

**A STUDY ON PERCEPTION OF CLOUD ACCOUNTING AMONG MICRO AND SMALL BUSINESS OF AHMEDABAD CITY****Aditi Birla**

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**Abstract:**

Accounting is crucial to the success or failure of any organization. Now a days , technology and machines had made people's job easier. Cloud accounting is the newest technology trend in the accounting industry. Cloud accounting, can be referred to as internet-based online accounting, with the use of cloud computing to the accounting function of a firm. Even though there are various benefits of switching from traditional accounting to cloud accounting but due to the lack of awareness amongst the users and industry expert , not being used by everyone . Therefore, this study focused on Perception of cloud accounting amongst Micro and Small Business with special reference to Ahmedabad city. The data has been collected through questionnaire and Chi Square test, One sample t test and frequency-percentage analysis has been used to analysis the data .The study concludes that around 70% of respondents are aware about cloud accounting but only 12% are using cloud accounting and others are not using due to the several reasons such as lack of technological resources , scarcity of funds, employees are not trained to adopt the technology , difficult to decide which cloud accounting software they should move , security issues and privacy of data .

**Keywords:** Cloud accounting, Awareness, Perception, Ahmedabad city**INTRODUCTION:**

The Internet has a huge impact on every part of our lives in the new economic period, and digital information has quickened the pace of life and work, bringing us incredible ease [Li Yaqui ,2014].

In this context, accounting cloud computing technology arises and provides accounting services to an more number of businesses. Businesses have also experienced the amazing ease with this new development . Globally, the enterprise cloud accounting has been steadily growing. Additionally, Asia-Pacific nations are actively enhancing the financial sector's infrastructure. Numerous outstanding providers of cloud accounting software have also arisen. The cloud accounting's development has accelerated.

Cloud accounting has received a lot of interest since it is a hybrid of traditional accounting and cloud computing technologies. In China, many businesses are looking to use online accounting tools to handle their complicated accounting needs.[ Luo, M. a. (2015)]

Cloud computing is one of the newest technologies used in accounting. Application of cloud computing in an accounting system is known as cloud accounting. Cloud accounting means the accounting software is hosted on remote servers. Data is safely transmitted to and stored in "the

cloud," where it is handled and processed before being given back to the consumer. It is comparable to conventional, on-premises, or self-install software based computerised accounting; simply, it is online accounting that is based on the internet. The cloud services are offered in three different forms i.e. SaaS, PaaS, IaaS [Research Journal of Finance and Accounting, Shaban Mohammadi, A. M. (2014).]

SaaS (Software as a Service ): It provides a special software to the user so that they can use the providers applications operating on a cloud infrastructure online . It is usually referred to as 'On demand Software' and generally is charged based on pay per use . The cloud user no more requires to install and run the application on their personal devices, which makes support and maintenance becomes easy. The major drawback of SaaS is that customer data is kept on the server of the cloud service provider.

PaaS(Platform as a Service ): It is an IT platform that is offered as an on-demand service and on which applications may be created .It is based on infrastructure as a service (IaaS) and connects with software as a service (SaaS) and infrastructure as a service (IaaS), allowing application developers to build and operate their software applications on a cloud platform without the expense and difficulty of purchasing and operating the hardware and software layers.

IaaS(Infrastructure as a Service ): It refers to the fundamental computing infrastructure comprising of servers, software, and network equipment that is offered as an on-demand service and on which a platform could be built and the implementation of software can be formed. Its key objective is to access those resources as virtualized objects programmable via a service interface rather than buying, housing, and managing the fundamental hardware and software infrastructure components.

This paper studies the Awareness and Perception of cloud accounting amongst micro, small and medium sized business owners and their perception towards cloud accounting .

## **LITERATURE REVIEW:**

(Lutfi, Alkelani, Al-Khasawneh, Alshira'H, Alshirah, Almaiah, Alrawad, Alsyouf, Saad,Ibrahim, 2022) States that for using traditional accounting system , requires a special solid drive for software installations and storage of financial data . Users of the programmes are only able to utilise desktop applications to view the data from a single place, which limits their schedule and mobility. On the other hand, for cloud accounting software there will be a remote server that is connected to the system over the internet. Additionally, end users can access financial information while using any suitable device with the web-based interface, avoiding the need to install desktop apps. enables backups that provide real-time data redundancy and updates, whereas the standard method requires manual information updates from the organisation.

(Elayanathan, P and Kalainathan, K, 2022) studied the level of awareness , adoption and experience of using cloud accounting among SMEs in Srilanka before and after COVID-19. The data was collected by 37 SMEs and they used T-test , box plot and bar chart to compare the data of before and after the COVID-19. They analysed that there is significant difference between of awareness and adoption of cloud accounting before and after COVID -19. It was also found that adoption level is lower than awareness level . It was noticed that SMEs are transforming into cloud accounting technology after COVID -19.

(Saad, Lutfi, Almaiah, Alshira'h, Alshirah, Alqudah, Alkhassawneh, Alsyouf, Alrawad, Abdelmaksoud, 2022) Studied the factors using Technological , Organisational , Environmental (TOE) framework to explore the affect of adoption of cloud accounting among Jordanian manufacturing SMEs and also focusing on critical roles of high industrial productivity, competitiveness and performance. They also mentioned the significance of cloud accounting adoption due to COVID -19 pandemic. The data was collected from 156 Jordanian SMEs owners or managers . It was analysis that except one factor Perceived knowledge uncertainty all factors relative advantage, security concerns, top management support organizational readiness, competitors' intensity and suppliers computing support were significantly influenced the cloud accounting of Jordanian SMEs manufacturing.

(Kusuma, Muafi, Aji, & Pamungkas, 2020) discovered that the TOE framework (Tornatzky & Fleischer, 1990) was the one that was most favoured by organisations to accept the new technology . and study the demographic features of managers and owners of MSMEs in Indonesia that looked at the adoption of IoT found that age, managerial position, and years of market experience were more important than gender and educational background.

Egiy & Udeh,( 2020) stated that due to maintenance and cost, SMEs are not swiftly converting to the digital world. SMEs started using accounting software for office automation and bookkeeping after the 2000s. Recently, programmers created specialised accounting software based on the needs and preferences of the consumers. Modern accounting ideas like cloud accounting are more advantageous than specially designed software. Cloud accounting offers benefits that go above and beyond what accountants need to do their jobs. The performance of the company as a whole is considerably enhanced by cloud accounting innovation. SMEs are demanding government regulations to store data in the cloud and limit access in the cloud to reduce the negative gaps because managers of Nigerian companies recognise the benefits of cloud computing and handle their compliance and security challenges.

(Tripathi , 2019) studied the factors that influence the users behavioural intention to use cloud computing in adopted and non adopted firms. They used the theory of Valence Framework of Behavioural Beliefs and Technology Acceptance Model. The data was collected from 458 firms from which 239 firms had adopted and 219 firms has not adopted the cloud computing ; Factor analysis and Structural equation modelling was used for analysing the data . It was found that impact of factors of perceived ubiquity and perceived benefits were significant for cloud computing adoption firms whereas impact of negative factors of perceived risks and perceived costs were significant for non adoption firms of cloud computing .

(Aarthiya , Gupta , 2018) studies the case study of KPMG firm and focuses on the use of cloud-based accounting software in SMEs and the advantages that could contribute significantly to revenue by 2020. they concentrated on comprehending the idea of cloud computing and its function in the field of accounting. For this, they read three KPMG publications on this specific subject. According to this study, cloud accounting provides a dependable and scalable source of data.

(Uddin, Islam, Ara, Kayser,2017) evaluated the satisfaction level of employees using accounting with modern technology of Northen region of Bangladesh . It was concluded that most of the employees are familiar with modern technology of accounting and they also use for their daily activities .They also face some difficulties in using the modern technology but though they are satisfied using the technology in accounting .

Numerous studies on cloud accounting were undertaken from different countries in relation to factors affecting adoption and non adoption of cloud accounting by businesses and its associated costs, benefits, digital security and privacy issues, measures for security solution, and suitability with technology are analyzed with reference to cloud computing. However, this research focuses on awareness and perception of cloud accounting amongst the business owners which is still untouched area in Ahmedabad city .

#### RESEARCH OBJECTIVE:

1. To identify the level of awareness of cloud accounting amongst the micro, small and medium scale business of Ahmedabad city.
2. To study the perception of business owner towards cloud accounting.

#### RESEARCH METHODOLOGY:

- Nature of Study: Descriptive
- Nature of Data: Primary Data
- Survey Tool: Structured Questionnaire (includes close ended and likert scale)
- Survey Area: Ahmedabad, Gujarat
- Respondents: Business Owners of MSE's
- Sampling Method: Random Sampling
- Sample Size: 90 [Questionnaire were sent to 100 business owners]
- Tools used for analysis: The analysis was done using SPSS.
- The tools used were: Descriptive, Chi square test, One sample t test.

#### ANALYSIS AND INTERPRETATION:

Descriptive statistics are brief informational coefficients that summarize a given data set, which can be either a representation of the entire population or a sample of a population. Descriptive statistics are broken down into measures of central tendency and measures of variability (spread). Measures of central tendency include the mean, median, and mode, while measures of variability include standard deviation, variance, minimum and maximum variables ( Adam Hayes, 2023)

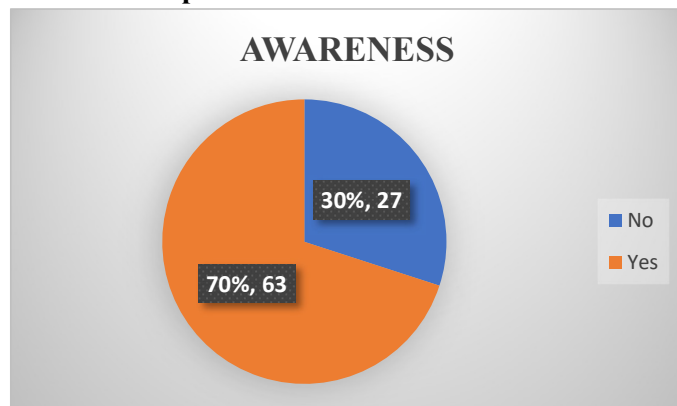
**Table 1 : Demographic Profile of Respondents**

Sr. No		Particulars	No. of Respondents	Percentage
1	<b>Gender</b>	Male	67	74.40%
		Female	23	25.60%
		Total	90	100%
2	<b>Education Qualification</b>	12th pass	10	11.10%
		Graduate	30	33.30%
		Post Graduate	37	41.10%
		Professional Degree	13	14.40%
		Total	90	100%
3	<b>Experience in Industry</b>	less than 3 years	7	7.80%
		4 to 7 years	13	14.40%

		8 to 11 years	21	23.30%
		12 to 15 years	27	30%
		16 years and above	22	24.40%
		Total	90	100%
4	Size of firms	1 to 3 workers	34	37.80%
		4 to 7 workers	23	25.60%
		8 to 10 workers	9	10%
		more than 10 workers	24	26.70%
		Total	90	100%
5	Estimated Turnover	upto 1 crore	61	67.80%
		1 crore to 5 crore	26	28.90%
		5 crore to 10 crore	3	3.30%
		Total	90	100%
6	Kind of employees	Full time employees	87	96.70%
		Part Time employees	21	23.30%
		Trainee/interns	18	20%
		Total	90	100%

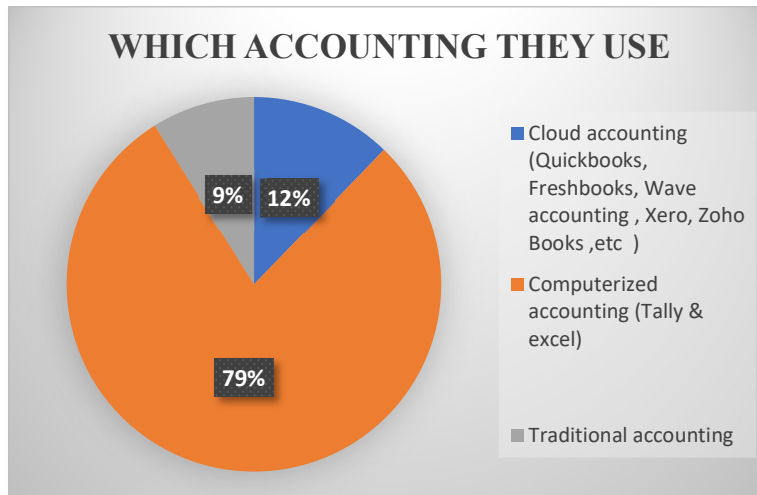
From the above table 1, it was found that majority of respondents are Male i.e. 74.4% . Major part of the respondents have education qualification of Post Graduate i.e. 41.1% . Majority of respondents have experience in the industry of 12 to 15 years i.e 30% . Maximum MSMEs have only 1 to 3 workers i.e. 37.8% It was found that estimated turnover of majority of MSMEs is only upto 1 crore i.e. 67.8% .It was also found that maximum employees are Full time employees in the industry i.e. 96.7% .

**Chart 1 : Respondents Awareness of cloud Accounting .**



From the above chart , it was found that 70% of respondents are aware about the cloud accounting and only 30% are not aware about cloud accounting.

**Chart 2 : Which Accounting they Use ?**



From the above chart , it was found that 79% of respondents are using Computerized Accounting . 12% are using Cloud Accounting and only 9% are still using Traditional form of Accounting .

**Cloud Accounting Awareness and Type of Accounting they use :** This section explains the awareness of cloud accounting relation with type of accounting they use . To check the association between awareness of cloud accounting and type of accounting they use , the following null and alternative hypothesis was developed :

**H<sub>0</sub>:** There is no association between Awareness of cloud accounting and type of accounting they use .

To check the association of developed hypothesis , Chi Square test was conducted:

		Which type of accounting do you use ?			Total
		Traditional Accounting	Computerized Accounting	Cloud accounting	
Are you aware about cloud accounting ?	Yes	3	49	11	63
	No	5	22	0	27
Total		8	71	11	90
Significance Value of Chi Square value is 0.012					

From the above Table , it was observed that there are 11 respondents who are aware about cloud accounting and they are using cloud accounting . There are another 52 respondents who are aware about cloud accounting but though not using cloud accounting and still using computerized accounting and traditional accounting. There are 27 respondents who are not aware about cloud accounting and none of them are using cloud accounting .

Table determines the significant value of Pearson Chi Square as 0.012 , which is less than the acceptable level of 0.05, then Null Hypothesis is rejected and Alternative hypothesis is accepted . Thus, there is association between Awareness of cloud accounting and type of accounting they use

**Result** : It was found that those who are using cloud accounting are surely aware about it . But though there are another 52 respondents who are aware about cloud accounting but not using it . So it could be assumed that they might not be ready to adopt the technology or there could be lack of technological resources or they don't want to have huge capital investment or due to the security and data privacy issues .

**Cloud Accounting Awareness and Educational Qualification** : This section explains the awareness of cloud accounting relation with education qualification. To check the association between awareness of cloud accounting and education qualification , the following null and alternative hypothesis was developed :

**H0:** There is no association between Awareness of cloud accounting and educational qualification.

To check the association of developed hypothesis , Chi Square test was conducted:

		Education qualification				Total
		12th Pass	Graduate	Post Graduate	Professional degree	
Are you aware about cloud accounting ?	Yes	4	19	28	12	63
	No	6	11	9	1	27
Total		10	30	37	13	90
Significance Value of Chi Square value is 0.036						

From the above table , it was observed that out of 13 respondents with professional degree ,12 are aware about cloud accounting . Out of 37 Post graduates ,28 are aware about cloud accounting . Out of 30 Graduates , 19 are aware about cloud accounting . Out of 10 respondents with 12<sup>th</sup> Pass , only 6 are aware about cloud accounting.

Table determines the significant value of Pearson Chi Square as 0.036 , which is less than the acceptable level of 0.05, then Null Hypothesis is rejected and Alternative hypothesis is accepted . Thus, there is association between Awareness of cloud accounting and education qualification .

**Result** : It was found from the analysis that as the level of education increases , more respondents are aware about cloud accounting . More than 75% of respondents with professional degree and Post graduates are aware about cloud accounting. Thus , it can be said that there is direct relationship between education qualification and awareness amongst the respondents .

**Cloud Accounting Awareness and Experience in Industry :** This section explains the awareness of cloud accounting relation with experience in industry. To check the association between awareness of cloud accounting and experience in industry, the following null and alternative hypothesis was developed :

**H0:** There is no association between Awareness of cloud accounting and Experience in industry

To check the association of developed hypothesis , Chi Square test was conducted:

		Experience in the industry					Total
		less than 3 years	4 to 7 years	8 to 11 years	12 to 15 years	16 years and above	
Are you aware about cloud accounting ?	Yes	5	7	16	20	15	63
	No	2	6	5	7	7	27
Total		7	13	21	27	22	90
Significance Value of Chi Square value is 0.698							

From the above table , it was observed that out of 22 respondents having experience of 16 years and above in industry , only 15 are aware about cloud accounting . Out of 27 respondents having experience of 12 to 15 years , 20 are aware about cloud accounting . Out of 21 respondents having experience of 8 to 11 years ,16 are aware about cloud accounting. There are 7 respondents out of 13 having experience of 4 to 7 years are aware about cloud accounting . There are 5 respondents out of 7 having experience of less than 3 years are aware about cloud accounting .

Table determines the significant value of Pearson Chi Square as 0.689 , which is more than the acceptable level of 0.05, then Null Hypothesis is accepted and Alternative hypothesis is rejected . Thus, there is no association between Awareness of cloud accounting and experience in industry .

**Result:** It was found that, higher the level of experience in industry , more percent of respondents are aware about cloud accounting . But the test says that there is no association between awareness of cloud accounting and experience in industry thus , we can assume that they are not ready to accept the cloud technology or there could be lack of training provided .

**Perception towards Cloud Accounting by MSME's Owners :** This section explains the perception of cloud accounting. We had collected 90 responses out of which only 63 are aware about cloud accounting so we had considered the perception of those 63 respondents only to check the significance of sample and population. To check the significance of perception of sample drawn from unknown population , the following null and alternative hypothesis was developed :

**H0:** There is no significant difference in perception towards cloud accounting



To check the significance of developed hypothesis One sample t test was conducted .The one-sample t-test is used when we want to know whether our sample comes from a particular population but we do not have full population information available to us.

### One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
It is clear and easy to understand	20.680	62	.000	1.540	1.39	1.69
It can be access anywhere geographically	29.379	62	.000	1.825	1.70	1.95
It uses a huge capital investment	3.526	62	.001	.349	.15	.55
It needs less efforts to interact with system	2.603	62	.012	.349	.08	.62
It has better security access	11.155	62	.000	1.222	1.00	1.44
It reduces the work load of an accountant	10.169	62	.000	1.016	.82	1.22
It updates real time data	17.883	62	.000	1.556	1.38	1.73
It has good data storage facility	13.325	62	.000	1.302	1.11	1.50
Lack of privacy of data	.567	62	.573	.079	-.20	.36
Employees are qualified enough to adopt the technology	1.751	62	.085	.222	-.03	.48
It requires additional cost for training the employees	7.570	62	.000	.746	.55	.94
Scarcity of fund prevents you from adopting cloud accounting	-1.990	62	.051	-.349	-.70	.00

Lack of technological resources prevents you to adopt cloud accounting	-1.437	62	.156	-.254	-.61	.10
It is difficult to decide on which cloud application shall you move .	1.916	62	.060	.286	-.01	.58
It reduces the work of the employees	7.562	62	.000	.730	.54	.92
It requires no further installation and updates	6.227	62	.000	.635	.43	.84
Do you think that COVID-19 has made it inevitable to use the digital platform	14.433	62	.000	1.492	1.29	1.70

The above table , shows the significant Perception of MSME's owners towards cloud accounting . The table shows the result based on test value of 3 as 5 point likert scale questionnaire was used . It was observed that perception of It is clear and easy to understand , It can be access anywhere geographically , It uses a huge capital investment , It needs less efforts to interact with system , It has better security access , It reduces the work load of an accountant , It updates real time data , It has good data storage facility , It requires additional cost for training the employees , It reduces the work of the employees , It requires no further installation and updates , Do you think that COVID-19 has made it inevitable to use the digital platform; whose [significance 2 tailed value ]  $p < 0.05$  , thus there is a statistically significant difference in perception of sample and population mean towards the cloud accounting .

Whereas Lack of privacy of data, Employees are qualified enough to adopt the technology , Scarcity of fund prevents you from adopting cloud accounting , Lack of technological resources prevents you to adopt cloud accounting , It is difficult to decide on which cloud application shall you move , this perceptions has  $p > 0.05$ , thus there is no statistically significant difference in perception of sample and population mean towards cloud accounting .

## CONCLUSION:

The primary objective of the study is to determine the awareness and perception of cloud accounting amongst micro, small and medium business .To meet this objective a questionnaire is prepared in google form and questions are framed to identify their knowledge and understanding about cloud accounting. The study concludes that in total the proportion of

micro, small and medium businesses who are aware (70%) about cloud accounting is more than those who are not aware (30%) about cloud accounting . The study also concludes that there is relationship between variables like educational qualification and type of accounting they use and awareness about cloud accounting whereas variable like experience in the industry has no relationship with the awareness about cloud accounting.

### **SUGGESTIONS:**

The cloud accounting concept is relevant and more appropriate in the future. So, the awareness of this concept should be spread out amongst the MSME's, so necessary initiatives such as awareness camps and training sessions should be conducted by the professionals to make others also aware about this. I would rather suggest that cloud accounting should be included in the commerce and accounting syllabus as majority of them are going to be either a businessman or accounting professional in future. With the increase in thorough awareness about cloud accounting, people's perception towards cloud accounting will also change and they will start adopting it to secure their confidential data at once in cloud .

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