ACCOUNTING INFORMATION SYSTEMS AND TECHNOLOGY

A Study on the Role of Technology in Improving Accuracy in Accounting Services

Samruddhi Anil Nandoskar[1], Reshma Nair[2]

[1]Amity Business School, Amity University Mumbai, Maharashtra, India
[2]Guide, Amity Business School, Amity University Mumbai, Maharashtra, India

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Abstract

Technology has become an essential component of modern accounting services. In this context it is observed that accounting professionals increasingly rely on digital records, spreadsheets, accounting software and government portals in order to manage financial information, perform calculations and execute statutory procedures. While such tools can help eliminate some of the drudgery involved in manual data processing, the overall accuracy of results depends on the quality of inputs and professional evaluation.

The observations made in this paper draw from the activities undertaken during the Summer Internship Project (SIP) at Kartik Agarwal & Associates LLP. The activities covered during the SIP include TDS-related procedures, income-tax documentation, reconciliation of client's information with Form 26AS and AIS, PAN and HUF-related services, GST-related procedures, MCA filings, NGO Darpan and DGFT/IEC procedures, UDIN generation and spreadsheet management.

The aforementioned observations reveal that while technology can be instrumental in maintaining and verifying information, portals' downtimes, incomplete documentation by clients, errors in inputting information, time constraints and confidentiality concerns can hamper the quality of output.

Keywords: Accounting Technology; Accuracy in Accounting; Digital Accounting; Tax Compliance; Data Reconciliation; Government Portals; Chartered Accountancy Firms

1 Introduction and background

1.1 Introduction

Accounting involves identifying, recording, classifying and summarizing of financial transactions in order to ascertain the financial position of an organization. Accounting helps the business organization take decisions, meet its tax liabilities, prepare its financial statements and maintain its records.

Earlier accounting activities were carried out manually, which consumed a lot of time as well as resulted into calculation and recording errors. With the advent of technology, accounting activities have now been automated with the help of spreadsheets, accounting software, digital document storage and government portals.

1.2 Meaning of technology in accounting

Technology in accounting refers to the application of digital tools, computer programs, electronic storage and online portals to perform accounting and financial related activities. Technology in accounting includes accounting software to record financial transactions, spreadsheets to store and

calculate financial information, electronic storage to maintain financial records and government portals to manage tax compliance.

1.3 Importance of accuracy in accounting

Accuracy implies that the information has been correctly recorded and calculated and is in consonance with the supporting evidence. Being accurate is extremely important in order to arrive at correct results of financial statements. Inaccuracies can lead to incorrect calculations, unreliable results, compliance issues and additional work to rectify the errors.

2 Problem statement, significance and objectives

2.1 Problem statement

Accounting professionals receive information from various sources including clients, banks, financial statements and government portals. At times, information across different sources may vary or be incomplete.

Technology helps in collating and managing this information, however, due to errors in inputs, application of incorrect formulae, wrong classifications or incomplete documents, errors may creep into the process.

2.2 Significance of the study

The significance of the study can be discussed under the following heads: -

- Enhanced understanding of the application of technology in accounting.
- Helps accounting professionals in avoiding errors in calculations.
- Assists in improved compliance with tax and regulatory procedures.
- Helps bridge the gap between theoretical and practical education.

2.3 Objectives of the study

- To understand the role of technology in accounting services.
- To study how spreadsheets and digital records aid in improving accuracy.
- To observe the application of technology in statutory compliance procedures.
- To understand the importance of reconciliation and verification of documents.

3 Research methodology and scope

3.1 Research methodology

The study is descriptive in nature and draws on practical observations made during the SIP at a Chartered Accountancy firm in addition to references from related sources including official portals and professional associations.

The intent of this study is to understand the application of technology in accounting services as opposed to quantifying its impact through a research experiment.

3.2 Scope of the study

The scope of the study includes application of technology in different facets of professional accounting services.

These facets include spreadsheets, digital records, income-tax and TDS procedures, GST procedures, PAN-related services, corporate filings and verification of documents.

4 Technology used in accounting services

4.1 Accounting software

Accounting software helps accounting professionals record transactions, organize financial information and prepare reports. Depending on the software, this may support sales records, purchase entries, expense recording, ledger maintenance and financial statements.

Using accounting software can help reduce repetitive calculations and bring consistency. However, the software needs to be correctly set up, and entries should be done in accordance with appropriate accounting principles. Inappropriate entries or settings can lead to incorrect reports.

4.2 Digital document storage

Electronic storage helps keep client documents organized and accessible. Files can be arranged by client, financial year, assignment or type of compliance. A clear system of naming and access permissions ensures that staff can find the correct version and avoid using an older document. Backup and secure storage are also important.

4.3 Online portals

Government portals offer online access to specific procedures, such as income-tax filing, PAN-related applications and corporate filings. Online submission can reduce paper handling and provide a digital record of the procedure.

5 Spreadsheets, reconciliation and data accuracy

5.1 Meaning of reconciliation

Reconciliation is the process of comparing information from two or more sources and investigating differences. It is an important control in accounting because client records, bank statements, tax records and other supporting documents might not always show the same figures.

5.2 Use of spreadsheets in reconciliation

A spreadsheet can place information from different sources side-by-side. The accountant can compare amounts, dates, names, reference numbers and tax details. Sorting and filters can help locate unmatched entries, and formulas can calculate differences or totals. A separate column can note whether each item is checked and what follow up is due.

5.3 Example from tax documentation

The SIP describes exposure to comparing client-provided documents, such as Form 16/16A and bank statements, with tax information available in Form 26AS and AIS.If interest income, tax deducted or

capital-gains information does not match, the accountant needs to examine supporting documents and clarify the difference before finalizing the relevant work.

5.4 Common spreadsheet risks

- Incorrect or incomplete source data may produce misleading results.
- Formulas can be deleted, overwritten or copied incorrectly.
- Amounts stored in inconsistent formats can affect calculations.
- Duplicate rows or missing entries can distort totals.
- Files can be shared without adequate access controls or version management.

6 Technology in income tax and TDS compliance

6.1 Income-tax portal activities

The Income Tax e-Filing portal supports a range of income-tax-related procedures. The SIP describes exposure to tracking return-processing matters, maintaining records and assisting with online grievance or rectification-related work. Digital access can make it easier to review the status of a case and submit information in the prescribed manner, but the user must select the correct service and provide complete supporting details.

6.2 Pre-filing verification

Before an income-tax return is completed, relevant information should be gathered and checked. Depending on the taxpayer's circumstances, records may include Form 16/16A, bank statements, investment proofs and information about income or capital gains. Comparing the client's documents with Form 26AS and AIS can help identify missing income or differences in tax details. Any mismatch should be investigated rather than adjusted without evidence.

6.3 TDS-related work

Tax Deducted at Source involves deducting tax from specified payments and reporting the relevant details. The SIP refers to work involving transaction ledgers, deductee information, PAN validation and TDS-related forms and schedules. Correct classification of payments is important because different provisions may apply to different types of payment.

7 Other digital portals and practical observations from the SIP

7.1 PAN and HUF services

The SIP describes exposure to PAN applications and correction-related procedures through the Protean eGov portal, including documentation associated with Hindu Undivided Families (HUFs). Digital applications require careful entry of identification details and supporting information. Checking names, dates and declarations against source documents can help avoid avoidable corrections or delays.

7.2 MCA and corporate compliance

The Ministry of Corporate Affairs portal supports company and LLP-related filings. The SIP mentions exposure to company incorporation documents and LLP closure-related documentation. These activ-

ities involve information such as names, identification details, legal documents and declarations. Digital submission can make it easier to file, but information should be checked for consistency before submission.

7.3 NGO Darpan and DGFT/IEC

The SIP also describes work involving NGO Darpan registration and DGFT/IEC-related procedures. Such portals require correct organizational information and appropriate documents. A systematic checklist can help confirm that the necessary details have been collected and that the submission is complete.

7.4 UDIN and document authenticity

The Unique Document Identification Number (UDIN) system is relevant to specified documents certified by Chartered Accountants. The SIP refers to UDIN generation in connection with turnover certificates and financial statements.

8 Practical observations from the SIP

8.1 Digital portals as part of daily work

The internship experience described in the SIP shows that digital portals are closely attached to professional accounting and compliance activities. Work may involve moving between the Income Tax e-Filing portal, Protean eGov, MCA, NGO Darpan and DGFT systems.

8.2 Differences between client and portal records

One important observation in the SIP was that client-provided information does not always match the information available in tax records. Examples include differences in income figures, tax deducted, interest income or capital-gains information. Reviewing source documents and reconciling the figures before filing helps identify issues early and gives the accountant an opportunity to explain the difference to the client.

8.3 Large data files and merchant information

The SIP describes work involving large volumes of e-commerce data and merchant statements. Large files require careful organization since duplicates, missing rows, inconsistent formats or incorrect formulas can distort totals. Spreadsheet skills therefore play an important role in turning raw data into organized working papers that can be checked and understood.

9 Findings and discussion

9.1 Technology supports consistent processing

Digital tools can support consistent processing by adopting standard formats, formulas and filing procedures. This is useful when the same types of work are repeated for different clients. Consistency makes it easier to review work and identify unusual entries, provided that the standard process is appropriate for the particular case.

9.2 Reconciliation is central to accuracy

The SIP's examples of comparing client information with tax records demonstrate that accuracy depends on examining the relationship between sources. Merely copying information into a digital form does not confirm that it is correct. Reconciliation helps reveal the differences that need to be explained before filing a return, statement or compliance document.

9.3 Portals improve access, but have limitations

Online portals provide access to digital procedures and can reduce physical paperwork. However, technical problems or downtime can disrupt work. Professionals should plan for deadlines and maintain relevant documents of submission or pending matters.

10 Suggestions and recommendations

10.1 Introduce standard checklists

Firms should maintain checklists for recurring tasks such as ITR documentation, TDS statements, PAN applications and corporate filings. A checklist should identify the documents required, details to verify, reconciliation steps and final review requirements.

10.2 Reconcile before filing

Important figures should be compared with source documents and relevant portal information before submission. Differences should be recorded, investigated and resolved or referred for professional review.

This is particularly important where client records, bank statements, Form 26AS, AIS and other tax documents contain different information.

10.3 Strengthen spreadsheet controls

Spreadsheets should use clear headings, consistent formats and formulas that can be reviewed. Important formulas should be protected where appropriate, and totals should be compared with source records.

Files should be saved with clear names and version details so that staff do not accidentally use an outdated worksheet.

10.4 Improve digital record management

Client files should be organized in a standard folder structure. Access should be restricted to authorized staff, and confidential documents should not be shared casually.

Firms should follow their security and backup procedures, and maintain supporting documents needed to understand how a calculation or filing was prepared.

11 Conclusion

Technology plays an important role in improving the organization, efficiency and potential accuracy of accounting services. Accounting software, spreadsheets, digital records and government portals

help professionals record information, prepare calculations, reconcile figures and complete statutory procedures.

These tools can help reduce repetitive manual work and make documents easy to retrieve, compare and review.

The practical observations described in the SIP at Kartik Agarwal & Associates LLP illustrate how technology is used in TDS-related work, income-tax documentation, reconciliation with Form 26AS and AIS, PAN and HUF services, GST-related tasks, MCA procedures, NGO Darpan, DGFT/IEC activities, UDIN generation and spreadsheet management.

These examples demonstrate that digital tools are part of everyday accounting and compliance work.

At the same time, technology does not guarantee that every result is correct. Incomplete client information, incorrect data entry, formula errors, portal downtime and deadline pressure can affect the work. Professional judgment, careful checking and confidentiality are essential.

Accounting firms can strengthen accuracy by using standard checklists, reconciling source records, reviewing formulas, organizing digital files securely and training staff regularly.

In conclusion, the most reliable approach is to combine technology with sound accounting knowledge and human supervision. When digital tools are used responsibly and their outputs are verified, they can support more accurate, organized and dependable accounting services.

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