

A Case Study of a Defense Health Agency: The Significance of Group Support Systems:

Chapter 3: Methodology

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Research Aim

This case study will involve exploring the insights and opinions of leaders and workers of DHHQ in Falls Church, Virginia, on incorporating GSS in the organization and the way it affects the organization's efficiency, especially in the area of decision making through analysis of individual interviews and the completion of questionnaires. The case study will involve collecting qualitative data and using qualitative techniques in data analysis such as thematic analysis. Judicious analysis of the qualitative data would provide insight into the significance of GSS in promoting efficiency among organizations such as the DHA.

Specifically, the purposes of the study are as follows:

1. To define the key impacts, which the promotion of the GSS methods in the settings of a team has on the productivity of meetings;
2. To locate the positive effects on the conflict solution process, which the GSS methods supposedly have in the setting of a specific team or a group of employees;
3. To identify whether the GSS approach may possibly mitigate the negative effects of conflicts in a specific team;
4. To identify whether the GSS approach has any effect on the increase in the overall performance of the members of a specific team (the DHHQ in Virginia in the case in point).

A research methodology defines the purpose of the research, how it proceeds, how to measure progress, and what constitutes success with respect to the objectives determined for carrying out the research study, as the research objective was to explore the consequences of

integrating GSS on organizational efficiency through an analysis of individual interviews with the leaders of DHHQ, in Falls Church, Virginia, as well as answers to a questionnaire on using GSS by employees of the organization. The study will involve exploring the insights and opinions of leaders and workers of DHHQ on the incorporation of GSS in the organization and the ways it affects the organization's efficiency, especially in the area of decision making through individual interviews and questionnaires. Chapter 3 includes discussions on the research method, data collection process, and appropriateness of the research design. The section on the data collection process includes an explanation of interview questions and the questionnaire. The chapter contains a description of the individual interviews analysis, the informed consent of participants, and the confidentiality of the research method in conjunction with an explanation of the validity and reliability of the instrument.

Research Method and Design Appropriateness

The study will be based on a qualitative approach in examining the case study of the DHA. The research method for the study will be a qualitative, multi-person, single embedded case study. Qualitative research allows an in-depth study of participants in their everyday settings (Simovic et al., 2012). While carrying out a case study can be viewed as an attempt to demonstrate the situational application of the GSS approach, it will, nevertheless, provide the effects of a practical application of the strategy in question. Therefore, the outcomes of the case study can be generalized to the point where they will become applicable to any workplace setting.

The qualitative research approach usually involves investigating the underlying reasons for certain phenomena to take place, the existing opinions on certain subjects, the geographical environment, or a phenomenon within a specific paradigm (Hyett et al., 2014). Qualitative

research helps in achieving a qualitative understanding of the nature of certain phenomena and motivations of the participants; in other words, it broadens the primary understanding. A small number of non-representative cases need to be considered for the study. In order to know peoples' perception about a specific issue, a qualitative research needs to incorporate a data collection tool such as an unstructured questionnaire. Researchers attempt to discern meaning based on the importance individuals place on their own experiences (Merriam, 2009). Qualitative research is based on empirical inquiry through the acquisition and an analysis of experiences in a natural setting (Shank, 2006): the results depend on the process as much as on the data.

According to the principles of qualitative research, researchers determine themes, subjects, and patterns from multiple sources of triangulated data, including primary source documents, interviews, and observations (Hyett et al., 2014). The acquisition, the analysis and a proper rendition of data are vital (Neuman, 2003). With the delineated results, qualitative research provides a complex understanding of a problem (Creswell, 2007). The main paradigm of the intended qualitative case study research design concerns investigating the performance efficiencies associated with using the Defense Connect Online GSS platform. The focus of all themes, subjects, and patterns will be on the association between the Defense Connect Online GSS platform and communication efficiency in the settings of a company meeting.

Qualitative methods such as interviews are useful in yielding new insights on the subject matter in order to gain a deeper understanding of information (Robson, 2002; Strauss & Corbin, 1990). Quantitative studies involve investigating causal determination, forecasts, and results generalization, whereas qualitative studies involve studying the clarification and identification of comparable circumstances (Ledderer, 2011). Qualitative research includes obtaining findings regarding a specific phenomenon of interest using qualitative terms (Strauss & Corbin, 1990).

Qualitative researchers search for a variety of perspectives (Glesne, 1999). In qualitative research, face-to-face interactions are the most distinctive feature and the basis for its most common problem (Nespor, 2012). The latter includes researchers' involvement with the people that they study and the accompanying challenges and opportunities that such closeness brings.

The proposed study will concern a federal defense agency serving the medical needs of U.S. military personnel in the United States and around the world, whose members include those commissioned on active duty, reservists, and retired professionals. The DHA, formerly known as Tricare Management Activity, has adopted GSS. The proposed study combined with a statistical analysis of the changes triggered by the GSS implementation will involve an attempt to determine whether GSS improve the efficiency of the organization by analyzing the qualitative and quantitative implications. Specifically, it will be necessary to evaluate the qualitative relationship between the key factors, i.e., the factors defining the efficacy of communication between the DHHQ members, and quantify them in order to compare their effects.

Leonard-Barton (1990) defined a study as an "in depth investigation comprising an oral, archival and secondary-based history of a past or current phenomenon and always dictates the terms of dissection and exploration" (p. 249). According to Tellis (1997), case studies rely on the extrapolation of findings because they involve examining a phenomenon in hopes of applying the findings to similar phenomena. Zivkovic (2012) contended the study often happens to lack clear methodological thoroughness that other research methods have because it does not presuppose the use of a formal protocol in conducting it and invites the possibility of a perceived obviousness of the results. Quantitative research will not be appropriate for the study, as social constructivism is necessary for this research (Šimović et al., 2012). The research questions are broad and the data collected will not be numeric (Creswell, 2007). Quantitative research is a

method designed to study larger groups than in the present study and has limits as to the number of factors studied (Neuman, 2003). Quantitative researchers ask narrow questions and obtain measurable information on variables (Creswell, 2008).

Mixed-method studies combine qualitative and quantitative data analysis in a single study (Creswell, 2007). Such studies include statistical data and descriptions. A deep understanding of both qualitative and quantitative methods is necessary to perform this type of study (Creswell, 2007). The mixed method is not suitable for the present study because statistical measures and variables are a requirement in such studies.

Creswell (2007) acknowledged the existence of other forms of qualitative research, as well as mixed methodologies, and identified “narrative, phenomenology, grounded theory, ethnography, and case study” as the five main research approaches. For the current study, only the five true approaches are under consideration. None of the first four methods is suitable for the study.

Narrative research is a written description of an event or series of events told in a chronological order (Pinnegar & Daynes, 2006). Phenomenology requires firsthand experience with the phenomenon of the study (Thomas, 2011). Researchers of phenomenological studies often intimately examine human encounters that might involve love, hate, anger, grief, or any other deep emotion (Merriam, 2009). Although participants in the GSS study experienced emotion during the creation of the community of practice, depicting an intense emotional experience will not be the goal of the study. In grounded theory research, the goal is to create an original theory (Corbin & Strauss, 2007). This theory may act as the guide for forming a new practice or promoting further research (Corbin & Strauss, 2007). The study includes the

advantages and disadvantages of implementing GSS technologies in organizations. However, it is not the purpose of the study to develop a new theory.

Ethnography is an expensive form of research that involves examining an entire cultural group (Creswell, 2008). This type of research is difficult and time consuming. Ethnography is the most appropriate methodology for the study. **Case** study research is appropriate because of the narrative data collected from the research participants. According to Merriam (2009), single embedded case studies contain a comprehensive case description, which makes them different from other types of qualitative research.

As far as the study in question is concerned, the qualitative research method was used, as the primary goal of the study was to research the [problem and locate the points of synapse between the variables instead of quantifying the research results. Indeed, a closer look at the specifics of the study will reveal that the retrieval of quantitative data is not the priority in the specified case; instead, the points of contact between the GSS approach and the enhancement of communication processes, redesign of the information management strategy and a change in the leadership style in the DSSQ headquarters must be located, which makes it quite obvious that the use of a qualitative study is crucial for the outcomes of the research. It is only with the qualitative design that the reasons for the GSS model and the factors that it exposes the DSSQ staff to may be detected, gathered and analyzed closely. Whereas the quantitative design would have obliged the author of the research to resort to a statistical analysis and the quantification of the data acquired, the qualitative one will allow for linking different variables to one another and explaining the effects that they have on the overall performance of the DSSQ staff.

In addition, the research in question can be characterized as inductive, seeing that it is primarily concerned with the generation of a new method of interpersonal communication within

the office setting instead of proving the one that already exists. Particularly, the study in question attempts at promoting the GSS techniques as an efficient tool for solving information management issues and the related concerns, as well as facilitating a change in the leadership strategy and, therefore, altering the staff's attitude towards the working process. In other words, the paper in question is aimed at proving that the GSS strategy use will encourage the head of the DSSQ to adopt a new leadership approach that will be based on motivating the employees.

Questionnaires were considered to be most appropriate tool for retrieving the information required for the research. The decision to use samples was dictated by the fact that the number of the respondents is quite humble and, therefore, the acquisition of detailed information can be afforded. In addition, in contrast to other types of data acquisition, the usage of questionnaires presupposes that a rather large amount of people can provide information to the researchers in an extremely expeditious and just as cost-effective manner. Seeing that the study requires that a relatively small amount of questions should be asked, it can also be assumed that the data acquisition process will take a relatively small amount of time. Thus, the specified data collection tool can be considered the most legitimate method of gathering information for the specified study. the fact that only ten questions are included into the questionnaire allows for distributing the latter among about twenty participants. A larger number of samples may make the information analysis process unnecessarily complicated, whereas an analysis of a smaller number of samples may return the results lacking in precision. The fact that the use of questionnaires was also considered a legitimate tool for data collection in previous researches with a similar design carried out by the author of this paper should also be brought up.

The last, but definitely not the least, the fact that the chosen methods of research align with its purposes and questions deserves to be mentioned.

Population and Sampling

The general targeted populations as respondents of this research are the employees of the DHA, which is the case of the study. A considerable number of managers and workers can effectively respond to the questions raised regarding the Defense Connect Online GSS communication platform. Through purposive sampling, the proposed research will involve sampling approximately 20 employees of the DHA, formerly known as Tricare Management Activity, with headquarters in Falls Church, Virginia. The purposive method of sampling is appropriate because it enables researchers to select participants of the study based on the inclusion and exclusion criteria set at the outset of the study (Suri, 2011). The agency serves more than 9 million active and retired military persons and their family members across the United States and abroad (“Evaluation of the TRICARE Program,” 2012).

The agency’s office at DHHQ, Falls Church, Virginia, has over 3,000 employees, including active-duty military members, civilians, and contractors who will comprise the population of the case study. Based on the target sample frame of the current study, a purposive sampling, which involves identifying and selecting participants who meet a certain criteria or profile, might enable the identification and selection of qualified participants (Cooper & Schindler, 2006). Each leader and worker will represent the various directorates or divisions of the DHA. The study will indicate the identities of participants employed in the DHA, a U.S. government agency, as military, civilian, or contractor.

Upon receipt of the Institutional Review Board’s approval from University of Phoenix, the selected participants will have to meet the following criteria: (a) over the age of 18, (b) working at DHA, DHHQ as a leader or worker, and (c) active participation experience on GSS at the agency. Participants who can articulate ideas well might offer a range of positions on issues

(Cooper & Schindler, 2006). Upon receiving approval, the researcher will schedule the individual interviews analysis at the time most convenient for the participants and will e-mail the questionnaires. The questionnaire will contain the following questions:

1. What skills and abilities should employees of DHHQ in Falls Church, Virginia possess in order to adjust to the new e-collaboration tools proposed by the GSS environment?
2. What are the main challenges for employees of DHHQ in adjusting to a computer-based environment?
3. How can such dimensions as leadership, employee engagement, organizational learning, and team building benefit from the introduction of GSS at DHHQ?

Seeking informed consent from participants and approval for conducting research in the company premises are important steps. Participants will receive informed consent forms before any data collection begins. Sampling strategies in qualitative research are numerous (Leedy & Ormrod, 2010). Polkinghorne (2005) noted that a sample size from 10 to 20 participants for qualitative research was appropriate. For the proposed study, the sample consisting of 20 employees of the DHA will be appropriate. The sampled participants will represent varying disciplines, as long as they possess relevant experience on the Defense Connect Online GSS communication platform.

Research Questions

The main research question posed by this study is as follows: What are the consequences of the integration of GSS on the impact of Defense Connect Online as a GSS communication tool in various directorate levels of the DHHQ in Falls Church, Virginia?

However, the specified question can only be viewed as a very general question to be answered in the course of a research; apart from the issue in question, the study will also address certain details of the implementation of the specified approach in the DHHQ settings.

Question 1. Will the incorporation of the GSS system allow for reducing the amount of misunderstandings among the DHHS staff in the course of meetings and discussions?

Question 2. What are the effects that the GSS system has on the conflicts occurring among the staff; specifically, the possibility for reduction of such conflicts will be evaluated?

Question 3. Will it be necessary to figure out whether the GSS strategy will help cancel the negative effects that meetings have on the DHHQ staff? Specifically, the reduction of the impact of conflicts in the workplace setting with the help of the GSS approach will be looked into.

Question 4. Is there a possibility of using the GSS approach as the tool for increasing awareness concerning the DHHQ operations and the importance of productive information use and distribution?

Informed Consent

Informed consent is one way to ensure participants do not feel coerced into contributing to a study (Neuman, 2003). The researcher will require informed consent of participants in the research study. Creswell (2007) noted that acquisition of informed consent allowed research participants to partake while increasing the openness and honesty of responses. Informed consent also promotes ethical practices for the researcher (Shank, 2006). Ethical practices included proceeding with caution, avoiding harm, maintaining openness, and upholding honesty (Wimpenny & Savin-Baden, 2012). After the study receives approval by the Institutional Review Board, the earlier included contact participants will be informed through e-mail. Participants will receive information that includes an overview of the study (see Appendix A), including the

purpose and nature of the study, along with a consent form for voluntary participation in an interview (see Appendix B).

Providing purpose and procedural tasks will ensure that each participant understands the purpose of the research, as well as their role in it. The purpose also includes a description of professional and personal contribution, which will help gain a deeper understanding of GSS. Prospective participants will sign the consent form and acknowledge participation in the study is voluntary and without reward, threat, or coercion. The participants will also understand, from the consent form, that personal information will remain confidential and withdrawal from the study will be acceptable at any time without risk of harm or repercussions. Each participant will receive a copy of the consent form, which includes researcher contact information. Participants will be able to contact the researcher in person, by e-mail, or by phone at any time. The letter of consent will also contain procedures for protecting participants' confidentiality. The researcher will read the consent form and each participant will sign it voluntarily (see Appendix B). After the participants sign and return the consent forms to the researcher, communications will commence to arrange a location and time for the interview. The signed letters of consent will remain in the researcher's office on file for 3 years from the date of study completion. Participation in this study is voluntary. If a participant chooses not to participate or to withdraw from the study at any time, he/she can do so without penalty or loss of benefit to themselves (see Appendix D).

Confidentiality in research studies is essential (Creswell, 2008) and is an important deliberation for the study. The informed consent document assures participants of confidentiality. For confidentiality and security reasons, only the researcher will have access to information identifying participants' personal information. Electronic files of the interviews,

transcribed interviews, and the related data will remain in an encrypted, password-protected folder on the researcher's computer. All physical materials related to the participants will remain in a locked file cabinet in the researcher's home office accessible only to the researcher. Destruction of all data for the study, including physical and electronic one, will occur 3 years after completion of the study (Hochstetler, 2009).

To ensure participant anonymity, each participant will have a unique number assigned. The unique number will begin with the letters DE for DHA employees and will contain a number in corresponding order of interviews, beginning at 1; for example, Participant Number 11 will be DE11. The list of participant names and their numbers will remain on a flash drive and will remain locked in the same file cabinet as the other information for 3 years. The document will undergo reformatting procedures to ensure erasure of all information from the study. The study will comply with the International Human Subjects Research Requirements and uphold ethical principles of research (Creswell, 2008; Merriam, 2009). The researcher will erase all computer data from the hard drive and shred all physical material.

The highlighted features of GSS platforms support shorter and more productive meetings due to the simultaneous capturing of ideas, automated data recording, and specificity in the generation of ideas. The approximate percentage of time saved is more than 50% due to electronic facilitation requiring less preparation time for setting up meetings, saving more resources unlike hosting distant meetings, and generally welcomes more and better ideas. Another contributing factor in the efficiency of electronic meetings is satisfaction of the participants. This observation emerges from the fact that with more unlimited participation by the members, the entire process emerges as more satisfying.

Geographic Location

The geographical location for this study will be Falls Church, Virginia, at DHHQ. The DHA has seven divisions and more than 19 directorates, with many subdivisions and program areas serving all over the United States in military facilities and internationally. Most division and directorate key persons are in DHHQ. The intent of this study is to interview division and directorate employees. The DHHQ faculty Membership requirements include familiarity with GSS, new technology capabilities and work environment, and varying levels of experience. Access to location and participants is favorable and accessible to the researcher. The organization has over 3,000 employees, including active-duty military members, civilians, and contractors.

Data Collection

Data collection in research refers to the process of collecting data associated with the research inquiry from the identified participants for analysis and assessing the research phenomenon (Morse, 2011). The intended research will include a qualitative data collection methodology for the data collection procedure. The primary aim of qualitative research studies is to explain behaviors, ideas, and events from studied groups' perspectives and ideologies (Savin-Baden & Major, 2013). Qualitative research studies facilitate valuable and in-depth investigations of the investigated data because the researched group's description of the accuracy is responsible for a majority of the diversities in the issue of concern, which increases the feasibility of deriving data from participants' perspectives.

Qualitative research design supporters insist on the potential for developing a theory through in-depth recording and analysis processes. Denzin and Lincoln (2011) noted qualitative research method tasks are capable of facilitating and exposing the understanding of what is under

study. Qualitative research studies might offer complex signs of phenomena that are difficult to understand through quantitative methods, thereby demonstrating the efficiency of qualitative data for illuminating quantitative findings (Holstein & Gubrium, 2012). Supporters of qualitative research also indicate that applying a logical method restricts the study outcomes within an already existing theory, whereas an inductive method encourages goal achievement and new theory discovery (Mannay, 2010). The data experimenting procedure, notwithstanding if it applies qualitative or quantitative data, consists of different relationships between the research and the collected data. An advanced and developed research question will result in a more exposed collection of responses (Saladana, 2012).

Creswell (2008) noted participants could participate in any of several possible interview techniques or formats. The format in this research study will consist of open-ended, semi-structured, and unstructured questions (Creswell, 2008). The researcher will seek permission to conduct the study from the officer-in-charge of the DHA with a letter of request (see Appendix C). The letter will include an explanation of the objectives of the study and the methodology selected. The letter will also indicate that the study will include an individual interviews analysis conducted by the leaders of the organization, and staff within DHA and its departments will e-mail a questionnaire to the employees for completion. Upon receiving approval, the individual interviews will take place at the time most convenient for the participants.

The data collection process will begin by identifying the research participants within the targeted study population. Researchers of case study qualitative approaches seek to gain in-depth insight about a research problem through interviews with participants (Seidman, 2012). The main instruments intended for data collection are questionnaires designed in an open-ended technique to allow participants to give their own view of the account concerning the efficiency of the

Defense Connect Online GSS platform in the DHA. Questionnaires are suitable data collection materials due to their perceived familiarity with respondents, ease in construction, ease in data analysis, and uncomplicated nature. Questionnaires generally gather extreme data within a short span of time via face to face interview, mail, email or telephone call whichever participants' prepares.

Instruments Used

Individual Interviews

The study will involve collecting data through an individual interview approach. Participants will discuss the pros and cons of the given issue and come to a mutual understanding by way of discussions. The individual interviews deliberations will be electronically recorded, professionally transcribed. These transcriptions will be shown to the participants for review and revision, if necessary. Once the transcriptions are approved by the participants, the tapes will be kept in safe custody. In addition, semi-structured interviews or simply open-ended questionnaires will provide enough flexibility to interviewers and allow participants to expound on their answers. The Interviewers should control digressing to another topic so that they stay on the issue at hand (Buckley & Waring, 2013).

Interviewers should make interviewees feel confident, relaxed, and encouraged to express their deepest thoughts about the subject under study but at the same time understand that there are certain expectations from them. The researcher will record and transcribe interviews verbatim for qualitative analysis. While giving interviews, interviewees might be biased due to various reasons such as reprimand by superiors and mockery by colleagues. The specified bias might affect the outcome of the interview. In order to reduce this particular risk, the participants will be given random numbers that will be known to them only. No participant will have the

number of other participants. The tapes will also be numbered according to the numbers given to the participants. The recorded tapes will be kept in a safe locker and once the purpose is over (which might take about seven years), they will be destroyed in such a manner that no one can reuse them. The safe will be locked and the key will be in safe custody.

Winter (2000) contended participants' answers to questions posed to them regarding their own experiences are enough, as long as they are truthful and considered valid (Elo et al., 2014). According to Eisner and Peshkin (1990), "In the case of the human sciences it is the congruence of our text of understanding with the lived reality of persons" (pp. 97-98). Harmonization of understanding and reality is dependent on the ability of researchers to derive patterns from diverse themes, perceptions, feelings, and experiences (Keller & von der Gracht, 2014). In exploring the experiences of others, the best methodology is an interview, as it will give a vivid picture of participants' perspectives and they will be the experts on the topic.

The individual interviews with DHA organizational leaders will be semi-structured with the researcher asking some questions and allowing such questions to be a springboard to open discussions.

Field Test

In order to establish the validity and minimize the errors of the questionnaire, a field test was conducted; the field test was carried out in an area that resembled the real field conditions. A panel of 3 experts was consulted for the test; such experts included managers, researchers, and sponsors. Others included in the field test were design specialists, interviewers and respondents. All the participants of the field test were given copies of the questionnaires and their opinion was sought. The suggested changes were incorporated in the questionnaires and the method to be adopted.

The questionnaire is provided below:

1. Please share how much time you spend on real-time, face-to-face meetings where members are physically present in the same room (before and after the integration of GSS).
2. What GSS do you use?
3. Do you feel any difference between a GSS meeting and a usual decision making method?
4. What are the effects of integrating GSS in your organization at different levels?
5. Do you feel that GSS can prevent the negative effects of meetings on productivity?
6. How much do you know about GSS and its use?
7. What are the advantages and disadvantages of using GSS?
8. To what degree are e-collaboration tools used as a primary means of communication within a virtually supported team environment?
9. How did the employees respond to the integration of GSS?
10. What training program should be implemented to promote employee engagement, team building, and leadership?
11. How does GSS overcome the gaps in spatial and temporal dimensions?
12. How does GSS affect participants' efficiency?
13. What skills are required for a person to be able to use GSS?
14. What challenges have you encountered in using GSS?
15. How do GSS contribute to group dynamics, commitment, motivation, and trust?
16. What are your (stakeholders') perceptions about the consequences of GSS integration on organizational efficiency?
17. Would you recommend the integration of GSS in other organizations? Why or why not?

As it has been stressed above the specified questions have been administered to three key groups of respondents. The respondents can be considered experts in interview-based qualitative research, as the interviewers mentioned above are fully qualified for conducting the study of the specified design.

Questionnaires

Questionnaires will be suitable because they represent a versatile data-gathering method due to their affordability (Sharma & Pandey, 2013). Cohen et al. (2000) also praised the efficiency of questionnaires. The latter allow researchers to collect a significant amount of information in one attempt, rather than needing to conduct interviews for weeks. Gillham (2000) wrote that questionnaires make efficient use of the respondent's time, because the survey participant can complete the questionnaire at a time that is convenient for them, and the survey process does not require the researcher and respondent to match free periods of time to conduct the research. Writing their remarks in the questionnaires might be useful in exploring the respondents' insights that may not fit within the closed-ended question part of the questionnaire. The DHA employees will receive copies of the questionnaires with additional space for explanations to elaborate on their responses via e-mail. The researcher will likewise field-test the questionnaire and revise it as needed before distribution.

It is appropriate to use this research method because the researcher will gain insights directly from the participants. Respondents will answer the questionnaire items and then elaborate on their responses by writing their comments or remarks in the spaces provided. The researcher will analyze the percentage of responses for each item. The qualitative aspect of the research design will be the narrative remarks the participants will write to show their insights about the items asked in the questionnaire, as well as their responses in the individual interviews,

which will involve an attempt to delve deeper into the issues of the questionnaire (see Appendix A).

Analysis of Data

The study will involve analyzing the data from the individual interviews qualitatively. The analysis of the data derived from participants' responses will require the use of the NVivo software. Leech and Onwuegbuzie (2011) noted that NVivo is qualitative software that queries themes, pictures, and images, coded in the survey, and analyzes the data effectively by establishing the existence of certain patterns. NVivo is content analysis software that helps researchers identify keywords within transcribed data (Buckley & Waring, 2013). The analysis of the interviews and questionnaires will reveal key themes in the GSS perceptions of experiences related to the consequences of the integration of GSS on the impact of Defense Connect Online as a GSS communication tool.

The proposed study will comply with ethical standards and considerations involved when conducting research with human participants. The head of the DHA will receive a letter of consent to conduct the study with the DHA personnel. The researcher will ensure the confidentiality of information to establish the participants' trust. Participation will be nonobligatory, and participants may withdraw at any time.

Organization and Clarity

The aim for the proposed study is to explore the consequences of integrating GSS on the impact of Defense Connect Online as a GSS communication tool in various directorate levels of the DHHQ in Falls Church, Virginia. The function of the DHA is to enhance martial activities. Employees at the DHA also ensure the implementation of policy as distributed by the assigned bodies and control inpatient activities and their sub-clinics designated to the DHA. The study

will be conducted in accordance with a case study approach. A field study will increase the reliability of the research results (Yin, 2009). The second strategy that strengthens reliability will be the use of interviews with open-ended questions.

Limitations of Study

Among the key limitations, a rather restricted amount of participants must be mentioned as the most obvious obstacle in retrieving accurate and, most importantly, objective research results. Indeed, aside from the fact that the qualitative research design does not offer much room for any elements of a mathematical analysis, the use of interviews presupposes facing major time constraint and, therefore, having quite few people to include in the data retrieval process. Herein the lack of objectivity lies. Moreover, there is a possibility that not all research participants are completely honest in providing information to the researcher. Nevertheless, it can be assumed that the integration of a vast data analysis allows for reducing the amount of errors to a minimum.

Chapter Summary

This chapter contained a discussion of all details pertinent to carrying out the study, including the research objectives, research problem, participants, instruments, and the actual procedures to follow until the moment when analysis begins on the data derived. Qualitative researchers explore, describe, and interpret a specific phenomenon and seek to answer the how, what, and why questions (Creswell, 2008). Qualitative researchers collect large amounts of non-numerical data that consist of word or text data from the sample (Creswell, 2008; Gelo et al., 2008). Qualitative researchers use several design types, such as a case study, a grounded theory, ethnography, field research, and a phenomenological study (Creswell, 2008). The optimum

research design for the proposed study will be studying participants' personal views, instances, and events for an in-depth examination of a specific issue (Gelo et al., 2008).

The chapter contained discussions on research method, design appropriateness, appropriateness of a case study to the research study, and the procedures for data collection. The data collection process will consist of interview notes for exploring personal views, events, and instances (Cooper & Schindler, 2006; Creswell, 2008). Chapter 3 also included a description on the procedures for data analysis, such as the process of transcribing the text and deconstructing the text, which involved creating categories, and ethical considerations. Chapter 4 will incorporate the detailed results of the study.

References

- Buckley, C., & Waring, M. (2013). Using diagrams to support the research process: Examples from grounded theory. *Qualitative Research, 13*(2), 148-172.
<https://doi.org/10.1177/1468794112472280>
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.). Routledge.
- Cooper, D. R., & Schindler, P. S. (2006). *Business research methods* (9th ed.). McGraw-Hill.
- Corbin, J., & Strauss, A. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Sage.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Pearson Education.
- Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Sage.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research* (4th ed.). Sage.
- Eisner, E. W., & Peshkin, A. (Eds.). (1990). *Qualitative inquiry in education: The continuing debate*. Teachers College Press.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open, 4*(1), 1–10.
<https://doi.org/10.1177/2158244014522633>
- Evaluation of the TRICARE Program: Access, cost and quality: Fiscal year 2012 report to Congress.* (2012). Retrieved from <https://www.health.mil/Military-Health-Topics/Access->

Cost-Quality-and-Safety/Health-Care-Program-Evaluation/Annual-Evaluation-of-the-TRICARE-Program?page=2#pagingAnchor

Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative research: Beyond the debate. *Integrative Psychological and Behavioral Science*, 42, 266-290.

<https://doi.org/10.1007/s12124-008-9078-3>

Gillham, B. (2000). *Developing a questionnaire*. Continuum.

Glesne, C. (1999) *Becoming a qualitative researcher: An introduction* (2nd ed.). Longman.

Holstein, J. A., & Gubrium, J. F. (Eds.). (2012). *Varieties of narrative analysis*. Sage.

Hyett, N., Kenny, A., & Dickson-Swift, V. (2014). Methodology or method? A critical review of qualitative case study reports. *International Journal of Qualitative Studies on Health and Well-being*, 9(1).

<https://doi.org/10.3402/qhw.v9.23606>

Keller, J., & von der Gracht, H. (2014). The influence of information and communication technology (ICT) on future foresight processes — Results from a Delphi survey.

Technological Forecasting & Social Change, 85, 81–92.

<https://doi.org/10.1016/j.techfore.2013.07.010>

Ledderer, L. (2011). Understanding change in medical practice: The role of shared meaning in preventive treatment. *Qualitative Health Research*, 21(1), 27-40.

<https://doi.org/10.1177/1049732310377451>

Leech, N. L. & Onwuegbuzie, A. J. (2011). Beyond constant comparison qualitative data analysis: Using NVivo. *School Psychology Quarterly*, 26(1), 70–84.

<https://doi.org/10.1037/a0022711>

Leedy, P. D., & Ormrod, J. E. (2010). *Practical research: Planning and design* (9th ed.). Prentice Hall.

- Leonard-Barton, D. (1990). A dual methodology for case studies: Synergistic use of a longitudinal single site with replicated multiple sites. *Organization Science*, 1(3), 248-266. <https://doi.org/10.1287/orsc.1.3.248>
- Mannay, D. (2010). Making the familiar strange: Can visual research methods render the familiar setting more perceptible? *Qualitative Research*, 10(1), 91-111. <https://doi.org/10.1177/1468794109348684>
- Merriam, S. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Morse, J. M. (2011). Moulding qualitative health research. *Qualitative Health Research*, 21(3), 1019-1021. <https://doi.org/10.1177/1049732310393257>
- Nespor, J. (2012). The afterlife of “teachers’ beliefs”: Qualitative methodology and the text line. *Qualitative Inquiry*, 18(5), 449-460. doi:10.1177/1077800412439530
- Neuman, W. L. (2003). *Social research methods: Qualitative and quantitative approaches* (5th ed.). Allyn and Bacon.
- Pinnegar, S., & Daynes, J.G. (2006). Locating narrative inquiry historically: Thematics in the turn to narrative. In Clandinin D. J., (Ed). *Handbook of narrative inquiry: Mapping a methodology* (pp. 3-34). Sage.
- Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology*, 52(2), 137-145. <https://doi.org/10.1037/0022-0167.52.2.137>
- Robson, C. (2002). *Real world research* (2nd ed.). Wiley-Blackwell.
- Saladana, J. (2012). *The coding manual for qualitative researchers*. Sage.

- Santanen, E.L. (2005). *Resolving ideation paradoxes: Seeing apples as oranges through the clarity of ThinkLets*. Proceedings of the 38th Annual Hawaii International Conference on System Sciences.
- Savin-Baden, M., & Major, C. (2013). *Qualitative research: The essential guide theory and practice*. Routledge.
- Seidman, I. (2012). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (4th ed.). Teachers College Press.
- Shank, G. D. (2006). *Qualitative research: A personal skills approach* (2nd ed.). Pearson.
- Sharma, S. & Pandey, S. K. (2013). Revisiting requirements elicitation techniques. *International Journal of Computer Applications*, 75(12), 35–39. <https://doi.org/10.5120/13166-0889>
- Simovic, V., Varga, M., & Oreski, P. (2012). Case study: An information system management model. *Management Information Systems*, 7(1), 13-24.
[https://www.researchgate.net/publication/265521809 Case Study an Information System Management Model](https://www.researchgate.net/publication/265521809_Case_Study_an_Information_System_Management_Model)
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage.
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63-75. <https://doi.org/10.3316/QRJ1102063>
- Tellis, W. (1997). Application of a case study methodology. *The Qualitative Report*, 3(3), 1-19. <https://doi.org/10.46743/2160-3715/1997.2015>
- Thomas, G. (2011). A typology for the case study in social science following a review of definition, discourse, and structure. *Qualitative Inquiry*, 17(6), 511-521. <https://doi.org/10.1177/1077800411409884>

Wimpenny, K., & Savin-Baden, M. (2012). Exploring and implementing participatory action synthesis. *Qualitative Inquiry*, 18(8), 689-698.

<https://doi.org/10.1177/1077800412452854>

Winter, G. (2000). A comparative discussion of the notion of 'validity' in qualitative and quantitative research. *The Qualitative Report*, 4(3), 1-14. <https://doi.org/10.46743/2160-3715/2000.2078>

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Sage.

Zivkovic, J. (2012). Strengths and weaknesses of business research methodologies: Two disparate case studies. *Business Studies Journal*, 4(2), 91-99.

Appendix A

Interactive Survey

Please complete the questionnaire with careful consideration of how you regard the integration of Group Support Systems (GSS) at work. Please write a brief explanation/clarification in the space provided for each number. You are free to expand the space for your explanation if needed. Kindly explain in detail.

Questions	Comments
1. In what way has GSS been helpful in facilitating our working assignment tasks?	
2. Which special skills and abilities are required the use of GSS?	
3. Am I favorable to being reached via GSS wherever I am to stay connected to work, and why?	
4. Do I prefer GSS to be turned off outside my work hours, and why?	
5. In what way have GSS been instrumental in keeping harmonious relationships with my colleagues?	
6. Why are GSS helpful in coming up with decisions for the organization quickly?	

7. In what way the use of GSS helps save time and effort?	
8. What changes in education, training, and roles and responsibilities distribution are sufficient to use GSS in my organization?	
9. Does the length of employment at DHA help to understand GSS better, and why?	
10. In what way does the hierarchy in my DHA makes a difference in the use of GSS?	
11. What are the key cultural or diversity effectiveness for using GSS in my organization?	

Appendix B

Signed Organization Inform Consent

INFORMED CONSENT: PARTICIPANTS 18 YEARS OF AGE AND OLDER

Dear DHA Employee,

My name is XX and I am a student at the University of X working on a doctoral degree in Doctor of Management in Organizational Leadership/Information Systems and Technology (DM/IST). I am doing a research study entitled “a case study of The Defense Health Agency (DHA): The significance of group support systems”. The purpose of the research study is to explore the consequences of the integration of GSS on the impact of Defense Connect Online or any other systems as a Group Support Systems (GSS) communication tool in various directorate levels of the DHHQ in Falls Church, Virginia.

Your participation will involve presenting truthful and straightforward perceptions and lived experiences of using GSS in your organization. The expected duration of participation is approximately 30-60 minutes. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you can do so without penalty or loss of benefit to yourself. The results of the research study may be published but your identity will remain confidential and your name will not be disclosed to any outside party.

In this research, there are no foreseeable risks to you.

Although there may be no direct benefit to you, a possible benefit of your participation is an opportunity to offer a valuable service in sharing personal experiences with GSS integration. If you have any questions concerning the research study, please call me at Phone: 571-225-XXX or email: XXX@gmail.com. For questions about your rights as a study participant, or any concerns or complaints, please contact the University of X via phone at 1-866-766-XXXX.

As a participant in this study, you should understand the following:

1. You may decide not to be part of this study or you may want to withdraw from the study at any time. If you want to withdraw, you can do so without any problems.
2. Your identity will be kept confidential through coding.
3. Pryalal Karmakar, the researcher, has fully explained the nature of the research study and has answered all of your questions and concerns.
4. If interviews are done, they may be recorded. If they are recorded, you must give permission for the researcher, Pryalal Karmakar, to record the interviews. You understand that the information from the recorded interviews may be transcribed. The researcher will develop a way to code the data to assure that your name is protected.
5. Data will be stored in a secure and locked area. The data will be held for a period of three years, and then destroyed.
6. The results of this study may be published.

“By signing this form, you agree that you understand the nature of the study, the possible risks to you as a participant, and how your identity will be kept confidential. When you sign this form, this means that you are 18 years old or older and that you give your permission to volunteer as a participant in the study that is described here.”

I accept the above terms. I do not accept the above terms. (CHECK ONE)

Signature of the interviewee _____ Date _____

Signature of the researcher _____ Date _____

Appendix C

Permission Letter

The Officer-in-Charge
Defense Health Agency
Falls Church, VA

Dear Sir/ Madam:

I am a student of University of XX, currently completing my degree in Doctor of Management in Organizational Leadership/Information Systems and Technology (DM/IST). My dissertation is on the consequences of the integration of Group Support Systems (GSS) on the impact of Defense Connect Online as a GSS communication tool.

I am aware that your organization has been using GSS. I am interested in learning how their use has affected efficiency in your organization, especially in terms of time management and decision making. In this regard, I am seeking your consent to disseminate a simple questionnaire (see attached) to your employees as well as conduct a group interview with you and other organizational leaders to discuss the effects of GSS on your organization at your most convenient time.

I hope you will allow me to conduct my study with your participation. Please contact me at (contact details) to let me know of your decision or any concerns.

Looking forward to meeting you soon!

Sincerely yours,

Appendix D Informed Consent Form

INFORMED CONSENT: PARTICIPANTS 18 YEARS OF AGE AND OLDER

Dear DHA Employee,

My name is XXX and I am a student at the University XX working on a doctoral degree in Doctor of Management in Organizational Leadership/Information Systems and Technology (DM/IST). I am doing a research study entitled “a case study of a defense health agency: The significance of group support systems”. The purpose of the research study is to explore the consequences of the integration of GSS on the impact of Defense Connect Online as a GSS communication tool in various directorate levels of the DHHQ in Falls Church, Virginia.

Your participation will involve presenting truthful and straightforward perceptions and lived experiences of using GSS in your organization. The expected duration of participation is approximately 30-60 minutes. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you can do so without penalty or loss of benefit to yourself. The results of the research study may be published but your identity will remain confidential and your name will not be disclosed to any outside party.

In this research, there are no foreseeable risks to you.

Although there may be no direct benefit to you, a possible benefit of your participation is an opportunity to offer a valuable service in sharing personal experiences with GSS integration. If you have any questions concerning the research study, please call me at xxxxxxxxxxxx or xxxxxx@gmail.com. For questions about your rights as a study participant, or any concerns or complaints, please contact the University xxxx via email at xxx@xxxxx.edu.

As a participant in this study, you should understand the following:

7. You may decide not to be part of this study or you may want to withdraw from the study at any time. If you want to withdraw, you can do so without any problems.
8. Your identity will be kept confidential through coding.
9. Pryalal Karmakar, the researcher, has fully explained the nature of the research study and has answered all of your questions and concerns.
10. If interviews are done, they may be recorded. If they are recorded, you must give permission for the researcher, Pryalal Karmakar, to record the interviews. You understand that the information from the recorded interviews may be transcribed. The researcher will develop a way to code the data to assure that your name is protected.
11. Data will be stored in a secure and locked area. The data will be held for a period of three years, and then destroyed.
12. The results of this study may be published.

“By signing this form, you agree that you understand the nature of the study, the possible risks to you as a participant, and how your identity will be kept confidential. When you sign this form, this means that you are 18 years old or older and that you give your permission to volunteer as a participant in the study that is described here.”

I accept the above terms. I do not accept the above terms. (CHECK ONE)

Signature of the interviewee _____ Date _____

Signature of the researcher _____ Date _____