

An Evaluation of the Customer Information and Billing System for Belize Electricity Limited

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ABSTRACT

Information Systems are currently revolutionizing the way businesses are looking at their industry. Having a new perspective on their market, it allows companies to be innovative and allow them to manage their operations more effectively. This is vital as the technology era is moving at an exponential rate. This survey is being done to analyze the effectiveness of the CIS Infinity Information System in the application of the country of Belize, the only electrical utility company in existence. Given that it is a monopoly, this is vital to ensure that the citizens of Belize are being offered the best service. This research uses the components of the DeLone and McLean model of information system success model and it expands to include more components, namely: System Quality, Information Quality, Complementary Technology Quality, Computer Self Efficacy, Service Quality, user Satisfaction and Perceived Net Benefits.

1.0 Introduction

Belize Electricity Limited (BEL) is the primary distributor of electricity in Belize, serving a customer base of approximately 94,450 accounts. BEL's national electricity grid connects all major municipalities, except for Caye Caulker. The grid is primarily supplied by local Independent Power Producers utilizing hydroelectricity, biomass, petroleum and solar energy sources, and is secured and stabilized by interconnection with Mexico. BEL also operates a gas turbine facility as a standby plant for energy security and reliability. As its mission is to provide reliable electricity at the lowest sustainable costs, BEL has continuously strived to expand their ability in extending electricity availability to the wider net of Belizean consumers. In 2017 BEL expanded their electricity grid availability to 300 homes in the rural are of the Cayo District.

This continous growth of electrical ability, has allowed BEL to keep in line with their mission of stimulating national development and improving the quality of life in Belize. BEL has compromised itself to ensuring that 98% if the Belizean community has access to electricity by 2020. As their vision continues to be an ever reaching target, "A model of excellence", BEL has continuously engaged the community through several outreach programs and initiatives. These include: Christmas hamper program, christmas breakfast drive, Golden Citizens pay program, Red Cross Soup kitchen, Belize Hospice Palliative Care Foundation, Social Security Board's Ride Across Belize event, and Dara's Ride for Hunger, to provide funding for underprivileged children and has even engaged in building houses for the underprivileged.

BEL was previously managed by the Canadian owned FORTIS, however in 2011 the Government of Belize sought to nationalize the company. In 2015, the government settled with FORTIS for the take over of the company then nationalizing it. Currently, the Government of Belize (GOB) has direct ownership of 32.6% interest in the Company, whilst the Social Security Board (SSB) owns 31.2% resulting in public sector interest of 63.8%. Fortis Cayman Inc. owns approximately 33.3% and over 1,500 small shareholders own the remaining 2.9% interest in ordinary shares.

2.0 Literature Review

In this study, the use and effectiveness of the program is analyzed with a detailed explanation of what the program entails. Through the explanation of what CIS is, a better understanding of the different uses employees at BEL have for the system will be outlined and understood. The survey conducted on BEL's employees are all feedback from the listed user friendly sources of CIS. The IS success model created by DeLone and McLean (2003) was based on the survey data.

CIS – Customer Information System is a complete Customer Relationship Management (CRM) Application that allows you to easily customize the database dynamically with user-defined fields allowing the system to fit the business needs rather than forcing the business to fit the software.

2.1 Customer Database

CIS is also considered an open system that allows for the business to manage the company's whole communication with its customers. Customers can be end users or distribution net. The Customer System is able to collect any

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information about the customers and is also very effective as a means of communication channel via web, email, and SMS. CIS collects customers' identities and profiles the necessary information that needs to be used internally. CIS Customer Database is based on four behaviors that are associated with developing knowledge systems: 1 generation (get or acquire); 2 memory (store); 3 dissemination (move); and 4 interpretation (use) (Zahay and Griffin, 2002, 2003, 2004). Employees follow these behaviors as a means of gaining customer knowledge. CIS with the gather and use of the data as to be followed under the four behaviors guarantee for end users to develop the knowledge systems.

2.2 Meter Management

The system also assists with meter management by maintaining accurate meter data that is essential to the profiling of customers as well as for the use of billing. Meter data can be organized through this means and a schedule can be programmed for readings. The system also has the feature to have multiple meters under one customer account making meter estimation and reading an ease. Additionally, the system also allows for handheld devices to collect meter readings and transfer the data whenever, wherever and however the company would like. Through this medium real time tracking is done and delinquent customers can be tracked. This helps for quick response to delinquency and assigning for cut off and maintenance to be done immediately. Field staff has an advantage of receiving immediate updates and assignments via CIS meter management.

2.3 Billing Services

CIS runs a billing cycle which is useful for both customers and the company. CIS retains a history of customers' billings and provides a quick feedback of customers billing information when requested. The billing system also assists the company to support special arrangements made with customers, running a budget and monitoring various billings under one account. CIS automates all information for pertaining whatever information is required from it. CIS can add accounts, create invoices and calculate payments.

2.4 Open Access

Open Access in CIS is basically providing customers with an e-bill service & online payment option. The benefits of CIS is also for customers but it is seen that the main focus of benefits through the advances of this software is on the company itself. A key reason why these advances in IT have spread so quickly is that they have progressively reduced the unit cost of computing power or the transmission of a message (Shah, 2013). The system cuts costs for the company by providing customers with real time access to their accounts, pay their bills electronically, report outages and request services online via any mobile device. This helps from medium size to large sized companies reduce or eliminate their paper documents by going electronic (Naguib, 2018). Advances to Information Technology has also reached the hands of customers whom 4.388 billion people which is 57% of the world's population have access to internet and 5.112 billion (67%) having a mobile device definitely defines how technology has advanced worldwide (Digital 2019 Belize – January 2019 Vol. 1). Customers presently opt for mobile access rather than having to make long lines or having printed receipts that pile into files at their homes. E-billing and online payments can be accessed at customers' fingertips by simply enrolling into BEL's website and creating their online account in order to access all the e-services. BEL in this case, then has less files and paperwork as well by having all customer billings sent via CIS online services to customers. For customers with multiple accounts, BEL distributes all accounts information under one platform. Collection of payments can also be collected via the web from customers by means of online banking and debit/credit card eliminating payment processing time for the company and its customers.

2.5 Payment Processing

BEL's CIS system can accept cash, debit/credit card and electronic payment as mentioned under the open access feature of CIS. Payment processing is easier and quick for employees to process by quick imprints of electronic receipts. It also provides a quicker form to update payment balances for customers on real time. For financial &

budgeting purpose, CIS creates real time billing and journal entries that allows the general ledger to always stay in balance.

2.6 Reports

CIS gives management the advantage to review and print reports based on data gathered and managed on a daily basis. End users can modify the reports based on their specific needs. The program has a Discovered Tool that allows the company to retrieve a business view of the data in order for management to solve business problems that may need attention.

3.0 Methodology

Research Model and Hypothesis

The CIS Infinity System study consisted of the staff members of The Belize Electricity Limited using this system specifically for customer service purposes, creating the CIS Infinity System as a reliable source in making the job more effective. The revised IS success model created by DeLone and McLean (2003) was modified to the measurement tasks of this CIS Infinity System framework. Thereafter, this research uses the following parameters: information quality, system quality, service quality, use, user satisfaction, complimentary technology quality, computer self-efficacy and perceived net benefit as CIS Infinity’s success constructs.

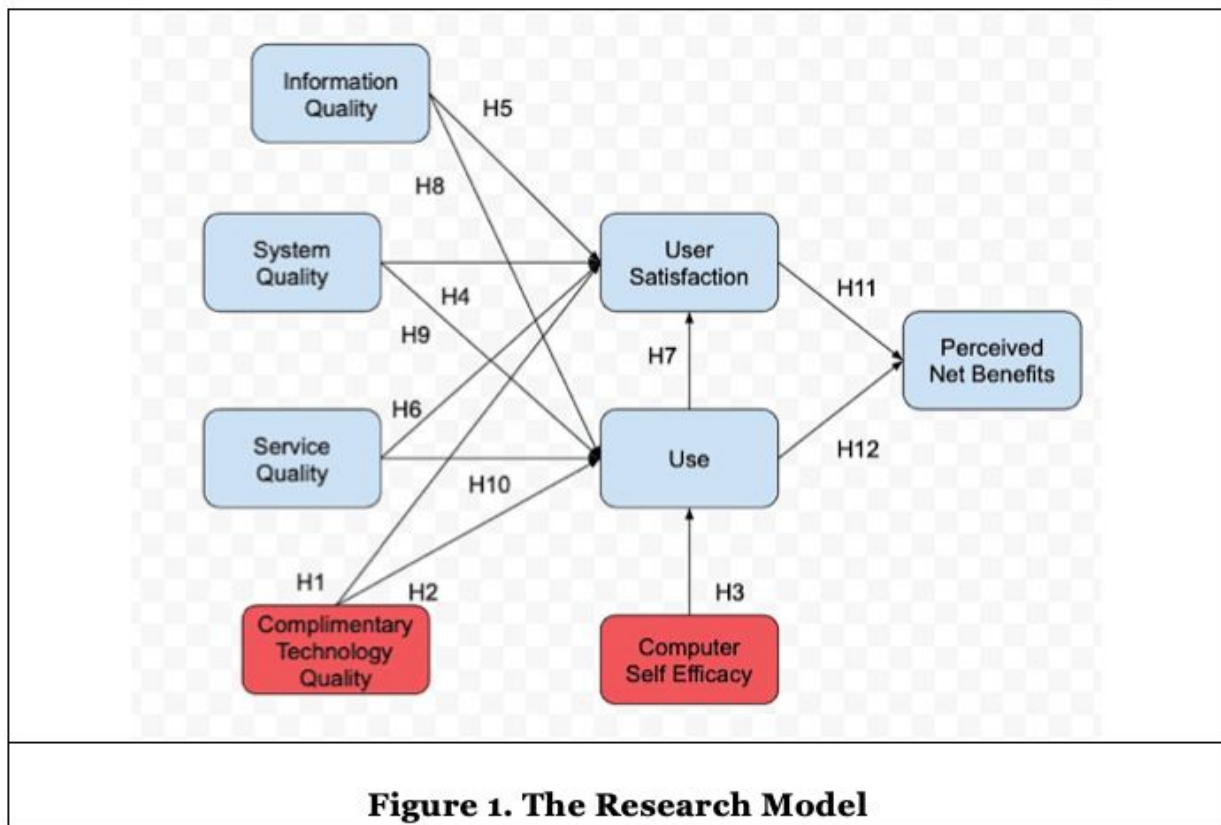


Figure 1. The Research Model

Figure 1. The Research Model

This is a hypothesized relationship between the CIS Infinity System and how successful it is using the success dimension; it will only be based on theoretical work reported by DeLone and McLean (2003). This phenomenal masterpiece conveyed by D&M established the theorized relationship between the CIS Infinity System and the IS success constructs. The following twelve hypotheses were verified:

H1. Complementary technology quality will positively impact user satisfaction.

H2. Complementary technology quality will positively impact system use.

H3. Computer self-efficacy will positively impact system use.

H4. System quality will positively impact user satisfaction.

H5. Information quality will positively impact user satisfaction.

H6. Service quality will positively impact user satisfaction.

H7. Use will positively impact user satisfaction.

H8. Information quality will positively impact use.

H9. System quality will positively impact use.

H10. Service quality will positively impact use.

H11. User satisfaction will positively impact perceived net benefit.

H12. Use will positively impact perceived net benefit.

Description of Participants

The participants are employees of The Belize Electricity Limited, the company itself has approximately a 325 employees countrywide. However, research data was collected from employees that work in the Customer Service Department.

3.1 Construct measurement

In order to guarantee that adequate and precise content was produced for the quantitative data collection aspect of this research, questions were based on the popular and realistic IS success model created by DeLone and McLean (2003).

First, the Information Quality construct was tabulated by a six-item scale from Bailey and Pearson (1983), whereby changes were made to adequately suit the substructure of the CIS Infinity System, this instrument is with no doubt acknowledged, as it has been rated with the quality of being trustworthy and reliable by multiple researchers, thus becoming the most used instrument in the IS research. Secondly, for the System Quality A four –item scale was incorporated and refined from instruments used by Alshibly (2011). Then, The Complementary technology quality was measured using a four-item measure. The Computer Self-Efficacy Measure construct consists of a ten-item scale. Complimentary Technology Quality with only a two-item scale. Service quality construct was measured using a four-item scale

applied and distilled from instruments operated by Chang et al (2009). User Satisfaction with a four-item measure scale, which seeks to see how satisfactory of easy to deal with is the CIS Infinity System by the employees at BEL (Doll and Torkzadeh, 1988). Use construct was evaluated by a four-item measure edited from previous findings (Balaban et al., 2013; Rai et al., 2002). The CIS Infinity Systems perceived benefits defined as a firm’s objectives for using the CIS Infinity System and determine if specific set goals were met. These cover how the system helps job productivity, improve company cost and efficiency. This was engaged by a six-item scale (Alshibly, 2011; Tansley et al, 2001). All the above mentioned items were measured using a 7- point Likert Scale with anchors ranging from strongly agree (7) to strongly disagree (1).

After the measurement variables were created, the validity of these variables was tested by a Group of MIS Students who reviewed each question to determine if the questionnaire would be understood correctly, and then this was forwarded to a lecturer for approval. Table 1 presents the research constructs and related survey items used for measurement of each of these constructs.

Table 1 measurement items for questionnaire

Construct	Survey questions
Information quality	IQ1: The CIS Infinity system provides information that is exactly what you need IQ2: The CIS Infinity system provides information you need at the right time IQ3: The CIS Infinity system provide information that is relevant to your job IQ4: The CIS Infinity system provides sufficient information IQ5: The CIS Infinity system provides information that is easy to understand IQ6: The CIS Infinity system provides up-to-date Information
System quality	SQ1: The CIS Infinity system is easy to use. SQ2: The CIS Infinity system is user-friendly. SQ3: The CIS Infinity system provides high-speed information access. SQ4: The CIS Infinity 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 CIS Infinity is adequate. CTQ2: The device hardware (desktop computer, laptop, mobile device) used to access the CIS Infinity is adequate. CTQ3: The speed of the Internet connection used to access the CIS Infinity is adequate. CTQ4: The reliability of the Internet connection used to access the CIS Infinity is adequate.
Computer self-efficacy measure	CSE-1 if there was no one around to tell me what to do as I go. CSE-2 if I had never used an information system like it before. CSE-3 if I had only the information system manuals for reference. CSE-4 if I had seen someone else using the information system before trying it myself. CSE-5 if I could call someone for help if I got stuck. CSE-6 if someone else had helped me get started.

	<p>CSE-7 if I had a lot of time to complete the job for which the information system was provided.</p> <p>CSE-8 if I had just the built-in help facility for assistance.</p> <p>CSE-9 if someone showed me how to do it first.</p> <p>CSE-IO.... if I had used similar information systems before this one to do the same job.</p>
Service quality	<p>SV1: The support staff keep the CIS Infinity system software up to date.</p> <p>SV2: When users have a problem, the CIS Infinity system support staff show a sincere interest in solving it.</p> <p>SV3: The CIS Infinity system support staff respond promptly when users have a problem.</p> <p>SV4: The CIS Infinity support staff tell users exactly when services will be performed.</p>
User satisfaction	<p>US1: Most of the users believed that the CIS Infinity system is useful</p> <p>US2: You think that the CIS Infinity system is useful</p> <p>US3: The CIS Infinity System has met your expectations.</p> <p>US4: You are satisfied with the CIS Infinity System system.</p>
Use	<p>U1: The frequency of use with the CIS Infinity System is high.</p> <p>U2: You depend upon the CIS Infinity System.</p> <p>U3: I was able to complete a task using the CIS Infinity System even if there was no one around to tell me what to do as I go.</p> <p>U4: I have the knowledge necessary to use the CIS Infinity System.</p>
Perceived net benefits	<p>NB1: The CIS Infinity System helps you improve your job performance.</p> <p>NB2: The CIS Infinity System helps the organization save cost.</p> <p>NB3: The CIS Infinity System helps the organization achieve its goal.</p> <p>NB4: Using The CIS Infinity System improves the assessment and training</p> <p>NB5: Using The CIS Infinity System in job increases my productivity.</p> <p>NB6: Overall, using the CIS Infinity System enhances recruitment and performance management.</p>

3.2 Sampling and data collection

The goal for this study was to distribute and collect minimum of 30 questionnaires, however, the department Customer Service Department at The Belize Electricity Limited which is the department that deals directly with this system consist of 20 employees only. Out of the 20 questionnaires distributed to Customer Service employees, 20 usable questionnaires successfully completed and were returned, which lead to a response rate of 100 percent, which is excellent. The respondents' characteristics is presented in Table 2. Female participants represented higher percentage of the completed sample (approximately 75%) compared to male participants (approximately 25%). 35% of the participants were aged over 35 to 45. The completed sample was composed of well-educated individuals, approximately 69% of whom were postgraduate students. The participants were mostly experienced CS, Approximately 35% of the participants had more than 15 years' work experience in using computers.

Table 2. Characteristics of respondents

Characteristics	Number	Percentage
Gender		

Female	15	75%
Male	5	25%
Age		
Less Than 25	3	15%
From 25 to 35	5	25%
Over 35 to 45	7	35%
Over 45 to 55	5	25%
Older than 55	0	0%
Education		
Certificates	0	0%
Associates	12	60%
Bachelors	6	30%
High School	0	0%
Primary School	1	5%
Working Experience		
<5	3	15%
5-10	7	35%
11-15 years	3	15%
15 years	7	35%

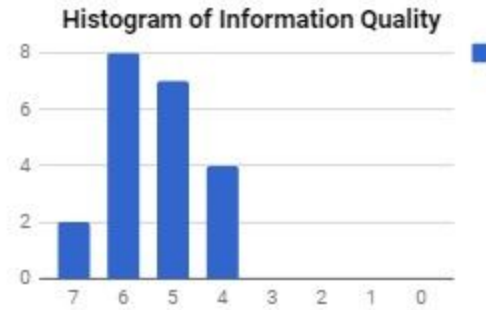
4.0 Discussion

In this research we are analyzing the effectiveness that users of CIS Infinity information systems feel in the infrastructure of Belize Electricity Limited. This was done by the issuing of structured questionnaires to a random selection of employees in various departments. Belize Electricity Limited (BEL) is the primary distributor of electricity in Belize, Central America. They service approximately 94,450 accounts with a peak power demand of approximately 104 megawatts during the year. Managing a customer base this huge requires various information systems. In this research, we are analyzing the effectiveness of the system that manages customers’ personal information and also calculates bills on a monthly basis through meter readings. Through this system management can determine which areas have a higher rate of electricity consumption.

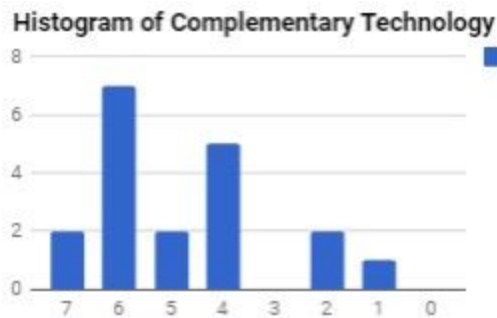
This research was done under 7 variables to get an understanding of the user’s feedback of the information system. The variables are System Quality, Information Quality, Complementary Technology Quality, Computer Self Efficacy, Service Quality, User Satisfaction, and Perceived Net Benefits. Given the nature of their business each variables are interrelated to produce effective results. The hypothesis of this paper indicates that perceived net benefits of this system should be overall high. This system handles a wide range of billing processes from simple to complex billing requirements. They have been established with industrial and government clients to effectively manage efficiency and conservation programs. It eliminates day-end processing with real-time transactions. This system have been in utilization for over 5 years. With its launch BEL have managed to reduce its cost of operations by start to implement its E-Bill service to be integrated.

The survey which was designed to produce quantitative data gave majority of the questions on a scale of 1-7 with the lowest choice of 1 being disagree with the choice of 7 being the highest with a

choice of fully agree. From the results it is indicating that there is a higher trend of males over females who feel that the overall information quality is high. This information is important as this is what is issued out to customers in tracking of their electricity usage. Knowing the rate of which area utilizes more electricity than others guides the management in making decisions as to how to invest in the company. Investment in infrastructure expansion is key in its business to ensure a reliable distribution to customers. In this day and age where it is vital to have electricity available for homes, schools and hospital etc. the company must have accurate information being issued.

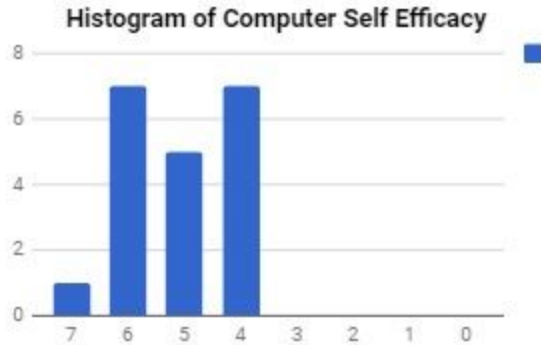


The users indicated that the complementary technology is not high with males showing an average of 4.9 and females showing an average of 4.2. This is alarming as the information from this system should complement the rest of the company. Especially in terms of advising how the level of infrastructure that the company should invest in for expansion and maintenance of their network. The challenge with this survey it doesn't allow users to elaborate on which areas they would recommend to improve on with the system. But it gives an overall opinion in the categories that was provided. From our survey it allows the organization to reevaluate the current structure of its system. A number of companies have systems in place that was chosen by managers but with minimal input by the employees who will be utilizing it on a daily basis. Having input from staff members is important as they are the force that will ensure the goals of the company is achieved.



The next variable that was measured was Computer Self Efficacy. Computers have made a dramatic effect on our society in all aspects. It is an integral part of many industries, education, hospital etc in ensuring that their objectives are met. Computer Self-Efficacy is said to be an individual's belief of their capability to perform a specific computer task. This is a specific application of the broader and more general construct of self-efficacy, which is defined as the belief in one's ability to engage in specific actions that result in desired outcomes. Self-efficacy does not focus on the skills one has, but rather the judgments of what one can do with his or her skills. Traditionally, a distinguishing feature of self-efficacy is its domain-specificity. In other words, judgments are limited to certain types of performances as

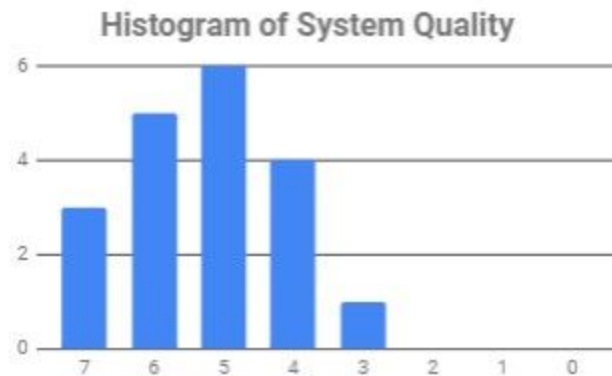
compared to an overall evaluation of his or her potential. From the results both male and females answers are averaging at 5 in their opinion how this system aids them in their achieved goals for their daily duties. This would indicate that they believe that the system can be improved to allow them to create more effective use of the data that is entered.



Service Quality was the next variable in terms of measuring how user friendly the system is and how it is maintained. The overall responses are indicating that the users are generally satisfied with the support that is provided. As this includes the level of effort given in the responses and the timeliness of responses. The interface the users also feels comfortable with the current set up for their daily duties. Given the current structure of their network in place their system reliability is high. Their servers are currently run on a bank of Dell Poweredge servers with Xeon processors. The interconnection between different locations have been enforced with the running of fiber connections for faster speeds and reliability. The network have various firewalls such as Cisco & Sonicwall products in place for various departments and their usages. Having the various systems in place allows for the support staff to log in remotely to assist with any issues they might encounter as they progress. The importance of Service Quality is high for a company such as this, given the services that they provide to the public. This is similar to their marketing department who must send out regular notices to the public for interruption in power supply. That department must be given proper information from the systems on when and where this will be happening. For this option the males gave a higher agree rate than the females. This can be contributed to various reasons as the support staff is a predominantly male department and is likely to befriend similar males to get responses. Or it can also be said that the females in the department are able to diagnose and solve their own issues and don't need to rely on the support staff as much the males.

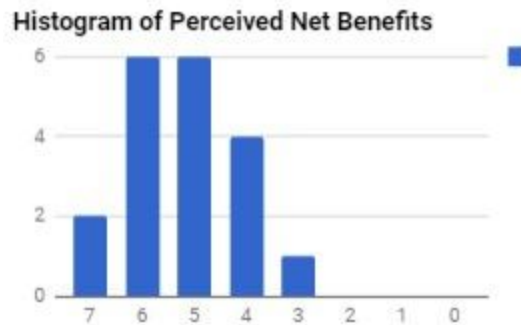


System Quality is interrelated with Service quality as both deals directly with the use of the technical aspect of the system. Whilst the service quality deals with the personnel response of the system but system quality deals with the overall set up of the modules in the system. Both male & females indicate a high satisfactory rate in this regard with a value of 5 out of 7. This indicates that the programmers of the system have done a good job in designing the CIS Infinity system to be able to adapt to their company goals especially for that department. But given the fact that it isn't a 6 or 7 this indicates that there is still room for development. This can vary for different personnel as several factors can affect a user comfort with using a system. As simple as the work culture in the organization is a major factor, such as how much hours they sit behind a computer screen can create uncomfortableness in a work environment. Also given the work pace that they have in place is a factor if their department demands fast and reliable reports can limit some employees from not able to perform as well as they would like. A next factor could also be contributed by the type of computer that they are utilizing. Such as if its Pentium processor system whilst the minimum requirements for the system is an I5 processor would result in a delayed response. Having the proper hardware requirements in place is a major factor also in ensuring effective use of a system. Once these and other factors are improved then it can ensure that the system quality responses get more positive.



The overall perceived net benefits are indicating that they are above satisfactory with an average responses of 5 out of 7 have been tabulated. This is a positive response as this segment measures how the user feels overall about the benefits of the system on their workload improvements and the benefits to the organization. This is a summation of the other segments as it first asks for how it helps your job performance as this is similar to the service & system quality. It also asks about the user opinion on how effective this system helps the organization in saving cost. This was given a positive response from the personnel but we would like to highlight that a number of systems such as these are proprietary in which it's not a one time fee for use. But the cost is high in terms of the issuing of user license where any new employee have to get a log in. The manufacturers of the system charge for each license and the level of interaction that user must have with the system can determine which license as some are most costly than others. There are times where the annual cost of licenses for some systems are in the hundreds of thousands which for some companies is not practical as their annual sales is not able to absorb. All companies look at ways at how they can reduce their cost of operations and to ensure. The managers usually look at the overall picture in terms of the number of man hours an employee utilizes to complete its duties within the system by also the cost to calculate the cost benefits for it. In most companies these numbers are not privy to all employees so the users might feel that it is effective but they are not aware of all the hidden costs. Some of the most important questions was highlighting how they feel about the system and its abilities to achieve the organization goals, how it increase productivity and how it enhances

recruitment and performance management. This is key to the success of any system as this is a sum of all the benefits to establish itself as how effective how the organization. Overall the responses for these was above satisfactory which is a good indicator of the system from the users.



5.0 Conclusion

The conclusion drawn from this study, is that the CIS Infinity management information system has kept the company up to date with its functionality. In our research, we saw how much more convenient it allowed the flow of data to transform into usable information for the different departments. As its functions were made for distinction, the CIS Infinity systems allowed for individuals practical usability in everyday handling. However, one outstanding factor that seemed to come up in the questionnaire to employees, is that the satisfaction is not widely accepted. This is seen in the responses given by employees, where it is their belief, that the MIS needs to be able to handle individualistic tasks for capacities, as opposed to organizational and departmental tasks. This would allow a higher rate of productivity by enhancing effectiveness of the users. It is the view of this group that the successful application of MIS for a customer based, operated company, has positively impacted the bottom line of the organization. The CIS system needs marginal operational edits to facilitate employees requests, but nothing major that would take the usefulness of the system far from home. Overall we believe that with continuous maintenance of the system the opinion would increase. The limitations of appropriate hardware usage can affect employees from getting the full use of a system by it not meeting its minimum system requirements.

6.0 Recommendations/Limitations

Given the magnitude of the organization in which there are employees all over the country it was difficult to get an accurate representation of employees opinion of the system from various district. We was only able to get from one department whose interaction are only with their roles/duties. Whilst a next department can interact with the system in a different capacity. For future reference to maximize this survey would be to send it electronically to all employees to get a better representation of employees opinions.

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8.0 Annex

Questionnaire I – “Success of CIS Infinity System” (BEL EMPLOYEES)

Purpose

This questionnaire asks for information about experience with BEL’s Information System and how effective it is to you as an employee. The company has a huge number of customers and clients to an Information System are essential for the day to day business processes. We would like to measure the use of the system and how effective and efficient it has been to employees in completing their day to day duties and its effects on the organization’s performance.

Please answer the questions in relation to your personal experience. 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 tick the boxes to mark your answers.

1. Background Information	Answers:
Please indicate your gender:	Male <input type="checkbox"/> Female <input type="checkbox"/>
Please indicate your age:	<25 <input type="checkbox"/> 25-35 <input type="checkbox"/> 36-45 <input type="checkbox"/> 46-55 <input type="checkbox"/> >55 <input type="checkbox"/>
Please indicate highest education level attained:	Certificates <input type="checkbox"/> Bachelors <input type="checkbox"/> Primary School <input type="checkbox"/> Associates <input type="checkbox"/> High School <input type="checkbox"/>
Please indicate your working experience:	<5 <input type="checkbox"/> 5-10 <input type="checkbox"/> 11-15 <input type="checkbox"/> >15 <input type="checkbox"/>

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

2. Information Quality	Disagree -----Agree
IQ1: The CIS Infinity system provides information that is exactly what you need	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"/>
IQ2: The CIS Infinity system provides information you need at the right time	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"/>
IQ3: The CIS Infinity system provide information that is relevant to your job	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"/>
IQ4: The CIS Infinity system provides sufficient information	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"/>
IQ5: The CIS Infinity system provides information that is easy to understand	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"/>
IQ6: The CIS Infinity system provides up-to-date Information	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"/>
3. System Quality	Disagree -----Agree
SQ1: The CIS Infinity system is easy to use.	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"/>

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SQ2: The CIS Infinity system is user-friendly.	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"/>
SQ3: The CIS Infinity system provides high-speed information access.	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"/>
SQ4: The CIS Infinity system provides interactive features between users and system.	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"/>
4. Complementary Technology Quality	Disagree -----Agree
CTQ1: The software on the device (desktop computer, laptop, mobile device) used to access the CIS Infinity is adequate.	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"/>
CTQ2: The device hardware (desktop computer, laptop, mobile device) used to access the CIS Infinity is adequate.	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"/>
CTQ3: The speed of the Internet connection used to access the CIS Infinity is adequate.	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"/>
CTQ4: The reliability of the Internet connection used to access the CIS Infinity is adequate.	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"/>
5. Computer Self-Efficacy Measure: I COULD USE THE CIS INFINITY SYSTEM...	Disagree -----Agree
CSE-1 if there was no one around to tell me what to do as I go.	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"/>
CSE-2 if I had never used an information system like it before.	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"/>
CSE-3 if I had only the information system manuals for reference.	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"/>
CSE-4 if I had seen someone else using the information system before trying it myself.	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"/>
CSE-5 if I could call someone for help if I got stuck.	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"/>
CSE-6 if someone else had helped me get started.	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"/>
CSE-7 if I had a lot of time to complete the job for which the information system was 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"/>
CSE-8 if I had just the built-in help facility for assistance.	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"/>
CSE-9 if someone showed me how to do it first.	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"/>
CSE-10.... if I had used similar information systems before this one to do the same job.	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"/>
6. Service quality	Disagree -----Agree
SV1: The support staff keep the CIS Infinity system software up to date.	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"/>
SV2: When users have a problem, the CIS Infinity system support staff show a sincere interest in solving it.	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"/>
SV3: The CIS Infinity system support staff respond promptly when users have a problem.	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"/>

Evaluation of the Customer Information and Billing System for Belize Electricity Limited

SV4: The CIS Infinity support staff tell users exactly when services will be performed.	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"/>
7. User satisfaction	Never -----Often
US1: Most of the users believed that the CIS Infinity system is useful	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"/>
US2: You think that the CIS Infinity system is useful	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"/>
US3: The CIS Infinity System has met your expectations.	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"/>
US4: You are satisfied with the CIS Infinity System system.	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"/>
8. Use	Never -----Often
U1: The frequency of use with the CIS Infinity System is high.	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"/>
U2: You depend upon the CIS Infinity System.	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"/>
U3: I was able to complete a task using the CIS Infinity System even if there was no one around to tell me what to do as I go.	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"/>
U4: I have the knowledge necessary to use the CIS Infinity System.	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"/>
9. Perceived net benefits	Never -----Often
NB1: The CIS Infinity System helps you improve your job performance.	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"/>
NB2: The CIS Infinity System helps the organization save cost.	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"/>
NB3: The CIS Infinity System helps the organization achieve its goal.	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"/>
NB4: Using The CIS Infinity System improves the assessment and training	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"/>
NB5: Using The CIS Infinity System in job increases my productivity.	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"/>
NB6: Overall, using the CIS Infinity System enhances recruitment and performance management.	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.