

## Confidence in Virtual Teams: Issues, interests and mechanisms for implementation

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### Summary

The topic of confidence is the pane that elicited the greater interest and more research. This is explained by the preponderance of the role of this variable in the performance and success of virtual teams. However, despite its importance, trust in virtual teams is of a paradoxical nature. On the one hand, it is essential for success, team performance and the development of relations between members. On the other hand, the necessary conditions for its development, such as physical proximity, interactions and exchanges face- to-face, are lacking in most virtual teams. This paradox gives rise to a question that this paper seeks to clarify:

***How in order to create a collective dynamic, fostering trust in virtual teams?***

The objective of this research is to determine the basic criteria to ensure a collective dynamic developing trust in virtual teams.

**Keywords:** virtual teams, trust, collective dynamics

### Introduction

Virtual teams represent a new work situation and become more widespread within companies. This situation is the result of adaptation to a business marked by the globalization of markets and the rapid development of information technology and communication environment.

These teams are mainly characterized by the existence of a spatial temporal distance (time difference) and / or organizational (network) between its members and the use of communication technologies. They are composed of individuals with varied expertise, established and grouped around a common project and working remotely, that is to say, not only in different places, but often at different times when they are located in different time zones, sometimes even belonging to different organizations.

Literature evokes several definitions of this team that we call 'virtual team'. However, we retain the proposed [23] definition that seems most cited by researchers: « *A virtual team is a team like any other group of people who interact through interdependent tasks guided by a common goal. Unlike conventional teams, a virtual team works beyond the boundaries of space, time, and organizations with reinforced fabric technology communication links.* » ([23], p.27)

According [20] confidence is paramount to the regulation of working in virtual teams has been the most investigated in the literature; « *One of the fundamental factors that are believed to be significant in determining success and failure of virtual teams is trust. [...] This is because trust functions like the glue that holds and links virtual teams together.* » (p. 188).

However, the issue of confidence is the most studied topic in the literature on virtual teams ([10]; [35]; [11]; [14]; [4]; ([17]; ([18]).

This craze underscores the importance of this concept in an environment characterized by

increased dematerialization of work processes and relations [17].

Indeed, the lack of co -face interactions and the virtualizing modes of exchange and coordination, time shift and availability constraints individuals are all brake mechanisms of control and traditional management practices. In this context, confidence proves the unique solution to counteract these obstacles and overcome the difficulties inherent in the management of the virtual teams to ensure their success and efficiency ([16]; ([21]).

[6] argues that confidence between members is one of the most predominant conditions for virtual team performance is then [13] argues that " a higher level of trust should result in an attitude more positive , a higher level of cooperation and professional behaviors and also a higher level of performance " Thus confidence is essential to collaboration [39], communication, coordination [18] as well as the overall performance of the team ([10]; [35]; [8]; [22]).

Confidence usually presents as a process to deal with uncertainty, it is justified by the fact that the low visibility on forthcoming events does not specify behavior that everyone should necessarily adopt in changing circumstances [1].

Confidence can be defined as « *the presumption that, under uncertainty, the other party will, even in the face of unforeseen circumstances, acts upon rules of behavior that we find acceptable.* » ([2], p.25). This definition gives a confidence ethical character and highlights the role played by the social context in establishing trusting relationships.

The observation of these different views expressed by researchers led us to approach the study of the issue of confidence in virtual relationships in three stages. First, we present the issues and interests of the confidence. Secondly we propose criteria of effectiveness capable of initiating and strengthening confidence in the virtual context. In the third

section, we analyze the implementation of trust in virtual teams belonging to the company studied, and the advantages and difficulties. Finally, we conclude with a summary of the results of the analyzes. In conclusion, we discuss the contributions of our work, limitations, and future avenues of improvement.

## **1 - Issues of trust in virtual teams**

Confidence in the virtual team is established easily. Indeed, the cultural diversity of disciplines [39] and the denial of face to face make it more difficult to establish a common knowledge that contributes to promoting relations ([9]; [12]; [27]; [32]).

The lack of a common context [9] and relevant communication mediums make it more difficult to understand mutual expectations and the difference that may exist between them can weaken the confidence between team members [9].

Some authors argue that individuals do not initially trust other team members because they do not have access to sound references about their past behavior or intentions. This lack leads the individual to exhibit a certain vulnerability to a situation that involves a lot of unknown [13].

The structure and the functioning of the virtual team limit contacts between its members. However, these relationships are crucial as stated [16] for which confidence "needs contacts." confidence evolves and even more individuals are present facing each other [25].

Henceforth, the face-to- face proves major. It builds relationships of trust and restores them if necessary ([30]; [31]).

However, if we refer to the context of virtual teams, these conditions are sometimes lacking. Indeed, in view of these elements, confidence is much less present in virtual teams than in traditional work groups.

We emphasize a reduced confidence in the virtual team due to lack of direct contacts between participants instead and possibly the limited duration of the existence of the team and the potential lack of intentionality for future cooperation. In this context, the effectiveness of such teams can be questioned [16].

### ***1-1. The emergence of instant trust in virtual teams***

A recent observation about confidence in virtual teams indicates that it takes a different form from that which prevails in the -face teams. It is the specific "instant confidence" temporary systems where it is presumed from their constitution [28].

This assumption arises because virtual teams, as temporary systems do not have the time to develop confidence. That is why the members of a virtual team assume from the beginning that their colleagues are trustworthy ([18]; [28]).

[28] suppose that the development of confidence in temporary systems is a particular form as the usual conditions of its formation is not verified. It is instant confidence is defined as follows : « *Give her confidence and be trusted under temporary systems means that members must be involved in a relationship of trust without waiting experience gradually indicates that deserves that confidence. Trust presumed ex ante.* » ([28], p. 177).

Moreover, instant confidence born of urgency characterizes temporary systems. In fact, members of these systems must act quickly to perform the work and do not have enough time to gradually expand interpersonal relationships based on the information they collect with the progress of work. Instant confidence is built with the constitution of the team and does not follow a gradual and cumulative development mode.

It is assumed from the outset. The similarities between temporary systems and configurations of

virtual teams have led some researchers to equate confidence that is built in virtual teams to instant confidence ([10]; [34]; [19]; [29]; [28]).

Indeed, the majority of virtual teams are composed of individuals who do not know and whose cooperation is limited to the task assigned to them. As temporary systems, virtual team members are selected based on their skills regardless of their location. In terms of the nature of work, level of complexity and interdependence that generates the two modes of work organization is similar. However, virtual team members are dispersed and rely on ICT for their activities unlike members of temporary systems that interact in face to face. Within the meaning of [28], these are the characteristics of the work environment bringing "outsiders" who favor the appearance of instant confidence. These characteristics associated with vulnerability, uncertainty and risk are the three conditions for the formation of the confidence explained above and accentuated by the virtual environment.

Actions to proactive and enthusiastic character may reduce the risk and increase the level of confidence. For [28], since the effects of vulnerability, uncertainty and risk in the development of instant confidence, study its dynamics will focus on the study of factors influencing these three notions. As such, they make proposals for the development of instant confidence and to guide future research on the subject.

Thus, the instant confidence reinforces the reduction in the size of the team, the interactions based on the work as opposed to personal interactions, the pressure due to the short lifetime of the team and the moderate levels of interdependence. All these factors contribute to the reduction of vulnerability, uncertainty and risk.

Similarly, [18] identified behaviors that may be adopted by the manager remotely to help build

instant trust in virtual teams. It is of proactive work styles, work focused on interactions, an optimistic team spirit, strong leadership, clear objectives and roles, frequent and regular interaction and immediate feedback.

## **2 - Interest on trust**

Considered a key success factor for interactions, confidence overcomes selfish interests and produce important benefits in the context of cooperative relationships between different economic actors.

[18] agree that the actual confidence between and to the members of the team is more difficult to establish electronically. Moreover, this concept has a factor in solving problems related to the control and supervision which becomes impractical in the context of virtual teams. So confidence is a way to cope with the complexity and uncertainty in contexts where the interdependence and interaction between the players reach high levels. It helps create a climate of cooperation and understanding interpersonal and collective levels promote citizenship behavior and achieve a good quality of decisions. The relative weakness of the co among virtual team members can have a negative impact on the reliability of the information exchanged, insofar as his wealth may hinder as well as their news.

At this level, the uncertainty in the exchange of information is growing and is an obstacle to collaboration and coordination. Where, confidence intervenes to prevent organizational and geographic distances produce psychological distances [31].

The mechanisms of trust used to restrict the negative effects of distance on the quality of information exchange for the success of the task. In this sense, the results of empirical research shows that relational information exists and exchange between team members who communicate remotely via ICT [5]. The ability to exchange social

information appears similar to that which takes place in relationships face- to-face with however a longer transfer time [36]. Again, confidence appears to play a positive role in facilitating informational exchanges in an environment characterized by uncertainty.

In conclusion, the confidence offers a palliative to the uncertainty that characterizes exchanges in transmission, understanding and use of information. Thus, one of the key roles of a manager at a distance is to foster the emergence and development of such a trust between team members for failing to use the direct control and supervision frequently.

## **3 - Implementation of trust in virtual teams**

In the following paragraphs we focus on the favorable development of trust within virtual team's behaviors and basic axes of the confidence necessary to the constitution of a collective dynamic.

### ***3-1. Favorable behavior trust***

The analysis of the work done on the new roles of manager remotely or e- leader and their intersection with factors building trust reveals the following three practices: 1) ensure the visibility of the members with respect to each other and allow a better understanding and 2) establish rules of conduct, behavior, communication and working 3) clear division of work activities and explain the contribution of each member and expectations relative to its task.

Concerning the first point, several studies emphasize the importance of face meeting of all members at the beginning of the project to bring the members by allowing them to see at least once during the work.

Physical visibility helps to reduce the uncertainty and vulnerability of members in relation to the

behavior of others to the extent that it helps to form a first impression based on physical appearance, attitude, body language, voice inflection etc. It also reduces the anonymity of individuals by allowing a first exchange and a first information sharing [3]. It thus avoids the anti- normative behavior (verbal aggression, absence, failure to respect the work and team members) identified in some anonymous electronic communications. Based on these discussions, the team members will be able to detect their similarities and differences and will try to initiate actions to build a shared social context and the collective identity of the group.

The face- to-face facilitates subsequent exchanges insofar members know their partners and come to "stick a face on e -mails or voice transmitted through communication tools'.

After ensuring a minimum of knowledge among team members, e- leader must focus on establishing rules of operation of the team and ensuring Membership to these rules.

These standards relate to behavior, communication and work. The rules of conduct are intended to provide a structured framework and specify the actions permitted and prohibited. For illustration, it may be the determination of interaction styles should avoid verbal abuses and ensure the respect of others in order to avoid anti -social and work environment degradation behavior. The aim is to create collaborative relationships and cooperation leading to confidence. Communication standards, in turn, set the communication tools to use, frequency of use and a provisional schedule of meetings (actual and / or virtual). The leader must establish mechanisms to ensure regular exchanges between members and rapid feedback.

This goal depends on the characteristics of the media used (rich or poor) and the distance between the members which sometimes involves jetlag and asynchronous exchanges [38]. However,

communicative harmonization and determination and respect of an exchange rate can ensure the availability and ensure achievement of labor [24]. Finally, work rules concerning the setting of objectives , planning activities and coordination mechanisms, the identification and explanation of the objectives to team members enable them to establish a clear vision of the work and its purpose and can engage them if they believe that is of interest. At this point, virtual teams do not differ - face teams. However, the e- leader must ensure that the ambiguity arising from the distance and ICT does not hinder the understanding of the objectives and requirements of the job. To do this, a schedule of activities establishing timelines, deadlines and time spent on each activity is essential. On the one hand, such a schedule can develop a rhythm of work favorable to its fulfillment in time. On the other hand, different maturities facilitate the monitoring of the implementation of the work and determination of potential and possible corrective actions to undertake malfunctions.

This can also be achieved through a clear division of tasks and determining the contribution of each member. This is the third mechanism of confidence-building available to the e- leader. Given the ambiguity of the virtual context, clarification of expectations regarding the contribution of each part is essential to reduce blur and facilitate execution of work [18]. In addition to determining the duties of each, the relationship between members arising from the interdependence between activities are also fixed. In this context, coordination mechanisms are in place to facilitate the flow of work on the one hand and trade structure, on the other hand. The form of work, deadlines, means of transmission are thus fixed.

Through these functions, e-leader provides three roles identified by the theory of behavioral complexity (objectives, internal processes, human

relations) and put in place confidence building mechanisms in the early stages construction team.

The purpose of these actions is to create prerequisites for the cohesion of the team working to build its guarantee of the emergence of confidence relationships collective identity. However, this can only be possible by the Membership to fixed rules. The e- leader must ensure the acceptance and application of standards by all group members to foster trust.

### ***3-2. The axes of the confidence***

The specific context of virtual teams raises the obvious question of the contribution of confidence in improving relations between the participants.

An obvious question to the extent that the trust occupies a central position in the literature especially in the inherent problems of cooperation and coordination [15] and more generally in the life of organizations. Hence the need for the manager to create quickly a collective dynamics of trust based on five pillars: management line, objectives, and rules, relationships within a team as well as methods and available tools.

#### ***3-2-1. Confidence in the management line***

This is the confidence that the employee has in its hierarchy and more specifically its direct manager is the key point of motivation. This type of trust can be categorized into three types [26]:

Confidence in the competence: the leader must show that it is best able to lead the team, he has the skills to do it and to understand and steer the work of the team.

Confidence in the «altruistic» behavior: by showing members that is in this sense of common interest, even when it involves personal sacrifice.

This «moral integrity « (acting for the interest of the project by his side) often avoids challenging decisions.

The Affective confidence: it is born through the ability to create not only professional relationships in long-term relationships, so «friendly «than the professional, but nevertheless respecting the hierarchy. By establishing such a relationship, the manager accepted as such, will therefore be able to defer its action on what will lead the project to success.

#### ***3-2-2. Confidence in the objectives***

This is the confidence that the employee has the aim of unity and hence the objectives set for it. It is realized by involving people with a unified objective results and shared rewards. This type of trust is essential to guard against misinterpretation of roles as well as the frustrations and corresponding disincentives.

Manager knows to make sense, so that everyone can get involved and also list its shares in a broader perspective, he understood and to which he adheres.

#### ***3-2-3. Confidence in the rules of the game***

This is the confidence that the employee has in the mode of his unit. Do job descriptions exist? And if so are they clear? Will have a formal and consistent process for setting individual goals and annual performance evaluation? What are the respective rights and obligations of the employee and his manager? All points for crucial confidence. Manager also knows to benchmark, so that everyone feels sufficiently protected from possible arbitrary.

#### ***3-2-4. Confidence in the technology***

It is directly related to the credibility given to the computer tool medium of communication between team members.

An effective way is to promote the user learning and, in this context, to simplify his or her functionality. Good understanding of the features of the technological tool is, in fact, supposed to allow

the individual to increase his ability to communicate with other members in the use of the tool and consequently helps to have confidence.

Manager is to be able to estimate the richness of a communication medium.

Therefore, a manager must ensure that each team member knows the limitations and interests of media workers.

### ***3-2-5. Confidence in the methods and tools available***

This is the confidence that the employee has in ways that are made available to help accomplish his or her mission and achieve his or her goals. These means may be: workstation, manual reference specific to its business methods (project management, balance sheet analysis), ongoing training, and personalized support.

Manager is to know finally allocate the required resources consistently with the efforts required and the desired result.

### ***3-2-6. Confidence in the links or relationships***

This is the confidence that the employee has in his colleagues and the team as a whole. This is the most difficult type to create trust. Indeed, establishing a relationship of trust between members of a virtual team is a sine qua non for its proper functioning. Do they feel involved in a common project that unites energies? Do the knowledge and skills are shared for the benefit of all? Namely a collective work will be evaluated and not believed in the ability of sincere cooperation leads either to exclude others or want to do everything alone, or reduce his personal involvement. In this case the, success rarely occurs. Manager also knows to federate his team around a common shared project. .

## **4 - Methodology and empirical study**

To observe the implementation of trust in virtual teams, a case study in the high-tech sector has been carried out. After presenting the methodology, the case study, the main results of this research will be exposed.

### ***4-1. Methodology and case study***

To provide an initial response to the research question, an empirical study was conducted at the company 'W' which is identified as having implemented virtual teams. This company is a leader in the technology sector and telecommunications. Teams of this company are divided between Tunisian and European websites sites.

This study is based on ten semi-structured interviews with people working in virtual teams, belonging to different services and occupying different hierarchical positions. In other words, we have met people either directional level (managers) or at the operational level (employees) performing functions: routine (control management style) or more innovative (such as project teams distance). We also met a Human Resources Manager.

The interviews were conducted face -to-face, between May and July 2012, the average duration is 45 minutes. We then conducted a content analysis of these interviews.

This research is exploratory. These interviews covered many areas such as the establishment and operation of virtual teams, trust, motivation and coordination and the role of management and Human Resources in the performance thereof.

We will retain in this paper as part of the interview on the implementation of confidence in these teams and the role of the manager about it.

### ***4-2. Exploratory analysis of result***

When asked about the importance of trust within the team, most of the interviewees confirmed that

trust is the basis for effective and efficient teams. It is interpersonal glue that makes easier and faster mutual adjustments: « *Of course, a team can function as such only if the confidence reigns.* » (Mr. K.A).

According to the interviewees, a certain level of confidence must be able to move between members of virtual teams. Confidence will allow members to get involved in activities that are difficult to control and / or evaluate. The notion of confidence is gaining importance as and when the project risk increases. Therefore, the mechanism of confidence can hinder and restrict the negative effects of distance on the quality of the informational exchange for the smooth running of the project : « *We must know, above all, how to communicate effectively if we want to build confidence in our long-term working relationships. We can do this by increasing our efforts to express our enthusiasm at the beginning of the project. This could be possible by maintaining a positive tone in messages, staying focused on the task and establishing a regular pattern of communication.* » (Mr. H.F).

According to the latter, the confidence is usually built by various means among which the contact face to face and similarities (social, cultural, values , expectations ...) play a crucial role. These conditions are sometimes lacking in the team studied. Thus, the lack of physical proximity and a shared social context and the limited lifespan of the team are obstacles to the development of confidence.

At first, members do not have enough information about each others. In addition, they do not have time to collect their information to form a judgment on the behavior of other members.

For this reason, they assume that the other members are trustworthy in order to limit the uncertainties and the risks inherent in the opposite assumption.

But after working together could prove or disprove this hypothesis. This leaves us still think the emergence of instant confidence.

To this end, in the virtual environment, competence and integrity have a higher intensity than benevolence in the early stages of formation of the team. Benevolence may be important in the later phases of work: « *It's very important to have confidence in others but it is a little hard to earn it. This is the real problem of confidence. (...) It is much more difficult; people are very independent (...). At first, we assume that our colleagues are trustworthy. However, with the technological means at their disposal, they may believe they are working when they are doing nothing at home, so this is a relationship of confidence that requires a lot of control after the team training and the beginning of collective work, then a little less after a relationship of trust is established.* » (Mr. W.B).

According to respondents, the notion of trust in their team can occur in five dimensions. First, confidence in people skills and if this confidence is lacking between the team members, we cannot rely on them or on the results of their work.

But for this trust is established, it is necessary for people to demonstrate their competence over time. It took a little time in the team studied since the majority of members have not previously had the opportunity to work together.

« *We know we are together our skills, so already from the beginning , there was confidence in the skills , but still it took a little time to confirm above we do not know very well ( ... ) Without confidence in the skills of others and their integrity can no longer work together.* » (Mr. N.C).

The second way to create confidence is by involving people with a unified objective results and shared rewards. It is confidence in the objectives: « *Confidence in the objectives is essential to guard against misinterpretation of*



*roles as well as the frustrations and corresponding disincentives.* » (Mr. C.M).

Then confidence in technology is to some interviewees directly related to the credibility given to the computer tool medium of communication between team members. An effective way is to promote learning by the user and, in this context, to simplify its functionality: « *The good understanding of the features of the technological tool is intended to enable the individual to increase his ability to communicate with other members in the use of the tool and consequently helps to have confidence.* » (Mr. Z.B).

Then confidence in the hierarchy which is manifested in the ability of the manager to show that it is able to manage the team, he has the skills to lead, mobilize action of the team: « *We must have absolute confidence in our leader. It is to act in the interest of the team with his side and avoiding often challenging decisions.* » (Mr. A.C).

Finally, confidence in the links or relationships is the most important. Indeed, establishing a relationship of trust between members of a virtual team is a sine qua non for its proper functioning. However, the time spent in common experience has facilitated the emergence of confidence among team members past: « *Work experience has allowed us to accumulate information on each other's and therefore we are able to distinguish those who deserve the confidence of those who do not deserve it. But broadly speaking, most of the team members are trustworthy, it is for this reason that we qualify as a solid team.* » (Mr. A.J).

According to the HR Director, the organization constantly works to ensure that the conditions involved in building confidence are met. It may itself insist that a number of face to face contacts take place. These contacts are very important for building strong interpersonal, teamwork and cohesion which are frequently cited in the

respondents' answers and dimensions are also essential, according to them, to develop trust within the team. This is what has been supported by most employees who confirmed that the solution is manifested by the physical meeting, or shared experience of working together. This is important to establish good working relationships and develop confidence later: « *It is necessary to know well the people to feel that feeling of trust towards them. This is something important because the virtual teaming leaves us scattered across multiple sites and this minimizes our face to face meetings. In addition, the more one knows, the better the more trust develops between us (...) I mean a team is more than a juxtaposition of individuals; obviously you have something to share. I think if you have physical relationships with people, you get to know them better as opposed to virtual, it helps a lot.* » (Mr. H.F).

However, should the team members show their characters and their working direction forces, as well as their skills and ability to communicate effectively they are trustworthy: « *Colleagues can contribute in different ways to install trusted relationships : clearly communicating the value given to the team by each members by providing proof of their commitment to meet the expectations of the team and by being careful enough to identify and correct problems that inevitably arise from one moment to another.* » (Mr. A.J).

Obviously the role of the leader is essential in building confidence within the team. Interviewees agree that managing remote employees demand a manager able to maintain contact even more rigorous and to use face to face meetings as often as necessary, in particular the launch of the team and the emergence of conflict.

The manager must possess or acquire capabilities in terms of openness, communication, cooperation and management style oriented towards relations.

This is what has been claimed by a manager who announces: « *Sometimes it is necessary to limit the virtual to have the confidence. It is very difficult for people who are alone, with a lot of responsibilities, autonomy to establish a big confidence. Then it is necessary that the manager-leader wants to dedicate this confidence by developing a sense of teamwork and common working spirit.* » (Mr. B.J).

## **CONCLUSION**

In this paper, we have highlighted the potential role of confidence in the collective dynamics of virtual teams and we have also shown favorable behavior to develop a sense of confidence.

Confidence is a basic criterion in the dynamic of the team since it ensures the group's work. However the implementation of the latter is difficult because of the dispersion of members, cultural and professional differences that characterize them. Indeed, the relative lack of physical proximity between team members may affect the relevance of the information exchanged, to the extent that wealth can be affected as well as their news. At this level, the majority of respondents confirmed that the uncertainty in the exchange of information increases and hampers for the realization of collaborative work. Hence the emergence of instant confidence between members is to assume that remote workers are trustworthy until they prove otherwise. This type of confidence intervened to limit the adverse effects of distance on the quality of the informational exchange for the success of the task.

In general, confidence can reduce the effect of uncertainty in exchange for the transmission, understanding and use of information and it

promotes social communication between employees and contributes to the link building. The confidence is established by the intensity of encounter and experience of working together. The role of manager is also essential to ensure confidence in the team that is why it must have a management style oriented towards relations. Thus in the studied case, the role of leader appeared crucial in building confidence.

It is supposed to not only promote among members of its distinctive qualities but also hold controlling its existence in the team.

Our research has yet an exploratory question. The results can in no way validate assumptions or be generalizable.

But this first study allows us to make assumptions about the role that managers must consider in developing confidence in their virtual teams. Managers should be trained in working practices such as remote use of ICT, remote control, virtual meetings, e- leadership etc. . . .

In future research, we propose other trails that are also possible for extensions of this work. It would be interesting to better understand the concept of swift trust deepening and behavioral factors influencing its development within a virtual team. In this respect, one could ask about the role played by information technology and communication in the development of confidence. More specifically, it would question the impact of media richness used in the sense of Daft and Engel (1986), on the dynamics of evolution of the instant confidence. A second runway was to investigate the impact of the presence or absence of leadership in determining the level of trust established within the team.

This track is to encourage if we refer to the result of [33] and [19] that found a significant relationship between leadership and styles the level of confidence in virtual teams.

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