Journey of Indian Accounting Practices

Introduction

Accounting is a discipline which records, classifies, and summarizes data and presents it in a convenient form to various stakeholders of the Company. Accounting is one of the oldest structured management information systems. Accounting as an information system is concerned with identification, measurement, and communication of economic information of an organization to its users who may need the information for rational decision making. The history of accounting dates back to the earliest days of civilization driven by the trade system of crops and products necessary for survival. The subject of accountancy and its importance has a long history in India in 'Kautilya's (also known as Chanakya) Arthshasthra' which is a treatise on economics and political science and has elaborate prescriptions on accounting (and accountability) aspects for a treasury and Government with features of universal utility. The earliest treatise on accounting is generally thought to be Pacioli's Summar of 1494. However, Bahikhata (a double-entry system of bookkeeping) predates the 'Italian' method by many centuries. Its existence in India prior to the Greek and Roman empires suggests that Indian traders took it with them to Italy, and from there the double-entry system spread through Europe, which then evolved itself to accrual from cash and gradually to present day modern reporting. Hence, this paper attempts to understand the Journey of Indian Accounting Practices and also collect evidence to prove the origin of double entry system in India.

Objectives of the study:

The current study is divided into four parts:

Part 1 aims to understand the evolution of accounting system in India.

Part 2 has discussed on Indian system of accounting.

Part 3 discusses on Indian System of Bookkeeping.

Part 4 reflects on the evidence collected for emergence of double entry bookkeeping in India.

Part 1: Phases of Accounting History of India

It makes sense to begin the history of Indian accounting methods in the BC as India as a nation was actively involved in trade at that time. As depicted in Figure 1, the historical development of Indian accounting system can be analyzed over five periods. (Vincent Tawiah & Pran Boolaky, 2020

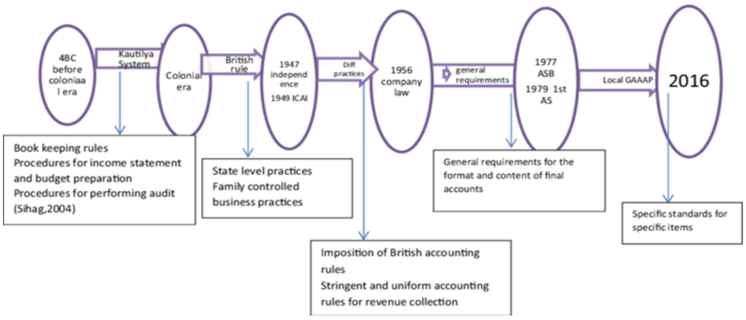

Figure 1: Phases of Accounting History of India

(Source: Vincent Tawiah & Pran Boolaky, 2020)

Accounting Practices during Kauthilya's/Chanakya's period:

The original Arthashastra was located in the institute, which was established by the Wodeyar kings of Mysore in 1891, by Sanskrit scholar and librarian Rudrapatna Shamashastri in 1905. The Arthashastra was written down by Shamashastri and published in 1909 on new palm leaves. In 1915, he provided an English translation of it. The British Raj thought India's concepts on government and military command were derived from the Greeks before the text was rediscovered. The Arthashastra is now the world's oldest text on political theory, unseating Niccolo Machiavelli's The Prince, a 16th-century masterpiece. (M Raghuram, 2019)

Figure 2: Original Arthashastra manuscript is stored at the Oriental Research Institute

Western accountants and even accounting historians know little about Kautilya's Arthasastra. It is not discussed in the early works on the history of standard accounting, such as Littleton (1933), Chatfield (1974), or ten Have (1986), nor is it mentioned in relevant anthologies, such as Littleton and Yamey (1956), Edwards and Yamey (1994), or in theoretical works that date back to the early days, like Most (1982). Only the most recent encyclopaedia by Chatfield and Vangermeersch (1996) makes a passing mention of it. (Richard Mattessich, 1998).

In the latter half of the fourth century B.C.E., Vishnugupta Chanakya Kautilya wrote The Arthashastra, which is the science of wealth and welfare. There are 150 chapters total in the

Arthashastra, which are organised into 15 books according to topics. (Balbir.S Sihag, 2004) It has a distinct chapter titled "The Business of Keeping Accounts at the Office of Accountants" that makes mentions of routine external audits, checking, and supervision of the accounts. Additionally, there is proof that a budget was prepared for manufacturing accounts, fixed and variable expenses, and revenues and expenditures. As a result, the discipline of accounting had already been established in India by the fourth century B.C.E. (LN Rangarajan, 2010)

The four categories below can be used to categorise Kautilya's contributions to accounting in this book: (i) the development of accounting principles, (ii) the definition of the scope and methodology of accounting, (iii) the codification of financial rules and regulations and the establishment of an organisational structure to minimise the possibility of conflicts of interest, and (iv) the role of ethics in the prevention of fraudulent accounting (often brought on by excessive greed) in upholding law and order, effective allocation of resources, and happiness pursuit.

In three of its chapters (Book 2, Chapter 6, 7, and 8), Kautilya defines, refers to, and uses several important concepts of business, accounting, and auditing that are of interest to modern accountants. (Manjula Shyam & Shyam Sunder, 2008)

Kautilya’s accounting system concentrated on the arithmetic side of adding and subtracting of figures. Businesses were preparing accounts, as it suits them without any reference to any standards. Again, each state and empire tried to develop laws that suit the people of the state. Kautilya used fractions, percentages, summation, and subtraction operations, and even permutations and combinations quite extensively, displaying a deep knowledge of arithmetic. (LN Rangarajan, 2010).
Kautilya created guidelines for bookkeeping, methods for creating budgets and income statements, and processes for conducting independent audits. (Balbir.S Sihag, 2004)

In order to promote accountability, specialisation, and most importantly to decrease the potential for conflicts of interest, Kautilya underlined the crucial function of independent periodic audits and recommended the creation of two significant but separate offices, the Treasurer and Comptroller-Auditor. Due to the dominance of government business during his age, Kaulitya concentrated on the accounting of the public sector. (LN Rangarajan, 2010)

Role of Departmental or Regional Accounts Officers:

• Proper Maintenance of Account Books: All accounts must be kept in the correct format and written legibly without corrections. It is illegal to do otherwise and is penalised.

• Accounts Must Be Filed On Time: Daily accounts must be submitted once per month and must be presented before the end of the following month to avoid penalties for late submission.

In general, the Kautilya Arthshastra addresses accounting rules and principles, the duties of accountants and auditors, the procedures for accounting, auditing, and managing the risk of fraud, as well as the importance of ethics in managing financial activities.

Maintenance of Accounts: The accounting financial year was set to the period of July through June, and there was a complete process for closing the books and conducting an audit of them. It discussed how to estimate net income and loss by combining the accounts from several government departments. The accountants were obliged to deliver the finished annual accounts to the head office by mid-July. Inaction or delay resulted in financial penalties.

Classification of Receipts: "Receipts may be current, last balance, and accidental (anyajátah = obtained from external source)," says Kautilya. He makes distinctions between cash receipts and debtors, current and accrued income, other sources of income, windfall gains, and the recovery of bad debts in it. He proposed various loan interest rates and recognized the idea of risk. Since the returns were unknown, loans for international trade attracted the most attention.

Classification of Expenditure: Similar to receipt classification, expense classification distinguished between capital expenditures and revenue expenses. Spending can be divided into two categories: daily spending and profitable spending, according to Kautilya. "Net balance" is the word used to describe the difference between income and expenses. He insisted on making long-term investments in things like construction and other projects since they would eventually provide dividends. It also necessitated monitoring the progress of the work.

Role and responsibility of accountants: Within the king's treasury department, there was a hierarchical organizational system that ranked senior accountants above junior ones. According to established norms, the accountants annually maintained the books of accounts. At year's end, the same were provided for audit. Kautilya advised paying accountants and auditors good salaries since a good income would keep them moral and he believed that fraud would be more likely to occur if accountants were paid extremely little.

Segregation of Roles of Treasury and Auditor: The intriguing aspect of Kautilya's strategy was his recognition of the conflict of interest between the functions of finance and auditing. He firmly declared that the king should get independent and separate reports from the heads of finance and audit. He was aware that they might run into each other. The Ministry of Finance and the Comptroller General of Audit are two distinct government departments in India.

Verification and Auditing of Accounts: Continuous monitoring, periodic auditing, verification, and vouching were concepts that were known in the past. Daily and regular checks (five nights, pakshás, months, four months, and the year) were conducted. The characteristics that are currently utilised to validate payment and income vouchers were also in use in the past. It was interesting to note that each section had spies to warn the seniors of misconduct and gather information. A thorough procedure was in place for identifying fraudulent transactions and disciplining accountants who provided false financial statement information.

Kautilya thus recommended the accounting theory, which covered bookkeeping, the creation of financial statements, auditing, and the management of fraud risk. He saw accounting as a crucial component of economics. His work was utilised by several Indian kingdoms up until the 15th century AD, or before colonial administration. (Sonia Jaspal, 2013).

Table 1: Showing the Classification of Revenue and Expenditure according to Major Heads of Account

On the receipt side, the revenue shall be classified according to the major Heads of Account:	On the debit side, expenditure shall be classified according to the major Heads, as given below:
1. Cost price share (bhaga) 2. Transaction tax (vyaji) Monopoly taxes 3. Fixed taxes 4. Manufacturing charges 5. Fines and penalties.	1. Worship (of gods and ancestors) and charitable expenses 2. The Place [expenditure of the King, Queens, Princes etc.] 3. Administration 4. Foreign Affairs 5. Maintenance of granary, ordnance depots and warehouses for commodities and forest produce (under separate subheads) 6. Manufacturing expenses 7. Labour charges

	8. Defence (with separate subheads for each of the four wings)
	9. Cattle and (pastures)
	10. Forests and game sanctuaries
	11. Consumables like (firewood and fodder)

FORM OF ACCOUNTS

Income Side {2.7.31}

Place	Period of accounting	Date and time of receipt	Head of account	Classification current year or outstanding dues	Quantity received	Name of payer	By whose order	Received by	Recorded by
1	2	3	4	5	6	7	8	9	10

Expenditure Side {2.7.32}

Place	Period of accounting	Date and time of payment	Head of Expenditure	Counter value received	Occasion	What was paid	Amount paid	For what use	Authority ordering payment	Withdrawn from store	Delivered by	Received by
1	2	3	4	5	6	7	8	9	10	11	12	13

Balance Columns {2.7.33}

Place	Date and time	Head of account	Dues left outstanding	Form in which balance received into the treasury	Quality	Amount received	Details of container	Delivered to (name of treasury official)
1	2	3	4	5	6	7	8	9

Figure 3: Showing the forms of Accounts.

(Source: Kautilya's Arthashastra by LN Rangarajan)

Accounts of Specific Transactions: A five-day grace period was given if the net sum that needs to be paid to the Treasury was minimal. If the accounts were delayed (by more than five days) the net balance had to be transferred to the Treasury first, followed by a thorough audit which took into account the laws of business, (applicable) precedents, the facts and calculations, and a physical verification of the work. Then, based on inference (supplemented by information from the secret agent), it would be determined if the smallness of the remittance was justified or not. (LN Rangarajan, 2010)

<u>Colonial Era:</u>

The British imposed stringent consistent accounting practises during colonization, particularly on the East India companies. To make it easier to collect taxes, Britain forced its local laws on the Indians. A unified accounting system was also required because, throughout the colonial era, Indians dealt with both Eastern and Westerners.

After India's Independence (1947 to 1979):

Following India's independence from the British, some government agencies and British corporations were taken over by private (family) investors, and new, family-run businesses were established. The majority of family-owned businesses were reluctant to reveal financial information due to concerns about competition, paying excessive taxes, and presenting fake accounts. Without referencing any rules, businesses were preparing their financial statements however it suited them. Businesses were preparing their accounting as they saw fit, without reference to any rules. Again, every state and empire made an effort to create rules that suited its citizens. Despite being established in 1949, the ICAI was only a group of experts with no official authority to establish standards. Without receiving any kind of standardised formal training, these professionals were already working across the nation. Although the Companies Act of 1956 gave some uniformity to the accounting process, the Act's provisions were vague and did not mention any particular standards. Although mandated to do so, the ICAI did not establish any standards until 1979, hence there were no clear requirements for the creation of accounts. The ICAI formed the Accounting Standard Board in 1977 to create accounting standards in order to carry out its (ICAI's) responsibility to suggest accounting standards. The board released its first set of guidelines in 1979, beginning with IGAAP (AS) 1 Disclosure of Accounting Policies. (Vincent Tawiah & Pran Boolaky, 2020).

From 1978 to till date:

11 Accounting Standards (or "AS") created in consultation with ASB between 1977 and 1988 were announced by ICAI, although these stated that the AS did not have statutory recognition. By amending the Companies Act, 1956 in 1999, accounting standards were given statutory legitimacy and legal force. The ASB of the ICAI was creating and updating IGAAP (AS) to take into account the constantly shifting economic environment up till India made it clear that it intended to switch to IFRS through the concept paper in 2007. After putting in a lot of work in 2010–2011, the ASB of ICAI produced 35 Ind AS, which, following consultation with NACAS, were announced by the Ministry of Corporate Affairs (MCA) in February 2011. A path for the adoption of Ind AS in India was outlined in a press release from the Ministry of Corporate Affairs (MCA) on January 2, 2015. MCA announced revisions to AS 2, AS 4, AS 10, AS 13, AS 14, AS 21, and AS 29 as well as Ind AS 11 in 2016 and 2018. In addition, AS 115 has taken the place of Ind AS 11 and Ind AS 18, respectively. (Himanshu Kishnadwala & Nilesh Vikamsey, 2018).

Part 2: Indian System of Accounting

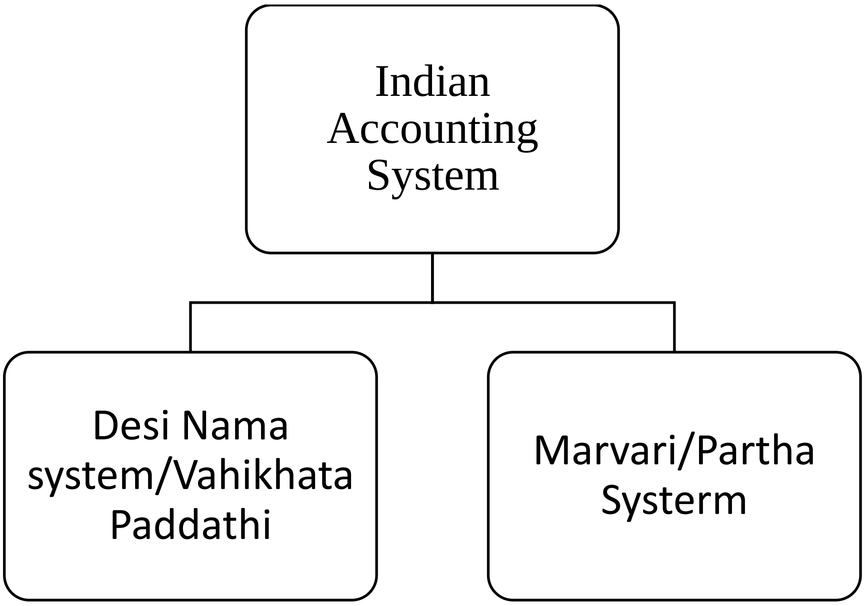

Figure 4: Showing the Indian System of Accounting

Deshi Nama accounting system / Vahi Khata Paddhati

Deshi Nama system is a very old system which is derived and adopted in the Indian subcontinent, to write accounts. Under this accounting method transactions are first entered in the rokhad bahi and then posted into Khata Bahi. A Kaccha ankada (Trail Balance) is also prepared. This system also uses the concept of Jama (Credit) and Udhar (Debit) for maintaining the books of accounts. No definite traces of date are found for development of the system of accounting in India yet it is commonly believed that Indian traders have been using this system since thousands of years. (Hitesh Shukla, 2015). This system is older than double entry system. There is a good deal of similarity between the two systems, from the viewpoint of accounting principles. However, because of its specific peculiarities this system shines out as against other systems. In this system the books are known as 'Vahi' and therefore this system is also known as 'Vahi Khata paddhati'.

Characteristics of Deshi Nama System

- **Books:** The books under Deshi Nama are covered with the red cloth and are hard bound. A design is made on this cover by thick string. These books are in the vertical form and contain plain white blank sheets tied with strings. However, now a days simple books of accounts, with lined pages are also in use.
- **Vikram Samvat:** Deshi Nama is usually maintained for a Vikram Samvat year. i.e. from Kartak Sud (ekam) to Aso vad-30 (Amaas). Now-a-days it is also maintained as per income-tax rules for a financial year (From 1st April to 31st March)

- **Use of the word 'Shri' in deshi nama**, while recording an entry in the Rojmel, bethomel or subsidiary books, the name of the account (Khata) is preceded with the word 'Shri' e.g. if interest (Vyaj) account is to be written, it will be written as "Shri Vyaj Khate'. Shri is considered as sign of omen.
- **Sal / Folds:** The pages in each of the books of accounts are with folds(sal). Rojmel, Bethomel and Khatavahi have pages with eight folds. But pages in subsidiary books have six folds. However, now in changing times, pages without folds and with columns drawn are being used.
- **Credit (Jama) and Debit (Udhar) side:** In the books for Deshi Nama system, out of total eight folds, first four folds on the left hand side are known as Jama (credit) side and the remaining four folds as Udhar (debit) side. Thus, the left-hand side is known as Jama side and the right hand side is known as Udhar side.
- **Methods of writing in folds/sal:** In Deshi Nama, while recording a transaction in Rojmel or Bethomel on either the credit or debit side, the amount of the economic transaction is recorded in the first fold(sal) of the side. In the remaining three folds, the name of the account affected and the debit or credit to it; is written. Below the name of the account, a brief detail/narration of the economic transaction is given and below such brief detail/ narration, ledger folio number is written in the third or fourth fold. In deshi nama, the name of the account of the transaction is written after drawing a line. Generally, the first fold, is for the amount and the remaining three folds are for the particulars of the transaction.
- **Method of writing the amount:** While entering the amount in Deshi Nama books, a sign (_,)known as 'Holayo' or 'Olayo' is put between the amount in rupees and paise. Many businessmen now a days use the sign of equality (=), instead of 'Olayo'. E.g.an amount of 121_,. 25 or 121=25 (Rupees one hundred twenty one and twenty five paise).
- **Rojmel:** Rojmel is the basic or primary book of accounting under the Deshi Nama. Cash and Credit transactions are recorded in the Rojmel. Rojmel is maintained everyday. At the end of the accounting entries for the day, cash balance is found out. That is why it is known as Rojmel. Ledger is prepared with the help of Rojmel.
- **Entry for a cash transaction in Rojmel**: Rojmel serves the purpose of a cash account. Hence, in any transaction, out of the accounts getting the effect, the effect to a cash account (Udhar or Jama effects) need not be recorded in Rojmel. But, the other effect to an account affected is recorded in Rojmel. If it is a cash transaction, the

accounts other than cash account, getting the effect are recorded in Rojmel. E.g. Received rent of 300. According to rules of debit and credit, cash account is to be debited and rent account is to be credited. But in Rojmel the effect to cash account is not to be recorded. Hence, the other effect to rent account is recorded in Rojmel as 'Shri Bhada Khate Jama.' In this way when there is any cash income other than rent, it should also be recorded in Rojmel on jama side to that income account. If the cash is received from any person, in Rojmel it will be recorded as.……. Person Khate/ account jama. Now if we try to understand the opposite situation, cash payment will be recored as 'Kharch (expense) khate Udhar', if it is a payment of an expense. E.g. Paid 100 for wages. Here as per the rule of debit and credit it will be recorded to 'Majuri (wages) khate udhar' and 'Cash khate jama'. However, in Rojmel only 'Majuri (wages) khate udhar' will be recorded, in the same way, any outgoing of cash for any expense will be recorded in Rojmel as 'Udhar' nondh to that specific expense account. If outgoing of cash is due to a payment to any person; in Rojmel there will be an 'Udhar nondh' to that person's account.

From the above it can be understood that in Rojmel, out of the cash transactions, those transactions relating to cash receipts are recorded on 'Jama' side and the cash payments are recorded on the Udhar side. Thus, the recording as per this system reflects the effects of cash receipts and payments in Rojmel.

- **Record of credit transactions in 'Rojmel'**: In credit transactions cash receipt or payment is not involved and therefore, in such transactions there is no effect to cash account. In a credit transaction, both debit and credit effects are to the accounts other than cash account. In such transactions, the account that is to be debited is recorded in Rojmel on' Udhar side and the account which is to be credited is recorded on 'Jama' side. Thus, it is recorded on both 'Jama' side and 'Udhar' side. This is the reason why such transaction does not have any effect on the cash balance. Eg. Purchased goods of 700 from Shri Vinod. Here the goods are purchased on credit. As per the rules of debit and credit purchase (kharid) account will be debited and Shri Vinod's account will be credited. In Rojmel, on the debit side it will be recorded as 'Shri Kharid Khate Udhar' and on the credit side 'Shri Vinod Khate Jama'. In the same way Eg. Gave a cheque of 350 to Manisha though a cash transaction, the cash receipt or payment does not take place. Hence, cash account is not involved. As per the rules of debit and credit Manisha's account is to be debited and bank account is to be credited. In Rojmel it will be recorded on

Udhar side as 'Shri Manisha Khate Udhar' and on Jama side as 'Shri bank Khate Jama'.

Form the above explanation, it should be understood that the noncash transaction is recorded on both Jama side as well as Udhar side by an equal amount. Such transactions are called as 'Jama Kharchi' transactions.(NCERT Class 11,2022)

Parta system of accounting/ Marwari accounting system

The Parta Accounting system, also known as Marwari Accounting, is believed to be the world's oldest Cost Management Accounting system, established over 100 years ago by Mr. Ghanshyam Das Birla, the grandfather of Mr. Aditya Birla. The term "Parta" refers to the net return on investment. It is a financial monitoring system that regularly shows the profit or loss of a business. This accounting system focuses on determining the return on investment based on cost management. The system is essential in monitoring a business's daily operations.

The Parta system of accounting is designed to guarantee profit and is considered a straightforward and user-friendly mechanism. It places emphasis on establishing return on investment through cost management. Despite its popularity within the Marwari business community, the Parta system has been found to have limitations in more complex and diverse business environments. Nevertheless, it continues to be widely used in Marwari business circles. (Samuel.S.Mitra and Arpitha Dey,2020)

Part 3: Indian System of Bookkeeping

Under this method accounts are kept in numerous books of accounts in local Indian languages based on particular principles and Indian customs (double entry system). It is completely scientific and is adopted by many big and small traders. The books in which accounts are maintained are called Vahi (ledgers). Both Manu Smriti and Kautilya's Arthashastra refer of this system.

Reasons for popularity of Indian System of Book-Keeping:

1. Simplicity: This system is very simple, even a less educated person can easily do accounts in this system.
2. Economical or less expensive: This system is highly economical as less books are used and accountants are available for less salary.
3. Use of vernacular language: In this system accounting is done using vernacular languages.
4. Confidentiality: Due to the use of native language, confidentiality is maintained in this system.
5. Elastic: In this system, the books can be easily expanded and reduced when the size of the business changes.

6. Use of less books: In this system less books are used.
7. Scientific: This is a completely scientific system because its principles are unalterable. This system is also based on the principles of double entry system.

There are two types of Indian system of bookkeeping namely:

A. Kathavahi as per ***Desi Nama***
B. Bahikatha as per ***Mahajani***

(A) Kathavahi as per *Desi Nama*

Kathavahi as per Desi Nama: Khatavahi is the name of the book of account in which separate accounts are maintained for transactions involving assets, goods, income, and expenditures. It is one of the primary accounting books.

Types of Khatavahi:

1. Saadi Khatavahi
2. Bethi Khatavahi or Tham Khatavahi
3. Sama Daskatni Khatavahi.

1. **Saadi Khatavahi:** Saadi Khatavahi refers to the Khatavahi where all business accounts, or Khatas, are kept. From an accounting perspective, this book is crucial since it contains all the data about people, things, assets, income, and expenses can be found at the end of each year. Utaro (Trial balance) and Varshik Hisabo (Annual accounts) can be prepare using this.

2. **Bethi Khatavahi or Tham Khatavahi**: Many business people record their transactions in a Betha Khata to quickly determine their receivables and payables. This type of account is known as a Bethi Khatavahi or Tham Khatavahi. Typically, this type of account is used when there is no formal record of credit sales and purchases in the business. A rough record of credit sales and purchases is made in this account. Once payment is received for credit sales or payment is made for credit purchases, the account is closed in the Bethi Khatavahi and the transaction is recorded in the Rojmel. However, this type of account is not useful for preparing annual accounts and serves no special purpose.

3. **Sama Daskatni Khatavahi:** Money lenders and bankers in the lending business typically maintain a specific type of account called Sama Daskatni Khatavahi. This type of account includes a ledger for each customer who has borrowed money, in which the amount lent, date of loan (Miti), day, interest rate, details of installment payments, penalties for late payments, as well as any assets or documents used as collateral are recorded. A revenue stamp is affixed to serve as proof of the amount

lent, and the borrower's signature is obtained on the stamp. Because it includes the borrower's signature, it is called Sama Daskatni Khatavahi.

Typically, traders using Deshi Nama do not keep a separate subsidiary book for recording goods return transactions. Instead, they record the accounting effects of these transactions in the Udhar Nondh and Jama Nondh. However, if cash is received or paid for a purchase return or sales return transaction, it is recorded in the Rojmel or Bethomel.

To account for the effects of Havala and to close the Kacha Khata, entries must be made and transferred to other accounts, such as Kharid-Vakra Khate. The Mel created for this purpose is called Havalamel. Many businessmen choose to include Havalamel on the last page of their Rojmel or Bethomel. Other names for Havalamel include Academy, Mand-Chhod no Mel, or Jama-Kharchi Mel.

Havalamel is used to close the Kacha Khata and record accounting adjustments such as closing stock, outstanding expenses, prepaid expenses, outstanding income, pre-received income, depreciation on assets, bad debts, interest on capital, rectification of errors, and more. Entries in Havalamel are recorded in a similar manner to Rojmel, where the account to be credited is noted on the Jama side and the account to be debited is written on the Udhar side.

Using the information recorded in Havalamel, the corresponding accounts must be posted. Finally, the profit or loss (calculated from the Kharid-Vakra Khata) is credited or debited to the Bhandol Khate. It is important to note that the total of both sides of the Havalamel must always be equal.(www.sarthaks.com,2022)

Figure 5: Showing Bahi Katha as per Mahajani System

(Source:www.deccanherald.com)

(B) Bahi Katha as per *Mahajani* System

Origin of Bahikatha:

It is difficult to pin down the precise period of the advent of Bahi-khata. Circumstantial evidence indicates that it was introduced and used in prehistoric days. In fact, it was coexistent with the notion of wealth and progressed in gradual stages as dictated by necessity and experience. A special branch of learning under the name of Varta, meaning National Economy, emerged in the epic period. It was devoted to the study of the material interests of the people, their economic welfare and prescription for development. Clear concepts of accounting and profit are traceable in Sloka 127 of Chapter VII of Manu Samhita (200 BC to 200 AD) relating to the determination of taxes payable to the king. By virtue of it, traders were caused to pay taxes after considering costs, sales, distance (i.e., freight), cost of protection and procurement, and sustenance charges in connection with the deals.
Alexander Hamilton, a noted orientalist, writes, 'We would remark that the Bahis of India have been for time immemorial in possession of the methods of bookkeeping by double-entry and Venice was the emporium of Indian Commerce of the time at which Friar Luca Pacioli's treatise appeared' (Hamilton, 1798). Historians generally hold a view that Indian traders frequented European port-towns for bartering their valuable goods, but the reverse was not true. Very few Europeans visited India for the purpose. As such, it is fair to presume that the skill of bookkeeping more likely travelled from India to Italy, than the reverse. (B M Lall Nigam, 1986

Bahi-khata, Mahujanor Deshi: Although it is an indigenous practice, Bahi-khata is still widely used by unincorporated businesses throughout most regions of the country. Even some limited liability companies managed by Marwari, Gujarati, and Chettiar individuals still keep some of their accounts using this system. Additionally, a few cashiers working in large commercial banks also record their receipts and payments using this method, as noted by Ritu Sethi in 2018.
Mahajani is a writing system based on Brahmi that was widely utilized in northern India until the mid-1900s. It was a specialized script used exclusively for writing financial records and accounts. In Punjab, Rajasthan, Uttar Pradesh, Bihar, and Madhya Pradesh, Mahajani was taught and used as an educational medium in schools called चटशाला (cataśālā). These institutions were attended by students from merchant and trading communities who learned the script and other writing skills necessary for business purposes.

The term "Mahajani" comes from the Hindi word "mahājana," which means "banker." The script was primarily used by bankers and money lenders, hence the name. There are similar accounting scripts used in different regions, such as "Sarrafi" which comes from the Arabic word "sarrāf" meaning "banker," and "Kothival," which means "merchant" in Hindi.

The main type of records created using Mahajani script is account books, known as "bahī-khātā." Additionally, other types of documents produced using Mahajani include merchant diaries known as "roznāmā," financial instruments such as bills of exchange known as "huṃdī," and letters referred to as "citṭhī." (Anshuman Pandey,2012)

The Mahajani system is still relevant today among traditional businessmen who engage in trades such as Banarasi Sari, food grains, spices, ornaments, and other businesses. They prefer to maintain their financial records using the Bahi-Khata and ledger system. The Mahajani system has unique features, such as the ability to calculate large numbers in a single go, which even calculators cannot do due to space limitations. The system also uses code words for various financial terms such as rate, profit, loss, savings, expenditure, stock, discount, money inflow and outflow, which only those familiar with the system can understand. This helps maintain the confidentiality of financial records and keep them protected. (Swati Chandra, 2011).

The structure of Bahi Khata as per Mahajani system:

Similar to the English bookkeeping system, the Bahi Katha system also follows a three-step process of original record, classification, and summarizing for transactions. Accounts are categorized into three divisions: Personal, Real, and Nominal. Personal accounts, also known as Vyaktigat Khate, are related to debtors and creditors, including the capital account which tracks the owner's investment in the business. Real accounts, or Vastavik Khate, represent the business's assets and properties used to conduct operations. Nominal accounts, or Avastavik Khate, relate to expenses and losses and are temporary accounts that are eventually closed by transferring to the profit and loss account. The physical structure of Bahi Katha differs from traditional English books, with folded pages serving as columns rather than ruled and numbered columns. The Jama (credit) is written on the left-hand side, while the Nam (debit) is on the right-hand side. The outermost column is called sira, and the inner columns are called peta, where the total amount for an account is listed in the sira, and the details are listed in the peta.

Bahi-khata, despite not having a treatise of its own, is a complete and symmetrical system that has a sound theoretical foundation. One of its biggest advantages is that it adheres to the seven fundamental concepts of modern accounting, including dual aspect, money measurement, business entity, going-concern, cost, accrual, and realization.

In India, as in other parts of the world, bookkeeping has evolved from handwritten records to typewritten methods, and now to modern professional accounting on computers. However, one bookkeeping system has remained unchanged for centuries - the use of the double-entry system maintained in the traditional bahi-khata, which is also known as pothis and chopdis in Western India. (Rithu Sethi, 2018)

Part 4: Evidence for emergence of double entry bookkeeping in India

The principle of double entry is a crucial concept in contemporary accounting and bookkeeping, which asserts that any financial transaction must have equal and opposite effects in at least two separate accounts. In the double-entry system, transactions are recorded in terms of debits and credits. Because a debit in one account balances out a credit in another, the total of all debits must always be equal to the total of all credits. The double-entry system provides a standardized approach to bookkeeping and accounting, resulting in more precise financial statements and making it easier to identify errors.

Evidence from various research articles:

Evidence 1:

The introduction and usage of a double-entry system of bookkeeping in India in times beyond the reach of historians is also evidenced by Kautilya's Arthasastra, the oldest available treatise in political economy. The manuscript of this great work, dating as early as the 4th century B.C., contains a separate chapter on The Business of Keeping up Accounts in the Office of Accountants. Arthasastra is the very first treatise on accounting, as far as present historical documentation goes.

The following items summarize most important accounting aspects of Kautilya's Arthasastra and hence of the first known treatise dealing with accounting aspects from a more theoretical point of view than any previously known record on this subject matter:

1. ***It contains conceptual formulations (not merely the application) of such concepts as income and revenue, expenditures, expenses and costs, sales tax, capital, etc. Some of these notions (as well as some distinctions mentioned in the next item) are, of course, much older; some can be inferred from accounting records of Sumerian and Babylonian times (cf. Nissen et al., 1993; Mattessich, 1995, 1998) but not from any theoretical discussions of***

these periods. Thus their theoretical presentation seems to occur, as far as historical documentation appears to go, first in the Arthasastra.

2. ***It manifests an awareness of such costing issues as work in process, partly finished products, and finished products, production of byproducts, long-term profit optimization, insurance or risk distribution, renting or leasing, etc., and offers pertinent descriptions.***
3. ***It offers discussion of verification, auditing and taxation procedures.***
4. ***It refers to price changes and the different notions of profit or gain resulting from them, as well as the effect of these changes on accounting procedures.***

These four items appear to be reason enough to put Kautilya's Arthasastra beside Pacioli's Summa (Mattessich, R.,1998).

Evidence 2:

In India, and it may also be the case in China, the accounting technique developed far before the Middle Ages and the idea that a debt was the inverse of an asset may have contributed to attributing a negative sign to the one and a positive sign to the other; the mathematicians could thus easily come over the difficulty of conceiving the existence of negative numbers. The Europeans, conditioned by the ancient Greeks' opposition to non-natural numbers, were greatly reluctant to accept negative numbers and ***Fibonacci (alias Leonardo da Pisa), who remained an exception for a long time, was the first mathematician to accept, in 1202, the concept of negative solutions of equations and to recognize zero as a number. The accountants were even more reluctant and Luca Pacioli established the mathematical relations defining the principle of double entry bookkeeping in terms of additions (A = L + OE) and not in terms of differences (A=L-OE)*** although he mentioned negative numbers several times in the mathematical part of his *Summa* (Cossu, C., 2003).

Evidence 3:

The origin of double entry bookkeeping is generally associated with Luca Pacioli. As a matter of fact, the history of accounting cannot be complete without highlighting the wonderful work of Luca Pacioli. His book "*Suma de Arithmetia, Geometria, Proportioni et Proportionalita"* which was published in 1491 had two chapters – *de Computis et Scripturis* – describing double entry bookkeeping. His idea reflected the business activities of the Venice at as that time, especially the way they recorded financial transactions. This is to say that even before Pacioli published his book, the Merchants of Venice actually maintained accounting records which of course, they did in a particular way. So, in his book, ***Pacioli simply described this peculiar method used by the early***

merchants to keep their records. This method was referred to as "the Method of Venice" or "the Italian Method". This is to say that Luca Pacioli did not invent the double entry system of accounting. He only described the method of accounting practiced at that time. In his opinion, the purpose of bookkeeping was to provide the trader with timely information concerning his assets and liabilities (Ovunda, A. S., 2015).

Evidence 4:

What we now refer to as the double-entry system originated from India, where it was called the Jama-Nama or Desi Namu (Deshi Nama) system. In this ancient accounting system, the debit and credit transactions were recorded in a reverse pattern. Used all across India, books under the system were referred to as 'Vahi', which explains why the system was also called 'Vahi Khata paddhati'**.** The system was typically written in the local or regional language, and it remains in use to date. Concepts under the system include Havala and Havalamel, Rojmel and Bethomel, then Petanondh, Utaro (trial balance), and Khatavahi (ledger). In public finance administration in places like Jajpur, Gwalior, Pataliputra, and Somnath in ancient India, the double-entry system was used extensively. ***Historians believe that the Italians came to learn of the Jama-Nama as a result of a relationship with the ancient Indian traders long before the Romans and Greeks took to sea trade. Upon reaching Italy, the Europeans implemented it in the Republic of Genoa's accounting as far back as 1340*** (Nikhil Chandwani, 2020).

Evidence 5:

The paper examines the extant late-eighteenth-century accounting record books of Kantababu, a Bengali property owner and silk trader. These annual records, in part destroyed by white ants and other insects, do not make up a complete set for more than any two Bengali solar years. ***Yet from the available evidence it is possible to make a case that some elements of the accounting systems used by Kantababu and his clerks have similarities to medieval and later European methods and to eleventh-century methods used by Cairo merchants as evidenced by documents stored in the Genizah of the Old Cairo synagogue.*** (Scorgie, Michael E. and Somendra Chandra Nandy,1992)

Conclusion:

Accounting is an integral part for any entity. Ancient accounting methods have given route for the modern accounting system. From the ancient Indian accounting system we can get a clear picture that the basis of accounting are same with the modern system but they are modified based on the needs and advancement. The uniformity in accounting formats and principles brought by GAAP helps in safeguarding the interests of the investors from fraudulent activities. IFRS is considered as a widely accepted set of accounting standards. When a company follows IFRS, it needs to provide disclosure in the form of a note that it is complying with the IFRS. When a company is said to follow the Indian GAAP, it is sure to portray the true and fair view of their financial affairs. Detailed study of Indian accounting system has provided inputs on the benefits of indigenous accounting practices which have withstood the challenges of time. Bookkeeping covers the transaction data and helps the organization know the activities happening within it. Double entry system of accounting instantly shows the dual effect a transaction. Evidence has been collected to prove the emergence of double entry system in India. Thus, with the growing technology, today accounting practices have advanced from manual to digital accounting on one side and practice of traditional accounting methods by business organizations on the other side stands as a testimony of its uniqueness.

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- The Beginning of Accounting and Accounting Thought
  http://dx.doi.org/10.1080/09638180320000089427a
  About the reference: The Beginnings of Accounting and Accounting Thought is a single-volume compilation of several articles published between 1987 and 1998, the first ones being about the evolution of accounting methods in the Middle East from the ninth to the third millennium the purpose of this book is to analyse the factors influencing compliance behavior in financial reporting of multinational European companies and more specifically to relate compliance behavior to regulatory approaches.

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  About the reference: The purpose of this paper is to provide evidence of how convergence to International Financial Reporting Standards (IFRS) impacts accounting values and the determinants of variation in equity adjustments among Indian companies. This paper reveals that fair valuation under Ind.AS causes a significant decrease in goodwill. A substantial decrease in both current and long-term liabilities because of non-recognition of proposed dividend, discounting of long-term provision per Ind.AS was also found.