## TRANSPORT DECISION MAKING

### Factors influencing transport decision making

<table>
<thead>
<tr>
<th>Macroeconomic trends and trends in the cost of various transport modes</th>
<th>Regulatory developments</th>
<th>Technological change</th>
<th>Carrier strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyse the following:</td>
<td>- Transport decision making is restricted by numerous Acts and regulations</td>
<td>- Logistics management should keep abreast of technological innovations in the transport market</td>
<td>6 strategic decision making areas of carriers</td>
</tr>
</tbody>
</table>
|  - long-term cost trends of the various transport modes | - All decisions should be made within the framework of these restriction | - The development of computer technology plays a major role in logistics and are used increasingly for:  
  - routing,  
  - scheduling and  
  - freight documentation,  
  while satellite technology facilitates  
  - freight tracing  
  - and expediting |  - the nature of service that carriers provide |
|  - the relative price of fuel and other cost components | | |  - the geographic area in which services are rendered |
|  - trends in the production and consumer price index | | |  - the size of the enterprise |
|  - interest rates | | |  - the scope of services |
| | | |  - marketing strategy |
| | | |  - use of technology |
| | | | |
# TRANSPORT DECISION MAKING AREAS

## THREE CATEGORIES

<table>
<thead>
<tr>
<th>TRANSPORT SERVICES NECESSARY TO ACHIEVE THE LOGISTICS MISSION</th>
<th>HOW SHOULD THE NECESSARY SERVICES BE OBTAINED</th>
<th>SOURCES NECESSARY TO IMPLEMENT THE TRANSPORT STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>decisions need to be made about the</td>
<td>Decisions involve</td>
<td>Decisions need to be made about</td>
</tr>
<tr>
<td>• transport modes or combination of modes to be used within the chosen mode</td>
<td>• the extent to which fixed contracts should be concluded INSTEAD OF using the services of common carriers</td>
<td>• the information that is necessary to make rational decisions</td>
</tr>
<tr>
<td>• choice between own and professional transport</td>
<td>• when and in what circumstances 3rd parties should be used</td>
<td>• the human resources needed and how they should be organised</td>
</tr>
<tr>
<td>• financing of own equipment</td>
<td></td>
<td>• how the latest technology is used</td>
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| | | |
| --- | --- | |
| | | how many financial resources should be spent on transport activity |
## Factors influencing carrier selection

|---------|------------------|----------------|
| overall cost consists of  
  - transit time,  
  - ease of system interface,  
  - equipment and related activities such as loading and counting | Carriers offering  
  faster and more reliable transit times  
  also offer  
  service attributes that are important to overall logistics performance. | Regardless of how fast a supplier is able to ship, it must provide a high degree of reliability. |

|---------------|-----------------|-------------|
| refers to a carrier’s capacity to provide specialised equipment such as  
  - temperature control  
  - bulk products  
  - side offloading | This refers to the manner in which door-to-door deliveries can be made  
  and  
  is generally not a problem for road transport but does present problems to other modes | a carrier’s ability to protect a load from  
  - loss,  
  - damage  
  - or theft. |
**Evaluation of carriers using a two-step approach**

<table>
<thead>
<tr>
<th><strong>Step 1</strong></th>
<th><strong>Step 2</strong></th>
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<tbody>
<tr>
<td>Determine the relative importance of service</td>
<td>assess each carrier’s performance concerning each</td>
</tr>
<tr>
<td>elements to a shipper</td>
<td>consideration according to a scale of 1 to 3 where</td>
</tr>
<tr>
<td></td>
<td>1 is high and 3 poor.</td>
</tr>
</tbody>
</table>
NEGOTIATING WITH CARRIERS
WHAT DOES NEGOTIATION INVOLVE? (NEGOTIATION DEFINED)

Negotiation is a management process involving

- The preparation for bargaining
- The interaction of two or more parties in a bargaining situation &
- The resolution or outcome of this interaction

Preparation includes

- The collection of information and
- its use on the formulation of interactive strategies
- designed to achieve a firm’s objectives in a bargaining situation

Bargaining includes

- the execution of these strategies and
- the “give and take” over individual issues
- which is necessary to satisfy the parties

Outcome represents

- an agreement between the parties
- designed to accomplish mutual gain or
- the discontinuance of the negotiation process
Deregulation of freight transport resulted in the entry into the market of an increasing number of carriers with a variety of services at different rates.

This competitive transport market created the opportunity for shippers to negotiate with carriers in an effort to bargain for the best possible service at the lowest possible cost.
WHAT CAN WE NEGOTIATE ABOUT? (MATTERS THAT CAN BE NEGOTIATED)

Matters that can be negotiated are mainly rates and services

Rate negotiation can assume one of the following three forms

- discount on the existing rate for small consignments
- a commodity rate for truckloads of a particular commodity transported in large volumes on a regular basis
- a contract rate for regular consignments over a long period

The main concern when negotiating about services is to improve a carrier’s service which, in turn, will raise the level of customer service.

Although negotiations revolve mainly around the quality of service, the following special services can also be negotiated:

- transit services
  Permit a shipment to be stopped at an intermediate point between initial origin and destination for unloading, storage, and/or processing

- diversion & consignment
  Changes to routing, destination or consignee after a shipment is in transit

- scheduled delivery and collection times
  Congestion at loading docks can be avoided by scheduling collection and delivery times with the carrier. This results in better utilisation of handling staff and equipment, and loading and unloading activities are more effective. The carrier benefits because shorter waiting times and the concomitant better utilisation of vehicles and crews

- deferred delivery
  The shipper offers the carrier the choice of dispatching the consignment later in exchange for a slower service. The shipper can negotiate a lower rate

- internal delivery
  Rates and delivery times can be determined mutually. This is an additional service that carriers provide, namely transporting goods internally to offices and warehouses.
DETERMINE RELATIVE POWER POSITION

The more dependent the carrier is on the organisation’s business, the greater the logistical manager’s power position will be.

In other words,

the greater the amount of business allocated to a particular carrier the greater the logistical manager’s power position will be

The smaller the relative share of a specific carrier in the organisation’s transport work the less reliant the carrier will be on the organisation and the weaker the logistical manager’s relative power position will be.

The more dependent an enterprise is on a carrier’s services, the smaller the logistical manager’s relative power position will be.
PREPARING FOR NEGOTIATION

Preparation is the principal phase in the negotiation process.

Preparation requires:

- the collection,
- analysis and
- evaluation of information

on an enterprise’s

- transport needs and
- shipping characteristics
- and the carrier’s operating characteristics and abilities
Collecting information

The information that is needed can be classified into 3 categories

i. Transport Needs

data used in most decisions about carrier selection must be gathered, such as

- the cost and tariff structure of carriers,
- reliability and
- their ability to meet the conditions of the agreement.

The following questions are invaluable in helping to focus on transport requirements:

**With regard to rates:**

- How do the enterprise’s transport costs compare with those of competitors?
- How does the price of the product after delivery to the final destination compare with that of competitors
- How much discount on rates is necessary to remain competitive
- How much discount on rates is necessary to increase sales

**With regards to Services**

- What level of service do clients desire?
- What level of service do competitors provide?
- What improvement in transport services will lead to a reduction in cost?
- What service adjustments are necessary to effect possible improvements in the enterprise’s logistics system?
The enterprises shipping characteristics

This information is extremely useful in determining the importance of the enterprise’s freight for the carrier and determining the enterprise’s power position.

The following are also important:

- the number of consignments per annum
- the tonnage shipped per annum
- the regularity of consignments
- the density of products
- the direction of consignments
- the handling characteristics of products
- the number of carriers used

The first four factors determine the value of the enterprise’s business for a carrier.

The next three influence the carrier’s cost.

The last one represents the concentration of the shipper’s power position.
Carrier operation and costs

An important criterion for successful negotiation is knowledge of the other party.

The following operating and cost factors are important:

- **Competitiveness of the product in a given market**
  Owing to the derived nature of transport demand
  A high transport rate can increase the price of the product to such an extent that it can no longer compete against available substitutes

  The logistics manager should emphasise the relationship between
  - the transport rate,
  - the price of the product,
  - the competitive position of the product and the demand for transportation of the product.

- **Handling characteristics**
  It is less expensive for a carrier to handle a product that requires little or no special handling.

  Palletised consignments are cheaper to handle than non-palletised ones and a lower rate can be expected on the former

- **Density**
  A shipper who can
  - improve the density of a product and
  - increase the mass that is loaded
  helps the carrier to transport a lower cost per mass unit.

  A lower rate can be negotiated in exchange for these reduced carrier costs.

- **Back-hauls**
  If traffic can be offered in the direction of a carrier’s back-haul,
  lower rates can be negotiated on the strength of the fact that the vehicle would have re-turned empty in any event.

  Once again, lower rates can be negotiated in exchange for better utilisation of vehicles.
Definition of Negotiation Objectives

To negotiate meaningfully about rates and services, it is necessary to identify beforehand what the negotiations are supposed to achieve.

The formulation of objectives stems from a study of what is expected of the carrier.
OWN AND PROFESSIONAL TRANSPORT

NATURE OF OWN TRANSPORT

A logistics manager wants good quality service at a reasonable price.
The extent of own transport can range from providing certain transport equipment such as freight cars or containers to a full transport service.

Decisions have to be made about

- the transport mode that is going to be operated,
- the type, size and quantity of equipment that has to be purchased or hired and
- when it has to be purchased or hired.
BASIC REASON FOR OWN TRANSPORT

The main reason for using own transport:

• to render a better service to customers,
• to deal with urgent consignments and

  to save on transport costs
### COST OF OWN TRANSPORT

<table>
<thead>
<tr>
<th><strong>FIXED COST</strong></th>
<th><strong>VARIABLE COST</strong></th>
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<tbody>
<tr>
<td>Comprises the following 6 points:</td>
<td>Concern mainly the operation of vehicles and include the following 3 areas:</td>
</tr>
<tr>
<td>• Depreciation and interest on capital in respect of vehicles and other equipment</td>
<td>• Fuel, oil and lubricants</td>
</tr>
<tr>
<td>• Depreciation and interest on capital in respect of additional buildings, maintenance facilities and parking facilities</td>
<td>• Tyres</td>
</tr>
<tr>
<td>• Other standing vehicle costs such as licenses, insurance and crew costs</td>
<td>• Maintenance parts</td>
</tr>
<tr>
<td>• Management costs</td>
<td></td>
</tr>
<tr>
<td>• Administrative costs</td>
<td></td>
</tr>
<tr>
<td>• Salaries of maintenance staff if the enterprise is going to be responsible for its own maintenance</td>
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<tr>
<td>ADVANTAGE</td>
<td>DISADVANTAGE</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ensures and effective delivery of urgent orders</td>
<td>equipment has to be purchased</td>
</tr>
<tr>
<td>creates a good impression of the enterprise among customers</td>
<td>involves cost of maintenance</td>
</tr>
<tr>
<td>because of fast service</td>
<td>often means experiencing problems obtaining suitable staff</td>
</tr>
<tr>
<td>eliminates congestion at the loading docks</td>
<td>involves expenses because vehicles may be operated empty and are underutilised</td>
</tr>
<tr>
<td>ensures safe arrival of goods because of less handling and the correct arrangement of freight</td>
<td>involves problems with the management of the transport department and the integration of activities with other functions of the enterprise</td>
</tr>
<tr>
<td>integrates incoming raw materials with production and distributes finished products according to orders</td>
<td>entails risk associated with purchasing vehicles that are unsuitable for the work they are supposed to perform</td>
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<td>can possibly eliminate expensive packaging methods</td>
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ADVANTAGES & DISADVANTAGES OF OWN TRANSPORT