

# Assessing the Success of E-service by the Belize Electricity Limited

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## Abstract

*Studies have been executed globally to measure the successful use and implementation of information systems, but many studies disregard the variables of conditions and circumstances that vary per territory, organization or institution. The Belize Electricity of Limited (BEL) is the only energy provider that aims to produce reliable electricity at the lowest sustainable cost, stimulate national development and improve the quality of life in Belize. BEL aims to promote a model of excellence that employs strategic regimes that assist in the attainment of strategic objectives, while giving its clients, partners and shareholders optimum value. BEL has employed an information system that facilitates the viewing of billing history's , forecasting electricity usage and calculate their billing advance. The use of the e-portal offers convenience for clients at their fingertips via electronic and internet capable sources. This study aims to assess the impact of the aforementioned information system and analyze its success by the number of clients who utilize such a system to conduct e-transactions. The hypothesized relationships between the clients willingness to utilize the e-service are significantly supported by an increase in technological developments. The findings provide several implications for BEL's e-service portal. The paper sums up the limitations of the study, which should be addressed in future research.*

**Keywords:** E-service, E-transactions, E-payments, Information systems, E-portal, Platforms

## Introduction

Belize Electricity Limited (BEL) is the primary distributor of electricity in Belize, Central America. Aggregate energy sold in 2017 was approximately 552.5 gigawatt hours (GWh). The Company served a

customer base of approximately 94,450 accounts with a peak power demand of approximately 104 megawatts (MW) during the year.

BEL's national electricity grid connects all major municipalities (load centers), except for Caye Caulker, with approximately 1,900 miles of transmission and primary distribution lines. The grid is primarily supplied by local Independent Power Producers (IPP) 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.

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.

BEL's e-service gives its clients access to their BEL accounts via a portal that holds unique data specifically for each account holder. The portal houses the data related to the holders consumption of electricity, bill payment due, due date, meter reading history and the account transaction history. Notifications of due dates, payment values and grace period are sent by the system to each client and services can be submitted and processed thereafter. The registration process to access the e-service is free and requires a BEL account number and customer number.

This research is pivotal to the general public at large since the results and output is based on client's view on the provision of the e-service by the Belize Electricity Limited. This e-service portal is a technologized tool that supports effective business transactions and e-commerce as an efficient and competence method. With effective ecommerce solution, you and your organization grow and scale easily to meet market demand as well as customer requirements by introducing different sales channels and reaching market segments. Such e-regimes support the advancement of firms to a more digitally friendly environment that supports e-friendly awareness (paperless).

The level of willingness by the clients to register for e-service is a key contributing factor that significantly impacts the success of the portal and its function. The portal is an easy, convenient, platform that allows clients to access their data at the touch of a button or via a mobile platform.

The goal of this research aims to determine the level of willingness to utilize the portal and the level satisfaction of how well clients utilize and evaluate the services.

## ***Limitations and Future Research***

The researchers had a limited population size that only includes the Faculty of Management and Social Sciences (FMSS) The results gathered from both campuses provided the necessary information to test for the success of BEL's e-service, but for future research it is recommended to have a larger sample size in order to test the different hypotheses and reach a wider audience. Also, given the small sample size the results and conclusions are debatable, therefore needing an increased number of surveys throughout the different campuses to validate the findings.

## ***Literature Review***

Information systems having been making life much easier for lower level employees up to CEOs by processing a company's data inputs into useful outputs.

It has been proven that information systems have been in existence for years now and in modern society it has become far more advanced. Information systems can offer more complete and more recent information, allowing companies to operate more efficiently (Markgraf, 2018). When companies have accurate, up-to-date information, choices can be made with confidence (Markgraf, 2018). Without these information systems in place it would take a lot of time to go into customer's records to find information that can be easily gathered with the help of these systems. The information system stores documents and revision histories, communication records and operational data (Markgraf, 2018). Therefore, since companies invest a large amount of money on information systems it is important to exploit all its abilities in order to get the most out of it. This can be achieved by making use of existing information and using it in new ways or by adding more data to gain more outputs.

It is the organization's responsibility to develop strategies which can use information systems to increase the overall productivity of the business. Nevertheless, the decision making systems are mainly used by top level management. According to Prachi, "Organizations use information systems to achieve its various strategy as well as short-term and long-term goals". With correct development, deployment and usage of information systems, organization can achieve lower costs, improved productivity, growth in top-line as well as the bottom-line and competitive advantage in the market (Prachi, 2018).

## ***References***

B. E. L. (2019). *Belize Electricity Limited*. Retrieved from [http://www.bel.com.bz/learn\\_more.aspx](http://www.bel.com.bz/learn_more.aspx)

***Excerpts***



### User Registration

Please provide all information requested. Once submitted, a verification code will be sent to your email. The verification code will be required the first time you sign into E-Service.

If you would like to receive e-bill, bill due and e-payment notifications for all your BEL accounts, simply register each account with E-Service. To register a Business which has only one name, please enter that name in the 'Last Name' field and 'N/A' in the 'First Name' field.

Ⓢ Red arrow indicates a required field. ⓘ Symbol provides information about corresponding field.  
 - (Note: - Registration may take several seconds. Once you click the Register button please wait until the system responds.)

ⓘ User Name:  ⓘ

ⓘ First Name:  ⓘ

ⓘ Last Name:  ⓘ

ⓘ Display Name:  ⓘ

ⓘ Email Address:  ⓘ

ⓘ Confirm Email:  ⓘ

Enter a password. Your password must be at least 7 characters long.

ⓘ Password:  ⓘ

ⓘ Confirm Password:  ⓘ

ⓘ Customer Number  ⓘ

ⓘ Account Number  ⓘ

ⓘ Want eBills?  True  False

ⓘ Want Printed Bills?  True  False

ⓘ Want ePayment?  True  False



**My E-Service**

- Why E-Service?
- How To Register
- Paperless Billing

**Pay Online**

- Credit Card Payments
- Atlantic Bank
- First Caribbean Bank
- Belize Bank
- Heritage Bank
- Scotia Bank

Notice: The 'Pay Online' links provided, directs you to third party websites. You will be leaving BEL's Website. Belize Electricity Limited is not responsible for the content of any third party website.

### Why E-Service?

With E-Service, you can now access all your \*BEL accounts from home or abroad.

You can now view:

- Past Bills.
- Meter Reading History.
- Electric Consumption History and
- Account Transaction History.

E-Service provides easy access for making bill payments via your local online bank account or with your Visa and MasterCard credit cards.

You can also:

- Submit Service requests; and
- Print bills received after registration for E-Service.

\*\*Additionally, you can opt to receive e-mail notifications which lets you know:

- When your bill is ready. (**e-Bill**)
- When payments are due; and (**Bill Due**)
- When payments are made. (**e- Payment**)

You can also opt to receive **Bill Past Due** SMS Notifications; (text message notification sent to your cell phone).

BEL also encourages you to make the switch to Paperless Billing and do your part in helping the world. [Click here](#) to find out how.

BEL E-Service, It's Convenience at your Finger Tips!

Sign up now. Click [here](#)

For more information, click [here!](#)

\* BEL account number and customer number required to register for E-Service (Numbers can be found on Bill.)  
 \*\* To receive e-mail notifications for a specific account, that account must be registered with E-Service.