

A study of the impact of cloud based accounting on maintenance of Accounting Records in the Business

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Abstract: Accounting is the language of business, serving every trade since its inception. The emergence of accounting software using cloud technology has improved and significantly changed accounting practices, one of the tremendous IT innovations of the last decade. Today the business world is changing and becoming more competitive and sophisticated due to the advancement of cloud based technologies. Like other areas of business, accounting has also adopted cloud computing solutions to provide relevant and specific information as well as a real-time overview of the business for all stakeholders. Although cloud-based accounting is becoming more and more common, many business owners and professionals are not entirely sure what it is, what its benefits are, or how it will shape the future of accounting. This paper has been prepared in an attempt to include a theoretical overview of cloud based accounting with its concept, benefits, comparison with traditional accounting and some other important aspects that will shape the accounting profession in the coming years. In this paper primary data has been collected and analyzed to obtain information about the use and benefits of cloud based accounting software.

Introduction: Accounting is an important aspect of any business as it involves the recording of all the transactions done by the business and thereby determines the financial position of any business. In earlier times accounting records were kept physically, i.e. physical records were kept to record business transactions. After this, computer software is used to keep accounting records but it also involves installing expensive software on every computer in the organization. Now the concept of cloud accounting has been merged. Cloud accounting is expected to provide easy access to accounting records, is more cost-effective than traditional accounting software, and saves companies significant time. Cloud based accounting is a platform from which data can be accessed by anyone at any time with the help of an internet connected device.

Many businesses around the world have reaped the benefits of using cloud accounting to meet all their accounting needs. In cloud based accounting software, no software installation is required in the computer. It also eliminates the need to store accounting records on secondary storage devices such as USB flash drives. In cloud based accounting, data is sent to cloud which is actually a platform from where data and software are easily accessible anytime anywhere with the help of internet. Employees of the organization work on the data present in the cloud and can also collaborate among employees to work more efficiently. With the help of cloud accounting, managers get access to real time financial information that enables them to take important organizational decisions. Cloud accounting is a revolution in accounting records. To use any traditional accounting software a business entity has to purchase the entire accounting software and install it on each computer. So it can be said that traditional accounting software only provides a product, but on the other hand cloud accounting provides services, under which the business pays the cloud service provider for the right to use the platform to meet their accounting requirements.

Objectives:

1. To give a brief overview of cloud accounting
2. To compare in between the services provided by the different cloud accounting companies in India
3. To study the effectiveness of Cloud based accounting software in India.
4. To take review about cloud based accounting Software

Research Methodology: The primary and secondary data has been used in the study. Primary data collected from accounting professionals of various organizations. Secondary data collected from sources such as professionals, books, journals, websites, etc. The data collected has been helpful in understanding of concepts

and the impact.

Meaning of accounting software: Cloud accounting software is similar to traditional, on-premises or self-installed accounting software, only the accounting software is hosted on a remote server, similar to the SaaS (Software as a Service) business model. The data is sent to the "cloud", where it is processed and returned to the user.

Cloud accounting is a system that allows multi-user access and secure online or remote server storage. Your users send all your data to cloud providers where the same data is processed and securely stored and returned. Cloud technology allows business processes to be streamlined and optimized for company growth.

Working of Cloud Based Accounting: Cloud-based accounting software works by using secure web-based software to help streamline business processes. Small business owners and their finance teams can access all key data from their locations, collaborating and simplifying financial reporting.

Users can access accounting software applications through the Internet or other networks through a cloud application service provider. With cloud-based software, the company does not need to set up individual desktops with the software because everyone in the company can access the cloud on their own devices. From finance teams to accounts receivable, remote teams or branches can access the same important data and financial records. Time and cost are always saved as everyone is on the same page.

Cloud accounting also offers data security; data backup and disaster recovery are often a part of your account. If there's a fire, natural disaster, or technical problem with a company computer, your data is "cloud secure."

Review of Literature:

Mahalakshmi (2017) Study the awareness of cloud accounting among accounting professionals. The survey was conducted for Chartered Accountants and Post Graduate teachers teaching Accountancy in Bangalore city. The study sample consisted of accounting professionals from various experience groups. A two sample t-test was applied to the data collected from 30 chartered accountants and 30 post graduate teachers teaching accounting and it was found that there was no significant difference in the level of awareness of cloud computing between chartered accountants and post graduate teachers teaching accounting in Bangalore City.

Yasmen Ali and Upasana Thakur (2017) discussed the reasons for the less adoption of cloud accounting, with security being a high concern and high cost, however, they also concluded that the younger generation of CAs is keener to adopt this technology.

Nurhajati (2016) Studied and assessed the current impact of cloud computing technology on the audit process. The companies studied represented two of the four major accounting firms in the world. An audit in a cloud environment is a combination of an information systems audit and an information technology audit (infrastructure IT audit). Understanding the audit process in cloud computing settings is difficult because the technology and controls are located outside the entity. A standard framework for regulating audits in cloud computing is still under development. It was found that there is a difference in the audit framework followed by each audit firm.

Onyali, Chidiebele Innocent (2016) Studied and reported that appropriate awareness of cloud based accounting minimize risks and get benefits, But the availability of more cloud service providers and a free trial of cloud services to clients for a restricted period will encourage the adoption of cloud computing. The Unstable Internet is a problem in adoption of cloud accounting in Nigeria, the author, therefore, concluded that before cloud computing could be effectively implemented stable internet access should be in place.

Ghosh (2015) searched the possibility of the rise of cloud-based e-accounting practices in India. He suggested that the organizations can design their own accounting software with the help of the cloud's infrastructure and can also design mobile-based applications connected to the cloud to maintain accounts. This helps the firms to be free from hardware or software investment and costs involved in software upgrades and maintenance.

Esther et al. (2014) studied using random sample of 72 accountants in Ghana. The sample was further divided into three categories: accountants working in an organization using cloud computing, accountants working in an organization but not using cloud computing, and future accountants. As per their findings, the security of the data that is input could serve as a major drawback of cloud computing, particularly for the fact that financial

information is confidential, however, cloud computing can still be used effectively for accounting purpose.

Mahlindayu Tarmidi, Siti Zaleha Abdul Rasid, Bakhtiar Alrazi, Rusli Abdul Roni (2014) studied and discovered that the awareness of cloud computing is in high level. Out of the reasons explored, it was found that not understanding its uses was the largest reason for non-adoption. The authors concluded that although there is awareness about cloud computing, there is no knowledge which a huge setback for its growth is.

Gupta, Sheetharaman, & Rudolph (2013) explained that there are five factors influencing the cloud usage by small and medium-sized enterprises, where the needs and business requirements are very different from large enterprises. Ease of use and convenience are the major factors closely followed by security and privacy and then cost reduction. SMEs do not consider clouds as dependable and at last, SMEs do not want to use clouds for sharing and collaborating and prefer their old convenient methods for sharing and collaborating their stakeholders.

Serkan ozdemir, Cemal elitaş (2015) the study concluded that the establishments that provide accounting systems services utilizing the cloud computing facilities in accounting sector must build the necessary infrastructure and models by foreseeing the general risks of cloud computing technology and the structure in the country in order to run the system without failure and to store the digital financial data of the establishments in a secure environment.

Inaki Bildosola , Rosa Rio-Belver, Ernesto Cilleruelo, Gaizka Garechana (2015) have concluded that, Cloud accounting is now a reality, but it is also observed in the study that large number of companies, especially SMEs, are not yet aware of either the existence of cloud technology or its benefits for the business sector. They further concluded that cloud computing is especially beneficial for startup companies, SMEs, entrepreneurs and companies that need to make new investments or do not have a stable infrastructure.

Elzbieta Wyslocka, Dorota Jelonek (2015) have highlighted that Small business does not need expensive Accounting software to maintain general ledger and perform basic accounting tasks. Simple accounting applications in the cloud are created to help small business owners to organize and manage their IT operations. Since cloud accounting is an online accounting service, one can access business data Anytime and anywhere on a mobile phone or PC and data is safe because backups is available.

Otilia Dimitriu, Marian Matei (2014) have concluded that the most outstanding concept, that has reshaped the traditional way of providing accounting tools, is cloud computing. The world of bookkeeping is shifting towards online products. The numerous benefits of the cloud services have proven that a technological revolution is undoubtedly necessary for companies' accounting department. The new manner of designing, managing and providing financial packages introduces accounting in the "cloud computing era". Benefits of using a cloud accounting solution are considerable and enterprises should do their best to explore all opportunities and learn from the continuously changing market.

Katherine Kinkela (2010) in her article it is highlighted that Cloud computing is now an accepted part of the selection of technology available to accountants. Cloud computing creates efficiency and cost cutting benefits to the user. Before using cloud technology, however companies should understand the risks and security issues inherent in this new technology. By taking a systematic approach to the risk assessment, including creating effective policies for cloud usage and a risk response plan, companies can take advantage of this new technology to increase operational efficiency.

Lipik Aarthiya, Aarti Gupta (2018), in the study focus is given on the deployment of cloud based accounting software in SMEs and its benefits. They focused on to understand the concept of cloud computing and its role in the field of accounting, for this purpose, they studied three reports of KPMG on the concept of cloud computing. In this study, they found that cloud accounting is at level of reliable and scalable data providing source.

Ceslovas Christanskar, Regina Miseviciences, (2012) in this the authors'investigated that cloud based accounting is the recent trend in accounting information system for small to medium sized business. Accounting on cloud based software is an innovative solution that is available at very low cost for SMEs. The small medium sized business can get a lot of advantages with the newest technology. However, cloud based accounting has its own risk too. The paper indicates the advantages and risks of the newest technology within the business.

Tahmina Khanom , Cloud Accounting: A Theoretical Overview 2017: Cloud based accounting easy and

available anytime anywhere From connected appliances to Internet-based education programs, people all over the world are utilizing the cloud as a way of connecting with customers and making their own business practices more effective. Cloud Computing could be hugely beneficial to accounting firms that take it up, allowing for the analysis of huge volumes of data immediately and possibly cutting the burden of compiling half yearly or annual reports in the process. In this paper, the author has an intention to serve something in this regard that can help to understand whether to take the advantage of technological advancement of cloud or not, as information has been collected from most recent studies and expert opinions. Furthermore, it will provide a brief overview of the cloud which may be helpful for the potential researchers in this field. However, there may be some shortcomings of the paper due to the unavailability of sufficient literature

Analysing the impact of cloud-based accounting on business performance of SMEs A.H.N. Kariyawasam

2019: Cloud accounting will enable SMEs in Sri Lanka to achieve, superior business performance, enhanced relationships with stake holders, knowledgeable and committed work force, and cost savings. In addition to these, enhanced flow of information is also enabled by cloud accounting. It will make organizational decision making efficient, with the enhance accessibility of information. Mentioned in Cleary and Quinn (2016), is that this will result in ultimate value creation for the organization through the acquisition of unique intellectual capital resources. These advantages might not have been available to SME before the introduction of cloud computing due to the capital investment limitations.

Cloud Accounting Companies across The World: Cloud Accounting is provided by many companies across the world. These are 8 Top companies providing cloud based accounting services on the global platform are:

1. **Sage:** Sage is a cloud based accounting software vendor dedicated to giving businesses the tools they need to succeed. They are known for merging social, mobile, and real-time technology to create innovative software solutions that will let you leapfrog your competitors. Serving independent bookkeepers and finance directors to small startups and mid-market companies, they have a wide range that can be configured depending on your needs.
2. **Tipalti:** It is a software vendor that strategically helps companies improve their accounting operations through innovative means. Having a vision for global AP automation, they offer a fully equipped cloud-based accounting program that streamlines the way you handle invoice management, vendor on-boarding, funds disbursement, and tax compliance.
3. **SAP:** SAP is the market leader in enterprise application software, helping companies of all sizes and in all industries run at their best. Focusing greatly on digital transformation, the company provides a suite of programs for different types of businesses. With a global network of customers, partners, employees, and thought leaders, SAP helps the world run better and improves people's lives.
4. **Fresh Book:** Fresh Books is a cloud-based accounting software service designed for small enterprises. It basically sends invoices and receives payment for their services.
5. **Scoro:** It is a cloud based accounting software to give businesses a smarter way to accomplish their day-to-day accounting operations. Founded by Fred Krieger, Kristina Lilleöis, and Priit Matiisen, Scoro offers a business management software with comprehensive tools that let you work more efficiently and organize your finances better. From basic accounting and tax filing to quoting and billing and enterprise-level reporting, the engineers at Scoro has made it possible to bring structure to your work.
6. **Xero:** Xero is a software company that develops cloud based accounting software for small and medium enterprises. It was founded by Rod Drury and his personal accountant when they felt that traditional desktop accounting software had become outdated and decided to create a modern cloud-based product.

7. **Zoho:** Zoho is a cloud software and system developer for business management. The company was founded in 1996 by Sridhar Vembu and Tony Thomas in Pleasanton, California and has development offices in India.

8. **Wave:** Wave is a Toronto-based company established in 2010. It is accounting software basically used by small and medium enterprises for accounting functions and cloud based services, which deals with payments, payrolls etc.

Table showing the various services provided by the top 8 Cloud accounting companies

Company Name / Parameter	Sage	Tipalti	SAP	Fresh Book	Scoro	Xero	Zoho	Wave
Double Entry	✓	✓			✓	✓	✓	✓
Mobile Access	✓	✓	✓	✓	✓	✓	✓	✓
All Major A/R and A/P Transaction forms			✓			✓	✓	✓
Payroll	✓	✓	✓		✓	✓		
Inventory Tracking	✓		✓		✓	✓	✓	✓
Live Support			✓	✓			✓	
Document Management	✓				✓	✓		✓
Multi-Currency Support	✓		✓	✓		✓	✓	✓
Customer/Vendor Portals	✓	✓	✓	✓	✓		✓	✓
Training Availability	✓	✓	✓			✓		
Estimate Quarterly Taxes		✓	✓					✓
	8	6	9	4	6	8	7	8

Findings: SAP provide the maximum number of services (9/11) while Fresh Books provides least number of services (4/11) . All the 8 companies provides Mobile access. Estimation of quarterly taxes and live support are two services which 5 out of 8 companies fail to provide.

Impact of Cloud Accounting- A Practical Survey: A survey conducted amongst 32 accounting professionals to study the impact of Cloud based accounting in the present business scenario has revealed the following results:

1. Are you aware of the recent trends in Accounting?

Response	No. of People	Percentages
Yes	27 (84.37%)	84.37
No	5	15.62

2. Do you know about Cloud Accounting?

Response	No. of People	Percentages
Yes	21	65.62
No	11	32.37

3. How did you come to know about it?

Response	No. of People	Percentage
Print media	5	15.625
Internet & Social media	27	84.375
Workplace	6	18.75
T.V or Radio	0	0

4. Do you use Cloud Accounting?

Response	No. of People	Percentages
Yes	23	71.875
No	9	28.125

5. Do you think Cloud Accounting leads to reduction in human resource employed in an organization?

Response	No. of People	Percentage
Yes I agree	14	43.75
I partially agree	10	31.25
I don't agree	8	25

6. Do you think Cloud Accounting leads to minimization of manipulations in accounting?

Response	No. of People	Percentage
Yes I agree	26	81.25
I don't agree	6	18.75

7. How well is the sensitive financial data secured by use of cloud accounting?

Response	No. of People	Percentages
Not Good	4	12.5
Average	21	65.62
Very Good	7	21.87

8. Is the financial data analysis of Cloud accounting better than the prevalent alternatives?

Response	No. of People	Percentages
Agree	28	87.50
Disagree	4	12.5

9. Do you think Cloud Billing is more efficient than the prevalent alternatives?

Response	No. of People	Percentages
Agree	28	87.50
Disagree	4	12.50

10. What do you feel about the efficiency of Cloud Accounting in fraud detection?

Response	No. of People	Percentages
Excellent	5	15.62
Good	22	68.75
Average	5	15.62
Not Good	0	00.00

11. Has Cloud Accounting brought any changes in the auditing process?

Response	No. of People	Percentages
Yes	26	81.25
No	6	18.75

12. Is Cloud accounting beneficial to determine the true financial position of a firm?

Response	No. of People	Percentages
Strongly agree	7	21.87
Partially agree	24	75.00
Strongly Disagree	1	3.12

The survey reveals that few professionals feel

The Use of Cloud accounting will be increased, and will make a massive impact on business. There is still needed awareness and training to use of Cloud based accounting to make more helpful. Cloud accounting has helped in saving a lot of time and effort, the more integrated it is with the other systems the more useful it will be. Some of the professionals said that they are new to this concept.

The survey reveals that 84.37% professionals are aware of the recent trends in accounting and 65.62 % professionals are aware of cloud accounting. It has been found that 84.37% professionals came to know about Cloud accounting through Internet and social media, 18.75% through their workplace. There are 28.12% professionals who don't use cloud accounting and 71.87 % do. It states that 43.75% professionals completely agree that there is reduction in human resource employed, 31.25 % professionals partially agree and 25.00 % don't agree. Also, 81.25 % professionals agree that cloud accounting minimizes manipulations whereas 18.75 % disagree. It is observed that 65.62 % professionals consider security of sensitive financial data in cloud accounting to be average, 21.87 % consider it very good and 12.5 % professional feels it's not good. Also, 87.50 % professionals agree that financial data analysis of cloud accounting is better and 12.50 % disagree.

There are 87.50 % professionals who agree Cloud billing is more efficient and 12.50 %disagree.

Professionals who feel efficiency of Cloud Accounting in fraud detection is good are 68.75 %, 15.62 % consider it as average and 15.62% consider it to be excellent. It has been stated that 81.25 % professionals believe that cloud accounting has led to changes in auditing process whereas 18.75% don't feel the same. Also, 74.07% professionals partially agree that Cloud accounting is beneficial to determine the true financial position of a firm, 21.87 % strongly agree and 3.12 % strongly doesn't agree. Majority of the professionals have answered that they „Partially Agree“ about features such as impact of cloud accounting on reduction of human resource employment and to determine the financial position of a firm, which indicates that they are still not fully aware of the impact of cloud accounting. Also, majority of the professionals „Agree“ that cloud accounting minimizes the manipulations in accounting, helps in fraud detection, has better analysis of financial data, has efficient Cloud billing options and has led to changes in the auditing process, which indicates a positive sign for future of cloud accounting.

Conclusion: The customization offered by cloud accounting is a huge advantage for any business to embrace, enabling every business small, medium or large to customize cloud software to suit their needs. In the near future, access to on-demand, actionable business data will be a daily requirement for enterprises. Entrepreneurs no longer use traditional accounting systems as important data is easily accessible through the use of cloud accounting. Thus, entrepreneurs can confidently make smarter and faster decisions. The ongoing changes to cloud accounting are expected to affect a wide range of industries and enterprises, and every business owner will experience the effects of this shift sooner or later. Cloud accounting is sure to have a huge impact on business growth. With an array of benefits like cost efficiency, high security, ease of use, etc. to offer, cloud accounting is the right choice for any business that wants to keep pace with its competitors. Cloud accounting can be extremely beneficial for businesses as it offers efficient technology and accounting services at a low cost.

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