IMPACT OF GST ON SUPPLY CHAIN STRATEGY AND ITS EFFECT ON WAREHOUSING AND TRANSPORTATION

MAHINDRA LOGIQUEST

SUBMITTED BY:
TEAM EAST COAST EXPRESS
ABILASH VENKATESH A
ARAVIND VULUGUNDAM
## Contents

INTRODUCTION

GOODS AND SERVICES TAX:

GST – BEFORE AND AFTER

IMPACT ON SUPPLY CHAIN MANAGEMENT

IMPACT ON WAREHOUSING

IMPACT ON TRANSPORTATION

ADVANTAGE FOR 3PL PROVIDERS

IMPACT OF EXCLUSION FROM GST

CONCLUSION

PROCESS

Supply Chain Reengineering

Transportation

Consolidation and Outsourcing

PEOPLE

Skill set upgradation and service levels

TECHNOLOGY

Automation

REFERENCES
INTRODUCTION

GOODS AND SERVICES TAX:

Goods and services tax is an indirect tax. This tax is levied on manufacture, sale and consumption of goods and services in India. This tax will replace the tax collected by the central and state governments. GST collected during the purchase or sale of goods is independent of the state where the purchase or sale takes place. This tax structure is proposed by The GST Bill or The Constitution (One Hundred and Twenty Second Amendment) Bill.

The tax rate under GST would be lower, however, there would be an increase in the number of assesses. The increased number of assesses is expected to make up for the reduced tax and the overall tax collection is expected to increase.

Some of the best GST systems across the world like Singapore and New Zealand use single GST, but India has opted for a dual GST model. The change in tax structure is expected to have a huge impact in supply chain in India. A comparison of GST rates of some countries with the proposed India GST rate is given below.

<table>
<thead>
<tr>
<th>Country</th>
<th>Rate of GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>10%</td>
</tr>
<tr>
<td>Canada</td>
<td>5%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>15%</td>
</tr>
<tr>
<td>Singapore</td>
<td>7%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6%</td>
</tr>
<tr>
<td>Sweden</td>
<td>25%</td>
</tr>
<tr>
<td>India</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: [https://en.wikipedia.org/wiki/Goods_and_Services_Tax_(India)_Bill](https://en.wikipedia.org/wiki/Goods_and_Services_Tax_(India)_Bill)
GST – BEFORE AND AFTER

Let us consider the example of a manufacturing company in Chennai, which moves its goods to New Delhi. The actual sale happens in New Delhi and the finished goods have to be transported from Chennai to New Delhi across different states. As per the current taxation norms, one has to pay Central Sales Tax (CST) when moving a good to another state and selling it in the other state. However, if the good is moved for stocking and not for sale, then CST need not be paid.

So many companies in order to avoid paying CST, they show this movement as moving to stock and not moving to sell. To do this, companies have warehouses in every state where the finish goods are stored and then the goods are transported for sale from the warehouse in each state.

Let us consider another example of a city called Hosur in Tamil Nadu which is approximately 30km from Bangalore. Shipping the goods from Bangalore warehouse to Hosur requires the company to pay CST as Hosur in Tamil Nadu and Bangalore is in Karnataka. So the companies ship goods from Chennai warehouse, which is approximately 250km to Hosur to avoid CST.

With the implementation of GST, the companies will be free to setup their own warehouses to optimize cost and improve customer service.

The following central and state taxes are integrated into GST.

Central Taxes:
- Excise duty
- Service tax
- CVD
- CST
- Various Cess
- Additional Customs Duty

State Taxes:
- State VAT
- State Excise
- Luxury Tax
- Entertainment tax
- Entry tax
IMPACT ON SUPPLY CHAIN MANAGEMENT

The structure of the supply chain is influenced by differential taxes based on geographical location. By eliminating multiple state taxes, logistics companies are encouraged to consolidate their warehouses instead of maintaining one in each state to avoid central tax.

This in effect brings the overall cost of the product down as the inventory cost and inventory carrying cost down. This directly affects the final cost of the product, bringing the selling price down. The cost saved by the companies as a result of GST can be used to invest further to improve serviceability.

After GST implementation, the design of the supply chain will be based on customer service and logistics cost. It also offers flexibility into demand and supply matching. GST would also enable firms to increase the accuracy of the forecast. Smaller warehouses can also be merged into one bigger warehouse and space optimization will be achieved.

The following are the benefits enjoyed by companies after the implementation of GST:

- Interstate sourcing of raw materials
- Price negotiation
- Improvement in quality
- Better forecasting
- Improved inventory management
- Better trade-off between cost and customer service
- Capacity expansion
- Greater flexibility in manufacturing
IMPACT ON WAREHOUSING

The location of warehouse is generally chosen to minimize the cost of delivery for both the company and the customer. Other factors considered are access arterial highways, access to highways, ports, etc. for shipment and labour availability. The local state taxes are also a factor considered by companies before locating a warehouse. Some companies prefer to have warehouses in every state of the country to avoid local taxation while transporting from one location to another.

With the implementation of GST, logistics companies can have restructure their warehouse locations and can have one central warehouse or can go for warehouses at specific locations or can adopt a hub and spoke model. With GST the local state taxes are eliminated and there will be only one Goods and Services Tax across the entire country. This enables the companies to achieve cost efficiency in their operations and thereby transferring this cost benefit to the end consumer in the supply chain.

Advantages on warehousing with respect to GST is that companies can consolidate stock at their warehouses. Demand variation at a particular warehouse can also be reduced. This in turn improves demand planning and improved inventory management.

Disadvantages of GST with respect to warehousing is that companies face challenges during route planning while having to deal with deliveries across a bigger geography. In case of services or deliveries which requires lower lead times, the service level might be impacted.
IMPACT ON TRANSPORTATION

Currently, the transportation is based on the Central Sales Tax and varied state value added taxes. However, after the introduction of GST, the tax will be levied at the central level and the state value added taxes does not have any impact. The tax rates are uniform across the borders and state boundaries will no longer be the parameter in deciding the routes.

With lesser number of warehouses, the location of warehouses and their transportation networks would eventually turn out to be critical. This demands for the fulfilment of prerequisites such as road/rail/multimodal connectivity. This requires well in advance planning to build an agile, efficient and futuristic supply chain model.

With larger warehouses (in terms of capacity), the transportation lot sizes automatically increase, which results in the larger and more efficient trucks. The optimization and rationalization of these options provide the competitive advantage to the business.

ADVANTAGE FOR 3PL PROVIDERS

According to the recent report launched by Novonous, 3PL logistics market in India is expected to be worth of $301.89 Billion by 2020. By 2020, Indian logistics market is expected to grow at a CAGR of 12.17%. This is because of the boom from ecommerce companies and expansionary policies of FMCG majors.

With the effect of GST, instead of maintaining smaller warehouses in each and every state, the companies will be setting up lesser and bigger warehouses, and can follow hub and scope model for freight movement from warehouses to manufacturing plants, distributors and retailers. Hence, there is a bigger opportunity that awaits the 3PL service providers who can manage these bigger routes and deliver accurately and efficiently.

The Indian logistics industry constitutes around 14% of the GDP which is greater than the other developing nations. The 3PL logistics firms are evolving from traditional service delivery systems to highly integrated and
technically equipped service providers striving to meet the service demands. GST provides them the ample opportunity to invest and expand the 3PL base in India.
IMPACT OF EXCLUSION FROM GST

With the introduction of GST, states have to forgo their authority on state levied taxes and has an impact on the states’ revenue. Hence, the reason why some of the goods such as Petroleum products, alcohol for human consumption and tobacco has been kept out of the purview of GST.

Keeping the petroleum products out of the GST would have serious implications on transportations sector and would not help achieve the actual goal of GST. The motor spirit consists of the larger part (close to 60%) of the transportation business. Hence, exclusion of petroleum products from GST would add up to the additional costs and breaks the chain of credits of GST.

However, instead of excluding the petroleum products, they can included with higher tax rate and there can be a sharing basis between center and states. This would allow level playing field to transportation providers.
CONCLUSION

As the next level of logistics are evolving in India and the corresponding regulatory policies has to be taken care well ahead of the GST introduction to have a positive and expected impact. Further, on account of the delay in implementation of GST, it is critical to gauge the opportunity loss for the various stakeholders.

The following are the critical business implications post GST implementation. The implications are segregated based on Process, People and Technology

PROCESS

Supply Chain Reengineering
Many service providers have to revamp their supply chains, realign their warehouses and logistics networks. This gives tremendous opportunity to 3PL and 4PL logistics providers.

Transportation
Reorganized manufacturing plants and warehouses would reduce the primary freight charges as they are located close to each other irrespective of which state they are in. However, secondary freight may increase because of the fewer warehouses.

Consolidation and Outsourcing
With the increase in the availability of organized and efficient players, there is a possibility of consolidation. Also, this leads to the outsourcing of their logistics operations (3PL & 4PL) to logistics service providers so that the companies can focus on their core competencies (products).

PEOPLE

Skill set upgradation and service levels
The need for optimally skilled and technically qualified workforce is likely to become a challenge. Hence, to cater to this need, supply of skillful
workforce should improve which in turn improves the service level of the company in its operations and meet the customer demands.

**TECHNOLOGY**

**Automation**
Because of the fewer warehouses, the warehouses can be ramped up and equipped with state of the art technology to facilitate long term benefits. Latest warehouse management systems (WMS) and modern robotics can be used for the effective and efficient warehouse management.
REFERENCES

7. KPMG GST Report -2011