Chapter 18
Digital Disruption: Lessons Learned from Virtual Team Management

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Abstract The purpose of this paper was to discover how management skills influence online teams in direct comparison to offline teams. A survey was conducted of 120 managers working in varying degrees of online and offline teams. As virtual teams are affected differently by leadership and communication skills together with team dynamics and culture, these attributes were examined at length to understand how best to manage online teams. The paper gives light to the new phenomenon of online teams and their benefits but also the extra attention needed when communicating, as the element of human interaction is missing. The study revealed that leadership and communication are important in online teams. Also, interaction and engagement with online teams require more sensitivity. Finally, team dynamics are more difficult to develop with online teams, and culture plays a major role in managing online teams.

Keywords Virtual teams • Leadership • Communications • Team dynamics • Cultural influences

18.1   Introduction

Communications in the business world have dramatically changed over the past 20 years, merging modes with mediums and moving from a socially intimate to a more socially distant environment. Diving into a digital environment has disrupted the traditional lines of communication between co-workers and business partners, regardless of the goal to build long-lasting relationships or one-time-only transactional relationships. Nonetheless, effective communication remains essential in business with variables such as time constraints, scope changes, budget fluctuations

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and other pressures which test a company's ability to thrive. The Internet has advanced the ways in which stakeholders interact, as they utilize items such as email, cell phones, social media, video conferencing, FaceTime (iPhone application) and virtual webinars (e.g. joinme.com or WebEx) to communicate. "With barriers such as location, distance, and travel removed, online work environments have come across new issues in terms of team dynamics" (Berry, 2011, p. 187). Virtual teams have become the new norm, and managers should aim to bridge the gap in communication to help reconnect the disruption caused by the new digital era. Although there is access to an incredible amount of information when team members are dispersed, there can be difficulties with creating a unified team culture if one team member resides in India, another in Canada and yet another in Australia. Culture, time zones, language, experience, personality and other factors affect the fluidity in communication between stakeholders on a team. "Making sense of another's beliefs or actions is a constant struggle in any team environment and this difficulty can be exacerbated in the virtual environment because of the potential for greater diversity within the team" (Boughzala, de Vreede, & Limayem, 2012, p. 720). Managers are tasked with creating cohesion and becoming the glue that holds all the pieces in place for each and every participant.

As a brief history on the differences between an offline team and an online team, it can be seen how management skills are challenged due to the differences in the modes, the mediums and the characteristics of communication. When speaking about teams, generically, they can be described as a "group of individuals who interact interdependently and are brought together or come together voluntarily to achieve certain goals or tasks" (Berry, 2011, p. 188). This ability to come together and work as a unit is challenged when lines of communication are strained through the digital disruption caused by virtual communication. "In online teams, communication is extremely important because it is almost always constant; several people can simultaneously or asynchronously interact in online spaces because these environments continue to function even if no one is using them" (Boughzala et al., 2012, p. 721). According to Berry (2011), "virtual teams can use computer-mediated communication technologies to work interdependently across space, time, and organizational boundaries" and are only restricted by how/what information is transferred (Berry, 2011, p. 190). Managers must be capable of understanding the skills needed to handle individuals in a team environment, so that they can be productive and accomplish the goals of the organization. They must also understand the differences that will occur once a digital mode or medium is introduced. It is imperative that managers take into consideration "the human/social factors and team climate, as these directly influence the course of the collaboration process and the quality of outcomes" (Boughzala et al., 2012, 722).

The prominent objective of this paper is to clearly identify what specific management skills would greatly optimize the talents of different stakeholders participating in an online environment (Lepsigner & DeRosa, 2010, p. 54). This will include how leadership and communication skills, team dynamics and as well as cultural influences create issues in how information is processed on an individual level, team level and organizational level. In order to find satisfactory research for

attaining this objective, some research questions have been established. The questions fall into three major sections mentioned, which are leadership and communication, team dynamics and culture.

Leadership and Communication   How would an online manager select and optimize modes of communication? What kind of characteristics would focus managers to ensure correct leadership skills are used? What specific technologies are used to effectively manage and articulate guideline/expectations of team members?

Team Dynamics   How is trust built amongst team members in online environments? What management skills can be developed or sustained to build trust so that stakeholders are willing to depend on each other for support?

Culture   What are the major cultural differences that will impact the virtual team? What are the advantages and disadvantages of working with online teams? How can challenges with culture be overcome?

18.2   Background

18.2.1   Leadership and Communication

18.2.1.1   Leadership

Leadership can be defined by many qualities in regard to team management, ranging from social skills to technological skills and to information interpretation skills, but have essentially shifted in character due to the digital nuances that have been brought to light. The introduction of the Internet has vastly changed the dynamics, modes and mediums of how leaders interact with their team members. The methods and skills needed to ensure virtual lines of communication are properly maintained must be established from the top down in order to reduce the occurrence of errors. Effective project leadership, which includes the need for proper communication, "has been iden- tified as one of the most important mechanisms for managing team dynamics as well as steering teams through" the Project Management Life Cycle (PMLC) (Sarin & O'Conner, 2009, p. 190). The characteristics or skills needed to become an effective team leader are examined to grasp how online communication (virtual) differs from offline (face-to-face) communication (Sarin & O'Conner, 2009).

There are three tiers or spaces within an organization that can be affected by deci- sions made by an organization's leaders and can directly affect all persons involved due to the lines of communication and the digital disruption. These tiers being exam- ined are organization, teams and individuals, the focus here being organizational leadership. Communication skills and techniques are crucial for successful team leaders, who are essentially the social architects who must understand the interaction needed between organizational and individual behavioural variables (Sarin & O'Conner, 2009, p. 192). There are three common levels of leadership: individual level, team level and organizational level. At an individual level, there are many

traits that can help to classify the needs and wants of individuals when working in a business environment. Past research has shown that due to regulatory orientation, individual's experiences will influence their judgements, decision making, feelings, attitudes, behaviours and task performance (Dimotakis, Davison, & Hollenbeck, 2012). Online versus offline communication—and which will be the most successful for whom—is key information that a manager should seek to understand why these differences will influence how the information is perceived and whether or not the modes or means of communication or lack thereof can be due to digital disruption. At a team level, leadership shifts its focus from a broad overall company view to a more specific project or program team level view. Bruce Tuckman's stages of team development show the level of work done as a team and how it improves over time before there is a dismissal of the team (Rickards & Moger, 2000). Objectives, goals and process are the main focus here. It is all geared towards creating an image for the organization, developing a culture as well as delivering the product or service with the best quality while receiving the most return on their dollar. As defined by Humphrey (2012, p. 274), "leadership is the ability to influence the motivation or competence of other individuals in a group". These skills specifically will relate to how leaders influence the organization's functionality on a top level.

There are two distinct types of leadership: transactional leadership and transformational leadership. Both have very different influences on managers in a team environment. Humphrey (2012) has clearly identified the difference between these in that transactional is a simple exchange (possibly a one-time event) that takes place between the leader and the follower, whereas transformational is an engagement between the two where changes occur on both ends so that purposes and results are developed through a joint relationship (Humphrey, 2012). In organizational leadership, both can be identified, but in terms of working together as a virtual team, transformational leadership role is more flexible, more interdependent and more interactive than the transactional leadership role. The main reason is due to the fact that "transformational leadership motivates and encourages others to perform above the minimum requirements, and often times to perform beyond their own expectations" (Humphrey, 2012, p. 249). To help understand why digital communication causes conflict in how information is transferred between parties, learning exactly what type of leadership is taking place is essential.

Being able to anticipate, challenge, interpret, decide, align or learn how to work in an offline environment are all extremely important management skills at any level within an organization (Schoemaker, Krupp, & Howland, 2013). According to Erne (2012), it is well advised to satisfy professionals' motives of personal growth, operational autonomy, task achievement as well as material and immaterial rewards by institutionalizing reward systems, career paths, challenging employment and adequate resources (Erne, 2012). What is important to note is that although all of these managerial skills are necessary when developing a business strategy, the approach to how these skills function in an offline environment can greatly differ to when utilized in an online environment where digital correspondence can cause a break in the flow of communication. The proper management of professional employees is amongst the most difficult problems facing the business enterprise, and ensuring

that adequate information is passed from one professional to another is weighted variable (Erne, 2012). Communication is more than just words on a screen; it envelopes many techniques that are not always evident when working in a digital online environment or through indirect communication.

18.2.1.2 Communication

There are direct communication and indirect communication, which can affect how the user portrays information. Yin and Kuo (2013) have delved into the realm of polite speech use with communication, both indirect and direct. The language that is used plays a big role, and when properly selected, the right information gets to the right people with the right message leading to correct reactions to the initial issue (Yin & Kuo, 2013). Organizations need to understand that language is the basic communication medium for completion of work as well as maintenance of interpersonal relationships (Yin & Kuo, 2013). As the team develops, for example, in an office where social or group learning is promoted, different modes of direct and indirect communications are possible (Singh, Dong & Gero, 2013). This will also lead to the use of all forms of communication that essentially provide opportunities for learning about the skills and knowledge of others, which can positively affect teamwork and team performance (Singh et al., 2013).

In the current workforce alongside the Internet—which has created the ability to communicate across the globe—indirect communication has exploded in popularity. But along with the explosion of indirect communication, there have been an increase in digital disruption and an increase in miscommunication amongst stakeholders. The realization of the need to gather other intellectual property not found within an organization comes with the awareness of how much a company can achieve by outsourcing work. Distributed teams or teams not located in the same vicinity can be constrained through the use of indirect communication as body language, tone and gestures are removed (Singh et al., 2013). In turn, online/distributed teams can reinforce the social interaction and observation opportunities through technological and communication media where all team communications, updates and activities are available to all the team members, facilitating indirect communications (Singh et al., 2013). When speaking about indirect communication, we are immediately referring to any online or non-face-to-face form of communication. This includes email, telecommunications, videoconferencing (Skype, Meetings-to-Go, FaceTime, etc.) and any form of social media (Facebook, Instagram, Twitter, LinkedIn, Pinterest, Google+, etc.). According to Zhang and Venkatesh (2013), they have discovered that individuals who have a large number of network ties or connections would have more interactions with others on the team, thus allowing them more access to different resources (Zhang & Venkatesh, 2013). This is where indirect communication proves to be a useful mode/medium for organizations that plan to work internationally with other global companies to make use of the resources they have become experts in. When an organization can distinguish between online and offline workplace communication networks and the risks of digital disruption, they

will begin to understand the independent and interdependent roles of online and offline workplace communication network ties in affecting job performance and ultimately their business performance (Zhang & Venkatesh, 2013). Technology is the way of the future. Statistics show that virtual environments and virtual teams provide multiple advantages for both organizations and individuals (e.g. reduced travel costs, increased autonomy and flexibility of employees) (Krumm, Terwiel & Hertel, 2013, p. 35).

18.2.2   Team Dynamics

Moving from introductions to a functioning group of people with a common goal can sometimes be difficult; therefore, a basic outline should be used to help follow along the process. The following is how a traditional team generally is created and moved through the life cycle of a project. This also holds true for virtual teams, only the modes of communications move to a digital forum. For the purpose of understanding how teams are made, Tuckman's (1965) four stages of team development, alongside Tuckman and Jensen (1977) addition of the last stage, offline team development moves through the following five stages: (1) forming, (2) storming, (3) norming, (4) performing and (5) adjourning (Rickards & Moger, 2000). Tuckman and Jensen (1977) illustrate how, in an ideal situation, each stage represents a higher level of communication and a need for cooperative interaction in order to complete projects/tasks at hand. *Forming* is the initial stage where group members meet and formulate relationships with each other. For the virtual teams, this may mean via Skype, WebEx, email or some other virtual means. *Storming* is where personalities will likely clash and represents how the group conflicts amongst themselves as they resist the formation of a group structure (Bonebright, 2010). This can be exceptionally confusing in a virtual environment since time and space can interfere with when communications such as emails may not be received in time before or after other correspondence. Conflicting personalities or even passive ones may cause a lag in performance within a virtual team. As these behaviours subside, then a norm for the team can be formed, moving the individuals into the next stage of the model, norming (Rickards & Moger, 2000). Norming is the unifying of the different opinions and creating a model for all individuals to follow in order to complete the work assigned. It is where group norms are defined as rules that the group must adopt to regulate and regularize the team members' behaviours (Krumm et al., 2013). When the team members are able to understand the expectations and roles of others on the team, even with the disruptions that may occur in a digital team, they are then able to find a "norm" for their actions. But once this has finally occurred throughout the team, then the work can be performed. Performing is where tasks are carried out as each individual works with other team members, efficiently and effectively, in a work environment to ensure the project/task is completed (Miller et al., 2013, p. 79). Understanding that engaging a team into a series of processes approved actions that are a well-developed reaction to an external situation can be crucial in online situations

(Williams, Parker, & Turner, 2010). The performing stage poses many challenges for online teams, especially in terms of measuring team performance, but upon successful completion of the assigned project/task, the team will then be able to disperse in the adjourning stage. Adjourning is where the members who have been working together for the time it took to complete a project/task part ways. They may or may not ever work with these same people again, but ensuring that amicable relationships have been developed, working together in the future may prove to be an easier process. In virtual teams, individuals may never have met their teammates, but it does not mean that amicable relationships cannot be formed.

Current literature gives many examples on the need for team development in an offline setting, but it has become increasingly popular for those who are managing online teams. "Since virtual teams predominantly use digital media to communicate and coordinate with at least one team member working remotely, managers must develop the skills necessary to properly address all parties" (Krumm et al., 2013, p. 34). It can be particularly difficult to manage an online team in comparison to an offline team due to the fact that there are many more variables preventing clear communication. "Whereas traditional teamwork is characterized by immediate and automatic personal (face-to-face) interactions between team members, communication on a 'virtual team' is often reduced and cue-deprived creating new challenges that hinder the creation of norms for the stakeholders to adapt to" (Krumm et al., 2013, p. 34). This portion of Tuckman's team development model is the beginning of where the struggle to maintain communication in virtual teams begins. According to Krumm et al. (2013, p. 34):

> Virtual-team members may act according to norms activated by other more salient social identities (e.g., family or colleagues from outside the work team), process information based on their own cultural background rather than on their collaborators' cultural backgrounds, and even perceive their colleagues working remotely as outgroup members, thus potentially facilitating distrust and hampering cooperation in virtual teams.

With this understanding of online teams, one of the first steps to administering appropriate management skills is to identify what the team needs in order to succeed. As a team develops, it will need the support and abilities of the manager to successfully make it through the Project Management Life Cycle (PMLC) for any task or assignment. Team development for an online team is similar to that of an offline team, with the biggest difficulties being "effectively using technology, ensuring efficient work flows, monitoring and motivating employees who work remotely, as well as ensuring trust and commitment among team members" (Krumm et al., 2013, p. 34). Tuckman and Jensen (1977) illustrate the process through which understanding the team dynamics, communication methods (whether direct or indirect) and cultural backgrounds will enable managers to hone their leadership skills for each situation. Lastly, cultural influences directly affect all parties and must be taken into consideration when working with an online or virtual team. There needs to be a level of respect between team members, and in an online environment, this is always a challenge. Moving through the different stages of team development, gaining trust in the other team members' ability is imperative. Establishing this as a manager can be difficult, but it is important for this to be established. Trust opens

the door for communication and builds the confidence for team members to believe in the integrity of their counterparts, regardless of whether it is in an online or offline environment.

18.2.3 Cultural Influences on Team

Teams today have become extremely diverse in terms of sex, race, age, ability, experience, etc. Virtual environments make this even more difficult to recognize as the initial human interaction has been removed as there is not necessarily an in-person meeting. This eliminates the nonverbal aspect of communication, which inconsequentially eliminates approximately 93 % of communication (Fields, 2015). One of the most pressuring issues when dealing with teams, offline and online alike, is the culture differences. Firstly, to define culture is to say that it is a patterned way of thinking, feeling, or reacting that is acquired and transmitted through symbols within a group of individuals" (Krumm et al., 2013, p. 35). Culture has everything to do with how people relate to others, as well as how they interact with those who do not share the same culture. It can create how individuals perceive people, work and teams on a whole. Now as the popularity of virtual teams grows, this cultural definition must be catered to on a much larger scale. This is due to the "globalization of business processes, where both traditional and virtual work teams have become increasingly more culturally diverse" (Krumm et al., 2013, p. 35). Globalization has become a key element in the interaction of teams who have people who exist across the world, integrating their goods and services with other international companies. According to Nurmi (2011), the most apparent potential context-specific stressors in geographically distributed teams are the feelings of "isolation and role ambiguity, loneliness, power and task coordination problems across distance and culture, amount of electronically-mediated cooperation, and language challenges and misunderstandings" (p. 125). In learning how culture influences a team, a manager is better prepared for the different variables when communicating with individuals. Some of the major cultural variables that have been found in literature that greatly affect lines of virtual communication are language, location/time zones and etiquette and tradition.

It is important that "language problems must be viewed within the context of communication problems, and these within the context of interaction problems, so that management is able to control any areas of risk before they are out of control" (Thomas, 2008, p. 309). Language can be one of the major communication barriers but is something that has been increasingly shrinking through the use of technology to connect people, businesses, countries and continents.

Another struggle found when working with online or virtual teams occurs when there are team members who are not collocated or do not live in the same time zones. Although members of a virtual team can work anywhere, virtual does not end the role of geography and the time zones in which team members can be found (Cummings, 2011, p. 26). The lack of proximity, face-to-face communication and spontaneous interaction drives the team culture into an environment where it

complicates communication and collaboration (Nurmi, 2011). It can be easier for "team members within the same or a few time zones to coordinate communication, but the reality of physical separation still reduces awareness of what other members are doing", thus creating communication gaps (Cummings, 2011, p. 26). Managers are better equipped in managing virtual teams if location and time zone issues are identified, analysed and solved, and the productivity of the team in theory will increase.

Etiquette and cultural traditions can create differences amongst team members, whether online or offline. In face-to-face meetings, there is the ability to read gestures or body language, but it is still difficult when etiquette and traditions are dissimilar. When dealing with different individuals with different cultural backgrounds, "knowing cultural practices is as critical as being able to speak the local language" (Yang, 2009, p. 32). Especially with online teams, it is irresponsible to "implement policies and practices that increase the diversity of the workforce, such as outsourcing work to different people in different countries, without understanding how diverse individuals can come together to form effective teams" (Mannix & Neale, 2005, p. 37). Research shows that diversity "can have negative effects on social integration, communication, and create more conflict in groups" than there already is found in the storming stage of the group development stage (Mannix & Neale, 2005, p. 35). This makes managing a culturally diverse team more difficult and also a more sensitive situation where the issue is not to offend others directly or indirectly. There is more difficulty when a virtual medium is used, as in the Chinese culture, for example, for "greeting (business partners vs. family or friends), introducing oneself (with or without a business card), eating (formal vs. informal), gift giving (proper objects to give), and politeness (addressing someone with an appropriate title to show respect)" (Yang, 2009, p. 35). One cannot assume that a formal greeting versus a casual greeting can be the same, especially in cultures where respect is one of the most important characteristics.

18.3 Survey Design and Data Collection

A survey was conducted of 120 managers working in varying degrees of online and offline teams. For this research, the sampling method that was used in order to study the opinions of managers working with virtual teams was nonrandom sampling method as only managers working with virtual teams were eligible to participate in the study and complete the survey (Dale, 2013). The questionnaire has been designed as a multiple choice survey for the participants to easily select an option from a given list. There were 26 multiple choice questions to be answered, of which involve the three influential aspects for the research (leadership and communication, team dynamics and culture) as well as basic demographic questions to help get an idea of who is currently involved in online teams and what their opinions are. The online platform www.surveymonkey.com was used to developed the survey and collect the responses.

18.4   Results and Discussions

18.4.1   Results Introduction

This section aims to present the results of all of the surveys conducted, in order to determine which management skills managers deem most important, when managing online versus offline teams. The focus is on the three major topics that have been trending throughout this dissertation which are leadership and communications, team dynamics and also culture. The questionnaire consisted of a sample size of 120 project managers working with online teams. The demographics of the surveyed participants consisted of 62 % male participants, and 91 % of the total participants were between the ages of 25 and 44. Cultural backgrounds of the participants exposed 73 % were born in North America, 9 % in South America, 8 % in Europe, 6 % in Asia and the remainder in Africa, Australia and Antarctica. The educational levels of the participants surveyed revealed 49 % had completed bachelor degrees, 19 % graduate degrees and 14 % college diplomas, and the remainder held a high school diploma or less. To ensure experience was a factor in the results, the number of years in the industry was examined. Thirty percent of participants had been working in their industry for 10 or more years, 27 % working 7–9 years and 25 % working 4–6 years, and the remaining 18 % had 1–3 years of industry experience. This gives us a vague idea that the majority of the persons surveyed were male between the ages of 25 and 44, born in North America, with bachelor degrees working in their industry for 10 years or more. All results are taken directly from the surveys conveyed using Surveymonkey.com.

18.4.2   Leadership and Communications

The results from the survey concluded that 60 % of project managers surveyed believe both types of leadership styles; transformational and transactional leadership will help to build relationships in an online environment. It can also be derived that 30 % of participants also believe that transactional leadership or human-oriented leadership, where communication is at its highest level, is a better or more efficient way of conducting their teams. The research conducted confirms that communication is one of the most powerful management skills that a manager can possess when working with online teams. Developing honed transactional and transformational skills and understanding in which circumstance each is to be used and with what style of communication will greatly improve the ability to develop a cohesive team culture.

The participants were asked about six management skills needed when working with teams (online and offline) and these include: anticipation of industry, challenging employees, interpretation of communication, decision making, aligning objectives and goals and continuous learning. The survey revealed that 41 % of participants agreed that all of these management skills will somehow need to be

altered to be effective in an online environment. However, it is clear that 40 % of the participants are aware that the interpretation of communication must be altered and is a major issue with working with online teams. Thirty-one percent feel that challenging employees is also a management skill that should be carefully handled. Twenty-nine percent recognize aligning objectives and goals to be the next management skill to top the list, followed by decision making at 25 % and continuous learning at 18 %. The last on the list of management skills that need to be adjusted when working with online teams is anticipation of industry at 15 %. When looking at the results once again, it needs to be taken into consideration that 41 % of individuals surveyed are using the Internet 5–10 h a day, with 68 % claiming that this time is spent at work. This means that the majority of project managers surveyed spend most of their time at work using the Internet. Also of those, 23 % surveyed worked in business and financial operations occupations, whereas 18 % in business management occupations and a close 15 % in arts, design, entertainment, sports and media. Working with online teams has become one of the fasted growing segments in the business world today as many people are seeking the benefits of the talents of those in places around the world.

When participants were asked about how often they work with online teams, although the statistics of the people surveyed claimed to work with online teams, 31 % of them stated that they rarely work with others online. 30 % claim to work with online teams sometimes, 25 % the work with online team often and 12 % always work with others online. This is atypical as it was found that 100 % of the people surveyed used email every day for communication, and this is still considered a form of online communication. This is likely an indication of the thought process of the survey participants, and it is important to understand—despite the survey findings—that even the small amount of communication via email is still considered working with others virtually. It is often overlooked by many that email communication is essentially online communication with virtual team members. This tends to be dangerous as they do not adapt their communication skills to fit the needs of individuals in online teams. Email is often used to as an initial form of communication before speaking to participants about projects. It is frequently overlooked that email is still considered virtual form of communication and needs to be used appropriately when working with online teams.

Another major portion of effective leadership is to understand which level the communication is on. Whether it is on an individual level, a team level or an organizational level, the manager should be able to differentiate each and develop their communication skills to suit the audience. Especially as leadership may play a "central role in inspiring and supporting knowledge sharing behaviours, this is consequently a result of human-oriented or transformational leadership which can have a positive effect on both knowledge collecting and donating behaviours" (deVries, Bakker-Pieper, & Oostenveld, 2010, p. 79). When the participants were asked about which organizational space they feel is the most important for leadership when working with online teams, the results showed that 64 % agreed that all three of the organizational levels should be equally important for leadership skills to be displayed. As a secondary tier, it can be seen that 24 % agreed that leadership must be

found at a team level. These survey results both indicate that managers understand the need for communication (whether direct or indirect) for groups of people and how it can ultimately affect the team culture.

18.4.3 Team Dynamics

Participants were asked about which stage of developing team dynamics is the most difficult to create when working in a virtual environment, and the results showed that 43 % agreed that the storming stage where the personalities of individuals clash is the most difficult stage for virtual teams. As the second ranked stage, 26 % have stated that the forming stage is as well a complicated stage. The participants have only a 16 % norming vote and a 13 % performing vote, and the remainder 2 % feel like difficulties lie in the adjourning stage. It is apparent that these individuals are most concerned with the storming stage when creating teams in an online environment. Binsiddiq and Alzahmi (2013) explain that understanding group level constructs and dynamic is critical in understanding team level phenomenon (Binsiddiq & Alzahmi, 2013). In addition, when participants were asked if trust was difficult to establish when considering team dynamics in virtual environments, the results revealed that 47 % of participants think that it is occasionally true that trust building in online environments can be difficult and 28 % say that this is always true. Alternatively 20 % of the participants surveyed felt that it is not usually true. It is very apparent that dealing with virtual teams, "the attitude and ability to trust one another in a team is considered one of the most critical elements that help team members bond with each other and work together seamlessly towards their common goals" (Turaga, 2013, p. 17). A survey participant indulges us with their comment stating, "As with any team environment, you just need to be aware. Trust is key and most micro-managers simply don't have that. I feel that if my employee are getting things done on schedule and they are pushing to challenge themselves, then it's obvious that they do well being remote with little supervision. Once that trust level is breached, then I revisit the team dynamics". Trust building in teams is necessary to be able to reach the objectives and the goals of the task or project on hand.

18.4.4 Culture

As we continue to present the results, culture becomes a very important influential factor when working with multicultural online teams. The comparison of virtual and traditional cross-cultural teams might be extended to virtual and traditional monocultural teams, which would enable us to clearly separate requirements due to cultural diversity and/or virtuality, building on facts that arise when working in either environment (Krumm et al., 2013). The virtual communication areas that are most

affected can be found within language, location/time zones and etiquette and tradition. When the participants were asked if they feel that language can be seen as a barrier when communicating with online teams, 76 % of participants felt positive that language was generally a barrier in a virtual environment, whereas 24 % feel that it is usually not true. To a degree everyone agrees that there is some language barrier, no one feels that there is never an instance where langue is not an issue. "A virtual team is a network group where team members from different cultures are temporarily gathered together for the period of a mission, and with the guidance of a manager", making the necessary adjustments for language barriers can improve interactions for all team members (Chang, Chuang & Chao, 2011, p. 308). Ensuring language barriers are recognized, the situation assessed and a solution provided, it is something that can be easily dealt with.

When participants were asked about their feelings on how location (spatial) and time zone (temporal) dispersions delay communication in online teams, the results showed that 48 % agree that location and time zone affect communication, 23 % are neutral, 16 % disagree, 11 % strongly agree, and the 2 % remaining strongly disagree. This gives a clear indication that the general populous surveyed feel that location and time zones create new issues with communication in online teams. This is something that is unique to virtual environments, as real-time face-to-face communication requires no waiting for a response due to the immediate nature of the communication style. Society's "fast-paced globalization of commercial activity" has expanded the need for online teams, and "it is not uncommon for organizations, especially those that span across nations, to group people from different locations as virtual teams" (Chang et al., 2011, p. 310). Location and time zones tend to hinder the ability to receive immediate feedback. When a question is asked, there is not always a response readily available; thus, this lag becomes something that can create a bottleneck for tasks or projects.

Furthermore, when participants were asked if etiquette and tradition create ambiguous communication as these cultural identifiers are not always readily identifiable, the answers were 53 % agreed that etiquette and tradition can sometimes cause ambiguous communication, 23 % were neutral, but 13 % strongly agreed with the question. "Leaders and members of virtual teams may be well advised to support common group identities, so that despite a lack of physical contact, the team becomes real", which in turn facilitates the norm formation (Krumm et al., 2013, p. 34). This meaning that although there are different cultural aspects that can be found within a team, embracing and accepting that etiquette and tradition will influence different members differently.

The suggested process is an active way to be aware of the participants in an online team. Managers must be proactive in order to be able to capture the trust and participation of team members. With a lack of constant interaction, language barriers, spatial and temporal factors as well as cultural differences in tradition and etiquette, it is important that managers are more sensitive to the differences in individuals' personalities and how they would react under different circumstances.

18.5 Conclusions and Recommendations

Three major conclusions can be made from the research and findings of this research: Firstly, leadership and communication are important in both online and offline teams, but the interaction and engagement with online teams require more sensitivity due to the loss of physical communication through human interaction. Secondly, team dynamics are more difficult to develop with online teams, requiring managers to play a more active role in ensuring that all team members are equally involved and engaged. The stages of team development are relatively similar but essentially require different leadership and communication skills to develop trust that is needed for team members to become interdependent. Lastly, culture plays a major role in team synergy and raising awareness of individuality, thus understanding that language, time zones, etiquette and tradition are influential elements for the decisions, interpretations and reactions of each team member. Key findings are summarized in Table 18.1.

The differences between offline teams and online teams have been examined through the characteristics of effective communication, leadership within organizations,

Table 18.1 Key findings

Leadership and communications	• Both types of leadership styles: transformational and transactional leadership will help to build relationships in an online environment • Communication is one of the most powerful management skills that a manager can possess when working with online teams • Developing honed transactional and transformational skills and understanding in which circumstance each is to be used and with what style of communication will greatly improve the ability to develop a cohesive team culture • All of the six management skills (anticipation of industry, challenging employees, interpretation of communication, decision making, aligning objectives and goals and continuous learning) will somehow need to be altered to be effective in an online environment • Effective leadership is to understand which level the communication is on, and whether it is on an individual level, a team level or an organizational level, the manager should be able to differentiate each and develop their communication skills to suit the audience
Team dynamics	• The storming stage where the personalities of individuals clash is the most difficult stage for virtual teams • Trust building in online environments can be difficult but is considered one of the most critical elements that help team members bond with each other and work together seamlessly
Culture	• The virtual communication areas that are most affected can be found within language, location/time zones and etiquette and tradition • The language is generally a barrier in a virtual environment • Location and time zones create new issues with communication in online teams, e.g. this tends to hinder the ability to receive immediate feedback • Etiquette and tradition can sometimes cause ambiguous communication, and managers need to be aware of such things

influential management skills, team dynamics and cultural issues. Similarly, the identification of specific management skills and the optimization of talents in a virtual environment have also been acknowledged through this research and review of literature. Ultimately, the various facets related to the effects of management skills with both online and offline teams have been studied in searching for a remedy to find what management skills work for online or offline teams.

There are a handful of recommendations that can be made for managers working with the huge influx of online teams that have been developed over the last 10 years. When working with online teams, a different managerial approach should be taken as traditional management skills can harm the delicate relationships with virtual team members. Managers should first internalize their leadership skills and test different elements of transactional and transformational leadership as different levels of each will be utilized in different situations. By defining and redefining the virtual team, the understanding is, "groups of geographically and/or organizationally dispersed co-workers are being assembled using a combination of telecommunications and information technologies to accomplish an organizational task" or project (Mysirlaki & Paraskeva, 2012, p. 977). Improving leadership skills by directly interacting with members on an individual, team and organizational level will ultimately bring the group of random persons to a comprised functional team. In fine-tuning the interaction with online team members, communication must be adapted for the medium or mode of communication, because "business becomes increasingly distributed and virtual in nature" (Mysirlaki & Paraskeva, 2012, p. 980). Understanding that the human element has been removed, adapting and creating an amicable working environment become extremely important, where communication is encouraged to ensure all members' participation. By maintaining a high level of interaction, open lines of communication as well as positive and timely feedback, team culture can be built to encourage the involvement and development of all participants. If there is an absence of the interdependent relationships amongst team members, tasks, projects and organizational goals will not be made. Focus should be on the proper development of team dynamics, and consciousness of any feeble relationships should be brought to the forefront.

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