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Warehouse Inventory Management

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Agenda

- Definition and Measurement

- Importance of Inventory Accuracy

- Potential causes of Inventory Inaccuracy

- How to Improve Inventory Accuracy

Definition & Measurement

Inventory accuracy measure the discrepancy in stock levels between system records and the physical stock on hand. Typically, this involves comparing the recorded inventory number in your inventory management system with the actual availability in your warehouse or store.

$$Inventory\ Accuracy\ (\%) = \frac{Number\ of\ matched\ (System\ Vs\ Physical)\ line\ items\ X\ 100}{Total\ number\ of\ line\ items\ counted}$$

Example -

- Total number of line items counted – 100

- Number of line items where stock matched with books – 83

- Inventory accuracy – 83%

$$Inventory\ Accuracy\ (\%) = \frac{83\ X\ 100}{100}$$

Importance of Inventory Accuracy

Customer Deliveries : Inaccuracy in inventory can lead to wrong commitments to customers (Customers deliveries are committed based on system stock), which in turn can cause revenue and customer confidence in the organisation.

When your inventory is accurate, you ensure customers are getting what they ordered instead of turning to your competitor.

Operational and holding costs : If you have something physically, and it is not available in system, you will end up in buying excess quantities. This leads to higher operational cost as well holding cost of inventory.

Accurate inventory helps you drive down operational costs.

Importance of Inventory Accuracy

Prevent inventory shrinkage: In the early stages of a business, losses and stock shrinkage might not be a significant concern. However, as the scale of operations expands, so does the susceptibility to risks such as theft, fraud, staff negligence, and damage.

Without the capability for real-time inventory control, tracking stock shrinkage becomes challenging, potentially resulting in unwelcome surprises during stocktaking.

While accurate inventory management doesn't eliminate the risk entirely, it does facilitate more effective monitoring and reduction of shrinkage.

Inventory Valuation: Encountering inaccuracies in inventory can disrupt the valuation process at the conclusion of a financial year or accounting phase. Ensuring accurate inventory leads to fewer challenges for both operations and finance team.

Even if there are shrinkages, those needs to accounted in real time for accurate financial reporting.

Potential Causes of Inventory Inaccuracy

Material Receipt : Material receiving is the first place, where the inventory accuracy starts. This involves visually examining all incoming shipments, verifying that the correct items and quantities match the purchase order and packing slip, and identifying any instances of damage.

Items expired, shortages or damages are communicated to suppliers immediately, so that all the discrepancies are resolved before booking the stock in system.

Unit of Measurement (UoM) : There are instances where suppliers shipped items in different UoM, whereas the storage units and shipment unit is different.

Consider sending a consumer an entire case (containing 10 items) instead of the single piece they ordered. Preventing mis picks through accurate unit measurement ensures customer satisfaction and enhances the profitability of the company.

Potential Causes of Inventory Inaccuracy

Improper Warehouse Layout : It is always advisable to have two separate doors for materials receipt and issuance. A common door for both activities together, might results in mixing of materials and inventory inaccuracy.

If there are similar items or SKUs, ensure that those are not stored closely together and be sure all locations are clearly labelled to avoid picking errors.

Delayed Data Entries in System : Materials those are received or issued must be accounted in system, before the physical movement of the goods. If the entries into the system are not entered or scanned in real time, there are chances of missing those entries and those will lead to inventory inaccuracy.

Nothing is more urgent and important than making an entry into the system.

Potential Causes of Inventory Inaccuracy

Access Control Not in Place : The warehouse area which is not physically controlled, is always prone to inventory errors. Material theft is only one of the possible scenario, even production can take the materials and use on the shop floor for production activities. These instances can lead to serious inventory and accounting errors.

Material Available but Stored in Wrong Location: All the materials needs to be stored in the defined location (In Inventory software). Materials stored in wrong location cannot be traced and issued to production or customers when required.

You might find it later, but the damage of missing customers deliveries due to inventory not available is already happened.

Potential Causes of Inventory Inaccuracy

Mismanaged Returns: Another issue contributing to inaccurate inventory is poorly handled returns. Incorrect coding of returned items can lead to erroneous inventory records when reintegrated into your warehouse.

For instance, a damaged product mistakenly labelled as "available" may result in what is known as "ghost inventory." This situation occurs when your inventory system indicates a specific item is available when it is not.

Human Errors: Very basic human errors like wrong counting or wrong entry into the system can cause the variations in inventory.

It is always advisable to consider a minimum buffer percentage for C class (Low value) items, as there might be minor variations during the weigh counting and organisation should not invest time and efforts in counting those C Class items.

How to Improve Inventory Accuracy ?

Well Organized Warehouse

- Clear, easily readable warehouse maps, well-labelled inventory areas, and proper signage with item descriptions are crucial for maintaining a well-organized warehouse. Designating even empty areas prevents misplacements, contributing to sustained efficiency.

- Well-organized warehouses enable the efficient receipt and storage of inbound materials, contributing to streamlined operational processes.

- Inventory location labels must be large, easily readable, and barcoded for automated readers, ensuring accuracy in inventory management.

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Standardized Storage

- We need to invest into the right storage bins, racks or other required materials for proper storage of the inventory. Inventory stored in non-standard containers is always open for misplacing or losing out.

- The capacity of these standard storage locations needs to be monitored regularly and if required, additional investment needs to be made accordingly.

- The investment on bins or racks might sounds high initially, but it certainly pack in the long run and helps to avoid inventory inaccuracy.

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Inventory Management Software

- To support the sustainable growth of your business, it is essential to implement a dependable inventory management system. If your current system is too rudimentary or lacks necessary features, you might be compromising your inventory accuracy.

- There are many ERP or inventory management solutions available in the market. Every organisation needs to evaluate and implement the appropriate inventory management software which is suitable for their business.

- *Google sheets or Microsoft excel worksheets are never a substitute for any Inventory management software.*

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Invest Into Technology

- **_Reducing Errors_** : Investing in RFID and barcode scanner technologies minimizes manual data entry errors, ensuring more accurate inventory records. Automation speeds up data collection and reduces the risk of inaccuracies associated with manual processes.

- **_Fast Data Collection_** : Barcode scanners and RFID tags expedite the data collection process, improving efficiency in inventory management. The rapid scanning of items allows for quick updates to the system, reducing the likelihood of errors and enhancing overall inventory accuracy.

- **_Real Time Visibility_** : RFID and barcode technologies provide real-time visibility into inventory movements, allowing businesses to track stock levels and respond promptly to changes.

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Limit Access to Inventory Area

- An easy safeguard for managing inventory is to only grant access to employees who need to have inventory accuracy metrics. You should know exactly who has access and ensure that this small group of people are properly trained on your company's inventory organizational system and practices.

- Ideally, this is something that should be decided upon when an inventory management system is being implemented. An annual or bi-annual review of this access might be a useful procedure to introduce to keep the list of who has inventory access up to date.

- In case the warehouse needs to be accessed for meeting urgent requirements after working hours, a proper procedure needs to be designed and monitored accordingly. Usually, one of the security guard has the access to inventory area and whatever inventory is taken from warehouse during these after-hours access, need to be regularised first thing in the morning.

Implement Cycle Count

1. Cycle counting involves systematically counting a small portion of inventory each day at a specific location, aiming to eventually cover the entire inventory every month or quarter.

2. All the items irrespective or value, class or type needs to be counted as part of the process. All the variances reported, needs to be analysed and accounted into system within 48 hours of reporting.

3. This inventory control method provides an accurate assessment of your stock levels compared to system inventory. Consequently, it enables you to promptly address issues such as inventory inaccuracies caused by human error, shortages, or shrinkage.

Some organisations appoint teams from functions other than warehouse to carry out cycle count on daily basis.

Discipline

1. ***Orderly Storage Practices:*** Establishing a disciplined approach to warehouse operations promotes orderly storage practices. This includes adhering to designated storage locations, consistently updating inventory records, and ensuring that items are returned to their designated spaces after use. Discipline among warehouse staff minimizes the chances of misplacement, contributing to accurate inventory levels.

2. ***Consistent Cycle Counts and Audits:*** Implementing a disciplined regimen for regular cycle counts and audits is crucial for maintaining inventory accuracy. By consistently and systematically checking stock levels against recorded data, discrepancies can be identified and corrected promptly. This disciplined approach helps prevent inaccuracies from accumulating and ensures that the inventory remains aligned with the recorded figures.

3. ***Adherence to Standard Operating Procedures (SOPs):*** Enforcing and adhering to standard operating procedures (SOPs) contributes significantly to inventory accuracy. Disciplined practices, such as following established protocols for receiving, storing, and picking items, help reduce errors caused by deviation from standard procedures.

Do you have more questions on topic ?

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Thank You