Short communication

On ICT-Government and E-payment

Abstract
Switching between internet solutions in an organization can be challenging, mainly if it affects the core operations and running of the organizations, such as e-payment. It becomes problematic when the role of e-government is not considered as core in an organization. In this study, we evaluated the school fees e-payment project of Covenant University and the losses associated when the ICT-government was not incorporated into the e-payment process. This study recommends good outsourcing, and corporate and ICT governance practices would have helped the University avert such losses.

Keywords: E-business, e-payment, Outsourcing, ICT governance

1.0 Introduction and Context

E-business relates to all forms of business conducted online mediated by the use of Information and Communication Technologies (ICTs) in an ever-growing global community. In the same vein, e-commerce involves exchanging goods and services with the help of the internet. A vital part of E-business is e-payment which seems to pose threats to both customers and business owners due to online fraud. The consumer and retailer find e-commerce or e-payment a convenient alternative to being physically present, thereby saving operation costs, amongst other advantages of e-commerce. With E-payment arrangements, there will be no need to carry a large volume of cash or keeping a large volume of cash at home or office. Imagine how untidy it would be to embark on multi-million dollar projects without an online payments platform for goods and services. A well-planned e-payment method would be significantly flexible and secured over the conventional payments methods [1] [2]. A few authors have defined online payments based on their experience and expertise; one of such is Adeoti and Osotimehin (2012) [3]. The authors considered online payment system as an electronic method for making payments for goods or services obtained on the web or in markets and shopping centers through the Point of Sales Machine (POS)". [3] defined "online payment as payments made through the automated clearinghouse, commercial card systems, and electronic transfers. [4] consider that the definition of online payments cannot be complete without adding "the use of electronic signals connected debit or credit accounts.

As good as e-commerce or e-payment can be, the understanding and effective Management of the dynamics associated with the different models enhances its success [5]. The electronic payment method is popular today and has proven to be a compelling, flexible, and convenient way of paying for goods and services. However, it is left with challenges to both retailers and consumers alike. [6] mentioned that is the successful operation of e-business would determine if the organization would survive in the long run. This study is centered on the survival of an organization due to the operation and Management of its e-business. According to [6], an organization must carefully consider how each potential e-commerce initiative would enhance business strategy before embarking on such a precarious path. Hence, the senior management staff of an organization should assess whether or not the organization has an adequate workforce, sufficient experience culture necessary to succeed in its e-commerce enterprises.

E-business operations involve maintenance and overall Management of e-business activities. [7] defined e-operations as developing fulfillment systems for handling the business that e-marketing and e-commerce generate. [7] mentioned that having e-operations tools in place to handle e-commerce will differentiate between a successful and failed online initiative. Reynolds (2015, p 199) stated the two critical decisions that must be established before considering running e-commerce are (i) who builds the site and (ii) who operates the site or who hosts the site. The two vital points raised by [6] are centered around the site developer's skills, experience, integrity, and the site host. Inability to diligently consider the two vital points raised by [6] can lead to business collapse. In the light of this, this study makes Covenant University school fees e-payment as a case study and discussed in section 3.

There are various types of online payments; some are contained in the study by [8]; the online payment was classified into electronic currency and account-based systems. Users make payments using their bank accounts in account-based systems, while in the case of electronic money, consumers pay only with the aid of some electronic cash. "The payments methods provided by both systems include Electronic payment cards (credit/debit and charge cards), Mobile payments, E-wallets, Smart and loyalty cards, Virtual credit cards, stored value card payment, and E-cash [9]. [10] gave several features of online payment methods, and the most popular and widely used is the credit/debit card payment.

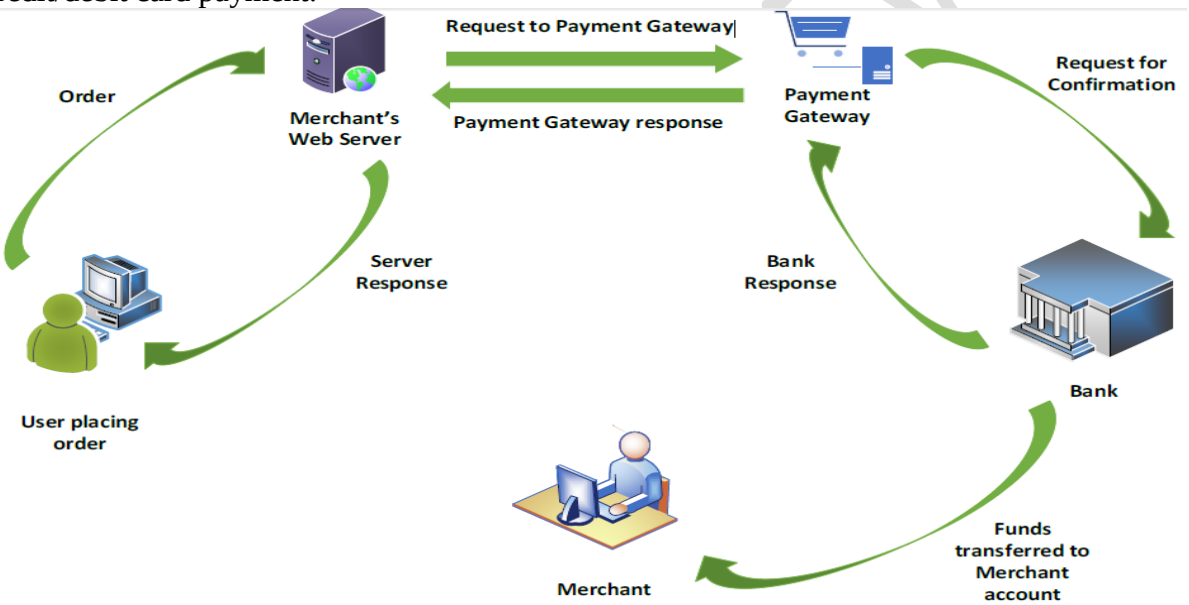

Figure 1: Online Payment Process
Source: [9]

Following the challenges associated with e-payment, the study by Khan et al. (2017) [9] showed that an E-Commerce Payment Gateway (PG) provides a secure way of making a payment with assurances that there would be no problems associated with electronic payments. A PG gives an access point to the national banking system, and every single online exchange must go through a Payment Gateway (PG); details on Payment Gateway can be found in the study by [9]. Figure 1 shows the process involved in online payment via Payment Gateway. The remaining part of this study is sectionalized as follows; in section 2, the Information Systems Management issue is discussed. Section 3 is the discussion and argument: Case of Covenant University E-payment Project. The study is concluded with critical reflections in section 4.

2. Information Systems Management Issue

The Information systems management issue to be focused on is the operation and management challenges of e-commerce associated with online payment projects. If e-business is not adequately

managed, it can result in the collapse of an organization; therefore, it is the duty of senior managers of businesses to design an effective and efficient operations model that suitably fits the organization [11]. An essential and most often ignored is internal fraud, and organizations, corporations, and Small and Medium Enterprises (SMEs) have been faced with internal scams. This study looks at the e-payment project of Covenant University and the internal e-fraud. A brief review of employee fraud is looked into before going into details of the e-business project case and how the Management of the University has successfully managed the project.

2.1 Employee's E-Fraud

This study cannot be complete without looking at employee fraud because the case study relates to e-fraud in the project occasioned by administrative lapses or lack of proper ICT governance in the University. Investopedia defines fraud as a "deliberately deceptive action designed to provide the perpetrator with an unlawful gain or to deny a right to a victim." Organizations globally are confronted with various forms of fraud, and the common form of fraud is e-fraud due to internal information at the employee's fingertips. The e-payment platform, a globally preferred mode of payment, has led to a dramatic increase in e-fraud occurrences [12]. The study by [13] showed that seventy-seven percent (77%) of fraud cases in banks were traced to employees of the banks (insider), while twenty-three percent (23%) were traced to outsiders.

The study by [14] shows that some information system flaws occasion internal frauds. [15] noted that internal fraud could occur after the Information Technology (IT) administrator leaves an organization or is fired. The survey conducted in the study showed that eighty-eight percent (88%) of IT administrators confessed that they would steal the company's secrets with them when they left the job. The study by [16] contains a data mining approach to reduce the risk of internal fraud. Figure 2 shows the types of internal scams. Detailed description of 'Asset misappropriation', 'fraudulent statements', and 'Corruption' is contained in CGMA report[17].

3. Discussion and argument: Case of Covenant University E-Payment Project

This session contains Covenant University E-Payment Project and the problem associated with the project. Covenant University is a Faith-based University owned by Living Faith Church, located at Ota Ogun State, Nigeria. The University, which shares a fence with the church was established in October 2002 and admitted the first set of students on October 21, 2002. As of the first time admitting the first set of students, the payment procedure was bank by deposit. The payer pays into one of the designated banks, issues a teller, and later converts the teller to receipt at the University Financial Services Department. The payer considers the process cumbersome. As a result of the challenges posed by the bank deposit method, a sophisticated IT solution was adopted. Therefore, the University outsourced payments and receipts of school fees to eTranzact Nigeria between 2009/2010 and 2013/2014 academic sessions. The eTransact Nigeria is an IT solution provider, details about the organization can be found on http://www.etranzactgh.com/history.html. Having employed the services of eTransact Nigeria, the University was not satisfied by the services based on some challenges such as loss of funds, and high percent charged per transaction. Hence, the Centre for Systems and Information Services (CSIS) developed an APP called CU PIN. With CU PIN a payer pays a certain amount to the designated bank, and the bank would issue a PIN that the student would use to pay from their portal to the University's account. So, generating PIN from a bank does not imply payment until the PIN is supplied into the student's account online. This method was found to be effective in paying school fees online. However, in 2018 an IT/Technical Support Staff advised the Vice-Chancellor the University Management, who equally happens to be an ICT expert on the use of the APP he (the IT/Technical staff) developed called CUPay to facilitate online school fees payment and made the host (a vital consideration in [6]) Unknown to the Vice-Chancellor and the University Management, the site host, the IT staff duplicated the diversion of fund to the tune of one hundred and eighty million naira (₦180m) was discovered to

have been taken place. Details relating to the case can be found in https://www.nairaland.com/5198675/daniel-owolo-covenant-university-n180m, and https://thenationonlineng.net/n180m-fraud-rocks-covenant-university/. The e-fraud was carried out successfully because the University Management entrusted such a massive project to the IT Support Staff alone without a well-organized ICT government to ratify the project.

Since 2019 when the case of CUPay fraud occurred, the University has resorted to using the CU PIN App developed by the ICT team of the University. The project is considered an effective and efficient method of e-payment. Because of the payment gateway, which gives access to the user placing order, and the banking system, which receives and transfers the money to the merchant's account.

4. Conclusion and Critical reflections

The problem of Management and operations of e-business/e-payment was considered in this study, a case study of Covenant University school fees e-payment project. The e-business and difficulty associated with an e-payment project were highlighted, and what the University Management did to mitigate against such occurrence in the future project was identified. In conclusion, senior Management of organizations should be actively involved in e-business operations to avoid the collapse of the business.

The University started receiving student's school fees by bank deposit and had little or no challenges until the University Management was advised to outsource to eTranzact. Outsourcing, which involved engaging experts to optimise business processes, resulted in cost savings for the University if properly managed, but the University recorded a loss. The challenges faced by the outsourcer (Covenant University) is outsourcing the school fees' e-payment to eTransact relates to loss of funds, and not lower quality of services per se mentioned by Chou et al.(2005) [18]. The University did not lose students to competitors, and as a result of the challenges, they only internalize the challenges and moved on. There should have been an internal structured approach to evaluate appropriately and asses contracting the online payment of school fees to the company. In total, outsourcing to eTransact did not threaten the University's business operations as CUPAY did. In the case of the outsourcing, there should have been proper integration, and an excellent synergic relationship with eTranzact would have helped, as contained in Willcock and Feeny (2006) [19]

[6] provides detailed information on Corporate and ICT governance as a framework that ensures that information technology decisions are made while taking into account the goals and objectives of the business. It can be deduced that there was no excellent ICT governance framework or practices in place in the University as of that time. Integration of frameworks such as the Control Objectives for Information and Related Technology (COBIT) and IT Infrastructure Library (ITIL) would have also minimized the flaws in the project. The ITIL solutions (Reynolds 2015, p 138) [6] contain five significant phases of an IT service life cycle: strategy, design, transition, operations, and continual service improvement. Following the RACI charts (Reynolds 2015, p 138) [6], no single person would be held responsible for the overall outcome of a given organization's project relative to the CUPay model adopted at Covenant University, which led to the diversion of funds into personal accounts.

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