

CHAPTER IV: FINDINGS

“Each group of individuals had a different story and a different perception.”

Taylor (1999, pp. 531-532)

Chapter Overview

Chapter IV presents the research findings of the study. The review of the findings includes the chapter introduction, review of interview topical areas and interview questions, participant responses, analysis, and summary of the key findings.

Introduction

This research study was designed to better understand how the diffusion and adoption process occurred in one military organization. The innovation that was chosen for study was SkillSoft®, an e-learning product. My findings derived from 24 in-depth interviews with members of one military agency. My topical areas were derived from the literature and review of the data and included description of the organization, selection of SkillSoft®, SkillSoft® implementation objectives, audience for SkillSoft®'s, awareness of SkillSoft®, interest in SkillSoft®, trial - first log on experience, evaluation of SkillSoft® (likes and dislikes of SkillSoft®), influences on the diffusion and adoption, and SkillSoft® vs. classroom Instruction.

Below are the findings organized by topical areas with interview questions and participant responses to a question. All individual responses to a question were not presented due to the similarity of individual responses. I used NVIVO to identify patterns of individual responses to a question. Individual responses that captured the perceptions of a specific group of responses were selected for inclusion in the responses below. The first topical area presented was description of the organization.

Topic: Description of the Organization

Interview Questions

(All interviewees were asked these questions to capture their perception of the organization.)

What is the composition of the organization?

What is the age range of people in the agency?

What are the educational levels of the personnel?

Describe the type of skills required by personnel in this organization

Describe the communication channels within the organizations

Describe the nature of the organizational and its structure

Explain the rank/grade structure of the organization

Describe how decisions are made in this military organization

Describe the culture and environment of the military agency

Participant Responses

Unit Size

- The Army agency is a small organization that's a mixed workforce.
- There are only several hundred employees (small compared to an Army brigade of 1,000 soldiers).
- The military unit could be viewed as more of a battalion size than a typical brigade.

Employee Mix

- There are military, government civilians, and then there are government contractors.
- ...about 50% military personnel and 50% civilian employees

Age

- The workforce is mixed in ages. The military tend to be primarily younger. The government civilians and contractors tend to be a little bit older.
- Overall, I would say the age of employees' ranges from 20 to 60 years old.

Education

- The education level of the three groups is also...much different. The military tend to be high school educated and possibly some undergraduate levels, whereas the government employees and the government contractors, who were not part of the study, tend to have undergraduate degrees and...graduate degrees.
- NCOs have a high school diploma (some with undergraduate degrees)
- Officers have an undergraduate degree (some with graduate degrees)
- Civilian employees have High school diplomas, undergraduate, and graduate degrees.

Gender

- As far as gender, it's a mixture of male and female.
- The mix is about 60% male, 40% female.

Skill Sets

- The unit is a very technically-focused organization with the skills or learning sets geared more towards the technical side and less towards the professional (soft side).
- Personnel require highly specialized technical skills (computer systems, software, networks, network security), and less managerial or administrative skills.

Channels of Communication

- Chain of command. Officers to enlisted personnel, senior NCOs to enlisted soldiers. Memos, policies, procedures, briefings, e-mail.

Command Structure

- It's a hierarchical military organization just by virtue of where it sits and what it does.
- It is organized like a military unit with a Commander, Deputy Commander, Division Chiefs, and Branch Chiefs however decisions are made at the leader level.

Organizational Decision-making Process

- Authority is somewhat decentralized [i.e., decisions are made at the leader level instead of being made by only one or two individuals within the unit].
- Decision-making has been delegated to the Division and Branch Chiefs.

Culture and Environment

- It's crazy; there is not enough time to meet all the work and certainly no time to train.
- It's like an amoeba, a distorted amoeba.
- [The] unit has experienced rapid growth. Staff increased from under 100 to more than 300 in the period of one year due to an increase in the scope of the unit's mission and responsibilities.
- Growth in number of personnel and technical skills required occurred because of the unit's need to perform its worldwide mission.
- The organization's workload (Optempo) increased tremendously in the past 8 months due to new mission requirements.

Continual Changing Mission, Functions, and Structure

- I would say that this is an organization that is in a growth spurt that performs a vital mission that is full of much focused people who work in very specialized areas.
- The unit is new . . . its missions, organization and functions are constantly changing causing employees to learn new technical skills and only attending job related training.
- There was a change in the pace of work and level of effort due to an increase in missions.

Analysis of Description of Organization

An analysis of the interviewee's responses indicated that the organization is composed of mostly highly skilled personnel who most require technical training. The organization is dynamic and changing and with 20 participants indicating that this was an evolving organization that was undergoing change in missions, organization, functions and work effort on a continual basis ("It's crazy; there is not enough time to meet all the work and certainly no time to train.")

Nine participants said that there was not enough time to complete all the work requirements and attend training. Since the organization's mission changed and the workload increased there appears to have been a lack of time for individuals to try and complete a SkillSoft® course. Seventeen participants indicated that they required highly specialized technical skills on their jobs ("Personnel require highly specialized technical skills (computer systems, software, networks, network security); and less managerial or administrative skills.") These same participants said that attending job related courses was very important. My analysis was that attending job related training was a priority for many study participants.

Topic: Selection of SkillSoft®

Interview Questions

These questions were specifically asked to the Division Chief, Project leader and Chief of Training who were responsible for selecting SkillSoft®)

Tell me the story of how the agency selected SkillSoft®

Who made the decision to select SkillSoft®? Why?

Participant Responses

- I attended the ASTD conference in Dallas and saw a demonstration of SkillSoft®.
- I was first introduced to SkillSoft® in May 2000 at the ASTD conference.

- I (Chief of Training) presented my Division Chief a proposal to purchase access for all employees to the SkillSoft® library of courses and he said purchase it.
- In July 2000, this agency purchased a new product, which is called SkillSoft®, a library of courses for professional development of personnel.
- We justified the SkillSoft® library of courses based upon anticipated cost savings (no course registration fees, lodging, or travel expenses required). We further justified SkillSoft® by demonstrating that all employees would have access to the training the program provided.
- Well, my original premise was that I thought SkillSoft® would be more beneficial to the employees of the organization if all of them had the opportunity to access the training, rather than just a few individuals who were fortunate enough to go to temporary duty to classes.
- Senior management wanted SkillSoft® implemented because it could save the organization money on training and training-related spending.

Analysis of How SkillSoft® was Selected by Management

My interviews with leaders and implementation personnel indicated that SkillSoft® was purchased because it could save future training dollars and because the course library could be made available to all members of the organization. The decision was made by management to purchase SkillSoft®, “I (Chief of Training) presented my Division Chief a proposal to purchase access for all employees to the SkillSoft® library of courses and he said purchase it . . . In July 2000, this agency purchased a new product, which is called SkillSoft®, a library of courses for professional development of personnel.”

Senior management, it appears, thought that SkillSoft® was an excellent product and that all employees could benefit from its use so they became the “champion” for the product.

Topic: SkillSoft® Implementation Objectives

Interview Questions

(These questions were specifically asked to the Division Chief, Project leader and Chief of Training who were responsible for selecting SkillSoft®.)

Explain the objectives for implementing SkillSoft®.

Explain your perception of what was to be accomplished with introduction of SkillSoft®

Participant Responses

- The first [objective] was to lower the cost of training. But second [objective] was to offer training to more people. [One] hundred percent were going to have access to the SkillSoft®. That was the objective.
- I feel that the course offerings were so wide and diverse that there was something there for everyone's use. It could be for personal development. It could have been for group training or it could have been for team training, but there was a utilization that could be available to many.
- The introduction of SkillSoft® provided senior management an opportunity to make employees aware of new ways (through e-learning/distance learning options) to obtain knowledge and skills besides attending traditional classroom instruction.
- I (Chief of Training) wanted to conduct further evaluation of whether the methodology as well as the content of this type of training courses (e-learning/distance learning) was a good way for personnel of this agency to obtain training.
- The implementation of SkillSoft® was the first time on a mass basis that an e-learning product was introduced as a way for personnel to obtain training, so I think that was the objective.

Analysis of the Implementation objectives of SkillSoft®

The above comments were from interviews with the Chief of Training, the project leader and the Division Chief who approved purchase of SkillSoft®. Management appears to have wanted employees to benefit from the use of an e-learning product so they introduced SkillSoft® as a new way to obtain their training. The leaders said that there was something in the SkillSoft® library for everyone, "The first [objective] was to lower the cost of training . . . But the second [objective] was to offer training to more people. [One] hundred percent were going to have access to the SkillSoft®. That was the objective."

Topic: Audience for SkillSoft®

Interview Questions

(All interviewees were all asked these questions to capture their perceptions.)

Tell me your perception of the target audience for SkillSoft®

Were both military and civilians to use SkillSoft®?

Participant Responses

- SkillSoft® was for people who were just entering government service and new soldiers.
- SkillSoft® was intended for everyone's use. Everyone being defined as both military and civilians, young or old [ages 20–60].
- The audience for SkillSoft® was anyone that would have access...and the audience is a variety of people within the organization from the technically inclined to the administrative personnel.
- SkillSoft® was for junior enlisted personnel [ages 20–24] are generally high school graduates. These soldiers need basic knowledge and skills on many topics.
- It [SkillSoft®] is probably most useful to the junior enlisted personnel, generally those who haven't gone to college.
- The SkillSoft® library contains over 350 different courses covering topics such as finance, management, communication, team building, project management, sales, and E-business, so there is something for everyone.
- SkillSoft®, we (management) thought at the time, would meet all the audience because of the large number of courses.
- SkillSoft® had something for everyone or at least that was the initial perception.
- SkillSoft®'s audience was the military. Second for the workforce, this is diverse group of women and men and military and government civilians.
- SkillSoft® courses are more “soft” skill oriented than technically oriented [i.e., computer programming, networking, computer security courses] so it was for administrative personnel.
- Well, most of them [the audience for SkillSoft®] are technical-type people, and those courses [SkillSoft® courses] are not technical. They're good courses, there's a lot of courses in there that I think would be fun just to take, just to take to get the knowledge, but these people [employees of the military unit], I guess, they're geared for technical stuff.

Analysis of the Perceived Audience for SkillSoft®

Management's perception was that, "The audience for SkillSoft® was anyone that would have access...and the audience is a variety of people within the organization from the technically inclined to the administrative personnel." While the employee's perception was that, "SkillSoft® was for junior enlisted personnel [ages 20–24] who are generally high school graduates . . . These soldiers need basic knowledge and skills on many topics."

I reported previously that some leaders said that SkillSoft® courses were varied enough to provide almost everyone in the organization with new knowledge or skills, while it appears that many study participants viewed the target audience as new civilian employees and junior enlisted personnel. Accordingly my analysis suggests that there were different perceptions of the target audience for SkillSoft®.

Topic: Awareness of SkillSoft®

Interview Questions

(All interviewees were all asked these questions.)

How did you become aware of SkillSoft®?

Describe the plan to create awareness of SkillSoft®.

What communication means were used to make you aware of SkillSoft®?

What information was provided to you about SkillSoft®?

Were personnel aware of SkillSoft®?

Participant Responses

- The Training Branch sent e-mails to all employees that announced that SkillSoft® was being made available to all personnel on December 1, 2000.
- E-mails went to everyone and described the benefits of SkillSoft®.
- A briefing describing the benefits of SkillSoft® was presented at the Commander's Weekly Update meeting.
- I first heard about SkillSoft® at the Commander's Weekly Update.
- My coworkers told me about SkillSoft®.
- In January 2001, senior management issued a policy memo to all employees about the use of SkillSoft®.

- The deputy put out a policy memorandum that said everyone had to take a course.
- I attended [a] product demonstration hosted by the folks from SkillSoft.
- SkillSoft Corporation hosted three product demonstrations, which included question and answer sessions.
- My senior NCO told me to have my soldiers to go to Training and pick up a user ID and try SkillSoft®.
- Members of the Training Branch handed out flyers and a list of courses
- My supervisor handed me a flyer and told me to go to the Training Branch and pick up my user ID and password.
- I picked up my user ID and password and was given a set of instructions on how to log on.
- I think most employees were aware of SkillSoft®.
- We (the implementation team members) made sure everyone heard about SkillSoft® so everyone was told about it.

Analysis of Awareness of SkillSoft®

According to my analysis, awareness of SkillSoft® was accomplished mostly through formal channels of communication consisting of memoranda, emails, meetings, briefings, product demonstrations, the chain of command (leaders to subordinates), and training branch personnel. In addition, discussion among coworkers and between NCO and soldiers provided further information about SkillSoft®. My estimation was that there was a plan developed and implemented to create awareness of SkillSoft®.

Topic: Interest in SkillSoft®

Interview Questions

(All interviewees were all asked these questions.)

What persuaded you to try SkillSoft®?

Discuss the influence(s)?

What influence did your supervisor or superiors play in your trying or using SkillSoft®?

What influence did your friends or coworkers play in trying or using SkillSoft®?

Explain

Participant Responses

- Because mandated policy required me to complete one SkillSoft® course to obtain a good appraisal.
- It was the mandate [of] senior management.
- It was mandated by a policy memo from senior management.
- It was mandated by my supervisor.
- Because of the management’s mandated policy.
- I like bettering myself.
- I took SkillSoft® to gain more experience and knowledge.
- There is value in learning and SkillSoft® [provided] an opportunity to learn.
- I just took it [a SkillSoft® course] because I wanted to.
- I can access SkillSoft® courses anytime from my home or the office.
- I could use SkillSoft® at home or work.
- My coworker told me it (SkillSoft®) had interesting courses.
- My supervisor said log on and try a course.
- Senior management wanted us to try SkillSoft® so they made everyone aware of its benefits.

Analysis of Interest in SkillSoft®

My review identified three primary reasons participants indicated that they tried SkillSoft® was: (a) “the use of SkillSoft® was mandated by senior management”, (b) “I like bettering myself”, or the value of learning something new, and (c) “I can access SkillSoft® courses anytime from my home or the office.” I previously reported that many participants (n=17), indicated that they required specialized technical training for their jobs. Since many study participants indicated that SkillSoft® did not provide the specialized technical skill training required then lack of job related technical training courses may have been a reason why many study participants did not continue to use SkillSoft

Topic: Trial - First Log on Experience

Interview Questions

(All interviewees were all asked these questions.)

Describe your first log on experience?

Describe the problems you had logging on?

Describe any problems you had?

Participant Responses

- I feel my first log on experience was like starting a correspondence course. You read some instructions and then go to work.
- I think it was pretty similar to your basic self-paced kind of training, just log on and go.
- It was actually very simple, as simple as it can be.
- I just went to the actual place I needed to go online, typed my information, and just like that I was using it.
- SkillSoft® was not available on the server that I use so I couldn't get connected.
- I couldn't get logged on.
- I got locked up and couldn't move forward or back in the program.... That was frustrating.
- I need[ed] help, and when I called the 800-phone number I had to leave a message.
- I'm not real familiar with computers, so logging onto SkillSoft® was a problem for me.
- SkillSoft® would not work properly, so I quit the course I was in.

Analysis of First Log on Experience

My finding was that each participant's first log on experience was different, "I think it was pretty similar to your basic self-paced kind of training, just log on and go"; "I'm not real familiar with computers, so logging onto SkillSoft® was a problem for me"; "and "It was actually very simple, as simple as it can be."

A few participants expressed a fear of the unknown during their interviews. One participant explained that he "was not sure what would happen when [he] logged on and did not want to start something [he] could not get out of." Two participants described previous log on experiences that did not go well. Others said that the "instructions were not clear;" while still others said "they did not want to try something new." Log on experiences varied, but most participants' felt logging on was simple.

Evaluation - Likes and Dislikes of SkillSoft®

Perception of the SkillSoft® Program was addressed by one broad question, what is your opinion of the SkillSoft® Program and by probing questions of, what do you like and what do you dislike about SkillSoft®? Participant's responses are presented in two tables below; table Liked about SkillSoft® and table Disliked about SkillSoft®.

Topic: Liked about SkillSoft®

Interview Questions

(All interviewees were all asked these questions to capture their perceptions.)

What is your opinion of the SkillSoft® Program?

Describe what you liked about SkillSoft®

Participant Responses

- It is a cost-efficient way to train.
- It cuts costs and gives you some initial training.
- I believe it is a great method of learning.
- A lot of [the] courses would help managers at different levels.
- You determine when you are going to do it.
- You are master of your destiny because you determine what to learn when and where.
- It's an excellent alternative to classroom instruction because of the amount of different courses.... You can get everything from communications to leadership in one tool.
- Any time you allow soldiers to receive any type of free training that they can do on or off duty, I think that is a good thing, especially if it targets their skills as far as their job or their edification and professional development.

Analysis of Likes about SkillSoft®

Many interviewees had positive things to say about SkillSoft®, "It is a cost-efficient way to train" . . . "Any time you allow soldiers to receive any type of free training that they can do on or off duty, I think that is a good thing, especially if it targets their skills as far as their job or their edification and professional development." The interviewees said that SkillSoft® courses

offered a number of perceived benefits (train where and when you want, its saves training dollars, and provides some good initial training). If SkillSoft® had as many perceived benefits as reported during the interviews, why didn't more participants try it? I address this question under the topic "Dislikes of SkillSoft®" presented later in this chapter.

Topic: Dislikes of SkillSoft®

Interview Questions

(All interviewees were all asked these questions to capture their perceptions.)

What is your opinion of the SkillSoft® Program?

Describe what you disliked with SkillSoft®

Participant Responses

- It is a waste of my time to take a SkillSoft® course, because I need courses related to my job.
- SkillSoft® courses do not teach technical skills so they are of little value to me.
- These courses are more designed for junior NCOs and new employees, not me.
- I don't like training this way, I want an instructor and a book
- I don't like using a program like this to learn, for I can't reflect upon what I learned.
- I can't find time at work or at home to take a SkillSoft® course because of competing requirements with my job and family, so I need to off-site to a training class.
- SkillSoft® does not fit my learning style.
- Programs like SkillSoft® are good for teaching basic knowledge and skills but not for the application of knowledge and skills.
- The only real value of SkillSoft® courses I see is for personal development. I could not see multiple screens at once so I could not review two pieces of information together. Therefore, could not compare, contrast, associate, or see multiple points or concepts together.
- I need to hear, look, and say how this compares to what I have heard earlier. I need to lay some pieces of paper down in front of me and simultaneously look at each piece.

- SkillSoft® did not provide access to multiple data sources for answers or immediate access to an instructor, so I became frustrated and chose not to use the program.
- I need an instructor, a book and some other students to help me learn. I can't sit down behind a computer screen and read words and remember what I have learned.
- I prefer the interaction of the classroom to a program like SkillSoft®.
- I enjoy having an instructor. I enjoy what the instructor brings to the table in terms of examples and collaborating on things. These things are just lost in the translation of distance learning program like SkillSoft®.
- SkillSoft® does not print out completion certificates so I couldn't prove to my supervisor that I completed a course.

Analysis of Dislikes with SkillSoft®

Each interviewee was unique and his/her perception of SkillSoft® reflected the differences in their backgrounds, experience, values, norms, fears, learning styles and training requirements, "It is a waste of my time to take a SkillSoft® course, because I need courses related to my job."; "I need an instructor, a book and some other students to help me learn. I can't sit down behind a computer screen and read words and remember what I have learned." Not all participants liked the SkillSoft® suite of courses. Some participants said that they wanted job related course, others indicated they enjoy and learn more from attending training off-site in a classroom with an instructor and others did not like using a distance learning product.

Influences on the Diffusion and Adoption of SkillSoft®

Participants were asked to describe and explain influences that may have affected the spread and acceptance of SkillSoft®. Influences were analyzed separately then grouped into five major categories of participant response, personal, organizational, technological, mandated policy and change for presentation and discussion for presentation. I identified the mandated policy as a possible influence since half of the civilians interviewed mentioned this policy. A few participants used the word "change" in their discussion of influences. Change as defined in this study by one participant was, "the perceived difference in the way a participant had to acquire learning (knowledge and skill), from attending an off-site classroom instruction to completing a course through the Internet using SkillSoft®." This grouping of influences

allowed me to better understand the possible effect(s) of the influence(s) on the diffusion and adoption process. Participants' responses on perceived influences are presented in the following tables.

Topic: Influences on the diffusion and adoption of SkillSoft

Interview Questions

(All interviewees were all asked these questions.)

Describe the influences that affected your trial and use of SkillSoft®

Explain how that influence(s) affected your decision to try SkillSoft®?

Explain how that influence(s) affected your use of the SkillSoft®?

Describe what you thought was the one major influence on use of SkillSoft® in the military agency?

Participant Responses

(Grouped by category of response)

Personal Influences

- You're dealing with a lot of stress, navigating through a program as well as mastering the coursework and passing the tests at the end of each chapter.
- I think that individuals get set in their ways, and do not like to change and try new things.
- People just didn't want to do it.
- I have a fear of getting locked up.
- SkillSoft® did not have any courses that were related to my job.
- I do not like SkillSoft® because it is not compatible with my learning style.... I can't get the reinforcement on the learning that I need.
- I just don't have the time with work, school, and family to do a SkillSoft® course.

Organizational Influences

- I saw a change in management priorities away from emphasizing SkillSoft® to changing mission requirements.
- I remember a change in the pace of work and level of effort due to an increase in missions.

- It seemed that the agency’s operational tempo increased dramatically during the implementation period.
- I did not have time for SkillSoft® with the increase in workload, because management did not set aside time for people to work on SkillSoft® course.
- People just did not like being mandated to take a SkillSoft® course in order to get an “excellent” rating.
- I don’t like being mandated to do anything.
- I saw an inconsistency in implementing the mandated policy for some supervisors did not feel that SkillSoft® was mission-essential training while others did.

Technological Influences

- The automation [IT] staff was reluctant to allow SkillSoft® to be loaded on the agency’s server.
- We had to go to a third party vendor for help.
- I could not access to SkillSoft® on my workstation.
- My user ID and password didn’t work.
- I could not log on.
- I got locked up.
- SkillSoft® would not bookmark.
- SkillSoft® does not print out completion certificates.
- I need[ed] help, and when I called the 800-phone number I had to leave a message.
- It all boils down to people’s familiarity with computers. Those that were familiar with Microsoft products had an easier time using SkillSoft®.

Analysis of Influences

Influences Grouped by Category (Personal, Organizational, and Technological)

The following is a list of potential influences on the diffusion and adoption of SkillSoft® in this military agency.

Personal Influences

Fear of new technology.

A few study participants (n=3) indicated uncertainty about trying a new software program (SkillSoft®) because they had not been trained to operate the new software. They also expressed their reluctance to use the written instructions to access the program because they were afraid of getting locked up (not being able to move forward or backward in the program).

Different learning styles.

A few participants (n=2) expressed a reluctance to use SkillSoft® because they felt that the course formats did not fit their learning styles. One participant said she was a visual learner, but needed the presence of an instructor to reinforce and explain key points.

Lack of time.

Many participants (n=9) indicated a lack of time to access and use SkillSoft®. The organization's mission changed and the workload increased during the implementation period, which may have resulted in a lack of time for individuals to try and complete a SkillSoft® course.

Lack of job-related courses.

Some participants (n=8) stated that they did not use SkillSoft® because it did not offer courses related to their jobs. It appears that many participants at the agency had highly technical computer-related jobs based upon my observations. Training for the technical participants often included information technology courses, not the personal development courses offered by SkillSoft®.

Organizational Influences

Failure of management to dedicate time to train.

Some participants (n= 5) stated that if completion of a SkillSoft® course was mandatory then management should set aside time during the workday to complete the training. While senior management indicated that it was up to each supervisor to set aside time for his/her employee to train during duty hours, I found that some supervisors did not implement such a policy.

Lack of consistent enforcement of the mandated policy.

Some participants (4 out of 11 civilian participants interviewed) indicated frustration with the fact that their supervisors ignored or misinterpreted the directive that all civilian employees were to complete one SkillSoft® course per year. The lack of consistent enforcement of the mandated policy resulted in participant dissatisfaction, which, in turn, discouraged participants from attempting a SkillSoft® course.

Change in priorities.

Due to the events of September 11, 2001, management appears to have had to revise its priorities and increase the workloads of all employees. This may have been an influence on the diffusion and adoption of SkillSoft®.

Change in the agency's optempo.

During the implementation period, the organization experienced significant growth in personnel and assignments according to study participants. These events, an increase in the amount and pace of the work, may have drastically reduced the time available for training.

Technological Influences

Lack of access.

Lack of access to the SkillSoft® program was mentioned by a few participants (n=2) as a reason why they did not continue to use SkillSoft®. This lack of access may have resulted in lack of observability and trialability and discouraged these study participants from adopting the program. The inability to access SkillSoft® may have also created fear or uncertainty in the minds of some.

Failure to bookmark.

Some users' inability to bookmark their exact location in a course before logging off was cited as a shortcoming of the SkillSoft® program. Because users could not bookmark their location in the course, when they logged on later they had to repeat the work completed in previous sessions in order to move forward. This appears to have caused frustration and loss of valuable training time.

Failure to print certificates.

Study participants could not print out completion certificates for their supervisors. Course completion certificates become part of the employee's permanent record and provided proof of

the employee's new knowledge and skills. Some participants were reluctant to continue using SkillSoft® since they could not obtain a record of the work they had completed.

Technical problems with the server.

SkillSoft® was hosted on a third party server according to members of the implementation team. At times, the SkillSoft® server was not accessible because it was being repaired or upgraded. A few users became disenchanted with the program because they could not access SkillSoft® at their convenience.

Lack of control over user support.

Some participants (n=4) expressed frustration with the lack of dedicated user support for SkillSoft®. Others said that they were dissatisfied because someone was not always on call to assist with technical problems or answer questions about SkillSoft®.

Topic: Influence - Mandated Policy

Background: All civilian employees were required by a policy memo from the Deputy Director of the military agency to complete one SkillSoft® course during their rating period. The policy memo encouraged military personnel but did not require them to take a course.

Interview Questions

(All interviewees were all asked these questions to capture their perceptions.)

Explain your opinion on the mandated policy to use SkillSoft®?

Did this policy influence your use of SkillSoft®? Explain?

Participant Responses

- I have worked for the government for over 30 years.... Every year I've gotten an exceptional rating, and I thought it was wrong to come in and say that if I don't take a SkillSoft® course I won't be getting an exceptional rating.
- [The mandated policy] was all right with me because you basically had a year to complete a course.
- It is not unusual in the military system or the government for your supervisor to mandate you to take a course...what was unusual about this mandate was the one-year timeframe.
- I think SkillSoft® is a benefit to my employees so I encouraged them to follow the

policy.

- I don't think SkillSoft® has any courses that benefited my employees so I did not enforce the policy
- I feel that any time an organization makes training available to all personnel free of charge that is a good thing, policy or no policy.
- Military personnel are required to complete mandatory courses in order to perform their jobs.
- I think it is wrong approach to ever try to force people to take a course... just to try it or just [for] learning.... However when you're talking about sending soldiers to military course so they can get promoted, that is...different.
- It was unclear what was mandated.
- I never saw the policy memo, but I did try SkillSoft®.

Analysis of Perceptions of Mandated Policy

Senior management's policy mandating the use of SkillSoft® by all civilian employees made some study participants (civilian participants interviewed) angry and may have influenced them not to use SkillSoft®. One participant said, "I think it is wrong approach to ever try to force people to take a course... just to try it or just [for] learning.... However when you're talking about sending soldiers to military course so they can get promoted, that is...different."

Opinions about the mandated policy were mixed. About half (6 out of 11) of the civilian participants interviewed for this study accepted the policy as just another requirement, while the other 50% of the civilians said that management should not have mandated the use of SkillSoft®. Civilian participants interviewed expressed most of the negative reactions, since they were the ones most affected by the policy. A few participants reported confusion on what was mandated.

During my interview with the project leader he indicated that senior management mandated the use of SkillSoft® because management felt the SkillSoft® might not otherwise be used. As one senior leader stated to me, SkillSoft® was an "experiment designed to create awareness that distance learning products could be another way for employees to obtain knowledge and skills." This supervisor said that the policy was designed to encourage employees to try SkillSoft® and

not to penalize them if they chose not to take a course. There were clear differences in the views of supervisors and participants on the mandated use of SkillSoft® by civilian employees.

Positive reinforcement rather than a penalty (negative impact on the participant's performance appraisal) might have encouraged more participants to try SkillSoft®. The mandated policy may have had the unintended effect of discouraging employees from trying SkillSoft®.

Topic: Influence - Change

Background: A few study participants describe change in reference to “the method of delivery of training” from going off-site to attend traditional classroom instruction to completing a course through the Internet/ Intranet using SkillSoft®.

Interview Question

(All interviewees were all asked this question.)

Explain your opinion about using SkillSoft® to complete a course

Participant Responses

- By being required to use SkillSoft® I could not go out of the agency to receive particular training.
- Most people in this agency were just not willing to give up going to classroom instruction.
- Traditionally, we are taught in the military through classroom instruction. Yes, that is changing and has changed over the last number of years in the military. However, we still go to classroom with an instructor and learn and are given a book and that kind of instruction. But SkillSoft® is not like that because there are no books, and there are only guides to go through.
- I felt that learning through SkillSoft® was different than going out to class.
- I think that you have to be self-motivated and self-directed to go out there and complete that stuff (classes on SkillSoft®).... Because it's not like having a teacher standing over your shoulder and saying, “Excuse me, this is your midterm. It is due.”
- I'm not a self-directed learner but with SkillSoft® you must be so I didn't finish my course.

- SkillSoft® was a change in the way I always had received my training and I didn't like that.
- I think that people are not inclined to make changes easily and with use of SkillSoft® there was change.
- SkillSoft® makes me uncomfortable for it is a different way to train.

Analysis of Perceptions of Change

A few participants (n=2) said that they chose not to continue to use SkillSoft because they could not see any advantage to adopting the new technology. These interviewee's comments can best be summed up by this statement, "Traditionally, we are taught in the military through classroom instruction. Yes, that is changing and has changed over the last number of years in the military. However, we still go to classroom with an instructor and learn and are given a book and that kind of instruction. But SkillSoft® is not like that because there are no books, and there are only guides to go through."

For these participants that could have meant a change in the way they obtained their knowledge and skills. SkillSoft® represented a move from traditional classroom instruction to the use of an e-learning program. These interviewees stated that they felt they were being asked to make a decision changing from traditional out-of-office classroom instruction to e learning.

SkillSoft® vs. Classroom Instruction

The last section of findings includes one additional question that was asked to the study participants about taking a course through SkillSoft® compared to taking classroom instruction?

Topic: SkillSoft® vs. Classroom Instruction

Interview Question

(All interviewees were all asked these questions to capture their perceptions.)

Compare and contrast SkillSoft® to classroom instruction?

Participant Responses

- I feel that SkillSoft® puts the responsibility for learning on the student as opposed to on the instructor.
- My experience with SkillSoft®, is that you have to read the material; you have to go through slide-by-slide, answer the questions, and go through the scenario. But in the end, you're left to ask yourself "what [are] the most important things I need to know from this...." Whereas if you are in a classroom environment, the instructor and the students around you and the dialogue of the class can help direct you.
- The difference is [that] if you have the ability to motivate yourself, to learn on your own, to learn from a variety of different medi[a], then distance learning will work for you. But if you are not a self-starter and you need someone to impose strict guidelines upon you in a very structured, formalized environment, where you can ask questions, then distance learning is probably not the way you want to learn.
- I would say that using SkillSoft® is less traditional [pedagogical] in learning style.
- I perceived SkillSoft® as a different way to learn.

Analysis of using SkillSoft® vs Attending a traditional Class

The typical responses was, " The difference is that, there is an instructor in front of you and you have classmates that you can interact with...while in SkillSoft® you have to be somewhat disciplined and be willing to sit there and look at a screen and read something. It is easier to stop, get up and walk away from a distance learning product than in the classroom." Some participants (n=11) expressed a preference for traditional classroom instruction outside the workplace. These participants felt they learned best when an instructor guided them, they were part of a classroom where there were other students to learn from and communicate with, and where they had a book to reinforce learning.

These same participants indicated that they were not willing to give up traditional classroom instruction because they were accustomed to and comfortable with learning that way. A few of these participants did not want to give up the benefit of going offsite for training. This apparent unwillingness to forgo the traditional classroom experience and offsite instruction may have influenced some participants not to try or continue to use SkillSoft® to obtain their training.

Key Findings

Findings indicate that few study participants adopted SkillSoft® (i.e., many did not make SkillSoft® part of their learning process on a regular basis nor did they continue to access SkillSoft® courses to enhance their knowledge or skills). This finding is based upon the SkillSoft® Usage Reports dated after 1 March 2001 that indicated that only two study participants were still accessing SkillSoft®. A review of the Usage Reports for the entire study period indicated that only 39 out of 176 of potential users (those who were issued user IDs) accessed SkillSoft® and completed a course during the implementation period.

The primary influences that surfaced during the interviews with study participants were:

- Dynamic environment of the organization,
- Lack of time to attempt SkillSoft® due to competing requirements of work and family,
- Lack of job-related course offerings,
- Civilian participant defiance of the mandated policy,
- Lack of control over technical issues.

The data revealed that the military agency's *environment* with its continually changing mission, work environment, and high Optempo may have influenced the dissemination and adoption of SkillSoft® by *limiting the amount of time* that the study participants had to attempt and complete a SkillSoft® course at work. The findings suggest that most study participants preferred taking *courses that were job related* so they were better able to perform their job. Since SkillSoft® courses did not provide mission essential training, then SkillSoft®'s lack of job related courses may have influenced study participants not to try or continue to use the product.

Analysis indicated that about half the civilian personnel interviewed did not like being mandated to take a SkillSoft® course. Their defiance to not follow senior management's policy and the inconsistency in implementing that *mandated policy* by some supervisors may have

influenced some civilian study participants not try or continue to use SkillSoft®. The findings further indicated that *technical problems* with accessing, obtaining help with logging onto and using SkillSoft® may have influenced some study participants to discontinue their use of the product.

The findings discovered that diffusion of SkillSoft® occurred mainly through formal channels of communication (memorandums, meetings, information papers, product demonstrations and emails) but also informal discussions. The findings suggest that adoption did not occur. Interviewees described multiple influences (lack of time, lack of job related courses, mandated policy and technical problems) that could have encouraged or hindered the participants' awareness, interest, trial, adoption or rejection of SkillSoft®. This study provided unique insights (providing perceptions on the target audience, the benefits and issues with SkillSoft®, and the influences that were perceived to effect their trial of for SkillSoft®), into how study participants perceived the process of diffusion and adoption occurring in a military organization. These insights could help fill gaps in the literature. The next section of this paper details insight, potential contribution of this study to literature and areas for possible future research.