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Measuring Performance in Supply Chain Management

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Measuring Performance in Supply Chain Management

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The 6th Student Research Symposium

Portland State University

May 2, 2018

OVERVIEW

- Introduction
- What is important to measure with regard to supplier performance
- Things to care about with regard to supplier performance
- Example of an organization that had supplier performance problems
- Logistics and transportation modes
- Best mode of transportation and its advantages
- References

Introduction

- Logistics is the movement of raw materials, in-process inventory finished goods and supplies from their origin to the point of final consumption [1]
- Supply-chain management is the design and management of seamless, value added processes across organizational boundaries to meet the real needs of the end customer [1]

A challenging task for an organization is determining what to measure [1]

Important Measures of Supplier Performance

- Consider what we need from the suppliers in order to attain valuable goods services in order to attract customers
- The use of a supplier scorecard. It measures multiple categories which are all important when assessing supplier performance and customer satisfaction [2]
- On-time delivery is important because customers want to receive their products as expected [2]
- Quality of service is important because customers want the job done right [2]
- Customer satisfaction is important because the customer is the king
- Responsiveness to problems is important because when people have a problem in their daily lives and need a solution they are likely to buy a product that can help them [2]

Things to Consider in Supplier Performance

- If I were a supply manager for a company some things that I would care about are: customer service, on time delivery, Inventory accuracy, and price of goods [1]
- Good customer service means ensuring that all the customers receiving the goods or services from my company are happy and rate the goods or services as excellent [1]
- On-time delivery means that the products are delivered within their requested timeline [1]
- Inventory accuracy means that the actual inventory on hand that was ordered from the supplier is correct and matches the inventory in the company records[1]
- Appropriate Price of goods means that the goods received from the supplier are affordable for the customer and aren't much higher than the competitors' products[1]

Example of Supplier Performance Problems

- Back in 2013 Apple chose their supplier to be GT Advanced Technologies; a company that made furnaces for sapphire production [3]
- GT proposed to make a sapphire cylinder twice the size of an ordinary one. They claimed that the larger sapphire would make more screens and reduce costs [3]
- Apple agreed to lend GT \$578 million toward building 2,036 furnaces and operating a factory in Mesa, Arizona [3]
- Apple would buy and retrofit the factory for an additional \$500 million and lease it to GT for \$100 a year[3]
- The issue was that just within a few days the first sapphire came out cracked making it useless [3]

Supplier Performance Problems (Cont'd.)

- It came to Apples attention that it wasn't just a problem with one sapphire cylinder but the whole manufacturing process itself [3]
- Apple did not take any corrective action and didn't have regular communications, therefore Apple failed to conduct due diligence and project planning [3]
- GT, also didn't cooperate and struggled with quality, production planning, and failed to meet deadlines [3]
- Apple didn't provide the human capital and knowledge required to make the technology possible. GT didn't ask for help from Apple [3]
- In the end, both parties failed to do what was needed to manage the relationship [3]

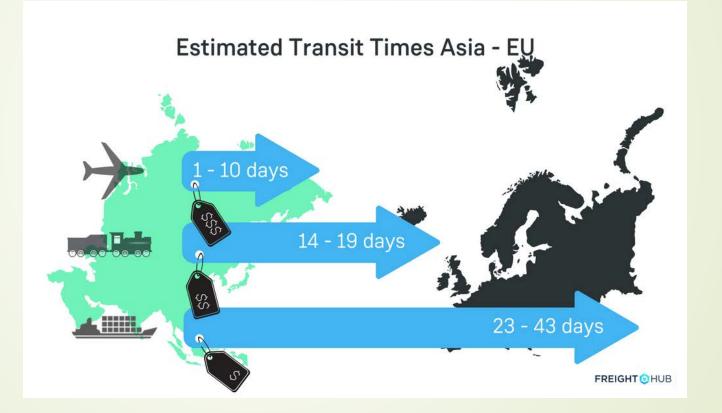
Logistics and Transportation Modes

- There are 5 basic modes of transportation: motor carriage, rail, air, water, and pipeline. They are all good for different things [1]
- The mode of transportation a company uses is an important thing to consider in its planning the shipment process [1]
- Asides from the costs, the urgency of the shipment, the value of the goods in the shipment, and the size and weight of the goods in the shipment, all need to be evaluated when determining which mode of transport to use [1]

Modes of Transportation

- One of the best modes is Air transportation because it is the fastest mode of transportation [4]
- The advantages of this mode are its: Quick transit, less handling of cargo, less documentation, reliable arrival and departures, enhanced level of security for your cargo [4]
- Ocean freight is also a preferred mode of transport for the movement of high volume and heavy cargo such as minerals, metals, ores, steel coils, etc. which would be impossible to move by air freight [4]
- Ocean freight is a less expensive method of shipping goods [4]
- Another benefit for ocean freight is while size and weight may be an issue for air; it is not for ocean freight [4]

Modes of Transportation and Leadtime



References

- [1] Matthews, D. L., & Stanley, L. L. (2008). Effective supply management performance. Tempe, AZ: Institute for Supply Management
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