International Journal of Computer Information Systems and Industrial Management Applications
ISSN 2150-7988 Volume 18(16s) 2026 pp. 73-77
https://doi.org/10.70917/ijcisim-2026-4559
Article

# Sovereign Cloud and Data Nationalisation Conceptual Frameworks For Accounting Professionals in India

**Shazpreet Kaur[1], Anjani Srivastava[2], Kirti Khanna[3]**

[1]School Of Commerce, Manav Rachna International Institute Of Research And Studies Faridabad, Haryana, Email-shazpreet1325@gmail.com
[2]School Of Commerce, Manav Rachna International Institute Of Research And Studies , Faridabad, Haryana. Email-Anjanisrivastava23@gmail.com
[3]Jaipuria Institute Of Management, Ghaziabad, Uttar Pradesh.
Email- Khannakirti24@gmail.com

**Abstract:**
**Purpose**
The enhanced consolidation of cloud accounting models within geographical boundaries of India has established latest standards in financial auditing, reporting, compliance procedures and virtual accessibility. Nonetheless the legal framework in the nation is evolving simultaneously to accentuate audit trails, nationalized storage of data and sovereignity of data. Latest modifications under the companies act 2013; the company's fourth amendment rules and the new policies issued by RBI for data localization have radically shifted the compliance framework for all the accounting professionals and the service providers in the country. Regardless of the mounting academic discussion on adaptability of cloud accounting around the globe, meagre research has highlighted hoe nationalized legal requirements have modified the framework infrastructure, risks involved and acceptability of accounting professionals in india which will be investigated in this study. This study will further identify the pros and cons for adoption of cloud accounting and will come out with suggestive cloud accounting models for Indian scenario.
**Design/Methodology/Approach**
An empirical and analytical research design has been adopted for the study and snowball and convenient sampling has been used for primary data collection..A sample size of 140 has been calculated using G-power. The research is confined to chartered accountants of agra district to whom a well structured questionnaire was sent using google forms.stastical tools used in this study is chi square test.
**Findings**
Cloud accounting is a tremendous shift towards triple entry system wherein a transaction is verified by a third party using cryptography and blockchain technology thereby increasing authenticity and trust by piling all entries in a public ledger. As a result of this more businesses are adopting virtual workforce models. Introduction of cloud based models in accounting profession has enhanced the roles of key processing indicators in the business.
Cloud technology magnifies employees networking and association thereby increasing efficiency and effectiveness. Chartered accountants who will accept this change will have new opportunities open for them and those who will look at this technology with ostrich approach will be left behind.
**Originality**
The findings will be valuable for further research work to be done in this area. The findings will help various researchers, chartered accountants, accounting professionals etc to understand the implementation of cloud accounting in developing countries like India and to understand in depth the implementation and adoption of cloud based accounting in the Indian scenario.
**Keywords:** Cloud accounting , Data nationalization , Sovereign cloud ,Ca's.

## 1.Introduction

In the era of Digitalisation cloud native systems have radically enabled automatic legal reporting , real time processing of financial statements, Gst incorporation and virtual auditing. While these efficiencies have a great potential, financial data is super sensitive as it is the foundation for legal mandates , taxation and auditing. Hence the sovereign authority and legal governance over books of accounts has become a non negotiable concern.Nations legislative framework has reinforced the compliance structure through obligatory audit trails , maintenance of books of accounts for a minimum time period of 8 yrs and real time data's backup electronically.These mandates require immediate restructuring of cloud native models in the field of accounting.

## 2.Background

The enhanced consolidation of cloud accounting models within geographical boundaries of India has established latest standards in financial auditing, reporting, compliance procedures and virtual accessibility. Nonetheless the legal framework in the nation is evolving simultaneously to accentuate audit trails, nationalized storage of data and sovereignity of data. Latest modifications under the companies act 2013; the company's fourth amendment rules and the new policies issued by RBI for data localization have radically shifted the compliance framework for all the accounting professionals and the service providers in the country. Regardless of the mounting academic discussion on adaptability of cloud accounting around the globe, meagre research has highlighted hoe nationalized legal requirements have modified the framework infrastructure, risks involved and acceptability of accounting professionals in india

**Legal requirements governing cloud native frameworks in India**

The framework and implementation of cloud native accounting systems in the nation are governed by legal regulatory requirements issued by the central bank of India and ministry of corporate affairs (RBI and MCA).These requirements specifically focus on strengthening financial authenticity, integrity of data and accountability in digital reporting. These requirements under are as under

1. Under the companies act 2013 mandatory maintinance of audit trail is effective from 1 April 2023 under section 8 of the act.
2. As per section 128(5) of the companies act 2013 companies are required to maintain books of accounts for a minimum time period of 8 yrs along with corresponding audit trails as supportive evidences.
3. As per section 2(13) of companies act 2013 all the companies formed under the act should make sure that all the changes in books of accounts should have a supportive edit log along with it . As per rule 3 of the companies act 2013 .Companies are required to maintain regular backup of real time data and other financial data even if the data is stored in foreign lands.

**Suggestive pragmative sovereign and hybrid cloud frameworks**

The Institute of Chartered Accountants of India (ICAI), formulated a Committee for Capacity Building of Members in Practice (CCBMP), and on its recommendation has developed a inclusive cloud-based All-in-One Accounting platform. It will be provided to chartered accountants free of cost for three years with supportive technical backing and specially tailored technology for ICAI members. This system integrates accounting operations, legal compliance framework, return filing, and electronic filing into a consolidated interface for Chartered Accountants and CA firms.

### *2.1Research objectives*

1. Amalgamate legal imperatives (companies act 2013, RBI mandates) and cloud native accounting system .
2. Critically evaluate of perspectives of CAs on the challenges faced by them while adopting cloud accounting.
3. Suggesting pragmative sovereign and hybrid cloud frameworks so that compliance and operational effectiveness are in parity for Indian scenario.

### *2.2 Literature Review*

Early envisagation of cloud computing by Ercan (2010) elaborated it as a shared computational environment allowing delegated access to services and data resources. Mell and Grance (2011) formalised the classification of cloud service models into IaaS, PaaS, and SaaS, introducing a well defined structural framework which is still referred in accounting system design.

Gupta, Seetharaman, and Rudolph (2013) critically evaluated adoption of cloud technology among SMEs and found usability, flexibility, and cost efficiency to be the key motivators, while privacy and security concerns restricted adoption. Walterbusch, Martens, and Teuteberg (2013) stressed on hidden or latent cost elements in cloud migration decisions, putting forward that total cost of ownership varies from perceived savings.

Dimitriu and Matei (2014) narrated cloud accounting as a radical shift in financial information systems, highlighting scalability and accessibility as major pros but acknowledging regulatory uncertaintyas a con.

Wyslocka and Jelonek (2015) observed that small enterprises benefit majorly from reduced infrastructure costs and increased accessibility.

Kinkela (2010) raised ethical and risk considerations, highlighting the need for structured security assessment before adoption. Similarly, Özdemir and Elitaş (2015) identified operational and institutional risks in accounting-specific cloud implementations.

### *2.3. Hypothesis framed*

H01:No substantial correlation exists between age and cognizance of cloud accounting.

H02: No substantial correlation exists between gender and cognizance of cloud accounting.

## 3.Research methodology

An empirical and analytical research design has been adopted for the study and snowball and convenient sampling has been used for primary data collection..A sample size of 140 has been calculated using G-power. The research is confined to chartered accountants of agra district to whom a well structured questionnaire was sent using google forms. Stastical tools used in this study is chi square test.

## 4.Data Analysis and Results

**Table 1: Respondents demographic profile**

| **AGE** | **COUNT** | **PERCENTAGE** |
|---|---|---|
| BELOW 25 | 20 | 14.3% |
| 25-25 | 100 | 71.4% |
| 35 AND ABOVE | 20 | 14.3% |
| TOTAL | 140 | 100% |

| **GENDER** | **COUNT** | **PERCENTAGE** |
|---|---|---|
| MALE | 70 | 50% |
| FEMALE | 70 | 50% |
| TOTAL | 140 | 100% |

| **Years of Experience** | **Frequency** | **Percentage** |
|---|---|---|
| LESS THAN 5 | 40 | 28.6% |
| 5-10 | 70 | 50% |
| MORE THAN 10 | 30 | 21.4% |
| TOTAL | 140 | 100% |

**SOURCE- SELF COMPUTATION**

Elucidation: Major population of the respondents are at the peak of their professional career also highlighting gender equality.

**Table 2: Reasons for non usage Using Cloud based Accounting (n=40)**

| **Reason** | **Frequency** | **Percentage** |
|---|---|---|

| | | |
|---|---|---|
| Nescience | 20 | 50% |
| Jeoparding security concerns | 20 | 50% |
| Punitive price | 20 | 50% |
| Rigidity to change | 10 | 25% |
| Internet snags | 10 | 25% |
| Optimised software | 10 | 25% |

Elucidation:Punitive price, nescience and jeoparding security concerns are the major reasons for non adoption of cloud accounting.

**Table 3: Reasons for Using Cloud Based Accounting (n=100)**

| Reason | Frequency | Percentage |
|---|---|---|
| Digital nomadism | 100 | 100% |
| Zero risk investment | 50 | 50% |
| Cybernation benefits | 50 | 50% |
| Cost savings of hardware | 40 | 40% |
| Cost savings software | 40 | 40% |
| | | |

Elucidation: Digital nomadism is the major reason for adoption of cloud accounting. Zero risk investment and cybernation benefits are secondary motivators.

**Table 4: Cloud Computing Services used by CA professionals**

| | Frequency | Percentage |
|---|---|---|
| **Infrastructure as a service** | 70 | 70% |
| **Platform as a service** | 0 | 0% |
| **Software as a service** | 50 | 50% |

**Source: Own computation**

Elucidation: IAAS model is majorly used by CA'S in india.PAAS is least used as it offers no customization .

## *4.1.Testing of Hypothesis*

**H01:No substantial correlation exists between age and cognizance of cloud accounting.**

**Table 6: No substantial correlation exists between age and cognizance of cloud accounting.**

| Awareness of Cloud based accounting | Below 25 | 25-35 | Above 35 | Total |
|---|---|---|---|---|
| **YES** | 20 | 90 | 10 | 120 |
| **NO** | 0 | 10 | 10 | 20 |

| | | | | |
|---|---|---|---|---|
| | 20 | 100 | 20 | 140 |
| Calculated value of Chi square is = 39.65, Table Value at 5 % Level of significance and 2 DOF is 5.99 | | | | |

Source: Own Computation

Elucidation: Ho1 is rejected since there is significantly a strong correlation between age and cognizance of cloud accounting. New professionals show a high awareness of cloud accounting.

**Ho2: No substantial correlation exists between gender and cognizance of cloud accounting.**

**Table 7: No substantial correlation exists between gender and cognizance of cloud accounting.**

| Gender cognizance of Cloud based Accounting | MALE | FEMALE | TOTAL |
|---|---|---|---|
| **YE** | 60 | 60 | 120 |
| **NO** | 10 | 10 | 20 |
| **TOTAL** | 70 | 70 | 140 |
| Calculated value of Chi square is = 1.807, Table Value at 5 % Level of significance and 1 DOF is 3.841 | | | |

Source: Own Computation

Elucidation: No substantial correlation is interpreted in gender and cognizance of cloud accounting . As a result Ho2 is accepted.

## 5.Discussion

Cloud accounting is a tremendous shift towards triple entry system wherein a transaction is verified by a third party using cryptography and blockchain technology thereby increasing authenticity and trust by piling all entries in a public ledger. As a result of this more businesses are adopting virtual workforce models. Introduction of cloud based models in accounting profession has enhanced the roles of key processing indicators in the business.

Cloud technology magnifies employees networking and association thereby increasing efficiency and effectiveness. Chartered accountants who will accept this change will have new opportunities open for them and those who will look at this technology with ostrich approach will be left behind.

**References**


1. Dimitriu, O., & Matei, M. (2014). Cloud computing in accounting. Procedia Economics and Finance, 15, 840–846.
2. Ercan, T. (2010). Effective use of cloud computing in educational institutions. Procedia – Social and Behavioral Sciences, 2, 938–942.
3. Gupta, P., Seetharaman, A., & Rudolph, J. (2013). Cloud computing adoption by SMEs. Journal of Information Systems, 33(5), 861–874.
4. Kinkela, K. (2010). Practical and ethical considerations on cloud computing in accounting. Journal of Accounting Ethics, 4(2), 45–52.
5. Mell, P., & Grance, T. (2011). The NIST definition of cloud computing (Special Publication 800-145). National Institute of Standards and Technology.
6. Walterbusch, M., Martens, B., & Teuteberg, F. (2013). Evaluating cloud computing services from a total cost perspective. Management Research Review, 36(6), 613–638.
7. Wyslocka, E., & Jelonek, D. (2015). Cloud computing in accounting for SMEs. International Journal of Business Information Systems, 18(3), 321–334.
8. Özdemir, S., & Elitaş, C. (2015). Risks of cloud computing in accounting field and proposed solutions. International Journal of Economics and Finance, 7(4), 22–30.