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Cost Benefit Analysis of Automated Storage & Retrieval System for Car Parking

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We are also grateful to different AS/RS manufacturers worldwide such as ROBOTIC PARKING COMPANY and EITO & GLOBAL INC. for sharing the useful information related to AS/RS system.

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Authors
ABSTRACT

The growing number of cars in Pakistani metropolitans is adding to vehicular emission, congestion and exerts tremendous pressure on limited available parking space. It is impossible to provide more space in the old constructed markets. This affects the people adversely in every area; especially the commercial activities, as people are hesitant to shop at markets where car parking is not possible. It adds to the anxiety, frustration, safety and security problems. So the need of the better parking solution is acute. An automatic parking is space saving and cost effective alternative and at the same time resolves traffic congestion issues, minimize accidents on roads and other stress injuries.

Main purpose of the research is to check the feasibility of automated storage and retrieval system for car parking. First step is the realization of problem, as there are a lot of traffic problems arising due to increasing number of vehicles on road. To determine the parking problems, a customer survey is conducted at Liberty Lahore. Result of this survey show that people are not satisfied with existing parking. By consulting various Government organization like Lahore parking company, TEPA and Environment protection Department, Punjab encouraged us that the need of installing such problem solving project is essential. After acquiring cost details from International Manufacturers and calculating all benefits that can be extracted from this project, help us to perform Benefit cost ratio analysis. After that we have reached to an optimal solution.

The results of this study are that this project is feasible at Liberty Lahore. Furthermore this project could be made more economical if the Government subsidize this project.
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