paper.

The relations of trust to confidence as distinct, yet related concepts, has also been analysed. It was argued that

confidence as a probability statement arising out of trust provides a sounder basis for calculation, however, this is not a replacement for trust which can potentially rise to a higher level as trust mediates expectations to convert matters to confidence. Trust provides an important resource for creating greater probability and certainty, hence building operational and dyadic confidence. Trust where evidence is present through behaviour is helpful for informing sound judgments about behaviour attached to events and therefore business decisions. This argument contributed towards objectives (iii) and (iv).

Confidence is intangible but less so than trust. It is easier l for business to engender value in its activities through confidence, although it has also been argued that trust is need to help generate confidence. The paper has also considered the value of trust through a range of research output in general and more specifically as an asset, hence a constituent of social capital. Whilst there are issues of making value concrete, tangible and measurable in financial terms, this is no different from many issues around finance where profit, "goodwill" or brand is ascribed value in accounts yet is hard to attribute to actions or pinpoint in reality. Nor is it different from ascribing the value of knowledge and knowledge management as part of the asset base of firms.

A number of recommendations flow from this, first for further research and second for practice. It is suggested that further research is needed upon:

- the willingness to trust and its relation to expectations in project business;
- trust as a strategic and tactical issue for projects;
- trust as a valuable asset in business operations.

It is further recommended that management practice consider:

- the development and management of trust in project business;
- formulating marketing strategy for segments in relation to trust;
- coming to a view on the value of trust for strategy formation and tactics for operations;
- coming to a view of the value of trust in financial and accounting terms.

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