PART 5
Managing Growth in the Small Business
Objectives of Inventory Management

- Ensuring Continuous Operations
- Maximizing Sales
- Protecting Assets
- Optimizing Inventory Investment
Balancing inventory to support customer demand and balance sheet concerns is critical for a healthy business.
Just-In-Time Inventory (JIT) System

- A demand (pull) method of reducing inventory level to an absolute minimum.
  - New inventory items arrive at the same time that the last inventory item is placed in service.

- JIT promotes:
  - Closer coordination with suppliers
  - Consistent quality production
  - Lower safety stock levels
Just-In-Time (JIT) Example

- Scrap
- Work in process inventory level (hides problems)
- Unreliable Vendors
- Capacity Imbalances
Just-In-Time (JIT) Example

Reducing inventory reveals problems so they can be solved.

Unreliable Vendors  Scrap  Capacity Imbalances
Operations Management and Quality

• Quality
  ➢ The features of a product or service that enable it to satisfy customers’ needs.
  ➢ A perception of the customer as to the suitability of the product or service of a firm.

• Total Quality Management (TQM)
  ➢ An aggressive, all-encompassing management approach to providing superior, high-quality products and services.
  ➢ Tie to CRM – various customer segments may have different perceptions of quality for same item(s) (cars)

• SLO Assessment
Exhibit 21.3 Essential Features of Total Quality Management

Successful Quality Management

- Customer Driven
- Organizational Commitment
- Culture of Continuous Improvement
Customer Focus of Quality Management

Customer Expectations

- **Quality** is the extent to which a product or service satisfies customer’s needs and expectations.
  - Product quality
  - Service quality
  - Product and service quality combinations
- “The customer is the focal point of quality efforts.”
- **Stealth Marketing** to set expectations (6 min)

Customer Feedback

- Customers are the eyes and ears of the business for quality matters.
Quality Tools

**Tools for Generating Ideas**
(a) **Check Sheet**: An organized method of recording data.

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(b) **Scatter Diagram**: A graph of the value of one variable vs. another variable.

(c) **Cause and Effect Diagram**: A tool that identifies process elements (causes) that might affect an outcome.

**Tools to Organize the Data**
(d) **Pareto Charts**: A graph to identify and plot problems or defects in descending order of frequency.

(e) **Flow Charts (Process Diagrams)**: A chart that describes the steps in a process.

**Tools for Identifying Problems**
(f) **Histogram**: A distribution showing the frequency of occurrences of a variable.

(g) **Statistical Process Control Chart**: A chart with time on the horizontal axis to plot values of a statistic.
Histories

What is it?

- A Histogram is a bar graph
- Used to present frequency data

How does it Work?

- Define **Categories** for Data
- Collect Data, sort them into the categories
- **Count** the Data for each category
- Draw the Diagram. each category finds its place on the x-Axis.
- The bars will be as high as the value for the category

What is its use?

- Histograms provide an easy way to evaluate the distribution of Data over different categories
Pareto Charts

What is it?
- A Pareto Chart is a Histogram
- Plus - a cumulative line (seek 70-80%)

How does it Work?
- Similar to a Histogram
- First define categories, collect Data and sort them into the Categories. Count the occurrences for each category.
- Now rank the categories starting with highest (frequency) value.
- Draw cumulative points above all the bars and connect them into a line.

What is its use?
- Pareto Charts are used to apply the 80/20 rule of Joseph Juran which states that 80% of the problems are the result of 20% of the causes.
- Used to identify that 20% root causes of problem.
Run Charts

What is it?
- Run Charts represent change
- Measurement over a sequence or time

How does it Work?
- Gather Data
- Organize Data
  - Measurements (y) must be confronted with time or sequence of the events.
- Chart Data
- Interpreting Data

What is its use?
- Determining Cyclic Events and their average character
- Look for patterns
Control Charts

What is it?
• Statistical tool, showing whether a process is in control or not

How does it Work?
• Define Upper limit, lower limit and medium value
• Draw Chart.
• Gather values and draw them into chart

What is its use?
• Taking samples of a process and detect possibility of process being out of control
Scatter Diagrams

What is it?
- Statistical tool showing a trend in a series of values.

How does it Work?
- Gain values series
- Draw graph with value points
- Draw trend line:

What is its use?
- Demonstrating correlations between values and showing trends for value changes.
Flow Charts

What is it?
- Represents a Procedure
- Uses simple symbols and arrows
- Shows activities in a process and their relationships
- Operations and Decisions can be represented

How does it Work?
- Determine what Process or Procedure you want to represent.
- Start at a certain point and go then step by step using circles or rectangles for operations or other elements, diamonds for decisions, arrows show the flow and the direction.
- Document the elements with titles. Let it close with an ending point.

What is its use?
- A Flow chart lets a process or procedure be understood easily it also demonstrate the relationships between the elements.
The Best Way Home

Leaving the Office

Check the Time and Weather

Weather Clear?

Yes

Before 5:00pm?

Yes

Check for congestion on primary route

Primary congested?

No

Take Alternate "A" Home

Divert to Alternate "B"

Take the Primary Route Home

Arrive Safely

No
Cause and Effect Diagrams

What is it?

- Demonstrates relationship between Effects and the categories of their causes
- The Arrangement of the Diagram lets it look like a fishbone, it is therefore also called fish-bone diagram

How does it Work?

- Determine the Effect or Problem you would like to examine
- Categorize the possible causes
- Find subcategories
- Describe the possible causes

What is its use?

- When a production team is about to launch a new product, the factors that will affect the final product must be recognized. The fishbone diagram can depict problems before they have a chance to begin.
The 80/20 Rule in action

FILM

How can you discover what the 20% (really productive) people do to be efficient?

Pay attention to Best Practices

Break into small groups of 3 -

Write the answer to these questions:

1. How did he apply the 80/20 principle at Panera?
2. How can you find out about “best practices” at work?
ISO 9000

The standards governing international certification of a firm’s quality management procedures.

- Helps Export sales
- Documents compliance of the firm’s operations with its quality management procedures.
- Serves as an indicator of supplier reliability to its customers.
- Is a requirement before becoming a supplier to larger U.S. and overseas firms.
Purchasing Policies and Practices

• Purchasing
  ➢ The process of obtaining materials, equipment, and services from outside.

• The Importance of Purchasing
  ➢ The process of acquiring quality raw material inputs affects:
    ❖ The timely and consistent production of quality products.
    ❖ Retailer sales of finished products to customers.
    ❖ The costs of products, their profitability and their selling prices.
Diversifying sources of supply

- **Reasons for having a sole supplier** (1):
  - Outstanding supplier quality
  - Quantity discounts for volume purchases
  - Single orders too small to divide among suppliers
  - Quality of supplier-customer relationship

- **Reasons for having multiple suppliers** (>1):
  - Choice of best quality, price, and service
  - Supplier competes for business
  - Insurance against input interruptions
### Vendor/Supplier Information

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Type Of Business:</th>
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<tr>
<td>Company Address:</td>
<td>Legal Form Under Which Business Operates:</td>
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<tr>
<td>City:</td>
<td>State:</td>
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<tr>
<td>Number Of Employees:</td>
<td>Number Of Employees At Headquarters:</td>
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<td>Size Of Headquarters:</td>
<td>Number Of Locations:</td>
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<td>Names Of Salespeople:</td>
<td>Names Of Key Officers:</td>
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### Vendor Evaluation

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<th>1. Timeliness Of Deliveries</th>
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<td>2. Quality Of Parts/Products/Material Upon Delivery</td>
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<td>3. Overall Quality Of Parts/Products/Material</td>
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<td>4. Competitiveness Of Price</td>
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<td>5. Quality Of Service Provided</td>
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<td>6. Competitiveness Of Terms And Conditions</td>
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<td>7. Credit Rating</td>
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<td>8. Overall Financial Condition</td>
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<td>9. Reputation Of Company</td>
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<td>10. Quality Of Design Compared To Specifications</td>
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<td>11. Level Of Assistance In Research And Development</td>
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<td>12. Expertise Of Sales Staff</td>
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<td>13. Technical Support Staff's Level Of Expertise</td>
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**Column Totals**

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Rank them based on criteria.