## Evolution of the Railway Transportation Devices in Sri Lanka: with refer to the Design Applicability and Usability for Appropriate Product Design

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## **Abstract**

Sri Lanka's rail transportation was pioneered and developed by the Britishers after capturing the Kandyan kingdom in 1815. England was where the railway transportation emerged as a viable solution to all hindrances in travel and transport in several parts of the country, limitations of the road network, lack of transportation motilities for transporting different goods and commodities etc. Hence, this mode of transportation was hugely beneficial for Sri Lanka as well. Studying the evolution of railway transportation system and devices which exist in Sri Lanka is a much important fact in the current context due to lack of research done in this particular area of interest. As a product designer, it is vital to gain knowledge and awareness about the evolution and socio cultural context in order to create or develop product design plat forms in Sri Lanka. Automotive and locomotives are a part of product design for the development of any industry in Sri Lanka. There should be an emergence of knowledgeable people, sources of information and the inspirational expertise and studies to make important decisions. It is an interesting topic to look through for the development of transportation devices as well as product design innovation in Sri Lanka. The methodology of the research is based on grounded theory method, by analysing the primary and secondary data, as well as extracting information gathered from existing railway transportation devices by experiencing, observing and analysing aesthetics, function, materials, and ergonomics. The research data formulated main key factors to analyse and understand the transportation devices such as, product functionality, material culture, user friendliness, easy usage, practicality, and usability. The research will be beneficial to know and understand the key features to design new transportation devices and product design evolution of the railway transportation devices in Sri Lanka.

Key Words: Transportation Devices, Locomotives, Product Design, Design Elements

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