

# [The performance measurement in business logistics commerce essay](https://assignbuster.com/the-performance-measurement-in-business-logistics-commerce-essay-essay-samples/)

Performance measurement can be defined as the process of quantifying effectiveness and the efficiency of an action (Neely, Mills, Platts, Gregory, Richards, 1994). Given the lack of any universally definition for performance in the organizational literature, it should not be surprising that extant literature offers many ideas about the dimension that ought to be incorporated into a conceptualization of logistics performance. One of the best examples is the framework where physical distribution effectiveness is defined as the extent to which distribution programmes satisfy customers [Rhea Shrock, International Journal of Logistics Management, 5, p. 3.

supply chain management encompasses the logistics management which plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements(Anonymous 2002).

Performance measurement in the logistics functions, like starts at the individual metric level. Because of the great abundance of metrics already in existence there is forceful need for a method with which to evaluate the existing metrics.

Quantitative and Qualitative measures are the two basic categories of Logistics indicators. Qualitative measures include such as product quality, customer satisfaction etc. and quantitative measures include such as order-to-delivery lead time, cycle time, flexibility, resource utilization, delivery performance, etc.

Non-financial and financial are two broad categories of Quantitative metrics of supply chain performance. In fact, in the late 1880s return on investment (as a financial measure) was the main emphasis. (Schermerhorn et al.,, 2000). However as the second progressed during 1980s, the world market changed and overseas competitors began to take market share from the domestic and national companies who were unable to provide higher-quality products with lower costs and more diversity. National companies shifted their strategic focus from cost production to quality, flexibility and short lead time, as non-financial measures to gain the competitive edge in the market (Stewart, 1995).

Business logistics performance metrics could also be classified as

Operational

Day to day technical representation

developed schedule adherence

avoiding complaints

defect free delivery

Inventory carrying cost(Levy (1997); Lee & Billington (1992)

Information carrying cost (Steward (1995)

Tactical

purchasing order efficiency

Cycle time

procedures booking

Cash flow,

Quality assurance

flexibility

transportation cost

Capacity

Strategic

Rate of return on Investment

Total cash flow time

lead time comparison

Quality level and quality assurance

cost saving

supplier pricing measuring against market(Gunasekaran et al. (2004)

query time

The critical elements that form the basis of logistics management are time, distance and money. Some utilization, productivity and effectiveness metrics used in the logistics management are:

## Dimension

## Metric

## Example

Utilization

Actual input/norm input

Area of warehouse occupied/ total area

Productivity

Actual output/actual input

Ton-miles delivered/cost incurred

No of orders processed/ no of hours of labor

Effectiveness

Actual output/norm output

No of shipment on-time/no of shipment sent

## Utilization measures:

They are used to track the use of input resources in process. In logistics, input could be characterized as financial, physical assets or inventory. Utilization metrics include the following:

Spending measures

Purchase price variance

Distribution cost as percentage of sales

Variance of transportation cost from budget

Non financial resources measures

Usage ratios

Amortized costs

Inventory measures

Static metrics (capture level of inventory expressed in physical, financial or other terms)

Flow metrics (capture speed of inventory as it flows through the system over a period of time)

productivity measures

Partial productivity measures (SFP-single factor productivity ratios )

Total factor productivity measurement

Financial productivity measurement (ROI-return on investment )( (Frameworx, 2005)

Effectiveness metrics

Order fill rates( order filled /orders requested

Line item fill rates( total line items not filled / shipped in time per period

Damage rates (line items damaged per order)

Order cycle time (elapsed time between receiving request and delivering order)

Delivery or transit time (elapsed time between readying order for shipment and delivery order)( DfT, 2004)

On-time ( orders shipped on time or orders received by customer on time )

Perfect deliveries (orders received by customers with no logistics service fullness)

## Importance of performance Measurement

The importance of measurement is everywhere as you get what you inspect, not what you expect. Hence, the importance of performance measurement cannot be denied. Therefore, to evaluate work done and to direct the activities metrics are required ((Melnyk et al. 2004).

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Pressures (globalization, severe competition, and changing customers needs) are significantly driving force in the present era requiring the organizations to re-focus on utilizing of people and resources based on organizational objectives.

A performance measurement system is needed to evaluate the resource utilization so that the organizations can strategically manage and properly control. It has been pointed out that in order to take action for ensuring desired results a performance measurement system is essential tool of controlling process. (Schermerhorn and Chappell, 2000)

Measuring performance is necessary, because of the following reasons (which vary from organization to organization) are :( Parker (2000)

Success identification

Measuring whether they are fulfilling the customer requirements;

Help them understand their processes:

Problems bottlenecks waste, etc. Identification

Making sure that decisions are based on fact, not on supposition, emotion or intuition; and

Disclose improvement planned, actually happened.

## Case Example

To fully utilize the performance measurement system of logistics a firm has to implement latest technological infrastructure so efficient logistics operations could work flawlessly.

Here we examine the case of Transcom Inc. that is a known to be the one of the leading edge a distributor of seals and bearings in Burnsville, Minn. it has successfully enhanced its performance measurements in its supply chain operations through implementing and incorporating latest technological measurement tools in its supply chain operations. Transcom was able to find numerous ways to speed up the order-to-ship process and reduce costs through this strategy that is through effectively measuring the performance of the logistics operation with the help of appropriate technology.

Analysis of performance data resulted in improved inventory control, increased product turns, increased shipment volumes and reduced line-item labor costs. Implementation of technological performance measurement tools increased the not only efficiencies of Logistics such as efficiencies in our distribution center but also created efficiencies purchasing, inventory control and customer-service departments. (Dennis Bollinger 2006)

## Conclusion:

The a firm's approach in establishing logistics measurements system does not matters a lot as the real value come when the information is acted upon to align the effectiveness and efficiency of the logistics process performance to value the customers. The role 3PL can have in your success is dependent on when you start measuring your logistics performance (james S. Keebler and David A. Durtsche 2007).

One of the logistics challenges is that organizations have to be more responsive, with high levels of flexibility in delivery. The emphasis should be on processes and performance rather than on functions and profit. The competitive battleground will be in the fields of quality, productivity, speed and innovation. Progress towards performance excellence will be aided greatly by relevant and integrated measurement frameworks and models (Christopher (1994).