



Cyber security in digital transactions

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Abstract

When speaking about digital transactions, the only major factor which would be affected the most drastically is the Accounting and it's connected fields like e-commerce and especially Taxation. It is the duty of the respective organization to look to their customers investment. In order to keep and set things right and above all to ensure the general public and the ultimate consumers, the economists thought of implementing the effective concept of Cyber Security. It is the process of checking into things in a very desperate and discreet manner for the purpose of protecting the customers investment and to push the economy towards the right path. Cyber security plays a very vital role in the digital transaction transformation especially in the day to day life of the people who make payments via online using their respective debit or credit cards as the case may be. The paper discusses about the impact of transformation into digital transactions and the role of cyber security in the digital and online transactions and also of why cyber security is lagging in the digital transactions. This paper will also be helpful for the audience and the readers to improve their knowledge about cyber security and to overcome security loopholes on their computer operation. Also it helps to spread awareness among normal people about emerging security threats. Simple and practical methods of dealing with things via online has been explained in order to overcome the difficulties of cyber criminals and such other problems.

Keywords: digital transactions, accounting, cyber security

Introduction

Cyber Security is the protection of internet-connected systems, including hardware, software and data, from cyber-attacks. In a computing context, security comprises cyber security and physical security- both are used by enterprises to protect against unauthorized access to data centers and other computerized systems. Information security, which is designed to maintain the confidentiality, integrity and availability of data, is a subset of cyber security.

One of the most problematic elements of cyber security is the constantly evolving nature of security risks. The traditional approach has been to focus resources on crucial system components and protect against the biggest known threats, which meant leaving components undefended and not protecting systems against less dangerous risks.

To deal with the current environment, advisory organizations are promoting a more proactive and adaptive approach. The National Institute of Standards and Technology [NIST], for example, recently issues updated guidelines in its risk assessment framework that recommend a shift toward continuous monitoring and real-time assessments.

Objective of the study

The objective of the study is that the risk of handling and managing the online or otherwise called as the digital transactions has become too complicated and difficult for the users to go through. As a result majority of people do not educate themselves about such provisions. On the other hand people educate and update themselves but do not use these owing to the high level of risks. This study will create more awareness among the users of technology today.

Data Source

The entire content in the paper has been collected from the secondary source of data based on the true and fair facts and the statistical data as updated recently in certain cases.

Literature Review

1. **T Baumeister- Laboratory at the University of Hawali- 2010:** This paper speaks about the presence of cyber security in various sectors.
2. **Y Cherdantseva, P Burnap, A Biyth, P Eden, L Jones & security, 2016:** Most of the papers do not speak about the risk assessment. This paper reviews updates and significantly extends the overview of risk assessment in online transactions.
3. **U Franke, J Brynielsson-computers and security, 2014, Elsevier:** Cyber Situational awareness is attracting much situation. This paper deals with the feature s prominently in the national cyber strategies of many countries, and there is a considerable body of research dealing with it.

Analysis and Discussion

The impact of transforming into digital money and transactions

India has joined other countries in the digital payment revolution a lot faster than the past where we often lagged behind in technology, especially in the financial sector. This is set to have a transformative impact on our country, especially as digital payments spread into rural areas. As we look to digital transformation the utmost factor that gets affected is the Accounting and its connected fields and Taxation.

Accounting profession is the one which would be affected

maximum by digital money and digital transactions even though in the most positive manner.

The more the accounting profession is involved in transforming the economy into the digital economy, less difficult it would be for them to manage the impact of digital economy.

Digital economy is defined as an economy based on ICT (Information, Communication and Technology) all of which is relevant to the Accounting World.

The earliest impact of digital economy was in terms of digital accounting packages like Tally and since then there has been large number of accounting packages that have been designed and developed to help the accounting professionals to maintain books.

Next was the Tax reforms using the Digital Technology?

Even globally, digital tax reforms are of a top priority. EU Finance Ministers for instance met in December last to tackle what they call as illegal or clever ways of tax saving by large Institutions like Amazon (AMZN.O), Google (GOOGL.O), Apple (APPL.O) and Face book (FB.O) for slashing their tax bills by rerouting their EU profits to low- tax countries such as Luxembourg and Ireland. This has been possible owing to digital standards for accounting adopted by the entire EU wide countries, saving a few. France was the first country to adopt GST and the tax was equalized. The European Commission, the EU'S executive arm, and the Estonian Presidency of the EU have also backed a major tax overhaul. But the EU envoys are gradually toning down the scale of the reform, according to documents seen by Reuters.

While the world still continues to tackle with digital economies and primarily digital companies earning huge incomes and also in a position to hide their incomes from tax authorities using the same technology. India which is also on the verge of the digital revolution and going for Digital India Tag has been taken ample steps to ensure that every company whether digital or otherwise is coming under tax ambit using state of the art digital tools.

On 1st July, 2017, as India rolled out to GST the entire nation became into a single market the order of the government was that all enterprises making a turnover less than 100 million should go into the digital path. As a result these enterprises which were under reporting their income, has to submit each report of theirs to the tax authorities. Finance Minister Arun Jaitley had said on 18th May after the Government announced new rates for Goods and Services Tax (GST).

Currently many of the transactions by an estimated 51 million small enterprises are carried out in cash, with no trail of sales. This makes it easier for some to under report revenue.

Under-Reporting

But the new reporting requirements could also mean chaos in a nation where about one-fourth of the population can't read or write and many offices do not have the technology which is needed to file the digital returns. The country director at the International Growth Centre and India's former Chief statistician, Pronab Sen. "It will take at least two or three years for them to settle."

After nearly six months, the small and medium sector that contributes over 30% to the nation's GDP and 45% to exports is struggling to adopt the new regime. They're bracing for a

painful rein where the change over to digital book keeping will also mean in equipment and tax consultants.

Several businessmen interviewed by *Bloomberg* news expressed concern over the new tax regime and said many would be forced to submit fake invoices if those they traded with did not upgrade their operations to report sales and purchases.

This would run counter to the Government's stated aim of reducing the black money or unaccounted cash in Indian Economy. Prime Minister Narendra Modi's push to implement the new tax, which will unify India's 29 states into a single market, comes within months of his shock cash ban last November. The withdrawal of 86% of India's currency in circulation paralyzed small business, farmers, workers, and shopkeepers who traditionally transacted in cash.

For the accounting profession all these mean greater challenge and more education of the Digital World. Most of the ICAI member practitioners have themselves made transition to digital economy faster than their counter parts in the industry as the direct and indirect axes had already gone digital long ago and e-filing of tax has become the norm for over a decade. A delegation from the International Federation of Accountants (IFAC) comprising it's President Ms. Rachael Grimes, Executives Director Ms. Sylvia Tsen and Head of Communications, Mr. Tony Miranda, who were in India to attend the ICAI International Conference held in Mumbai in lat year. The IFAC delegation has since been working with the ICAI to achieve a greater degree of digital transformation than now.

The President of ICAI in his annual statement exhorted the ICAI member professionals to go digital faster to minimize the impact of the digital economy on their own working. The President of ICAI Mr. Nilesh Shivji Vikisey in his annual report of ICAI had referred to the Institute's submission to Indian Finance Minister on the eve of the Budget. The suggestions related to the challenges faced y the members on issues pertaining to Service Tax, CENVAT credit rules, 2017, Excise Duty, Customs Duty and Central Sales tax, while the suggestions on direct and international taxes, broadly categorized under Policy and Provisions of Income Tax Act, 1961 ND IMPROVING Tax Administration and Citizen Services, purport to serve to improve tax collection, reduce or minimize litigations, rationalize provisions of tax laws and remove administrative and procedural difficulties.

"Our suggestions aim to help the Government in simplifying the tax laws and administration and make that more transparent and assasi- friendly," the President has said.

Cyber security in the age of digital transformation

As companies embrace technologies such as the Internet of things, Big data, Cloud, and mobility, security must be more than an after thought. But in the digital era, the focus needs to be shifted from securing network perimeters to safeguarding data spread across systems, devices and the cloud.

The Essentials of Cyber Security for Safe and Secure Digital Payments

Following are the volumes (in millions) and values (in INR Billions) processed across the various channels and instruments in the last 12-14 months.

Adoption of these instruments and channels is more prevalent amongst the younger generation and upwardly mobile sections of the demographic groups across India. And the use of mobile in initiating digital transactions especially payments has seen an explosive growth. But this explosive growth brings into force certain practices, guidelines and caution that should be exercised while transacting over the net or mobile networks.

Here is a list some of the key cyber security essentials with the aim of promoting safe and secure digital transactions:

Secure Networks

It is always better to transact using net banking, mobile banking and other mobile payment apps only over secure wi-fi and or local area networks.

Download apps from secure app stores

Apps that allow transacting digitally should only be downloaded from trusted app stores. Example: those supported by Google, Apple, and the like. Those apps which does not have any access towards your personals in your mobile like gallery, media and such others can be used.

Preference for two (or more) factor authentication

The two factor authentication is seriously encouraged when transferring money or making payments. Most bank's net banking systems, mobile banking systems support passwords or PIN'S. Use of PIN'S to unlock smart phones is strongly encouraged. So it is always better to register or sync your mobile along with your PAN or such other personal details.

Storage of card details

For automatic debits and payments should be avoided unless the site where such details are requested and stored is trusted. These must be shared with care. It is worthwhile to determine if such sites comply with various standards laid out by the RBI and or the payment Card industry.

Use of e-mails and text messages

To verify that transactions were originated by the customer is encouraged as is calling customer care centers of banks and payment companies in case any discrepancy or potential fraud is noticed. This also ensures that people today are very productive about the improving technology and that they are also using it effectively. As a result it results in Globalization.

Tokens

Apps that support tokenization of critical data are strongly recommended. Samsung pay, Android Pay are the example of applications that tokenize payment card data. The recent Aadhaar Number is a welcome step and of much benefit in. To be on the safer side always its better to keep changing our PIN numbers and not to disclose it to anyone.

Why is Cyber Security lagging in digital Transformation?

1. All organizations know that Cyber Security is critical but few people like to be confronted with this requirement: With technology, user experience, performance and agility are crucial. Security, of course, is also important. However, to several users, having to go

through other procedures to make sure that network systems are secure, make them uncomfortable. There has to be a change in outlook. Companies should view it as a fundamental requirement. In spite of all the developments in the technology the problem in the digital or online transactions keeps progressing.

2. Many seem to believe that cyber security slows down the digital transformation:

Digital transformation involves change, connectivity, speed, agility, improved service, enhanced customer experience, etc. however, when you add cyber security into the mix, many find it boring because of the rules and regulations, training, and everything that is included in the implementation of security.

All these ultimately happens because of the complicated procedures that the organizations has kept in order to ensure the customer's safety.

3. Cyber Security is not a simple process: Cyber security is not an easy fix to potential cyber attacks. It requires developing a strategy that involves prioritizing the most critical processes and systems within the organization, as well as identifying and protecting potential sources of vulnerabilities or attacks. The only drawback in online transactions is the complicated procedures which cannot be copped up by anyone.

4. Mobile technology has changed security parameters:

Technology such as mobile and lot has made security parameters more complicated. The cyber security perimeter is practically all over the place. Since there are several channels through which attacks can take place, anti- virus and firewall solutions are no longer existing. Overall, a change of mindset regarding cyber security should take place. Security should be involved from the start of digital information in an organization. Cyber security should be embedded into the company network. Treat cyber security assets and strengths that is crucial to the success of the company instead of looking at it as an additional cost.

Thus it is all in the hands of ours to choose things wisely and make productive or efficient use of it to the fullest and keep things in an undisclosed manner unless and otherwise required so. However everything cannot be secured owing to high level and amount of transaction in a company today. Most important and highly valuable items can be protected and safeguarded but of course not with a 100% assurity.

Conclusion

In conclusion, the impact would be heavy either direct or indirect on the accounting professionals and the best way forward is to educate ourselves to face up to the future Challenges of Digital India. As digital ecosystems grow, both consumers and merchants are demanding payment mechanisms relevant to the way they interact within them. Meeting this requires banks to go beyond building a digital wallet proposition with digitized card capability. It means enabling bank accounts to be used in all digital commerce purchases, exposing payment and it means creating an experience that consumers love and that benefit the merchants. It also means building solutions for mass payment volumes, mass digital commerce and mass consumer adoption. In

essence, digital payments are a transformational opportunity. Every business is becoming a digital business which arouse to the highest possibility of the Cyber security in every online transactions. All organizations need to understand their treat environment and the risks they face, address their cyber security problems, and hire the most appropriate people to do that work.

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