# Evaluating the Success of the Social Security Board's Online Portal

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### Abstract

This research looks at how effective the Online Portal at the Social Security Board of Belize is to its employees. The Social Security Board's Online Portal offers a wide range of services to its user with a fast and easy signup. The system allows for 24 hours access to its users, and it is said to save time especially for business owners with organization holding great amounts of workers. The SSB also advertises lack of need to stand in a line because payments and other transactions can now be accessed online. Aside from assessing the effectiveness of the Online System, this research also looks at how efficient the system is, and how satisfied the users of the system are.

**Keywords**: Social Security Board (SSB), Management Information System, Online Contribution Portal, Fin15A, Effective, Efficient

# Introduction

Information Systems is a vital part of many businesses in this modern era we are living. Properly managing data into systems that can be effective and efficient is a plus. Social Security Board currently uses an Online Portal which has been of great usage to employers. This network application allows registered companies the ability to submit their monthly contributions statement to Social Security Board and facilitates the online payment through participating financial institutions. This platform is essential to both parties since the process is made easier, fast and reliable.

# Background

The history of modern management information systems matches the development of computer hardware and software. The history also parallels the devolution of management control from centralization to decentralization. Currently, all computer-based systems that collect, process, store and communicate that data as information are commonly defined as management information systems or MIS (Boykin, 2017). This advancement has also helped many firms in Belize. One of them is the Social Security Board (SSB) which was established on June 1, 1981. One of the missions of SSB is to provide a sustainable social insurance to workers and protection to its contributors against economic insecurity by paying cash benefits to workers to replace wages for the birth of a child, inability to work due to sickness or an injury suffered on the job, at retirement age, or for the death of a spouse or child. Moreover, SSB is a Statutory Body that falls under the Minister of Finance, and is headed by a Board of Directors comprised of nine members and is responsible for running the scheme. These members include 5 persons representing the Government of Belize, 2 persons representing Employers and 2 persons representing Employees (Social Security Board, 2017). Presently, this firm has an information system "Online Contribution Portal" that provides an electronic version of form Fin15A used by businesses for recording the statement of their monthly contributions. This is the system that the investigators will research and examine for findings.

# Literature Review

An initial review of the literature on the topic of online contribution portals and their development methodologies showed that while there are many publications available, only a small percentage of them were written by academic researchers. Moreover, there are few articles that provide information on the expansion of online portals, particularly in those designed where contributions are received. Many papers and articles talk about mainly about the general characteristics and features, new improvements and so forth, but many of them fail to provide information on the development method that can be adopted to build an effective and efficient one.

Information system is composed of formalized procedures that can provide all of the relevant appropriate information at all levels to all of the managers is called Management Information System (MIS). This system uses all of the internal and external resources to provide data and information to the end users which enable them to take timely decisions that are effective from the directing, planning and controlling point of view. As a whole, this is an efficient system that can provide all of the required information to the management at all levels at appropriate times. Furthermore, MIS is basically an affective combination of human and technology resources that results in data storage, collection, and communication, data retrieval and usage. In managerial operations and business planning, these MIS systems play a vital role in business success (DeLone, 2003; Weighart, 2017).

The Social Security Board's Online Portal offers a wide range of services to its user with a fast and easy signup. The system allows for 24 hours access to its users, and it is said to save time especially for business owners with organization holding great amounts of workers. The SSB also advertises lack of need to stand in a line because payments and other transactions can now be accessed online. (Social Security Board, 2018; Tas Belize, 2017).

Furthermore, the researcher who has conducted this Online Contribution Portal is the Belize Social Security Board's Manager. The research was based on how it could impact the entire payment of contributions process by improving the timely processing of contribution payments and submission of statements. The theoretical structure used is Adaptive Structuration Theory; this theory is formulated by DeSanctis and Poole to study the interaction of groups and organizations with information technology (Greenbaum, 2017). Adaptive structuration theory basically explains the use and effects of technologies in organizations. Therefore, at the Belize Social Security Board they are slowly changing from its traditional way of receiving and making payments manually and holding high hopes that this new system will change the organization for the better. The Belize Social Security Board is now breaking into the technology era by introducing an online contribution portal which is now being used for employers to make payments that aims to make the process easy and less difficult for businesses. As a matter of fact, this online contribution portal makes life easier for customers because they can be on vacation in another country and they can pay their contributions, like for SSB (Selby, 2012; Hung-Pin Shih, 2008).

### Methodology

The researchers used a quantitative approached to gather numeric, relative and contextual information from the target population. The researchers used questionnaires to measure the effectiveness and efficiency of the Social Security Online Portal Contribution for internal users which are the employees of Social Security. Questionnaires were used to measure the overall success that Social Security's Online Contribution Portal has had with its employees. A total of thirty questionnaires were distributed to Social Security's staff that directly interacts with the online contribution portal. After gathering the information The DeLone and McLean model will be used to evaluate the online contribution portal.

#### Setting:

The researchers went to the Belmopan Social Security Headquarters and provide the SSB staff a hard copy of the questionnaires. This was done in order to ensure that the questionnaires were done in a timely and accurately fashion. A total of thirty questionnaires were handed out to the employees of SSB.

#### **Research Participants:**

There were only one participant in this research project and it's the internal users. The internal users were chosen from the Social Security Headquarters in Belmopan, a total of thirty internal users were chosen since they have direct contact with the online portal.

#### **Research Design:**

Firstly, the researchers went to Social Security Board headquarters in Belmopan to administer the questionnaires to the internal users and stressed to the Social Security Staff that the information gathered would be kept confidential and will only be used for the research. An employee that works at the headquarters assisted with issuing of the questionnaires. This was very helpful since it made it easier for the staff to answer the questionnaires. The employee acquired other staff members in a quantitative method to be a part of the survey. The questionnaires were gathered to identify the usefulness of the online portal. All questions were close ended to avoid unanswered questions. Table 1. The measurement items for questionnaire.

Construct	Survey Questions	Source
	IQ1: The Information System provides information that is exactly what you need	
	IQ2: The Information System provides information you need at the right time	
	IQ3: The Information System provide information that is relevant to your job	
	IQ4: The Information System provides sufficient information	
Information & System Quality	IQ5: The Information System provides information that is easy to understand	Bailey and Person (1983)
System Quanty	IQ6: The Information System provides up-to-date Information	Change et al., (2009)
System Quality	SQ1: The Information System is easy to use.	
	SQ2: The Information System is user- friendly.	
	SQ3: The Information System provides high-speed information access.	
	SQ4: The Information System provides interactive features between users and system.	
Complementary Technology Quality	CTQ1: The software on the device (desktop computer, laptop, mobile device) used to access the Information system is adequate.	
	CTQ2: The device hardware (desktop computer, laptop, mobile device) used to access the Information system is adequate.	

		1
	CTQ3: The speed of the Internet	
	connection used to access the	
	Information system is adequate.	
	CTQ4: The reliability of the Internet	
	-	
	connection used to access the	
	Information system is adequate.	
Computer Self-	I COULD COMPLETE THE JOB USING	
-	THE INFORMATION SYSTEM:	
Efficacy		
Measure	CEM1: If there was no one around to	
Weasure	tell me what to do as I go.	
	CEM2: If I had never used an	
	information system like it before.	
	information system like it before.	
	CEM3: If I had only the information	
	system manuals for reference.	
	CEM4: If I had seen someone else	
	using the information system before	
	trying it myself.	
	u ying it mysen.	
	CEM5: If I could call someone for help	
	if I got stuck.	
	CEM6: If someone else had helped me	
	get started.	
	CEM7: If I had a lot of time to complete	
	CEM7: If I had a lot of time to complete	
	the job for which the information	
	system was provided.	
	CEM8: If I had just the built-in help	
	facility for assistance.	
Sorvice Quality	SQ1: The support staff keep the	
Service Quality	Information system software up to date.	
	information system software up to date.	
	SQ2: When users have a problem, the	
	Information system support staff show a	
	sincere interest in solving it.	
	SQ3: The Information system support	
	staff respond promptly when users have	
	a problem.	

	SQ4: The Information system support	
	staff tell users exactly when services	
	will be performed.	
	US 1: Most of the users bring a positive	
	attitude or evaluation towards the	
	Information System function.	
User Satisfaction	US 2: You think that the perceived utility about the Information System is high.	Seddon and Yip (1992)
	US 3: The Information System has met your expectations.	
	US 4: You are satisfied with the	
	Information System.	
	U 1: The frequency of use with the	
	Information system is high.	
	U 2: You Depend upon the Information	
	System	
	U 3: I was able to complete a task using the information even if there was no	
	one around to tell me what to do as I go.	Balaban et al., (2013)
Use	U 4: I have the knowledge necessary to use the Information System	Rai et al., (2002)
	PB1: The Information System helps you	
	improve your job performance.	
Perceived Net	PB2: The Information System helps the	
Benefit	organization save cost.	Alshibly,(2011);
	PB3: The Information System helps the	Tansley et al, (2001)
	organization achieve its goal.	
	PB4: Using The Information System	
	improves the assessment and training	
	PB5: Using The Information System in	
	job increases my productivity.	
	DB6 Quarall using the Information	
	PB6: Overall, using the Information System enhances recruitment and	
	performance management.	
	performance management.	1

# Data Analysis & Results

In this section, we look at the findings of the research conducted at the SSB. There was a total of thirty employees that were asked to fill out the questionnaire.

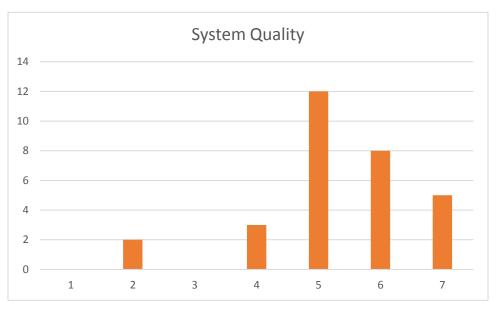


Fig 1: Bar Graph Showing Average System Quality Ratings

Fig 1 shows that many of the users somewhat agree that the System Quality of the SSB Online Portal is okay. Two Respondents responded with a lower rating, and 3 respondents rated the system a little below average.

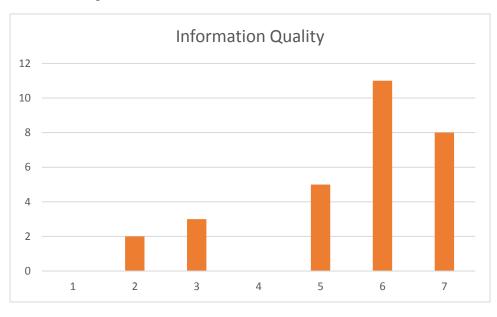


Fig 2: Bar Graph Showing Average Information Quality Ratings

Most of the users of this Online Portal agree that the Quality of the Information accessed is very good. Few rated it the information quality as poor, but eight respondents were very satisfied with the quality.



Fig 3: Bar Graph Showing Average Service Quality Ratings

As for Service Quality, Majority of the users are satisfied with the Service Quality of the SSB's System. On the other hand, four respondents rated the service quality low, and one person rated the service average.

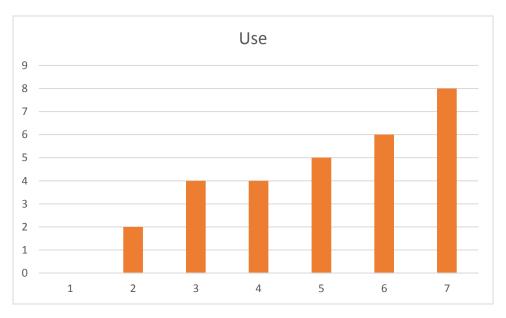


Fig 4: Bar Graph Showing Average System Use Ratings

The use of the system was mostly rated excellent, but there were also numerous ratings for different degrees of satisfaction. For example four people gave the system rating a three, and four. Two people gave the system use rating a two.

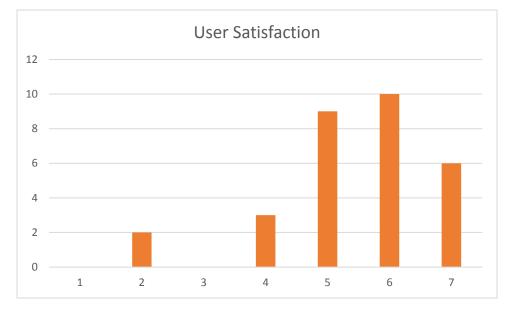
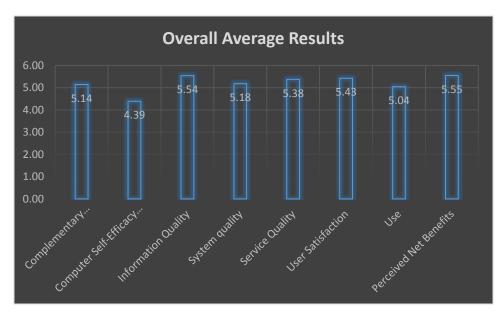


Fig 5: Bar Graph Showing Average User Satisfaction Ratings

Most Importantly, the User Satisfaction of the System. Most of the users of the Online Portal are satisfied with the system overall. Only two respondents were dissatisfied with the system and its features.



#### Fig 6: Bar Graph Showing Average Ratings Overall

Fig 6 shows the average rating for each one of the components of the Online Portal at the SSB. Overall, the system falls in the average range. Based on these results it is evident that there is a

lot of room for improvement especially in the use, and the System Quality areas. Perhaps some training in the self-efficacy department can improve ratings.

# Limitations

One Limitation that may have arose in this research process was that all the employees were not present at work the day the questionnaire was given out. Another limitation to this is that the questionnaire was only handed out at one branch, and the SSB has several other branches in the country of Belize. Lastly, this study was only conducted internally meaning that only employees of the SSB filled out the questionnaire and no other external users.

# Conclusion

Based on these findings, it is safe to say, that the users of the Online Portal are satisfied. This means that the system provided up to date information to their users as they needed it, and at the right time. This also means that the system is easy to use, and the speed of the system is great. This is all beneficial to the organization since the system now saves costs within the organization, increases employee job performance, as well as increasing employee job productivity. This study, however, was only limited to one branch of the SSB. Perhaps further research in this area can help to improve the SSB system countrywide.

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### Appendix

#### Questionnaire - "Benefits of Social Security Board's Online Portal"

#### <u>Purpose</u>

This questionnaire asks for information about the effects of Social Security Board's Online Portal which allows employer to pay their employees' contributions online.

Please answer the questions in relation to your company. Your individual responses to the questionnaire will be strictly confidential.

#### **Instructions**

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

1. Background Information	Answers:
Please enter amount of computer experience you have in years:	
Please indicate the number of years you have been working for this company:	1 2 3 4 5 6 7 8 9 10
Please indicate your gender:	Male 🔲 Female 🗌
Which of the following best describes your position in your company?	Manager 🗌 Forman/Supervisor 🗌 Non-Manager 🗌

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

2. Information Quality	DisagreeAgree
The Information System provides information that is exactly what you need	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System provides information you need at the right time	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System provide information that is relevant to your job	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System provides sufficient information	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System provides information that is easy to understand	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System provides up-to-date Information	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
3. System Quality	
The Information System is easy to use.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System is user-friendly.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System provides high-speed information access.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌

5. Computer Self-Efficacy Measure	DisagreeAgree

I COULD COMPLETE THE JOB USING THE INFORMATION SYSTEM:

If there was no one around to tell me what to do as I go.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
If head onvarious system tive feating between	
lusteract not system manuals for reference.	1 0 2 0 3 0 4 0 5 0 6 0 7 0 - 2 - 3 - 4 - 5 - 6 - 7
If I had seen someone else using the information system before trying it myself.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
If I could call someone for help if I got stuck.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
If someone else had helped me get started.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
If I had a lot of time to complete the job for which the information system was provided.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
If I had just the built-in help facility for assistance.	

6. Service Quality	PoorOutstanding
The support staff keep the Information system software up to date.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
When users have a problem, the Information system support staff show a sincere interest in solving it.	1 🗌 2 🗌 3 🗌 4 🔲 5 🗌 6 🔲 7 🗌
The Information system support staff respond promptly when users have a problem.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🔲 7 🗌
The Information system support staff tell users exactly when services will be performed.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌

7. User Satisfaction	PoorOutstanding
Most of the users bring a positive attitude or evaluation towards the Information System function.	1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _
You think that the perceived utility about the Information System is high.	1 🗌 2 🗌 3 🗌 4 🔲 5 🗌 6 🔲 7 🗌
The Information System has met your expectations.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
You are satisfied with the Information System.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌

# Assess your user satisfaction on the following items by rating them from (1) very poor to (7) outstanding.

8. Use	DisagreeAgree
The frequency of use with the Information system is high	1 🗌 2 🗌 3 🗌 4 🔲 5 🗌 6 🔲 7 🗌
You Depend upon the Information System	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
I was able to complete a task using the information even if there was no one around to tell me what to do as I go.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
I have the knowledge necessary to use the Information System.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌

9. Perceived Net Benefits	DisagreeAgree
The Information System helps you improve your job performance.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System helps the organization save cost.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
The Information System helps the organization achieve its goal.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
Using The Information System improves the assessment and training	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
Using The Information System in job increases my productivity.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌
Overall, using the Information System enhances recruitment and performance management.	1 🗌 2 🗌 3 🗌 4 🗌 5 🗌 6 🗌 7 🗌

Thank you for your participation.

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