



## AWARENESS OF CLOUD ACCOUNTING AMONG ACCOUNTING PROFESSIONALS IN BANGALORE CITY

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### **Abstract**

*The advancement in internet technology has brought in several changes in the way the business is carried out. All the stakeholders of the business are benefitted in terms of time, cost and value addition. One such recent advancement is the application of cloud computing in accounting, termed as cloud accounting. Though certain security issues are involved, organizations have started adopting cloud accounting, which enables them to work from anywhere and anytime. The subsequent spread of knowledge about cloud accounting sprouts from the auditors who are most of the time act as advisors to their client organizations and also teachers who impart fundamental knowledge of accounting to the students. The present paper attempt to study the awareness among accounting professionals about cloud accounting. A survey has been conducted among a sample of chartered accountants and post graduate teachers teaching accounting subject in Bangalore city using purposive sampling. The sample chosen for the study consists of accounting professionals in different experience groups. On employing two sample t-test to the data collected from 30 chartered accountants and 30 post graduate teachers teaching accounting subject, it was found that there is no significant difference in the level of awareness of cloud computing between chartered accountants and post graduate teachers teaching accounting subject in Bangalore city.*

**Keywords:** *Internet, Cloud Accounting, Profession, Awareness.*

### **Introduction**

Cloud accounting is a marriage between cloud computing and accounting. The users access accounting software applications remotely through the internet or other network via a cloud application service provider. Data is stored in the cloud and can be retrieved anytime and anywhere. The advantages of cloud accounting include no major investment in hardware and software, access data even through mobile phones, disaster recovery, data backup, thus providing greater productivity. The Fiscal Report 2016 of Intuit has claimed that cloud based tax software had a rise of 15% subscribers and Xero, another cloud based accounting software witnessed 51% growth during the year ending in March 2016. Pegg, an accounting bot can store the images of bills over the online account which can be accessed anytime. Thus cloud has made a process innovation in delivering customer experience. The concept of cloud accounting is a milestone in the way towards e-business.

### **Literature Review**

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

Wyslocka & Jelonek (2015) conducted a survey among Polish entrepreneurs in the province of Silesia on the knowledge of the concept of cloud computing, analysed the potential of the business model and compared with the results of the survey conducted by Cloud Industry Forum in the UK in 2012. Around 53% of the Polish entrepreneurs had no opinion on the subject, probably due to little knowledge of the essence of the cloud computing model. Only 16% of the respondents showed an interest in the subject.

Rahmath & Sarwar (2014) discussed about various opportunities, challenges and future prospects of cloud computing in India. The study highlights the application of cloud computing in major areas namely e-governance, education system, SMEs, telecom and power industries and Indian call centres.

Tarm idi, Rasid, Alrazi, & Roni (2014) explored the level of awareness of cloud computing among the small and medium enterprises (SMEs) in Malaysia. Around two-third of the accounting practitioners in both audit and commercial fields were not aware of cloud computing and lack of perceived benefits and security were revealed as the most important drivers for non-adoption. The findings of the study include that 30% of the respondents claim to be familiar with cloud computing and only 7% confirmed that they were very knowledgeable about it.

Dimitru & Matei (2014) has analysed the key aspects that should be considered by any company in order to choose the right accounting system. The study reveals that technical aspects such data quality and storage, specific information demands and best timing for transfer and also pricing and financial aspects including the cost of implementation, customization, staff training and maintenance fees need to be considered for implemetation of cloud accounting in organisations.



Dimitriu & Matei (2015) discussed the impact of cloud accounting on business environment and various benefits and risks associated with it.

Mohlameane & Ruxwana (2014) investigated the awareness of cloud computing within SMEs in South Africa. The study has identified SMEs perceptions on cloud computing as an alternate ICT solution. It was found that the lacking awareness and understanding of cloud computing was the main cause of slow cloud computing adoption among these SMEs.

Coles & Yeoh (2015) surveyed 212 participants spread around globally across 17 countries, representing IT security, IT, compliance and audit firms and also from other industries. The data obtained was compared across Americas, Asia-Pacific and Europ-Middle-East-Africa regions. The results of the study showed that 12 per cent of companies in the Americas do not consider cloud a priority compared with 9 per cent in EMEA and 7 percent in the APAC region. It was found that security remained the top barrier to cloud adoption and other significant barriers were a lack of knowledge and experience on the part of IT and business managers.

Majhi, Meher, & Maharana (2015) conducted a study among 56 LIS professional in seventeen Indian university libraries to access the familiarity and usage of cloud computing applications among Library and Information Science professionals. Around 85.7% of the total respondents were aware of the term cloud computing. The respondents have suggested for 'Tutorials/Demonstrations/Trainings' an d'Seminars/Workshops' on the use of cloud computing .

### Statement of the Problem

Some of the popular chartered accounting firms in Bangalore have begun to provide cloud based accounting services to their clients. Still the knowledge about cloud accounting has not been extended to the industry due to certain reasons. At the grass root level, the teachers and practitioners are found to be the knowledge ambassadors. It is therefore necessary to determine the extent to which they are awareness of this technological development, a future impetus of their profession as it is at present a rapidly growing domain.

### Research Questions

1. Are the chartered accountants and post graduate teachers teaching accounting subject aware of cloud accounting?

### Objectives of the study

1. To determine the level of awareness of cloud accounting among chartered accountants and post graduate teachers teaching accounting subject in Bangalore city.
2. To find out if professional experience has an influence on the awareness of cloud accounting.

### Research Methodology

The small and medium Enterprises hire the chartered accountants primarily for audit and compliance purposes. These auditors become the source of knowledge to the serving industry about latest business concepts and technological developments in the field of accounting and finance. The business organizations thus learn from their stakeholders about upcoming technology and adopt in their businesses. The purpose of the present study is to understand how far the stakeholders in industry and academia help in the transformation of traditional business organization to a modern one.

In this context, purposive sampling has been adopted. A well structured questionnaire has been administered to around 42 chartered accountants and working in various chartered accounting firms and 30 teachers teaching accounting subject in post graduate programmes namely Master of Business Administration, Master of Commerce at various private colleges in Bangalore city during January-February 2017. Only 30 chartered accountants and all teachers have recorded their responses.

### Data analysis and findings

By employing t-test, the primary data obtained from the respondents were analysed. The demographic details of the sample respondents have been used to explain the awareness level.

**Table 1: Demographic details of Chartered Accountants**

Particulars	Number	Percentage
Experience (in years)		
00-05	4	13.3
06-10	11	36.67
11-15	10	33.33

16-20	5	16.67
Gender		
Male	24	80
Female	6	20

Table 1 show that around 36.67% and 33.33% of the respondents were having experience of 6 to 10 years and 11 to 15 years respectively. Only 13.3% of them were have experience up to 5 years experience and the remaining 16.67 % were having 16-20 years experience. 80% of the total respondents were men.

**Table 2: Demographic details of Accountancy Teachers in PG Courses**

Particulars	Number	Percentage
Experience (in years)		
00-05	3	10
06-10	6	20
11-15	9	30
16-20	12	40
Gender		
Male	19	63.33
Female	11	36.67

40% of the accountancy teachers were having 16-20 years, 30 % in the range of 11-15 years experience, 20% in the experience group 06-10 years and the rest 10% had experience up to 5 years. Around 63.33% of the respondents were men and the rest were women.

The following hypotheses were framed for the purpose of the study.

H<sub>N1</sub>: There is no significant difference in the awareness of cloud computing between chartered accountants and post graduate teachers teaching accounting subject

The following details have been considered to analyse if significant difference in awareness level exists between both the professionals.

**Table 3: Experience vs. Level of awareness of the Chartered Accountants**

Chartered Accountants							
Level of Awareness ↓	Experience (in years) →	00-05	06-10	11-15	16-20	Total	%
Strong		0	1	1	0	2	6.67
Fairly know		0	4	2	1	7	23.33
Partially know		2	3	2	2	9	30.00
Heard of		1	2	3	2	8	26.67
Doesn't know		1	1	2	0	4	13.33
<b>Total</b>		4	11	10	5	30	100

Table 3 indicates that the around 30% of the chartered Accountants had partial knowledge of cloud accounting. The respondents who have heard of the concept constitute 26.67% and 23.33% of them fairly know the technology and its benefits

**Table 4: Experience vs. Level of awareness of the PG Accounting Teachers**

Teaching Professionals							
Level of Awareness ↓	Experience (in years) →	00-05	06-10	11-15	16-20	Total	%
Strong		0	0	1	1	2	6.67
Fairly know		0	2	1	2	5	16.67
Partially know		1	0	3	1	5	16.67
Heard of		1	2	1	4	8	26.67
Doesn't know		1	2	3	4	10	33.33
<b>Total</b>		3	6	9	12	30	100



Table 4 shows that nearly 33.33% of the PG accounting teachers does not know about cloud accounting. 16.67% of the respondents fairly and partially know the technology. Only 6.67% of the respondents have strong knowledge about cloud accounting.

Using Minitab 14 version, the hypothesis is tested by employing two sample t-test based on the professional experience of both the samples.

**Two-Sample T-Test and CI: CA00-05, PROF00-05**

Two-sample T for CA00-05 vs PROF00-05

	N	Mean	StDev	SE Mean
CA00-05	5	0.800	0.837	0.37
PROF00-05	5	0.600	0.548	0.24

Difference = mu (CA00-05) - mu (PROF00-05)

Estimate for difference: 0.200

95% CI for difference: (-0.894, 1.294)

T-Test of difference = 0 (vs not =): T-Value = 0.45 P-Value = 0.670 DF = 6

On applying t-test to two different samples of chartered accountants and PG accounting teachers having experience of up to 5 years, it has observed that the standard deviation for the first sample is 0.800 and for the second sample is 0.600, t-value obtained is 0.45 and p-value is greater than 0.05 i.e. 0.670. This implies that the null hypothesis is accepted and hence there is no significant difference in the awareness of cloud computing between chartered accountants and PG teachers teaching accounting subject having experience up to 5 years.

**Two-Sample T-Test and CI: CA06-10, PROF 06-10**

Two-sample T for CA06-10 vs PROF 06-10

	N	Mean	StDev	SE Mean
CA06-10	5	2.20	1.30	0.58
PROF 06-10	5	1.20	1.10	0.49

Difference = mu (CA06-10) - mu (PROF 06-10)

Estimate for difference: 1.000

95% CI for difference: (-0.801, 2.801)

T-Test of difference = 0 (vs not =): T-Value = 1.31 P-Value = 0.231 DF = 7

The responses of sample respondents having experience of 10-50 years about their awareness of cloud accounting show a standard deviation of 1.30 and 1.10 respectively. The t-value obtained is 1.31 and p-value is 0.231. As the p-value is greater than alpha value, null hypothesis is accepted. There is no significant difference in the awareness of cloud computing between both the professionals having experience up to 6 to 10 years.

**Two-Sample T-Test and CI: CA11-15, PROF 11-15**

Two-sample T for CA11-15 vs PROF 11-15

	N	Mean	StDev	SE Mean
CA11-15	5	2.000	0.707	0.32
PROF 11-15	5	1.80	1.10	0.49

Difference = mu (CA11-15) - mu (PROF 11-15)

Estimate for difference: 0.200

95% CI for difference: (-1.227, 1.627)

T-Test of difference = 0 (vs not =): T-Value = 0.34 P-Value = 0.743 DF = 6

The standard deviation in the above analysis pertaining to chartered accountant is 0.707 and 1.10 for teachers. The p-value is 0.743 making the null hypothesis to be accepted. Therefore there is no significant difference in the awareness of cloud computing between both the professionals whose experience between 11 and 15 years.

#### Two-Sample T-Test and CI: CA16-20, PROF 16-20

Two-sample T for CA16-20 vs PROF 16-20

	N	Mean	StDev	SE Mean
CA16-20	5	1.00	1.00	0.45
PROF 16-20	5	2.20	1.48	0.66

Difference =  $\mu$  (CA16-20) -  $\mu$  (PROF 16-20)

Estimate for difference: -1.200

95% CI for difference: (-3.092, 0.692)

T-Test of difference = 0 (vs not =): T-Value = -1.50 P-Value = 0.177 DF = 7

The above results shows that the p-value is 0.177 indicating that null hypothesis is accepted. Therefore professionals of 16 to 20 years do not significantly exhibit any difference in their awareness level about cloud accounting.

#### Conclusion

The business applications of cloud computing in several industries in India are in development stage though a few of the stakeholders have adequate knowledge and experience in such domains. Some of the multinational companies have already begun to employ cloud accounting. These pioneers will be sooner followed by others in picking up the latest technology in order to survive in the industry.

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