COMPARATIVE SUPPLY CHAIN MANAGEMENT PRACTICES FOR SELECTED AMERICAN VEHICLE PARTS IN INDIA AND MIDDLE EAST

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INTRODUCTION:
Indian automobile industry has been doing well during last few years with overwhelming economic growth rate of over 26 % during the year 2010-11. American automobile industry has also bounced back recently after three years of turmoil caused due to crash of U.S. economy. In view of the present economic scenario the automobile manufacturers and suppliers face many challenges that include improving quality, meeting cost reduction targets and good logistics etc. and in the age of e-business and global outsourcing, supply chain management (SCM) plays a crucial role in many of these areas.

Supply Chain Management has attracted significant attention during last decade from industry as well as multidisciplinary academicians and researchers. Supply chain “integration’ and “collaboration” have been some of the underlying concepts that bring out the philosophy of supply chain management.

American manufacturers like Ford and General Motors are marketing their product all over the world which also includes genuine parts sales. Middle East and India are two big markets for American automobile companies. After a ban on American vehicles in the Middle East for almost two decades, they re-entered the market in 1987 and set up a dealer network. General Motors and Ford put together, sell over $600 million worth of genuine parts in the Middle East. Rich oil states have accepted big American cars and trucks very well. Parts of American vehicles are sold all over the world through network of dealers. General Motors and Chrysler Corporation had to file for government support during economic crisis and they are still recovering from the effect of economic slowdown. Ford Motor Company was the only big automobile company in America that survived the downturn and emerged stronger. Hence, Ford Motor Company has been chosen for this research for their parts operations in Middle East and India.

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STATEMENT OF PROBLEM

All the big automobile companies are trying their best to reduce the costs by adopting best practices of Supply Chain Management. American companies entered markets like India and Middle East during last two decades and have been struggling to compete with Japanese vehicle manufacturers like Toyota Motor Corporation. These American companies are continuously striving to maintain the top positions that they occupied in the global automobile industry prior to best practices of Supply Chain Management were adopted by Japanese manufacturers in particular and other manufacturers in general and face a big challenge during years to come. Supply Chain Management practices adopted by two largest automobile companies in the world, General Motors and Ford Motor Company took a new dimensions with opening of parts distribution centres in Dubai in the Middle East and in Chennai and Gurgaon in India. Primary data was collected from officials of Ford Motor Company, dealer staff in India and Middle East and customers at both locations. Following data depicts the automobile industry scenario in USA and India at a glance:

### Market share % age of vehicles sold in USA – Last 4 years at a glance:

<table>
<thead>
<tr>
<th>Make</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>44.44</td>
<td>45.22</td>
<td>47.15</td>
<td>44.40</td>
</tr>
<tr>
<td>Japanese</td>
<td>39.77</td>
<td>38.11</td>
<td>34.30</td>
<td>37.10</td>
</tr>
<tr>
<td>European</td>
<td>8.42</td>
<td>8.63</td>
<td>9.45</td>
<td>9.24</td>
</tr>
<tr>
<td>Korean</td>
<td>6.93</td>
<td>7.60</td>
<td>8.67</td>
<td>8.90</td>
</tr>
<tr>
<td>Others</td>
<td>0.44</td>
<td>0.44</td>
<td>0.43</td>
<td>0.44</td>
</tr>
</tbody>
</table>

### Auto parts industry in INDIA – Last 4 years turnover at a glance:

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>US $ 23.0 billion</td>
</tr>
<tr>
<td>2010</td>
<td>US $ 30.1 billion</td>
</tr>
<tr>
<td>2011</td>
<td>US $ 39.9 billion</td>
</tr>
<tr>
<td>2012</td>
<td>US $ 43.5 billion</td>
</tr>
</tbody>
</table>

It is expected that automobile parts industry will cross US $ 65 billion turnover by 2015 and US $ 100 billion by the year 2020. Supply chain management has become integral and one of the most important management practices in American automobile parts industry.
RESEARCH METHODOLOGY

The research regarding Supply Chain Management of selected American vehicle parts in Middle East and India have been conducted keeping in mind the following research methodology:

1. To collect conceptual and theoretical knowledge related to supply chain management in automobile industries in USA, Middle East and India.
2. To study the application of various supply chain management practices in the chosen area of research, present levels of adaptation of procedures and practices and their benefits. Also to research and analyse constraints and barriers with a view to evolve various recommendations for improvements.

OBJECTIVES OF THE STUDY

It was intended that following objectives would be achieved with this research:

1. To study the growth of American automobiles industry in Middle East and India.
2. To understand existing Supply Chain Management practices adopted by selected American vehicle manufacturers regarding their parts operations in the Middle East and India and study the comparative data.
3. To evaluate the following management practices of selected American vehicle parts in India and Middle East:
   a) Inventory management
   b) Warehousing
   c) Distribution
4. To evolve and suggest Supply Chain Management strategies for selected American automobile parts to sustain present growth rate and meet the customer expectations in the Middle East and India.
5. To create a background and set direction for future research in the field of Supply Chain Management of American vehicle automobile parts.

CONCLUSION

This research confirms that American automobile companies have been using successfully using SCM practices to help them in their Parts operations in demand forecasting, receiving orders from dealers, giving a close to accurate promise date, sourcing and manufacturing the right parts at the right time for range of vehicles, position inventory of necessary parts...
at each location appropriately to provide best fill rates, pick, pack, and efficient shipment from various parts distribution centers etc. Comparison between the two markets, India and Middle East showed some significant differences like customer’s perception of level of inventory that a dealer should hold at all times, demand levels, warehouse management systems and distribution strategies etc.

Both General Motors and Ford Motor Company have Parts Distribution Centers in Dubai for the Middle East region and from India parts are distributed all over the South East Asia region. Low cost of operation and conducive government support have been major drivers for American automobile companies to invest in India and Middle East.

A comprehensive research of Supply Chain Management of Ford parts has been carried out in Middle East and India and analyzed with a view to compare the present practices and suggest improvement upon the areas of SCM. Suggestion like improvement in distribution methodology and handling of normal and vehicle off road parts were made.

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