

Trends in Accounting Information System: Opportunities and Challenges in MSMEs

Dr. Srinath T K

Associate Professor, Research Guide Jain CMS Business School

Mobile: 9880034190

Srinathtk57@gmail.com

Mrs. Swathi S

Research Scholar, UOM Al-Ameen Research Foundation

Mobile: 9945383140

swathidsjbs@gmail.com

Abstract

Accounting Information System which integrates the data of all the departments of the company helps decision-makers to take accurate, timely decisions based on the data it collects and stores. Today in this digital era where the majority of the business transactions are happening through digital mode AIS has gained its importance. AIS has immensely contributed to collecting, storing, retrieving, and processing data of the company during pandemics at times where digital means we're the only path to continue the business. In recent times AIS is becoming one of the tools in improving business efficiency due to its features like quick reporting, integrating data, low cost. In the past 2 decades, AIS has witnessed tremendous technological change. Today digital accounting solutions are experiencing new trends coming up like cloud accounting, artificial intelligence, data analysis, mobile accounting. All businesses are it large or small or micro has to adopt digital accounting solutions to get accurate financial data, faster decision making, easy compliance with the law, good cash flow, business transactions without any obstruction. The review of research done reveals that the contribution towards Indian GDP by MSMEs is increasing year by year. MSMEs in India is contributing around 48% of the country's exports and will be reaching 60% soon. Though due to pandemics some of the MSMEs were forced to shut down yet they are recovering at a faster pace. Today converting into the digital world has become a necessity for the MSMEs not only to recover but to sustain in the business. This research paper focuses on the recent trends in AIS, opportunities, and challenges faced by MSMEs in adopting digital solutions. MSMEs will be always in a dilemma and find challenging in choosing the traditional accounting method, conventional accounting software, and modern accounting software with the new trends. The research shows that despite having advantages in the adoption of upcoming changes in the field of accounting MSMEs still lag in adopting by facing challenges as to the fulfillment of their day to day requirements.

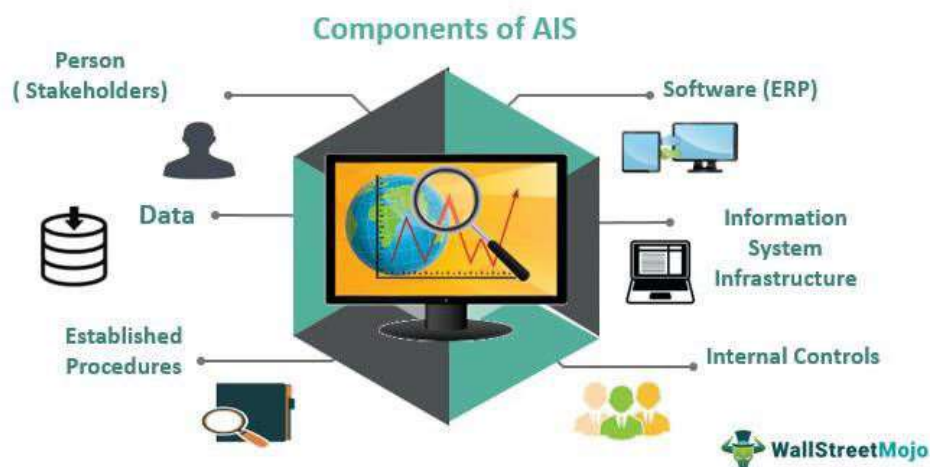
Keywords: Trends, AIS, MSMEs, Digital solution, Cloud accounting, Artificial intelligence, Automation, Block chain.

1.0. Introduction

A Business that doesn't change is a business that is going to die - FRANK PERDUE

In this digital era due to fast changes in technology, accounting information system (here on AIS) has experienced many technological developments. AIS helps different departments of the company to work together. It helps to efficiently store the data and make these data available to the decision-makers. It also helps to prepare financial reports and ensure the quality, reliability, and security of the data. AIS allows the business operations to run smoothly and at the same time, the data collected in AIS can be used to find out where the company went wrong during the financial crisis. Examples of such cases where AIS is proven are WorldCom and Lehman Brothers. At the initial stages, only large companies with a good amount of resources were adopting AIS. Today all sizes of businesses are it large, medium, small enterprises are converting their accounting and financial roles towards AIS. Due to the fast growth and adoption, many trends in AIS have come up. The accounting information system is not only an effective tool for collecting, storing, and integrating data but also is cost-effective. AIS is unique as it not only helps to perform accounting functions but also activities related to auditing, managerial accounting, tax, reporting.

Accounting Information System (AIS)



Source: [Accounting Information System \(wallstreetmojo.com\)](https://wallstreetmojo.com/)

Micro, Small, and Medium Enterprises are popularly known as MSMEs in India are the foundation of the country by contributing around 6.11% of manufacturing GDP and 26.63% of GDP from services. It also contributes around 49.5% of overall exports which the nation wants to reach 60%. Though MSMEs contribute around 37% of India's GDP yet it has many ground-level problems which can be solved through tech-based solutions. The pandemic has hit the MSMEs in such a way that many businesses got to strike off. Digital means we're the only helping hand during a pandemic but those businesses which followed the traditional way of running a business with manual work could not survive. It's high time now that MSMEs should transform from traditional way to modern way not only to survive but to overcome the disaster post-Covid. The accounting solutions market is witnessing more changes and growth in the past two decades. Implementation of GST has made every businessman whether small or big to comply with statutory norms thereby adopting digital accounting software. Expansion of sectors like IT, Telecom, BFSI, retail has led to the growth of accounting software. The accounting software market is experiencing growth in MSMEs also. The reason being converting from the traditional way of accounting with pen and paper to conventional method of bookkeeping with computers, generalized accounting software comes with features like inventory, supply chain management, HRM, simple GST norms, invoice generation, payment clearance. Tally solutions India's major accounting software market player for small and medium enterprises and other competitor software such as Vyapar, Khatabook is targeting Micro businesses like Kirana stores, restaurants for expanding its market while billing as an entry point. The ministry of MSME is supporting MSMEs to adopt emerging trends in technology and to help manufacture essential products related to these technologies to overcome Covid disaster and make MSME turn this as an opportunity to succeed in the direction of Industry 4.0

2.0. Concepts and definition

2.1. AIS

The accounting information system is a systematic process of collecting, storing, and processing financial and accounting data which is used by internal users to report information to stakeholders.

2.2. MSME

Micro, Small, and Medium Enterprises. In India MSME is operational since 2nd October 2006. A business or enterprise is treated as MSME if the investment and annual turnover are limited to the following classification:

2.3. MSME Classification

Criteria	Micro	Small	Medium
Investment	<Rs.1 Crore	< Rs.10 Crore	< Rs.50 Crore
Annual turnover	<Rs.5 Crore	< Rs.50 Crore	< Rs.250 Crore

3.0. Evolution of AIS

Accounting information system evolved in 1970 with payroll function which was expensive and inherent. No accounting software packages were available. Today many

AIS software is available with configuration and customization features. The features of accounting solutions are not only limited to core accounting but have extended to Inventory management, tax audit, supply chain management, fund accounting, billing and invoicing, budgets and forecasting, payroll by integrating all departments' workflow. Few examples of accounting solutions are Quickbooks online, Sage, Account Mate, CYMA, Intacct, Redwing software. In India, the top 5 accounting software adopted by MSMEs are Tally ERP, Quick books, Zoho books, Marg, Busy.

4.0. Statement of the problem

Changing accounting-related work from traditional to digital platforms has become a necessity for every business at the current time. Despite development in business and information technology resulting in easier process of work yet most of the MSMEs which are treated as the backbone of India has not implemented any AIS software and are not much aware of the recent trends in accounting. This paper throws light on understanding different recent developments in accounting, opportunities and challenges for MSMEs in adopting the same.

5.0. Objective

- To examine the evolution and growth of accounting information systems.
- To analyze the importance of MSMEs in India.
- To evaluate the benefits of upcoming trends in accounting solutions to MSMEs.
- To critically analyze the obstacles faced by MSMEs in accepting new trends
- To develop a framework for the effective implementation of new trends in AIS to MSME

6.0. Review of literature

1. AzharSusanto and Meiryani (2019): This research paper attempts to describe the evolution of AIS. In the early 20th century computers were used for only basic accounting applications known as Electronic Data Processing. Later EDP became Data Processing and now it is named as Accounting Information System. Gradually focus was shifted to MIS, DSS, office automation, and Artificial Intelligence. The authors have discussed AIS models such as Manual Process models, Flat file models, Database system models, REAREA model, and finally ERP system model.
2. MuhannadAkram Ahmad and Seif Obeid (2019): This research paper shows that from the responses of 350 SMEs employees Accounting Information System improves the organizational performance. Knowledge management plays a mediating role between AIS and Organizational performance in achieving this goal. . Knowledge management positively supports AIS to influence Organization's performance.
3. Amos Archer Ganyam and John AyoorIvungu (2019): The authors from the review of certain literature are of opinion that many pieces of research that took place in

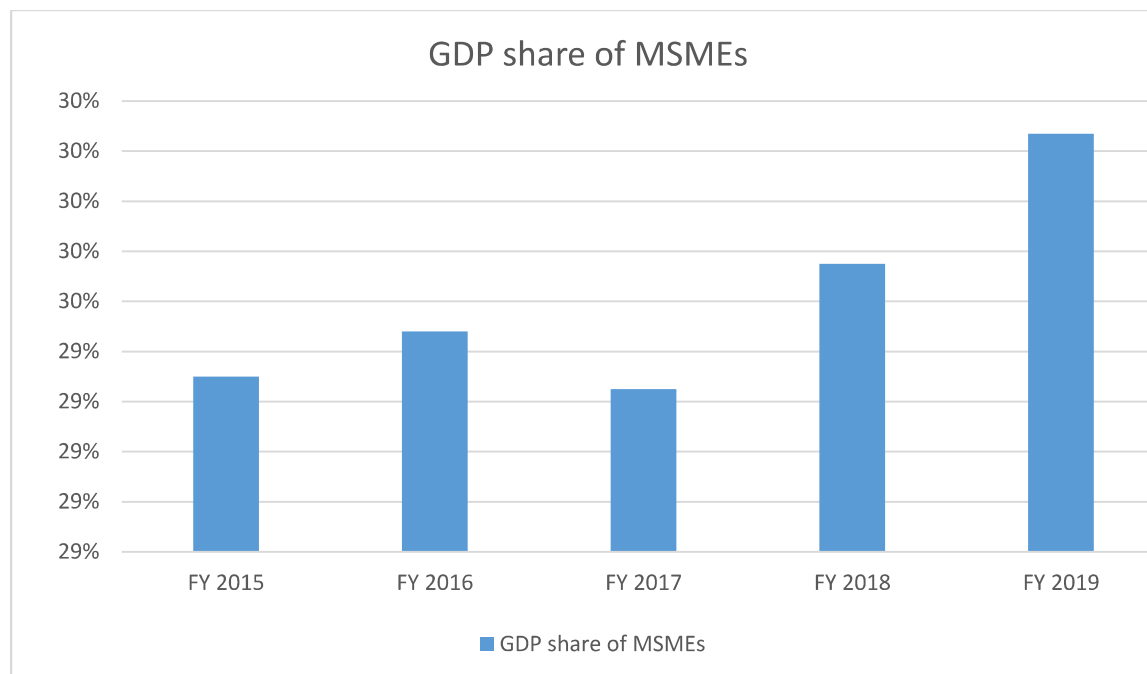
economically developed country Europe and Asian countries have concluded that there is a positive relationship between AIS and firm performance.

4. MalekHamed, AbdalwaliLutfi, and others (2021): This research paper has attempted to study and conclude that the influence of environmental factors such as Mimetic pressure, Coercive Pressure, and Normative pressure have a positive impact in influencing SMEs to adopt computer-based AIS. To avoid risk, to comply with the statutory norms, and because of the pressure that big firms have adopted CBAIS SMEs go for digital solutions.
5. CeslovasChristauskas, Regina Miseviciene (2012): The authors asserted that the accounting system is lacking in helping businesses due to complexity. Emerging change in accounting software Cloud accounting can help SMEs a lot and also have risks. The companies prefer locally developed accounting software and lack knowledge regarding the benefits of web ltechnology. Companies hesitate to accept innovation in web technologies.
6. Salehi, Mahdi &Rostami, Vahab&Abdolkarim, Mogadam (2010). The authors have found out from the research that financial statements and reporting can be improved with AIS. AIS lags in meeting out the requirements of the business properly. It doesn't provide sufficient information for decision-makers.
7. AzizeEsmeray (2016): This research paper has attempted to study the impact of AIS on a Firm's performance. It is found out that the level of adoption of AIS depends on the high-level educational qualification of the managerand the number of employees in the company.
8. Dr.Yasmeen Ali and Dr. UpasanaTakur (2017): For the purpose of the study the 200 questionnaire was distributed out of which 140 have responded.the study shows that many of the CA's are aware of the concept and few have adopted cloud accounting as it saves cost and data is readily available which eases their work.It was also discussed that the young professionals are more convenient and awareness is more about cloud accounting.many of the CA's have not adopted cloud because of security issue as they are bound to maintain confidentiality of the work, was not in need, not knowing the usage of cloud accounting and due to cost issues.Those who have adopted is mainly because of automation and location friendly.

8.0. Trends in accounting

1. Cloud accounting – Also called Real Time Accounting. Cloud accounting permits accounting software to use the internet and get access to financial data from anywhere and at any time. In recent times cloud accounting is becoming popular for its lower cost. It has paved a way for MSMEs to adopt accounting information systems for their accounting activities which was once a tool only for large companies with big investments. All accounting software is designed with cloud capability. Tally has also upgraded Tally ERP 9 to Tally Prime

2. Mobile accounting – Mobile accounting enables the accountant and management to access accounting data through the mobile version of the accounting app anywhere without any restrictions as to location.
3. Artificial intelligence – Artificial intelligence is a technology that mimics humans. It tries to make decisions as humans take, understand different languages, act to information. EY one of the big 4 auditing firms in its report on the 2020 Global Tax Technology and Transformation Survey states that AL can replace 40% - 70% of the time of highly qualified accountants spending on data cleansing. Integration of artificial intelligence with accounting software results in the automation of processes thereby makes the application of business decisions faster. The government of India has initiated a national program on Artificial Intelligence in 9 areas such as Health care, Agriculture, Education, Smart city. The Ministry of MSME in its single window system “Champions” for MSME has implemented AL and ML on its portal as one of the steps to convert Covid disaster into an opportunity.
4. Data analysis- In accounting data analysis is used by accountants to help businesses in strategic decision making, identifying and managing risk on tax matters related to investments, improving business performance, analyzing the cash flow of the business.
5. Automation –Automation in accounting helps to reduce the monotonous work of recording, posting. Automation in accounting makes faster application of business decisions. PWC one of the big 4 auditing firms has stated that future accountants should be well versed with automation skills. The Finance and IT experts are predicting that in the future all accounting methods will become automated.
6. Blockchain – Blockchain maintains a joint register of transfer of assets and related accurate financial information instead of maintaining separate records for each transaction receipt. The accountants can use this new technology to have clarity in ownership of assets, obligations related to the assets, to know internal control mechanisms, help clients in regulatory issues about Blockchain.



For the 2019-20 MSMEs GDP share is 30%

Source: Central Statistics Office, Ministry of Statistics and PI

8.0. Opportunities for MSMEs

1. MSMEs are the backbone of India. Adopting new trends like cloud accounting, Automation these businesses can save time by having a smooth workflow.
2. According to Forbes, 10 June 2021, AI can take small businesses to the next level by assuring product quality, scheduling works, schedule customers' appointments in time, security, and marketing.
3. The growth rate of MSME is more than 10% every year. As and when it is growing, the need arises for different departments to collaborate and work together which is possible through AIS. Cloud accounting and mobile accounting helps in achieving this.
4. Around 30% of India's GDP is from MSMEs. If all MSMEs adopt digital accounting solutions with new trends then they can witness an increase in productivity and growth in business.
5. Every day requirement - Many MSMEs will have day to day basis transactions which include Clearing bills, generating invoices on time is possible with new trends of AIS thereby helps in having good business relations with vendors and distributors
6. The needs of the MSMEs which are different from that of large companies can be fulfilled with customization of the software having the cloud-based, automatic feature.
7. Cloud-based accounting helps to search data and organize the finances of the business properly.
8. Collaboration of work can be achieved from the employees staying in remote areas during any disaster through Cloud and mobile accounting.

9. Real-time data can be extracted - Connecting to accounting solutions with new trends helps small and medium businesses to track inventory, sales, expenses.
10. Remote access - It helps owners to have access to data from wherever they are. No physical presence at the office is required.
11. Safety – One of the major reasons why small businesses hesitate to implement accounting software is fear of data security. Cloud accounting is the safest way of securing data and accounts compare to the conventional way of bookkeeping.
12. Device accessibility - Cloud accounting, AL, Blockchain helps to access the data from any internet-enabled device.
13. Greater reliability – As software designed with automation or AL gives accurate data, the risk of errors is very less unlike traditional accounting
14. Lower costs – Small businesses cannot invest too much in labor. Standard basic software requirements cost less to the company. Cloud accounting is becoming small business's cup of tea
15. Unlike traditional or old accounting software consuming the majority of the time of accountants in doing repetitive work on data, inputs Automation helps in saving quality time of accountants and auditors. The workflow becomes fast. No need to input data into a spreadsheet and check the calculations. Automation in accounting solution take cares of all finance-related work done automatically
16. AL, Blockchain, automation minimizes errors thereby financial information will be accurate.
17. New trends in AIS result in more transparency and Improves cash flow management.
18. All the new trends evolved in AIS helps in simplifying tax filings for MSMEs which is a big task for these businesses.
19. Using digital accounting solutions with new trends helps customers to get invoices in time. This improves good business relations which is very important for MSMEs.
20. The recent notification issued by the Ministry of Corporate Affairs of India (MCA) mandates that every company has to include audit trails in the accounting software to be implemented to FY 2023. It's time now for the MSMEs to deploy software with the new trends including audit trails.

9.0. Challenges

1. Accounting Software needs to be completely redesigned for Microbusiness as traditionally run micro-business are still on the verge of adopting basic accounting software.
2. MSMEs don't spend more money on training the accountant. AIS itself and new trends require the accounts department employees and the management to know its usage.
3. MSMEs are an unorganized business where the need of each business is different. Making generalized software with such simplicity is critical for accounting solution companies.

4. If the software is rigid where it has a process and until one step gets over next step cannot be done, the majority of the business information or data remains outside the software. Making very simple and flexible accounting solutions are not easy.
5. Complexity in software makes businessmen feel the challenge and prefer to go back to the same mechanism which they are following
6. Computer knowledge and software usage awareness is required where the training of accountant is the cost to the company
7. Many MSMEs in India are being run in a traditional way with aged people who doubts technology. They fear the security and confidentiality of data in software.
8. Cost is the major challenge for MSMEs to adopt new technology. Free version or cheap software Limits data that can be freely stored.
9. Fear of gaining the knowledge or entering the data wrongly- any automation do its job based on the data entered. If wrong data is entered then the whole result goes in vain.
10. Internet connectivity is a big challenge for MSMEs in adopting new trends as in many locations poor or no connectivity is available.
11. Around 20% of the MSMEs are located in rural. Many MSMEs which has rural-based are traditionally conducting business and do not rely on computers.
12. Many owners are hesitant to adopt new trends as it requires changes in the whole process
13. Technical issues such as understanding software, poor internet connectivity in rural and sometimes in urban area challenges adoption of new trends.

10.0. Findings

1. An accounting information system helps to integrate all activities of the business and help in improving productivity
2. Accounting is collaborating with technology to reap the benefits of the latter. New trends in accounting with technology are Cloud-based accounting, Mobile accounting, Artificial intelligence, automation, Blockchain.
3. Being the backbone of India MSMEs lag in adapting to new technology to improve their business. Less than or only 50% of the small businesses are using accounting software.
4. Many MSMEs have rapidly started adopting Accountingsoftware post Covid disasterasking themselves equipped with digital knowledge.
5. More opportunities for MSMEs are opened in adopting new trends in AIS. MSMEs can improve business efficiency, have the security of data, maintain good cash flow, and work from a remote area.
6. As MSMEs are growing day by day which results in more needs related to financial activities Accounting software developing companies have opportunities to enter small and micro-businesses.
7. There are challenges and drawbacks in implementing new trends both to solution providers and MSMEs concerning knowledge, cost, design, internet connectivity, the confidence of businessmen, need.

8. Knowledge about the usage of new emerging trends in accounting systems influences the adoption of AIS with Cloud computing, AI, Automation.
9. MSMEs can witness support from GOI through National programme on artificial intelligence along with digital India 2.0

11.0. Conclusion and Recommendation

Businesses have to adopt information technology to survive and to achieve a competitive advantage. Mere adopting IT does not impact much. Enterprises have to go for cloud accounting or automation or mobile accounting to improve the performance of the business. The number of MSMEs in India has increased by 18.5% in 2020. It's now the time for all accounting software companies to design software that fulfills MSMEs needs. The majority of the MSMEs are out of the digital accounting solutions due to complexity in the accounting software which they feel challenged. After the lockdown was held up many small businesses have started adopting accounting software especially with cloud and mobile features as they have realized that they need to be prepared for such disasters in the future. According to economics times, the accounting software market is expected to grow at a CAGR of 8.5% during the forecast period 2019-2024. This is mainly because of the rapid growth of MSMEs and their accounting needs. The knowledge about new trends evolving in AIS and its usage in accountants and management is a very important factor for adopting digital solutions. MSMEs to survive in the business and empower with new technology should adopt digital solutions with emerging changes resulting in improving the efficiency of the business. MSMEs must change themselves to IT and go along with the changes they witness. The accounting needs of MSMEs will be full filled as India's leading accounting software companies such as Tally solutions, Vyapar, Khatabook is targeting Micro businesses like Kirana stores, restaurants for expanding its market while billing as an entry point. The ministry of MSME has extended its support to MSMEs to adopt emerging trends in technology and to manufacture essential products related to these technologies. Based on the study the authors recommend to MSMEs and the software development companies that

1. To gain the confidence of small and micro businesses the needs in the accounting data of the MSMEs should be full filled by making it very simple and flexible.
2. The software companies have to work on the cost aspect so that all small and especially micro-business majority of whom are outside the accounting technology can adopt and implement the same.
3. Every enterprise in this technology-driven world has to adopt new trends to sustain in the business.
4. MSMEs have to go for AI, automation which improves the efficiency of the business by reducing cost, time and providing the accurate result.
5. Having well-qualified and technologically experienced accounting employees is very crucial for any type of business.

The authors had a time limit due to which research was done based on secondary data. This study has considered MSMEs of the whole of India in general. Further research can be done using primary data in a particular region, awareness about usage of any or all trends in AIS among MSMEs, meeting expectations with reality.

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