
Security Issues in Virtual Cash Management

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Abstract

Most of the financial institutions believe and are providing online virtual cash management services to their customers for sharing and exchanging information electronically over internet by the help of ICT (Information and communication technology) and IT (Information Technology). They are using integrated application software platforms to connect their front and back office together for sharing information. Web-enabled software like ERP, e-business, and CRM is implemented by many of these financial institution for providing end to end electronic transaction for managing virtual cash management. In order to operate effectively in today's rapidly globalizing, deregulating and volatile marketplace, financial institutions must be able to respond quickly to ever changing environment in terms of technologies , they are using and security issues they are facing to execute safe and hassle free financial transaction. They should regularly analyze their communication architecture to minimize percentages of virtual data theft and crime.

The objective of this paper is to understand that how to manage virtual cash management and discusses various security threats that need to be dealt with when customer use virtual cash management services offered by their financial institutions.

Design/Methodology Conceptual Paper

Keywords Virtual Cash Management, Security Issues, ERP, CRM, ICT

Introduction

It has been seen that most of the financial institutions are using an integrated IT solution for competitive edge, speed to market, flexibility, and improved service delivery. These comprehensive integrated packages have multiple functions and processes to connect front, middle, and back office operation and provides extensive automation for e- trading, virtual treasury operations, portfolio management, online payments, retail, online banking and insurance. IT plays very important role for enhancing productivity, reporting time, superior information and risk management, under 24x7x365 real time processing. To meet such requirement of the customers many financial institutions

now a days are using integrated technology platforms like ERP, e-business, and CRM for accessing database to edge over their competitors with quick response time.

Trend and Technology

The advent of internet technologies has really revolutionized the business world today. The life of

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e-Banking, e-trading, online purchasing is only possible because of the superior internet technologies.

ERP (Enterprise Resource Planning) is customized software that is used by number of financial institutions to coordinate and share information of every area of businesses. ERP platforms help to manage companies business processes using a common integrated database. ERP software supports the efficient operation of business processes by integrating activities of different databases together such as finance, sales, marketing, operation etc.

e-Business Electronic-business solutions increased competitiveness and market expansion potential through faster introduction of new products, improved customer service and integration, cost reductions, improve operating efficiencies by virtual communication. It is a process by which business transaction can be done electronically through web. with innovation in the area of ICT (Information and Communication Technology), e-business gained huge success in the area of e-banking, e-trading and in e-cash management.

CRM Customer relationship management is software by which financial institutions can build a healthy relationship with the customer across the world with quick response time. The focus of the CRM is to acquire, retain and access new customer with effective

on- line services. The customer relationship management system is specifically tailored to help and improve levels of customer care and build customer loyalty while reducing costs and time simultaneously.

It was noticed that today's most of the financial institutions are collectively using services of ICT either with ERP, e-business, or CRM so that they can give best services to their customer for quick cash management. Such technologies and their combination integrate front and back offices together with web enable applications.

Virtual Services offered by Financial Institutions

The integrated architecture which is used by most of the financial institutions has been specifically designed for a global environment. Such type of superior architecture enables banks and customers to access information/services on a 24x7x365 basis with real time monitoring. The technologies they are using is client and server oriented, client may access their information in variety of forms from any remote location of the world and generate their reports. The integrated solution which is used by most of the financial institutions are leverages with internet technology and provides a new-generation IT architecture ideally suited for any centralized implementation. Most of the public sector and corporate sectors banks offering following services in context of virtual cash management:-

- Advanced e-Banking and e-Trading
- Advanced Securities Back-office operation
- Credit/debit cards with ATM, integration
- Corporate credit administration and monitoring
- Wealth management
- Treasury and cash management
- Integrated financial accounting
- P&L calculations
- Electronic payments
- Automated e-mail contract and statement delivery
- Mobile access
- Generation for Advanced Asset Management
- Configurable accounts, deposits and lending products
- Customer relations management and personalisation
- Collateral management
- Unified investment order management
- Payments and funds transfer
- Cash balance forecasting
- Asset allocation
- Online corporate actions
- Real-time update of settings
- Call centre support

Security Issues

While using internet, for purchasing and fund transferring, financial institutions use secure technique to avoid misuse of the customer information. Many financial institutions use some of the famous technique like SSL (Secure Socket Layer) and SET (Secure Electronic Transaction) to avoid online information theft. SSL basically encrypts the data as soon it passes through the web browser and it is required to be decrypting at receiving server. While in the case of SET the encrypted information requires digital certificate and all transaction is verified on the basis of these digital certificates. The application software platform provides multiple levels of security by the use of leading-edge technologies to deliver high-integrity solutions through web Standard market interfaces and a powerful communication manager module assure connectivity to any external application or data feed.

Security threats or computer information crime can be of two types hardware or software and it is defined as unauthorized access & use of information, modification and, destruction, theft of the software, hardware, and data of any organization without authentication.

Hardware threats include physical damage, theft, destruction of the hardware such as (CPU, Switch, Firewall, Network Device etc.)

Security issues related with software and its application are more concerned area of the many financial institutes who are dealing in online cash management. Below mentioned software application threats, if not dealt properly, can pose serious threats to the integrity, safety, reliability, and survival of the any financial institute and thus business institutes require to adopt effective security method to deal such issues in top priority.

Privacy The context of online cash management confidential data is exchanged between the different parties depending upon the requirements and need of the information sharing in the form of reports, number etc. It is very important to understand that information through web transaction is kept restricted in such a way that it will not be read or accessed by third party.

Availability Computer information system is continually accessible and updated in a way so that necessary information and resources which is required for doing virtual cash transaction, can be accessed successfully in 24X7X365 mode with 100% uptime.

Conclusion

Revolutionary technology innovations bless and enable n-number of financial institutions to work together and do businesses online and in return save time and cost. Information technology innovation also brings some challenges in terms of secure, reliable, and accurate on line cash management. Hence these challenges are prime and major area of concern for the management to understand and assure their customer for safe and secure electronic transaction. Finally to handle virtual cash management successfully, financial institutions must know how to manage on-line cash management so that it is free from online fraud, data theft, security losses both in hardware and software.

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Notes

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