How to create trust quickly:

A comparative empirical investigation of the bases of swift trust.

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Abstract

Swift trust has long been considered of critical importance to the work of project teams and other forms of temporary organising, but research has remained heavily fragmented in regard to its antecedents or bases. This contribution conducts a systematic review of the literature and derives from it seven possible bases of swift trust. The relative significance of each of these bases is tested through a survey of 172 project managers. Its findings allow for the distillation of the bases of swift trust into three coherent thematic blocks of different significance in the creation of swift trust. Bases related to team composition exert the strongest effects, whereas reputational and institutional information demonstrate much more limited effects, and action-related bases of swift trust are shown to be largely irrelevant. These findings contribute to a deeper understanding of the formation of swift trust and resolve existing tensions found in the literature.

Keywords: swift trust; temporary groups; temporary organising; trust building; project management

1. Introduction

The fundamental significance of trust to economic organisation has come to be increasingly acknowledged over the past two decades (see the overviews, e.g., by Lane and Bachmann, 1998; Kramer and Cook 2004; Lewicki *et al*., 2006). One form of trust, though consistently acknowledged as particularly significant, has remained starkly under-researched. This is "swift trust", which is situated in temporary, transient economic settings. Its distinctive characteristic is that, unlike most trust, it cannot rely on a history of experiencing the other and building up trust over time, but instead having to make a "snap decision" whether to trust them or not. The seminal contribution on this topic (Meyerson, Weick and Kramer, 1996) outlined this form of trust as relying largely on roles and other "imported" bases of trust rather than on experience of the individuals involved.

Swift trust has attracted great attention especially because forms of temporary organising have become ubiquitous, from project- or event-based teams to dynamic and shifting semi-formal networks (Sydow *et al*., 2016). Because members of these teams have little or no interpersonal history, and quick cooperation requires an equally quick ability to rely on other team members, research has consistently recognised the great significance of swift trust in this context (see the overview in Bakker, 2010). Accordingly, our empirical study chooses as its subject project managers, whose working lives revolve around such temporary forms of organising.

However, there is reason to believe that swift trust may possess even broader social significance. As Giddens suggested (himself elaborating on an earlier formulation by Luhmann), life in modern societies constantly requires the initiation of trust in the absence of interpersonal familiarity: encounters with doctors and nurses, mechanics, police officers,

and many others routinely rely on trust in expert systems and in the roles these systems bestow on individuals (Giddens, 1990; Luhmann, 1979).

It is thus unsurprising that Meyerson, Weick and Kramer's seminal book chapter has attracted numerous citations (e.g., over 2,500 citations in Google Scholar). However, despite its great relevance, very little conceptual development has taken place since Meyerson, Weick and Kramer's (1996) seminal conceptualization of swift trust. Many contributions stress the positive consequences of swift trust (e.g., Iacono and Weisband, 1997; Coppola *et al*., 2004). In contrast, little clarity exists on the genesis of swift trust, even though its genesis would seem to take precedence over its consequences, both analytically and practically. While a number of studies have examined the bases or antecedents of swift trust (see the literature review below) research has remained heavily fragmented, with different combinations of bases considered. This contribution is the first to draw the different bases discussed together in a comparative review for the purpose of greater theoretical consolidation.

Our contribution focuses on the question of what bases are the most likely to enable the building of swift trust. It surveys the literature in a synthetic review, focusing on which bases are emphasised (section 2). It then goes on to describe the methodology and background of our empirical study of project managers (section 3) and discusses its findings (section 4). The discussion in section 5 links these findings back to the wider theoretical questions posed in the literature and develops new thematic blocks of bases which possess greater or smaller significance in establishing swift trust. Finally, the concluding section presents limitations, practical implications and avenues for further research.

2. Bases of swift trust

This section will – in considerable brevity due to the number of categories to be discussed – consider each of the bases of swift trust, as distilled from the extant literature. We restrict ourselves to the literature specifically on swift trust, as the more general literature on trust is vast, and already summarised well elsewhere. We also don't delve into the literature that uses laboratory-based games or experiments to investigate trust, as these have already been reviewed elsewhere by Johnson and Mislin (2011) and there is evidence from Wilson's empirical work on surveys and experiments (2018) that games tend to measure different phenomena than surveys of practitioners in the field. In addition, as Ferrin et al. (2007, 2008) highlight, the game-theoretical and experimental literature has demonstrated a tendency to unduly conflate trust and cooperation, even though each can (and often does) exist in the absence of the other.

In the following, for each of these bases we will outline both their original treatment in the seminal contribution by Meyerson *et al*. (1996) and the way they have been discussed in the literature since. (For ease of reference, see table 1.) From this overview, it is evident that the literature following Meyerson and colleagues has largely taken a "pick and choose" approach, discussing different combinations of possible bases without a consolidation of their range or number. Our contribution addresses this research gap.

In addition, we address what we consider a striking oversight in the bulk of the literature: few connections have been drawn between studies of swift trust and the broader trust literature. In order to draw on its rich insights, we link each of the bases to related categories in writing on more "conventional" forms of trust. This has also enabled the

clearer identification and delineation of bases which had hitherto remained largely implicit both in Meyerson *et al*. (1996) and in the literature following them.

Insert Table 1 about here

2.1 Roles

In the conventional trust literature, trust based on social role is a relatively new category, with few precursors to Meyerson *et al*. (1996). Later contributions describe role-based trust as "predicated on knowledge that a person occupies a particular role in the organization rather than specific knowledge about the person's capabilities, dispositions, motives, and intentions. Roles can serve as proxies for personalized knowledge" (Kramer, 1999: 578).

In Meyerson *et al*.'s (1996) conception, trust which is based on (particularly professional) roles plays a central part as one of the most important impersonal bases of swift trust. They posit that role-based interaction, highly frequent in temporary systems as it is, leads to swift trust, largely by virtue of the predictability created by role-bound interactions (p. 173).

In the literature on swift trust, role-based trust has been interpreted particularly as a function of role clarity (e.g., Xu *et al*., 2007; Dionisi and Brodt, 2008). Conversely, inconsistent role behaviour and "role blurring", but also overly personally-focused interaction is argued to endanger swift trust (Jarvenpaa and Leidner, 1998; Iacono and Weisband, 1997).

Interestingly, some of the literature following Meyerson *et al*. (1996) has sought to further elaborate on this idea, positing that role-based swift trust is not purely "imported" from external sources. Greenberg *et al*. (2007) plausibly argue that "within-role ability" inspires swift trust (i.e., we trust a team member swiftly not because they are an engineer, but because they seem like a skilled engineer able to fulfil the specific task entrusted to them in the context of the temporary group). Adobor and McMullen (2002) add that for this basis to take effect, the within-role ability needs to be made visible (i.e., we need to see the engineer perform at least briefly in order to gain the impression that they deserve our trust because they are competent and able to fulfil the specific task at hand). Accordingly, Coppola *et al*. (2004), Hiltz and Turoff (2002) and Greenberg *et al*. (2007) all argue that both role clarity and impressions of within-role-ability can be facilitated by distributing roles with meaningful tasks early on to give team members an opportunity to see each other perform their respective roles early on in the relationship. We thus predict that:

Hypothesis 1. Perceived role clarity is likely to increase swift trust.

2.2. Institutional categories

For Meyerson *et al*. (1996) category-based swift trust is a typical form of imported trust, arising from membership in "institutionally-driven" categories. They do not go into great depth concerning the precise nature of these categories, merely citing "roles, industry recipes, cultural cues, and occupational- and identity-based stereotypes" as examples (p. 174).

Similarly, the newer literature remains comparatively vague on their definition, often subsuming roles under the broader umbrella of categories (e.g., Robert *et al*., 2009), or otherwise conflating these two bases to a considerable degree (e.g., Jarvenpaa and Leidner, 1998). However, the "conventional" trust literature has long discussed trust based on institutionally defined categories (e.g., Zucker, 1986; Lyon and Porter, 2009). In particular, Lane and Bachmann's (1996, 1997; Lane, 1997) argument is pertinent that institutional memberships, professional affiliations and institutionally awarded qualifications and certificates can serve as an impersonal basis for trust. (Particularly where the surrounding institutional environment is stable and coherent; Arrighetti *et al*., 1997.) Thus, the abovementioned expectations of role fulfilment and within-role ability (e.g. an engineer able to fulfil the precise task entrusted to them in the context of the temporary group) may partially or even largely derive, but remain clearly distinguishable, from underlying external institutionally defined categories (e.g.: a good engineer, as certified by their degrees, certificates, group memberships, etc.).

Institutional categories, then, may constitute a prime means of achieving faster information processing in trust formation. Therefore, our hypothesis is:

Hypothesis 2. Perceived links to positive institutional categories are likely to increase swift trust.

2.3 Trusting predispositions

A number of papers in the literature surveyed assume that swift trust is more likely to arise where trustors exhibit higher levels of generalised trust in people based on their own

trusting predispositions. This idea is already present in Meyerson *et al*. (1996), who stress that the deeply engrained predispositions and cognitive structures relating to trust in people in general are likely to be drawn on especially under conditions of time pressure. With this, they relate back to a large body of "conventional" literature which focuses on predispositional trust, assuming that the inclination to trust is transcontextual and individually stable (in the tradition of Rotter, 1967, 1971). Lately, this idea has attracted much criticism from trust research which argues that mechanisms and expressions of trust and trustworthiness are deeply context-bound (Saunders *et al*., 2010).

Most typically, the literature following Meyerson *et al*. (1996) combines predispositions with categories (thus relying virtually entirely on "imported" bases of trust; e.g., Li *et al*., 2009; Robert *et al*., 2009). Greenberg *et al*. (2007) and Xu *et al*. (2007) stress combinations of dispositional trust and further psychological biases (such as "unpractical optimism"; also see Hyllengren *et al*., 2011). Thus, we expect that:

Hypothesis 3. Higher individual trusting predispositions are likely to increase swift trust.

2.4 Shadow of the past and shadow of the future

Individual reputations based on prior work (sometimes referred to as the "shadow of the past") can form a valuable basis for swift trust (Lorenz, 1999; Cusmano *et al*., 2015). At the same time, expected effects of present behaviour on one's reputation can form a powerful incentive for trustworthy behaviour if the actor expects future interaction. Meyerson *et al*. (1996: 171-2) particularly stress the vulnerability of people immersed in networks of "weak ties". This effect is exacerbated the smaller the pool from which members for temporary

groups are likely to be drawn as their reputation within these networks becomes increasingly vital to them. That is, the more likely it seems that they will meet again, the greater looms the "shadow of the future" (Axelrod, 1984; Poppo *et al*., 2007).

This ties neatly into the "conventional" literature on trust and the embeddedness into social networks, largely following Granovetter (1985). Other treatments of networks (e.g., Burt and Knez, 1996; Della Giusta, 2008) stress how reputations are diffused in these networks and the effect this type of third-party information has on trust decisions and future interaction (Dei Ottati, 1994; Kleinknecht *et al*., 2016).

In the literature following Meyerson *et al*. (1996), several papers draw on Hung *et al*. (2004), who use third-party information as one of their central factors (Greenberg *et al*., 2007; Tatham and Kovacs, 2010). Gammelgaard (2010) extends the idea of the "shadow of the future" created by reputation in delimited networks for "virtual communities of practice". Perez-Nordvedt *et al*. (2013: esp. 405) even go so far as to identify reputation with "swift trustworthiness". Therefore, we predict that:

Hypothesis 4. Positive reputational information is likely to increase swift trust.

Hypothesis 5. A greater likelihood of future collaboration is likely to increase swift trust.

2.5 Active engagement

We also consider active engagement with other team members as a basis of swift trust. This represents a counter-hypothesis to the predominant view of swift trust as primarily "imported" through external bases. "Active trust", here, is understood in the specific sense

first outlined in the "conventional" trust literature by Giddens (1990), who emphasised the active and reflexive nature of trust building. Möllering (2006) develops this idea further and considers the possibility that potential trustors may attempt to speed up trust decisions by purposefully creating situations that require the other party to "show their true colours". This may pertain to temporary groups and situations where time is lacking and judgements on the competence and goodwill of other team members are required quickly.

Meyerson *et al*. (1996), despite their focus on "importing" trust without relying too much on interpersonal interaction, do insist that that swift trust relies on a "highly active, proactive ... style of action" (p. 180), and conclude that swift trust is a form that is all about "doing" (p. 191). This aspect is more prominent in the newer literature, emphasising initial communication and rapid early interaction (Coppola *et al*., 2004; Iacono and Weisband, 1997).

Most interestingly, a number of contributions explicitly combine "imported" and interaction-related bases of swift trust (e.g., Jarvenpaa and Leidner, 1998). Li *et al*. (2009) make the useful point that category-based trust may arise particularly when category membership is not (or not only) signalled by third parties, but is reinforced by early actions of the potential trustee that are able to signal category membership. Of particular relevance is Mitchell and Zigurs's (2009) notion of "situated swift trust", which we interpret as imported bases of trust being tied into the respective action context. This would accord an important role to the quick sending and interpretation of cues of trust and trustworthiness (Adobor and McMullen, 2002; Reynaud, 2017). We hypothesise that:

Hypothesis 6. Active solicitation of signals of trust and trustworthiness is likely to increase swift trust.

2.6 "As if" behaviour

"As if" behaviour, too, relies on a proactive strategy which may enable team members to actively encourage the building of swift trust. While it has been noted comparatively rarely in the "conventional" trust literature (Baier, 1986; Möllering, 2006), Meyerson *et al*. (1996) formulate this idea clearly. They observe that in temporary groups, "people often act *as if* trust were in place" (p. 186, original emphasis), and that this may act as a self-fulfilling prophecy: "the presumption of trust often ... creates the trusting behavior that was presumed to be there" (p. 172). This is often at least partially based on the dynamics of "social proof": it is only the assumption that others will trust too which makes trust a real option (also see Sabel, 1993; Lewis and Weigert, 1985).

This idea has not been taken up in the literature on swift trust to the same degree as many of the other bases. Adobor and McMullen, however, do use it as the basis for an unequivocal recommendation to "act as though [one's] counterparts are trustworthy" (2002: 74). While this approach does of course harbour risks – the reciprocation in kind is not as automatic as Adobor and McMullen seem to assume here – it can form a highly promising approach to creating trust under intense time pressure. We predict that:

Hypothesis 7. Acting in a trusting manner until better evidence is available is likely to increase swift trust.

3. Method

3.1 Participants and procedure

The hypotheses were tested using a sample of project managers; we consider here as project managers not only the one manager in charge of coordinating the project, but all project professionals who take on responsibility within the temporary team. Project managers suggested themselves as an ideal object of study because much of the literature on swift trust has revolved around individuals typified by them – their working lives revolve crucially around temporary forms of organising, where the ability to successfully interact within new teams with different goals and of different compositions comes at a premium, and the establishment of trust in those teams is seen as an integral part of that task (Bakker, 2010). In important ways, project managers represent central developmental tendencies within the wider economy, seeing how temporary forms of organising are becoming increasingly ubiquitous. Most participants were approached through the generous assistance of the Association of Project Managers (APM) in the period May-July 2014. A request to take part in the survey "about the specific forms of trust that occur in temporary teams" was included in the monthly newsletter, and subsequently reminders were sent via the APM Linkedin group. Participants clicked through from the e-newsletter to a Qualtrics internet survey. They were only instructed to complete the survey if they were a project manager, and they were asked to answer the questions with regard to the last project that they were involved in and that was now complete. Disregarding the partially completed questionnaires, 172 project managers completed the questionnaire to the end. The survey was cleared by the pertinent Research Ethics and Risk Assessment Committee of the University of Cambridge.

3.2 Measures

Swift trust. In the absence of validated measures of swift trust, we measured it using items derived from the measures of employee trust in managers (Tzafrir and Dolan, 2004; Mayer and Gavin, 2005). We reformulated the questions measuring the three dimensions that are theorised to constitute swift trust, i.e. trust in benevolence, trust in ability, and trust in integrity (Mayer, Davis, and Schoorman, 1995; also see Dietz and Den Hartog, 2006). These survey items focused on the emergence of trust in the early stages of participants' involvement in the project. The items that we used to measure the three dimensions of swift trust are presented in Table 2. Participants rated trust in the members of the project team that they were actively involved with during the early stages of the project on a 7-point Likert type scale anchored from 1 (strongly agree) to 7 (strongly disagree). For the purposes of data analyses scale categories were recoded so that higher scores indicate a higher degree of trust, i.e. 7 (strongly agree). The scale reliabilities (Cronbach's alpha) for the three item measures of the benevolence, ability, and integrity dimensions of swift trust were high (Hair, Black, Babin, and Anderson, 2010): .69, .75., and .88 respectively.

Insert Table 2 about here

Predictors of swift trust. Table 2 presents the items that were used to measure swift trust based on roles, institutional categories, individual predispositions, reputations, shadow of the future, active engagement and "as if" behaviour. Note that, consistent with previous

research, the hypotheses and resulting items focus particularly on respondents' *perceptions* of the respective bases (see, e.g., Asadullah, 2017). Role-based swift trust, category-based swift trust, and reputation-based swift trust were measured using the items derived from Meyerson *et al*.'s (1996) conceptualization of these constructs. Disposition-based swift trust was measured using the "Disposition to trust" index developed by Robert *et al*. (2009). Shadow of the future-based swift trust was measured using the items derived from Poppo *et al*.'s (2007) conceptualisation of the construct[i]. Active swift trust and "as if" swift trust were assessed using the items derived from Möllering (2006). These scales and theoretical outlines were selected because they represent the seminal and/or most widely acknowledged thinking on these different aspects. Participants rated items of trust measures using a 7-point Likert type scape anchored from 1 (strongly agree) to 7 (strongly disagree). In the data analyses we recoded the scale categories so that higher values indicate agreement with an item and thus higher level of trust. The scale reliabilities for the three item measures of the role-based, disposition-based and reputation-based forms of swift trust were .76, .84, and .81, indicating a relatively high level of the internal consistency of scale items. Where a scale is comprised of only two items a correlational test was used instead of Cronbach's alpha test to determine the internal consistency of scale items (Hair *et al*., 2010). There were strong correlations between the two items that comprised the composite measures of category-based and shadow of the future-based swift trust ($r = .78$, $p < .001$; $r = .65$, $p < .001$).

Control variables. We controlled the measurement of the hypothesized associations between the predictors and swift trust for the confounding effects of the demographic and work-related characteristics of participants. Gender was coded as 1 (female) and 0 (male).

Age was measured as an actual age of a participant. Where the project manager managed the project it was coded as 1, or 0 if they were a non-managing member of the team. Degree of influence exerted in the selection of team members was measured using a 5 point ordinal level scale anchored from 1 ("I selected them by myself") to 5 ("I had no influence in their selection"). Number of hours worked on project was measured as a continuous variable for the average number of hours per week participants estimated they had spent working on the project. Number of people in project was measured as the actual number of people that were actively working on the project. Face-to-face interaction with peers was measured as the proportion of people involved in the project that participants saw regularly face-to-face using a 7 point ordinal scale anchored from 1 (all) to 7 (none).

3.3 Common method variance

Because our data was collected using a cross-sectional research design, it can be affected by common method variance. We used the following procedures to minimise the probability of the emergence of and to test for the presence of common method variance in our data. In designing our survey, we reverse coded survey items and included distinctive questions throughout the survey to minimise the likelihood of response biases associated with the non-discriminant agreement with survey questions. After data collection, we tested for the presence of common method variance using Harman's one-factor test (Podsakoff *et al*., 2003) and marker variable test (Lindell and Whitney, 2001). First, Harman's one-factor test suggests that data can be affected by common method bias when variables form a single factor or when one factor explains most of variance. The results of factor analyses using principal components extraction method generated 16 factors with eigenvalues greater than

1. The first factor explained 20.62% of variance. Second, following a recommendation of Lindell and Whitney (2001) we used a marker variable to examine how it would influence the associations between our independent variables (e.g. bases of trust) and dependent variables (e.g. measures of swift trust). The selected marker variable, i.e. creativity, measured in terms of responses to the item "The project required us to think creatively outside the box", had insignificant associations with both independent and dependent variables. The results of partial correlations and disattenuating correlations remained significant. Therefore, the results of both Harman's one-factor test and marker variable test consistently indicated that our data is unlikely to be affected by common method variance.

4. Results

As table 3 shows, the mean scores on the 1-7 trust scales show a wide variation in the different levels and bases of trust. All three sub-scales of swift trust (ability, benevolence and integrity) scored above 5 on the scale, demonstrating how common the occurrence of swift trust is among managers. Some of the predictors of trust also scored highly, demonstrating that role-based, "shadow of the future" and "as-if" based swift trust are commonly used, but category-based and active swift trust have means below 4, demonstrating that they are invoked less often.

To disentangle the bivariate associations between the seven bases and swift trust from their multivariate associations, we tested our hypotheses using both Pearson moment product correlations and ordinary least squares regressions. The results of correlation and regression analyses are presented in tables 3 and 4, respectively. Regression equations

explained more than half of the variance in the dimensions of swift trust: benevolence (R^2 = .50), ability (R^2 = .52), and integrity (R^2 = .59).

Insert Tables 3 and 4 about here

Hypothesis 1 predicted a positive association between role clarity and swift trust. There were significant positive correlations of role clarity with all three dimensions of swift trust: benevolence ($r = .45$, $p < .001$), ability ($r = .60$, $p < .001$), and integrity ($r = .60$, $p < .001$). The results of OLS[ii] regressions indicated that, controlling for the effects of sociodemographic and work-related characteristics, role clarity positively predicted all dimensions of swift trust: benevolence ($\beta = .24$, $p < .001$), ability ($\beta = .50$, $p < .001$), and integrity ($\beta = .45$, $p < .001$).

Hypothesis 2 postulated a positive association between perceived links to positive institutional categories and swift trust. Correlational analyses identified a significant positive association between these institutional categories and the ability dimension of swift trust ($r = .20$, $p < .05$), but not the other dimensions of swift trust ($p > .05$). The results of regression analyses indicated that category-based trust did not predict any of the dimensions of swift trust ($p > .05$).

Hypothesis 3 predicted a positive association between trusting predispositions and swift trust. Correlational analyses identified a significant positive association between dispositional trust and all three dimensions of swift trust: benevolence ($r = .26$, $p < .001$), ability ($r = .26$, $p < .001$), and integrity ($r = .32$, $p < .001$). In contrast, the results of regression

analyses indicated that in the presence of demographic and work-related controls dispositional trust was not associated with any of the dimensions of swift trust ($p > .05$).

Hypothesis 4 postulated a positive association between positive reputational information and swift trust. Correlational and regression analyses consistently identified a significant positive association between the predictor and the ability dimension of swift trust ($r = .19$, $p < .05$; $\beta = .16$, $p < .05$), but not the other dimensions of swift trust ($p > .05$).

Hypothesis 5 predicted a positive association between greater likelihood of future collaboration and swift trust. The results of correlational and regression analyses indicated that there were significant positive associations between this "shadow of the future" and all three dimensions of swift trust: benevolence ($r = .56$, $p < .001$; $\beta = .43$, $p < .001$), ability ($r = .44$, $p < .001$; $\beta = .29$, $p < .05$), and integrity ($r = .51$, $p < .001$; $\beta = .31$, $p < .001$).

Hypothesis 6 predicted a positive association between the active solicitation of signals of trust and trustworthiness and swift trust. Correlational analyses identified significant negative associations between this predictor and the dimensions of swift trust: benevolence ($r = -.32$, $p < .001$), ability ($r = -.17$, $p < .05$), and integrity ($r = -.18$, $p < .05$). In contrast the results of regression analyses indicated that active trust was positively associated only with the ability dimension of swift trust ($\beta = .16$, $p < .05$), but not the other dimensions ($p > .05$).

Hypothesis 7 predicted a positive association between "as-if" behaviour and swift trust. The results of correlational and regression analyses consistently indicated that "as-if" behaviour was not significantly associated with any of the dimensions of swift trust ($p > .05$).

5. Discussion

This analysis has been grounded in a comprehensive overview of the bases of swift trust as they have been discussed in the literature following Meyerson *et al*.'s seminal contribution. Our findings exhibit a number of clear patterns which are suited to bringing greater clarity to the hitherto fragmented academic debate.

The most significant theoretical contribution of our findings is that they allow us (a) to compare the relative effects of the whole (rather than only a partial) set of potentially influential bases of swift trust, (b) to distil broader theoretical themes across several (groups of) these bases rather than continuing to look at them in isolation, and (c) by reconsidering the bases in this manner, to address the inherent fundamental tension between theories of swift trust as largely "imported" or formed *ex ante* and more traditional theories of "active" trust building. The newly identified themes, which permit the discussion of swift trust from a novel angle, can be summed up as follows:

5.1 Consistent positive effects of team composition

The most coherent and clear finding of this analysis is that two bases clearly and consistently exhibit positive effects on swift trust: the allocation of roles within the project team, and the "shadow of the future" based on the likelihood of working together with some of the team members again in the future.

First, in line with Xu *et al*. (2007) and Hirtz and Turoff (2002), we suggest that a thoughtful allocation of complementary roles and, above all, their clear communication to all team members, appears as a *sine qua non* of creating swift trust. As Jarvenpaa and

Leidner (1998) caution, few things impede the formation of swift trust more than inconsistent or blurred role definitions within the project team. Note that, while this type of role clarity requires some active input by the coordinating manager who allocates and communicates roles, it is *ex ante*, rather than emerging gradually in interaction, and as such is "imported" into the trust relationships of individual team members in the sense of Meyerson et al.'s (1996) use of the term.

Second, consistent with the theoretical insights of Granovetter (1973, 1985) and other Stanford scholars such as Powell (1990), we suggest that the perceived and anticipated structure of the networks the team-members are chosen from can provide a powerful incentive towards trustworthy behaviour, and consequently the expectation of trustworthy behaviour by others. Because this is a pre-existent (or "imported") condition, it evidently forms a welcome proxy for trustworthiness which can be "swiftly" activated.

The commonality across the two bases with the greatest explanatory power, then, is that they are both related to *team composition*. If team members are selected from the "right" networks and assigned clear and complementary roles, ideal preconditions are created for swift trust to arise. Significantly, this confirms the tenet of much research to date that swift trust is most influenced by conditions which are determined *before* the team members meet for the first time (also see 5.3 below). Note, however, that this does in no way make swift trust "automatic" (as is implicit in some studies; see, e.g., Beck, 2006) or remove it beyond the influence of actors (as might result from approaches heavily referencing the trusting dispositions of individuals; e.g., Hyllengren *et al*., 2011). Rather, it means that the "work" of swift trust focuses around the early stages of team composition, before team members meet for the first time.

5.2 Limited effects of reputational and institutional information

The above forms an interesting contrast to the finding that the "shadow of the past", as well as external institutional categories, have much more limited effects.

Institutional categories, particularly as expressed in the form of certificates and membership in professional associations, did not meaningfully affect any of the dimensions of swift trust. This is an interesting finding not merely because it sets swift trust apart clearly from the assumptions of traditional trust building theory (Zucker, 1986; Lane and Bachmann, 1996; Bachmann and Inkpen, 2011). It is also illuminating because much of the literature following Meyerson *et al*. (1996) has not striven to distinguish the effects of institutional categories clearly from those of roles (e.g., Jarvenpaa and Leidner, 1998; Li *et al*., 2009). Our results clearly demonstrate differential effects between the bases of "category" and "role".

The "shadow of the past", in the form of individually-focused reputational information, has a positive effect only on the ability dimension of swift trust, but shows no discernible effect on predicting the pro-social characteristics of swift trust emphasising project members' integrity and benevolence. At a closer glance, this is plausible in the light of existing knowledge: only information which is itself corroborated again – for instance by being conveyed by third parties which are themselves trusted (Burt and Knez, 1996; Ferrin *et al*., 2006; also see Beugelsdijk, 2006) – is regarded as sufficiently "thick" to convey such complex personal characteristics as benevolence, whereas swift trust is often regarded as a "thin" form of trust (e.g., Jarvenpaa and leidner, 1998; Harrison *et al*., 1997). In addition, this typically needs to be corroborated subsequently by the trustor's own experience. Thus, where in the traditional trust literature it is sensible and meaningful to group the "shadow of the past" and the "shadow of the future" as cognate effects in networks (Poppo *et al*, 2007),

for swift trust they exhibit differential effects and as such belong in different conceptual categories.

5.3 Irrelevance of "active" trust building strategies

It is particularly interesting for the research interests of this study that the two bases which rely on the active strategies of team members to create trust early on in the process of cooperation, *viz.*, active engagement and "as if" behaviour, are found to have an overall marginal effect on swift trust. In both the traditional (Giddens, 1990; Möllering, 2006) and in the swift trust literature (Coppola *et al*., 2004; Iacono and Weisband, 1997) the assumption is widespread that early interaction of this kind is critical. Signalling-theory oriented trust research (Six, 2007; Author A, 2012) would predict the same. However, this link is not borne out by our data. Regression analysis did not indicate a meaningful association of these bases with swift trust (with the exception of a positive association between active engagement and the ability dimension of swift trust). For active engagement, correlational analysis even identified negative effects on all three dimensions of swift trust.

Two possible explanations suggest themselves. It is conceivable that team members themselves hold an expectation that not much time can be expended to "get to know each other" in projects, such that apparently time-consuming trust signalling strategies would be considered ineffective (or potentially even frowned upon). This would form an explanation for Iacono and Weisband's (1997) caution against team members trying to relate to their team mates on a personal level. This will be true, too, of the kind of conscious "tests" of the other's trustworthiness that Möllering (2006) describes as an option for gradual trust building. The commonality between these two potential explanations would indeed tie back

to the distinguishing feature of swift trust, *viz.*, time pressure. The findings for "as if" behaviour are perhaps more surprising: classic social theorist Robert K. Merton (1948) identified the power of self-fulfilling prophecies which occurred when people acted *as if* something were true; our empirical research finds no evidence for such a mechanism in the development of swift trust. While further study may be necessary to test these propositions, our data is unequivocal on the fact that the active dimension described in much of the recent literature on swift trust (e.g., Adobor and McMullen, 2002; Coppola *et al*., 2004) is unlikely to yield any positive effects on swift trust.

5.4 Relative irrelevance of trusting predispositions

Previous studies had highlighted trusting predispositions as an important predictor of swift trust (Greenberg *et al*., 2007; Li *et al*., 2009; Robert *et al*., 2009; Hyllengren *et al*., 2011). While in the bivariate analyses dispositional trust was correlated with all three dimensions, in the multivariate analyses it did not influence any of the dimensions of swift trust. Yet dispositional trust was correlated with both role clarity and the "shadow of the future", which consistently influenced swift trust. Therefore, our findings suggest that the effect of trusting predispositions on swift trust could be confounded with the effects of team composition on swift trust.

This resonates with scepticism towards approaches such as McKnight *et al*.'s (1998), who combine trusting predispositions with a whole host of further psychological mechanisms and biases which may make swift trust (or what they call "initial" trust) more likely. Here, and in newer contributions following them (e.g., Beck, 2006), swift trust can sometimes seem to arise "automatically" or near-inevitably. Seeing that empirically swift

trust often fails to arise, and considering our findings, overly strong reliance on these bases needs cautioning against.

Thus, while our findings are not suited to resolving the wider debate around the explanatory power of trusting predispositions (see e.g. Lewicki *et al*., 2006), our data shows that for the case of swift trust, these dispositions have no discernible effect.

Overall, thus, the results of our data analyses for the multivariate effects of all bases on swift trust suggest that the most potent predictors are those bases which relate to the team composition *ex ante*. By contrast, reputational and institutionally-based information as well as active trust building strategies play a relatively marginal role in the development of trust in the early stages of collaboration. Our findings decisively resolve the tension in the literature on swift trust in favour of "imported", rather than actively created, bases of swift trust. However, the fact that the bases of swift trust are external in nature does not mean that they are unchangeable "givens" beyond the actors' reach. Team composition in particular allows for an agentic use of externally given swift trust bases, setting the stage for swift trust to occur.

Our findings have clear implications for management practice. The above discussion can be used to construct an ideal-typical sequence of facilitating the occurrence of swift trust in temporary groups. Given our findings, an effective use of externally given bases will likely lie in the hands of the coordinator who assembles the team. General reputations of individuals, supported by their educational and professional credentials, can form the basis for the assumption that a member of the temporary team is competent to deliver what they are relied on to deliver (ability dimension of swift trust). For swift trust which goes beyond this

into the dimensions of integrity and benevolence, the coordinator will need to pay particular attention to the networks from which the team members are recruited: to what degree can the team members expect future collaboration with the same individuals? The more interconnected, directly or indirectly, participants to the networks are, the more likely they are to be incentivised towards trustworthy behaviour as well as an expectation of trustworthy behaviour by others based on the same logic. In choosing team members from these networks, it will be equally important to ensure that each member will have a clearly delineated role within the team. Subsequently, it will be worth spending time and energy on devising clear roles for each team member before they meet for the first time, and communicating these clearly to everybody involved. This sequence fits not only with the insights derived here from the newer literature on swift trust; particularly the progression from the preliminary establishment of comparatively "thin" competence-related forms to "thick" goodwill-oriented forms of trust chimes with established models of trust building (e.g., Lewicki and Bunker, 1996).

6. Conclusion

Our study set out to shed some light on, and give additional structure to, the academic debate on swift trust. It was motivated by the perception that, despite the obvious relevance of and interest in this topic in organisation and management research, the literature since Meyerson *et al*.'s (1996) seminal chapter, had become increasingly fragmented and was lacking coherence, or even communication among contributions beyond the common referral back to Meyerson and colleagues.

In order to do so, an amalgamated overview over the literature was presented, identifying seven bases of swift trust commonly used in the literature. A survey was designed which covered all of these bases equally and measured the perceived degree of swift trust retrospectively in the most recent projects of 172 project managers. Our findings permitted the identification of new themes across groups of bases, which are more germane to the context of swift trust as a distinct phenomenon, and as such permit the discussion of swift trust from a novel angle. In particular, our findings revealed that the most consistent positive effects on the formation of swift trust were exerted by bases relating to team composition, and that in contrast, early interactions in the process of cooperation did not possess any predictive power, a finding which is suited to resolving the inherent tension in the literature between "imported" and actively created bases of swift trust.

The validity of our findings can be affected by a number of limitations of the research design. First, we used one item-measures for the assessment of "active" and "as if" bases of swift trust and two-item scales to measure institutional categories and "shadow of the future" bases of swift trust. The validity of measurement could have been increased by using multi-item scales with a more differentiated set of items. However, the two items that we used to measure the influence of both institutional categories and the "shadow of the future" were found to be strongly correlated ($r = .78$, $r = .65$), suggesting that there was a high degree of internal consistency between the items that comprised the measures of these bases. Second, the internal validity of our findings could have been increased by using a more differentiated set of predictors of trust and control variables. However, the selection of the predictors of trust was theoretically informed and regression models with demographic and work-related control variables explained more than a half of variance in the dimensions of swift trust. Third, the study is reliant on cross-sectional data; although we

take reasonable precautions against some of the weaknesses inherent in this method (such as common methods variance) we cannot completely exclude the possibility that there exist prior variables that we have not included in the regressions as controls that could be producing spurious effects or suppressing genuine effects. Furthermore, with our medium-sized sample, including any further variables in the model would reduce the power and stability of the regressions[iii].

Clearly, more detailed work is needed on the development dynamics of swift trust (Gammelgaard, 2010); the present study has merely been able to make a start to this complex endeavour. As was evidenced by our approach, empirical studies may be helpful in this quest for greater conceptual depth and clarity. However, it needs to be taken into account that our study had to choose one empirical subject only – project managers, whose working lives, while representative of some important tendencies of temporary organising more broadly, are also likely to differ from those of other contexts in which swift trust is likely to matter. Swift trust is not only a multi-faceted phenomenon, but also one likely to change in shape and expression depending on its situated context. Thus, further studies of swift trust in other empirical contexts are desirable. In view of the increasing prevalence of temporary organisational forms in today's economy and society, swift trust deserves increased conceptual and empirical attention in the future.

References

Adobor, H. and McMullen, R.S. 2002. Strategic partnering in e-commerce: Guidelines for managing alliances, *Business Horizons*, vol. 45, 67-76

Arrighetti, A., Bachmann, R. and Deakin, S. 1997. Contract law, social norms and inter-firm cooperation, *Cambridge Journal of Economics*, vol. 21, 171-95

Axelrod, R. 1984. *The Evolution of Cooperation,* New York, Basic Books

Bachmann, R. and Inkpen, A.C. 2011. Understanding Institutional-based Trust Building Processes in Inter-organizational Relationships, *Organization Studies*, vol. 32, 281-301

Baier, A. 1986. Trust and Antitrust, *Ethics*, vol. 96, 231-60

Bakker, R. M. 2010. Taking stock of temporary organizational forms: A systematic review and research agenda, *International Journal of Management Reviews*, vol. 12, 466-86

Beck, T.A. 2006. '*Understanding Swift Trust in Temporary Interorganizational Relationships*', PhD thesis, University of Texas

Beugelsdijk, S. 2006. A note on the theory and measurement of trust in explaining differences in economic growth, *Cambridge Journal of Economics*, vol. 30, 371-87

Burt, R.S. and Knez, M. 1996. Trust and Third-Party Gossip, pp. 68-89 in Kramer, R.M. and Tyler, T.R. (eds), *Trust in Organizations: Frontiers of Theory and Research*, London, Sage

Coppola, N.W., Hiltz, S.R. and Rotter, N.G. 2004. Building Trust in Virtual Teams, *IEEE Transactions on Professional Communication*, vol. 47, 95-104

Cusmano, L., Morrison, A. and Pandolfo, E. 2015. Spin-off and clustering: a return to the Marshallian district, *Cambridge Journal of Economics*, vol. 39, 49-66

Dei Ottati, G. 1994. Trust, interlinking transactions and credit in the industrial district, *Cambridge Journal of Economics*, vol. 18, 529-46

Della Giusta, M. 2008. A theory of trust based systems of intermediation, *Cambridge Journal of Economics*, vol. 32, 65-81

Dionisi, A.M. and Brodt, S.E. 2008. Managing Identities Across the Negotiation Divide: The Effect of Intra-Group Trust Development Strategies on Inter-Group Negotiation, paper

presented at the International Association for Conflict Management Conference, Chicago, Illinois

Dietz, G. and Den Hartog, D. 2006. Measuring trust inside organizations, *Personnel Review*, vol. 35, 557-588

Ferrin, D.L., Dirks, K.T. and Shah, P.P. 2006. Direct and Indirect Effects of Third-Party Relationships on Interpersonal Trust, *Journal of Applied Psychology*, vol. 91, 870-83

Ferrin, D.L., Bligh, M.C. & Kohles, J.C. 2007. Can I Trust You to Trust Me? A Theory of Trust, Monitoring, and Cooperation in Interpersonal and Intergroup Relationships, *Group & Organization Management*, vol. 32, 465-99

Ferrin, D.L., Bligh, M.C. & Kohles, J.C. 2008. It Takes Two to Tango: An Interdependence Analysis of the Spiraling of Perceived Trustworthiness and Cooperation in Interpersonal and Intergroup Relationships. *Organizational Behavior and Human Decision Processes*, vol. 107, 161-178

Gammelgaard, J. 2010. Knowledge retrieval through virtual communities of practice, *Behaviour and Information Technology*, vol. 29, 349-62

Giddens,A.1990. *The Consequences of Modernity*, Cambridge, Polity

Granovetter, M. 1973. The Strength of Weak Ties, *American Journal of Sociology*, vol. 78, 1360-80

Granovetter, M. 1985. Economic Action and Social Structure: The Problem of Embeddedness, *American Journal of Sociology*, vol. 91, 481-510

Greenberg, P.S., Greenberg, R.H., Lederer Antonucci, Y. 2007. Creating and sustaining trust in virtual teams, *Business Horizons*, vol. 50, 325-33

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. 2010. *Multivariate Data Analysis: A Global Perspective,* London, Pearson

Harrison, R., Dibben, M. and Mason, C. 1997. The Role of Trust in the Informal Investor's Investment Decision: An Exploratory Analysis, *Entrepreneurship: Theory and Practice*, vol. 21, 63-81

Hiltz, S.R. and Turoff, M. 2002. What Makes Learning Networks Effective? *Communications of the ACM*, vol. 45, 56-9

Hung, Y.T.C., Dennis, A.R. and Robert, L. 2004. Trust in virtual teams: Towards an integrative model of trust formation, *Proceedings of the 37th Hawaii International Conference on System Sciences*, track 1, vol. 1

Hyllengren, P., Larsson, G., Fors, M., Sjoberg, M., Eid, J. and Olsen, O.K. 2011. Swift trust in leaders in temporary military groups, *Team Performance Management*, vol. 17, 354-68

Iacono, C.S. and Weisband, S. 1997. Developing Trust in Virtual Teams, *Proceedings of the 30th Annual Hawaii International Conference on System Sciences*, vol. 2, 412-20

Jarvenpaa, S.L. and Leidner, D.E. 1998. Communication and Trust in Global Virtual Teams, *Journal of Computer-Mediated Communication*, vol. 3, 1-55

Johnson, N.D. & Mislin, A.A. (2011). Trust Games: a meta-analysis. *Journal of Economic Psychology*, vol. 32, 865-889

Kleinknecht, A., Kwee, Z. and Budyanto, L. 2016. Rigidities through flexibility: flexible labour and the rise of management bureaucracies, *Cambridge Journal of Economics*, vol. 40, 1137-47

Kramer, R.M. and Cook, K.S. 2004. Trust and Distrust in Organizations: Dilemmas and Appproaches, pp. 1-18 in Kramer, R.M. and Cook, K.S. (eds), *Trust and Distrust in Organizations: Dilemmas and Appproaches,* New York, Russell Sage

Kramer, R.M. 1999. Trust and Distrust in Organizations: Emerging Perspectives, Enduring Questions, *Annual Review of Psychology*, vol. 50, 569-98

Lane, C. 1997. The social regulation of inter-firm relations in Britain and Germany: market rules, legal norms and technical standards. *Cambridge Journal of Economics*, vol. 21, 197-215

Lane, C. and Bachmann, R. 1996. The Social Constitution of Trust: Supplier Relations in Britain and Germany, *Organization Studies*, vol. 17, 365-95

Lane, C. and Bachmann, R. 1997. Co-operation in inter-firm relations in Britain and Germany: the role of social institutions, *British Journal of Sociology*, vol. 48, 226-54

Lane, C. and Bachmann, R. (eds) 1998. *Trust Within and Between Organizations*. Oxford: Oxford University Press.

Lewicki, R.J. and Bunker, B.B. 1996. Developing and Maintaining Trust in Work Relationships, pp. 114-39 in Kramer, R.M. and Tyler, T.R. (eds), *Trust in Organizations: Frontiers of Theory and Research*, London, Sage

Lewicki, R.J., Tomlinson, E.C. and Gillespie, N. 2006. Models of Interpersonal Trust Development: Theoretical Approaches Empirical Evidence, and Future Directions, *Journal of Management*, vol. 32, 991-1022

Lewis, J.D. and Weigert, A. 1985. Trust as a Social Reality, *Social Forces*, vol. 63, 967-85

Li, X., Rong, G. and Thatcher, J.B. 2009. Swift Trust in Web Vendors: The Role of appearance and functionality, *Journal of Organizational and End User Computing*, vol. 21, 88-108

Lindell, M.K. and Whitney, D.J. 2001. Accounting for common method variance in crosssectional research designs, *Journal of Applied Psychology*, vol. 86, 114-21

Lorenz, E. 1999. Trust, contract and economic cooperation, *Cambridge Journal of Economics*, vol. 23, 301-15

Luhmann, N. 1979. *Trust and Power,* Chichester, Wiley

Lyon, F. and Porter, G. 2009. Market institutions, trust and norms: exploring moral economies in Nigerian food systems, *Cambridge Journal of Economics*, vol. 33, 903-20

Mayer, R.C. and Gavin, M.B. 2005. Trust in Management and Performance: Who Minds the Shop While the Employees Watch the Boss? *Academy of Management Journal*, vol. 48, 874-88

Mayer, R.C., Davis, J.H. and Schoorman, D.F. 1995. An Integrative Model of Organizational Trust, *Academy of Management Review*, vol. 20, 709-34

McKnight, D.H., Cummings, L.L. and Chervany, N.L. 1998. Initial Trust Formation in New Organizational Relationships, *Academy of Management Review*, vol. 23, 473-90

Merton, R.K. 1948. The Self-Fulfilling Prophecy, *Antioch Review*, vol. 8, 193-210

Meyerson, D., Weick, K.E. and Kramer, R.M. 1996. Swift Trust and Temporary Groups, pp. 166-95 in Kramer, R.M. and Tyler, T.R. (eds), *Trust in Organizations: Frontiers of Theory and Research*, London, Sage

Mitchell, A. and Zigurs, I. 2009. Trust in Virtual Teams: Solved or Still a Mystery? *Data Base for Advances in Information Systems*, vol. 40, 61-83

Möllering, G. 2006. *Trust: Reason, Routine, Reflexivity*, Amsterdam, Elsevier

Perez-Nordtvedt, L., O'Brien, R. and Rasheed, A.A. 2013. What Are Temporary Networks and When Are They Useful? *Group and Organization Management*, vol. 38, 392-421

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies, *Journal of Applied Psychology*, vol. 88, 879-903

Poppo, L., Zhou, K.Z. and Ryu, S. 2007. Alternative Origins to Interorganizational Trust: An Interdependence Perspective on the Shadow of the Past and the Shadow of the Future, *Organization Science*, vol. 19, 39-55

Powell, W.W. 1990. Neither market nor hierarchy: Network forms of organization, *Research in Organizational Behavior*, vol. 12, 295-336

Reynaud, B. 2017. Forms of trust and conditions for their stability, *Cambridge Journal of Economics*, vol. 41, 127-45

Robert, L.P., Dennis, A.R. and Hung, Y.C. 2009. Individual Swift Trust and Knowledge-Based Trust in Face-to-Face and Virtual Team Members, *Journal of Management Information Systems*, vol. 26, 241-79

Rotter, J.B. 1967. A new scale for the measurement of interpersonal trust, *Journal of Personality*, vol. 35, 651-65

Rotter, J.B. 1971. Generalized expectancies for interpersonal trust, *American Psychologist*, vol. 26, 443-52

Sabel, C.F. 1993. Studied Trust: Building New Forms of Cooperation in a Volatile Economy, pp. 104-44 in Swedberg, R. (ed.), *Explorations in Economic Sociology,* New York, Russell Sage

Saunders, M.N.K., Skinner, D., Gillespie, N., Dietz, G. and Lewicki, R. (eds.) 2010. *Organisational Trust: A Cultural Perspective*, Cambridge, CUP

Six, F. 2007. Building interpersonal trust within organizations: A relational signalling perspective, *Journal of Management and Governance*, vol. 11, 285-309

Sydow, J., Bakker, R.M., DeFillippi, R.J. and Schwab, A. (eds.) 2016. Temporary Organizing, *Organization Studies*, vol. 37/12 (special issue)

Tatham, P. and G. Kovacs, G. 2010. The application of 'swift trust' to humanitarian logistics, *International Journal of Production Economics*, vol. 126, 35-45

Tzafrir, S.S. and Dolan, S.L. 2004. Trust me: a scale for measuring manager-employee trust, *Management Research*, vol. 2, 115-32

Wilson, R.K. 2018. Trust Experiments, Trust Games, and Surveys. In E.M. Uslaner (ed), *The Oxford Handbook of Social and Political Trust*. Oxford: Oxford University Press.

Xu, G., Feng, Z., Wu, H. and Zhao, D. 2007. Swift Trust in a Virtual Temporary System: A Model Based on the Dempster-Shafer Theory of Belief Functions, *International Journal of Electronic Commerce*, vol. 12, 93-126

Zucker, L.G. 1986. Production of Trust: Institutional Sources of Economic Structure, 1840-1920, *Research in Organizational Behavior*, vol. 8, 53-111

Table 1: Bases of swift trust

Basis of swift trust	Key quotes from Meyerson *et al*. (1996)	Taken up in	Connection to "traditional" trust
Roles	"people in temporary systems deal with one another more as roles than as individuals" (173); "Role-based interaction leads to more rapid development of trust" (181)	Adobor and McMullen (2002), Coppola *et al*. (2004), Greenberg *et al*. (2007), Hirtz and Turoff (2002), Iacono and Weisband (1997), Jarvenpaa and Leidner (1998), Xu *et al*. (2007), Dionisi and Brodt (2008)	Kramer (1999)
Institutional categories	"expectations ... imported from other settings ... in categorical forms" (174); consequence: "depersonalised trust based on category membership" (174, citing Brewer); nature of categories: "institution-driven categories" (175)	Coppola *et al*. (2004), Jarvenpaa and Leidner (1998), Xu *et al*. (2007), Gammelgaard (2010), Hyllengren *et al*. (2011), Li *et al*. (2009), Mitchell and Zigurs (2009), Robert *et al*. (2009)	Kramer (1999), Zucker (1986)
Trusting predispositions	"To reduce this uncertainty, people fall back on predispositions"; they "access over-learned tendencies and cognitive structures that provide guidelines for trust or mistrust." (178)	Greenberg *et al*. (2007), Xu *et al*. (2007), Hyllengren *et al*. (2011), Li *et al*. (2009), Robert *et al*. (2009), Tatham and Kovacs (2010)	Rotter (1967)
Reputations and the "shadow of the future"	"The smaller the labor pool or network from which personnel in a temporary system are drawn, the more vulnerable the people who are drawn; the stronger the grounds for not expecting harmful behavior, the more rapidly trust will develop" (181); "Their reputation is entrusted to others who can do considerable damage in multiple networks" (172)	Greenberg *et al*. (2007), Jarvenpaa and Leidner (1998), Dionisi and Brodt (2008), Gammelgaard (2010), Perez-Nordvedt *et al*. (2013), Tatham and Kovacs (2010)	Granovetter (1985), Burt and Knez (1996)
Active engagement	"swift trust may be a by-product of a highly active, proactive, enthusiastic, generative style of action" (180); "swift trust is less about relating than doing." (191)	Adobor and McMullen (2002), Coppola *et al*. (2004), Iacono and Weisband (1997), Jarvenpaa and Leidner (1998), Li *et al*. (2009), Mitchell and Zigurs (2009)	Giddens (1990), Möllering (2006)
"As if" behaviour	"In a temporary group, people often act *as if* trust were in place." (186, emphasis in original); "one can presume that the other people in the setting are trustworthy. If one acts toward them in a trusting manner, the presumption of trust often acts like a self-fulfilling prophecy and creates the trusting behavior that was presumed to be there" (172)	Adobor and McMullen (2002), Xu *et al*. (2007)	Möllering (2006)

Table 2. Measures of trust

Dimensions of swift trust	**Items**
Swift trust	Only thinking about the EARLY STAGES of your involvement in the last project, how would you rate the following statements about other members of the project team that you were actively involved with? 1. I could count on other members of the project team to help me if I had difficulties with my job [Benevolence]. 2. I was concerned that they might try to sabotage or undermine the project [Benevolence, reverse]. 3. I felt they were committed to the project [Benevolence]. 4. They had a lot of knowledge about the kind of work that needed to be done [Ability]. 5. They were successful in the things they tried to accomplish [Ability]. 6. They exhibited competence in their jobs [Ability]. 7. They were open and upfront with me [Integrity]. 8. They kept the promises they made [Integrity]. 9. They took actions that were consistent with their words [Integrity].
Bases of swift trust	**Items**
Role clarity	Only thinking about the early stages of your involvement in the last project, how would you rate the following statements about other members of the project team that you were actively involved with? 1. It was clear from the start who was responsible for which task. 2. Members of the project team knew who they were reporting to. 3. Members of the project team knew how to communicate important information.
Institutional categories and reputations	Still thinking about those team members you were actively involved with in the project, but now focusing only on those who you had not worked with before the project began, how would you rate the following statements? I knew whether or not I could trust them because... 1. ...of their membership of professional associations [*category*]. 2. ...of their qualifications [*category*]. 3. ...they had worked on successful projects before [*reputation*]. 4. ...I had heard people speak about them [*reputation*]. 5. ...I asked someone I know about them [*reputation*].

Table 2 (continued).

Bases of swift trust	Items
Trusting predispositions	Now thinking about both your job and life outside of work, in your experience how true are the following statements: 1. Most people are honest in describing their experience and abilities. 2. Most people tell the truth about the limits of their knowledge. 3. Most people can be counted on to do what they say they will do.
"Shadow of the future"	To what extent do you agree with the following statements about the project and its outcomes: 1. I think it is likely that I will work with the people involved in the project again in the future. 2. If I had the choice, I would like to work with the people involved in the project again in the future.
Active engagement	For the next few questions, please answer with respect to the people you were actively involved with as part of the project. Only thinking about the early stages of your involvement in the last project, how would you rate the following statements about other members of the project team that you were actively involved with? -I regularly put team members on the spot so I could see their true colours early on.
"As if" behaviour	Again, thinking only about those team members who you were actively involved with in the project but who you had not worked with before the project began, how would you rate the following statements? -I just went in trusting them until I had better evidence.

Table 3. Means, standard deviations and correlations of study variables

	M	SD	1	2	3	4	5	6	7	8
1. Swift trust – Benevolence	5.53	1.15								
2. Swift trust – Ability	5.42	1.13	.59***							
3. Swift trust – Integrity	5.09	1.28	.71***	.69***						
4. Role clarity	5.13	1.21	.45***	.60***	.60***					
5. Institutional categories	2.96	1.62	.03	.20*	.15	.15				
6. Trusting predispositions	4.92	1.03	.26***	.26***	.32***	.32***	.07			
7. Reputations	4.68	1.40	.14	.19*	.15	.10	.31***	.14		
8. "Shadow of the future"	5.21	1.56	.56***	.44***	.51***	.31***	.03	.20*	.19*	
9. Active engagement	3.06	1.58	-.32***	-.17*	-.18*	-.15	.01	-.04	.13	-.22*
10. "As if" behaviour	5.30	1.40	.13	.10	.06	.05	.15	.27***	.03	.00
11. Gender	0.29	0.46	.10	.03	.10	-.12	-.09	-.14	-.08	.17*
12. Age	43.77	16.76	.19*	.12	.19*	.22**	.01	.24**	-.07	-.06
13. Management of team members	2.51	1.26	-.10	.00	-.05	-.09	.05	-.01	-.10	-.02
14. Selection of team members	3.72	1.09	-.18*	-.08	-.24**	-.25**	-.16*	-.04	-.26***	-.25**
15. Hours worked on project	29.20	18.34	-.01	-.03	.02	.00	-.10	-.04	.03	-.08
16. Number of people in project	61.02	99.08	.01	-.04	.03	.00	-.15	.10	-.02	-.01
17. Face-to-face interaction with peers	2.88	1.50	.06	-.03	.05	.09	-.05	-.09	-.03	.02

N = 171; *p <.05, **p <.01, ***p <.001.

Table 3 (continued). Means, standard deviations and correlations of study variables

	9	10	11	12	13	14	15	16
1. Swift trust – Benevolence								
2. Swift trust – Ability								
3. Swift trust – Integrity								
4. Role clarity								
5. Institutional categories								
6. Trusting predispositions								
7. Reputations								
8. "Shadow of the future"								
9. Active engagement								
10. "As if" behaviour	-.09							
11. Gender	-.19*	-.11						
12. Age	.01	.14	-.20*					
13. Management of team members	-.16*	-.11	.12	-.11				
14. Selection of team members	-.05	.09	.24**	-.18*	.29***			
15. Hours worked on project	.12	.10	-.05	.23**	-.18*	-.16*		
16. Number of people in project	.03	.08	-.10	.17	-.20*	-.12	.33***	
17. Face-to-face interaction with peers	-.13	-.03	.02	.13	-.01	-.02	-.13	.10

N = 171; *p <.05, **p <.01, ***p <.001.

Table 4. OLS Regression analyses predicting dimensions of swift trust

	Dimensions of swift trust											
	Benevolence				Ability				Integrity			
	b	SE	β	Sig.	b	SE	β	Sig.	b	SE	β	Sig.
Role clarity	.21	.07	.24	.002	.40	.06	.50	.000	.44	.07	.45	.000
Institutional categories	.04	.05	.07	.381	.07	.05	.11	.129	.08	.05	.11	.101
Trusting predispositions	-.02	.09	-.02	.779	-.08	.08	-.08	.310	.15	.09	.12	.088
Reputations	.08	.06	.11	.143	.11	.05	.16	.031	.04	.06	.05	.433
"Shadow of the future"	.31	.06	.43	.000	.19	.05	.29	.001	.25	.06	.31	.000
Active engagement	-.14	.05	-.19	.014	-.04	.05	-.07	.371	-.04	.05	-.05	.485
"As if" behaviour	.06	.07	.07	.389	.06	.07	.06	.409	-.01	.07	-.01	.890
Gender	.24	.18	.10	.183	.12	.16	.05	.477	.44	.18	.16	.018
Age	.01	.01	.14	.067	.00	.01	-.02	.793	.01	.01	.14	.046
Management of team members	-.07	.07	-.08	.263	-.07	.06	-.08	.253	-.01	.07	-.01	.874
Selection of team members	.04	.08	.04	.611	.15	.08	.16	.053	-.05	.08	-.05	.517
Hours worked on project	.00	.00	.02	.802	.00	.00	-.05	.483	.00	.00	.04	.586
Number of people in project	.00	.00	-.02	.748	.00	.00	.01	.928	.00	.00	.02	.754
Face-to-face interaction with peers	.01	.05	.01	.901	-.02	.05	-.02	.761	.00	.05	.00	.952
R^2		.50				.52				.59		
ΔR^2		.44				.45				.54		

N = 168

[i] One of the two items in the "shadow of the future" scale concerns whether the respondent would like to work with others in the future, which is arguably more about their affective response rather than just likelihood of working together in the future. To check for this possibility we re-ran the regressions omitting that suspect item, but reassuringly the results were hardly changed.

[ii] The distribution of the DVs are fairly symmetrical with no outliers, so OLS and ordered logit or probit are likely to give very similar results. With our relatively small sample size, the power advantages and interpretability of OLS outweigh the hypothetical advantages of those non-parametric methods.

[iii] One possibility that we took seriously was whether having previously worked with some or all of the team members could be causing spurious relationships. The variable that asked about this did show that in about a quarter of cases the respondent had worked with more than half of the other team members before (but we don't know whether they had worked closely enough to form opinions on their trustworthiness). As a check we correlated this variable with the three Swift Trust variables, and in all cases the correlations were small (rhos <0.12) and not significant (ps > 0.13). We thus conclude that previous knowledge of some of the members of a team is unlikely to be causing spurious effects, but this is clearly a complex topic that could be explored in more detail in future research.