

# International Research & Technical Symposium 2015



MEMBER

## "Innovation and Technological Advancement to Enhance Sustainability"



**21<sup>st</sup> November 2015**  
**Grand Ballroom, Galadari Hotel, Colombo**  
**9.00 a.m. - 5.00 p.m. (Registration at 8.00 a.m.)**

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**A Sustainable Commercial Hub in Sri Lanka: The Role of Automobile  
Industry**

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**First Author Biography**

Lalith Edirisinghe is a PhD candidate in Transportation management and presently works as the Head- Department of Logistics and Transportation of the CINEC Maritime Campus, Sri Lanka and a visiting lecturer of the University of Colombo. His research interests are Education, Marketing, and Logistics. He is a Chartered Member of Logistics and Transport and a Chartered Marketer. He holds a Masters degree in International Trade and Logistics offered by University of Sri Jayawardanepura- Sri Lanka and University of Canberra - Australia.

**Second Author Biography**

A.W. Wijeratne, having obtained the Doctoral degree in Mathematics from Harbin Institute of Technology, China in 2008, he has been working as a senior lecturer in Statistics and Mathematics at Department of Agribusiness Management, Sabaragamuwa University of Sri Lanka. He has published over two dozens of research papers in refereed journals covering wide range of subject areas. He has given his active contribution as a Statistician for projects at national level. His research interest includes Mathematical Modelling in Business, Experimental Designs and Applied Statistics.

## **1. Introduction and research problem**

The objective of converting the country to a naval, aviation, commercial hub in Asia is much dependent on the efficient and effective mobility. In keeping with this objective, heavy investments are essential in developing the required infrastructure and the improvement in the Automobile industry. Out of the five hub concepts that Sri Lanka focuses its attention on Commercial hub would realize very lucrative dividends to the country. While there are improvements seen in infrastructure the attention on exploring and applying technological advancements with respect to Automobile Industry is rarely noticeable. Logistics facts and figures in Sri Lanka published by the World Bank in their Connecting to Compete 2014 report the world ranking of “Timeliness” component is still lagging at 85 out of 160 countries. Therefore, it is highly important to investigate the factors that can contribute more efficient mobility system in the country. According to Meyer (2012) the main industry players need to figure out the best ways to develop technologies that will drive future revenues, whether it is electronic components for fuel cell or battery electrified vehicles, lightweight body materials for urban car concepts, or software for in-car added value services for the connected generation – many of whom won’t even own their own car.

## **2. Methods**

The study employed both primary data and secondary sources. The study draws attention on the Past data and future projections of Automobile Industry, KPMG annual reports, Automotive landscape 2025, <http://www.oica.net/>, Doing Business Reports of The World Trade Organization, The World Bank And The International Finance Corporation, The Global Competitiveness Report of World Economic Forum, and Connecting to Compete Report. The study has critically evaluated these data using many other secondary sources such as Central Bank of Sri Lanka, Review of Maritime Transport by United Nations Conference on Trade and Development, World Customs Organization, and many industry publications.

A questionnaire was used to collect data from the industry personnel. Depth interviews have been conducted with senior officers of Automobile Associations in Sri Lanka, Trade Associations such as Ceylon Association of Ships Agents, Sri Lanka Association of Vessel Owners, Container Trucking Companies, Sri Lanka Shippers Council, Ceylon Chamber of Commerce, Department of Inland Revenue, Customs and Board of Investment of Sri Lanka. Sri Lanka is a small country, the distance between the two furthest points, Point Pedro and Dondra Head is only 435 Km apart thus each of these trucking companies has a comprehensive knowledge about the road net work and other infrastructure within which they operate as their managers have a history of dealing with transportation and logistics operations and were able to provide valuable insight.

### **3. Results and findings**

The comparative analysis of data and information gathered points out key problems pertaining to automobile industry that persist and what may effect the effectiveness of a commercial hub and its sustainability. Sri Lanka has no land-based links through road or rail or pipe to move goods in an out of the island, and being an island, the possibilities of sea transportation to any point around the coast is very much a given. There is substantial cost benefit of water transport. SL's geographic location enables its logistics through sea transport which creates a comparative advantage to the country but the overall cost of international trade in Sri Lanka is quite high given the high land-based transport cost. It was also noted that 1,279,616 vehicles have been issued valid revenue licenses in 2012 in the Western province where Colombo city is located. This figure reflects 38 percent out of the total vehicles of 3,374,479 running in the country in all nine provinces. Therefore, it is evident that roads in and around Colombo city is continuing to be getting congested thus automobile industry needs proactive planning effective management efforts. Commendable improvement is being done with respect to road network in Sri Lanka including highways to address this issue. Vehicle related issues have contributed considerably with respect to traffic congestion. This factor generally has a direct impact on commercial hub as well as maritime hub because container shipping plays the major role in country's exports and imports. It was noted that delays were sometime occurred due to vehicle breakdown and that delays occurred due to vehicle breakdown create a big impact in cargo transportation. It was revealed by some respondents that all the major variation of travel time to regular destination had some relevance to a vehicle breakdown. This is quite unpredictable, and investors are facing difficulties in meeting with their international schedules. There were various highly sophisticated automobile solutions that could help improving the cargo transportation was analyzed. However, an immediate plan to make use of the latest technology in the automobile industry was not evidenced.

### **4. Conclusions, implications and significance**

The paper proposes solutions to selected problems in the automobile industry in Sri Lanka with respect to vehicles pertaining to cargo transportation in particular. The analysis illustrates that considerable progress has been made in logistics performance and doing business and that the international community through independent assessment tools and indexes sees the potential in Sri Lanka to establish itself as a Commercial hub and the activities in the automobile industry play a key role in this exercise. Given the negegible quantity of cargo transportation by rail in Sri Lanka the need for effective and efficient road transport is very much evident. Carefull consideration is hghly essntial to improve qualitative aspects of vehicles, vehicle fleet management systems, road congestion management efforts, in which automobile industry in Sri lanka play the key role. The absense of timely and rapid application of technological developmets may generate serious impact on the sustainability of Commecrail hub concept.

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