

# The Antecedents and Feedback Loops Contributing to Trust in Agile Scrum Teams

Trish O’Connell

School of Science & Computing  
Galway-Mayo Institute of Technology  
Galway, Ireland  
trish.oconnell@gmt.ie

Owen Molloy

Dept. of Information Technology  
National University of Ireland  
Galway, Ireland  
owen.molloy@nuigalway.ie

**Abstract**— Scrum has become the dominant Agile way of developing software products and systems. To ensure the team achieves the goals of the Sprint, the team needs to collaborate effectively and share knowledge optimally. To do this, McHugh, Conboy and Lang, amongst others, have claimed that trust is “of increased importance” to the Agile Scrum team. This paper describes the contributions to the academic discourse on trust and subsequently hypothesizes how these may apply to the Scrum team. Whilst some of the antecedents are straightforward contributors to building trust, others may function as reinforcing feedback loops. A preliminary conceptual model is presented, and further research is underway to refine and validate the model.

**Keywords**-Agile; Scrum; Team; Trust; Collaboration; Knowledge-sharing.

## I. INTRODUCTION

Software development has always been a task-oriented activity. With the advent of Agile, it has become a task-oriented, social activity. Moe, Dingsøyr and Dybå state, “the basic work unit in innovative software organizations is the team rather than the individual [1].” In Scrum (an Agile framework for managing the development process often referred to as a methodology), software development can be considered as a collective team effort, where teamwork requires cooperation and therefore, social interaction. A fundamental characteristic of a good team is that the team members collaborate well. The co-creators of the Agile Manifesto [2] referred to the fact that Agile teams are characterized by “intense collaboration” where collaboration refers to “actively working together to deliver a work product or make a decision.” It is through collaboration and knowledge-sharing that software development tasks may be accomplished successfully. Nerur concurs, “A cooperative social process characterized by communication and collaboration between a community of members who value and trust each other is critical for the success of agile methodologies [3].”

Whereas cooperation between team members involves the “smooth transfer of work in progress, work products, and information from one member to another [4],” collaboration, by contrast, “elevates groups beyond cooperation, adding an essential ingredient for emergent, innovative, and creative thinking [4].”

## A. Collaboration

To increase collaboration and facilitate knowledge sharing, Agile methods such as Scrum rely heavily on face-to-face communication and a high degree of interaction between the team. The Agile Manifesto advocates “Individuals and interactions over processes and tools [2].” Highsmith states “Most traditional ‘methodologies’ place 80 percent of their emphasis on processes, activities, tools, roles, and documents. Agile approaches place 80 percent of their emphasis on ecosystems—people, personalities, collaboration, conversations, and relationships [5].”

Whilst the Agile software development framework referred to as XP promotes developers working together in a technique known as ‘pair programming’ to achieve this face-to-face communication, the Scrum approach relies on the three key practices which McHugh, Conboy and Lang describe as “sprint/ iteration planning, daily stand-up, and sprint/iteration retrospective [6].”

The iteration planning session is where the team collectively plans and agrees on what will be delivered at the end of the Sprint.

The daily stand-up is a team status meeting where team members describe progress and obstacles (if any) to meeting commitments.

The sprint retrospective is effectively a post-partum review of the sprint that has been completed. It is supposed to allow the team to collectively review what went well and what did not, during the sprint. It should serve as the baseline for improvement. [7]

Ghobadi and Mathiassen posit, “Software development is a collaborative process where success depends on effective knowledge sharing [8].”

## B. Knowledge sharing

Liu and Phillips expound that trust and collaboration are “essential for effective knowledge sharing to occur [9].” It is essential that the Scrum team shares knowledge during all phases of the Sprint. Park and Lee postulate, “The time spent on problem solving can be reduced significantly because the project participants’ benefit from the shared and accumulated knowledge [10].” The three Agile practices which are used in Scrum all involve communication and sharing information, to varying degrees. Following their research study McHugh, Conboy and Lang conclude “All

three practices provide an open forum for sharing knowledge and obtaining feedback [7].” The purpose of knowledge sharing in Scrum is that it moves the development process along. The team members do not need to pause in their development efforts due to obstacles. As Park and Lee explain, “more frequent communication creates opportunities to develop and enhance knowledge sharing. 10)” This “frequent communication” is the hallmark of Agile with the Agile Manifesto recommending. “Individuals and interactions over processes and tools [2].”

For collaboration to be successful a climate of trust needs to exist in the team Ceschi, Sillitti, Succi, and De Panfilis, highlight the fact that “Knowledge sharing through communication requires a high level of mutual trust among team members and frequent interactions [11].” Indeed, it may be argued that trust is a vital component, and “important supporting mechanism of teamwork [12],” according to Weimar, Nugroho, Visser, Plaat and Goudbeek.

Many authors have cited trust as being important to collaboration, with Mishra claiming, “trust has been found to be a critical factor facilitating collaboration [13].”

Park and Lee also see trust as imperative for knowledge transfer and successful team performance asserting, “the sharing of knowledge in an IS project has become a requirement for the completion of a successful IS project [10].”

Whilst much has been written about the importance and need for trust in Agile teams, e.g. Mayer, Davis and Schoorman posit, “The emergence of self-directed teams and a reliance on empowered workers greatly increase the importance of the concept of trust, as control mechanisms are reduced or removed, and interaction increases [14],” there has been little to no direct research into trust in Agile teams. As, McHugh, Conboy and Lang state, “Agile methods have been the subject of much research, as has trust, but the impact of trust on agile teams has not [6].”

This paper attempts to fill this void in the trust construct as applied to Agile Scrum teams.

The remainder of this paper is organized as follows: Section II of this paper briefly considers team formation and the development of interpersonal trust. Section III examines the notion of trust as presented in the academic discourse. Section IV addresses the application to the Scrum team and presents a conceptual model of how trust can be depicted in a Scrum team setting. Finally, the paper concludes with a brief discussion and plans for future work.

## II. TEAM FORMATION

Depending on the context, there are many characterizations of trust. In terms of a team, the most crucial type of trust is likely to be interpersonal which facilitates and fosters collaboration and knowledge sharing between team members. Rotter defines interpersonal trust as, “an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or

group can be relied upon [15].” From a Scrum team perspective, it is imperative that a team member fulfils his commitment which is made at the Scrum Daily standup meeting. Another oft-quoted definition of trust is attributed to Mishra, “Trust is one party’s willingness to be vulnerable to another party based on the belief that the latter party is 1) competent, 2) open, 3) concerned, and 4) reliable [13].”

Interpersonal trust does not tend to just ‘happen’ in a team. The preeminent treatise on team formation was proposed by Tuckman in 1965. He proposed that teams progress through four distinct phases: “Forming, Storming, Norming and Performing [16].”

“Forming” is the phase where team members are first brought together and whilst they may agree on goals they are predominantly working as individuals with no sense of the common purpose. Individuals assess each other’s boundaries in what Tuckman refers to as “testing”. In addition, Tuckman expounds, “Coincident with testing in the interpersonal realm is the establishment of dependency relationships with leaders, other group members, or preexisting standards [16].”

The second developmental phase in team development is termed “Storming” and it is often characterized by “conflict and polarization around interpersonal issues, with concomitant emotional responding in the task sphere. These behaviors serve as resistance to group influence and task requirements [16].” At this stage, trust is predominantly invested in the team leader.

On exiting the preceding phase, the team comes to the realization that they have a common goal. Tuckman describes how “in-group feeling, and cohesiveness develop, new standards evolve, and new roles are adopted. In the task realm, intimate, personal opinions are expressed [16].” At this stage, referred to as “Norming,” interpersonal trust is beginning to develop. Once the team norms are understood the team begins to develop trust in the process.

“Performing” is the final and most crucial stage for the team. As Tuckman explains, “group energy is channeled into the task. Structural issues have been resolved, and structure can now become supportive of task performance [16].” At this stage, the team members should be sufficiently comfortable with each other that a degree of interpersonal trust is established.

In Scrum, teams are often pulled together based on the projects requirements, the domain expertise needed, the availability and experience of personnel. Scrum teams will inevitably progress through the four phases as described above.

Scrum teams are self-managing. Moe, Dingsøyr and Dybå describe how “a Scrum team is given significant authority and responsibility for many aspects of their work, such as

planning, scheduling, assigning tasks to members, and making decisions [1].”

It would not be possible for the team to function effectively, in pursuance of the above, without trust.

### III. TRUST IN THE ACADEMIC DISCOURSE

Whilst many have written about trust it would still appear to be confusing, predominantly because much of the research has been context specific, ranging from sociological (Simmel [17], Luhmann [18], Barber [19], Lewis and Weigert [20], Mayer et al. [14], Dirks and Ferrin [21]) to psychological (Rotter [15], Rempel, Holmes and Zanna [22], McKnight and Chervany [23]). Confusing, also, because for there to be trust between team members there must be conditions, which facilitate this trust to grow.

Some authors refer to these as the *antecedents* of trust (Costa, [24]), but trust also gives rise to consequences. In this authors opinion, some of the consequences also function as reinforcing feedback mechanisms for enhancing trust in a team.

Whilst Simmel [17] referred to trust as a mysterious “faith” of man in man. Deutsch [25] equated trust to a reciprocal, cooperative, relationship between people who make the decision to trust. By this he means that a person will meet the expectations of another, and in return, expect his/her expectations to also be fulfilled. Furthermore, Deutsch expounds that fulfilling another’s expectations also involves the notion of competence. There is nothing to be gained from trusting someone to do something in which they have no competence to succeed.

Once a degree of mutual trust has been established, knowledge sharing and collaboration should follow. Zand concurs that persons who trust one another “will provide relevant, comprehensive, accurate, and timely information, and thereby contribute realistic data for problem-solving efforts [26].”

Granovetter [27] refers to relationships between two individuals as “dyadic ties” and defines the strength of a tie as “a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie. Each of these is somewhat independent of the other, though the set is obviously highly intracorrelated [27].” Gabarro highlighted the importance of “openness about task problems or task related issues [28]” as being highly influential in the development of trust. Moreover, Gabarro echoes Deutsch [25] in that he posits “competence, reliability and openness more than compensated for a lack of initial liking [28].”

Furthermore, Gabarro listed integrity and judgement as being equally as important as competence in the perception one forms of another when considering whether to trust them [28].

Working from the premise that one trusts people with whom one is familiar, Luhmann [18] argued that familiarity

serves as the “prerequisite for trust.” Another train of thought expounded by Luhmann concerns the motivations of the trustee in the trust situation. It seems to be the first mention of a rational calculation on which to base trust since Luhmann refers to “motivational structures” which can be focused on when we do not “know the future actions of the other party[18].” He postulates that “on the one hand he (the trustor) will find it worthwhile to ask himself with what prospects for gain and loss his partner (the trustee) can reckon, if he is trusted[18].” This harks back to Deutsch who referred to “behavior which the individual perceives to have greater negative motivational consequences if the expectation is not confirmed than positive motivational consequences if it is confirmed [25].”

Ultimately, Luhmann acknowledges the situation in which trust is required and he further expounds on the role of uncertainty and ambiguity in building trust. Undoubtedly, this encompasses the realm of software development.

“There has to be defined some situation in which the person trusting is dependent on his partner; otherwise the problem doesn’t arise. His behaviour must then commit him to the situation and make him run the risk of his trust being betrayed. In other words, he must invest in... a ‘risky investment’. One fundamental condition is that it must be possible for the partner to abuse the trust; indeed, it must not merely be possible for him to do so but he must also have a considerable interest in doing so. It must not be that he will toe the line on his own account - in the light of his interests. In his subsequent behaviour the trust put in him must be honoured and his own interests put to one side [18].”

From this description, it is evident that trust occurs when there is an element of uncertainty in the relationship or task. The trust process as described by Luhmann evidences a two-way street in terms of firstly the trustor must confer trust and then the trustee accepts and fulfils the trust proposition. Luhmann concludes that the process “demands mutual commitment and can only be put to the test by both sides becoming involved in it, in a fixed order, first the trustor and then the trustee [18].”

Barber reiterates Deutsch’s [25] position on the need for competence but goes further by including an expectation that “partners in interaction will carry out their fiduciary obligations and responsibilities [19].”

In 1991, Butler postulated that trust is “multidimensional as a construct as well as being activated by a multidimensional set of conditions [29].” By reviewing the work of those that had contributed to the academic discourse on trust, Butler was able to develop and publish his content theory “consisting of a multidimensional set of conditions that activate and sustain trust in a specific person [29].” In 1994, Butler and Cantrell ranked the conditions of trust in the following order of importance: “*competence* (technical and interpersonal skills required for one’s job), *integrity* (honesty and truthfulness), *consistency* (reliability, predictability, and good judgement), *loyalty* (having motives for protecting and making the target person look good, and *openness* (freely sharing ideas and information) [30].” Further research led to the identification of ten categories and from these ten conditions of trust were inferred: “*availability, competence, consistency, discreetness, fairness, integrity, loyalty, openness, promise fulfilment, and receptivity.*[30]” As Butler commented, “the inferred conditions were conceptually similar to most of the trust conditions identified by Jennings (1971) and Gabarro (1978) [29].” However, it should be noted that whilst *promise fulfilment, fairness* and *receptivity* were not specifically listed by the authors above they arose from either inferred/implicit comments from respondents or from direct mention.

Building on the work of Simmel [17], Luhmann [18], and Barber [19], Lewis and Weigert present trust as “a property of collective unit, not of isolated individuals [20].” These authors perceive trust as an attribute which is “applicable to the relations among people.” In this sense the academic discourse is moving closer to the social relationships present in teams.

Similar to Butler [29], Lewis and Weigert acknowledge the “multifaceted character” of trust. However, they differ insofar as they describe the facets as “distinct cognitive, emotional, and behavioural dimensions that are merged into a unitary social experience [20].” They explain the cognitive aspect of trust as discriminating “among persons and institutions that are trustworthy, distrusted, and unknown. In this sense, we cognitively choose whom we will trust in which respects and under which circumstances and we base the choice on what we take to be ‘good reasons’, constituting evidence of trustworthiness [20].”

Deutsch hypothesizes that an increase in communication will increase ‘trust’ and also that “we can expect that there will be some tendency for trustworthiness to increase with trust [25].”

Gabarro deviates from the academic discourse by theorizing that trust may be “better understood as a result rather than a precondition of cooperation [28].” Trust, according to Gabarro [28] would thus exist in groups simply *because* the group is successful and able to cooperate. It should be noted that Gabarro lays the foundation for much of the theory of trust that comes next when he states, “There is a sense in which trust may be a by-product, typically of

familiarity and friendship, both of which imply that those involved have some knowledge of each other and some respect for each other’s welfare [28].”

Shapiro, Sheppard and Cheraskin argue that “the benefits associated with establishing trust in the right conditions should result in increased quality of output, greater efficiency of process, more flexibility, and an enhanced strategic focus [31].” The authors promulgate three bases of trust as follows: deterrence based trust, knowledge based trust and identification-based trust. In situations where monitoring and control are used to ensure compliance, these form the basis of deterrence based trust. Knowledge based trust is also based on Deutsch’s [25] belief that trust is the underpinning or foundation of cooperative behaviour. Shapiro, Sheppard and Cheraskin postulate that if we know a person and how they will act or respond we have an element of predictability upon which we have a “basis of trust” since as the authors state “At its core, trust is simply dependability. The benefits of dependability are reduced uncertainty and less need for contingent planning [31].” Unsurprisingly, Shapiro et al. advocate regular communication as a method of achieving knowledge-based trust.

The third base of trust according to the authors is identification based trust. This is explained as “the highest order of trust assumes that one party has fully internalized the other’s preferences [31].” It is often mentioned in the literature on successful teams that having a shared goal or vision is crucial to success.

Lewicki and Bunker expand on the theories of Shapiro et al. [26] by positing that “the three types of trust are probably linked and sequential [32].” Whereas Shapiro et al. identify the three types of trust as separate and independent. Lewicki and Bunker propose that this linkage is sequential and iterative, “achievement of trust at one level enables the development of trust at the next level [32].”

Additionally, Lewicki and Bunker describe the process of trust beginning with calculus based trust. The authors describe how calculus based trust is arrived at in a stepwise process with each trusting endeavour being used as the basis for the next level. In this sense it is described as “tactical climbing [32].” Once a certain level of understanding has been achieved, it is possibly for knowledge based trust to evolve in that, having ‘tested the waters’ so to speak, the trustor has knowledge of the trustee and can reasonably predict their behaviour vis à vis a given expectation. Once this level of trust has been attained, slight breaches of trust may even be tolerated. Finally, the highest level of trust, identification based trust, occurs when the parties involved share the same wants and needs, what Lewicki and Bunker refer to as a “collective identity develops [32].” At this point a healthy degree of synergy has developed which facilitates cooperative and productive teamwork.

The model of organizational trust proposed by Mayer, Davis and Schoorman in 1995 is one of the most cited models of trust in the literature. In their research, the authors

examined “why a trustor would trust a trustee.” The authors view trust as “a trait that leads to a generalized expectation about the trustworthiness of others [14].” Mayer et al. refer to this trait as “propensity to trust [14].” Continuing in this vein the authors’ state “People differ in their inherent propensity to trust. Propensity might be thought of as the general willingness to trust others. Propensity will influence how much trust one has for a trustee prior to data on that particular party being available [14].” Thus, whilst Deutsch [25], Lewicki and Bunker [32] and Shapiro et al. [31] argue for the existence of a calculated decision to trust Mayer et al. [14] introduce the concept of a propensity to trust which the trustor may or may not have. According to Mayer et al. [14] the propensity to trust cannot be taken in isolation. As if describing two sides of the same coin, the authors also argue for the trustee to possess the characteristic of trustworthiness. The trustee must show themselves as meriting or warranting trust being placed in them. Mayer et al. describe three characteristics of a trustee as: “ability, benevolence and integrity [14].” Ability has already been introduced by Deutsch [25] but this time Mayer et al. argue that an individual may not have competence in all areas but often a specific area. In addition to this Mayer et al. introduced the ideas of a “willingness to be vulnerable to the actions of another [14]” and furthermore a trustee must have benevolence towards the individual who is trusting. The Mayer et al. model of trust is one of the first that clearly discriminates between trust and its antecedents.

However, the authors themselves note that this particular model is limited to a unidirectional treatment of trust between a trustor and a trustee. Consequently, there is no mention of reciprocity in this model as it was not explicitly designed to examine trust relationships in a team context.

Watson [33] describes McAllister’s work as “influential.” His work on trust recognises the importance of “developing and maintaining trust relationships [34].” Basing his theories on the work of the sociological researchers on trust (Barber, [19]; Lewis and Weigert, [20]; Luhmann, [18]; Shapiro et al. [31]; Mayer et al. [14];) McAllister distinguishes two principal forms of interpersonal trust “cognition-based trust, grounded in individual beliefs about peer reliability and dependability, and affect-based trust, grounded in reciprocated interpersonal care and concern [34].” The introduction of an affective or emotional component to the trust model proposed by McAllister was ground-breaking.

Whilst Mayer et al. see trust as unidimensional and largely cognitive, based in so far as they advocate that one would judge the ability, benevolence and integrity of the person upon whom they would confer trust. McAllister, by contrast, whilst conceding the cognitive aspect and its antecedents argues also for an affective basis on which to confer trust stating “emotional ties linking individuals can provide the basis for trust[34].” This reiterates Lewis and Weigert in their conclusion that trust is multifaceted with “distinct cognitive, emotional and behavioural dimensions

that are merged into a unitary social experience [20].” Similarly, Johnson-George and Swap [35] referred to two dimensions of trust “Reliability” and “Emotional Trust.”

From having worked and led teams it is the author’s opinion that there is merit in all of the antecedents as listed. The next section reviews these antecedents with specific focus on Agile Scrum teams. Building on the work of Gabarro [28] it is hypothesized that the antecedents of trust effectively form a reinforcing feedback loop.

#### IV. SCRUM TEAM TRUST

Whilst the antecedents of trust have been described in Section III, it is somewhat surprising that there is a dearth of research in the domain of Agile Scrum teams. McHugh et al. clarify, “While there have been many studies of trust in software development teams few have examined trust in an agile context [6].” Although many authors cite trust as necessary, Moe et al. explain succinctly the rationale for this “without sufficient trust, team members will expend time and energy protecting, checking, and inspecting each other as opposed to collaborating to provide value-added ideas [1].” What follows attempts to explain how the antecedents of trust might function in a Scrum team. This is shown in Figure 1. At this point in the author’s research, Figure 1 represents a first stage conceptual model of trust in the Scrum team.

##### A. Perception

In a team setting trust is initially most likely to be based on perception. How a new team member comports himself on day one will lead the rest of the team to make a calculated judgement based largely on observation. What the new team member says and also how he says it is all used to form a perception and consequently an initial judgement of the individual. This initial phase closely resembles Tuckman’s seminal work on stages of group development. Tuckman describes how in the ‘Forming’ phase members engage in “ritual sniffing” in order to get to know a new member and make a preliminary determination of their credibility [16].

##### B. Reputation

The new team member’s reputation, if this is known to the team, will also be brought to bear in forming an opinion as to whether the individual can be trusted. Stemming from this a degree of what Lewicki and Bunker [32] refer to as “calculus based trust” comes into play. This type of trust is predominantly what Lewicki and Bunker [32] describe as “deterrence based trust” in which the team member is effectively being evaluated to ascertain if they will do what they say they will do. The authors argue that an individual will comply not only because of the fear of “punishment for violating the trust” but also due to the “rewards to be derived from preserving it [32].” Acceptance or rejection by the Scrum team would be of paramount importance to a new team member.

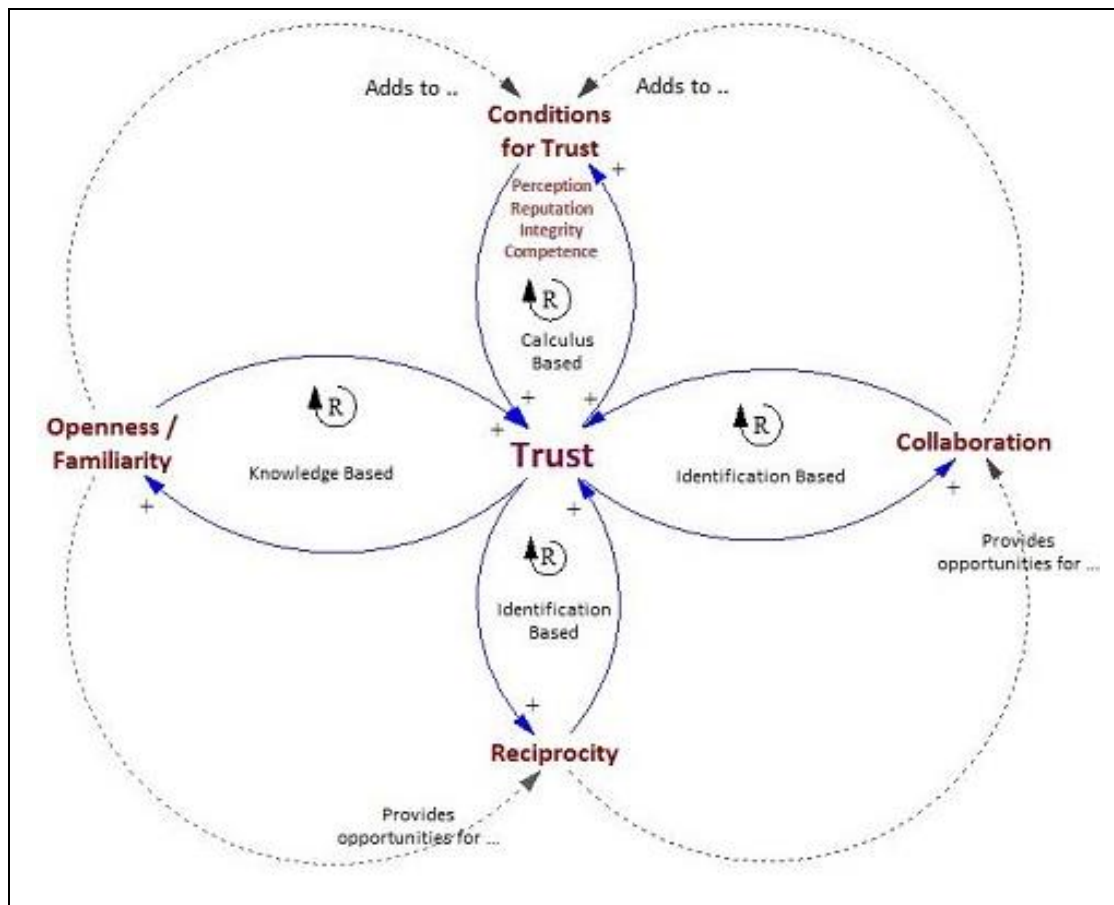


Figure 1. Conceptual Model of Trust

**C. Integrity**

As time passes, the team member’s credibility is tested and retested during Sprints. If the team member keeps his commitments his integrity is acknowledged by the team. He becomes predictable insofar as he is known to keep his word on what he says he can deliver [25].

**D. Competence**

It should be noted, however that a team member’s technical competence in their team role is crucial to the Scrum team’s performance and success [19]. A competent Scrum team will succeed in delivering the Sprint backlog.

As time passes and the new team member is proving/has proved himself as being trustworthy it is envisaged that the first reinforcing feedback loop becomes operational. A team member who has proven himself to act with competence and integrity will find that both his reputation and his team mates’ perception of him and his ability to deliver is enhanced and they he trusted more than he was initially.

By the time the team has progressed through Tuckman’s stage of ‘storming, norming and performing’ the Scrum team has hopefully learned to work well together.

**E. Familiarity**

Once team members have developed a good rapport, the team can move beyond calculus based trust to where they have developed what might be thought of as an emotional bond between each other. Santos et al. explain, “Agile values and principles foster changes in team members’ attitudes and strengthen their relationships. These changes happen as a result of greater trust and better communication and transparency in the relationships among team members [36].” Ideas may be shared without fear of ridicule and the team should be set for a degree of knowledge sharing and collaboration.

Moving from working cooperatively to collaboratively is a key milestone for a Scrum team. Scrum teams work closely together and are frequently co-located. Given the emotional intensity involved in keeping commitments, delivering on time and helping each other to deliver artefacts from the Product backlog it is unsurprising that strong dyadic ties begin to develop among the team [27]. Team members become interdependent in order to realize the goals of the Sprint and rely on each other to a high degree. The familiarity that results reinforces the trust within the team.

### F. Openness

As a consequence of this familiarity, Scrum team members tend to be open and act with integrity in their dealings with each other. This level of “trusting behaviour invites the attributes of trustworthiness [29]” according to Butler.

Allied to this level of familiarity and openness it is unsurprising that an affective bond begins to develop between the Scrum team members. They begin to know each other, and a degree of predictability ensues. This “knowledge based trust [32]” is the core of the second reinforcing feedback loop. As team members come to know each other better, trust is enhanced.

The benefit of moving into this phase is postulated by Shapiro and Sheppard as the “primary advantage of knowing that a partner is reliable, i.e., will keep his/her word, is that it shifts one’s focus from monitoring to problem solving [31].”

### G. Reciprocity

DeVries, Van Den Hooff and Ridder describe “a cycle of reciprocity, in which team members are more likely to exchange (i.e., both donate and collect) knowledge with each other [37].” As the team bonds become deeper, it would be expected that a Scrum team member would not feel exposed in asking for assistance on an aspect of the development with which difficulty was being experienced. In similar vein the team member who receives help would most likely be happy to help the individual who had given help. As a highly functioning team it is the team goal that is of paramount importance and the degree of benevolence (Mayer et al. [14]) that team members feel towards each other would ensure that help is both given and received in equal measure as required.

In this stage yet more positive reinforcing feedback occurs. The team members can set aside the cognitive approach to trust and opt rather for an emotional connection between each other. McAllister, [34], Martin, [38], Lewicki and Wiethoff [39] have referred to this as “Identification based trust.”

Once the team has moved into the ‘Identification based trust’ realm the team members fully identify with each other and with the common goals of the Sprint.

## V. CONCLUSION AND FUTURE WORK

The academic literature on trust is vast as many studies have examined it from a variety of contexts. This paper has presented the findings of the main contributors to the academic discourse on trust and has attempted to apply their contributions to the Agile Scrum team in the form of a preliminary conceptual model.

The next step in the research is to ascertain using a constructivist grounded theory methodology if this hypothesis is, indeed, valid or whether there are other

elements of the trust equation which lead to successful Sprints.

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