

DEVELOPING TRUST IN MULTIPLE STAGES: THE IMPLICATIONS FOR MANAGEMENT ACCOUNTING

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ABSTRACT

This study examines the role that management accounting information can play in developing trust over time. Trust is important to management accounting researchers because it is a means by which uncertainties between different economic actors can be managed (such as employees/employers, joint venture partners etc). While anecdotal evidence suggests that it is difficult to trust on an informed basis, we argue that this situation is most likely where trust is viewed as developing in a single stage. This paper proposes that trust develops over multiple stages where the information relevant to developing trust is stage specific; that is, information relevant to developing trust in one stage is not relevant in subsequent stages. If supported empirically, this multiple stage perspective might better enable trust to be developed more fully. We provide evidence of the relationship between management accounting information and the development of trust over time using a case study of an airline alliance.

INTRODUCTION

It has long been acknowledged that management accounting information plays an important role in managing organizational uncertainties, and this role continues to be important today (Horngren 1962; Horngren et al 2009). Management accounting researchers have typically studied the management of uncertainty in terms of controls, but trust has long been considered the 'glue' that holds these controls together. For example, *ex ante* controls (rules, contracts) can seldom be designed to cover every eventuality and, where gaps or ambiguities appear, trust is the 'glue' that fills the gap. That is, where the letter of the rule cannot be applied, actors are trusted to interpret the spirit of the control appropriately. (Burt and Knez 1996, 68). As such, an absence of trust can be as damaging as an absence of control. For example, in 'working to rule', employees withdraw the trust that is normally expected of them to interpret rules appropriately, leading to severe disruption within those organizations.

Although the organizational literature has long acknowledged the importance of trust, it is only comparatively recently that management accounting researchers have started to study trust as a topic in its own right, as evidenced by the small but growing number of recent articles devoted to trust (see Free (2008) for a review). One possible reason for this recent focus has been the difficulty in imposing controls in contemporary organizational settings, such as knowledge-based organizations, strategic alliances, virtual and networked organizations. Arguably, these settings preclude the extensive use of overt controls and a greater reliance on trust is required. But anecdotal evidence suggests that managers find it difficult to trust in an informed way and are understandably reluctant to trust blindly (Handy 2002).

While controls and trust are both important in managing organizational uncertainties, they do so in different ways. In this paper, we clarify these differences before focusing on trust and examining how it develops over time and the role management accounting information plays in this process. In understanding the relationship between information and trust, our starting point is the seminal (but theoretical) article of Tomkins (2001) who viewed the relationship as developing in a single stage. We extend Tomkins (2001) by proposing that trust develops in multiple stages where the dynamics of trust are different at each stage, along with the information relevant to developing it.

If supported empirically, this multiple stage perspective may help managers better understand how trust can be more fully developed in an informed way, thus avoiding situations where trust fails to reach its potential (because managers do not know how to take it to the next stage). While a multiple stage model of trust has not been proposed in the management accounting literature before, such multiple stage models are not uncommon (Yuens and Moores 2001).

Besides examining how trust develops across multiple stages and the role that information from management accounting plays in this process, we also view trust as a multidimensional construct and this contrasts with some of the extant literature that has viewed trust as unidimensional (Collette et al 200x). In particular, we breakdown trust into competency trust and goodwill trust and there are three reasons why this is important. First, competency trust and goodwill trust relate to different domains of activity and information relevant for one is unlikely to be relevant for the other. Second, information relevant to developing trust is stage specific; that is, information relevant to competency trust and goodwill trust in one stage is unlikely to be relevant in another (stage). Third, competency trust and goodwill trust are likely to develop at a different rate to each other, raising the possibility that competency and goodwill trust may be in different stages of development at any one point in time. We motivate these three issues from the literature and develop them into three exploratory research questions that are examined empirically using a case study of a strategic alliance between two airlines. The paper ends with a discussion of the results from the case study together with its limitations and some thoughts about future research.

LITERATURE REVIEW

Despite the growing importance of trust across different organizational-related literatures, trust is a concept that has proven to be both slippery and elusive. This elusiveness can be illustrated by difficulties over basic issues (such as a definition of trust) and the existence of apparent paradoxes (such as how does trust start if, as some assert, it is a function of previous interactions).

One reason these difficulties have persisted has been the multidisciplinary nature of trust research that has viewed trust from different perspectives. For example, psychologists typically view trust in terms of the characteristics that make up an individual's trustworthiness, whereas sociologists view trust as a relational construct between individuals. Despite these differences, a multidisciplinary consensus of trust has emerged around two core concepts of trust: 'vulnerability' and 'positive expectations' (Rousseau 1998). That is, X is willing to trust Y (even though X is vulnerable to being harmed by Y), because X has positive expectations that no such harm will occur. These concepts are important because they have remained stable in recent times and provide the basis for judging whether trust exists and whether it is changing (Hardin 2006, 17).

The organizational literature has devoted considerable attention to defining trust in order to avoid confounding the effect of trust with other constructs such as power (Hardin 2002). For management accounting researchers, perhaps the most obvious confound for trust is control because, until recently, trust has often been treated as a form of (social) control (Merchant and Groot 200x). However, greater scrutiny of the constructs has led to trust being increasingly differentiated from control, and this is explained next (Sheppard and Tuchinsky 1996).

Differentiating Trust and control

Differentiating trust from control is potentially controversial because trust has traditionally been part of the control literature and creating a separate 'space' for trust might be viewed as diminishing the control literature. Tomkins (2001) differentiated trust from control by arguing that, although trust and control both use information to manage organizational uncertainties, they are separate because each manages these uncertainties differently. These differences and similarities can be illustrated with an example of a joint venture between partners, where one partner (trustor) is seeking to extend trust to the other partner (trustee).

There are two components of uncertainty for the trustor in judging a trustee's future behaviour (although the trustor is unlikely to be able to differentiate between these components). The first

component relates to the uncertainty about a (trustee) partner's range of behaviour in response to any given event or situation. However, this actual range is known only to the (trustee) partner and the (trustor) partner's perception of that range might be quite different. Consequently, the second component of uncertainty concerns how accurate the trustor's perception of that actual range is. All other things being equal, where the trustor perceives the range to be greater than the actual range, the (trustor) partner will perceive the trustee partner's behaviour to be more uncertain than it actually is.

To manage this uncertainty, the (trustor) partner may seek to control the behaviour of the (trustee) partner. In exercising control, information needs to be shared between partners about: (i) desired standards of performance/behaviour, (ii) feedback about whether standards have been achieved, and (iii) the consequences for meeting/not meeting those standards. Controls work by *reducing* the range of the trustee partner's behaviour (relating to the first component of uncertainty) which, in turn, also reduces the trustor's perception of those uncertainties. However, it is only feasible to use controls to reduce uncertainty to a given point and typically for those situations where problems can be identified *ex ante*. Thereafter, if perceived uncertainty remains too high, the gap needs to be bridged by trust. Consequently, managers often depend on trust to manage uncertainties relating to circumstances that are unseen and unknowable at the time that controls are developed.

The notion that trust helps to bridge this gap has long been recognized (Luhmann 1979), and trust initially works by the (trustor) partner gathering additional information about the (trustee) partner. However, because trust is internalised to the trustor (partner), this information does not need to be shared with the trustee, and so information from controls is likely to be an important (but not exclusive) source of information for trust (but not vice versa) (Schenker et al 1996, 116). Consequently, trust (unlike controls) does *not* reduce the first component of uncertainty (that relates to the actual range of the trustee partner's behaviour) and only affects the second component of uncertainty that concerns the (trustor) partner's *perception* of that uncertainty, where the trustor believes that they can more confidently predict the trustee's behaviour (Serva et al 2005, 678). Moreover, unlike controls, once trust has been established, it does not need additional information to make it work, although additional information is needed to change the level of trust.

Consequently, trust occurs when the (trustor) partner becomes increasingly knowledgeable about the (trustee) partner's behaviour that the trustor develops positive expectations that his vulnerability (created by the remaining uncertainty) will not be exploited by the trustee. In this way trust involves making a leap that would not be warranted through rational prediction alone, enabling relationships between partners to continue even when uncertainties remain.

However, this view portrays trust as a residual; that is, something that is considered after controls have been put in place, whereas the relationship is likely to be more intertwined and recursive than this. For example, the extent to which controls need to be introduced in the first place will be a function of the perceived *ex ante* uncertainties, such that if these uncertainties are perceived to be low, there may be no need to introduce controls at all. Consequently, both trust and control are related because they both use information from the management accounting system to manage organizational uncertainties, but they do so in different ways.

Most management accounting studies that have examined information and trust have usually examined how information from management accounting controls affects trust, and several studies have attempted to tease out the complexities of this relationship. For example, Langfield-Smith and Smith (2003) examined how information from different types of management accounting controls (output, behavioural and social controls) affects trust. This line of enquiry was taken further by Emsley and Kidon (2007) who showed that a different mix of management accounting controls (output, behavioural and social) exist at different organizational levels (operational and executive) and this affects different types of trust (competency trust and goodwill trust).

Motivating these studies among others was the seminal article of Meyer et al (1995) whose review of the trust literature has recently been updated (Meyer et al 2008) from which several important issues have emerged, two of which are pursued in this paper; namely, (i) the multidimensionality of trust, and (ii) the notion of developing trust in multiple stages over time.

(i) Multidimensionality of trust

Trust has often been viewed as a unidimensional construct where trust is portrayed as having a halo-like quality that extends across all domains of partner-related activity. Although trust continues to be studied as a unidimensional construct (e.g., Colletti et al 2005; Christ et al 2006), Hardin (2006, p.42) argues that this view of trust is too broad and atheoretical.

Arguably, trust has been traditionally viewed in terms of goodwill trust (Lane and Bachmann 1998), which refers to a partner's confidence that their interests will not be intentionally harmed by the other partner's actions (Das and Teng 2001; Sako 1992). However, task-orientated relationships have become more important in recent times (Barber 1983), leading to the notion of competency trust, which refers to the trust that a (trustor) partner has about a (trustee) partner's technical ability to execute partner-related activities. Consequently, researchers have found it increasingly important (both theoretically and empirically) to separate competency trust from goodwill trust because they represent different domains of activity. While competency and goodwill trust are not mutually exclusive, they are theoretically independent of each other to the extent that information relevant to developing competency trust is unlikely to be relevant to developing goodwill trust (and vice versa).

(ii) Developing trust over multiple stages of time

The notion that trust develops in multiple stages over time differs to the conventional, single stage view held by Tomkins (2001) who proposed that the relationship between information and trust is best represented (graphically) by an inverted U-shaped curve. Tomkins (2001) argued that more information increases trust to a certain point and then the level of trust plateaus, regardless of how much more information is provided. Thereafter, to maintain trust at that plateaued level, only a relatively small amount of information is needed (thus, completing the U-shape). This relationship was broadly supported in a laboratory experiment by Colletti et al (2005).

While both Tomkins (2001) and Colletti et al (2005) view the development of trust as a single stage phenomenon with a single plateau, we view trust as developing cumulatively in multiple stages over time, with each stage having its own plateau and each stage representing a cumulatively higher level of trust that largely supplants (or "trumps") lower levels of trust (Serva et al 2005).

Understanding trust as a multiple stage model is important because we not only argue that the level of trust can be enhanced at each stage, but also that the information relevant to developing trust at each stage is stage specific. That is, information that enhances trust at an early stage will not enhance trust at a later stage. If supported empirically, managers who fail to perceive these different stages (and the information relevant to each) may well find trust plateauing prematurely, along with their ability to use trust to manage organizational uncertainties. This situation might partially explain the anecdotal evidence (Handy) that managers have been reluctant to rely on trust (because they have not known how to develop it to higher levels), and have overly relied on controls to manage uncertainties, despite their known dysfunctionalities.

Consequently, the purpose of this exploratory study is threefold. First, to examine whether the information relevant to developing competency trust in each stage is different to developing goodwill trust. The second purpose is to examine the role of management accounting information in developing trust over several stages. The initial stage occurs before partners start to collaborate and depends on reputation-based trust. The subsequent stages occur after the partners start to collaborate, and address deterrence-based trust, knowledge-based trust and identification-based trust respectively. The third purpose is to examine whether competency trust and goodwill trust develop at a different rate, meaning that they can be in different stages at the same time.

THEORY DEVELOPMENT

While it is axiomatic that trust can increase or decrease over time, the idea that trust develops in multiple stages over time has been credited to Boon and Holmes' (1991) study of romantic relationships. While romantic relationships are unlikely to map organizational relationships, the

idea has been taken up and adopted by a number of organizational researchers (Lewicki and Bunker 1996; Sheppard and Tushinsky 1996; Lorange and Roos 1992).

While there is no unanimous agreement about these stages (Bijlsma-Frankema and Woolhuis 2005, 264), we combine the three stage model of Lorange and Roos (1992) with the three stage model of Shapiro et al (1992), to form a four stage model that is pursued in this paper (Table 2).

Table 2: Stages of trust development

Models	Stages of trust over time			
	Before relationship starts	After relationship starts		
Lorange and Roos (1992)	Formation	Implementation	Evolution	
Shapiro, Sheppard, and Cheraskin (1992)	N/A	Deterrence-based trust	Knowledge-based trust	Identification-based trust
This paper	Reputation-based trust	Deterrence-based trust	Knowledge-based trust	Identification-based trust

Consistent with Lorange and Roos’s (1992) model (but not the Shapiro et al (1992) model), we recognize that trust starts to be developed before partners start working together, and this formative stage relies upon reputation-based trust. After the relationship formally commences, we equate the implementation stage in the Lorange and Roos (1992) model to the deterrence-based trust in the Shapiro et al (1992) model, and this is also adopted in our model. However, the evolution stage of the Lorange and Roos (1992) model is broken down into knowledge-based and identification-based trust in the Shapiro et al (1992) model, and this latter approach is also adopted in our model. Consequently, we propose a four stage model which, we believe, balances the tensions between recognising that multiple stages exist but resisting the urge to create more stages than can be clearly differentiated, both theoretically and empirically.

As a result, this paper seeks to extend the literature by examining the role of information in developing trust as a multiple stage phenomenon, as well as examining these stages in terms of two forms of trust: competency trust and goodwill trust. We now discuss these four stages in turn, starting with reputation-based trust.

Reputation-based trust

Reputation-based trust occurs before partners commence working together and relates to partner selection. Establishing reputation-based trust involves information that is necessarily impersonal because partners are presumed to have no direct experience of working with each other at this time. Reputation-based trust is based on information that a trustor partner has about a (potential) trustee partner which is meaningful to the trustor. Meaningfulness derives from their own experience of organisations with similar characteristics (characteristic-based trust) or from more broadly held perceptions at community level (institutional-based trust).

Characteristic-based trust relates to information about the largely fixed characteristics of the trustee that impart some meaning to the trustor, such as the trustee’s personality traits, demographics (age, gender etc), language and cultural background. The trustor bases an initial level of trust on their experience of other (trustee) organizations with characteristics similar to those currently under consideration.

Institutional-based trust relates to information about a trustee's membership of, or association with, socially created and legitimized institutions that impart some meaning to the trustor. This meaning relates to perceptions that are commonly held by the broader community that can be generalized to the trustee under consideration.

However, these institutions range in terms of the trustor's perception of their effect on the trustee's behaviour and, consequently, the level of trust the trustor might be prepared to extend. At one end of the continuum are institutions that significantly affect a trustee's behavior (because of the sanctions they can impose on the trustee), such as comprehensive and independent legal systems, standards within professional bodies and codes of practices within trade and industry associations. In these situations, the trustor relies on a form of systems trust whereby the trustor relies on the control system *within* the institution to moderate a trustee's behaviour by imposing certain minimum standards that make their behaviour more predictable (Child and Moellering 2003). At the other end of the continuum are institutions that are more symbolic in nature but nevertheless impart meaning because of commonly held views within the community. For example, trust may be extended based on another's 'uniform' such as a judge's wig and gown or a doctor's white coat and stethoscope.

Reputation-based trust is important because it enables a tentative relationship between partners to develop that might not be possible otherwise. For example, without reputation-based trust, internet firms with an exclusive on-line presence have found establishing an initial level of trust with customers difficult because they have few institutional-based sources of trust (Serva et al 2007). Similar difficulties face local organizations who are globally ambitious but whose local institutions are not recognized globally, as well as organizations who need to be able to develop trust swiftly (such as consulting firms). How reputation-based trust affects competency and goodwill trust is described next.

Competency trust

Reputation-based competency trust largely relates to impersonal information about the average or typical organisation associated with those characteristics and/or institutions. This information is likely to relate to standards of competency that are required for membership of industry associations and are likely to be seen as relatively objective, unbiased and plausible because they originate from credible independent (third party) sources; namely, institutions. As such, it is relatively quick and easy for the trustor to evaluate competency and develop sufficient competency trust so that the relationship can progress to the next stage.

Goodwill trust

Relative to competency trust, the scope to enhance goodwill trust using information from reputation-based sources of trust is more restricted. While a limited amount of goodwill trust can be developed from information contained in reputation-based sources of trust, this information is more likely to be subjective and incomplete, as well as biased and unreliable. A trustee is likely to suppress any information that might reduce the level of goodwill trust a trustor might extend to the trustee. For example, if the trustee has been suspended from an industry association, he is likely to try and suppress this information. As such, the trustor will place relatively less reliance on information relating to reputation-based goodwill trust and, as a consequence, goodwill trust is unlikely to be as well developed (as competency trust) before moving to the next stage.

The next three stages examine the development of trust once partners begin to collaborate and work together to implement their shared business activity. The first of these three stages is deterrence-based trust.

Deterrence-based trust

Deterrence-based trust has been assumed to be grounded in a trustee's fear of failing to comply with a trustor's expectations. For example, a trustee who betrays a trustor may suffer the financial penalties in a contract. Such a view is supported by comments referring to deterrence-based trust as the "willingness to trust the belief that there is a credible threat of punishment for failure to cooperate" (Tyler and Kramer 1996, p.8) and "people do what they say they are going to do sustained by the threat of punishment" (Lewicki and Bunker 1996, 116).

However, such a view better fits our earlier definition of a control because the deterrence *reduces* the actual range of the (trustee) partner's behaviour. This point is important and indicates the confusion in the literature about trust and control, at least in terms of the definitions used in this study.

Instead, we view deterrence-based trust in terms of information that a (trustee) partner signals (to the trustor partner) about their willingness to increase their vulnerability, which might relate to a *future* deterrence (control) the trustor might want to impose. Such willingness is likely to induce trust because it signals a trustee's willingness to increase their vulnerability (of potentially not meeting the requirements of the control), but they do so with positive expectations that they can (meet those requirements).

This relational signalling (van der Meer-Kooistra and Vosselman 2000) is likely to be important because of the relative lack of information about a trustee partner's behaviour at this (still) early stage in the relationship. Consequently, deterrence-based trust is likely to grow relatively slowly until more complete information is available, but how deterrence-based trust affects competency and goodwill trust is likely to be different and these differences are described next.

Competency trust

By committing to a future competency-related control such as a management accounting system with its discipline of monthly reporting about performance, a trustee signals information that he is willing to increase his vulnerability by committing to a system that monitors their performance. This signal is arguably stronger where the trustee initiates the control because it is indicative of competency, rather than having it imposed by the trustor partner.

Goodwill trust

The willingness of the trustee to commit themselves to a control can also be extended to goodwill trust. For example, entering into an alliance contract is not a trivial decision and its success or failure may affect the trustee's reputation in the wider business community (as a desirable alliance partner). Consequently, insofar as maintaining reputation is important, a trustee's willingness to risk their reputation signals information about their intentions that is likely to enhance goodwill trust. However, the (trustor) partner will also recognize that during this honeymoon period, their (trustee) partner is also likely to be on their best behaviour, and this uncertainty will limit the amount of goodwill trust a trustor is willing to extend at this stage.

This stage ends when partners start working together and information about those activities starts to flow, leading to knowledge-based trust.

Knowledge-based trust

The third stage is knowledge-based trust (and is similar to the concept of process-based trust in Zucker (1986) and van der Meer-Kooistra and Vosselman's (2000)) which refers to information that is largely gained from repeated interactions with the partner while working together. From these interactions, generalized expectancies about a partner's future behavior can be developed, until it can be predicted with confidence (Lindskold 1978; Rotter 1971).

According to Shapiro et al. (1992), there are several aspects to information that can enhance knowledge-based trust. Initially, information that simply correlates a trustee's reaction to events over time contributes to the predictability of their behaviour such that for a given event the trustor can expect the trustee to respond in a predictable way, until a point is reached where the trustor fails to be surprised by the trustee's response to events.

In time the trustor moves beyond mere correlation to better understand the reasons why the trustee reacts to events the way he does. Through interaction, the trustor learns the reasons that explain the trustee's behaviour and this further enhances predictability (Kelley & Stahelski, 1970). In this stage, the level of interaction and trust begins to accelerate as the to-ing and fro-ing associated with interaction starts to build a greater understanding and empathy between partners that leads to each partner understanding the expectations of the other. Experiencing a partner's reactions across a wide variety of events, situations and affective states also provides evidence of the likely variation in behaviour that, again, enhances predictability. However, knowledge-based trust is likely to affect competency trust and goodwill trust differently, and this is explained next.

Competency trust

Competency-trust is likely to be enhanced as a result of partners working together, where accurate, abundant, (relatively) objective and independent performance-related information is expected to be widely available from the management accounting system (e.g., meeting budgeted performance targets, explaining variance analysis etc). As such, this performance-related information can be used relatively easily to evaluate a partner's competencies (including how convincing their explanations for non-performance are), from which an informed level of competency trust can be developed.

Goodwill trust

Information about knowledge-based trust that is relevant to goodwill trust is likely to be gained from knowing that the interests (goals) of partners are aligned, where partners understand that in serving his own interests, the trustee (partner) also serves the trustor's interests. As such, resolving issues (such as prioritising strategic direction) becomes increasingly conflict-free, and greater goodwill trust emerges. However, in this stage the trustor is still conscious of a trustee's potential for deceit, as well as knowing that any deceit-related information will be closely guarded by the trustee. Consequently, this limits the level of goodwill trust that can be developed at this time.

Identification-based trust

The fourth and final stage in developing trust relates to identification-based trust. In this stage partners arrive at a position where they implicitly understand, appreciate and empathise with each other's wants, needs and values. That is, partners effectively embrace and internalize each other's wants, needs and values as their own. Roles and routines have become stabilized and possibly even institutionalized, such that each partner's actions can be taken for granted. As such, partners are able and willing to act as substitutes for each other and be confident that their interests will be protected. Indeed partners may empathize so strongly that a collective identity (or group-think) develops whereby they unconsciously reason in similar ways. In this situation, each partner not only understands the other partner's values, but places the same level of importance on them, and is able to anticipate them for any given situation (even where the trustee partner might not have the same wants, needs or values).

For example, the (trustee) partner may learn how critical the (trustor) partner believes it is to deliver a product to a particular customer on time. If delivered late, the (trustee) partner knows that the (trustor) partner will become annoyed and take this lateness as evidence that the (trustee) partner 'cannot be trusted' (i.e., the trustee does not understand how important it is to the trustor that the product be delivered on time). Thus, the (trustee) partner empathizes with the sense of urgency felt by the (trustor) partner and always makes sure to deliver to the customer on time, even if the (trustee) partner believes that it is not as critical as the (trustor) partner thinks.

Competency trust

Information about identification-based competency trust includes information about technical competencies (speed, quality, level of responsiveness etc) but also the priorities the trustee partner attaches to this work (even if different to the rest of their business). Ultimately, partners may identify with each other to such an extent that they are willing to merge their identity with their partner by being physically co-located or by sharing a joint name, title or logo (especially where partners are still readily associated with the logo).

Goodwill trust

Information about identification-based goodwill trust is likely to relate to events whereby a (trustee) partner does not need to consciously consider the (trustor) partner when making decisions that can potentially harm the partner's interest because the trustor can instinctively rely on the trustee to take the appropriate decision. This behaviour can be taken for granted because the values that have developed from working together have resulted in a shared moral position of behaviour that is right and wrong, at least with regards to their specific relationship.

We now examine these stages empirically to address the three research questions; namely, that; (i) information relevant to competency trust is unlikely to be relevant to goodwill trust (and vice

versa), (ii) information relevant to one stage is unlikely to be relevant to another (stage), and (iii) competency trust develops at a different rate than goodwill trust.

METHOD

A case study was undertaken to study the research questions, and this section describes why a case study was used, how it was undertaken and how the data were analyzed.

A case study was used for two main reasons. First, case studies are often necessary where the object needs to be studied within its real-life context (Yin 2003). This real world context is important for trust because doubts persist about how faithfully other methods, such as laboratory experiments, can operationalize trust in organizational settings (e.g., Coletti, Sedatole and Towry 2005), especially where trust needs to be examined over a long period of time (e.g., Christ, Sedatole and Towry 2006). Second, case studies are useful when relationships between variables (such as information affecting trust) have not been empirically studied to any great extent and researchers are grappling with basic issues that are likely to be complex. Such complexities are more likely to be teased out and revealed in a longitudinal case study than, say, a cross-sectional survey where such complexities are likely to be hidden in the analysis as 'noise'.

However, case studies have limitations that need to be managed and, in particular, case studies are perceived to be less rigorous than quantitative methods with regards to validity and reliability issues (Lillis 1999; Yin 2003). Some of these issues are addressed in this case study by using NVIVO, a software package designed to facilitate the analysis of large amounts of qualitative data. NVIVO has a number of advantages over manually analyzing transcript data, such as enhancing coding reliability, minimizing errors, and establishing an audit trail that links quotes with codes. Such an approach has been advocated as a way for qualitative researchers to enhance the credibility of case study research (Lillis 1999), and tools like NVIVO are increasingly being used in management accounting case research (e.g., Abernethy, Horne, Lillis, Malina and Selto 2005; Malina and Selto 2001; Emsley and Kidon 2007).

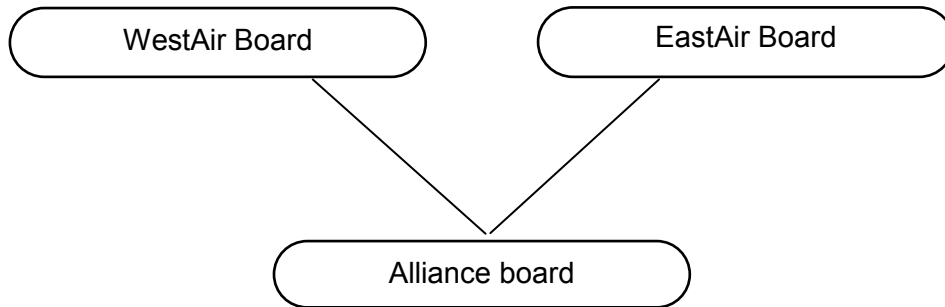
Background to case

The case study was based on a strategic alliance between two international airlines who will be referred to as WestAir and EastAir. The airline industry has traditionally been characterised as fragmented and inefficient, with almost every country having its own 'flag-carrier' which has typically been state-owned and controlled. Consequently the efficiencies that might have been delivered through mergers in an industry with less regulation and state ownership, have proved elusive. However, from the late 1980s, some flag-carriers have been privatised which has resulted in a greater priority being attached to operational efficiency and profitability. For example, airlines' networks have changed from a collection of point-to-point routes to the more efficient hub-and-spoke pattern. Consequently, networks based on point-to-point routes have declined, especially where the destination cannot be reached without stopping (that is, as a spoke of a hub). For example, the majority of European airlines have left the Europe to Australia point-to-point route and those remaining perceive that some form of alliance or joint venture is necessary to capture the efficiencies necessary to be viable in the long-term.

During the late 1990s, the government shareholder of WestAir was preparing the airline for partial privatisation, but there was a perception that WestAir was not large enough to compete in the global market alone. In the words of one interviewee, "*WestAir needed a partner so that they could stand up in the school playground*", at least until WestAir was able to become a world player itself. After considering at least two potential partners, WestAir formed an alliance with EastAir, initially to share revenues through codesharing.

The alliance was organized at three levels: alliance management team, alliance board and the boards of WestAir and EastAir, as highlighted in Figure 1.

Figure 1: Alliance organization



The alliance management team consisted of managers from both partners and they executed the activities of the alliance, that included managing the combined alliance-related capacity *inter alia* by co-ordinating schedules and networks. The general manager of the management team reported to (and was a member of) the alliance board, which comprised of executives from both airlines. The alliance board monitored the performance of the management team and also managed relational issues between partners, such as approving new activities to be undertaken by the alliance. Executives on the alliance board were then ultimately accountable to the board of directors of their respective airlines.

This structure is important because it raises an issue central to the empirics in this study; namely, which trust relationships are being examined? The trust that WestAir has for EastAir or vice versa? The trust they collectively have for each other? Or the trust each partner has for the alliance? These are important questions that determined the focus of data collection and analysis. Initially, we studied the trust that WestAir had for EastAir in selecting them as their partner. Once the alliance began, we examined trust primarily through partners' involvement in the activities of the alliance, but we were also alert to any unilateral action one partner might make that harmed the other partner. It was noticeable that, except for one incident, partners had a similar level of trust for each other, as indicated by two quantitative questions we asked interviewees about the level of competency and goodwill trust between partners.

The case study is presented chronologically from reputation-based trust through to the identification-based trust. We identify the information that was relevant for competency trust and goodwill trust in each stage, and then identify (and provide evidence for) changes in competency trust and goodwill trust (in terms of changed levels of vulnerability and/or positive expectations of partners).

Data collection

The alliance had operated for a period of eight years when the data started to be collected which took fifteen months. A total of twelve interviews with nine managers were conducted, including the current and immediate past general managers of the alliance (who were interviewed several times), as well as managers who were present at the start of the alliance. The purpose of multiple interviews with these key respondents was not only to verify and pursue issues that arose in the other interviews, but also to follow events longitudinally. Whether twelve interviews is a sufficient number is a matter of some conjecture. While that number compares favourably with Langfield-Smith and Smith (2003), Quattrone and Hopper (2005) and Langfield-Smith (2009), the primary consideration in determining whether to continue interviewing was the decreasing amount of new information that emerged from each additional interview (Ahrens and Chapman 2004, p. 284).

The interviewees were representatives from operational and executive levels of both partners past and present, as well as managers who were seconded from each partner to work in the alliance itself.

The interview process evolved whereby one manager would suggest talking to another manager who was better qualified to answer specific issues or confirm or deny a particular perspective on an issue. Consequently, a protocol was devised where each manager was typically asked a

common set of questions, but interviewees were allowed to follow their own perspectives on issues in what Alvesson (2003) would call a process of 'reflexive interviewing'. The uniformity of answers to common questions was remarkable, especially to two quantitative questions that asked about the overall level of competency and goodwill trust between partners, and suggests that the data were relatively free from personal bias. The interviews averaged 90 minutes and were recorded, resulting in over 350 pages of transcript.

Data analysis

As indicated earlier, NVIVO was used to analyze the interview data. The purpose of NVIVO is to extract, compare, explore, and reassemble meaningful pieces from large amounts of data in creative, flexible, yet systematic ways. This process can be described in two main stages: data reduction and networking relationships.

Data reduction is a process of attaching meaning to quotes by coding them such that related quotes from different interviews can be collated. The codes were partially informed by the theory (e.g., codes for 'goodwill trust', 'competency trust') and partially from issues raised during the interviews (e.g., 'mid-point hub'). Quotes were often attached to more than one code because they had more than one inference. While coding was necessarily a subjective process, reliability was developed by the two researchers initially agreeing upon a basic set of codes and then independently coding the first two interviews. When the codes attached to quotes were compared, there was a 78 percent agreement in the coding by the two researchers. For the 22 percent of quotes coded differently, the researchers analyzed each difference in order to establish agreement and ensure that meaning and consistency could be extended to the remaining interviews. This comparative process was undertaken for the rest of the interviews. By the conclusion of the interviews, the level of first-pass agreement was 88 percent, providing some comfort level with the reliability of the entire coding process. This result compares favourably with previous research using a similar reliability procedure (Malina and Selto 2001). The codes were then grouped into code families (e.g., the code for 'goodwill trust' and the code for 'competency trust' were both grouped under the family code 'Trust').

The second stage of the analysis linked relationships between code-related quotes and variables. This process developed tentative links between variables that were established by the theory. To facilitate this process, NVIVO has a function that allows the researcher to record ideas about relationships when reviewing the data. In addition, the network display facility in NVIVO allowed relationships to be mapped, along with the number of supporting and contradicting quotes. These relationships were then explicated in writing up the case study which focused on identifying information that affected competency trust and goodwill trust as well as changes to the level of competency trust and goodwill trust (through increased vulnerability and/or positive expectations).

In addition to the interviews, documentary evidence was also examined, including the formal alliance contract, an internal governance principles document, various newspaper articles, and letters sent to regulatory bodies. The purpose of this evidence was to ensure consistency in the information obtained from different data sources. We now present the case study starting with reputation-based trust.

Reputation-based trust

Reputation-based trust was important in short-listing of potential partners for the alliance, as well as to establish whether the level of trust associated with the preferred partner was high enough to warrant pursuing the alliance. But information relating to reputation-based competency trust was a different to reputation-based goodwill trust.

Competency trust

Reputation-based competency trust was high from the outset because competency was deemed to be a prerequisite to even being considered an alliance partner. One interviewee put it succinctly when he said that issues of competency represented: "*water under the bridge*". In addition interviewees referred to institutional-based sources of trust such as membership of trade associations such as the IATA (International Air Transport Association) and ICAO (International

Civil Aviation Organization). Membership of these associations requires satisfying certain technical competencies relating to safety, licensing and regulatory issues. All potential partners were long-standing members of these trade associations, and this provided assurance that minimum levels of competency existed.

But bolstering these institutional-based sources of trust was information relating to characteristic-based trust of which reputation was important. In the airline industry, a lack of competency is highly visible as reflected in frequent accidents, safety emergencies or flight cancellations, and a competent partner's reputation is vulnerable to being diminished if they form an alliance with a less competent partner. Widespread consensus existed that all potential partners regarded each other as competent and this was summarised by one interviewee who said that: *"trust already existed that each others operational safety record was world class and that we were relaxed about putting our passengers on each others aircraft"*.

However, it should be noted that competency trust was also enhanced by direct experience of each others competencies through the occasional repairs each airline had provided for each other in the past. For example, when an aircraft breaks down away from its home port, it is repaired by the airline in whose home port the break down has occurred (because that airline has the facilities). Competency to make repairs is partly assured *inter alia* through ICAO membership, but it is also influenced by being able to check those repairs (when the aircraft returns to its home port), the time taken to complete the repair and the longevity of the repair. Breakdowns also provide the scope to assess administrative (or non-technical) competencies, such as disruption procedures (how efficiently off-loaded passengers are re-booked onto other flights), as well as procedures for handling complaints (*Frankfurt experience example*). Such information is important where there is a paucity of competency-related information because the information that does exist tends to be generalized to other aspects of the partner's abilities.

Consequently, the level of competency trust between potential partners was already high before the alliance was considered, leading one interviewee to comment that: *"we all regarded each other as well-respected, world class airlines with skin in the game"*. Evidence that competency trust existed was indicated by it being a prerequisite to being considered an alliance partner because a partner's reputation for competency is vulnerable to being diminished to that of the least competent partner. However, partner selection was based primarily on reputation-based goodwill trust.

Goodwill trust

Although reputation-based goodwill trust was the primary basis for selecting the alliance partner, goodwill trust was very different (to competency trust) because all potential partners had been keen competitors prior to the alliance and had had no reason to co-operate commercially. Consequently, there was much less goodwill-related information compared to competency-related information.

While WestAir needed an alliance partner who was a global player, the corollary was that this made WestAir vulnerable to being dominated. This issue was important for the government shareholder who was privatising WestAir because it was anxious that the iconic national symbol that the WestAir brand-name represented would continue after privatisation. In analysing the likelihood of interference by EastAir, three characteristics of EastAir were perceived as important (relative to the alternative alliance partner being considered, called X Air), and helped to enhance reputation-based goodwill trust.

First, EastAir's management style/organizational culture was characterized as adopting a 'hands-off' approach both in terms of internal management (which was highly decentralised) as well as its dealings with other alliance partners.

(At EastAir) power is decentralised and delegated and people are expected to take up responsibility and take initiative and make decisions this (decentralisation) started with the former CEO who went to great lengths to open up EastAir and make it a lot more decentralised. I mean when you go to head office, there are no offices, it is totally open plan. Even the CEO's area is open plan and a lot more information is shared and there are high levels of trust.

Second, the configuration and location of EastAir's network suggested that there would be fewer incentives for EastAir to interfere than the alternative partner (X Air). EastAir and WestAir were similar in that their hub was at either end of the point-to-point route and so were perceived as having similar interests and goals because they were more likely to focus on feeding passengers from their hubs onto the route. In contrast, the alternative partner (X Air) hubbed in the middle of the route and there was a perception that X Air would inevitably absorb WestAir as simply another spoke in their hub.

Third, interference was also thought to be influenced by the national culture of the partner airline. EastAir's national culture was perceived to be less likely to be interfering and dominating (in Hofstede's terms, on power distance and uncertainty avoidance), at least relative to the alternative partner (X Air). But national culture was primarily seen as determining the speed by which trust would develop, rather than the level of trust that would ultimately eventuate. One interviewee said that: *"I think there is a like-minded culture (between EastAir and WestAir) so I think people do have common interests and common things that galvanise people, be it through sport and things like that and (that) makes relationships able to grow more quickly"*.

Consequently, reputation-based goodwill trust was important in selecting the potential partner. However, at the time that EastAir was selected as the alliance partner, the level of goodwill trust that existed was low. As one interviewee said, until the prospect of the alliance arose, *"... there had been no real relationships between the parties ... we had been staunch competitors who were suddenly thrown together ... and we had to find a way to remove the competition so that we could co-operate"*. However, the economic need for the alliance, the need to make a decision quickly and the ability to minimise risk in the initial stage (by limiting the scope of the alliance) meant that even though the level of goodwill trust was low, it was high enough to move to the next stage.

Deterrence-based trust

Once the alliance partner was chosen, this coincided with a move from reputation to deterrence-based trust.

Earlier we argued that the 'deterrence' in deterrence-based trust should not be seen as a punishment or sanction that one partner can impose on the other because, in this paper, such a threat better fits the definition of a control (than trust). In contrast, this paper views deterrence as reducing the *perceived* level of the uncertainty (not avoided through controls) by better understanding the (trustee) partner from which their behaviour can be predicted more confidently. One way for a (trustee) partner to reduce the (trustor) partner's perceived level of uncertainty is to demonstrate their willingness to subject themselves to *future* controls (such as management accounting controls or the alliance contract). Such willingness increases trust because, at this stage of the relationship, there is still a paucity of information about the trustee, and this willingness signals information about a partner's preparedness to increase their vulnerability (of not being able to meet the standards in the control), even though they are confident they can do so (positive expectations).

Competency trust

For competency-trust, information about the willingness to submit to a competency-related control such as a management accounting reporting system was not even raised as an issue because each partner already had similar extensive management accounting controls within their own (wholly owned) operations, and it was presumed by both partners that the alliance would have similar controls. Consequently, there was only a marginal but positive increase in competency trust.

Goodwill trust

In contrast to competency trust, developing deterrence-based goodwill trust was problematic and largely revolved around partners' willingness to increase their vulnerability to a future goodwill-related control; namely, the alliance contract. However, negotiating this contract was problematic, not in terms of partners' willingness to initiate negotiations, but in terms of their willingness to finalize negotiations.

Negotiating the contract certainly created conflict but this is not necessarily problematic where negotiations continue to progress because such conflict is an indication that partners are searching for common ground and progress is an indication that they are finding it.

However, interviewees involved with negotiating the contract commented that at one point progress was deadlocked because they were almost entirely focused on the financial aspects of the agreement. It had taken almost two years to negotiate the financial section of the agreement which had become very complex as a result of negotiators focusing on information about every risk and uncertainty. That is, partners were focusing on all the things that could possibly go wrong, as indicated by the following quote.

“The guy I was up against was (like me) a finance guy and he was very focused on the numbers and he would say, ‘Well we’ve got to cover this off because if you were to do this, this and this, EastAir would be worse off by half a million dollars. We can’t do that so we’ve got to build yet more complexity into the deal to stop you doing that’ (even though the likelihood of that (event) happening was remote). So the financials got more and more complex. And because my boss saw EastAir looking at it that way, we also looked at it that way ... and I was told to, ‘Run all the models, find out how they can screw us on this’. So we just kept making the financial piece more and more complex.”

In addition, there was also a high level of suspicion.

“You know during negotiations you’re always saying to yourself, ‘Hang on, why did they ask for that, what have I missed? Why does he want me to agree to that? You always think of the worst scenario. When I was negotiating, my opposite number would be sitting there running through his models and he’d say, ‘You can do this, this and this and really hurt us, so I want you to expressly say you will never do that in the contract’. And although I’d say, ‘Well, the chance of us doing that is remote’, he’d say, ‘I don’t care, I want it in there’, and I’d reply, ‘Well I can’t say I’m never going to do it because who knows what might change in the world’. ‘Oh I see’ he says, ‘I knew you were going to do that. That was your plan all along’.”

Consequently, goodwill trust between the negotiators from Finance was low and remained low because they were unwilling to increase their vulnerability. This deadlock might have derailed the alliance altogether were it not for a commitment made at the highest levels in both organizations. This commitment was serendipitously prompted by WestAir’s imminent privatisation, whereby the alliance contract needed to be disclosed as a material contract in the prospectus. At this stage the contract consisted of a highly complex and incomplete financial section and virtually nothing under any of the other governance and management-related sections. The need to complete contract negotiations gained the attention of the CEOs whose possessed information about the the broader potential benefits of the alliance. One of the negotiators interviewed commented that: *“(the CEOs saw) that the (alliance) contract isn’t really what the alliance is all about, the alliance is about the broader benefits and opportunities that pull us together.”*

As a result of a greater focus on information about the benefits, sufficiently high goodwill trust existed between the CEOs to enable the contract to be finalised. One interviewee involved in the negotiations described how negotiations were concluded.

“After negotiating all the detail and fighting over every point, the contract was sorted out by my CEO meeting up with his opposite number where they sat down in a quite corner and said, ‘... all that stuff these other (finance) guys have been arguing about, let’s just wipe the slate clean and start again’ and so the deal was done”.

This provides evidence for enhanced goodwill trust because the CEOs (at least) had positive expectations about what the alliance might deliver and partners’ vulnerability increased through greater commitment to the alliance. This vulnerability related to the potential damage to each partner’s reputation if they committed themselves to an alliance that subsequently fails. Recall that reputation was a desirable characteristic for potential alliance partners because, in the absence of mergers and takeovers in the airline industry, alliances were increasingly the only way airlines could realise the economic benefits necessary for longer term survival.

Knowledge-based trust

Knowledge-based trust was a stage where the activities of the alliance were implemented, increasing the flow of information and providing a more concrete basis upon which to establish trust.

Competency trust

The high level of competency trust that existed at the time of signing the alliance contract was enhanced further when the partners actually started working together. The alliance was initially designed to be revenue-sharing (rather than profit sharing), and so the alliance's initial activities were geared to maximising revenue. Consequently, information about revenues by route were regularly monitored and reported upon using a variety of techniques such as variance analysis. The use of variance analysis and other diagnostic systems meant that both positive and negative information (e.g. from exceeding/missing budget targets) about competency-related issues were routinely and automatically generated. Understanding and explaining the different issues arising from a multitude of different situations and contexts meant that each partner was exposed to information about the other partner's competencies across a wide variety of circumstances. However, this information was accumulated incrementally, incident-by-incident and problem-by-problem, as one of the general managers commented:

"we keep an action log of each of our achievements because it's good to reinforce that at the end of the calendar year, I'll go and say well this is what we've actually achieved as a group, so good on you guys ..."

Apart from the technical and managerial competence implied by analysing performance and solving problems, one interviewee also described how competency trust was strengthened by *"a like-minded approach to solving problems"*; that is, where there might be several ways to address a problem, the partners often thought alike about the best solution.

While there was a like-minded approach to solving problems, the alliance brought together different methodologies for specific tasks (e.g. disruption handling), and these were benchmarked to find out which was superior. In turn, benchmarking had a knock-on effect on each partner's operations outside of the alliance, as outlined by one interviewee:

"... benchmarking has been done within the alliance which shows areas of cost inefficiency and I'd go to some of those business units and say here's some information which you might want to look at and it gives them an opportunity to improve operations within the alliance but also across other parts of the partner's business."

Evidence that knowledge-based competency trust was enhanced is provided by the move from revenue sharing to profit sharing. Revenue sharing limited the potential benefits (and losses) of the alliance because it precluded activities where cost savings could be made, for example, by sharing airport lounges rather than maintaining separate ones. As one interviewee said, *"when it was just a revenue share, you weren't necessarily getting the right decisions made ... and moving to a profit share had the huge advantage of involving costs."* Moving to a profit-sharing arrangement increased partners' vulnerability because they were now exposed to their partner's ability to manage costs as well as revenues. However, partners agreed to do so because they had positive expectations about the other partner's competency to control costs and its effect on profitability.

Goodwill trust

Until this stage goodwill trust was relatively low because the partners had previously been fierce competitors but the alliance was initially agreed to because it represented a small (and unexpected) window of opportunity for the partners; namely, that it provided a possibility that co-operation might make the route viable when other airlines had already exited the route. But the partners did not enter into the alliance with a fixed and clearly articulated vision of what the alliance would achieve, but were convinced of the need for an alliance or similar to ensure the on-going viability of the route. Consequently, the development of goodwill trust was necessarily slower than might have otherwise been the case but, arguably, an enhanced level of goodwill trust emerged as

a result of the alliance partners having to develop this vision for itself, along with the activities that would achieve that vision.

Developing a shared vision reduced the likelihood of conflict because both partners wanted to achieve the same goals and typically agreed about the best way to achieve them. But whereas increasing competency trust was built on experience through incremental examples of competency, goodwill trust was increased more by a reassurance that potential conflict would likely be low because partners corporate strategies were aligned (both partners were pursuing a volume-growth model). Consequently, if a partner did make a unilateral decision that affected the other partner, it would be most likely to benefit that partner (or at least not disadvantage them). This reassurance was important because each partner made various policy decisions that they wanted to implement the whole of their airline, including their operations within the alliance. Consistent corporate strategies meant that partners' decisions at corporate level were less likely to cause conflict at alliance level. Moreover, each partner made sure that the other partner was aware of the decision and actively managed the impact, as the following quote reflects, *"... it wasn't that the (corporate policy) decision wasn't going to happen ... it was going to happen (extend to the alliance-related operations), but it was a matter of capturing the impact of that on the alliance's operations and conveying that impact so there's an awareness of the impact to the alliance partner"*.

However, it was notable how enhancing goodwill trust was also a result of consciously avoiding or suppressing information about potential conflicts that might have reduced goodwill trust. To this end the general manager of the alliance played a pivotal role between partners as he largely controlled information about the issues that were brought up for discussion. Depending on whether the issue related to developing new activities or resolving problems with existing ones, the general managers interviewed described how they suppressed or avoided information that might create conflict between partners.

In avoiding information relating to developing new activities, one general manager said that he was told to *"never bring (information that) surprises, we want no surprises at alliance board meetings"*. Consequently, he always *"tested the waters informally"*, whereby he canvassed the relevant individuals on the board in *"corridor conversations"* for their opinion in order to build consensus about the acceptability of the new activity.

"... what you would normally do is to make sure that any concerns anybody might have about a particular proposal are talked about outside of the alliance board meeting so there's a good level of understanding and support for it so that at the (alliance board) meeting everybody has already unofficially signed off on it."

Given the abundance of opportunities for new activities for co-operation between partners (described by one interviewee as, *"an abundance of low hanging fruit"*), if there was resistance to an idea, the general manager would avoid conflict by simply withdrawing the idea (i.e., before it created conflict) and reintroducing it at a more propitious time. For example, there was an attempt to increase the scope of the alliance across the globe, as one interviewee recalled:

"... so that an EastAir plane arriving here from Europe at five in the morning might actually fly over Los Angeles fifteen hours later and then go all the way back to Europe, you know, this way around the globe. Yes we tried to do this before and we will try to do it again when there's the willingness to push the envelope further."

For existing activities, avoiding information that might create conflict was assisted by developing routines whereby partners knew that an issue was being dealt with and so was not *"front of mind"* and not actively creating conflict. For example, if profitability on a specific route fell beyond a certain point, it was put into *"intensive care"* which was an agreed process explained by one interviewee. *"If routes do not perform ... the route may be put into intensive care by the non-operating airline ... where the operating airline has one year to turn profitability around before the route is taken out of the alliance."*

In extreme situations, if the source of the conflict was the activity itself, then it might be removed from the alliance altogether, at least temporarily, until the issue was resolved. For example, when

the products of the two partners diverged one commentator gave the example of product disparity, *“... product disparity from the introduction of the flat bed (into business class) meant that the codeshare had to be removed for a period of time.”*

Alternatively, where an issue was contentious but could be avoided by partners acting independently outside of the alliance, they would elect to do so. For example, partners at a corporate level had different approaches to hedging the price of fuel and so rather than creating conflict by disagreeing over how to hedge, they agreed to hedge independently, as explained by one interviewee who said that, *“... the fuel price that’s reflected in the alliance is basically unhedged, so what both carriers agreed they’d take on the hedging separately”*.

Only where none of these alternatives could be embraced was the issue escalated, which meant that the potential for conflict was greater. But on the few occasions this happened (one general manager said there was one incident in his two and a half years in the role), the issue was typically resolved ‘behind the scenes’ (between the most senior executive of each partner on the alliance board). Consequently, goodwill trust was as much an exercise in avoiding or suppressing information that was likely to cause conflict, as providing information that enhanced goodwill trust.

Evidence that goodwill trust was enhanced during this stage was provided by the increased number of activities that were included in the alliance because it increased partners’ vulnerability to the potential liability they were exposed to, but they did so with positive expectations that the outcomes would be favourable.

Identification-based trust

Identification-based trust reflects a situation where partners implicitly understand each others wants and needs, and do not feel the need to refer to the other partner when making a decision that affects them both. Nor is the other partner perturbed by this lack of referral because they are confident that their partner will represent them in a way that they would represent themselves.

Competency trust

Information relevant to identification-based competency trust was not obvious. The information that flowed, and the source of that information, was no different from the previous stage, although it had accumulated over time and perhaps this would have eventually led to identification-based competency trust developing. But the case evidence suggested that a tipping point to developing identification-based trust was partners’ reaction to a crisis; namely, the SARS virus outbreak. SARS had a quick and significant effect on reducing the revenue and profitability of the alliance. Given the gravity of the situation, one interviewee said that partners had considered *“taking back the wheel”* and managing the issue independently, but it was clear that the alliance was in the best position to manage the problem. Consequently, partners were forced to consciously evaluate information as to whether competencies existed within the alliance to adequately manage the situation and, affirming that these competencies *did* exist, partners allowed the alliance management team to orchestrate the resources of both partners as they best saw fit. And the alliance management team did so without referring back to either of the partners to ratify decisions. This was significant because WestAir and EastAir flights were cancelled without having to justify the rationale nor the equity between partners. This reference to decision making without referring back to partners is consistent with identification-based trust.

Additional evidence suggesting identification-based competency trust existed was subsequently provided when both partners’ sales functions were co-located. This co-location was significant because one partner’s function was moved to the other side of the world and combined with the other partner’s sales function. Instead of separate identities for each sales function, there was now one merged sales function and this example is consistent with identification-based competency trust. One interviewee in reference to the merged sales function commented: *“I don’t worry whether I just put that passenger on an EastAir flight when I could have put him on a WestAir flight because we just sell the inventory of the alliance”*.

Goodwill trust

In contrast to competency trust, it is difficult to find any evidence that identification-based goodwill trust existed. Certainly success in managing SARS and the co-location of the sales function had,

arguably, a knock-on effect to goodwill trust (e.g., that the cancellations during the SARS crisis were equitable). However, even in these halcyon days, one interviewee remarked that partners independently gathered (private) information about each other, and this sense of 'checking up on each other' seems inconsistent with identification-based goodwill trust. For example, one respondent said that, "... (partners) have their own figures and monitor each other separately and where there is a difference (to the shared information from the alliance reporting) they follow this up".

Continuing from knowledge based trust, partners' corporate strategies were aligned (and based on volume and market share than margin and profitability), and this alignment minimised the potential for conflict. But there was also an awareness that partners' primary responsibilities were to their own shareholders with one interviewee saying that, "*I think on other occasions there's a conscious decision to make a decision which is in the best interests of one partner, knowing full well that it may not be perceived well, or is in the best interests of the alliance*". Also, that "*both (partners) did what they thought was best for them and then took the view of managing the effect on the other (partner) as well as they could*". That is, while both partners cared what their partner thought of them (and did not actively seek to harm their partner), this was clearly subordinated to what was good for themselves.

The potential for conflict increased as EastAir started to face different market conditions to WestAir. EastAir's main market was highly competitive and was being threatened by low-cost carriers, consequently, in response EastAir moved from a strategy that prioritised volume growth to one that prioritised margins, as evidenced by selling off their own low cost airline. (One interviewee commented, "*there was no space for a low cost operation within EastAir's portfolio*" which had already been sold). In contrast, WestAir continued to position itself for volume growth because their primary market was still growing strongly and they also had the opportunity to grab market share (as a result of bankruptcy of their major domestic competitor). One respondent reflected on this situation in the following way:

"... with two companies who have a similar strategies ... goals are aligned, so there tends to be agreement and people see a common objective and therefore there's a commitment towards that. Over time, invariably you know companies move and are moved by different circumstances that then puts pressure on the relationship because strategic goals start to differ ... WestAir has come through the last two or three years fairly well in terms of the industry and have competed effectively against the emergence of a low cost competitor by launching their own low cost airline. They're driven by a belief that their future rests on growth both domestically and internationally and that is what's influencing sort of WestAir decisions around the alliance at the moment. EastAir have come through the last couple of years in a very different situation where particularly following 9/11 and collapse in traffic on their main routes ... that EastAir had considerable concerns about survival ... "

Thus, as partners' corporate strategies diverged, conflict started to emerge. Initially conflict was relatively trivial, for example, one interviewee recalled that, "*WestAir wanted the refurbishment of the business class lounge in Singapore to include making the lounge 50 percent bigger to cope with expected growth (per their growth strategy), whereas EastAir wanted it smaller now (to reflect their expectations of growth) and only to increase the size as and when that growth eventuated*".

However, the potential for greater conflict became increasingly likely as market opportunities for one partner were not seen to be opportunities for the other. Events came to a head when an opportunity (unrelated to the activities of the alliance) arose for WestAir to enter a market that had previously been denied them (but where EastAir was an established player). By adding capacity ahead of demand, WestAir reduced the yields of EastAir in this market. At this point, any prospect for identification-based goodwill trust disappeared as it became apparent that the alliance goals were subordinated to those at corporate level. However, high competency trust remained, as one interviewee said, "*When there was tension in the relationship, generally that tension manifests itself at the top, but the good personal relationships that guys at the bottom have built provides quite a nice balancing mechanism. You don't damage the business activities while the guys at the top are having an argument.*"

Epilogue

The alliance continued beyond the study period because the alliance continued to provide benefits for both partners. But information flows dried up and there was no appetite for further co-operation and no further activities were developed. Reputedly, WestAir paid compensation to EastAir for the loss they had caused by depressing yields. At this point, the case study ends and the results are discussed next.

DISCUSSION AND CONCLUSION

In this section we discuss the three research questions in light of the evidence presented in the case study. Some observations and conclusions are then proposed before reflecting on the limitations of the study and the possibilities for future research.

The first two research questions examined how different information affects competency trust and goodwill trust at different stages of trust development, and we provided evidence of changing levels of competency trust and goodwill trust in terms of vulnerability and positive expectations. The results are summarised in Table 4 below for each stage of trust development, and this provides the basis to evaluate the degree to which research questions have been addressed.

Table 4: Summary of results for the first two research questions

Stage of trust	Information relevant to competency trust	Information relevant to goodwill trust
Reputation-based trust	<ul style="list-style-type: none"> ✓ Information about membership of institutions (e.g., ICAO) ✓ Public information about safety record etc 	<ul style="list-style-type: none"> ✓ Public information analyzed to identify the probability of interference from the corporate partner
Deterrence-based trust	<ul style="list-style-type: none"> ✓ Paucity of information ✓ Willingness to become subject to future competency-related control; namely, performance reporting 	<ul style="list-style-type: none"> ✓ Paucity of information ✓ Willingness to become subject to a future goodwill-related control; namely, the alliance contract
Knowledge-based trust	<ul style="list-style-type: none"> ✓ Abundance of performance-related information ✓ Information relevant to competency based on incremental incidents of competency ✓ Both positive and negative information used 	<ul style="list-style-type: none"> ✓ Paucity of information ✓ Information relevant to goodwill based on a reassurance that goodwill was likely (based on a similarity in corporate goals) meaning that a partner's unilateral decision would be unlikely to harm us ✓ Negative information avoided
Identification-based trust	<ul style="list-style-type: none"> ✓ No new sources of information but a larger accumulation of information about existing activities ✓ Conscious decision to extend identification-based trust 	<ul style="list-style-type: none"> ✓ New sources of information typically relating to events outside of the alliance

The first research question stated that information relevant for competency trust is unlikely to be relevant for goodwill trust (and vice versa). To assess this question, it is necessary to compare the data in the column titled 'information for competency trust' and 'information for goodwill trust' for each stage. We believe this data supports the first research question and, in particular, there are three main comments to make.

First, competency trust was formed in response to both positive and negative information relevant to competencies (e.g. achieving/not achieving budget), whereas it was noticeable how negative information relevant to goodwill trust was avoided or suppressed, as if goodwill trust was particularly sensitive to negative information. Second, competency trust was enhanced on an incremental basis from information about individual incidents of competency, whereas goodwill trust was enhanced by information that provided reassurance that a partner was unlikely to harm the other (in the case by shared corporate strategies). Third, information relevant to competency trust largely related to the activities within the alliance, whereas information relevant to goodwill trust (especially threats) was more likely to come from events outside the activities of the alliance.

The second research question stated that information relevant to competency trust (or goodwill trust) in one stage is unlikely to be relevant to competency trust (or goodwill trust) in a subsequent stage. To assess this question, it is necessary to compare data from Table 4 in each row for the column titled 'information relevant to competency trust' and then repeat the exercise for the column titled 'information relevant to goodwill trust'. We believe this information supports the second research question because of the differences in information for each stage for both competency trust and goodwill trust separately. Probably the biggest difference in information relevant to goodwill trust between stages was that issues arose that were unforeseen at the start of the alliance rendering parts of the contract obsolete. Managers increasingly resolved these unforeseen issues, not by changing the contract, but agreeing informally between members of the alliance board. Increasingly, what was 'right' and 'wrong' was determined less by the contract and more based on information about by what was morally 'right' and 'wrong' as developed by the relationship. This arrangement was sustainable while the individual members responsible for this moral development remained in place, but they changed at the very time when partners' corporate strategies diverged and conflict was more likely. That is, the ability to resolve conflict was diminished at a time when it was needed the most.

While this evidence provides support for the first two research questions, the third research question stated that competency trust and goodwill trust will develop at different rates. This was clearest in the first stage, reputation-based trust, where competency trust represented "*water under the bridge*" whereas goodwill trust was low because partners had been competitors and had not co-operated at all. Also, the different rates were obvious in last stage where, arguably, identification-based competency trust was achieved but not identification-based goodwill trust. Evidence from the case study suggested that competency trust was quicker to establish because, relative to goodwill trust, information relevant to competencies was more likely to be reliable (objective, verifiable and credible). Also any change in competency is likely to be asymmetric in that competencies can be improved (you can learn to do something better) but are unlikely to diminish, at least in the short term (that is, it is difficult to unlearn a competency). In contrast, goodwill trust was slower to develop because information relevant to goodwill was less reliable than information relevant to competency trust (i.e., more subjective, less verifiable and incentives to suppress unfavourable information). Also, changes to goodwill trust are more likely to be symmetric in that it can increase or decrease.

Apart from differences between information relevant to competency trust and goodwill trust, there were also some similarities. In the early stages, information relevant to establishing both competency trust and goodwill trust tended to be: low in quantity, related to the partner as a whole and was sourced from what was publicly known about a partner. Trustor partners responded to this lack of information by reading more into this limited information than was, arguably, warranted. In particular, they extrapolated generalised information about the partner to the specific circumstances of the alliance, for example, in guesstimating the likelihood active intervention by the corporate partner into the workings of the alliance. In addition, trustor partners also sought to overcome the lack of information by generating their own information, such as signalling their

future intentions by willingly committing themselves to a future control (in deterrence-based trust). During these early stages, competency trust increased more quickly than goodwill trust and this may have been because either more relevant information was available about competency trust (than goodwill trust), and/or a given amount of information had a greater effect on building competency trust (than goodwill trust). Interestingly, the opposite existed for decreasing goodwill trust where small amounts of negative information appear to radically reduce trust. While these observations are clearly speculations from the case study, they raise many suitable areas for future research using more controlled environments. These findings and observations are now considered in light of the limitations of the study.

Limitations

As with all research, there are limitations to this study that qualify the results and restrict any conclusions that might be drawn. Given the early stage of trust research, case studies are appropriate because they can be valuable, inductive ways to identify significant factors affecting trust as well as identifying potential relationships between those factors. However, we acknowledge the limitations associated with case studies such as the perceived lack of rigor associated with reliability and validity but we have tried to manage these limitation in various ways, for example, by using NVIVO to analyse the data.

In terms of theoretical limitations, one issue raised early in the paper was the need to conceptualise trust separately to control. We believed that it was necessary to differentiate trust from control but, given that trust has been traditionally located within the control literature, this required carving a 'space' for trust from the control literature, and this has resulted in perhaps a more restrictive view of control than is traditionally acknowledged (that is, aspects once seen as control-related are now seen as trust-related). This exercise is always likely to be controversial and while some might criticise the approach we have taken, we believe we have differentiated trust from control in a manner consistent with the literature (Tomkins 2001).

Probably the biggest limitation of case studies concerns their lack of generalisability because they cannot control potential confounding factors. However, arguably, the closeness of the researchers to the data means that the more obvious ones can be more easily identified which, in turn, can inform future research. For example, the open-ended nature of the alliance in this case study made its development uncertain and, in such situations, trust is arguably more important than alliances that are more clearly defined and limited in scope (where controls can be more easily designed *ex ante*). This open-endedness means that it is necessary to rely on trust but it is more likely that partners become more vulnerable as a result, especially from events that are unknown at the start of the alliance and unrelated to the alliance, such as the opportunity provided to WestAir to enter a new market and harm EastAir's non-alliance operations. Other factors that are likely to be important are: relative equality of partners, whether partners operate in the same or different industries and whether they were previously competitors. Also, there were many questions associated with this study that the authors would like to have been able to answer. Such questions include: Is it necessary for each stage to follow in sequence? Are the stages of equal length? Does trust increase by the same amount at each stage? While these issues are limitations, we also see them being helpful in guiding future research topics.

Other limitations relate more to ontological issues such as what is the nature of organizational trust, if trust differs within a partner organisation? (Recall in the deterrence-based trust stage, a different level of trust existed between the CEOs and the senior (finance) managers of both partners negotiating the contract). Alternatively, non-positive approaches using Actor-Network Theory for example might provide insights relating to the roles of key individuals and serendipity in the process of trust development whose effects might have been pivotal but could not be adequately addressed in this research.

There are many different aspects of trust that need to be explored in more fully understanding how trust can be used to manage organizational uncertainties, and we are specifically interested in terms in how the management accounting system can facilitate the development of trust. This is important because trust, arguably, is a superior way to manage uncertainties but trust needs to be informed rather than blind. This study was intended to be one step in developing a more complete understanding of these issues but more needs to be done.

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