

Running Head: EFFECTIVENESS OF SELF-MANAGED VIRTUAL TEAMS

We are virtually all on the same team: The effectiveness of self-managed virtual teams

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Abstract

Self-managed, virtual teams are becoming increasingly relevant, especially in geographically dispersed organizations; yet many organizations create virtual teams with almost no understanding of what it takes to ensure their success. The study examines the relationship between member satisfaction and the effectiveness of self-managed, virtual teams. The study was guided by Adaptive Structuration Theory, which examines the structures that emerge in human action as people interact with technology. Using a qualitative, ethnographic interviewing approach as the research method, the study examined eight members of a small, western Canadian hotel management company, who met weekly for a self-managed virtual team meeting.

Results yielded eight major themes which included the following eight factors: (1) The Virtual Team Experience, including comparing virtual and face-to-face meetings, the size of the virtual team, competing demands for attention, meeting efficiency, reducing the sense of isolation, and creating a support network for members; (2) Technology, including taking technology for granted, email versus conference calling and consideration of alternate technologies; (3) Self-Management, including autonomy and interest in self-management; (4) Operation of Meeting, including standards, structure, stability, and scheduling of meetings; (5) Team Members, including establishment of personal relationships, meeting counterparts, the personality and experiences of team members, newness to the meeting, losing face, and designated roles on the team; (6) Decision Making, including methods such as deferring to the head office and consensus; (7) Rewards, including receiving value, recognition, gratitude, and benefitting through sharing and learning; and finally (8) Effectiveness, including meeting member expectations and trust.

While this study highlights the gratification members experienced from participating in the meetings and the relative satisfaction with the technologies, results also indicate that the ability to produce high quality, effective outputs are only partially met. Overall, the research indicates that members were more satisfied than frustrated with the group experience, but when measuring the results of the study team against LaBrosse's (2008) 10-step program of how to create effective virtual teams, the results are inconclusive.

**We are virtually all on the same team:
The effectiveness of self-managed virtual teams**

1.0. Introduction

Virtual teams are becoming increasingly relevant, especially in geographically dispersed organizations which leverage their expertise, promote broader participation in strategic decision-making, increase job flexibility, lower travel costs and pool expert knowledge (Malhotra & Majchrzaka, 2005). Driven by globalization and enabled by advances in technology, virtual teams have become an important element in an organization's ability to achieve business objectives. Timmerman and Scott (2006) estimate that 80 per cent of Fortune 500 companies involve half their employees in teams, with these teams becoming increasingly virtual in nature. Although accurate counts of virtual teams are not readily available, it is likely their use is increasing; yet many organizations create virtual teams with almost no understanding of what it takes to ensure their success (DeRosa, 2009).

Virtual team members juggle competing demands for attention, ambiguity of remote communication, establishment of personal relationships, and the need for accessible, stable, and user-friendly technology (Nunamaker, Reinig & Briggs, 2009). A lack of face-to-face communication, long distances and a sense of isolation can sometimes be exacerbated by traditional top-down leadership styles. As a result, some virtual teams are adopting self-management practices, as team members of similar status from various geographic locations gather to share and distribute information or work collectively on a product and/or service outcome.

Due to these complex variables, working in a self-managed virtual team can prove challenging to members. Unless teams have satisfied members, achieving business objectives

and turning value from these teams can be difficult. “Even if the connections are established and trust develops among participants, a set of business processes based on information and communications technologies that can foster success with these flexible, dispersed, information-intensive organizations is needed” (Lurvy & Rasinghani, 2001, p.524).

1.1. Purpose of Study and Research Question

The purpose of this study is to analyze the relationship between member satisfaction and the effectiveness of self-managed, virtual teams. Specifically, the research will attempt to identify the forces that influence member satisfaction, and how this satisfaction impacts the perceived effectiveness of the team. It is hoped this research will offer those involved in virtual teams insight into becoming more effective through focusing on their satisfaction. Therefore, the research question is:

RQ1 – What is the relationship between member satisfaction and effectiveness in self-managed virtual teams?

1.2. Theoretical Discussion

This study is guided by Adaptive Structuration Theory (AST), based on Anthony Giddens' (1984) structuration theory. Structuration Theory is formulated as the production and reproduction of member's social systems, and their use of rules and structure in guiding their interactions. DeSanctis and Poole (1994) adapted Giddens' theory to study groups and organizations that use information technologies to interact and called it Adaptive Structuration

Theory. AST criticizes the technocentric view of technology use and emphasizes the social aspects.

Initially, a more encompassing framework using Socio-Psychological theory was considered in this study for its traits of communication that reflect personalities, beliefs and feelings, judgments, and how people working in groups affect one another (Craig, 1999). This was rejected as the framework was considered too broad for the researcher's purposes. AST provides a better structure for examining member satisfaction and its relationship to effectiveness, as it focuses on teams in organizations who use information technologies that dynamically create perceptions about the role and use of technology and how it can be applied to their work activities (Schiller & Mandviwalla, 2007). Perceptions can vary widely across groups, influencing how the technologies are used, and their impact on member satisfaction and group outcomes.

2.0 Literature Review and Key Terms

Much of the existing knowledge about virtual teams comes from practitioner articles, popular books, student teams and isolated cases (Kirkman, Rosen, Gibson, Tesluk & McPherson, 2004). As a result, virtual teams are often created and utilized with varying degrees of success – without the guidance of research based on actual workplace virtual teams and their members. There exists little research or “empirical evidence regarding the technology use or success of different virtual team arrangements” (Timmerman & Scott, 2006, p.109). However, there is a substantial base of academic research on virtual teams, which this literature review draws on.

The literature review discusses and defines the key terms of virtual and self-managing teams, effectiveness as it relates to member satisfaction, and the technologies deployed by virtual teams and their impact on satisfaction levels. An understanding of these concepts will better inform the investigation of the research question.

2.1 Virtual and Self-Managed Teams

The generally accepted definition of a virtual team is summed up most succinctly by Lipnack and Stamps (2000) as “a group of people who work interdependently with a shared purpose across space, time, and organization boundaries using technology” (p.18). Virtual teams strive to overcome the limitations of time, space and organizational affiliations (Townsend, DeVeronica & Hendrickson, 1998) and can reduce the need for people to travel between work locations, thus reducing travel-related expense, time and stress (Dube & Robey, 2009). Members of virtual teams rarely meet their counterparts, with all communications occurring via electronic means.

Much of the research goes beyond setting up effective virtual teams and espouses that virtual teams can often be better than face-to-face teams. Majchrzak, Malhotra, Stamps and Lipnack (2004) believe such teams not only have a wider variety of communication channels at their command but are free of many of the psychological and practical obstacles to effective participation that hobble their traditional counterparts. Virtual teams have the ability to optimize team performance by drawing upon the talents of the best people available, wherever they might be located (Kirkman et al., 2004).

Chudoba, Wynn, Lu and Watson-Manheim (2005), argue that geographical dispersion is just one of several discontinuities or gaps underlying the experience of virtual teamwork. Geography, time zones, organizational culture and practices, and technology are all factors that present specific challenges to people working in virtual teams (Dube & Robey, 2009). Jarvenpaa and Leidner (1999) indicate that building trust across distance is difficult for distributed team members without prior relationships. To this end, Kirkman et al. (2004) recommend that the empowerment of team members can improve virtual team performance due to the difficulty of monitoring team-member activities.

For the purposes of this study, self-managing teams are defined as semi-autonomous groups whose members are given discretion to achieve tasks. According to Wageman (2001), self-managed teams have the “authority and accountability for...executing and managing the work – but within a structure and toward purposes set by others” (p. 559). The degree, in which self-managing team members use their authority to manage their work processes, can vary from team to team. Self-management is a behaviour process and it is entirely possible for a self-managing team to manage themselves well, but be highly ineffective or vice-a-versa (Wageman, 2001).

2.2 Virtual Team Effectiveness through Member Satisfaction

Literature on teams defines effectiveness in terms of group-produced outputs and the consequences the group has for its members (Cohen & Bailey, 1997; Hackman, 1987). Effective teams should be able to produce high quality outputs (i.e. products and services) and reward team members in terms of gratification and satisfaction with the working experience (Jarvenpaa & Ives, 1994). Research in this area often focuses on advice on how to structure and reward teams to maximize effectiveness.

Nunamaker, Reinig and Briggs (2009) suggest four principles for effective virtual team work including: realigning reward structures for virtual teams; finding new ways to focus attention on the task; designing activities that cause people to get to know each other; and training teams to self-facilitate. DeRosa (2009) suggests fostering an atmosphere of collaboration and accountability among team members, with clear goals and expectations of the team, along with empowering team members to make decisions. LaBrosse (2008) goes further than Nunamaker et al., offering a ten step program for how to create effective virtual teams by building trust among members; setting project expectations; managing the results not the activities; scheduling and sticking to regular communication; creating time saving decisions; creating standards that build a cohesive culture; going over the rules of responsiveness; using collaborative tools; paying attention to cultural cues and time zones; and creating an attitude of gratitude. (For more on LaBrosse's 10-Step Program, see Appendix A.)

Hackman's (1990) definition of effectiveness succinctly defines the process as incorporating three components: (1) Task Performance: the degree to which the team's service meets the needs of those who use it; (2) Group Process: the degree to which members interact in ways that allow the team to work increasingly well together over time; and (3) Individual

Satisfaction: the degree to which the group experience, on the whole, is more satisfying than frustrating to team members (Wageman, 2001).

Piccoli, Powell and Ives (2004) further refine Hackman's measures of defining team effectiveness, saying effective teams are able to satisfy individual team members' needs, rather than frustrate them, as a byproduct of team interaction. According to Piccoli et al. (2004), team performance and individual satisfaction are the two most common variables when examining virtual team outcomes, with members of self-directed virtual teams reporting higher individual satisfaction with the team and project.

This study utilizes Hackman's (1990, as cited in Wageman 2001) measure of effectiveness as refined by Piccoli, Powell and Ives (2004).

2.3. Technologies used in Virtual Teams

Information and communication technologies (ICT) have strongly influenced team work by reducing time and space constraints, and creating new work settings, demands and ways of operating (Caballer, Gracia & Peiro, 2005). Virtual teams often use ICT's including audio-conferencing, email, video-conferencing and online collaboration software to communicate.

Considerable research has focused on the communication technologies needed to facilitate virtual work to enable effective knowledge sharing (Malhotra & Majchrzak, 2004, 2005).

Timmerman and Scott (2006) suggest that contexts such as culture, time zone differences and the size of the team can affect what communication channels are used, as these affect how the team members perceive virtual meetings; and as a result, their satisfaction levels.

Studies of team member satisfaction capture important factors predicting the use and impact of information technologies deployed by virtual teams. The collaboration technologies

used by virtual teams highly influence their ability to be effective (Bjorn & Ngwenyama, 2009). ICT's can be a barrier to effective teamwork as the lack of non-verbal and visual cues on electronically mediated communication may increase conflict between team members (Mortensen & Hinds, 2001). This can hinder the development of group cohesion, reducing knowledge sharing and the overall satisfaction of team members (Dube & Robey, 2009).

Most of the literature examines both asynchronous and synchronous communication technologies. Malhotra and Majchrzak (2005) argue that users can overcome some of the constraints imposed by email and teleconferencing through practices of use. Nevertheless, sufficient problems in the satisfaction levels of the technology by the user remain, leading a number of researchers to conclude that for tasks requiring many cues, such as negotiation and conflict resolution, face-to-face communication is preferable to email and teleconferencing (Maznevski & Chudoba, 2000). This study focuses on the technologies of teleconference (synchronous) and email (asynchronous).

Sivunen and Valo (2006) indicate that team leaders are often determinants to what technology the team members will use to communicate. Instead, they recommend that communication technologies be chosen by the members and should facilitate and support communication between virtual team members, a recommendation that supports the self-management of virtual teams.

3.0. Research Design

As illustrated in the literature review, much of the current literature on virtual team effectiveness focuses on key performance outcomes and member satisfaction. However, less research has been conducted to examine whether the same relationship exists in self-managing

virtual teams. Virtual teams are made of up human members who interact through technology. Technology, therefore, profoundly affects the nature of virtual teams. Adaptive Structuration Theory provides a useful framework for examining the social aspects the technology brings and its impact on member satisfaction. By studying these aspects together, this study seeks to give organizations further tools to evaluate, and succeed in, their use of virtual, self-managed teams.

3.1. Research Participants

This study examined a virtual team of 12 members of a small (125 employee), western Canadian hotel management company who meet weekly for approximately one hour via teleconference to review hotel revenues – called the Revenue Team Meeting – who's primary goal is to increase revenues at each property. Participants' positions vary. Eight participants are Front Desk Managers representing each affiliate hotel, two are Sales Managers, and one is the Operations Manager. The final participant is the author, who is the Marketing Manager. Only eight of the twelve participants were interviewed as there was a possible conflict of interest between the interviewer and the Sales Managers and one team member was let go from the company and elected not to participate. The participants were two men and six women. Their ages ranged from early 20's to mid 60's, with the majority of participants being in their 30's. Nationality also varied: two participants are French-Canadian, two from Europe and four are from Western Canada. The virtual team members thus represent a broad array of age, ethnicities and organizational positions.

Approximately two years ago the team decided to restructure itself to be a self-managing team as each member has a similar status, in terms of responsibility, within the organization. Additionally, all participants are responsible in some way for revenue, with no one person in the

company dedicated to the position of revenue manager. As a result, the team as a collective fulfills this role. In order to facilitate a true self-managing virtual team, the team has created a rotating moderator position. Each week a member assumes the role of moderator according to a pre-arranged schedule, sent out via email every three months by the Marketing Manager. The team is also responsible for filling in two reports prior to each meeting; an occupancy report and a competitive property report.

The team is charged with managing daily revenues for the company as a whole, including the average daily rate (ADR), occupancy levels, sales and promotional activities. The team also engages in general discussion regarding best practices of hotel management. At the end of each meeting members are required to report to their manager(s) regarding the meeting outcomes.

3.2. Qualitative Research

Using a qualitative, ethnographic approach, this study assesses each member's satisfaction, with a view to explore the relationship between their level of satisfaction and the team's effectiveness. This study chose qualitative research methods because of its "means for exploring and understanding the meaning individuals...ascribe to a social or human problem(s)" (Cresswell, 2009, p. 232). The qualitative research process researches questions, collects data from the participants, analyzes the data inductively, builds from particular to general themes and makes interpretations of the meaning of the data that lend itself well to this study (Cresswell, 2009). The study is ethnographic because the interviews were conducted by the researcher who is a member of the virtual team.

3.3. Ethnographic Interviewing

Ethnography is a form of qualitative research that includes descriptions of people, places, languages, events, and products. The data is collected by means of observation, interviewing, listening, and immersion, with the least amount of distortion and bias (Gee & Ullman, 1998). Because the researcher in this study is a member of the team being studied, ethnography is indicated as the research method of choice.

Ethnographic interviews give researchers unique insight into the lives and experiences of the individuals most affected by the...problems and issues under study. Entire qualitative studies have been conducted on the strength of respondent interviews. Clearly, interviewing is one of the most popular research methods, in both emergent and conventional paradigms. Ethnographic interviews allow the researcher to explore a topic in a way that yields rich data impossible to obtain through surveys, document analysis, or observation. (Ortiz, 2003, p. 37)

Interviews were chosen as the research technique because they are “particularly well-suited to understand the social actor’s experience and perspective” (Lindlof & Taylor, 2002, p. 173). The eight team members who are part of the self-managed virtual team under study can offer insights and experiences that provide valuable data. Interviews also allow for the gathering of information about subjects’ feelings on satisfaction that cannot be observed effectively by other means (Lindlof & Taylor, 2002).

The interview techniques used in this study loosely follow Spradley’s (1979) methods in *The Ethnographic Interview*. Spradley suggests that, in the course of ethnographic interviewing, the pattern of questions may vary according to the kind of responses provided by each informant. Ethnographic interviews should start with Grand Tour Questions that seek general overviews of the events and activities under study, and then move to Mini Tour Questions that deal with much

smaller aspects of the experience. Next, Example Questions can reduce assumptions behind ideas, while Experience Questions may prompt stories of unusual experiences. Finally, Native-Language Questions reflect the same language and terms in the questions as the interviewee uses in their responses. (For more details on Spradley's suggested question format, please see Appendix B.)

3.4. Role of Researcher

The researcher is a member of the self-managed virtual team in this study. In this regard, she can be considered an 'insider researcher'. Insider researchers study a group to which they belong. While this shared status can facilitate acceptance among the team members and create a commonality of shared experiences, it can also impede due to assumptions of similarity, an emphasis on shared factors and difficulty separating the personal experience of the researcher from that of the team members (Dwyer & Buckle, 2009).

As a result, great attention has been paid to the ethical implications of this study. The researcher used clear written consent forms (see Appendix C.); as well, in reporting results of this study, the researcher assigned members pseudo names. Finally, the results of the study were not (and will not) be shared with the employer. Thus every attempt has been made to protect the identity of the participants, enabling them to speak freely about their satisfaction levels, as well as to make them comfortable regarding topics of a potentially sensitive nature.

4.0. Measures

Due to a lack of existing qualitative measures that can be used to assess satisfaction of virtual, self-managed teams, this study created questions drawn from a pre-existing quantitative instrument (Communication Satisfaction measures) and adapted them to an ethnographic interview situation. Communication Satisfaction is a focal area in communication audit research and is considered to be an important barometer of organizational well-being and functioning (Koning & De Jong, 2006). “In organizations where employees are more satisfied with communication, there is an increase in performance, productivity, profitability and external customer orientation...(and) the levels of stress, staff turnover and number of absentees are reduced” (p.3). According to Koning and De Jong (2006), communication satisfaction consists of multiple constructs. These may include factors such as the amount of information employees receive, the organization’s communication climate, receptivity of upward communication and employees’ frequency of interaction.

Communication Satisfaction measures have typically been administered using the Communication Satisfaction Questionnaire (see Appendix D). This was originally developed by Downs and Hazen (1977) to “acquire a holistic impression of the way employees evaluate the communication system of an organization” (Koning & De Jong, 2006, p. 4). The instrument focuses on employees’ attitudes and evaluates judgments of several communicative practices. These perceptions are believed to influence the behaviours of employees in an organization. The questionnaire estimates the communication satisfaction of employees by asking them a number of evaluative statements regarding eight important communicative factors:

1. Satisfaction with Communication Climate
2. Satisfaction with Superiors

3. Satisfaction with Organizational Integration
4. Satisfaction with Media Quality
5. Satisfaction with Horizontal Informal Communication
6. Satisfaction with General Organizational Perspective
7. Satisfaction with Communication With Subordinates
8. Satisfaction with Organizational Perspective

In regards to adaption of the questionnaire from a quantitative to a qualitative measure, some of the eight communicative factors outlined by Downs and Hazen (1977) were adapted from their seven point, Likert scale into open-ended questions, keeping in line with the interview guidelines provided by Spradley. (See Appendix E for the interview questions.)

4.1. Data Collection and Analysis

Where possible, interviews were conducted in person, in the home town of the team member. When face-to-face interviews were not feasible (due to financial or travel considerations), computer conferencing via Skype was used. During the interviews, a memoing technique was employed during the interview to record emerging insights from the answers. As well, a double check was ensured through dual methods of recording interviews. With the interviewees' consent, individual interviews were recorded through tape recorders and Call Graph (a free call recording service software that integrates with Skype through a desktop application plugin), which were then saved in an .mp3 format. The interviews lasted for duration of approximately one hour and were subsequently transcribed either by the interviewer or using Call Graph's paid transcription service within the following week, with the notes added to the file.

During the interview process, a series of probing questions were used to allow the interview to flow in a conversational manner with initial themes, patterns, commonalities and differences highlighted in the researcher's notes. The resulting recorded interviews were transcribed into approximately 164 pages of text. After reviewing the transcripts numerous times, the researcher utilized emergent themes, patterns, commonalities and differences to develop a protocol to promote ease of analysis. Initially, 30 major themes were identified. From this, the themes were condensed into eight key themes that were compared to the existing literature, looking for connections.

Considerations for validity and reliability were of paramount concern during the interview and data analysis process. Methods for ensuring validity included having participants review the interview transcripts to ensure their experiences had been captured accurately; using rich, thick description to convey the findings, clarifying biases and presenting negative and/or discrepant information; and using an external auditor to review the entire project (Creswell, 2009).

5.0. Results

The results of this study provide an excellent starting point for exploring the research question and examining the relationship between member satisfaction and effectiveness as it relates to self-managed, virtual teams. As mentioned in the previous section, during reviews of the data, codes were developed to identify major themes. Data segments were created based on the answers to specific interview questions and in the coding of the responses. While over 30 initial themes were identified, subsequent examination of the data revealed to eight major themes

with a number of sub themes in each category. These following themes are considered the most notable emergent themes from the study, occurring throughout interview after interview.

- The Virtual Team Experience, including comparing virtual and face-to-face meetings, the size of the virtual team, competing demands for attention, meeting efficiency, reducing the sense of isolation, and creating a support network for members.
- Technology, including taking technology for granted, email versus conference calling and consideration of alternate technologies.
- Self-Management, including autonomy and interest in self-management.
- Operation of Meeting, including standards, structure, stability, and scheduling of meetings.
- Team Members, including establishment of personal relationships, meeting counterparts, the personality and experiences of team members, newness to the meeting, losing face, and designated roles on the team.
- Decision-making, including methods such as deferring to the head office and consensus.
- Rewards, including receiving value, recognition, gratitude, and benefitting through sharing and learning.
- Effectiveness, including meeting member expectations and trust.

5.1. The Virtual Team Experience

5.1.1. *Virtual versus Face-to-Face Teams*

When asked about preference between virtual versus face-to-face teams, a broad spectrum of answers were given. Many preferred face-to-face meetings for subtextual reasons that allowed them to know their counterparts greater. “There is just so much more than just the

meeting. There is the coffee that goes with it. What people are wearing. There are so many more variables that get thinking about things...it's more personal" (Mary). Other participants felt virtual teams disconnected them from their counterparts and more emphasis and importance was placed on the discussion when members could see each other. But overall, many participants were inclined to believe that virtual teams offered a greater sense of freedom and convenience, not to mention a low cost way for all counterparts to meet. "Virtual meetings are probably more of a convenient situation in order to communicate" (Joan).

5.1.2. Size of Team

A recurring theme from the interviews was the size of the virtual team. While all participants seemed to agree that the meeting was the right size, it was unanimous that if the virtual team grew, a new structure should be applied. In regards to offering solutions, the preferred methods tended to divide the properties by geography or seasonality. "Whether its mountain properties which will have similar seasons. Or whether it's BC versus Alberta because they've got similar...structures" (Christopher).

One concern in regards to growing the team was the amount of time the participants spent listening to problems which they felt were irrelevant. "I don't mind 10 minutes of hearing about another property, but at a certain point it could have a negative impact. Cause frustrations. People don't want to be there. It could be demoralizing" (James).

5.1.3. Competing Demands for Attention

Members found that a virtual team structure allowed them to multitask during the meeting. This was generally considered both a detriment and an advantage. Almost all participants confessed to being distracted while they were on the call. "Unfortunately I'm guilty of it myself...we do tend to keep working...so you're probably not 100% focused on the meeting

as if you were to meet...in person” (Michelle). Or, “I can say for myself sometimes...I’ve drifted away doing something else and didn’t listen and went ‘uh-uh’. Because you’ve got emails coming in” (Mary).

Team members believed others on the conference call were also distracted. “Sometimes you hear typing. You hear something going on in the background, so you know someone is less involved” (James). Equally though, because their counterparts could not see what they were doing on a conference call, members felt they could complete additional work, helping to make them feel more productive. “Conference calling is helpful because you can still deal with the guests while you are on the phone” (Patrick).

Listening skills were identified as paramount to the success of a virtual meeting. “You have to be a good listener to participate in a conference call because you can’t have two or three people talking at the same time or you can’t have someone typing” (Mary). One participant felt that members often did not listen well and would frequently speak over someone else.

“Sometimes I think it’s quite rude. You know, I just want to say, ‘hello I’m talking here’” (Veronica). Another participant thought that poor listening skills could be related to being distracted but it could also relate to “an unwillingness to hear anything else, except that particular opinion” (Christopher).

5.1.4. Reduced Sense of Isolation and Creating a Support Network

Members who were managers in isolated properties considered the revenue team meeting their touch point to the larger company as it offered them support through their ability to share stories, frustrations and best practices. Often these members had little contact with others in a similar positions or situations, so the meetings offered them a chance to connect with their peers. “Because everybody is so far away from one place to another...it’s nice to be able to kind of feel

that you can sit down at the table together and discuss things...(it) gives us the opportunity to help each other out” (Joan).

5.1.5. Efficiency of the Meetings

Most team members agreed that the virtual meetings were efficient. “Through email and you know (conference calling) we can get answers and get something out to the public like this...(snaps fingers)” (Mary). The technology aspect also contributed to the efficiency of the meetings as it allowed members to “speed things along and allows for greater communication” (Declan). Other efficiencies noted were reductions in cost and travel time. “I think there are lots of benefits and most of which I think, is particularly poignant for us, is cost and travel time” (Christopher).

Overall, the participants indicated they preferred meeting face-to-face, but understood the advantages of virtual meetings including: convenience, efficiency and the low cost, all which could contribute to the meeting’s productivity. The reluctance to grow the team was juxtaposed against the benefits of learning from others. In regards to competing demands for attention, members expressed liking the ability to multitask but at the same time, feeling distracted. Finally, members, especially those in isolated properties, professed to enjoy the meetings as a touch point to the wider company as it created a situation where they could share with those in similar situations to their own. It is this sharing and communication between counterparts that Downs and Hazen (1977) note as an indicator of satisfaction in terms of the extent of grapevine activity within the organization and information on how their job compares with others.

5.2. Technology

5.2.1. *Taking Technology for Granted*

Much of the existing research focuses on the technologies and their impact. When questioned asked about the technologies used, most participants seemed surprised by the questions and unsure how to answer. Participants gave the impression they had given little consideration to the role of technology in the meetings and as a result awarded it to be of minor consequence. Answers included: “It’s not something I think about” (Mary); “It’s a hard question...I’ve never heard that question before” (Patrick); and “I’ve never really looked at it that way until you brought it up” (James).

Team members were surer in regards to the advantages of conference calling as they could dial in remotely and deal with other issues while on the phone. “We’ve had moderators dial in when they are sick at home because it’s so much easier” (James). Or, “When I was heading to (name removed) to take over from (name removed), I was able to still do the revenue meeting, putting it on speaker while I was driving” (Michelle). Or, “If someone comes to my door, I can actually run out the door, deal with them and come back in. So there’s no interference and no one will know why I had to hang up or put the phone down” (Declan).

5.2.2. *Emails versus Conference Calls*

Overwhelmingly, participants preferred conference calls to email. Many thought the email process was arduous for decision making and could be misconstrued. “Email can be misinterpreted...they need to be taken lightly. I think the phone is best as there is a tone” (James). Beyond the ability for emails to be read out of context, other members believed email was a limited communication method. “Just emails all the time is fine, but you need that little bit more with these properties, you need to have that support of that team” (Patrick). One participant

found email limiting due to the size of the group. “So if we’re waiting for emails to go back and forth with a group of...what are we sometimes...15 people...we’d just never get things done” (Christopher).

However, several participants acknowledged the relevance and importance of email in regards to distributing the agenda and sharing reports. “Sometimes the occupancy reports are not received by everyone and while you’re sitting in that call its really easy to log back in and patch it and hit send and now everyone has a copy and we’re back up to where we were” (Declan).

5.2.3. Alternate Technologies

When asked if the team would be interested in moving to alternate technologies besides email and conference calling, the answers were varied and non-committal. Four team members brought up video conferencing (either using Skype or another program) but were concerned about cost and the effort to change. “The only next step would be to do the webcam, but I don’t think we need to go that far” (Patrick). One member felt that video conferencing would be helpful though in counteracting distractions and would help “keep that level of professionalism” (Christopher).

Go-to-Meeting was another technology that was mentioned. It allows for instant messaging, potentially reducing the questions between team members. Although one participant who mentioned Go-to-Meeting as an alternative thought it could hinder the portability of conference calling saying, “I don’t think it would work quite as well as virtual (re: conference calling) because like I said if you’re on the road or something...you wouldn’t obviously be able to do it then” (Michelle).

On the whole, participants seemed satisfied with the existing technologies, even though Sivunen and Valo (2006) recommended members choose the technology. The fact that many

participants had not considered the technology aspect of the revenue team meetings before being directly asked may have played a role in this as well. “The technology we have for what we’re doing is great” (Mary). When pressed, participants were often unable to offer alternative technology solutions for the meetings as they felt they were not well-versed on them. “Honestly, I don’t know what else to suggest that we could use” (Veronica).

5.3. Self-Management

5.3.1. Autonomy of Self-Management

Throughout the responses, a sense of personal responsibility arose in regards to the outcomes of the meeting, and perhaps more subliminally, the benefits to the property. Phrases such as “it comes down to the individual” (Patrick) or “it’s very independent” (James) were mentioned frequently. It is this sense of personal responsibility that is a key factor in the satisfaction of members.

Some participants talked about how self-management compares to traditional leadership situations, where the leader makes the final decision with or without input from their subordinates. “The way we do it now, there is less intimidation, more of an openness, more of a one-on-one. It’s more like having coffee and discussing work” (James). Another participant said “I think it’s fairly good the way it is...I think everybody is quite open to discuss and come up with a solution” (Joan). Other members felt empowered to “write the book of (the hotel management company)” (Mary) and able to make decisions that benefited their particular property. “If you think something won’t work for your specific property, you can say so...and there’s usually an understanding” (James). A further benefit of self-managing teams, beyond the ability to control the decisions made for their property and having an equal voice at the table,

was the discretion to achieve tasks without going to their superiors who were often busy. "...and if we can accomplish this as a team during the revenue meeting and figure it out on our own, I think that makes their job a little easier too" (Michelle).

On the other hand, some members felt that the ability to self-manage was not always truly autonomous. One participant said "it depends on where in the chain (of command)...how much pull they have" (Declan). Another member seconded this sentiment saying "I think we would very much like to (think we're autonomous). I think that there are limitations for authorizations and approvals even at the corporate level, when we decide to do something" (Christopher).

When asked about the equality of team members, some participants believed that other team members were hierarchically above them in role or responsibility. "Although we have different positions and some of the positions are higher in management, I think we all have an equal right to bring to the table what we think is important" (Mary). This sense of equality seemed to extend to team members being equal in their participation, but did not always translate to equivalent abilities. As one participant noted, "I don't believe they're equal in terms of experience or ability" (Christopher).

5.3.2. Interest in Self-Management

Six of the participants wholly embraced the self-managing aspect of the team as they believed it made them more responsible. Moderating the meetings every few weeks on the rotating leadership schedule had the impact of making them want to succeed and not lose face in front of their counterparts. "By having the moderator rotated, this seems to have really engaged more people" (Christopher). Most team members preferred the self-reporting structure to that of a traditional team where they reported to a supervisor. They felt ultimately responsible in regards to their property's revenue results which bolstered their confidence in performing. "Although at

first I didn't like self-managed as much, I prefer it now...it's got a little more spice to it" (Mary). Another participant expressed that he had not been on a self-managing team before and preferred it. "This is the first time that I've worked with this type of meeting before and I have to say that I like it a lot" (Patrick).

However some differing opinions were expressed. One team member appeared ambivalent about the self-managing structure. "I think that maybe sometimes we should have someone lead" (Veronica). Another outright preferred to have the meetings led by a team leader. "I think we had better meetings when you (Hilary) ran the meetings. I think the Marketing Manager brought more to the table and was able to have more interest created" (Joan). Some participants conveyed concerns with continuing to self-manage if the team grew. "Right now I think it's the way to go...but with us expanding...it should be under review" (Michelle).

This data shows that self-managing teams seem to correlate to two of Downs and Hazen's (1977) indicators of communication satisfaction. Firstly, horizontal communication with other employees is accurate and free flowing. This is seen from comments from participants who mention openness and equality as major themes. Secondly, the communication method used in virtual team meetings motivates and stimulates enthusiasm for meeting goals. This is seen in the communication method of the self-managed team structure which has the ability to empower members to achieve goals, such as meeting or exceeding their revenue projections.

On the whole, the self managing aspect of the virtual team provided a sense of autonomy and personal responsibility that team members generally responded well to. However, members did express feeling limited in the scope of their decision making abilities and were concerned about the size of the team becoming too large.

5.4. Meeting Operation

5.4.1. *Meeting Standards and Structure*

Meeting protocol, standards and meeting expectations emerged as another major theme. “This compares...about 100% better than other virtual teams I’ve been on. One of the reasons why I think this is because it is very scheduled” (Declan). Similarities between responses focused on attending the meeting, reviewing the agenda, being prepared, submitting their reports and contributing to the discussion as a whole. “Being prepared, being on time, contributing to the conversations” (Christopher). Participants felt that knowing what was expected of them allowed them to perform better in the meeting as it reduced redundancies. “If there’s an area that’s not of concern, and then the person has to ask about that area, it’s actually a waste of time. So by putting in your report ahead of time, everyone gets a general overview and knows where to discuss and what points to touch on” (Declan).

Regarding the role of the rotating moderator, the team was consistent in their understanding of what was required of both leading, and being led. “When it’s our turn to manage or host the meeting, then we have to set up the agenda, and send out the emails, and organize the meeting, and notify everybody on what’s on the agenda for next week” (Joan). Following these meeting practices week after week allowed the group to arrive at the meeting with a certain standard of expectation. Some participants offered recommendations for augmenting the meeting standards such as taking minutes. “I think...we often lose our threads because every week everyone has got their own agenda so when you don’t write the minutes...we lose great ideas” (Mary). Another recommendation was to add new ideas to the standard meeting agenda to make it more meaningful, and compare properties to their counterparts or to the whole company. “Comparing where you stand in (the company) as a whole

so in reality, you know (the company) works together and (the company) also competes, though each resort has its own little competition” (Declan). Moreover, another participant felt that the meetings could be condensed. “It would be great if we could say...we’re at the point where our revenue meetings are 15 minutes every morning” (Christopher).

5.4.2. Meeting Stability

Almost all participants were in unison that the meetings were ‘fairly stable’. They noted that participants of new properties had been added to the meeting, but the original members remained. “In my opinion, the team seems to be stable. We haven’t really had much change, other than we just have add-ons which is great, it shows that (the company) is growing” (Michelle). Stability also stemmed from the self-management style. “I actually think a lot of that is due to the self-managed way or direction that we’ve gone and I think it’s actually stabilized quite a bit” (Declan).

5.4.3. Scheduling

Each member understood and appreciated that the meetings were at a set time, Thursday afternoons at 2:30pm MST, 1:30pm PST. Scheduling the meeting for the same time each week offers structure to the meeting and allows members to set their schedule. “It’s very easy to schedule my time then...so I always know on that day I can always work around something” (Patrick). When asked directly about the timing of the meeting, some participants felt that the mornings or later in the afternoon would work better for them or if it could be on a day of the week where they would be able to take two days off in a row (most members work weekends). As each property has different sizes, seasonality’s, time zones and peak periods, members were aware there was no perfect time everyone to meet. “Sometimes it would be nice if we (could)

just cancel the meeting and pushed everything ahead a week or so...but that would just be skipping a meeting” (Declan).

Because of lean staffing at the hotel level, members often worked the front desk while they participated in virtual team meetings. This meant they were regularly required to step away from the conference call to deal with a guest or a situation. “We’re all managing front desks and offices. So we end up getting busy and following through on something else and maybe get sidetracked from the meeting itself and have to step out of the meeting” (Joan).

The difference in each property’s peak times, the varying demands on members and their location during the call was often a point of friction between the team members. Respondents did not seem to truly understand why other members were unable to attend or frequently had to step out of the virtual meetings. This could lead to feelings that other members were not managing their time properly at the expense of others on the team. “We have members who continually give excuses about – ‘well I have people at the desk. I have this. I had that. There’s a big check-in today’. We are all in hotels. Giving excuses to peers who are in the same situation is not acceptable” (Christopher). This frustration was often due to the inability to see the situation in front of others, so they had to trust what they were telling them. “We hear (from the participant) how busy it is because they’re back and forth (on the conference call) but we don’t actually see how busy” (Michelle). Conversely, many of the same participants expressed their own frustration at not being able to contribute more to the meetings because they had to continually deal with situations at their property. “I don’t have anywhere to go really to do a private conference call...I’ve got GSA’s (Guest Service Agents) asking me questions, and housekeepers that are coming in and out...and so I’ve missed basically half the meeting” (Michelle).

In regards to time zones and scheduling, time zones were continually noted as being an issue throughout the interview. However, when pressed for concrete examples of when they had been a challenge, participants seemed unable to recall specific examples, but believed time zone differences could be a challenge. Interestingly, most participants seemed more concerned with how it might affect those in a different time zone, than how it affected them.

AST can be used to examine the structures of communication provided by advanced technologies. As a result of the consistent structure of the meeting, a system is created. By and large, the virtual meetings were thought to be clear, well-organized and concise, with the majority of participants expressing satisfaction in this area. However, many members expressed dissatisfaction with communication overload as they often had to work the front desk or deal with other situations while they were in the meeting. While time zone differences were mentioned as a problem to look out for, as noted both in research by Chudoba et al (2005) and by the participants, concrete examples of challenges with time zones were not forthcoming.

5.5. Team Members

5.5.1. Establishment of Personal Relationships

Research shows team members feel more satisfied when they have personal relationships with other members and receive some kind of personal benefit from attending the meeting. Overall, this team believed they had some kind of personal relationships with their counterparts. Members who had been there since the beginning of the revenue team meetings two years prior, recalled when there was one leader, making it difficult it to know the other members. “I never knew anybody else” (Veronica). Other members thought the self-managing aspect brought the team members closer together. “I think by having the virtual meetings once a week, and getting

to know each person a little bit more, and actually by having everyone...hosting the meeting has given a little more idea of who they are” (Joan).

Participants mentioned finding out information about their various team members during the conversations that occurred while waiting for all members to join the call. “While we’re waiting for everyone to get into the meeting, there’s always that couple of minutes of conversation, what you’re doing, who’s talking, how’s it going, someone’s picking on somebody and its always a good laugh and then we go into the meeting” (Declan). This gave team members an idea of the approachability of other members while offering insight into both their personal and work habits. Additionally, others wished there was more team socialization. “So when we find out little things like we found out with the (property name removed)...it really brings the team together. Everyone laughs. We’ll probably always remember that revenue meeting” (Mary).

5.5.2. Meeting Counterparts

Most participants had met the team members from the head office along with those in their geographic vicinity. “I know some better just because they live in (province removed).” (Michelle). Still members felt affinity to their counterparts on the phone and considered themselves to ‘know them’. “Half of them I know personally. There is a very small handful that I don’t. But I’m able through our short discussions to gauge what kind of members they are...I guess” (Mary). Or, “on a scale from small, medium to large...I would say medium...I think I’m able to pick up on what people are like, and get a good idea of the personalities” (Joan). When asked if they ever called the team members they had not met personally for help or advice, members admitted they did not. “Well the ones I personally know...but I don’t call (name removed) to see what’s going on in (place removed)” (Mary).

Perception of members, having never met the majority, influenced how the other team members interacted with them. “Well you can make preconceived ideas of how people are because you’ve never seen their face. Are they big, small? It’s an interesting fact because you create who the person is and you’ve never seen them” (Mary). Another said “then when I’ve actually met some people, I thought, you’re so entirely different to what I thought you would be” (Veronica). There seemed to be a longing to meet the other members, especially in not knowing how they looked. “It’s one thing to meet someone face-to-face and one thing to talk to them constantly on the phone...it’s not a bad thing, but sooner or later, you want after all these meetings...you actually really want to meet these people face-to-face because you’ve known them for so long” (Patrick).

5.5.3. Personality and Experiences of Team Members

Without any set precedents, members appeared to divide themselves according to length of time they had served on the team. “As a senior member, I think it’s my duty to share my experience a bit with the rest of the team” (Mary). Seniority on the team repeatedly played a role in the comfort level of the team members, allowing them to feel more at ease in moderating meetings or speaking up on ideas being debated. “You can clearly see the natural leadership with people who have been there the longest” (Christopher). Length of time on the team also created confidence in guiding newer members to ‘show them how it’s done’. “On behalf of the senior team members who are able to ask questions to show its okay to ask a question that everyone else may know the answer to” (Christopher).

The amount of discussion members contributed during the virtual team meeting could also help determine how other team members perceived them. “If you’re not talkative or are easily intimidated by people that will affect your performance and the whole group and what you

get out of it” (James). Others felt the amount a member contributed impacted their enthusiasm or interest in the meetings. “Some people don’t feel comfortable talking in front of everyone. They are kind of shy or uncomfortable...some people...you can feel are more interested than others” (Mary).

The life experience of other members was thought to bring new dynamics to the team as well. “We have different backgrounds. We have some people that have more of a real estate background and some people...who have more of the hotel background” (Patrick). Age differences were also thought to impact the behavior of members. “Some of it may have to do with people who are younger being able to accept change better. Different generation” (Christopher).

5.5.4. Newness to Meeting

Empathy towards new members was often expressed, as members recalled their first meetings. They remembered being unsure of the expectations and feeling stressed about performing in front of their peers. “I was pretty uptight, pretty tense because I had no idea” (James). Or, “last year when I first started the meetings, of course I was more listening than participating just to kind of get a feel of all the meetings...then once I felt comfortable enough to completely participate and to make suggestions” (Michelle). Members believed initial perceptions of timidity were often due to a lack of experience with the meeting process and not their competence level. “I’m sure with time they will get the feeling and go with the flow” (James).

New members frequently contributed fresh ideas to the team. “I think it’s valuable to them to listen to the ones who have been around longer, but in the same sense, the ones who are new can bring new suggestions to our group that we not have thought of” (Michelle). As a point

of observation, one of the newer team members expressed hesitation on a number of the interview questions as they were unsure how certain processes and team standards had been decided.

5.5.5. Losing Face

There was an inability on behalf of some members to ask questions of their counterparts for fear of losing face, especially if they felt they should know the answer. “I think that there are members who limit themselves on what they ask, because, potentially of their insecurity” (Christopher). Another member mentioned a participant who needed to read to understand new ideas or another member who did not feel comfortable voicing questions in a group forum but preferred to ask one-on-one.

Losing face in a face-to-face meeting was perceived differently to that in a virtual meeting, as your counterparts cannot see you, so literally and figuratively they did not have to ‘face them’. “Missing a virtual meeting doesn’t look as bad” (James). Others spoke about difficulties in following through on items discussed in the meetings due to the lack of visual cues such as running into the person during their day, which never occurred with virtual team members, removing the physical reminder of what they had promised the group. “Once you leave the virtual meeting, you got the suggestions and now you have follow through with them and you’re on your own to do it” (Michelle).

5.5.6. Designated Roles

When asked about roles on the team, responses were primarily broken down by the position the person held within the company or if they were serving as the rotating meeting moderator. “Well for the Operations Manager and Marketing Manager and the Sales Managers, I would say they are more of the designated roles what they bring to the table. The Hotel

Managers all have pretty similar roles, just based differently on each property” (Joan). Two of the Hotel Managers found themselves deferring to the Operations Manager in the meetings. “If (they)’s got an opinion if we bring up a suggestion and (they’d) rather say yes or no. (They are) overseeing all of the properties, (they) know how everything works and I do look at (them) as more of a superior” (Michelle).

Other roles were broken down by ability or knowledge. “If we were able to follow a certain course of action with the website (we) defer to you (Hilary) rather than asking the leader, because they know that is not their area of expertise” (Christopher). In regards to the rotating position of virtual team moderator, most participants believed the moderator was given due respect. “After that topic had been discussed, we would revert back again to whomever the moderator was for that week” (Christopher).

One participant believed superiors in the company secretly were coming onto the calls and not making their presence known. They felt intimidated that if they did not talk or act in a certain manner, their superior who was listening in would think they were less qualified. “I just know that that’s in the back of their head how I performed in front of a group” (Declan).

Interest in team members was one of the largest themes in this study. Participants eagerly shared stories of personal relationships, the desire to meet their counterparts, the life experience and personalities of members, new member experiences, losing face, and the designated roles members played. Communication satisfaction indicators that make virtual teams successful include the exchange of personnel news, which was done informally by the team while waiting for all participants to join the call; and the communication abilities of members, found in both the senior and new member experiences. The one member who believed his supervisor was listening in on the conversations signified to him that superiors were not to be trusted, an

indicator of dissatisfaction. This issue is worthy of note, as losing face in a virtual team has not received attention in the research literature. As well, this study revealed that losing face in a virtual team was seemingly not viewed with the same stigma as it could be in face-to-face situations.

5.6. Decision Making

Even with a self managing structure and the belief that all team members are equal, seven out of the eight participants mentioned the head office as being the final decision maker, especially for items such as scheduling, filling in for a missing moderator, giving final approval and moderating any issues. “Anyone that’s actually located at head office kind of has the ear of people more so than the people that aren’t sitting there” (Declan).

How the team makes decisions included methods such as discussing the topic as a group, listening to feedback from all participants, and then using consensus to make the decision. Most participants used the word ‘all’ or ‘everyone’ when referring how the team arrived at decisions. “Everybody gives their own advice and then everybody just makes a mutual decision by what is the best way. Everyone gives kind of different types of examples and then everybody kind of goes in on one” (Patrick). However, this was not always the case, as some team members felt certain decisions were handed to them that could not be changed. “There are some promotions...like Stay Honoured (an annual promotion to military families). It comes out and that’s that. It’s not really a decision” (James). Other members were influenced by the experience level of others. “When three or four people that are working on something and it seems to be working for them, then as a group they’ll decide that it’s a good trait for everyone to use” (Declan).

One participant felt the group did not make decisions at all. “You know...I don’t think we make any decisions” (Veronica). Another thought that when the discussion of an idea elicited negative feedback, the team became paralyzed about making a decision, leading them to avoid certain topics. “Whenever there’s like a little bit of negativity that pops up, then everyone will pretty much stop talking and just go silent and wait for the conversation to move on. And they won’t share their opinion at all” (Declan).

Generally, results revealed that how decisions were made included deferring to the head office, consensus, and through the shared experience of other team members. While there are not specific communication satisfaction indicators for these kinds of decision making, it may be assumed that the variety of decision making methods available to the participants impacts their satisfaction level. While Downs and Hazen (1977) recommended that conflicts be handled through appropriate communication channels, the self-managing structure can make it difficult to resolve conflicts as members sometimes avoid difficult or negative conversations where there is no clear path to resolution. This was indicated in the research as well by Maznevski and Chudoba (2000) who thought tasks such as conflict resolution required visual cues and thus were better suited to face-to-face communication.

5.7. Rewards

5.7.1. *Receiving Value*

Team members considered personal reward and/or property performance an indicator of deriving value from the meetings. Joan stated that she felt the meetings “were productive” and Michelle felt she was rewarded “by increase of occupancy...and possibly increase in their daily revenue, increase the budget”. One participant recalled “I feel rewarded when I get results...I

remember dropping our rates 30% off, which was discussed. I was having a really bad looking month. And we did that. And boom, people started booking for those days” (James).

5.7.2. Recognition and Gratitude

Intrinsic values such as recognition and gratitude by other members comprised the majority of what they regarded as rewards. “I think we are always thanked for joining the meeting. I remember the first time I lead the meeting, you (Hilary) sent me an email saying great meeting...I think we do receive a certain amount of praise” (Mary). Other members talked about how the team offered support to the other members by “saying simple things like ‘way to go!’, ‘congratulations!’ or, ‘you’re doing a great job!’” (Patrick). Another member recalled when he had expressed their frustrations to the team about Christmas bookings at their property not going well. When he finally made a large number of reservations over Christmas, everyone offered praise in regards to their success. “To me reward is an email of recognition...saying you like my idea. That will stay in my head all day and make me feel more positive...like I contributed” (James).

In regards to performance based rewards, team members expressed desire that their immediate supervisor be made aware of their contributions as it could reflect positively on their job performance. “Not really reward, but some kind of recognition, even just that you’re bringing forth ideas” (Mary). Some members talked about financial reward or being evaluated on their contributions to the meetings in their annual employee review. Nearly all members had been told that it would be part of their annual review but “(they) didn’t really touch on that in my evaluation. My participation was not brought up” (Mary). Christopher felt that “there should be some type of scaled system and the easiest thing to do is to is monetary bonuses...or...utilize RRSP contribution or other benefits”.

5.7.3. *Sharing and Learning*

Self-managed meetings offer a chance for team members to express their feelings and form decisions from the group discussion. “Even people from different properties will share their knowledge with you...and it doesn’t feel like you’re being patronized. It just feels like a bunch of friends and you get together and you’re sharing these ideas” (James). The sharing aspect contributed in large part to the mutual respect created between team members. “Different ideas are shared and picked...one member may offer an idea and somebody else picks up with it and adds to it...I feel that everybody’s willing to be open to accept those ideas” (Joan). This was especially true of the moderator role, as team members paid greater attention to the other properties and reviewed those more closely when it was their turn to moderate. “(The rotating chair) has a role of actually seeing how each different area is developing. How each different area is working. How each different area is operating...It gives me a chance to ask questions that I probably wouldn’t have thought of had I not shared them in the meeting at that time” (Michelle).

Others used the meeting time to share grievances they may have with their hotel, guests, peers, superiors or the company. “Occasionally you’ve got a complaint and it’s difficult to tell your side of the story to somebody else” (Veronica). Or one of the team members who thought their superior listened in, pointed out he could complain about something in the hopes their supervisor would overhear, allowing him to share a grievance in an indirect manner. Others expressed happiness with the way things were and how far the team had come, but felt more could be achieved. “For the last two years there has been a lot of education in order to get everybody up to the same level” (Christopher).

The team structure allowed members to work to support, guide and correct each other with fewer directives from their supervisors. “You can steer someone away from trouble if you see them doing something wrong. You might see that my rates are not loaded for March so I could be losing sales...it’s almost like everyone is checking on each other and we’re all in this together” (James). Or, “and to not be scared about any kind of problems or any challenges that you might be having and to explain that to the team” (Patrick).

Members talked about how they had a wider support network to draw on and how this enabled them to accomplish more. “Someone that is not necessarily even in your province is able to help you out with something because they’ve found a way to work with it” (Declan). Others found that by listening to other participants and by discussing ideas as a group, they learned and benefited from ideas. One participant talked about a promotion she had not heard of before, but had worked well for another property so she wanted to try it. “The outcome worked out good on our behalf because it increased our forecasting and it increased our occupancy” (Michelle).

Others expressed liking that they found out more about the company as a whole, its growth and direction. It helped to create a wider view of what they were doing beyond their day-to-day operations.

“It opens my view and my interest of our other properties. If we were not meeting with properties from (place removed) or properties from (place removed), my interest in opening their web page or actually going to find out their competitive grid on Expedia would be nil. I probably would not go and do that, but it really opens my mind about what (the company) is as a company. I am less focused, on my little area and more focused what we are as a whole”. (Mary)

Another participant said “as an individual, it empowers your managers a little bit more. It makes you know you are part of something bigger than just your property. You’re part of (the company), you’re part of that brand” (James). Further to this, one participant saw greater opportunities for career advancement because they were aware of the greater picture beyond his own property. “Advantages again, because (we’re) being trained for any possibilities. So if they were to move to another resort or go to assist, they would have a certain level of understanding of that property and how it functions” (Christopher).

Reward functions are a key communication satisfaction indicator. Recognition of efforts is mentioned by both Nunamaker et al. (2009) and Downs and Hazen (1977). Creating an attitude of gratitude is mentioned by LaBrosse (2008) which seems to be happening through mutual praise and gratitude among team members. However, education and learning from others are also considered rewards by this team. Once again this factor is of note as there is little mention of it in the researched literature.

5.8. Effectiveness

5.8.1. *Meeting Expectations*

In regards to meeting member’s expectations, some members expressed discontent with having to hear about other properties for long periods of time (by which they meant more than three minutes). Other members felt the agenda was repetitive, potentially causing feelings of indifference towards the meetings. “It would be a good idea to find something that gets people a little more interested or enthusiastic about doing it” (Joan). Or, “the agendas have been the same for so long. Just copy and paste” (Mary).

The nature of conference calling allows only one person to talk at a time, and the dominance of conversation by some team members who spoke over or cut off others was considered frustrating to the participants. “I sometimes feel that when we’re trying to get a point across, that we get cut off if it doesn’t meet with what somebody is expecting us to say” (Veronica). Others expressed a certain kind of nervousness that virtual meetings were becoming too common and that they would eclipse all face-to-face meetings “It doesn’t seem like this time round we’re going to have our annual meeting...which means it’s pretty much replaced the in person” (Declan).

5.8.2. *Trust*

Perhaps the greatest obstacle to team members in creating vibrant and productive meetings was absenteeism. While all admitted they were guilty of missing meetings, they still accused others when absences occurred. Participants felt that because the meetings were virtual, they were easy to miss which could impact trust levels. “Which is not fair to everyone who makes the effort to be there” (James). “I think like two weeks ago that it was only like four people or something...so there is only so much that people can say” (Patrick). As mentioned earlier, participants seemed to understand there are conflicting interests occurring while on the conference call, such as guests arriving at the front desk, which could cause the revenue meeting to become a secondary priority. Still, members felt their ability to wear many hats was part of the problem in creating the absenteeism—for themselves and other team members.

Factors that could promote trust between members included being prepared for the meeting, being on time, contributing, and not looking to adjourn the meeting ‘too soon’. These were considered respectful traits that were often perceived by participants as trust. When participants did not deliver on the group’s expectations, this could lead to feelings of mistrust.

“They’ll say yes I’ll have that done by a certain date...and it’s not done” (Christopher). Each time a situation like this occurs, it can cause deterioration of the trust felt by other participants.

Nevertheless, most team members agreed that they trusted their counterparts. However, they did indicate that because they were essentially responsible for themselves, it was harder to let their team members down. Some members blindly trusted other members because of the role they had in the company. They trusted the company had put that person in place because they were qualified and thus by association could be trusted. “If you are at that meeting it’s because you have a certain role. And if you have that role, it’s because you’ve got experience” (James).

Having met other members in person seemed to establish a larger degree of confidence in them, than through meeting only over the phone. “There may be some people I’ve worked with personally so their trust is based on that” (James). The preliminary conversation while waiting for others to join the call was one way members felt they got to know their counterparts better, helping to establish trust. Similarly, hosting the meeting was a great way to establish rapport as was the opportunity to speak during the meetings, allowing insight into the character of other members, which in turn could facilitate trust.

While in general there seems to be a healthy attitude towards communication between members, potential impediments to achieving effectiveness on the team include certain members dominating the conversation along with stagnant meeting agendas. While communication satisfaction indicators deal mostly with trust by a supervisor, this concept can be applied to a self-managed team as well, as trust between members forms the basis for which all other benefits such as sharing, feeling rewarded, establishment of personal relationships, decision making, etc. occur.

6.0. Discussion

The results of this study explore the relationship between member satisfaction and effectiveness in virtual, self-managed teams. When asked to give a grade on meeting performance in terms of revenue, the average grade given was 7.56 out of 10. The lowest grade was a six and the highest grade was a nine. All but one participant believed that the key goal of the Revenue Management meeting was to find was to maximize revenue for their property. Indicators of effectiveness seemed to relate to levels of absenteeism, competing demands for attention, self-management, size of team and gratitude, as well as how the results stacked up against LaBrosse's 10 Step Program to Effective Meetings. Indicators of satisfaction, on the other hand, seemed to relate mostly to the social aspects provided by technology including benefits and challenges. While this study highlights that the gratification and satisfaction members experienced was high, results indicate that it is the ability to produce high quality, effective outputs where the group only partially meets their goals.

6.1. Relating Findings to Effectiveness

As noted earlier by Koning and De Jong (2006), absenteeism and competing demands for attention impact member satisfaction, which has consequences for the team's ability to be effective. Competing demands for attention present an interesting paradox as members admitted they enjoyed the freedom to deal with tasks that needed to be dealt with while still participating in the virtual meeting. However, results point to a sense of resentment towards other members for doing the same.

A secondary aspect in regards to competing demands for attention was the necessity of many of the participants to work a busy front desk or deal with other managerial issues during

the call. Findings showed this was seen as a major point of conflict in terms of scheduling the meeting and team members felt unable to focus on being truly effective team members during the actual meeting. Members seemed to resent not only the fact that their jobs did not allow them to focus properly on the meeting, but also resented those members who continually made excuses to leave the meeting to deal with other issues.

The size of the team presented another paradox as members expressed benefits from hearing and learning from the other team members, enlightening them on issues pertaining to the larger company. However, all participants expressed concern with the growth of the team as there was a certain point (15 attendees was suggested) where there would be too much time hearing about other hotels that held little relevance for other individuals. This again points to a correlation between member satisfaction and effectiveness, for, if the members are not engaged in the learning process, the meetings become irrelevant and hence ineffective.

The self-managing aspect was considered both a help and hindrance in the ability to achieve the goal of maximizing revenue. Without a consistent leader, goals are not set for the team and because members work with peers, they do not feel comfortable making goals for each other. However, while participants are accountable to no one but themselves, they still appear motivated to not lose face. They want to perform at a high standard and often question themselves when questioned by others. This helps the self-management structure be an effective tool for motivation and accomplishment of meeting goals. Because the company does not mandate what needs to occur as a result of these meetings, they are not reviewed as part of job performance, which can create a lack of accountability. Only two members mentioned examples where there was direct, tangible benefit from being in the meeting as having made a difference

on their bottom line, perhaps indicating that the self-management structure is not always conducive to delivering results.

According to Jarvenpaa and Ives (1994), effective teams should be able to produce high quality outputs and reward team members in terms of gratification and satisfaction with the working experience. In regards to rewards, the self congratulatory aspect of the attitude of gratitude may satisfy members in regards to participating and receiving gratitude from the team, but seems to have little bearing on results and creating effective meetings.

6.2. Achieving LaBrosse's 10 Step Program to Effective Virtual Meetings

Overall, most members believed the meetings to be fairly effective. Five of the ten points outlined in LaBrosse's (2008) 10 step program (see Appendix A) for how to create virtual team effectiveness were indeed met. The factors of effectiveness that were met include the following: Scheduling and sticking to regular communication, accomplished by having the meetings the same time each week. Creating time saving decisions, accomplished by sending the reports to all other attendees before the meeting. Creating standards that build a cohesive structure, accomplished by rotating the moderator and having a meeting agenda. Paying attention to time zones, accomplished by members acknowledging that time zones could be a challenge for some members, but not feeling personally challenged by them; and creating an attitude of gratitude, noted by members as a key reward of the meetings.

However, others of LaBrosse's factors for virtual team effectiveness were not met. Going over the rules of responsiveness was unclear, with some members contributing significantly more than others. In terms of managing the results not the activities, the study team seemed more focused on activities such as sharing best practices, discussing discrepancies at their own

property, and rarely focusing on measures and results. Setting expectations seemed ambiguous as well. While rules during the meeting were set, the self-managing aspect meant that there was no one person setting meeting expectations. With members left floundering for direction, they often looked to head office to make decisions. The head office would respond accordingly, but its abilities to offer tangible advice was limited. Additionally, being challenged by peers was difficult for some participants.

Measuring the team's results against LaBrosse's 10-step program helps indicate a partial relationship between member satisfaction and effectiveness, but as not all factors were met, the results can still be considered somewhat inconclusive.

6.3. AST and Satisfaction

The study was guided using Adaptive Structuration Theory (AST). AST is a useful framework to consider groups and their use of technologies as it helps understand the balance, deterministic influences and willful choices that reveal groups' unique identities (DeSanctis & Poole, 1994). Overall, the team members indicated they were relatively satisfied with the meeting technologies. This could be due, in part, to the remote location of the participants which has them frequently connecting to others using technology or because of the increasing popularity of conference calling and email that it seems second nature. While not necessarily a sign of effectiveness, the relative happiness and satisfaction apparently felt with the technologies, and the ease of connecting, suggest a correlation to the ability to facilitate an effective meeting.

Both Maznevski and Chudoba (2000) and Mortensen and Hinds (2001) noted that ICT's can be a barrier to effective teamwork as the lack of non-verbal and visual cues on electronically mediated communication may increase conflict between team members. In this study, trends

show that as long as the issues being discussed did not become negative, the group worked well together. This did change, however when conflict occurred. For example, when a group member was challenged by another, the entire group tended to fall silent as members appeared to find it hard to relate to one another due to the absence of a face-to-face connection, which could provide visual cues. As a result, the team could become paralyzed to make decisions, leading them to avoid certain topics.

6.4. Other Indicators of Satisfaction

Often, satisfaction felt by the members came from previously undefined priorities by the company, such as having a touch point with head office and working with other managers. When participants were asked what they discussed at the meetings, a wide variety of answers were given beyond increasing property revenues, indicating these meetings may be doing more for team members and their ability to be effective in their roles than previously considered. Other team members felt that keeping the whole company working together and doing things similarly helped to decrease redundancies in their jobs. Others indicated they liked the sense of kinship and seeing a bigger picture of where the company was going. While these factors were not identified in the research literature as indicators of member satisfaction and effectiveness, they all seem to facilitate member satisfaction insofar as they achieve broader effectiveness goals that have potential for other positive ramifications beyond an effective revenue team meeting.

According to Wageman (2001), individual satisfaction is the degree to which the group experience, on the whole, is more satisfying than frustrating to team members. Overall, this research indicates the team is, on the whole, more satisfied than frustrated. Self-managed virtual teams are both touted and flouted for their ability to offer team members a chance to multi-task,

meet in an efficient manner, feel empowered, and offer isolated members' connection to others. As participants' sentiment prevailed that the meetings were growing slightly stale, perhaps as Nunabaker, Reinig and Briggs (2009) suggest, the team could use goals, keep members accountable or reduce the number of people on the call to help facilitate this. In answering the research question, there are points of correlation between certain indicators of communication satisfaction but no true determinant of a direct relationship among all variables.

7.0. Limitations and Further Considerations

While this study provides organizations with some tools necessary to examine the member satisfaction of self-managed virtual teams, there are some limitations. Firstly, the size of study is small. While well-suited for master's level research, any results from this study should be replicated on a larger level using several virtual teams the same organization and/or several virtual teams from a variety of different organizations. This would give greater generalizability and validity beyond the organization being studied and extend findings to other organizations.

Secondly, the ethnographic element is an issue that must be considered as the researcher is also a member of the team which she is studying. However, it must be noted that as far as possible, differences in status, power, and interpretations were considered throughout the study. The researcher has a pre-established role on the team. Thus she is a recognized and accepted part of the self-managed team who participates when it is her turn to be the moderator. While this should make her an equal on the team, the very fact she is studying the team could potentially have an impact on her perceived role.

Thirdly, the interview process itself has limitations and weaknesses. Interviews involve personal interaction and as a result, cooperation is essential. Because of the role the researcher

plays in this study, interviewees could have been unwilling or uncomfortable in sharing all that the interviewer hoped to explore. Perhaps, too, the familiarity between the interviewer and the team members may have affected the type of questions asked. For example, the researcher-as-interviewer may not have asked questions that evoke long narratives from the participants, or assumptions could have been made about statements that required further probing.

Finally, using a combination of virtual (Skype) and face-to-face interviewing could be considered inconsistent, as the virtual interviews provided a slight disadvantage in that the interviewer was unable to observe the non verbal cues. This was especially apparent in the differences in note taking during the interviews, as the in-person interviews recorded data about reactions based on facial expressions which were absent from the virtual interviews.

8.0. Conclusion

In conclusion, this research project has provided an approach for understanding the relationship between team member satisfaction and effectiveness in a virtual, self managed team. Through the use of individual, semi-structured interviews, guided by the concept of AST as it relates to the social aspects and structure created by technology, this research was able to identify participant's perceptions of the use of technology, the self-managed team structure, and how indicators of communication satisfaction can help identify the ability of the team to be effective. While team members on the whole expressed a high degree of satisfaction, there was no conclusive evidence that this related to the team being more or less effective. Broader research that incorporates virtual, self-managed team member experiences and perceptions of satisfaction and effectiveness would be a worthwhile development to pursue in further studies.

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10.0. Appendices

Appendix A

LaBrosse's 10 Step Program for Managing Effective Virtual Teams

1. Build Trust

In order for people to work effectively virtually, there has to be trust. Trust doesn't happen magically. It is built when you bring your team together for training or team building and then continues to grow with clear expectations consistently set by leaders and met by the team. Launching the project with a face-to-face meeting is a great way to kick off a virtual project. If you can't meet in person, you can do virtual team-building activities. For example, you can have everyone on the team create a profile on Facebook or MySpace—with the objective of having team members give more of a sense of who they are as people.

A team builder that we've had great success with when we bring our people together is building kayaks. Our project-management techniques are embedded into the activity, and it's very revealing from a team-building perspective. I often learn a lot as the leader watching the activity, and it gives me insight about people's leadership skills and their ability to follow a process.

2. Set Expectations with a Project Agreement

Project agreements help to eliminate unnecessary conflict because objectives, expectations, timelines, and roles and responsibilities are clearly defined. In a virtual environment, it's important to update the project agreement regularly and post it to the collaborative work environment or e-mail it to the team.

3. Manage Results, Not Activity

In the physical office environment, "busy work" often gets mistaken for real work. In the virtual environment, when you can't see what people are doing, the key is to manage results. Monitor and measure the results and be clear about the goals.

4. Schedule Regular Communication

It's important that there is a regular time for reporting both progress and potential pitfalls to the team. This keeps people on track and gives everyone the discipline of a team check-in. It's ideal if there is a standing time every week or every month—depending on your project milestones. Remember to build in time for feedback, coaching, and support.

5. Create Communication That Saves Time

Have you created an e-mail culture that wastes time with endless daisy-chain conversations that take several hours to read? Does your team spend hours trying to solve an issue with an e-mail conversation that could have been solved with a 30-minute conference call? Because e-mail is a critical tool in our work environments, it's important to create a new culture of effectiveness around it. Have people learn to write meaningful subject lines that communicate what the e-mail is about. Also, make sure they lead with what is important and who needs to take action on what. Many deadlines can be missed when the action is buried in paragraph 12.

6. Create Standards That Build a Cohesive Culture

What are your standards of quality? How do you define excellence? What does your brand mean to each employee? Making sure everyone knows the answers to those three questions is even more important when people are scattered geographically. Virtually, you need to create cohesion with excellence and a sense of pride in what your company stands for.

7. Rules of Responsiveness

When people are working remotely, it's important that you define what the rules of responsiveness are for your culture. How quickly are people expected to return an e-mail, an instant message, or a phone call? What is your protocol when people are out of the office or on vacation? If you're in a customer service environment, it's important to have clear expectations regarding how to respond to all customer inquiries.

8. Use Collaborative Tools Like the Wiki

Working virtually is *not* about platitudes. It is about systems: creating the systems that enable people to do their work from anywhere and everywhere. There has to be a very strong commitment to giving people the tools they need to help run the business and serve the customers. If they have to go somewhere to answer the phone to serve the customers, they cannot work virtually.

The Wiki is a central hub for our work where we coordinate our projects and processes. We started this for the marketing group to reduce the e-mail and to better capture the various marketing initiatives and decisions. Within one week, it was adopted by all the other people in the company: IT for projects, facilities to coordinate facility work, accounting to coordinate budgeting with the different parts of the business, and course development to keep track of course upgrades. It has increased our productivity and also created a central "memory" for all of our work.

9. Pay Attention to Cultural Cues and Time Zones

When you're working on a global team, you need to be sensitive to the time zones that you're working in. For example, which time zone are the deadlines relevant in? Are you scheduling calls at a time that works best for all time zones? Also, remember that cross-cultural communication becomes even more of an issue in e-mail. Pay attention to how your colleagues communicate in e-mail. How formal is it? How are they addressing each other? Don't automatically assume an informal tone until you have gained the trust and respect of your team.

10. Create an Attitude of Gratitude

Reward people when they do well. Especially when people are working virtually, they need to know when they've made a difference. We created a program called "The Attitude of Gratitude," where people have 2,000 points every month to distribute to their coworkers to thank them for whatever they did during the month. The top three people with the most points at the end of the month win. The first-place prize is something worth \$500, the second-place prize is worth \$300, and the third-place prize is worth \$200. It's a companywide employee recognition program that everyone participates in, and it creates both buzz and community.

Appendix B

I. Grand Tour Questions

The goal of the grand tour question is to find out the names of places and objects, to meet and/or hear about people, to observe and/or hear about events or activities, and to begin to understand how all of these elements interrelate. There are four types of grand tour questions: the general overview, the specific tour, the guided tour, and the task-related grand tour.

II. Mini-Tour Questions

The purpose of a mini-tour question is the same as that of the grand tour question. The difference is that a mini-tour question deals with a much smaller aspect of experience. The mini-tour question puts a magnifying glass on an activity or area that seems to be important.

III. Example Questions

Example questions are usually woven throughout the ethnographic interview. Example questions can help reduce assumptions between the interviewer and interviewee regarding the meaning behind their ideas.

IV. Experience Questions

Open-ended experience questions are often used after a number of grand tour and mini-tour questions. Experience questions can be difficult for some people to answer as they often prompt informants to tell about unusual experiences, as opposed to the more typical experiences.

V. Native-Language Questions

Native-language questions refer to using the terms that the informant uses to talk about their experience. By using their language, this can help give a window into how the interviewee thinks and talks about things and can help establish rapport. There are three types of native-language

questions: direct-language questions, hypothetical-interaction questions, and typical-sentence questions.

Appendix C

Information/Consent Letter

You have been invited to participate in an unfunded study involving the effectiveness of self-managed virtual teams.

This study seeks to determine the relationship between member satisfaction and the effectiveness of self-managed virtual teams. The study will adapt quantitative Communication Satisfaction measures to an ethnographic interviewing format. The data will be collected using 11 members from a virtual team for a Western Canadian based hotel company.

The research is being conducted by Hilary Moore, a graduate student at the University of Alberta for a final project in Master of Arts in Communication and Technology.

Research Procedures, Expected Duration and Nature of Participation

The data will be collected in a series of interviews with participants from the same virtual team. The interviews are expected to be 1.5 hours in length, and as often as possible, conducted in person. If that is not possible, phone (and/or Skype) interviewing will be used. The data will be recorded using a tape recorder and then transcribed after the interview is over. The interviewee (Hilary Moore) may take notes during the interview as well.

The researcher (Hilary Moore) will comply with the University of Alberta Standards for the Protection of Human Research Participants

<http://www.uofaweb.ualberta.ca/gfcpolicymanual/policymanualesection66.cfm> and any other research personnel involved in the study will be required to sign a confidentiality agreement (i.e. transcriber).

In order to preserve the confidentiality of the participant as much as possible, you will be assigned a pseudo name of which the coding sheet for the pseudo names will be stored in a separate location to the interview transcripts and any other possible reports. All tape recordings will be transcribed within one week and destroyed after two months.

All information provided by the participant will be stored in the home of the researcher in a locked file cabinet. All reports based on the information provided will be made in such a way that individual participants cannot be identified. In the case of using a direct quote from the transcript any identifying information (i.e. location) will be changed as well.

Where appropriate (and possible), the information provided by the participant will not be shared with other individuals or with or with their employer who is aware of the study and has stated that they do not expect the results of the research to be shared with them.

There are no foreseeable harms that may arise from your participation in this research. However, there may be some benefits that you might experience as this study examines a virtual team that you are a member of and may offer insights into how the team is structured, giving you a chance to express your feelings on how the meetings could be better conducted and evaluate your personal satisfaction level with the meetings.

As mentioned above, the data collected will remain confidential and a pseudo name will be used. The final paper will not be given to your employer to review. You should be aware that there is possibility that your employer may read the final paper if they access the paper via public records. However, your employer will not be informed of this option or where to source the study by the researcher.

Verification/Review

The transcript(s) of your interview will be submitted to you, the participant, for you to review for accuracy. You will be given two weeks after you review and accept the transcript of the interview to send in any additional revisions and/or if you chose, to withdraw your data.

Rights

Please review the rights that you are entitled to:

- You have the right to not participate
- You have the right to withdraw at any time without prejudice to pre-existing entitlements, and to continuing and meaningful opportunities for deciding whether or not to continue to participate
- You have the right to opt out without penalty up to two weeks after you have reviewed and accepted the details of your interview transcript in the study and to have any collected data withdrawn and not included in the study. In the event of opting out, your transcript will be discarded using a paper shredder and the tape will be erased.
- You have the right to privacy, anonymity and confidentiality
- You have the right to your data being safeguarded for security purposes. The transcript data will be kept in a secure place for a minimum of 5 years following completion of the final project. When the data is destroyed, the transcript(s) will be discarded using a paper shredder. The taped interview(s) will be erased to ensure privacy and confidentiality two weeks after the participant has reviewed and accepted. The coding sheet for the pseudo names will be destroyed after the paper is submitted (estimated to be in 2010).
- You have the right to the disclosure of the presence of any apparent or actual conflict of interest on the part of the researcher.
- You have the right to a copy of a report of the research findings. To obtain a copy you may indicate at the time of the interview or at any time after that (up to 5 years) that you would be interested in a copy and one will be sent to you in your preferred manner.

Informed Consent

In the event you have some concerns, complaints or consequences, please contact:

Researcher:

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Ethics Approval Statement

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB at (780) 492-3751.

I _____, consent to participate in the study “The Effectiveness of Self-managed Virtual Teams” conducted by Hilary Moore. I understand the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature	Date
_____	_____
Participant	

Signature	Date
_____	_____
Principal Investigator	

There are two copies of the letter and consent form, one to be kept by the participant, and one returned to the researcher. One is to be signed and returned and one is for your records.

Appendix D

Communication Satisfaction Questionnaire Databank

The Communication Satisfaction Questionnaire, developed by Downs and Hazen (1977), is a primary investigative tool used in communication assessments. Employees were asked about their satisfaction level with various aspects of communication within the organization. This is a summary of employee responses collected from the 26 companies represented in the databank. The results are presented in three sections.

Table 1 presents a rank-order of the communication satisfaction items in descending order of satisfaction. All means are computed on a "0 - 10" point satisfaction scale, with "0" representing no satisfaction, "5" representing average satisfaction, and "10" representing high satisfaction.

Table 2 presents employees' reactions to factors that impact their level of job performance. A "0 - 10" point scale was used, with "0" representing that the item had no influence on performance, "5" indicating average influence, and "10" indicating high influence.

Table 3 presents the demographics of the sample.

Table 1: Rank of Employee Satisfaction Levels

<i>Rank</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Survey item</i>
1	7.45	2.44	? Supervisor trusts me.
2	7.14	2.34	? Supervision given me is about right.
3	7.07	2.17	? Work group is compatible
4*	6.88	2.04	? My employees are responsive to downward directive communication.
5*	6.81	2.04	? Subordinates are receptive to evaluation, suggestions, and criticism.
6	6.79	2.02	? Satisfaction with my job.
7	6.69	2.29	? Supervisor is open to ideas.
8*	6.64	2.12	? Subordinates feel responsible for initiating upward communication.
9*	6.53	2.06	? Subordinates anticipate my needs for information.
10	6.48	2.66	? Information about employee benefits and pay.
11	6.39	2.52	? The extent of grapevine activity in our organization.
12	6.38	2.29	? Horizontal communication with other employees is accurate and free flowing.
13	6.34	2.50	? Information about the requirements of my job.
14	6.34	2.33	? Written directives and reports are clear and concise.
15	6.23	2.83	? Supervisor listens and pays attention to me.
16	6.14	2.68	? Supervisor offers guidance for solving job-related problems.
17	6.13	2.28	? Communication practices are adaptable to emergencies.

18*	6.12	2.23	? Supervisors do <i>not</i> have communication overload.
19	6.00	2.56	? Information needed to do my job is received on time.
20	5.87	2.19	? Informal communication is active and accurate.
21	5.73	2.71	? Information about company policies and goals.
22	5.66	2.50	? The attitudes toward communication in the company are basically healthy.
23	5.62	2.73	? Information about departmental policies and goals.
24	5.59	2.58	? Meetings are well organized, clear and concise.
25	5.56	3.25	? Information on company profits and company standing.
26	5.51	2.46	? Personnel news.
27	5.38	2.56	? Company publications are interesting and helpful.
28	5.34	2.31	? The amount of communication in the company is about right.
29	5.30	2.38	? People in my organization have great abilities as communicators.
30	5.27	2.86	? Information about accomplishments or failures of the company.
31	5.26	2.58	? Conflicts are handled appropriately through proper communication channels.
32	5.19	2.60	? The company's communication makes me identify with it or feel like a vital part of it.
33	5.18	2.60	? Information about my progress in my job.
34	5.02	2.63	? Information about changes within organization.
35	4.99	2.47	? Company communication motivates and stimulates enthusiasm for meeting its goals.

36	4.86	2.51	? Supervisor knows and understands the problems faced by subordinates.
37	4.86	2.80	? Recognition of my efforts.
38	4.56	2.71	? Information about how I am being judged.
39	4.53	2.60	? Reports on how problems in my job are being handled.
40	4.50	2.81	? Information about government action affecting my company.
41	4.44	2.57	? Information about how my job compares with others.

Note: * Designates that only those in supervisory position answered the questions.

N = 2,101

*N = 547

Table 2: Factors Influencing Level of Job Performance

<i>Rank</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Survey item</i>
1	8.77	1.67	? Feelings of personal achievement
2	8.72	1.72	? Job satisfaction
3	8.68	2.14	? Job security
4	7.73	2.09	? Pay
5	7.70	2.81	? Family
6	7.63	2.21	? Immediate supervisor
7	7.56	2.59	? Opportunities for advancement
8	7.18	2.13	? Co-workers
9	5.91	2.71	? Economic conditions

Table 3: Database Demographics

Gender	(a) Males: 49.9% (b) Females: 50.1%	(1977). A factor analytic study of <i>Journal of Business Communication</i> , (14)3, 63-73.
Age	(a) under 21: 3.2% (b) 21-29: 38.9% (c) 30-39: 31% (d) 40-49: 15.7% (e) 50-59: 8.9% (f) over 60: 2.2%	
Education	(a) high school or less: 44.5% (b) some college: 22.7% (c) specialized professional degree: 10.7% (d) undergraduate college degree: 20.7% (e) graduate degree: 2.0%	
Length of time worked for the organization	(a) less than a year: 18.2% (b) 1-4 years: 33.9% (c) 5-8 years: 20.5% (d) over 9 years: 26.8%	

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Appendix E

Interview Questions

Introduction

Thank you so much for participating in my research today and thank you for signing the Informed Consent Form. As mentioned in that form, this research is part of my final project for my Masters of Arts which I am presently pursuing at the University of Alberta. My study seeks to determine the relationship member satisfaction has on the effectiveness of self-managed virtual teams. As you have been a virtual team member of the revenue team meetings since (insert time) your experience and insights make an excellent participant for this research. This interview will be taped and is estimated to be approximately 1 hour in length. Before we begin, do you have any questions for me?

I. Self Management Practices

- Can you please tell me how you feel the revenue management meetings operate?
 - Is there a rotating chair? Can you please describe how that process works?
 - Are there designated roles for certain people on the team? Can you please describe those roles?
- Self-managing teams are defined as “semi-autonomous groups whose members are given discretion to achieve tasks”. Do you believe this definition encompasses our virtual team?
 - Can you please explain why or why not?
- Do you feel a self-managing team is the best fit for the revenue meeting? Could you explain what you mean?
- Do you believe each member of the team is equal?
 - Can you please explain why or why not?
 - Is there a team leader? If yes, who. If not, are there any team members who assume the role of a leader?
- Self-managing teams are known for their horizontal communication practices which are where the information flows among team members and is not directed

in a vertical fashion. In the revenue meetings, do you believe the horizontal communication with other employees is free flowing?

- Can you please explain why or why not?
- Can you describe an example of where it is/isn't?

II. Working Virtually

- A virtual team can be defined as a group of people who don't work together face to face but instead use technology, like a conference call, to connect and meet. According to this definition, the revenue team meetings are considered a virtual team. Have you ever thought about the virtual nature of the revenue meetings?
 - If yes, can you explain how so?
- The different geographic backgrounds of team members can sometimes bring their own unique set of advantages and challenges. What do you think are some of the benefits to working on a virtual team? What do you think are some of the drawbacks?
 - (Possible Development Question) Certain challenges have been geography, time zones, and different cultural practices. Have you experienced any of these challenges on our virtual team?
 - (Possible Development Question) Certain advantages in geographically dispersed team is that it brings together a collection of people who have a certain expertise; there is less travel time, there is less stress. Have you experienced any of these advantages on our virtual team?
- Trust between team members is always important, especially when you can't meet-to-face. Can you describe some of the ways trust has or has not been established with your virtual team mates?

III. Evaluating Member Satisfaction

- How are the virtual meetings scheduled?
 - Who makes the decision?
 - Does this work for you?
 - Why or why not?
 - Do you have any recommendations for scheduling meetings?

- How well would you say you know the members of your virtual team?
 - In your opinion, is the team stable or does it change frequently?
- Do you believe that this particular team fulfils an important purpose for the company?
- If you were to give the revenue team a performance grade, what grade would you give it?
 - Can you please explain why you gave that answer?
 - How does this team compare to other teams you've worked on? (either f2f or virtual)
 - (Possible Development Question) Would you make any recommendations for the team to perform better?
- What are the responsibilities of individual team members?
- Do you believe that all team members do pull their weight?
- What kinds of decision does the team make?
 - How does the team make their decisions?
 - Do you think your team's decision-making processes could be improved? If so, can you please explain how?
- Do you believe the team members listen well?
 - If so, can you please describe how?
 - If not, can you please describe why not?
- Do you believe the team members are open minded?
 - If so, can you please describe how?
 - If not, can you please describe why not?
- How, is the revenue team is rewarded for their efforts? #####
 - What (additional) reward practices would you set up?
- What are the outcomes of the revenue meetings?
 - Do you believe those are the correct outcomes?

- If not, what do you believe they should be?

IV. Technologies Used

- You remember we talked about the fact we are a virtual team and don't meet face to face. Instead we use conference calls and email. Do you believe these technologies are effective?
- How is conference calling and email helpful to the meeting process?
 - Can you give me an example?
- Have you ever felt that conference calls have been a hindrance to the meeting process?
 - Can you give me a specific example?
- Are you satisfied with the technologies that are used in the revenue meetings?
 - If so, can you explain why?
 - If not, can you please explain why? Would you recommend another type of technology?
 - (Possible development Question) Given the choice, would you prefer to communicate using the _____ (insert based on above responses) or face-to-face?
 - Can you explain why?

Wrap Up

Do you have anything else that I have not covered that you feel would be of benefit for this study?

Do you have any other insights or questions for me?

Thank you so much for participating today, your participation has been invaluable.

