SCHOOL OF COMPUTER SCIENCE UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

Bidholi Campus, Energy Acres, Dehradun-248007 Session 2022-2023



Topic: Hindustan Times Project

Name of the Project: Getting started with Finance and FinTech

Subject: Summer Internship

Submitted By:

Guided By:

Prasoon Ghosh

Mr. Rajesh Ambastha

SAP ID: 500087553

Roll No: R201220011

Batch: BCA (B.F.S.I)

Semester: 4

Session: 2020-2023

Index

S No.	Topic	Pg No
1	Acknowledgment	3
2	About Hindustan Times	4
3	IT in Finance (FinTech)	6
4	SAP	14
5	Revenue and Expenses	16
6	Inventory	20
7	Purchase Order	25
8	Inventory Management	30
9	Functioning of different departments in HT	35
10	Workflow of newspaper printing in HT	36

Acknowledgment

I have taken efforts in this project. However, it would have not been possible without the kind support and help of many individuals. I would like to extend my sincere thanks to all of them for helping me in the successful completion of this project

It has been great honor and privilege to complete my internship at Hindustan Media Ventures Private Ltd. Patna, Bihar I am highly indebted to Mr. Rajesh Ambastha, UFC at Hindustan Times,

I am highly indebted to Mr. Rajesh Ambastha, UFC at Hindustan Times, for their guidance and constant supervision as well as for providing necessary information regarding the project and also for their support in completing the project. His constant guidance and willingness to share his vast knowledge made me understand this project and its manifestations in great depth and helped me to complete the assigned tasks on time.

I would like to express my gratitude to my parents and members of Hindustan Media Ventures Private Ltd. for their kind cooperation and encouragement which help me in the completion of this project. My thanks and appreciations also go to my university for providing me with the necessary knowledge to complete this project on time.

About Hindustan Times



About the founder:

Born in 1878, Sunder Singh Lyallpuri was a leading Sikh member of the Indian independence movement, a general of the Akali Movement, and an educationist and journalist. Lyallpuri played a key role in the development of the Shiromani Akali Dal, the Gurudwara Reform Movement of the early 1920s, and

also the founding of the Central Sikh League.

What is Hindustan Times?

Hindustan Times is an Indian English-language daily newspaper founded in 1924 by Sunder Singh Lyallpuri. Hindustan Times is one of the largest newspapers in India by circulation. According to the Audit Bureau of Circulations, it has a circulation of 993,645 copies as of November 2017. The Indian Readership Survey of 2014 revealed that HT is the second-most widely read English newspaper in India after *The*



Times of India. It is popular in North India, with simultaneous editions from New Delhi, Mumbai, Lucknow, Patna, Ranchi, and Chandigarh.

The Delhi-based *Hindustan Times* is part of the KK Birla group and managed by Shobhana Bhartia, Rajya Sabha member of the Congress Party, and the daughter of the industrialist Krishna Kumar Birla and granddaughter of Ghanshyam Das Birla. HT Media Limited is a subsidiary of The Hindustan Times Limited which is a subsidiary of Earth stone Holding (Two) Limited. The KK Birla group owns a 69 percent stake in HT Media, currently valued at ₹834 crores. When Shobhana Bhartia joined *Hindustan Times* in 1986, she was the first female chief executive of a national newspaper. Shobhana has been nominated as a Rajya Sabha MP from Congress Party.

Along with *Hindustan Times*, HT Media owns Desimartini, Fever 104 FM, and the newspaper *Mint*.

Supplements of Hindustan Times

- Brishu
- HT Education
- HT Estates
- Shine Jobs
- HT Live
- HT Cafe

IT in Finance (FinTech)

A Simple Definition

The term "fintech company" describes any business that uses technology to modify, enhance, or automate financial services for businesses or consumers. Some examples include mobile banking, peer-to-peer payment services (e.g., Venmo, CashApp), automated portfolio managers (e.g., Wealth front, Betterment), or trading platforms such as Robinhood. It can also apply to the development and trading of cryptocurrencies (e.g., Bitcoin, Dogecoin, Ether).

History of Fintech

Even though fintech seems like a relatively recent development in technological advances, the underlying concept has existed for quite some time. It is generally considered that early credit cards in the 1950s were the first fintech products to become available to the general public, as they eliminated the need for consumers to carry physical currency. Fintech evolved from there to include bank mainframes and online stock trading services. PayPal was one of the first fintech companies to be founded in 1998, operating primarily on the internet. Mobile technology, social media, and encryption have also further revolutionized the business model. We rely on these mobile payment apps, blockchain networks, and social media-based payment options because of this fintech revolution.

The Technologies that power FinTech

Modern fintech relies primarily on AI, big data, and blockchain technology to redefine how companies transfer, store, and protect the digital currency. Specifically, AI can help businesses better understand their customers' behavior and spending habits by providing valuable insights. Using big data analytics, companies can predict market changes and create data-driven business strategic blockchain technology in finance enables decentralized transactions without the need for a third party's input; relying on a network of participants to monitor changes or additions to encrypted data.

The role of IT in Finance

Information technology's role in financial services has changed the global financial network's capacity for exchanging information. Financial services are heavily reliant on information technology for many reasons, but most notably for the electronic networks that exchange information. In today's financial services, it's all about creating a faster, more efficient service that is embedded in a more mobile-based approach that offers customers greater flexibility. Cloud-based technologies are so commonly used that information technology is incredibly important.

Taking into account information technology, one needs to take into account the global financial systems that allow this technology to flourish and function globally. As a result of the role of information technology in finance, financial institutions can continuously acquire new information at the same rate as their competitors. Information technology also makes it easier for customers to complete online transactions, creating a better sense of confidence in finance, allowing for information technology to develop, and initially creating a faster, more efficient service. The financial reporting industry is also one that impacts the financial services industry substantially within the realm of information technology. Financial reports have benefited greatly from the growing modernizations centered around information technology.

In general, technology has driven a persistent imperative for accessibility, innovation, and convenience, and this is something that has never gone away. Information technology plays a large role in finance departments, from small to large applications and operations. As a consequence of information technology, communication is also a very critical component, and communicating more efficiently offers several benefits from both perspectives.

The creation of more automated and commoditized processes and the use of Robo-advisors increase the power of information technology in our society today. As a prime example of how IT has changed how we look at asset allocation and investment opportunities in wealth management, this is a prime example of how IT has taken over our world. As stated earlier in this article, computers are also important in finance because they

improve storage, reporting, and file management. Data reporting and analysis play tangential roles with cloud-based services such as Dropbox. The use of online banking, mobile payments, and transactions is becoming increasingly popular in today's society. Since financial transactions are used so often, there are a lot of vulnerabilities. Staying current means adapting to the latest technology and security. Even though there are a lot of risks that are associated with the use of information technology, there are a lot of positive aspects to the use of higher technology.

There are billions of financial transactions that are happening on a day-to-day basis. This is why information technology is perfect for the way financial systems are set up. The software tools and computer systems that are in place for automation, create huge importance for the use of information technology in finance.

Scope of IT in Finance

Digital disruption is completely changing the rules of business, and companies that don't stay on top will find it difficult to catch up with more agile competitors. Intel describes this state of extreme disruption in business as the Vortex of Change, where new technologies are transforming companies across every industry, from healthcare to entertainment to transportation and manufacturing.

Jim Henrys, Director of Business Solutions at Intel explains why technology is disrupting multinational monopolies: "The democratization of technology is the key driver of disruption. Cloud and mobile technologies have already turned business models upside down and given start-ups the power to disrupt entire industries, regardless of their size, but further unprecedented technological change is just around the corner – so this is still early days".

In addition to being unable to innovate, organizations operating on outdated hardware waste unnecessary resources. "In a world where everything is changing and connecting, the biggest mistake to make today is to think you'll be on top indefinitely and stand still," warns Henrys. Not only must businesses update their IT infrastructure, but they must also develop completely new business models and Triple Bottom Line (TBL) strategies that will enable them to flourish in the digital landscape.

Business success is measured in terms of three elements: economic, environmental, and social. While money is inevitably the driving force, being socially and environmentally responsible is vital to any business's bottom line in the digital age. In addition, businesses need to revamp their workplaces to foster a productive workplace culture and provide employees with smart work methods.

"Many organizations fool themselves into thinking they foster creativity and innovation across their workforce," says Andrew Moore, GM of the Digital Transformation Office at Intel. "In reality, employees are often hesitant to come forward with ideas at most of the largest corporations in the world. Usually, it's because they know senior leaders won't take on board concepts unless they're backed up with a fully polished presentation and a detailed ROI calculation. This leads to companies being overtaken by agile competitors who aren't afraid of taking risks and trying radical things."

A business must ensure it is the disruptor instead of being the disruptor to stay competitive. The Financial Services Industry (FSI) has adapted slowly to innovative technologies, while many sectors have already been transformed by them. As innovation continues to accelerate, the financial sector has a lot of catching up to do, hampered by antiquated infrastructure and more stringent regulations than most other sectors.

According to Gerald Grattoni, Head of EMEA Financial Services Industry Solutions at Intel Corporation, three key topics must be addressed by FSI businesses to ensure success in the digital age:

1) Cyber Security: All businesses in the digital era must deal with the issue of cyber security. To maintain consumer trust, banks need to assure them that their financial and personal information is secure. Security of customer data will be enhanced by new systems such as multifactor authentication.

- 2) Compliance Regulation: "For the last ten years, this has been topping of mind for the industry as regulations have become increasingly stringent," says Grattoni. "Businesses are challenged with turning the significant operational costs involved into a model that can drive new value and business". Compliance will continue to evolve as emerging technologies such as artificial intelligence enable banks to make more effective use of big data.
- 3) Evolution of customer engagement: "Customers are now a lot more tech-savvy and have different expectations on how they experience their financial services, putting pressure on banks to adopt," says Grattoni. Along with the expectation for consistent experiences across devices, there is also a demand for real-time digital payments, both of which require the underlying technology to be updated. In particular, younger generations expect the same convenience that they get from other non-finance platforms such as Netflix*, Spotify* and Facebook*. As such, customer empathy is vital.

Five Years Scope

Looking forward, it will be crucial to consider how emerging technologies – such as artificial intelligence, cloud computing, and IoT – will manipulate the landscape and inspire new business models. "You can see early deployments of some of these technologies already but we're looking at them becoming more mainstream in the next few years," says Grattoni. In contrast to relatively 'new' sectors, like online retail and social media, banks have been slow in utilizing the valuable data they possess. Machine learning and artificial intelligence should be integral parts of any forward-looking digital business strategy. Not only do they streamline operations and remove inefficiencies from the payment process, but they can also vastly improve customer interfaces and personalization. "Three things have come together – the emergence of big data, the evolution of drastically improved hardware, and smarter algorithms. When you plug these three together, it's a dream recipe for the acceleration of AI," says Grattoni.

Intel has already showcased several developments in this area, including the Movidius Myriad X Unit (VPU) Vision Processing, Intel RealSense technology, which integrates 'human-like senses' into devices, and a self-learning neuromorphic chip called Loihi, which mimics the brain's functions.

What will the future look like?

In more than a decade, emerging technologies will completely transform the financial services industry. As more decisions are made by machines, trust will reach a tipping point as AI and machine learning become integral to FSI businesses. Customers would be able to interact with technology in a much more natural way with AI and robotics advances. Blockchain, which forms the foundation of Bitcoin, will also benefit the finance sector of the future.

In short, a shared ledger is a database that records ownership and provides a permanent record of transactions. It is not needed for the ledger to be overseen by a central authority, as it is validated by the network itself. A shared ledger's audit trail will revolutionize several areas within FSI, including fraud detection and tax collection.

Furthermore, banks will no longer resemble what they are today. Banks will no longer resemble what they are today. Grattoni states that the fortress looks safe, and fortified and that the inside is pretty dull and there isn't much activity there. That was his understanding until he stumbled upon an unusual branch of a Boston bank. Several people were seated at tables with laptops, a barista was serving coffee and the television played sports. The concept of a dying branch had been turned upside down, he explains. It is important to improve the customer experience, and it is possible to do that.

There are two possible directions for banks from 2030 onwards, says Grattoni, who believes that they could either become core transaction platforms or fully-featured lifestyle companies. "In the first example, banks lose their customer-facing infrastructure, including branches, websites, apps and sales staff, to become infrastructure providers, concentrating on transactional services, capital financing and loans, and handling all aspects of regulation and compliance," explains Grattoni.

"They will then let other consumer-focused companies connect to this service to provide a user-focused front end". Organizations can provide financial products as part of their regular business models, or even offer them to employees as benefits. However, this model will require open-source, modular technology with open standards to be successful.

"The alternative route is the complete opposite. It sees banks embracing the data they do have to gain better insight into their customers than even the most data-savvy web company can," says Grattoni. "Arguably, the transactional data that banks hold gives more of an insight into a customer's habits than their online activity."

Another possibility that could happen as part of either of these two scenarios is the bank as a central data custodian. As know-your-customer (KYC) initiatives evolve to become almost 100% accurate, banks could potentially become responsible for a person's core data profile, which is then shared with the government and other organizations. For this to become a reality, data security needs to be the top priority.

The leveling of capital markets is another potential scenario for the future of finance. With connected devices and readily available market data set to level out the asymmetric playing field of financial information, investment banks may no longer be at such an advantage. What's more, AI will lower the risk, and therefore the return, on investments by making decisions based on predictive analytics.

In conclusion, the financial sector has been slow to adapt to the digital landscape, but is set to undergo an unprecedented change in the coming years — and FSI businesses must be ready. Organizations will need to update legacy infrastructure and move towards multi-cloud technology that allows agile, forward-thinking business models. Companies must look ahead to 2030 today and consider the 8 questions that all businesses need to answer for a successful digital transformation. "The reality is that people are struggling to address decisions that were taken 30 years ago. In your 2030 strategies, the decisions you make now are vital," warns Grattoni.

The importance of IT in Finance

It is widely considered that information technology is very useful for financial services. Digital technology is used by numerous financial organizations every day, from the exchange of financial tools to the estimation of earnings.

Modern financial services mainly focus on providing faster, more organized customer experiences online. Many people prefer to use mobile applications in today's fast-paced world.

20 years ago, this option of paying bills through a mobile device did not exist. Information technology is a crucial component of financial services in many ways. Companies can also update at the same rate as their competitors with the aid of technology.

With the help of information technology, social media can provide valuable data on their consumers. Organizations can increase their brand credibility and gather data by integrating online communities with their products.

Using IT eliminates the need to use checks to transfer financial information. The internet detects a person's bank account balance by credit or debit card purchase and swiftly rejects a transaction if there is not sufficient money. The staff in a traditional bank usually don't work on weekends. In contrast, the internet does not know the concept of holidays, so the consumer can initiate a transaction from the comfort of his own home at any time.

Internet banking has revolutionized the finance industry with mobile payment applications like Paytm, phone, and Google Pay. Several financial companies have stepped up their security game, to reduce the risks posed by the internet.

SAP

SAP is a German multinational corporation based in Walldorf, Baden-Wurttemberg that develops enterprise software to manage business operations and customer relations. The company is especially the world's third-largest publicity-traded software company by revenue and the largest German company by market capitalization. Apart and enterprise software products, such as human capital management (HCM) software, customer relationship management (CRM) software (also known as customer experience), enterprise performance management (EPM) software, product lifecycle management (PLM), supplier relationship management (SRM) software, and supply chain management (SCM) software.

SAP in Finance (SAP FI)

SAP FI stands for Financial Accounting and it is one of the important modules of SAP ERP. It is used to store the financial data of an organization. SAP FI helps to analyze the financial conditions of a company in the market. It can integrate with other SAP modules like SAP SD, SAP PP, SAP MM, SAP SCM, etc.

SAP FI comprises the following sub-components:

- Finance Accounting General Ledger.
- Finance Accounting Accounts Receivable and Payable.
- Finance Accounting Asset Accounting.
- Finance Accounting Bank Accounting.
- Finance Accounting Travel Management.
- Finance Accounting Fund Management.
- Finance Accounting Legal Consolidation

Where do we use SAP FI?

SAP FI module enables you to manage financial accounting data within an international framework of multiple companies, currencies, and languages. SAP FI module mainly deals with the following financial components.

- Fixed asset
- Accrual
- Cash journal
- Accounts receivable and payable
- Inventory
- Tax accounting
- General Ledger
- Fast close functions
- Financial statements
- Parallel valuations
- Master data governance

SAP FI consultants are mainly responsible for implementing Financial Accounting and Cost Accounting with SAP ERP Financials.

Revenue and Expenses

1) Revenue:

Revenue refers to goods and services sold in the primary operations of a business that generate income. Commercial revenue may also be referred to as **sales** or as **turnover**. Interest, royalties, and other fees can be sources of revenue for some companies. Income can be defined as any form of income or it can refer to the amount earned during a specific time frame, as in "Coalition X had revenues of \$42 million last year.". Generally, net income is defined as total revenue minus total expenses. Accountants consider revenue to be a subsection of Equity on the balance sheet, where revenue increases equity. This is due to its position at the very top of the income statement. As opposed to this, the bottom line denotes net income (gross revenues fewer total expenses).

The term revenue is generally used to refer to the total income a company generates from the sale of goods and services. Revenue from sales of goods or services over time is referred to as sales revenue. Governments receive income from taxpayers in the form of taxes. A charity's fundraising revenue comes from donations and other sources. For the purpose of furthering its social objectives.

A government or government agency calculates or estimates periodic income according to a particular accounting practice or set of rules. The measurement of revenue differs between cash basis accounting and accrual basis accounting. Generally accepted accounting principles or international financial reporting standards are usually required by law for corporations that offer shares for sale to the public.

An income statement summarizes revenue accounts under the heading "Revenue" or "Revenues" under a double-entry accounting system. The revenue account name describes the type of revenue, such as "Repair service revenue", "Rent revenue earned" or "Sales revenue earned".

2) <u>Expenses</u>:

Expenses are items that require payment of money or fortune to other people or groups to purchase an item, provide a service, or pay for another type of cost. Rent is an expense for a tenant. Education costs for students are an expense for parents. The purchase of food, clothing, furniture, or an automobile is often considered an expense. Expenses are costs that are remitted or paid for in exchange for something of value. An expensive item is one that appears to

cost little. Dinner, refreshments, a feast, etc. are considered "expenses of the table."

A specific cash outflow or other valuable asset from one person or company to another is called an expense in accounting. Generally, the outflow represents one side of a trade between buyers and sellers involving products or services with a similar or better current or future value for the buyer. As a matter of technical terms, an expense is an event that diminishes or depletes a proprietary stake, or entails a liability. The effect of expenses is to reduce equity in an organization. Expenses are defined by the International Accounting Standards Board as follows:

...decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Expense is also used in sociology, and it refers to the act of sacrificing a particular fortune or price by something or someone to another, often in the context that the latter is taking advantage of the former.

Types of Revenue

1) Operating

Any business is driven by operating revenue. Businesses cannot operate on a day-to-day basis without consistent revenue.

A measure of operating revenue is usually more valuable than a measure of total revenue. The main reason for this is that it provides important insight into the productivity and profitability of a company's primary operations. A company with steady customer relationships and predictable sales typically have better cash flow than one with a high amount of non-operating revenue. Due to the fact that a large percentage of businesses fail because of cash flow problems, businesses need to maintain a consistent operating revenue stream.

2) Non-Operating

In business, non-operating revenues refer to earnings outside the company's main or central operations. Incidental or peripheral revenues are also considered non-operating revenues. For example, investment income and interest income are common examples. Purchases and sales of merchandise are the retailer's main activities. Its main or central business is not to invest idle cash in interest-bearing investments.

Gains often result from disposing of property, plant, and equipment at a higher price than the carrying amount (or book value) of the asset. The sale of a delivery truck by a retailer for a cash amount greater than the carrying capacity of the truck is a good example. A lawsuit settlement is another example.

Revenues and gains from nonoperating activities are usually reported after the subtotal Income from operations on the income statement, with the caption other income.

Source of Revenue in Hindustan Times

1) Advertisement Revenue

Advertisement is a revenue source for publications and a gauge of their ability to generate advertisement revenue.

2) <u>Circulation/Readership Revenue</u>

This is a calculation of people who read the publication. Readership is almost higher than circulation.

Types of Expenses

1) Operating Expenses

Operating expenses are related to selling goods and services and include sales, salaries, and shop rent

2) <u>Financial Expenses</u>

They are costs incurred by lenders or creditors. They are expenses outside the company's core business.

3) Extraordinary Expenses

Costs incurred for large one-time events or transactions outside the firm's regular business activity.

4) Non-operating Expenses

These are costs that cannot be linked back to operating revenues.

Expenses in Hindustan times

- Printing and Paper
- Ink
- Events
- Salaries
- Spares
- Inventory Maintenance

Inventory

Items stored in HT inventory

- Paper
- Ink
- Plate
- Chemicals
- Spare Parts
- Services

Store Inventory Control

Keep track of your inventory levels in your retail stores by using store inventory control. Online and physical stores alike can benefit from this. In other words, the chain of events begins with the purchase and ends with the point of sale at a retail store.

Stock in the warehouse must be monitored as well as stock coming in and going out. Your company's inventory can be tracked using inventory control, including which products are available and where they are located within the warehouse. To minimize the costs associated with holding onto the stock, it is necessary to reduce the stock holding period. Additionally, you'll understand when to purchase new products, replenish stock, and sell old stock. In addition to reducing warehouse space and adding to your cash flow, inventory management techniques can ensure you're not holding onto the old or unsellable stock.

Purchase Requisition (PR)

An employee fills out a purchase requisition form to request that certain goods or services be supplied by the purchasing department. The form specifies what items must be acquired and when they are needed, as well as the nature and quantity. To indicate that the purchase requisitions have been authorized, some organizations require that their department manager sign the requisitions created by his staff. A company can avoid making unnecessary purchases by following this procedure. Once the form is completed, it is sent to the

purchasing department, which obtains the requested items by using a purchase order, which is a legally binding document that is sent to the applicable supplier.

Ordering raw materials for production does not require purchase requisitions. Rather, these items are authorized for purchase by a materials management system, which determines the net quantity required by comparing production schedules with on-hand quantities. In order to increase production efficiency, a production system needs to be more automated than departmental purchasing that is typically routed through purchase requisitions.

Purchase Order (PO)

Purchase orders (PO) are commercial documents that indicate the types, quantities, and prices of products or services offered by a buyer to a seller. They are used by organizations to control the purchase of products and services from their suppliers. A purchase order can play an important role in enterprise resource planning.

The issuance of a purchase order does not constitute a contract. A contract between the buyer and seller is formed when the seller accepts the order.

There are various reasons why companies use Purchase Orders (PO). Buyers and sellers can communicate openly and clearly with purchase orders for maintaining transparency. Additionally, they can help purchasing agents to manage pending orders and incoming orders. A PO also protects sellers if a buyer refuses to pay for goods or services.

The advantage of purchase orders is that they streamline the purchasing process in a standardized manner. On the basis of purchase orders, commercial lenders or financial institutions may provide financial assistance. Nearly every financial institution offers businesspeople a variety of trade finance facilities against purchase orders, including:

- 1. Before shipment credit facility
- 2. Post shipment credit facility
- 3. Trade finance facility
- 4. Foreign bill purchase credit facility
- 5. Bill retirement credit facility
- 6. Order confirmation
- 7. Follow up

Purchase orders are necessary for procuring goods and services, fulfilling customer requirements by using external resources, or procuring materials that are needed in production from an internal source (long-distance intra-plant stock transfers). It is also possible for companies to make a single purchase and to maximize purchasing by optimizing negotiated conditions or by utilizing existing resources to the fullest extent.

Process of Purchase Order

- 1) The process begins with recording the purchase order's basic details and creating the requisition for integral approval.
- 2) The requisition then needs to be approved by a manager or the finance department or any other required officer before the PO is created and sent to the supplier.
- 3) The vendor or the supplier is automatically notified and invited to review the purchase order.
- 4) The supplier either accepts the order or declines it, in which case a reason must be provided and sent back to the buyer.
- 5) In case the vendor accepts the order and the delivery date is confirmed, the final details are sent to the receiving department.
- 6) Next steps involve receiving food, physical verification of goods, receiving invoices, and payment to the vendor within agreed terms.

Quotation

Quotes are also often referred to as quotations. A proposal is a submission a supplier makes to a potential customer outlining the proposed price for the supplier's products or services. Normal conditions stipulated by the client govern the creation of the quotation.

In general, there would be no need to provide a quotation if the supplier had fixed rates. Quotations are often required for services but are also required by companies that sell goods.

Suppliers commit to the price proposed in their quotations to potential clients. An estimate isn't binding on the supplier, so a quotation is very different from one. In

order to be profitable, the quotation should take into account all costs associated with the job and be based on markup.

Quotations typically contain a lot of detail. Taxes/VAT, material costs, labor costs, and other factors affecting the quotation will be outlined in the quotation. Also included is the delivery date of goods or the completion date of the service.

As well as the timeframe during which a quotation will be valid (after that period has expired, a new quotation will be needed), quotations may also clarify whether a price has changed due to adjustments or modifications to the original invoice.

Goods Received Note (GRN)

Goods Received Notes (GRNs) serve as formal acknowledgments of the receipt of client goods. This document is also known as a delivery note, which proves that goods have already been delivered to the customers. The GRN is also used by suppliers and customers to compare order and delivery quantities.

GRN will later be attached to the invoice and sent to the customer. Clearly proving the delivery of goods is demonstrated by this piece of evidence. The document is also used by customers for inventory and account payables, as invoices can arrive late and they need to keep track of stock.

Internally, the document serves as an inventory list. It is possible for goods to be transferred from a factory to several different warehouses throughout the country. It is necessary to move construction materials from the warehouse to the construction site. As a means of preventing fraud or errors, we use the goods received in the note. Transfers of inventory between locations are tracked by accounting departments.

A good received note has some problems because it is a human-made document. When errors occur, they will impact the other's work depending on how serious they are. The document should be double-checked by another person to prevent human error. Despite the fact that it won't be able to eliminate errors completely, it will be able to reduce them.

GR/IR (Goods Receives/ Invoice Receipt)

A GR/IR (goods-receipt/invoice-receipt) clearing account is a bookkeeping device that can be used when goods arrive before the invoice is generated, or when an invoice arrives before the goods are delivered.

In the normal course of business, discrepancies often (if not usually) exist between goods receipt and quantity invoiced for a purchase order. These differences

produce an artificial debit or credit balance. The GR/IR clearing account checks the number of goods received against the number of goods invoiced and then posts a positive or negative balance accordingly. The GR/IR clearing account thereby serves as a "buffer" between the inventory account and the vendor account, minimizing confusion and reducing the risk of accounting errors.

A GR/IR account should be cleared at regular intervals, such as at the end of every fiscal year.

Store person

A store person checks and examines the stock that arrives in warehouses and storage facilities where stock is held. Incoming goods are cross-referenced against the invoices to ensure there are no discrepancies.

Three-way matching

A Three-way match is the process of comparing the purchase order, invoice, and goods receipt to make sure they match before approving the invoice for payment. If they match, the supplier's invoice will be approved for payment. A 3-way match helps decide if an invoice should be paid partly or in full.

Benefits of a three-way match

- Time and money saver
- Good supplier-buyer relationship
- Auditing made easy

Purchase Order

Why PO?

1) They give you legal protection: Consider a scenario where your startup ordered ten ergonomic chairs and paid for them but on the delivery day only nine arrived. Who's at fault?

You can end up in a tricky legal position if you and your vendor disagree without a purchase order. It can sometimes be difficult to prove what went wrong with a purchase without a paper trail.

As an on-the-record legal document, purchase orders eliminate ambiguity by binding both parties to a mutually binding contract. A purchase order is legally binding as soon as the vendor receives and approves it.

Purchase orders only become legally binding once the vendor "acknowledges" them by signing them. Sending them to a vendor alone isn't enough.

2) They make orders easier to track: Orders can help you track when goods and services arrive, keep track of how you're paying for them, and keep track of how much you're spending.

You can track your orders by assigning a PO number to each purchase order, similarly to invoice numbers. Your supplier is contractually bound to deliver orders at a specific time and date, so you can track them more confidently from an operations standpoint.

A contractually-enforced purchase price gives you confidence in your budget from an accounting perspective.

3) They help you avoid audit problems: In the event that you get audited, you'll be grateful for creating purchase orders in the first place. Exactly why? Audits are made easier by purchase orders, which provide auditors with a conclusive audit trail and make cross-checking invoices and packing slips easier.

Invoices, receipts, and emails with vendors will take a long, painful time to review without purchase orders.

4) They make life easier for vendors: A purchase order will speed up the shipping process if your vendor is used to receiving them. All information they need is in one place, so there is no back and forth and no miscommunication.

PO Workflow

The steps involved in the purchase order process can be a bit complicated. Here's a breakdown of a typical transaction involving a purchasing order from the perspective of a purchaser:

- 1. First, the purchasing department at your company is notified by management that a purchase needs to be made. Some companies do this by issuing a **purchase requisition form**.
- 2. If the department approves the order, they fill out a purchase order detailing exactly what the purchase is.
- 3. The purchase order is then sent to the vendor, who decides whether they can and want to fulfil the order. Once they approve the purchase order, it becomes legally binding.
- 4. The purchaser sends payment for the agreed price (or does so at an agreed-upon later date, which is specified on the purchase order.)
- 5. The vendor delivers the order along with an invoice. The purchaser's finance department then compares this invoice to the purchase order to make sure that the two documents agree with each other.

Algorithm:

Abbreviations:

HT: Hindustan Times

HT- (step number): The Step is for Hindustan Times Section

V- (step number): The Step is for Vendor Section

PR: Purchase Requisition

PO: Purchase Order

STEP HT-1: START

STEP HT-2: CREATE A PURCHASE REQUISITION

STEP HT-3: IS THE PR APPROVED?

STEP HT-3.1: IF YES, MOVE TO STEP HT-4

STEP HT-3.2: IF NO, MOVE BACK TO STEP HT-1

STEP HT-4: RECEIVE QUOTATIONS FROM 3 DIFFERENT VENDORS

STEP HT-5: QUOTATION 1, QUOTATION 2, QUOTATION 3

STEP HT-6: SELECT THE LOWEST COST QUOTATION

STEP HT-7: GENERATE PO

STEP HT-8: SEND PO TO THE VENDOR

STEP V-9: GENERATE AND SEND INVOICE TO HT

STEP HT-10: IS THE INVOICE, OK?

STEP HT-10.1: IF YES, MOVE TO STEP HT-11

STEP HT-10.2: IF NO, MOVE BACK TO STEP V-9

STEP HT-11: SIGN INVOICE

STEP V-12: GENERATE ORDER

STEP V-13: SHIP ORDER

STEP HT-14: IS THE ORDER, OK?

STEP HT-14.1: IF YES, MOVE TO STEP HT-15

STEP HT-14.2: REPORT TO VENDOR AND SKIP TO STEP V-21

STEP HT-15: PHYSICAL VERIFICATION BY STORE PERSON

STEP HT-16: IS EVERYTHING OK?

STEP HT-16.1: IF YES, MOVE TO STEP HT-17

STEP HT-16.2: IF NO, MOVE BACK TO STEP HT-14.2

STEP HT-17: GENERATE GRN WITHIN 24 HOURS

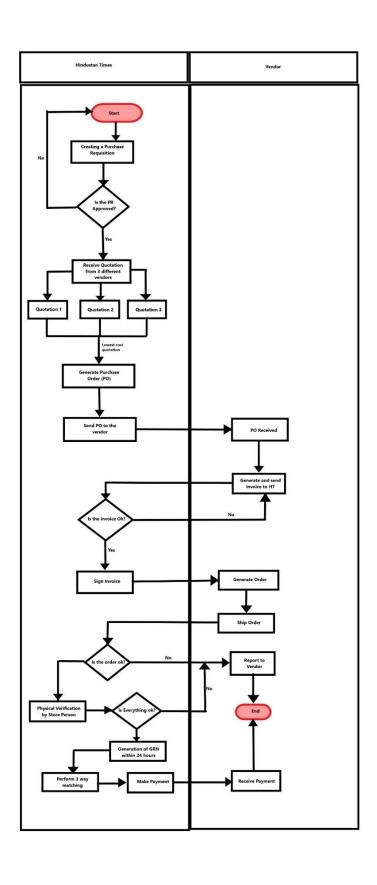
STEP HT-18: PERFORM 3-WAY MATCHING

STEP HT-19: MAKE PAYMENT

STEP V-20: RECEIVE PAYMENT

STEP V-21: END

Flowchart:



Inventory Management

Inventory is the goods or materials a business intends to sell to customers for profit. Inventory management, a critical element of the supply chain, is the tracking of inventory from manufacturers to warehouses and from these facilities to a point of sale. The goal of inventory management is to have the right products in the right place at the right time. This requires inventory visibility — knowing when to order, how much to order and where to store stock. The basic steps of inventory management include:

- 1. Purchasing inventory: Ready-to-sell goods are purchased and delivered to the warehouse or directly to the point of sale.
- 2. Storing inventory: Inventory is stored until needed. Goods or materials are transferred across your fulfillment network until ready for shipment.
- 3. Profiting from inventory: The amount of product for sale is controlled. Finished goods are pulled to fulfill orders. Products are shipped to customers.

Visibility and Importance:

Multichannel order fulfillment operations typically have inventory spread across many places throughout the supply chain. Inventory visibility is knowing what inventory you have and where it's located. Businesses need an accurate view of inventory to guarantee fulfillment of customer orders, reduce shipment turnaround times, and minimize stockouts, oversells, and markdowns.

Types of Inventory Management:

1) Periodic inventory management

The periodic inventory system is a method of inventory valuation for financial reporting purposes in which a physical count of the inventory is performed at specific intervals. This accounting method takes inventory at the beginning of a period, adds new inventory purchases during the period, and deducts ending inventory to derive the cost of goods sold (COGS).

2) Barcode inventory management

Businesses use barcode inventory management systems to assign a number to each product they sell. They can associate several data points to the number, including the supplier, product dimensions, weight, and even variable data, such as how many are in stock.

3) RFID inventory management

RFID or radio frequency identification is a system that wirelessly transmits the identity of a product in the form of a unique serial number to track items and provide detailed product information. The warehouse management system based

on RFID can improve efficiency, increase inventory visibility and ensure the rapid self-recording of receiving and delivery.

Key Features:

- 1) Inventory Tracking
- 2) Order Management
- 3) Transfer Management
- 4) Reporting and analytics
- 5) Purchasing
- 6) Shipping Capabilities

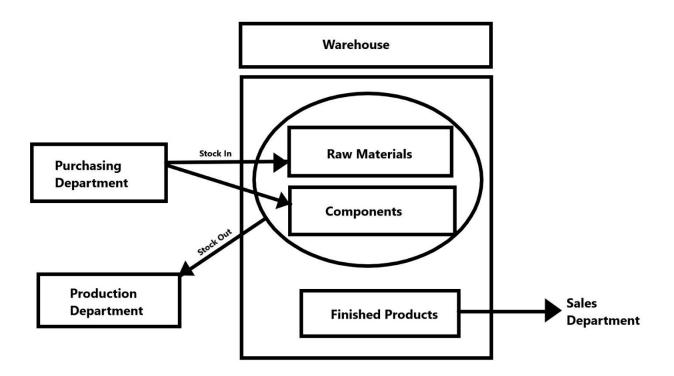
The Future of Inventory Management:

Businesses are managing inventory differently due to globalization, technology, and empowered consumers. Technologies will be used by supply chain operators to improve the performance of the supply chain. Logistics managers will be able to predict anomalies in performance and cost before they occur and will be able to see where automation can offer significant cost and time reductions.

Inventory management will continue to be transformed by these technologies in the future:

- 1) Artificial Intelligence
- 2) Internet of Things (IoT)
- 3) Blockchain
- 4) Intelligent order management
- 5) Quantum Computing

Warehouse Diagram:



Algorithm

Abbreviations:

HT- Hindustan Times

QC- Quality Control

FD (step number): The following step is in Financial Department Section.

W (step number): The following step is in Warehouse Section.

PUD (step number): The following step is in Purchasing Department Section.

QCD (step number): The following step is in QC Department Section.

PD (step number): The following step is in Production Department Section.

SD (step number): The following step is in Sales Department Section.

STEP PUD-1: START

STEP PUD-2: PURCHASING MATERIALS

STEP W-3: STOCK IN

STEP W-4: SETTLEMENT OF PURCHASING INVOICE

STEP W-FD-4.1: ACCOUNT PAYABLE

STEP W-5: STOCK OUT

STEP PD-6 STOCK REQUEST

STEP PD-7: STOCK ENQUIRY

STEP PD-8: PRODUCTION

STEP QCD-9: QUALITY INSPECTION

STEP W-10: STOCK IN

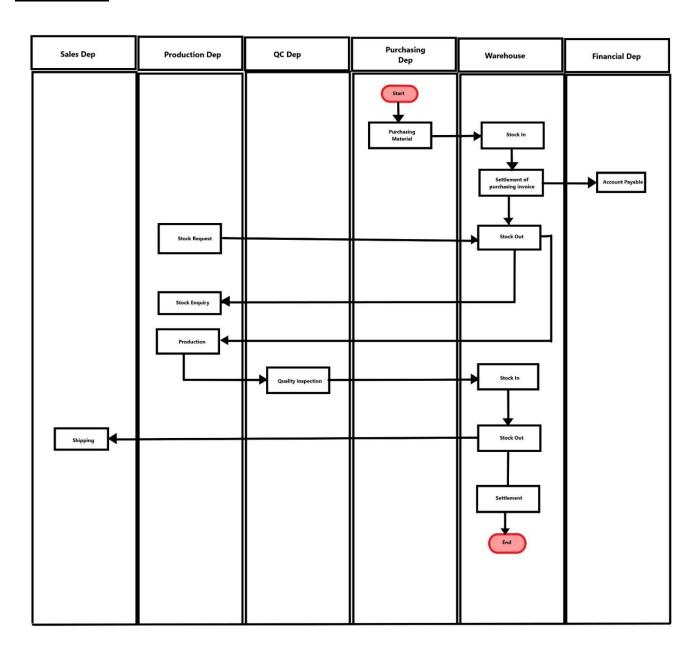
STEP W-11: STOCK OUT

STEP SD-12: SHIPPING

STEP W-13: SETTLEMENT

STEP W-14: END

Flowchart



Functioning of Different Departments in HT

Departments in HT:

- 1. <u>Media Marketing</u>: This department is at the top of the hierarchy of newspaper printing. This department is responsible for bringing in advertisements for Hindustan Times.
- 2. <u>Editorial</u>: This department is responsible for writing news articles for the newspaper. Every district has its editorial department and editors.
- 3. <u>Production</u>: After the media marketing brings in the advertisements and editorial write the news articles; the production of the newspaper begins. The production department is responsible for the printing of the newspaper.
- 4. <u>Circulation</u>: The circulation department work starts after the production department. This department is responsible for the circulation of printed newspapers.
- 5. <u>Commercial</u>: This department is responsible for the collection of revenues. This department has two different sub-departments, which are;
 - a. <u>MM Commercial</u>: This department is responsible for the collection of revenues for the advertisements brought by the media marketing department.
 - b. <u>Cr Commercial</u>: This department is responsible for the collection of revenues made by the circulation of the newspapers.
- 6. <u>Finance</u>: All the revenues made are reported to the finance department and then the finance department accounts for all the revenues. This department also accounts for all the expenses of the Hindustan Times.
- 7. <u>Human Resources (HR)</u>: This department is responsible for the well-being of the employees, keeping track of employee requirements and recruiting, etc.
- 8. <u>IT</u>: This department maintains the IT infrastructure of the company. This department also manages the liege line.

Workflow of newspaper printing in HT

Algorithm:

Abbreviations:

MM (step number): This means that the following step is in the media marketing section.

E (step number): This means that the following step is in the editorial section.

IT (step number): This means that the following step is in the IT section.

P (step number): This means that the following step is in the production section.

CR (step number): This means that the following step is in the circulation section.

C (step number): This means that the following step is in the commercial section.

F (step number): This means that the following step is in the finance section.

STEP MM-1: START

STEP MM-2: COLLECTION OF ADVERTISEMENTS.

STEP E-3: WRITING NEWS ARTICLES.

STEP IT-4: SENDING THE ADVERTISEMENTS AND NEWS ON THE DUMMY TO THE

PRODUCTION DEPARTMENT THROUGH LIEGE LINE.

STEP P-5: PRINT THE NEWSPAPERS.

STEP CR-6: DISPATCHING AND CIRCULATING THE NEWSPAPERS TO DIFFERENT

DISTRICTS.

STEP C-6: COLLECTION OF REVENUES MADE FROM ADVERTISEMENTS AND

CIRCULATION

STEP C-7: SENDING THE DETAILS OF REVENUE TO THE FINANCE DEPARTMENT.

STEP F-8: UPDATING THE BOOK ACCORDING TO THE REVENUES. STEP F-9 END.

Flowchart:

