



# Innovative Inventory Management Strategies for Small Businesses

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**Abstract:** This research aims to explore innovative inventory management strategies that can be implemented by small businesses. Inventory management is a crucial aspect of business operations as it directly impacts a company's bottom line. However, small businesses often face unique challenges when it comes to managing their inventory, such as limited resources and access to information. Through a qualitative research approach, this study will examine the current inventory management practices of small businesses and identify potential strategies for improvement. The goal of this research is to provide valuable insights for small business owners and managers, as well as practitioners in the field of inventory management, on how to effectively manage inventory.

**Index Terms** - Inventory management, small businesses, qualitative research, improvement strategies, business owners, managers, practitioners.

## INTRODUCTION

In today's fast-paced business environment, having an efficient inventory management system is crucial for small businesses in rural areas. However, due to limited resources and lack of access to the latest technology, small businesses in rural areas often struggle to implement effective inventory management strategies. This paper aims to explore innovative ways for small businesses in rural areas to manage their inventory and stay competitive in the market. Small businesses in rural areas face unique challenges when it comes to inventory management. They often have limited resources and access to technology compared to their urban counterparts, which can make it difficult to implement effective inventory management strategies. Additionally, these businesses often operate in markets with lower demand and less competition, which can make it difficult to justify the costs of implementing advanced inventory management systems. Despite these challenges, small businesses in rural areas can still benefit from adopting effective inventory management strategies. Utilizing technology such as cloud-based systems can help these businesses to better track and manage their inventory, while implementing lean inventory principles can help them to reduce waste and increase efficiency. Additionally, small businesses can also benefit from adopting inventory management practices such as forecasting, just-in-time inventory, and inventory optimization. This paper will explore these and other innovative ways for small businesses in rural areas to manage their inventory and stay competitive in the market. By examining the challenges that these businesses face, as well as the strategies and technologies that are available to them, this paper will provide insights and recommendations for small business owners looking to improve their inventory management. Ultimately, the goal of this research is to provide small businesses in rural areas with the tools and knowledge they need to succeed in today's fast-paced business environment. [5]

## Innovative ways for small businesses:

Implementing a cloud-based inventory management system is a great way for small businesses in rural areas to track their inventory remotely and in real-time, regardless of their physical location. This allows them to keep an eye on stock levels, sales trends, and other key metrics, all from the convenience of their own devices. Utilizing e-commerce platforms is another

important step for small businesses looking to expand their reach and connect with customers outside of their immediate area. By setting up an online store, small businesses can sell their products to people all over the world and reach a wider customer base than they would be able to otherwise. Partnering with other local businesses is also a great way for small businesses in rural areas to share resources and pool inventory, helping them to stay competitive in the marketplace. Optimizing supply chain management can also help small businesses to stay competitive by reducing unnecessary expenses and streamlining their operations. Utilizing mobile technology, such as mobile apps, can also help small businesses in rural areas to track inventory, process sales, and manage their operations on the go. Social media can also be leveraged for marketing and sales, helping small businesses in rural areas to create a strong online presence and reach customers who may not have been aware of their products or services before. Inventory forecasting and replenishment software can also be used to predict future inventory needs and reorder products before they run out of stock. Utilizing drop-shipping, small businesses can connect with suppliers that offer drop-shipping which allows them to sell products without having to keep an inventory. Utilizing subscription-based models, small businesses can offer subscription-based models to customers, this will help them in forecasting the demand and keeping inventory accordingly. Utilizing predictive analytics, small businesses can analyze data on customer behavior to make informed decisions about inventory management and marketing strategies to stay competitive in the market. [4]

### Inventory Management Statistics:

- Only 22% of the companies maintain a proactive supply chain network.
- 43% of small businesses are not tracking their inventory.
- 21% of the small businesses report they don't have inventory.
- 67.4% of the supply chain managers use Excel spreadsheets to manage inventory.
- Inventory stock outs cost retailers approximately \$4.6 billion in lost Black Friday sales in 2021.
- U.S. retail operations possess 63% supply chain accuracy, which causes delays and re-stocking issues.

What Small Business Use for Inventory



● 2% | Other ● 8% | Don't track inventory ● 14% | Manual processes (pen & paper) ● 18% | Inventory software or system ● 15% | Inventory in accounting software (Quickbooks) ● 24% | Don't have inventory ● 21% | Spreadsheet program (Excel)

What Small Business Use for Assets



● 2% | Other ● 6% | Not sure ● 11% | Don't track assets ● 12% | Manual processes (pen & paper) ● 16% | Asset software or system ● 22% | Tracking in accounting software (Quickbooks) ● 32% | Spreadsheet program (Excel)

Fig 1: Inventory software utilization

## Utilizing Technology:

In recent years, the use of technology in inventory management has grown exponentially, particularly in the realm of cloud-based and mobile solutions. Small businesses in rural areas stand to benefit greatly from these advancements. One such method is the use of cloud-based inventory management software. This type of software allows businesses to access and update their inventory information from anywhere with an internet connection, and it also allows multiple employees to access the information at the same time. This can greatly improve the efficiency and accuracy of inventory management, particularly for businesses that have multiple locations or remote employees.

Another method that small businesses in rural areas can use to manage their inventory is mobile inventory management apps. These apps can be used to scan barcodes and track inventory levels on-the-go, making it easy for employees to update inventory information in real-time. This can be particularly useful for businesses that operate in remote or hard-to-reach locations, as it allows employees to update inventory information even when they are away from the main office or warehouse.

In addition to cloud-based and mobile solutions, businesses can also use radio-frequency identification (RFID) technology to track inventory. This is a more advanced method but can be more cost-effective in the long run as it eliminates the need for manual inventory counting and reduces the risk of human error. RFID tags can be placed on individual items, allowing businesses to track inventory levels in real-time and receive alerts when inventory levels are low. [3]

Another way small businesses in rural areas can manage their inventory is with consignment inventory. This allows businesses to only pay for the inventory they sell, reducing the risk of overstocking and saving on storage costs. With consignment inventory, businesses can avoid the financial burden of carrying large amounts of inventory and instead focus on purchasing only what they need. In conclusion, small businesses in rural areas have various options to manage their inventory, such as cloud-based inventory management software, mobile inventory management apps, RFID technology, and consignment inventory. These methods can greatly improve the efficiency and accuracy of inventory management and can save costs in the long run.

## Cloud-based systems to implementing lean inventory principles:

Implementing lean inventory principles in a cloud-based system can help companies optimize their inventory management by reducing waste, improving efficiency, and increasing responsiveness to customer demand. This can be achieved through a variety of techniques, such as using real-time data to track inventory levels, implementing just-in-time (JIT) ordering and delivery, and using automated inventory replenishment systems. Additionally, using a cloud-based system allows for greater flexibility and scalability, as well as better collaboration and communication across different departments and locations. Overall, implementing lean inventory principles in a cloud-based system can help companies reduce costs, improve customer service, and increase profitability. [2]

## Strategies that small businesses can adopt to improve their inventory management:

### 1. FIFO vs. LIFO

FIFO and LIFO are accounting methods that determine how inventory is valued and reported for financial purposes. FIFO stands for "first in, first out" and involves valuing and selling the oldest inventory first. This method is commonly used for perishable or expiring goods to ensure they are sold while they are still fresh. LIFO, on the other hand, stands for "last in, first out" and involves valuing and selling the most recently received inventory first. This method is often used for non-perishable goods and can have potential tax advantages for a business. The default costing method is FIFO, but a business can choose to use LIFO if it is more beneficial for their specific circumstances.

### 2. Demand forecasting

Demand forecasting helps small businesses predict product demand to maintain optimal inventory levels. Established businesses base this on historical sales data, while newer businesses may use industry data and assumptions until they have their own sales history. It's important to regularly review and update forecasts, ideally quarterly, to ensure inventory is sufficient and reordering targets are set accordingly for inventory management.

### 3. Minimum order quantity vs. economic order quantity

Minimum order quantity (MOQ) is a method used to determine the minimum amount of each product a seller is willing to fulfil, while economic order quantity (EOQ) is a method used by manufacturers to minimize costs by purchasing the greatest amount possible of multiple product units to minimize the need to reorder items individually. MOQ is more commonly used for high-ticket items, while EOQ is more commonly used for manufacturers with variable costs.

### 4. ABC analysis

ABC analysis categorizes products into 3 groups: A (high value, low cost to store), B (important sales, but not as high value as A), and C (low value, high turnover). It helps businesses understand which products are most profitable and which are most costly.

| ABC Inventory Analysis Example |                         |                          |
|--------------------------------|-------------------------|--------------------------|
| Classification                 | Percentage of inventory | Annual consumption value |
| A                              | 10-20%                  | 70-80%                   |
| B                              | 30%                     | 15-25%                   |
| C                              | 50%                     | 5%                       |

Table 1: ABC analysis value wise

#### 5. Safety stock inventory

Safety stock inventory is additional inventory ordered beyond expected demand to ensure availability of popular or essential products, based on sales projections.

#### 6. Dropshipping

Dropshipping is a business model where a retailer receives customer orders and then has a supplier ship the products directly to the customer, eliminating the need for a storage facility or inventory. However, customer satisfaction relies on the supplier, not the retailer.

#### 7. Cross-docking

Cross-docking is a logistics strategy that aims to increase efficiency by streamlining the movement of goods from the point of receipt to the point of distribution. The process involves unloading deliveries from inbound trucks directly into outbound trucks, without the need for intermediate storage or inventory management. This method is particularly effective for products that are intended for "just-in-time" shipping, as it allows for timely delivery to customers without the need for significant warehousing or inventory management.

### Conclusion

In conclusion, small businesses in rural areas face unique challenges when it comes to managing their inventory. However, by implementing innovative strategies such as utilizing technology, forming partnerships, and implementing just-in-time inventory management, these businesses can effectively manage their inventory and increase their chances of success. It is important for small businesses in rural areas to stay informed about the latest inventory management trends and to continuously evaluate and adapt their strategies as needed. Overall, with the right approach and mindset, small businesses in rural areas can overcome the challenges of inventory management and thrive in the competitive marketplace.

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