

Science, Engineering and Technology

the temperature coefficient of frequency (TCF) decreases from maximum of 130.44 /°C to minimum of -1.11/°C.

P-46 Causes, Trends and Implications of Motorization in Malaysia

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Motorization trend has been rising rapidly in many countries including Malaysia. But the level and trend of motorization in each country varies according to major factors such as population, size of the country, economic growth, income level, fuel cost, and public policy on vehicle ownership. The level of motorization has both positive and negative impacts. On the positive side, it provides mobility from a landuse to another landuse to meet various purposes besides increasing trade related to transportation. On the negative side, it increases pressure on the environment by increasing more pollutants into the atmosphere causing global warming, traffic congestion, accidents, and added pressure on the road and rail infrastructure in terms of capacity. Looking at the past trend of motorization, the future appears very bleak. This paper highlights trends and causes of motorization in the past, its likely impact on the environment and possible implications.

P-48 Design and Development of a New Shariah Compliant Dirham Based Islamic Market

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The return of Islamic currencies consisting of the Dinar and Dirham calls for the return of the Islamic Trade and market. The Islamic Trade represents a frame by which the Islamic currencies operate in accordance to Islamic shariah exemplify by the earlier Muslims. For trades to exist, Islamic markets have got to be established and the characteristics of an Islamic market includes (1) right of place in the market until the completion of transaction, (2) no private ownership of the market place (3) no rent or tax levied on the usage of the market place.

A new Islamic trading and market that complies with the aforementioned shariah is hereby proposed. The proposed system consists of integrating a platform of registered sellers to a marketplace in the form of a vending machine. The vending machine is made up of two different modules, namely the seller module and the buyer module. The login information provided for each registered seller is used to configure the unit selling price by the seller and this information is also used for online sales monitoring and alert.

The buyer module is made up of an automatic dirham coin sensing device and the product selection switch. Insertion of dirham coin triggered the sensing and detection unit for coin validation. On completion of validation process, the acknowledgement unit reads the status of the products selection switch to detect the selected product. The End point module comprising of the sms gateway, the return unit and the delivery unit handles the completion of the transaction activity.

This innovative shariah compliant Islamic market gives any registered user the ability to trade on any of the available e-market space in the vending machine until the transaction completes without being the owner of the machine.