

# Evaluating Customer Service at the Vital Statistics Unit: A Customers' Perspective

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## Abstract

*In today's world, Internet has radically changed the conduct of business, and information technology is now the driving force within businesses. Belize is facing numerous economic challenges and the performance of its government departments is inefficient. Many theories and models have been developed in the Information System (IS) context to predict and explain user behaviour with technology. However, this study methodically tested the DeLone and McLean model of information systems success model in the Vital Statistics Unit (VSU), a Unit within the Ministry of Health to predict and explain the customers satisfaction and experiences. The research was conducted to analyse the quality of the Customer Service and output of the VSU in Belize when accessing selected services such as such as acquiring a Birth certificate, Marriage Certificate, Death Certificate, or a Deed Poll and the quality of service provided based on the system used at the VSU. A survey questionnaire with twenty-two questions was used to collect primary data from 35 customers who were randomly selected. The results of the data analysis showed that the data fit the extended the DeLone and McLean model of information systems success model well, the results indicated that system quality and information quality, all affected the concerns among customers at the VSU. Improving the Information Systems can help redress some of the challenges and play a significant role in improving the VSU's efficiency and enhancing employee performance. The researchers evaluated the findings of the survey and concluded with positive recommendations.*

**Keywords:** Information Technology, Customer Service, Government Department, system quality, Information quality, efficiency, employee performance

## Introduction

Vital Statistics Unit (VSU) is a General Registry in Belize that is accountable to register major events such as births, deaths, marriages, adoptions and deed polls. Registration of these documents is fundamentally important in Belize as they are required when conducting business. A committee was formed in 1999 to find ways to improve the vital registration system. (Margaret, Edwin, 2007). Through this means, the vital registration system was examined and members agreed that an integrated system monitored by the Ministry of Health would contribute to reduce the under registration and under-reporting of vital statistics. This will further enhance the quality of information produced by the country of Belize as it relates to vital statistics. (Jules, 2013).

After countless unsatisfied reviews the system was re-evaluated; Registrar General, Velda Flowers stated that in 2016 a new system was implemented called the Supreme Court Management System which was to supply the registration, the preparation of births and deaths and marriage certificates. With the new system, for instance, a birth certificate can be requested in the morning and given in the afternoon, but the time frame is not consistent because some information takes time to verify and further research may be conducted. A person's document can be misplaced due to the lack of organization skills. The VSU have two main locations which is in Belize City and in Belmopan and, if you live in a remote area, it can be costly to frequently travel for a document that is not completed. Technology has impacted the performance of VSU and slowly eliminating paper-based to electronic copies. UNICEF is enforcing technology within the hospital systems through secure lines to immediately register a child because it is the Right of Child. (Williams, 2015).

On the other hand, there are different procedures and time frames for each instances and the team will analyse and implement an information system to manage those time frames. In addition, the team will also be evaluating the success of the systems through DeLone and McLean model; which focuses on the six aspects of information system that are comprised of information quality, system quality, service quality, system use, user satisfaction and net system benefits. Individuals will be notified when their document is ready as well as the user. The user will notify the individual within two business day whether by email, phone call or text. This will prevent backups and leave less room for conflicts within the work environment

especially for clients. The un-notified length will be minimized and VSU will bring upon a positive reputation since every individual's time is valuable and we shouldn't waste it.

### **Literature Review**

Vital Statistics provide crucial information of a country's population. This literature review will showcase findings of researchers who have studied different Vital Statistics systems in countries such as the United States of America and Japan. The research all seem to focus on improving the data collection methods for Vital Statistics. Quality data, they argue, will enable governments to be better plan for the future and to allocate resources efficiently. Moreover, given that there is little to no academic research on vital statistics in Belize, we will utilize such international research to situate the objectives of our project.

In the first case, Kozo Ueda, lecturer on Demographic and Social Statistics at the Statistical Institute for Asia and the Pacific in Tokyo, Japan, and Masasuke Omori, Director of the Second Division at the Civil Affairs Bureau, Ministry of Justice in Tokyo, Japan, wrote about how Japan has been successful in collecting data at their Vital Statistics unit. Japan implemented a special family registration system whereby births, deaths and marriages must be declared. It also established a relationship system which is used for the authentication of the relationships between the various members of a registered family. The importance given to this component is what encourages the completion of the registration of those vital events. To ensure that they keep up with their data, they also provide monthly reports on vital events. Even though there are little errors made in data collection and processing, Japan still faces a few difficulties as its system normally requires data to be hand written and passed on through various offices – which some level of accuracy is lost by the time it has arrived at its final destination. Therefore, this indicates the importance of verification systems both to encourage registration and during paperwork or electronic input.

In the second case, Vito M. Logrill, Director for Center for International Health Information USAID Resource Center in Arlington, U.S.A., studied the current systems in place for the U.S.A. His research highlighted the importance of new technologies which are focused on record processing, storage and retrieval, electronic transmission of information, and, the preparation, analysis and reporting of vital statistics. These systems in place consist of mainframe and PC's as well as special software used to collect data, especially at the time of

registry. This system proves efficiency in simple tasks such as confirming specific identity (birth) data from a child upon request of a school, for example. The information is searchable on their database which allows for the process to be less time-consuming. There is also current implementation of a new system whereby birth and death registry can be done online. The data collected are used to generate vital and health statistics reports which ultimately are used for their health program direction and evaluation. The only concern with this new system coming into place is that some states have an open access to information system so this raises concerns of privacy and confidentiality. Similarly, we should take this into consideration as we seek to improve the system in Belize.

In the third case, Patrick Nshimiyimana of the National Institute of Statistics of Rwanda in Kigali, Rwanda, focused on the importance of the use of Vital Statistics in Africa. He noted that in developing countries it is difficult and costly to retrieve statistical data. However, the investment into a solid system for registration becomes more a benefit than a disadvantage. This information can then be used for various purposes, especially for health and social policy planning. Moreover, depending on the results of the Vital Statistics, a country is able to determine the current health status of the country. The data can also, among other things, allow for the development of the country's economy. This research suggested that Belize must be prepared to invest on improving its Vital Statistics system, if it desires to improve its planning.

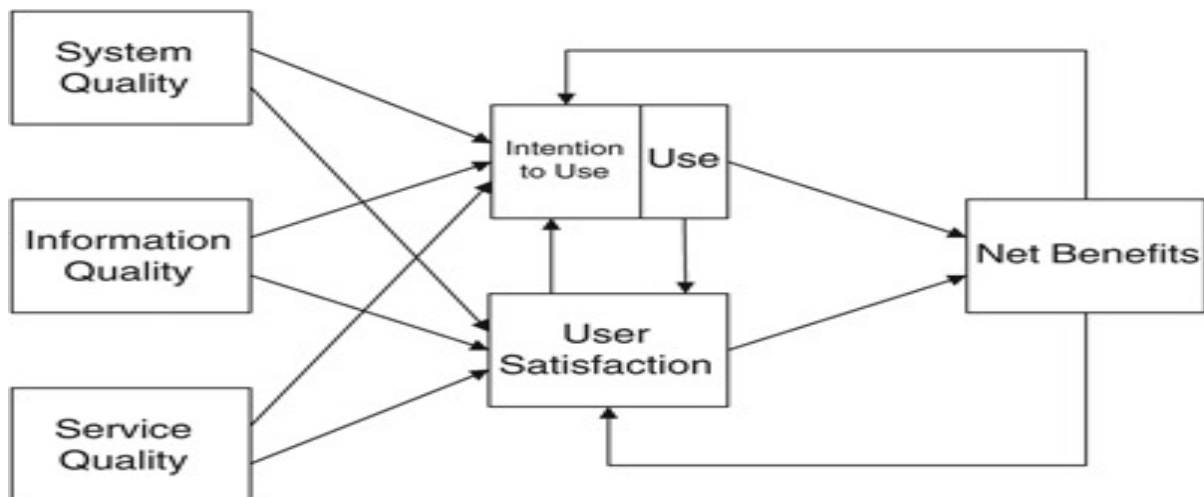
All three researchers showcased different points on how the vital statistics. They all agreed that interviews with stakeholders like international agencies, statistical department and government is important to improve the system. They all agreed that the investing into a robust and efficient Vital Statistics unit is critical to development. However, for the purpose of our project, we aim to build upon these foundations by gaining the input of citizens who have accessed the Vital Statistics Unit. By way of this research, we will come to know the strengths and weaknesses of the current system in place. We will also add to this literature, by focusing on how our current system in Belize can be improved, especially in the area of customer service and in providing accurate documents in a timely and efficient manner.

## **Methodology of the Study**

The research being conducted intends to analyze and implement an information system to manage different procedures and time frames to register major events or other relatable events such as births, deaths, marriages, adoptions and deed polls. For this research, William H. DeLone and Ephraim R. McLean IS Success Model will be used to measure the information system that will implemented to manage those time frames. This research used a quantitative approach to gather numeric and contextual information from the target population. The target population consisted of all citizens of Belize who acquire the services of the Belize Vital Statistical Unit. All data collected will be gathered through data collection method through questionnaires. Any other information acquired will be shown through tables and graphs under Data Analysis and Results.

### **Theoretical Foundation: Information Systems Success**

To measure the success of these various IS, organizations are moving beyond traditional financial measures, such as return on investment. This research will be focused on the study of DeLone and McLean 2003. DeLone and McLean model of IS success (1992) was updated a decade later based on a review of the empirical and conceptual literature on IS success that was published during this period: DeLone & McLean, 2003. Furthermore, some researchers have synthesized the literature by examining one or more of the relationships in the D&M IS success model using the quantitative technique of meta-analysis to develop a better understanding of success. The study of DeLone and McLean breaks down the in six major dimensions or categories of IS success model: system quality, information quality, use, user satisfaction, individual impact, and organizational impact. Using these dimensions, both conceptual and empirical studies are then reviewed and organized according to the dimensions of the taxonomy. These are further analyzed through how actual use and user satisfaction of the system deliver net benefits to the organization. The figure below shows this original IS success model (DeLone & McLean, 2003).



Taking into consideration all the factors from the DeLone and McLean IS model of system quality, information quality, use, user satisfaction, individual impact, and organizational impact as vital components to evaluate, analyze and implement an information system to manage different procedures for Vital Statistics Unit (VSU), General Registry in Belize.

The hypothesized relationship between VSU success variables are based on the theoretical and empirical work reported by DeLone and McLean (2003). Although further research is essential. Accordingly, the study hypothesized the following nine hypotheses tested:

*H1. Complementary technology quality will positively impact system quality.*

*H2. Information quality will positively impact user satisfaction.*

*H3. System quality will positively impact user satisfaction.*

*H4. Service quality will positively impact user satisfaction.*

*H5. Use will positively impact user satisfaction.*

*H6. Information quality will positively impact use.*

*H67. System quality will positively impact use.*

*H8. Service quality will positively impact use.*

*H9. User satisfaction will positively impact perceived net benefit.*

*H10. Use will positively impact perceived net benefit.*

### **Construct Instrument:**

The DeLone and McLean IS Model does not specify on how the data must be collected. For the research and purpose of the study researchers developed a questionnaire to gather all necessary information. Quantitative data collected is the scale that was used to determine the success of the information system in order to preserve content validity. To ensure that our research information validity, measurement scales for the quantitative data collection were mainly elicited from previously verified instruments. The Bailey and Person (1983) seven item scale with some adjustments to fit the specific context of VSU. Bailey and Pearson's instrument is the standard instrument in the IS Field, because it has widely accepted, has been tested for reliability and validity by several researchers.

<b>The measurement items for questioners.</b>		
<b>Construct</b>	<b>Survey Questions</b>	<b>Source</b>
Information Quality	IQ1: The VSU provides information that is exactly what you need IQ2: The VSU provides information you need at the right time IQ3: The VSU provides information that is relevant for decision making IQ4: The VSU provides sufficient information IQ5: The VSU provides information that is easy to understand IQ6: The VSU provides up-to-date information	<i>Bailey and Person (1983)</i>
System Quality	SQ1: The VSU is easy to use SQ2: The VSU is user-friendly SQ3: The VSU provides interactive features between users and the system	<i>Alshibly, (2011)</i>
Services Quality	SV1: The support staff keep the VSU software up to date SV2: When users have a problem the VSU support staff show a sincere interest in solving it SV3: The VSU support staff respond promptly when users have a problem with the system SV4: The VSU support staff tell users exactly when services will be performed	<i>Change et al., (2009)</i>
Complementary Technology Quality	CTQ1: The computer (desktop, laptop, mobile device) you normally use to access VSU is adequate CTQ2: The computer (desktop, laptop, mobile device) you normally use to access VSU has a fast and reliable internet connection	<i>Teece, D. J. (1988).</i>

User Satisfaction	US1: Most of the users have a positive attitude towards VSU. US2: You think that the utility of the VSU is high. US3: The VSU has met your expectations. US4: You are satisfied with the VSU.	<i>Seddon and Yip (1992)</i>
Use	U1: Your frequency of use of the VSU is high U2: You depend upon the VSU U3: You were able to complete a task using VSU even when there was no one around to tell you what to do U4: You have the knowledge necessary to use the VSU	<i>Balaban et al., (2013)</i>  <i>Rai et al., (2002)</i>
Perceived Net Benefit	NB1: The VSU helps you improve your performance at work NB2: The VSU helps save time and costs NB3: The VSU helps you achieve your work goals NB4: Using the VSU increases your work productivity	<i>Alshibly, (2011)</i> ; <i>Tansley et al, (2001)</i>

### Sampling and Data Collection:

The sample frame was obtained based on the option of random sampling, as derivative of the lecturer who oversaw this research paper, selecting 35 individuals who have sought the services of the Vital Statistics Unit and analyzed the level of service provided.

Before the questionnaire was conducted, it was pre-piloted by two random citizens who had acquired the services of the Belize Vital Statistics Unit to test its validity. The citizens agreed that the questionnaire was well prepared and easy to understand. Based on the responses from these two citizens, there were no changes made to the questionnaire. The questionnaires were disseminated to all participants by the researchers, approaching them and requesting to assist with the administering of the questionnaires. To ensure that the entire sample frame was surveyed, each member of the proposed research team was assigned to reach out to a certain number of participants. There were five members in the proposed research team; therefore, all members of the research team were responsible to sample 7 citizens each. Interviews were also conducted with two employees from the Vital Statistics Unit, selected at random, in order to better understand the services provided and to receive feedback on the system in place.

The researchers used a questionnaire as the survey tool to obtain all the information from the citizens. The questionnaire had a total of twenty-two (22) questions. It sought to identify the



effectiveness of the service provided by the Vital Statistics Unit. In addition, it aimed to understand some of the challenges faced by their customers and to identify ways to correct the issues faced by their customers, by recommending a proper Information System in place. The questionnaire also contained an introduction explaining to the citizens its purpose and requesting their consent to proceed with the questions. Most of the questions were close-ended to facilitate the selection and to avoid unanswered questions. Scales were not used as part of the close ended questions, as the aim was to make the survey as simple as possible.

<b>Table1. Characteristics of Respondents</b>		
<b>Characteristics</b>	<b>Number</b>	<b>Percentage</b>
<b>Gender</b>		
Male	14	40%
Female	21	60%
Other	0	0
Total	35	100%
<b>Age</b>		
18 - 25	4	11%
26 - 34	21	60%
35 - 45	7	20%
46 - 55	2	6%
Older than 56	1	3%
Total	35	100%
<b>Education</b>		
PhD	2	6%
Masters	5	14%
Bachelors	7	20%
Associates	11	31%
High School	10	29%
Primary School	0	0
Total	35	100%

**Table 1. The Respondents' Characteristics Summary Presentation**

### **Data Analysis and Results**

The researchers collected all questionnaires and an excel file was created to enter all information gathered. All variables were coded in numerical coding and were entered into the

Statistical Package for Social Sciences (SPSS) program; tables and charts were created to evaluate this analysis.

**Background information**

The data for this particular study were collected from civilians throughout Belize. Each individual had their own experiences which were either good or fairly decent. Out of the 35 questionnaires handed to the individuals all were usable and responses were 100 percent.

The complete sample was composed of PhD, Masters, Bachelors, Associates, and High School and leading were Associates and High School education level which was displayed in Figure 1.

**Highest Level of Education**

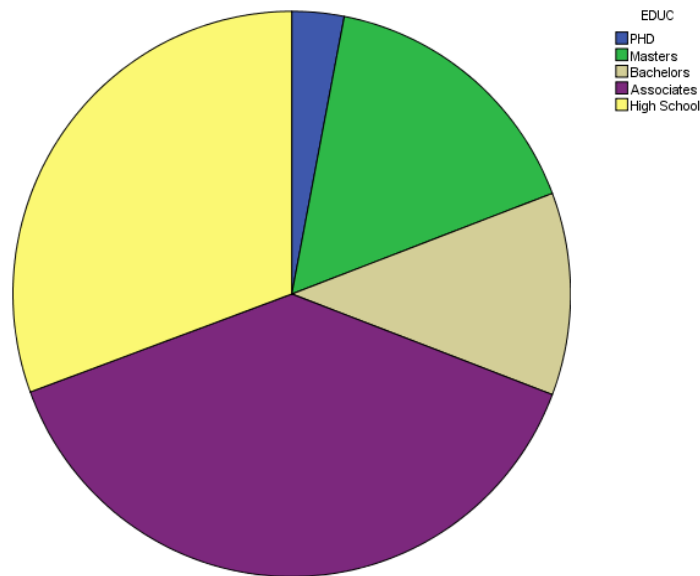


Figure1

In Table 2. Birth Certificates were the highest-chosen document to be requested with a percentage of 68.6 percent and marriage was second of 22.9 percent. One day service was 14.3 percent and express, which was only requested by one individual was at 2.0 percent. With the document type it may vary of the timeframe; 2 responders had requested Death Certificates (5.7 percent) and Deed Pool was requested by one person (2.9 percent) which completed the 100 percent.

**Type of Document Requested**

**Case Processing Summary**

		N	Marginal Percentage
SERVICE_TYP	One Week	29	82.9%
	One day	5	14.3%
	Express Service	1	2.9%
DOC_TYPE	Birth Certificate	24	68.6%
	Death Certificate	2	5.7%
	Marriage Certificate	8	22.9%
	Deed Pool	1	2.9%
Valid		35	100.0%
Missing		0	
Total		35	

**Table 2. Table Showing Types of Documents Requested**

**Information Quality**

Within the research, the researchers questioned the respondents about the Information Quality they had received at the VSU; and 75 percent stated that their application was not processed on time. This may have been because documents were not handled properly or the report was missing. 25 percent stated that their documents were handled properly, within the timeframe requested, depicted from Figure 2. In figure 3 it was a marginal difference as 50.72 percent said that their records were not accurate and 49.28 percent had accuracy in their records.

**Table 3. Information Quality**

Response	Number of Participants	Percentage
Yes	7.75	22%
No	27.25	78%

**Table 3. Table Displaying the Average Responses for Information Quality**

**Process time**

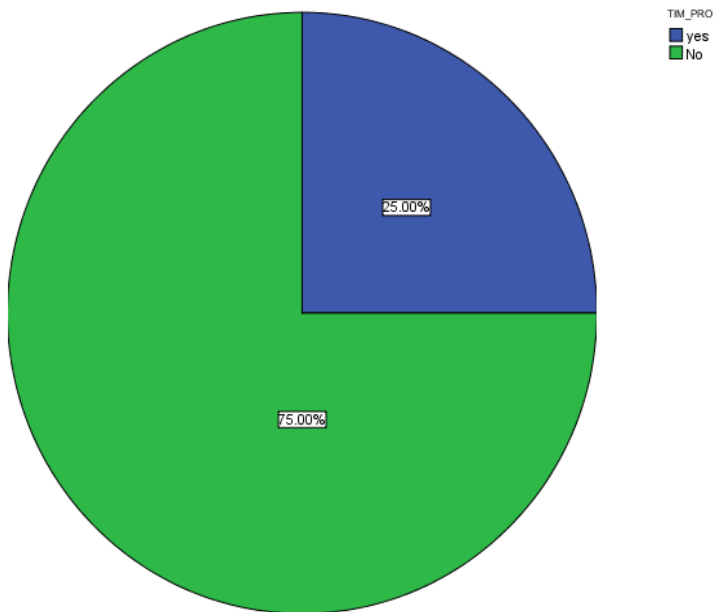


Figure2

**Accurate Records**

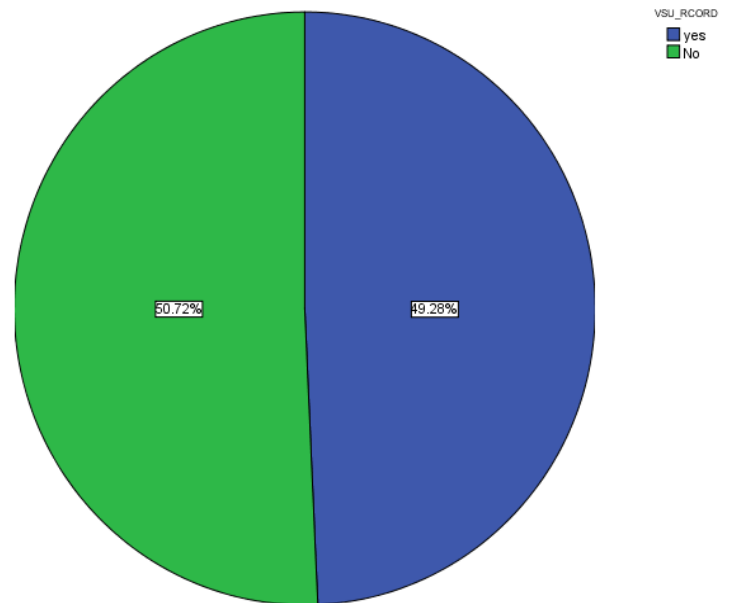


Figure 3

Figure 4 had a larger marginal rate of 73.81 percent which displayed that information was not easily obtained. Some stated that they had to personally go to a supervisor to clarify their issue or go back and forth to clarify. Others that did not have that issue were the remaining 26.19 percentile. No applications were displayed online that could have been submitted. Online application would be beneficial to the customer so as to minimize the amount of time they spend in line to get one application submitted. Customers would appreciate the easy application process from the convenience of their homes. (Figure 5). Figure 6 displayed a superior percentage of 96.98 percent who had no form of notification as to when their documents would have been ready and most had to repeatedly visit the office to track the status of their document processing. In addition, a 3.02 percent stated that their receipt had a estimated pickup date.

### Easily Obtain Information

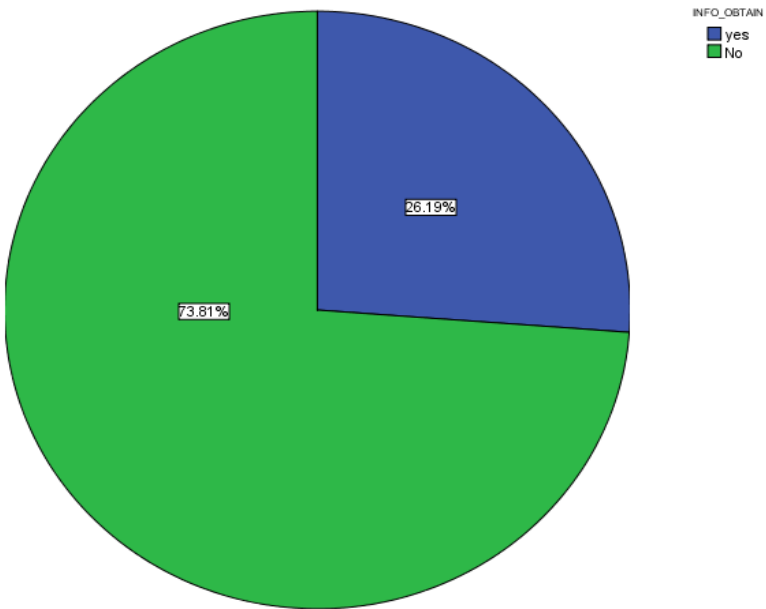


Figure 4

### Application Online

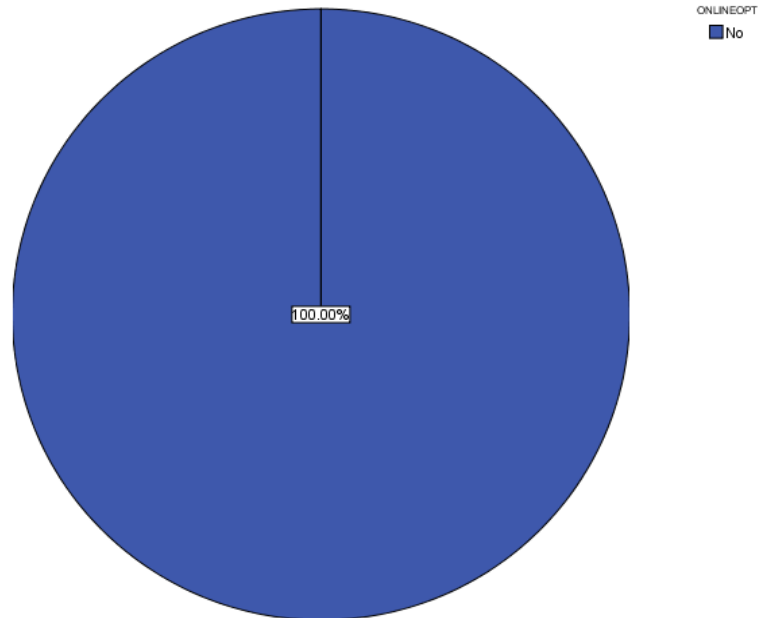


Figure 5

### Form of Notification

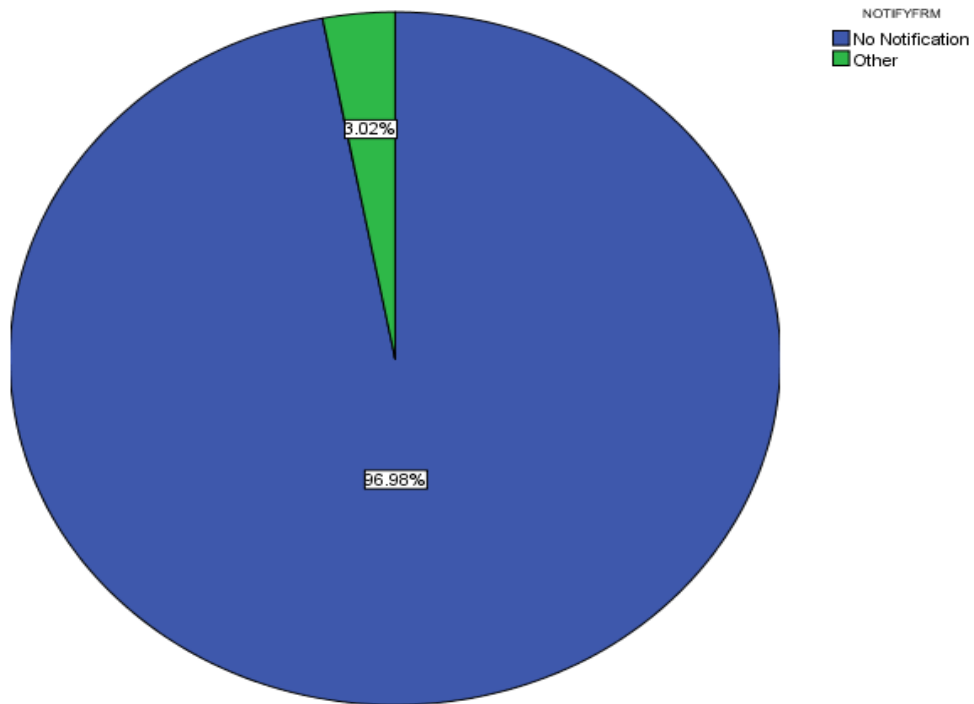


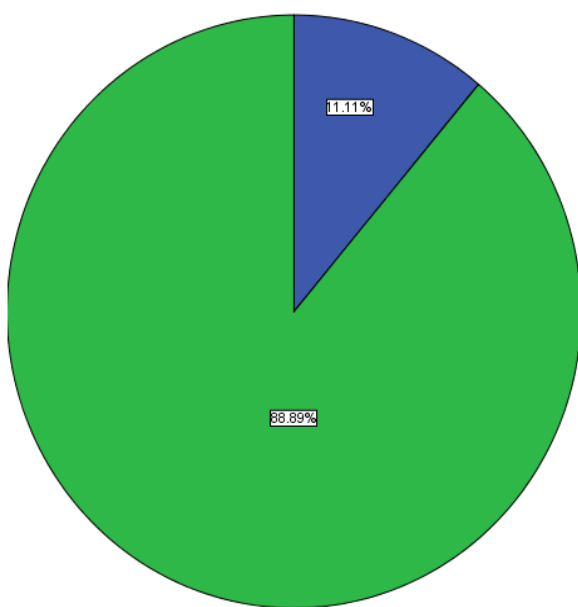
Figure 6

### System Quality

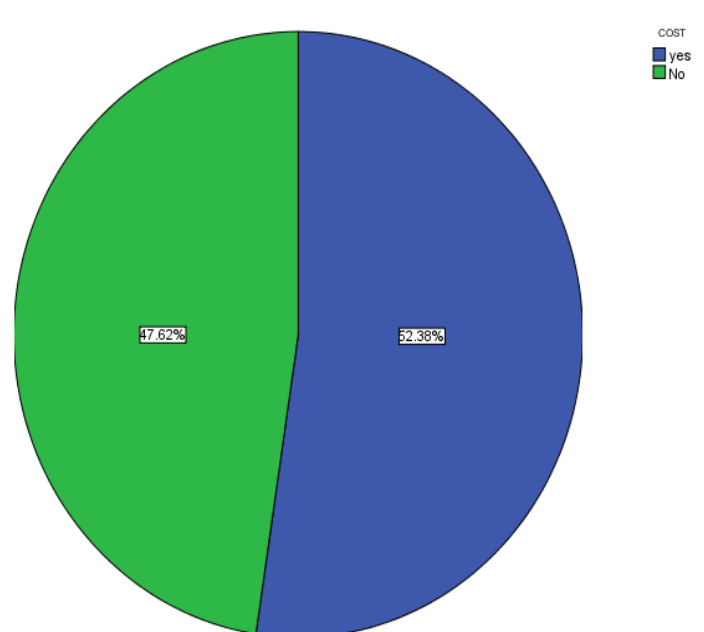
The system quality was decent for the customers. However, 88.89 percent participants were in agreement that the system was not easy to use since they believed they were being pushed around by the VSU staff. In contrast, 11.11 percent did not have any difficulties. This can be seen displayed in Figure 6. According to 52.38 percent of the participants, the process was costly for them since most had to travel out-district numerous times as, in most cases, they were asked to return at later dates to receive their documents. Notifying customers of the status of their documents would minimize this issue substantially. The system our group would like to implement could assist with the timeframe. On the other hand, 47.62 percent did not have an issue with the cost. (Figure 7.)

Table 4. System Quality		
Response	Number of Participants	Percentage
Yes	13.5	39%
No	21.5	61%

Table 4. Table Displaying the Average Responses for System Quality



Easy System  
Process Cost



Customer Satisfaction with VSU Representatives

<b>Table 5. Customer Satisfaction with VSU Representatives</b>		
<b>Response</b>	<b>Number of Participants</b>	<b>Percentage</b>
Strongly Disagree (1)	7	20%
2	6	17%
3	8	23%
4	7	20%
5	4	11%
6	2	6%
Strongly Agree (7)	1	3%
Total	35	100%

**Table 5. Table Displaying the Average Responses for Customer Satisfaction with VSU Representatives**

Investing in good customer service would improve the reputation of the Vital Statistics Unit. The participants were asked to rate VSU's service from 1 being strongly disagree or 7 being strongly agree. From the results, it was gathered that the VSU has been improving. However, in Table 6. 22.9 percent out of 100 percent thought the representatives were not trained well at their field of work. And a small amount of 14.3 percent and 5.7 percent agreed. A recommendation for the VSU would be to invest in providing proper training for staff, creating a customer-friendly atmosphere. Figure 8. displayed a 27.26 percent and a 22.86 percent of fairly satisfied participants with the professionalism showcased by the VSU. Subsequently, only a small 3.02 percent strongly agreed with representatives being professional. Table 7 displays that 22.9 percent of the participants did not feel that the representative who attended to them were tentative to their questions or concerns. While a 25.7 percent had a fair experience, leaving only one individual to strongly agreed to having a representative attend to him or her with the interest they required.

**Satisfaction of Representative**

VSU\_TRAIN Table 6

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	7	20.0	20.0	20.0
2	7	20.0	20.0	40.0
3	8	22.9	22.9	62.9
4	6	17.1	17.1	80.0
5	5	14.3	14.3	94.3
6	2	5.7	5.7	100.0
Total	35	100.0	100.0	

Table 6

**Satisfaction of Professional Standards**

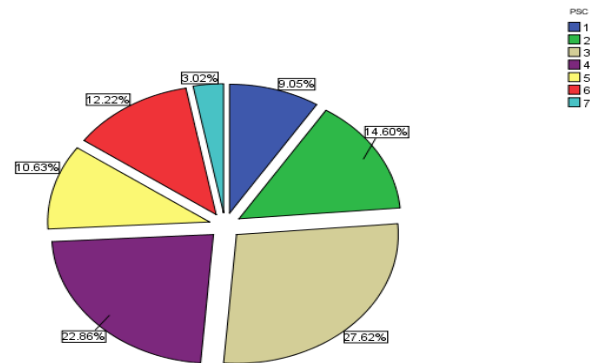


Figure 9

**Satisfaction of Representative Interest**

Table 7

REP\_SERV

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	8	22.9	22.9	22.9
2	6	17.1	17.1	40.0
3	9	25.7	25.7	65.7
4	5	14.3	14.3	80.0
5	6	17.1	17.1	97.1
6	1	2.9	2.9	100.0
Total	35	100.0	100.0	

**Overall satisfaction**

Overall most had a good involvement. An accumulated 34.29 percent and 13.97 percent were not satisfied. (Figure 10).

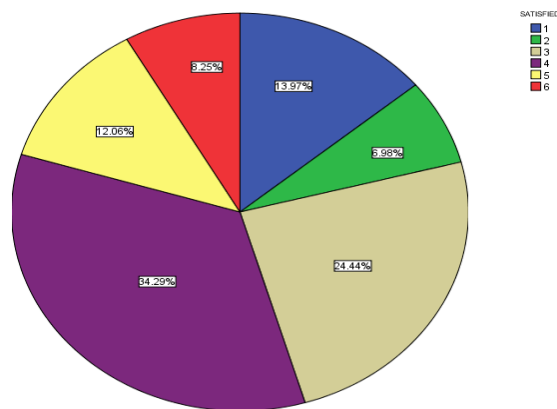


Figure 10



### Satisfaction of Documentation

Lastly, the results of satisfaction and quality of the documentation received, showcased in Table 8, shows satisfaction was rated from 1 being poor to 7 being outstanding. 3 participants stated the document quality was exceptional, while 6 were not satisfied as they had to go back to fix minor errors that inputted by the representative. Table 9 showcases a superiority in numbers; where participants were fairly satisfied with the overall documentation. However, 1 individual was not satisfied and only 4 persons were fully satisfied and had great remarks about the VSU.

### Quality of Document

Table 8 QUALITY

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	2	5.7	5.7	5.7
2	3	8.6	8.6	14.3
3	5	14.3	14.3	28.6
4	9	25.7	25.7	54.3
5	7	20.0	20.0	74.3
6	6	17.1	17.1	91.4
7	3	8.6	8.6	100.0
Total	35	100.0	100.0	

### Satisfaction of Overall Documentation

Table 9. Satisfaction with Documentation

Response	Number of Participants	Percentage
Strongly Disagree (1)	1	3%
2	3	9%
3	6	17%
4	8	23%
5	7	20%
6	6	17%
Strongly Agree (7)	4	11%
Total	35	100%

Table 9. Table Displaying the Average Responses for Satisfaction with Documentation

## Conclusion

The Vital Statistic Unit of Belize is the only body either governmental or statutory that can legally provide the populus with access to personal documentation of individuals such as Birth Certificate, Death Certificate, Marriage Certificate and Deed Polls to name a few. Even after many attempts over the years to improve service delivery to customers - in 1999, 2007 and recently as 2016, the unit still sorely lacking in this area. Via analysis, the majority (88.89%) of individuals still states that the system in place is not user friendly even after all these iterations by the unit.

As the data of this small sample size shows within this report, birth certificates accounts for 68.6 percent of requested documentation while marriage certificates finished second at 22.9 percent. The VSU does not have a website and they do not provide online services, so individuals need to visit in office. Roughly 75 percent of individuals stated that they do not get their documentations in a timely manner, but additionally for all the documents requested and paid for by customers, an abysmal 49.28 percent of the documentation received actually had correct and accurate information. If the percentage of accuracy on these documents was a grade, then the VSU is clearly failing and with only two office location of Belmopan and Belize City, this could be greatly inconvenient for those out district who would travel long distances just to receive incorrect data.

In conclusion, in the short term, what the VSU could do to improve their service is firstly, properly train staff on the full transition from paper based system to fully ICT based system which will help in the eventual demise of the perceived corruption within the unit. Secondly, cross check data with the Social Security Board to validate date of birth and correct spelling of names for individuals to make sure they coincide. Thirdly, they could provide online services for birth certificates for starters and provide individuals with emails with an estimated time of pick up. In the long term, the unit could place their remaining services online like marriage and death certificates and also looking on expanding the unit to more than just two offices countrywide.

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## Appendix 1

### Questionnaire - Vital Statistics Customer Experiences

#### Purpose

As part of our Management Information Systems course at the University of Belize, our group is conducting a survey for a research paper which focuses on your experience at the Vital Statistical Office and the quality of service received, the effectiveness of the system in place. This survey should take approximately 10 minutes to complete. Please note that the inclusion of your name is not required so be assured that all answers you provide will be kept in the strictest confidentiality.

#### Instructions

Please answer the questions in relation your experience at the Vital Statistics Office. Thank you for taking time to assist in completing this survey.

1. Background Information	Answers:
Please indicate your age range:	18 to 25 <input type="checkbox"/> 26 to 34 <input type="checkbox"/> 35 to 45 <input type="checkbox"/> 46 to 55 <input type="checkbox"/> Older than 56 <input type="checkbox"/>
Please indicate your gender:	Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/>
Please indicate highest education level attained:	PhD <input type="checkbox"/> Masters <input type="checkbox"/> Bachelors <input type="checkbox"/> Associates <input type="checkbox"/> High School <input type="checkbox"/> Primary School <input type="checkbox"/>
Please indicate what type of documentation you requested:	Birth Certificate <input type="checkbox"/> Death Certificate <input type="checkbox"/> Marriage Certificate <input type="checkbox"/> Deed Poll <input type="checkbox"/>
What type of service did you apply for?	One Week <input type="checkbox"/> One day <input type="checkbox"/> Express <input type="checkbox"/>
2. Information Quality	Answers:
Was your application processed on time?	Yes <input type="checkbox"/> No <input type="checkbox"/>

Evaluating the Success of VSU Customer Service

Does VSU keep their records accurately?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is information easily obtainable by the customers?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Did you have the option to apply online?	Yes <input type="checkbox"/> No <input type="checkbox"/>
What form of notification did you received when your document was ready? <i>(Please select all that applies)</i>	Telephone call <input type="checkbox"/> Text message <input type="checkbox"/> Email <input type="checkbox"/> No notification <input type="checkbox"/> Other _____

3. System Quality	Answers:
Are the application forms user friendly?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is the system easy to use?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Are the operating hours convenient to you as a customer?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Do you find the process costly?	Yes <input type="checkbox"/> No <input type="checkbox"/>

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

4. Customer Satisfaction with VSU Representatives	Disagree -----Agree
VSU service representatives are well trained.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
VSU service representatives adhere to professional standards of conduct.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
VSU service representatives act in my best interest.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
Overall, I am satisfied with the VSU service representatives.	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>

**Evaluate your personal satisfaction with the documentation provided by VSU on following fields by rating them from (1) very poor to (7) outstanding.**

5. Satisfaction with Documentation:	Very Poor -----Outstanding
Quality of Documentation	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
Accuracy of Documentation	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
Appropriateness of the documentation	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>
Rate overall documentation provided	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>

Please return this survey to the person who gave you the form.

Thank you for your participation.

**Appendix 2**

Interview Questions prepared for VSU Staff

1. Name
2. Job title
3. Job description
4. How long have been working with the VSU?
5. What is the workload per day
6. Meeting deadlines
7. What happens when deadlines are not met
8. What is your proficiency with technology?
9. Is there an IS in place?
10. If yes, what type of IS is in place?
11. Is the system easy to use?
12. Do you like the system? If not, why?
13. What was the transition between the old and the new system?
14. Was there any improvement? If yes, what were the improvements?
15. Do you think customers are satisfied with the services of the new system?