Information Success Model: Evaluating the Success of Smart Stream system at The Central Information Technology Office.

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Abstract

An investigation has been conducted out on the information success of SmartStream Systems at the Central Information Technology Office in Belmopan through questionnaires. This research offers an analytical examination of the application of Delone and Mclean; a performance guide for the SmartStream Information System. The model consists of eight (8) constructs which are information quality, system quality, complementary technology quality, computer self-efficiency measure, service quality, user satisfaction, use, and perceived benefits. The SmartStream Information System utilized by the Central Information Technology Office helps managers, administrators, and support workers to perform accounting, staffing, payroll and conventional of day-to-day activities with more computerized processes much more effectively and efficiently. A total of 32 questionnaires were distributed to staff members of CITO. The ultimate aim of this study is to assess the efficacy of this initiative for all government agencies and to evaluate the profit and importance that SmartStream Systems has contributed to the performance of the Central Information Technology Office, which has been productive. The conclusion of this paper addresses the success of the majority of the responses, which show that more staff at the Central Information Technology Office find SmartStream systems to be useful and beneficial.

Keywords: DeLone & McLean Success Model, Central Information Technology Office (CITO), Enterprise level application, Information System, SmartStream System, e-government.

1. Introduction

In today's society there is a rapid increase in technology throughout Belize and other developing countries. The huge wave of technology adapts information systems and its software to increase production of both private and public organizations. Firstly, "Information System (MIS) can be defined as the study of people, technology and organizations and its relationship among them. The information system is developed using Information Technology to aid an individual in performing a task." (Petter, DeLone & McLean, 2008). Therefore with the importance of information system in the work filed, the "IT governance for enterprise resource planning supported by the DeLone-McLean model of information systems success," "The core processes underlying effective and comprehensive IT governance are the same as those for an enterprise." (Bernroider, 2008). Thus, The Central Information Technology Office (CITO) that was established in 2004 from the Belmopan Computer Center had been re-organized to provide Management, Administration and Support for the newly implemented Government of Belize Wide Area Network and its Enterprise Applications. However, with the combination of the need to work more effectively and efficiently an information system was applied called Smart stream. Of course, the transition from the traditional everyday operations to the newly introduced computerized operations has its pros and cons. In this research Smart stream will be defined as the administrative support in the government system by using information technologies, aiming at creating value within and across the different departments and targeted Organization.

Furthermore, due to the advanced spread of Information system the "eGovernment implementation can result in significant benefits such as improved efficiencies, greater access to services, greater accountability, transparency, and citizen empowerment." (Gupta, Dasgpta, & Gupta, 2008). In fact, according to the article "re-conceptualizing Information System Success: the IS-Impact Measurement Model," the author claims that "Organizations make large investments in Information Systems (IS) expecting positive impacts to the organization." (Gable, Sedera, & Chan, 2008). For these purposes, and many more, it is necessary for analysis to see if the SmartStream System is an aid to the government's activity and is successful in facilitating such benefits.

SmartStream is the Enterprise Level Application used by the Government of Belize (GoB) for its day-to-day operations, finance, accounting, personnel, and payroll processes. Smart Stream provides a range of solutions for all back-office operations and providing rapid results to maximize efficiency. Smart Stream's structure allows for analysis and online drill-down as well as integration between associated activities. It is known that this software has been measured throughout the country and is known to be the best within the government service. The objectives for this research are as followed:

- Measure the information quality of this software and if it suits the institution
- Measure the system quality of this software
- Measure the complementary technology quality that works along with the software
- Measure the service quality the software
- Measure user satisfaction of the users

This paper is aimed to explain the effect, usage, quality, and user-friendliness of the computer network on the output of the Central Information Technology Office. The main purpose of this study is to assess the success of this initiative for all government agencies.

As the Government of Belize is heavily relevant on the SmartStream System, it is analytical with is public services to handle its budgets, revenue, staff accounting and day-today administration processes to assess how the SmartStream System is executing its functions efficiently. More specifically, it is important for researchers to decide if SmartStream contributes some value to the Central Information Technology Office (CITO). This work is being undertaken to fill the information void on the usefulness and reliability of SmartStream.

2. Literature Review

"The measurement of Information Systems (IS) success or effectiveness is critical to our understanding of the value and efficacy of IS management actions and IS investments." (DeLone & McLean, 2003). "By using the model as a common framework for reporting and comparing research work involving IS success or effectiveness, the belief of one of the primary purposes of the original article has been achieve." (DeLone & McLean, 2003). In another study by Kulkarni, Ravindran and Freeze stated that in 2012 they examined a knowledge management (KM) success model that incorporates the quality of available knowledge and KM systems built to share and reuse knowledge such as user's perception of usefulness and user satisfaction with an organizations KM practices. In an unprecedented scope in the era of digital technology, the society shifted from the manufacturing era to the electronic age.

The effects of this change and the introduction of transfer words and ideas have become part of our everyday lives, topics such as e-commerce, e-business, and even e-government have arisen in economics. "E-government is an idea raised by the vision of linking the citizen to the various agencies of government for getting all kinds of government services in an automated and automatic way, in addition to the completion of the government working itself depending on information and communication networks to reduce costs, improve performance, speed of delivery and effectiveness of implementation." (Almarabeh & AbuAli, 2010). "E-government is considered as one of the most powerful tools to spread digital dividend across current level awareness about e-government initiatives among government employees." (Hossan, Habib, & Kushchu, 2006). "The public sector plays a major role in almost every country. Public sector departments are trying to emulate the Information System practices of the private sector to achieve greater performance objectives in the public service." (Nandi & Nayak, 2008). "DeLone and McLean IS model was tested in the context of government to citizens in Taiwan.

Even though there have been numerous researches in information system success, there has been little focus on e-government context." (Wang & Liao, 2008). "With the utilization of DeLone and McLean Model, the purpose of the study was to assess e-government success from the perspective of the citizens. The instrument that was used to obtain data for the study was a questionnaire. The results concluded that DeLone & McLean success model dimensions were a rational measure of e-government system success." (Wang & Liao, 2008). After other countries has heard about the success e-government has had, a delivery server was then created, the Smart Stream system. "A smart stream delivery server, a system and methods are described herein for assembling a mix of services which are to be delivered over one or more networks to a premise of a subscriber." (Robertson, 2013). "The Smart Stream system was used for the budget process, but it was not operational yet for auditing." (The World Bank, 2011).

Philmore Alleyn also had conducted a study on Developments in Public Sector Accounting Practices in Barbados. Alleyn (2017) stated "unlike other researchers conducted using the DeLone & McLean model; this study does not utilize the model but mentions perceived benefit. Notably, Barbados is a developing country, therefore this study focuses on examining how effective smart stream information system is in developing countries such as Barbados. Its main objectives are to determine the accounting practices using smart streams. The aim of this information system is to improve openness, reliability and organizational quality and effectiveness. The overhaul of public sector accounting procedures involved computerization of the accounting system. However, difficulties such as insufficient staffing and high costs have been faced, the reform phase has culminated in increased tax collection capacity, more open and reliable monitoring of the country's financial status, stronger performance control and greater transparency for those entities who have implemented the accrual framework for accounting.

To accomplish what has been described, the implementation of the smart stream information system has been introduced in Barbados. Smart Stream is a known pioneer in financial transaction management technologies that allow businesses to solve post-trade issues by increased automation. This information system has made it possible for Barbados to be competitive and secure.

Based on Roberts,(1995) Belize's Government is highly dependent on the Smart Stream System, for their public departments to manage their payrolls, finance, personnel, and accounting it is empirical to

determine whether the Smart Stream System is executing its features effectively. More precise, it fundamental for the researchers to determine whether the Smart Stream System is adding any value to establishments.

The main purpose of our study is to assess the true results of how Smart Stream brings value to Belize's Citco using the Delone and McLean Success Information System Model and determine if this model is effective in measuring its success.

3. Methodology

Acquiring data can be done using multiple methods, such as questionnaires, interviews and focus groups. The method chosen to gather proper and statistical information based on CITO management information system is questionnaire (survey). The questionnaire used for this research was created using an online application called Microsoft forms. Microsoft Forms is a simple, lightweight app that lets you easily create surveys, quizzes, and polls. In educational institutions, it can be used to collect customer feedback, measure employee satisfaction, improve your product or business, or organize company events (Microsoft Office). Moving on, after creating the questionnaire, it will be distributed to the employees of CITO. Then to convert and analyse the data collected it will be placed in Microsoft Excel for rapid and efficient use.

It is for sure that your research will have some limitations and it is normal. However, it is critically important for you to be striving to minimize the range of scope of limitations throughout the research process. limitations of the previous literature we encounter are relate to the following points:

1. Formulation of research aims and objectives. You might have formulated research aims and objectives too broadly. You can specify in which ways the formulation of research aims and objectives could be narrowed so that the level of focus of the study could be increased.

2. Implementation of data collection method. Because you do not have an extensive experience in primary data collection (otherwise you would not be reading this book), there is a great chance that the nature of implementation of data collection method is flawed.

3. Sample size. Sample size depends on the nature of the research problem. If sample size is too small, statistical tests would not be able to identify significant relationships within data set. You can state that basing your study in larger sample size could have generated more accurate results. The importance of sample size is greater in quantitative studies compared to qualitative studies.

5. Scope of discussions. You can include this point as a limitation of your research regardless of the choice of the research area. Because (most likely) you don't have many years of experience of conducing researches and producing academic papers of such a large size individually, the scope and depth of discussions in your paper is compromised in many levels compared to the works of experienced scholars.

This research has used the updated DeLone and McLean Information Success Model as a means of effective and efficient measurement. Originally, in D&M IS Model consisted of six (6) measurements: Information quality, system quality, service quality, user satisfaction, user, and perceived net benefits, however, two (2) more measurements were added which include: Complementary technology quality, and computer self-efficiency measure.

Information quality measured whether the information provided by SmartStream is relevant and up-to-date to the user's work, provided that the information is easy to understand and provided that the information is easy to understand and provided with sufficient information to carry out his/her job functions.

System quality measured the ease of use, ease of use and interactive features of the system.

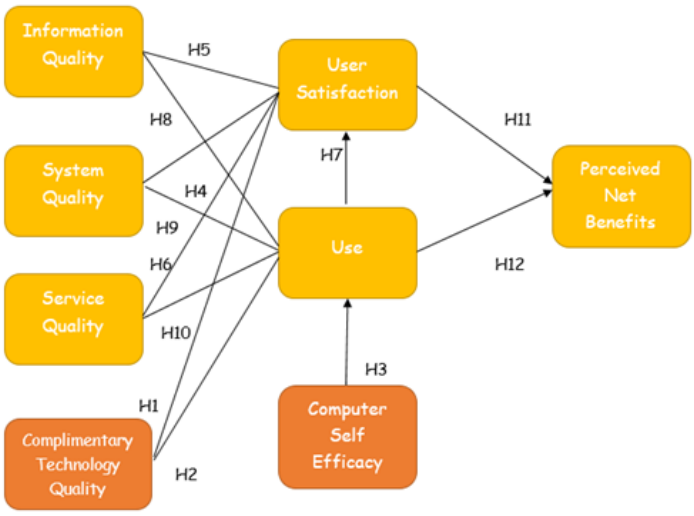
Complementary technology quality focused on whether hardware and internet access were adequate to allow the system to be used effectively.

Service quality assessed how IT workers managed the infrastructure and delivered the necessary resources to ensure that the system is successfully utilized.

User satisfaction evaluated the experiences of the system by the user.

Use calculates level of use, efficiency, consumer awareness of the system.

Perceived net benefits evaluated the benefits of the SmartStream system and how it had any pros.



Model 1. Modified Research D&M IS Model.

Hypothesis

H1. Information quality will positively impact user satisfaction.

H2. System quality will positively impact user satisfaction.

H3. Service quality will positively impact user satisfaction.

H4. Use will positively impact user satisfaction.

H5. Information quality will positively impact use.

H6. System Quality will positively impact use.

H7. Service quality will positively impact use.

H8. User satisfaction will positively impact perceived net benefit.

H9. Use will positively impact perceived net benefit

The robustness of this theoretical structure is to have a better knowledge of how each hypothesis links together and analyse each hypothesis to see it effectiveness and efficiency towards each other. Another reason for using this structure is to see the user's satisfaction on a clear scale and validity. To have a scope of discussion in what is supporting the structure and the limitations.

4. Data Analysis and Discussion

The purpose of this research is to evaluate the effectiveness of the implementation of Smart Stream at the Central Information Technology Office (CITO). The method we used to carry out this process was by the

distribution of surveys. The target population was thirty-two (32) currently employed by the Government of Belize and CITO. These surveys were appointed to 32 employees of CITO located in Belmopan City. Questionnaires were distributed through convenience sampling. Convenience Sampling is a type of sampling where the first available primary data source will be used for the research without additional requirements. This sampling method involved receiving participants wherever you may allocate them and where it is convenient. This research does not test the hypothesis. Instead, applied research is done due to restrictions, finances, and time limitations. At the end of the conducting the survey, there was a 100% response rate from Belmopan. Along with this response rate, it was ensured that a 10% margin error by maintaining a confidence level of 90% which was acceptable in this research. All data was inputted in an excel document and the response of each user was entered. Thereafter all scores were averaged to get a final score on assessing its effectiveness. However, there was some limitations throughout the project that need the researchers to seek alternative, such as time constraint; CITO was times kept delaying the researchers from providing the questionnaires as well as a short period of 5 weeks to complete this research. At the Beginning of the instrument, the first section asked about the responders' background information such as gender, age, education level, and time worked at the institution. Out of the 32 surveys, 62.50% or 20 of these surveys were answered by females while the remaining 37.50% or 12 surveys were answered by males. This indicates that there are mire females working at CITO than males. The next topic they answered is the age range. At 50% or 16 of the surveys were between the ages of 26-35, 43.75% or 14 responders were less than 25, 3.13% or 1 responder is between the age of 36-45 and 3.13% or 1 of the responders was between the ages of 46-55. This indicates that at CITO, there are currently more younger employees between the ages 35 and below. The next analysis we found was that 37.50% or 12 of the responders is working there with a master's degree, while at 21.88% or 7 respondents, Bachelor's Degree and High School Diploma or Lower Diploma work there, respectively. In the final question of this first section is dependent on the responders' work length whether they have been working at the establishment for less that 5 years or higher. At a high percentage of 59.38% or 19 of the respondents have been working there for less than 5 years. At 31.25% or 10 of the respondent have been working there between 5-10 years, 6.25% or 2 of the respondents have been working there for over 15 years and lastly, 3.13% or 1 of the respondents have been working there for the past 11-15 years.

Response Number	Gender	Percentage
20	Females	62.50%
12	Males	37.50%
Response Number	Age	Percentage
16	26-35	50.00%
14	<25	43.75%
1	36-45	3.13%
1	46-55	3.13%
0	>55	0.00%
Response Number	Education	Percentage
7	<Highschool	21.88%
6	Diploma	18.75%
7	BA	21.88%

12	Masters	37.50%
Response Number	Work Experience	Percentage
19	<5	59.38%
10	5-10	31.25%
1	11-15	3.13%
2	>15	6.25%

Table 1. Background Characteristics Results

While Using the DeLone and McLean Model, there are 8 different variables that achieve the ultimate information success model. The topics enlisted in the success model are Information Quality, System Quality, Service Quality, Complementary Technology Quality, User Satisfaction, Use, Computer Self Efficiency, and Perceived Net Benefits (Look at Model 1). Below are the various results of the surveys pointed out. Througout the findings, majority of the answers were between 5 to 7 SQ Average, indicating the satisfaction, efficacy and effectiveness of using SmartStream. Each Graph has been seperated by different categories such as [0,1], [1,2], [2,3], [3,4], [4,5], [5,6], and [6,7].

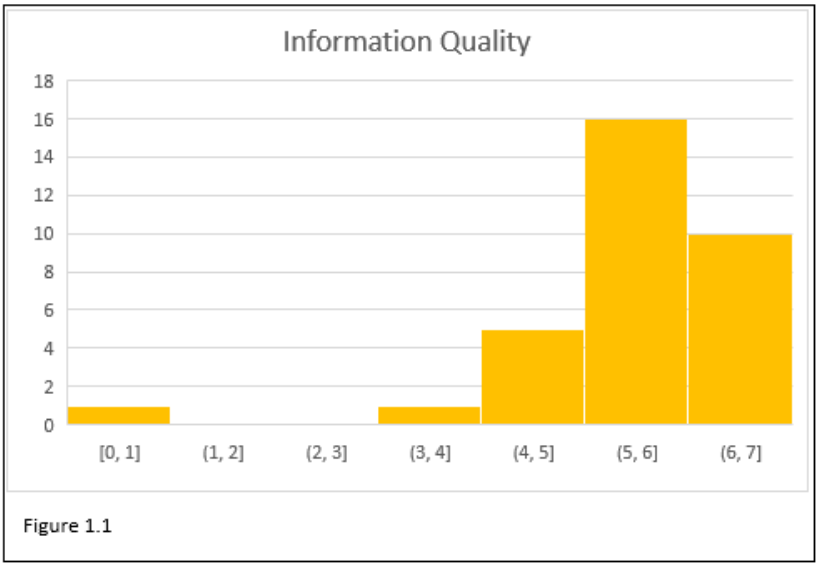


Figure 1.1

Figure 1.1 is showing the information quality provided by the Central Information Technology Office. From a sample of thirty-two employees, the highest response was 5,6 with a score of 18 & 6,7 with a score of 10, indicating that the quality of Smart Stream is of high value to the company based on response numbers. Very few participants had an average and disgreement response. Substantially, the graph illustrates a satisfactory feedback.

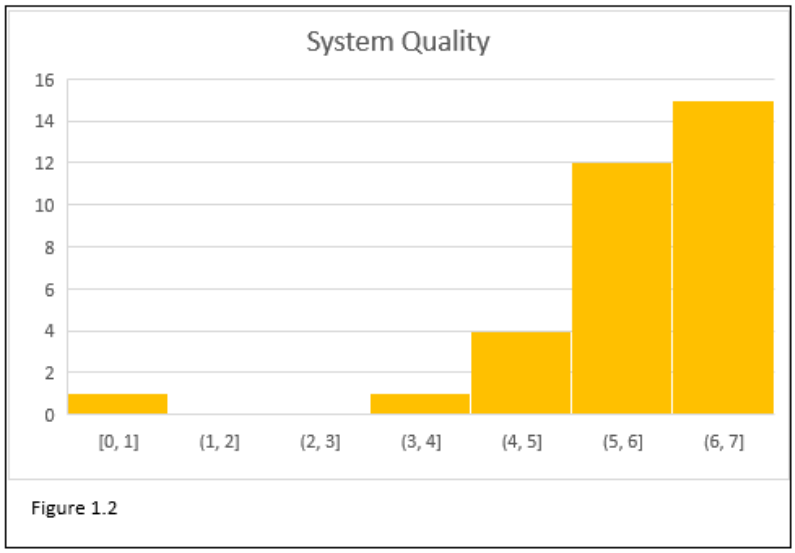


Figure 1.2

Figure 1.2 illustrates the response based on four questions: SQ1 The GOB SSS system is easy to use. SQ2 The GOB SSS system is user-friendly. SQ3 The GOB SSS system provides interactive features between users and the system and SQ4 the GOB SSS system provides high-speed information. According to the diagram, a high rate of 5,6 scoring or 12 responses & 6,7 scoring at 15 responses, agreed and very few disagreed. Substantially, the graph clearly indicates that the system is at its utmost excellence with the user.

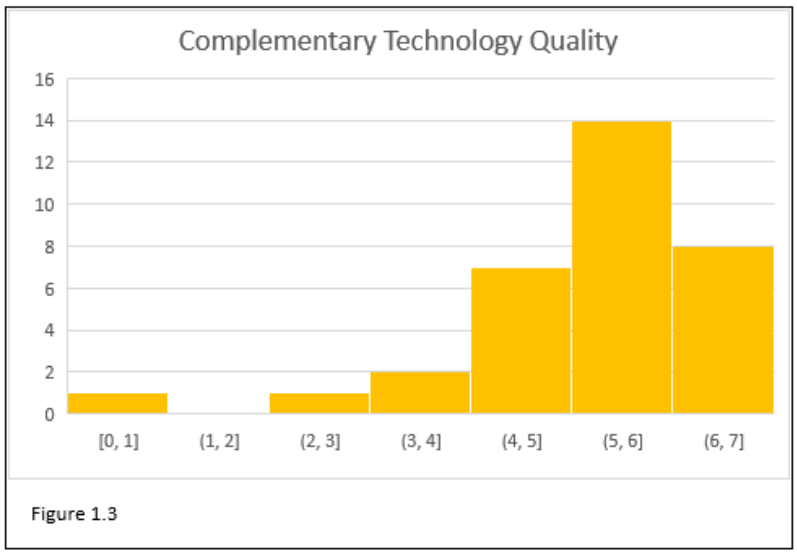


Figure 1.3

Figure 1.3 portrays the Complementary Technology Quality. Users responded with 5,6 scoring at 14 responses & 6,7 scoring at 8 responses, being the highest response in to agreeing that the quality is adequate. A few responded to it being average and little participants disagreeing with the technology being satisfactory. For the most part, the graph illustrates that the Central Information Technology Office has adequate software and hardware and reliable speed of internet connection to access the Smart Stream.

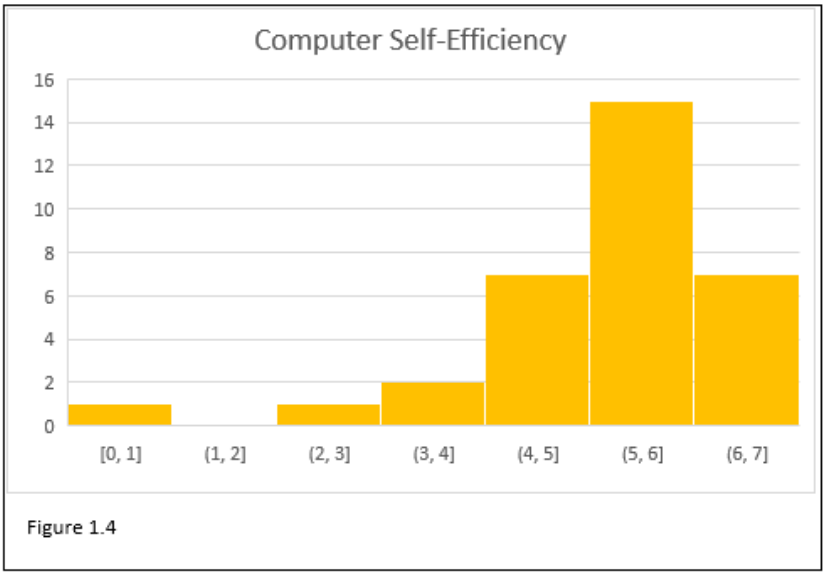


Figure 1.4 Computer Self-Efficiency depicts a large response on 5,6 having a peak score of 15 responses & 6,7 having the second peak score of 6 responses respectively along with 4,5, which indicate that the employees at the Central Information Technology Office agree that they are comfortable with the system. Very little users disagreed but overall, the Smart Stream seems to have a positive feedback on the employees.

Figure 1.5 Service quality portrays the response based on four questions: SV1 the support staff keep the GOB SSS system software up to date. SV2 When users have a problem, the GOB SSS system support show a sincere interest in solving it. SV3 The GOB SSS system support staff respond promptly when users have a problem and SV4 the SSS system support staff tell users when services will perform. View appendix 1 for the full survey. As per the graph the results illustrate a high response being average 4,5 or 10 responses and above being 5,6 or 7 responses & 3,4 being 9 responses along with some responses below average disagreeing. Overall, the results show an average feedback for service quality.

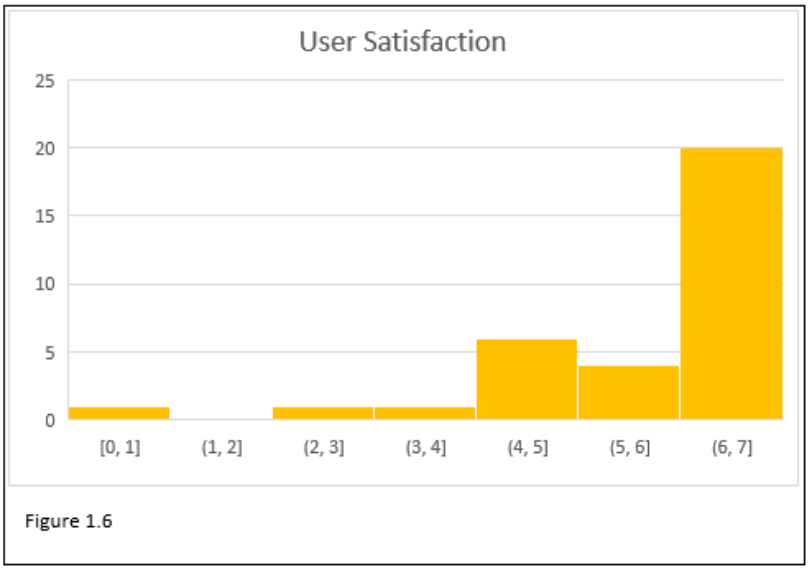


Figure 1.6

Figure 1.6 User Satisfaction shows an exceeding amount of participants acknowledging the user satisfaction with the highest response number at 20 response between [6,7] and hardly any dissatisfactory at only 1 response in 3 categories of [0,1], [2,3], and [3,4] respectively. Substantially, the user satisfaction is immensely visible in respect of the Smart Stream in both the system itself and to the users. The second highest response is between[4,5] with a total number of 6 responses followed by [5,6] with ha total number of 4 responses.

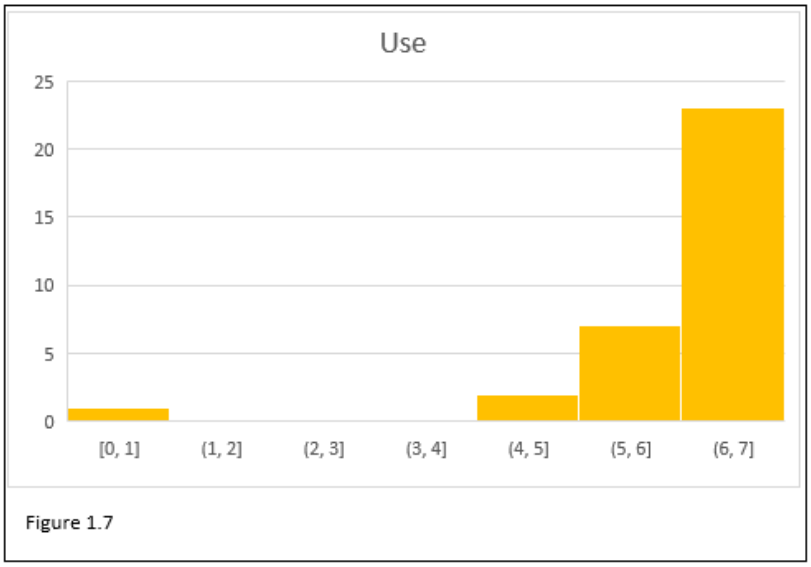


Figure 1.7

Figure 1.7 shows the responses of the following section of use. This depicts a tremendously feedback on the usage of the Smart Stream to accomplish the job to hardly any dissatisfactory of the system. With a total of 23 responses between [6,7] shows the evidence of overall satisfactory and the lowest response is 1 between [0,1]. Overall, it is evidently visible that the operation of Smart Stream is approving its use in the Central Information Technology Office.

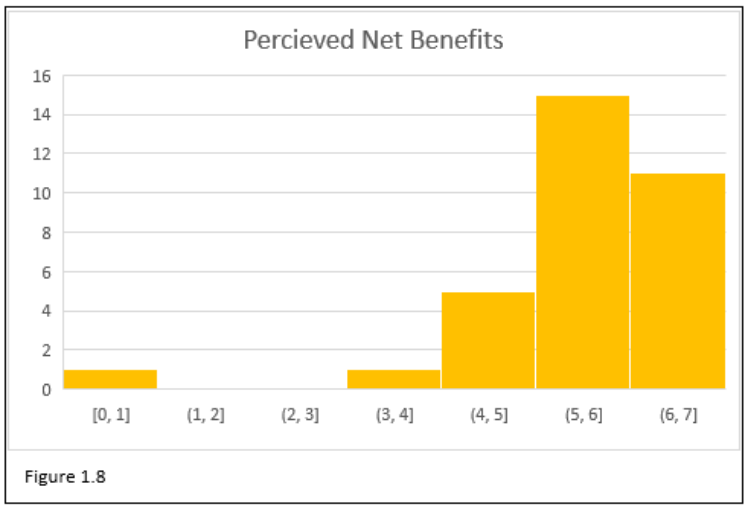


Figure 1.8

Figure 1.8 Perceived Net Benefits illustrates that there is a favorable amount of feedback between 5,6 of 15 responses & 6,7 of 11 responses. With little average feedback 4,5 of 5 responses and few that weren't in favor. Overall, the results indicate that the Central Information Technology Office helps improve the job assessment, save cost, and enhances the management performance.

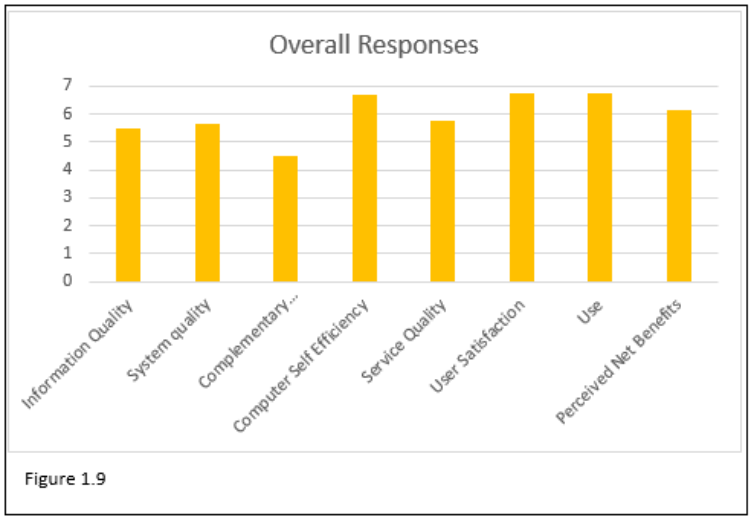


Figure 1.9

The goal of this research is to measure the DeLone and McLean success Model with a functional system in an organization. In this SmartStream is the system used at the Central Information Technology Office. Thus, the overall responses to the Smart Stream was a positive one. Each section placed a great contribution to the Information Success of the Central Information Technology Office (CITO). The average information quality of the smart stream system was a 5.5. The average feedback for the system quality was a 5.67. The complementary technology quality response was a 4.5. The computer self-efficiency was an average of 6.7. The service quality feedback on the program was a 5.75. The user satisfaction and use were an average of 6.75. Lastly the perceived net benefits were an average of 6.17. In order words by taking a look at Figure 1.9, there is a balanced wave of different Information Success question from the lowest being a 4 Average up to a 7 average.

Due to the participants who contributed to the survey, we were able to gather this useful information which showcases the usage of SmartStream to be a useful, efficient, and user-friendly system. It is recommended that learning how to use this type of software will not only benefit future employees who seek a career at CITO but also for other organizations. If SmartStream were to be implemented, then there is a higher

advantage for users to understand the software and have the availability of being able to transfer from one company or department to the next.

5. Conclusion

The research conducted strived to measure the level of success of SmartStream within CITO a Government office in Belize. SmartStream is the Enterprise Level Application used by the Government of Belize (GOB) for its finance, accounting, personnel, and payroll processes. It also, provides a range of solutions for all back-office operations and providing rapid results to maximize efficiency. SmartStream's structure allows for analysis and online drill-down as well as integration between associated activities. Therefore, in order to conduct a complete evaluation, it was compared to DeLone–McLean model of information systems success. This model of information success includes six main features which are: Information Quality, System Quality, Service Quality, User Satisfaction, Use and Perceived Net benefits. However, the researcher felt that using these six main features would narrow the research, therefore, two other components which are the Complementary Technology Quality and Computer Self Efficacy were added. Now using these eight features, questionnaires were developed to conduct the research and obtain accurate information which would prove the hypothesis to be true.

The Public sector is very dependent on this system in order to view or project the economy details of Belize and they highly rely on it to make critical economical decision.

Some of the Modules used by GOB are

-SmartStream Financial

* Payables

SmartStream Human Resources

*Payroll

Therefore, it is utmost important that the system is accurate and efficient.

In order to fully analyze the information system, some hypotheses were developed which will eventually guide the direction of the research. The following are some of the hypothesis:

H1. Information quality will positively impact user satisfaction.

H2. System quality will positively impact user satisfaction.

H3. Service quality will positively impact user satisfaction.

H4. Use will positively impact user satisfaction.

H5. Information quality will positively impact use.

A quantitative analysis was distributed in the form of a questionnaire to confirm if the hypothesis was true or false. After the questionnaire was completed majority of the staff agreed that the SmartStream system is very effective and efficient, user-friendly, and good quality within their department. Even though the system might be expensive it is still resourceful for the business. The SmartStream aims to improve openness, reliability, and organizational quality.

5.1 Limitation

The research was successful as it served its purpose which was to measure the success of the SmartStream system at CITO, Belize. However, there were limitations faced along the way. Time played a major role in the research. The researchers were faced with limited time as we only had 5 weeks to complete this research. This type of research can be vigorous and very time consuming.

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Appendix

Appendix 1. Questionnaire instrument that was given out to the participants of CITO.

Purpose

This research is required for the CMPS3012 MIS course at the University of Belize. This questionnaire asks for information about yourself and how often you use the Government of Belize Smart Stream System (GOB SSS). The data gathered will be analyzed to determine the success of GOB SSS at the Central Information Technology Office.

Please answer each question based on your use of GOB SSS. Your individual responses to the questionnaire will be strictly confidential and used solely for this research.

Instructions

This is a survey, not a test; there are no right or wrong answers. Please tick the boxes to mark your answers.

1. Background Information	Answers:
Please indicate your gender:	Male ☐ Female ☐
Please indicate your age:	<25 ☐ 25-35 ☐ 36-45 ☐ 46-55 ☐ >55 ☐
Please indicate what Degree you are currently holding	<High School ☐ Diploma ☐ BA ☐ Masters☐
Please indicate your working experience:	<5 ☐ 5-10 ☐ 11-15 ☐ >15 ☐

Indicate your agreement with each statement by rating it from (1) strongly disagree to (7) strongly agree.

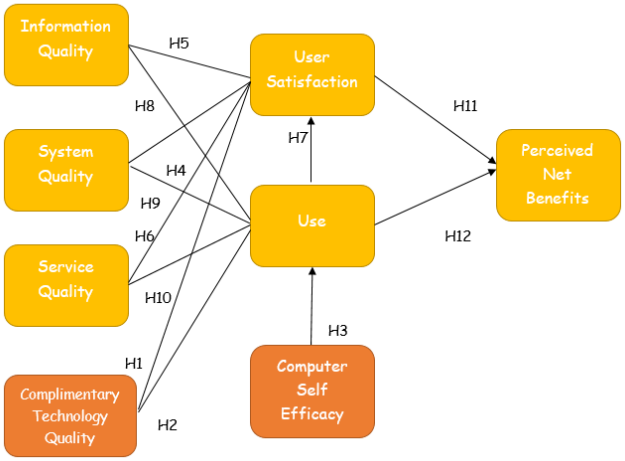
2. Information Quality	Disagree ----------Agree
IQ1: The GOB SSS system provides information that is exactly what you need.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
IQ2: The GOB SSS system provides information you need at the right time.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
IQ3: The GOB SSS system provides information that is relevant to your job.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
IQ4: The GOB SSS system provides sufficient information.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
IQ5: The GOB SSS system provides information that is easy to understand.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
IQ6: The GOB SSS system provides up-to-date information.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
3. System Quality	**Disagree ----------Agree**
SQ1: The GOB SSS system is easy to use.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
SQ2: The GOB SSS system is user-friendly.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
SQ3: The GOB SSS system provides interactive features between users and the system.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
SQ4: The GOB SSS system provides high-speed information access.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
4. Complementary Technology Quality	**Disagree ----------Agree**
CTQ1: The software on the device (desktop computer, laptop, mobile devices) used to access the GOB SSS system is adequate.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CTQ2: The device hardware (desktop computer, laptop, mobile device) used to access the GOB SSS system is adequate.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CTQ3: The speed of the internet connection used to access the GOB SSS is adequate.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CTQ4: The reliability of the internet connection used to 7access the GOB SSS system is adequate.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
5. Computer Self- Efficiency Measure	**Never ----------Often**
I COULD COMPLETE THE JOB USING THE GOB WAN SYSTEM.	
CSE-1: if there was no one around to tell me what to do as I go.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CSE-2: if I had never used an information system like it before.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CSE-3: if I had only the GOB SSS system manuals for reference.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CSE-4: if I had seen someone else using the SSS system before trying for myself.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CSE-5: if I could call someone for help if I got stuck.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CSE-6: if someone else had helped me get started.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CSE-7: if I had a lot of time to complete the job for which the WAN was provided.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

CSE-8: if I had just built-in help facility for assistance.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CSE-9: if someone showed me how to do it first.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
CSE-10: if I had used similar SSS systems before this one to do t to same job.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
6. Service Quality	**Disagree ----------Agree**
SV1: The support staff keep the GOB SSS system software up to date.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
SV2: When users have a problem, the GOB SSS system support show a sincere interest in solving it.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
SV3: The GOB SSS system support staff respond promptly when users have a problem.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
SV4: The SSS system support staff tell users when services will performed.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
7. User Satisfaction	**Never ----------Often**
US1: Most of the users bring a positive attitude or evaluation towards the GOB SSS system function	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
US2: You think that the perceived utility about the GOB SSS system is high.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
US3: The GOB SSS system has met your expectations.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
US4: You are satisfied with the GOB SS system.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
8. USE	**Never ----------Often**
U1: The frequency of use with the GOB SSS is high.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
U2: You depend upon the GOB SSS system.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
U3: I was able to complete a task using the GOB SSS even if there was no one around to tell me to do as I go.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
U4: I have the knowledge necessary to use the GOB SSS.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
9. PERCEIVED NET BENEFITS	**Never ----------Often**
NB1: The GOB SSS system helps you improve your job performance.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
NB2: The GOB SSS system helps the organization save cost.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
NB3: The GOB SSS system helps the organization achieves its goal.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
NB4: Using the GOB SSS system improves the assessment and	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
NB5: Using the GOB SSS system in job increases my productivity.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
NB6: Overall, using the GOB SSS enhances recruitment and performance management.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

Please return this survey to the person who gave you the form.
Thank you for your participation.

Model

Appendix 2. The DeLone and McLean Information Success Model.



Response Number	Gender	Percentage
20	Females	62.50%
12	Males	37.50%
Response Number	Age	Percentage
16	26-35	50.00%
14	<25	43.75%
1	36-45	3.13%
1	46-55	3.13%
0	>55	0.00%
Response Number	Education	Percentage
7	<Highschool	21.88%
6	Diploma	18.75%
7	BA	21.88%
12	Masters	37.50%
Response Number	Work Experience	Percentage
19	<5	59.38%
10	5-10	31.25%
1	11-15	3.13%
2	>15	6.25%

Table 1. Background Characteristics Results

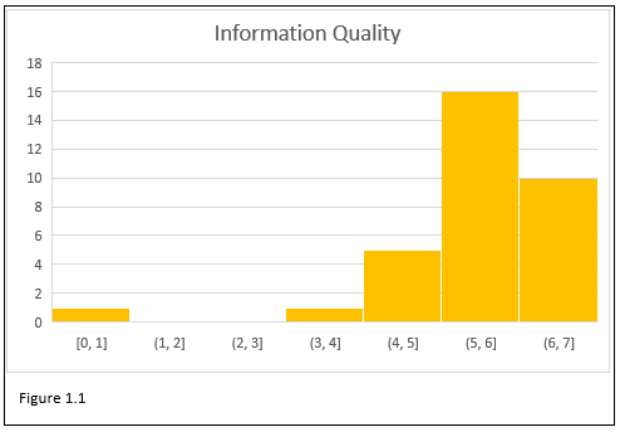


Figure 1.1

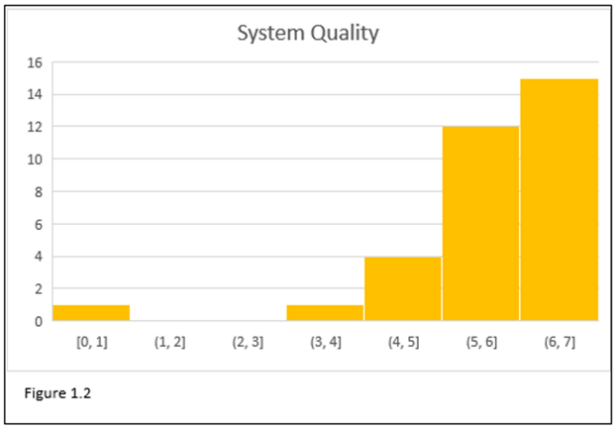


Figure 1.2

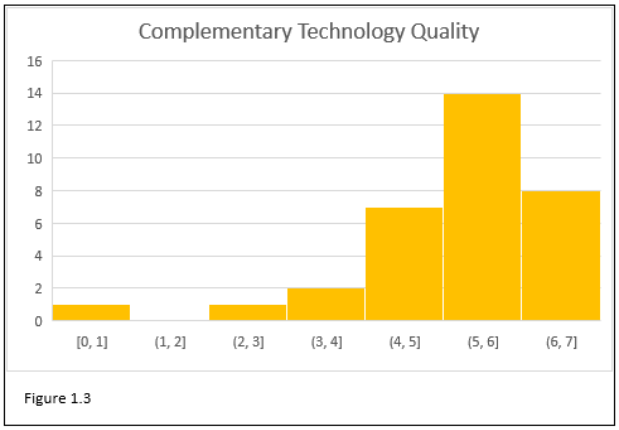


Figure 1.3

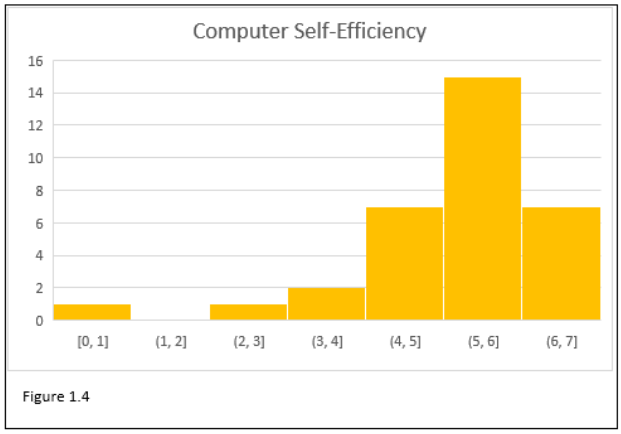


Figure 1.4

Figure 1.5

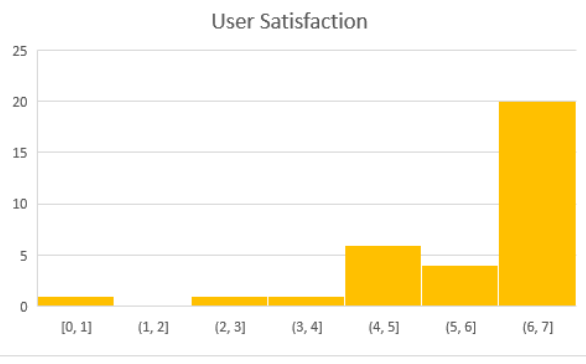


Figure 1.6

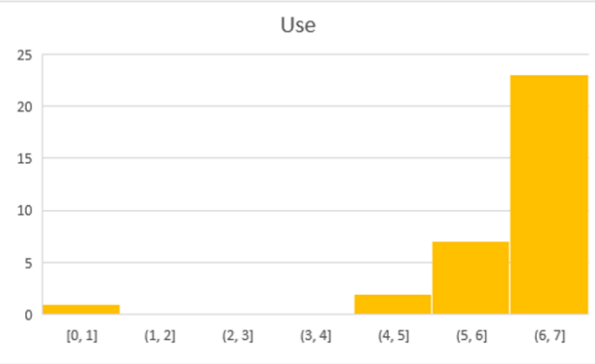


Figure 1.7

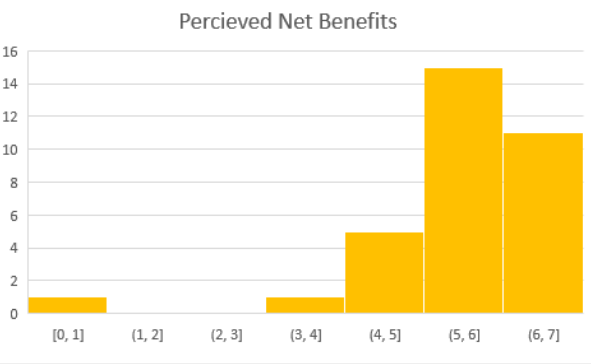


Figure 1.8

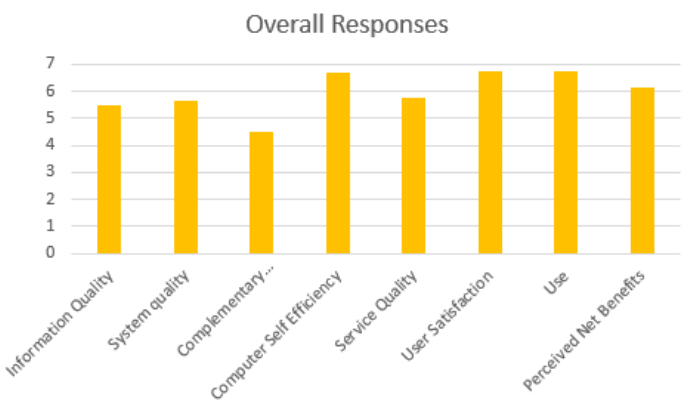


Figure 1.9