Impact of ICT on Effective Financial Management

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Abstract: Information technology had carved across all the aspects of modern day activities ranging from small to medium and medium to large applications and operations. The trends of human centric systems which are more common and popular at times are now slowly and gradually diminishing from our public and private corporate establishments. The new, most versatile, popular, advent, efficient technique wherein the basic approach is computer centric modus operandi have overridden almost all the modern day industrial practices from very basic step of requirement elicitation to final product outcome. Information and Communication technology is this computer centric system. ICT has increased efficiency, reliability, effectiveness, performance and other characteristics of modern day commercial operations. ICT has increased and renovated financial structure both in quality and quantity. ICT has sophisticated the way transactions are catered in any financial system with optimal levels of performance and efficiency. Now it is the time to think beyond the curtains and ensure proper implantation and maintenance of information and communication technology.

Keywords: ICT, Financial Management, Traditional Financial Management, E-commerce

1. Introduction

With the emergence of Information & Communication Technologies (ICTs) and e-governance the possibility of improvement in efficiency and effectiveness of financial management looks more in
comparison to the traditional manual system. The information and communication technology is a
centre of expertise in ICT business intelligence, labor market research, policy development and
workforce solutions. ICT enables industries to develop and maintain a competitive edge in the global
market to practice its services to rejuvenate the innovative trends. ICT refers to a wide range of
computerized technologies that enables communication and the electronic capturing, processing, and
transmission of information. These technologies include products & service such as desktop
computers, laptops, hand-held devices, wired or wireless connectivity, business productivity software,
data storage & security, network security, other related protocols, etc. (Ashrafi and Murtaza, 2008).
The emergence of ICT has opened multiple facets of enterprises that collectively interact with
geographically dispersed workstations to carry out business activities more efficiently, over digital
networks (Buhalis, 2003). ICT has contributed openly to eliminate time, distance and space constraints
in order to furnish the Business activities with ease and efficiency by integrating the capability of high
speed devices with high speed communication links carrying multimedia information. ICT deals with
the collection, storage, manipulation and transfer of information using electronic means.
Communication technology refers to the physical devices and software that link with various hardware
components and transfer data from one physical location to another. Application of ICT to enhance the
performance of organization of all types around the world and do not only help to cut cost and improve
efficiency (Spanos et al. 2002). In conclusion ICT has now being accepted as the backbone for all
organizations ranging from small to big, public to private, micro to macro scale industries, education to
finance etc.

ICT has the ability to enhance, coordinate and control the operations of many organizations and
can also increase the use of financial management. (Attom) Business, especially SME’s thrive well
when their business process are recorded and reported timely. Generally ICT is considered one of the
most reliable means of providing a strong platform for effective system of internal control over
financial reporting. It stands to reason that a sound ICT system provides a sure and guarantee medium
of financial information delivery that covers the entire accounting cycle of the firm. ICT creates
conducive atmosphere that integrates all financial transactions with the help of accounting software to
generate financial report which thereto, would have very difficult to prepare. O’Brien and Marakas
(2010) hinted that accounting information system are the oldest and the most widely used information
system in business. Computer-based accounting system record and also generate reports on cash flow
through an organization on a historical basis and produce important financial forecast of future
conditions. ICT has therefore contributed a lot in eliminating the problem faced by SMEs in generation
of accurate accounting information. Hence, SME business and operators with significant ICT
deficiencies are most likely to face the problem of misstated financial information. Preece (2003)
stressed that the exploration of ICT tools and their integration with customer relationship management applications are expected to bring several benefits such as improved product and service quality, customer satisfaction, higher productivity, improved financial performance and creation of barriers to entry, enhanced convenience and customer service through the advent of new product and various delivery/service channels. The remote viewing and printing of and other financial documents, applications for loans, checking of balances, effecting transfers, etc are part of the invaluable benefits supported by the emerging Information and communication technology. ICTs are employed greatly to support the internet dissemination of banking service. (Ben Attom), ICT creates an enabling atmosphere that integrates all financial transactions with the help of accounting software to generate financial reports needed to influence the decision of potential and existing investors. Timely and accurate accounting information is invaluable to stakeholders of varied interest. They found that 70% of Medium-Scale enterprises do make use of ICT in their financial and accounting reporting. In the last decade, there has been a tremendous development in the field of ICTs and its application in the financial world. Aigbiremolen and Atuma (2014), In the competitive advantage of various financial organizations has greatly increased due to ICTs. ICT has proved useful strategic and tactic tool for them to increase their competitiveness. This is because; ICT is employed in all departments of financial organizations such as Management, Marketing, Credit Administration, Administration, Human Resources, Operational Management, and strategic management, Procurement, Accounting and Financial Management.

2. ICT and Financial Practices

Information Technology and communication (ICT) benefits the business world by allowing organization to work more efficiently and maximize productivity, faster communication, electronic storage and electric record are the few popular practices. Since the ubiquity of ICT has increased across the boundaries it has now become an inevitable domain to incorporate ICT in all workstations to tackle all the activities in efficient and effective fashion. Technology is an essential partner in management for business, regardless of the kind of enterprise you operate. Whether you need computers for storage, transfers, retrieval or transmission of information, you can manage your business with greater accuracy and efficiency with the assistance of information technology and computer applications. The benefits of using ICT are tangible and can be measured;
2.1. Global Financing

Information technology allows finance to function on a global level. Financial markets can be thought of as the first organized, global information markets operating through network computers. Without information technology, financial markets could not react to global development and finance companies couldn’t consistently acquire information at the same time as their competitors. For example, the internet allows continuous access to credit scores and credit rating to all lenders, insurance companies and businesses that need financially responsible customers.

2.2. Social Media

The Information Technology that runs social media on the internet that provides financial institutions with valuable information on their customers. By encouraging online communities associated with their products, finance companies not only acquire information but also encourage brand loyalty. For example, websites such as Amazon allows online stock traders to discuss their picks and advise newcomers. Socially driven information technology allows finance companies to contact the younger demographics that will be in future customers.

2.3. Storing and Protecting Information

Information technology creates electronic storage system to protect company’s valuable records. According to Graziadio Business Report, Published by Pepperdine University, secure maintenance of customer and patients files is vital to business integrity, storage systems, such as vital vaults, keep information safe by only allowing certain users within the company to access, withdraw, add or change the documents and protect from being hacked, or wiped out during a technological disaster. Electronic security means your valuable records will remain safe. You may already use
computer for data storage for business, inventory, sales, receivables’ and payable stored in excel, and open office or a similar program keeps these figure at your fingertips. Accounting software stores your payroll information, tax records and specialized data for your business.

2.4. Marketing

Large and small businesses are on level playing field on the internet. You can have web presence, take orders, buy merchandise, sell excess or even operate some business entirely online. A marketing tool that uses information technology is the quick response that looks like a bar code. We can use your business management skills to direct employees or contractor to do your internet marketing with the help of information technology.

2.5. Information

The internet is a wealth of information to keep your current with trends, techniques, software and human resources. We can draw on online database and websites to locate potential employees, compare insurance proposals, tackle employee issues or check out the competition. Managing your business with information gleaned from the internet keeps knowledge and on the cutting edge.

2.6. Communication

Communication by email is faster and costs less than sending a paper letter by post. The business communication in various commercial organizations has widely accepted email as main medium for information dissemination across platforms. Email systems not only carry out information in textual formats rather provides the way to transmit multimedia information from customer to client and vice versa.

2.7. Benefits to the Business

The business benefits arising from effective ICT generally relate to the reliable and consistent matching of ICT services to user needs i.e. service quality. Which in turn contribute to the overall success of the organization’s business through higher productivity. These benefits are achieved through increasing service availability and quality to users, better match of capacity of requirements, more efficient handling of problems and reduce risk of failure, minimizing the effect of such failure.

2.8. The Design and Planning Process

The Design and planning process within an ICT organization are concerned with providing overall guidelines for the development and installation of an ICT infrastructure that satisfies the needs of all aspects of the business and futuristic scope of ICT as well.
2.9. Time saving: \((Transport, Delivery\ time,\ Response\ time)\)

The main time saving factor is the flexibility of scheduling when to engage on a process. For example a visa application form can be filled when the applicant has a free time and not necessary during the opening hours of the consulate. The data filled are verified immediately for validity. Acknowledge is sent immediately as prove of application. Payment is made online with credit card thereby saving the time of passing through the cashier.

2.10. Money Saving: \((Transport\ cost, Material\ cost, Environment\ cost)\)

The application doesn’t need to travel to the consulate two times, first time for collecting the application form and for physical presentation. He needs to go to the consulate only once the application form would have been filled online. The cost for travelling the first time is saved. Also the potential wastage of paper is removed. Reducing paper consumption helps improve the quality of environment, reduce forest destruction since paper is produced from wood and reduce of waste processing.

2.11. Improved security: \(transportation, transactions, trace\ of\ activities\)

The reduction of the number of transport necessary for processing a visa contributes to reduction of dangers and insecurity linked with transport. For example the reduction of the number of transport will reduce traffic and thereby reduce the potential of road accident. Also in countries where road transport constitutes some form of danger by arm robbers, reduction of the number of transport will also reduce exposure to arm robbery. Online transactions for payment will contribute two types of security- the reduction of exposure to arm robbery and the reduction of temptation to bribery. It is in fact a common believe that the arm robbery succeeds since the arm robbers are sure getting money during their operation since the majority of the population has no other means but carry raw cash on them when travelling. Also, since those practicing bribery rely on the direct contact with the client (applicant), coupled with the absence of trace of their transactions, the fact that the trace of all transactions is recorded helps dissuade the practice of bribery. Transactions or payments are made online and acknowledge with prove of payment.

Reference:

3. Traditional Financial Management

Before the inception of Information and Communications Technology (ICT), the accountants of an organization were using a socially acceptable behavioral method of reporting accounting and
economic reports, carried out during accounting year ends. Like the preparation of Accounting Records, Book such as the Profit and Loss Account, the Balance Sheet, Cash Book, Cash Flow Statement, Income and Expenditure accounts were carried out by adopting traditional or manual protocols.

The application of Information and Communication Technology (ICT), on accounting practice in India has become a subject of fundamental importance and concerns to all business enterprises and indeed a prerequisite for local and international competitiveness. It is obvious that the way accountants plan and take decision on what and how to provide their service in the accounting profession. It has been affected immensely by Information and Communication Technology (ICT). This has continued to change the manner in which accounting practice and their corporate relationships are organized worldwide and the variety of innovative device available to improve and facilitate the speed and quality service delivery. (Granlund & Mouritsen, 2003), The biggest Impact of Information and Communication Technology (ICT) has been made on Accounting, and it is the ability of companies to develop and use computerized system to track and record Financial transactions properly and accurately. The Recording of business transaction manually on Ledgers, Papers, and Spread Sheets has been translated and computerized for quick and easy presentation of individual financial transaction and give report on it.

The computer programs that helps Accountants of the 21st century to carry out their task effectively and efficiently. Prior to the 1960s, the Accountants were perceived as a Book-Keeper whose primary responsibility was ensuring that Records were kept. The Accountants fought a constant battle against the failure and lost of Records. Computer provides more efficient means of keeping the books, and they afforded the Accountant quick access to financial information for reporting purposes.

4. Role of ICT in Financial Management

Financial Management is concerned with raising financial resources and their effective utilization towards achieving the organizational goals. Financial Management includes adoption of general management principles for implementation. The following may be said as the related aspects of financial management rising of funds, using of these funds profitably, planning of future activities, controlling of present implementations and future developments with the help of financial accounting, cost accounting, budgeting and statistics.

ICT is a network of networks. It is not a single network but a global interconnect network providing free exchange information. It implies the most pragmatic use of information technology as a medium of universal communication. It has brought unprecedented change in society. Spanning the entire globe, the net has redefined the methods of communication, work, study, education, interaction,
entertainment, health, trade and commerce. The versatile facilities and opportunities provided by the ICT led to the development of electronic commerce. This became possible when the information and communication technology transformed from the ordinal system providing static web pages into two-way system such as E-Commerce, E-Banking and Corporate Internet Banking (CIB).

Developments in the field of Information and communication technology (ICT) have made inroads in almost all sectors. The impact of technology adoption particularly in the banking sector has changed the face of the industry. Banking sector is the backbone of any economy and a healthy denotes a strong and resilient banking sector. ICT strongly supported growth inclusiveness of the banking sector, thus facilitating an inclusive economic growth. ICT not only improved the efficiency of the banking by strengthening the back and administrative process and also front end operations thus bringing down the transactions costs for customers which has been the major focus of the ICT for financial Management. Today banks have centralized operations, more and more banks and branches are moving to core banking solutions, network based computing and are using ICT for customer relationship management (CRM). ICT fills the business environment, strengthen the success of Modern Corporation, provide governance with a well-ordered infrastructure and connect value to the process of the learning, in the activity and management of modern organizations (Gaddamsetty). ICT provides an extensive perspective on the nature of technology, and the impact of information and communication technologies on the enterprise and on society. ICT in financial management presume one of the modules. The growth and development of ICT in this area has led to massive applications. This paper tries and examines how ICT tools and applications are used with respect to financial management. This article also probes as to how ICT tools and applications are used with respect to financial management. The usage of ICT contributed significantly to the workers performance. Due to increase in the technology usage in the banking industry, workers performance increases day-by-day. And ICT is becoming an indispensable part of modern day and banking service. Banking industry is also one of the industries that adopt technology which helped in providing better services to customers (Adesola).

Major opportunities offered by Technological developments are:

- Reducing cost per transactions.
- Broadened and easier access to target customers.
- More efficient system and techniques for dealing with information on customers (CRM).
- Possibility of diversifying into new business.
- More efficient tools for controlling internal processes efficiency.

The first goal is to shift highly standardized low value-added labour intensive activities towards computerized applications capable of reducing the unite price of transactions. Research in different countries has demonstration significant cost structure differences for communications and transaction
channels, with increasingly innovative ICT and e-business channels significantly reducing operational costs. For example, if the cost of transactions carried out at the counter is valued at a unit cost of one, this value halved with phone banking, quartered with home banking, and reduced to sixth with internet banking. This difference in cost structure through the remote channels allows aggressive pricing and forms a winning strategy for gaining market share of customers who prepared to change banks for more competitive products. The benefit of developing other communication channels to achieve cost reduction is only achievable when the transactions have the high volume. The cost of the single transactions is certainly lower with remote banking compared to traditional banking; however the setup of the virtual bank requires high initial investment that either have to be subsidized from current activities or require separate financing. The investment in ICT system and infrastructure has become a key element in productivity and growth in the banking industry. Increased investment in ICT-capital has accelerated growth and development in industry (Luka).

4.1. List of Information Technology Financial Management (ITFM) Software Solutions

- **ACCIOD**, software as a service IT Operational and Financial Management
- **VMware**, software as a service IT Financial Management
- **ClearCost Software**, Integrated Service Financial Management
- **ComSci**, Software as a Service IT Financial Management
- **Costnomics**, Software as a Service IT Financial Management
- **Cube Billing**, Software as a Service Cost Allocation and Chargeback Software
- **EcoSys Epc**, web based IT Financial Management and Project control Software
- **HP**, Software as a Service or on-premise Financial Management, Asset Management and Project Financial Management
5. E-Commerce

Electronic commerce (E-commerce) has become a buzzword for business over the past years, with increased awareness about the use of information and communication technologies to simplify business procedures and increase efficiency (Joseph). Combining a range of processes, such as Electronic Data Interchange (EDI), electronic mail (e-mail), World wide Web (WWW), and Internet applications, e-commerce provides a way to exchange information between individuals, companies, and countries, but most important of all between computers. E-commerce comprises core business processes of buying and selling of goods and services and information over the internet. The e-commerce information is available on the internet is huge and still growing. The Indian e-commerce shifted to higher gear. The growth of domestic segment is 33% from the previous year 2014. This is shown in figure 1.

Figure 3. Behavior of e-commerce in India.
5.1. E-Commerce Opportunities for Industries

There are many sectors where e-commerce is witnessing rapid growth in the global market. Indian software and service companies need to tap into some of these vertical segments to gain the maximum advantage in the e-commerce solution sector.

5.1.1. Financial services

There are large numbers of users use the internet for some form of financial guidance.

5.1.2. Stock Trading

Online Stock Trading is one of the most demanding e-commerce utilities. The ability to offer market access at a competitive price is a key advantage of online stock broking companies and now this is rapidly growth in India too.

5.1.3. Banking

Internet banking is still growing. Many banks like ICICI and HDFC are making inroads into the ICT area.

5.1.4. Legal and Professional Services.

Opportunities also exist for Indian companies in legal and other professional services. There are significant legal and regulatory implications and implementing an internet business. In terms of opportunities for Indian legal service providers, the requirement for professional, legal and regulatory advice is expected to increase in the number of internet users.

5.1.5. Tour and Travels.

The travels industry has readily adapted to e-commerce. They are now growing emphasis on the search for alternative distribution within the sector, particularly in the railway and airlines sector as they seek to reduce costs. These sectors are adapted well because of their online reservation system.

5.1.6. Healthcare

Healthcare represents one of the biggest expenditure of government worldwide. The internet has the potential to enhance communications, streamline processes and create new business opportunities by providing high quality administrative services and integrating information system.

5. Role of ICT in Decision Making

The role of decision making process on ICT investment varies across the organization. In most organizations decision making is depending on the financial volume of the project. ICT can enhance
the efficiency and effectiveness of decision making through the processing of information, statistics, econometric and data mining, these became extraordinary powerful instruments with the support of ICT. With the use of ICT, Decisions making can evaluate the trends and innovations and promoting their use as appropriate. ICT can provide office-wide management and control of telecommunication services and also providing efficient and cost-effective service relating to procurement, accommodation, health and safety, energy, printing, filling and other logistic matters. ICT making the budget processing more responsive to priorities and management practice more flexible such that defined priorities are easier to achieve and strengthening the competitive pressure among providers of public services.

ICT strategy is a crucial component part of ICT effective financial management. It serves as a blueprint and guideline on the future direction and performance of ICT for the relevant time period (usually 4-5 years), providing the foundation for achieving a comprehensive vision by enhancing existing ICT efforts and launching new ICT initiatives that will assist the achievement the organizational goals (ZHang and Chuklow). Its purpose is to deliver value through the effective use of ICT. An ICT strategy is expected to enhance organizations effectiveness by aligning ICT with business needs and imposing efficiency through timely adoption and use of information and communication technologies. The strategy usually includes ICT key priorities, investments and deliverables for the specified period of time in support and aligned to the organization mandate, strategic plans and operations. It often also outlines the organizations ICT and management framework. A number of frameworks have been proposed to describe the phases of decision making processes. A phase is defined as a period of coherent activity that serves some decision related function, such as problem definition, orientation, solution development or social emotional expression (Poole and Baldwin).

6. Conclusion

ICT has been now boon to every modern system to perform all its operations with “computer as the middle” principle. The application of ICT in Financial management has also accounted a lot more success and efficiency in performing various operations related to different activities to commit a financial transaction. So for as the efficiency and effectiveness of ICT is concerned it has notably produced better throughputs which were acceptable and reliable. The need of the hour is the plan and develops more security measures to ensure authentic and secure client and server communication.
Reference


[19] Source: NASSCOM.Org
