



ISSN: 2028-9324 CODEN: IJIABO OCLC Number: 828807274 ZDB-ID: 2703985-7

Now IJIAS is indexed in DOAJ, CAB Abstracts, Chemical Abstracts Service, Index Copernicus, IET Inspec Direct, Ulrichs Web, Google Scholar, CAS Abstracts, J-Gate, UDL Library, CiteSeerX, WorldCat, Scirus, Research Bible and getCited, etc.



Eco Innovation efforts: A review of dynamic eco innovation practices and new research agenda towards sustainability development

Lizwa Rashid, Samer Ali Shamee, and Juhaini Jabar

Faculty of Technology Management & Technopreneurship, Universiti Teknikal Malaysia Melaka, Malaysia

Copyright © 2014 ISSR Journals. This is an open access article distributed under the *Creative Commons Attribution License*, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT: The automotive industry is a backbone for nation development and approved as one of the dynamic sector with rapid change of technology capability, customer preferences, and complex management for the auto components. As part of the initiatives to support the ability of current generations to meet their needs without compromising the ability of future generations to meet theirs, firm starting to implement eco innovation in terms of producing an eco product and implementing green process in their manufacturing activities. However, there are low evidence of literature underlines firms capabilities to enable eco innovation as scholars tend to discuss factors from Macro and Meso level. Thus, this paper provide an insight for new paradigm of eco innovation research by introducing dynamic eco innovation practices as an antecedent for eco innovation efforts and indirectly supporting eco performance in triple bottom line effect. Four main factors identified as the heart of dynamic eco innovation practice namely; technology collaboration, green human resource, eco innovation culture and environmental management system strategy. Furthermore, this paper shed light on new research imperatives by proposing a research model with hypothesis development to be tested mainly in the automotive industries and particularly development countries as the background setting.

KEYWORDS: Eco Innovation, Dynamic eco innovation practices, sustainability, automotive industry.

1 INTRODUCTION

Malaysia, as part of ASEAN countries renown as one's of developing countries in this region who are success on transforming the economy through Foreign direct investment (FDI). The introduction of FDI strategy is not only success on attracting investors, but also spurring the economic growth by the establishment of the manufacturing sectors to develop varies types of product. Due to the outstanding strategies, resulted on the increment of the export earnings since 1970's and rapid globalizations by the manufacturing industries as in [1]. As part of it, the automotive industries have significant contribution in nation development through employment (more than 550,000 employees before and after market) and economic growth (3%-4% GDP per year) via manufacturing and marketing activities [2],[3]. This industries steadily growth since 1985 in technology transfer and product development while highly protected by the government [4] because the industries encompass growing number of company (up to 570 manufacturer and 35,000 aftermarket business) and build up from numerous components and suppliers in different industries such as metal, plastic, rubber, Electric & Electronics and others [5],[6].

The increasing of attention and global competition in a sustainability development has forcing the local automakers and suppliers to shift their paradigm in green production. The pressure to eco innovative impetus on worsen of air quality, response to the Global trends of producing hybrid and electric vehicles originated from Japanese, Chinese, and Indian countries [7], [8] and competition with the traditional competitor which are Thailand and Indonesia as in [9]. Therefore, the priority in New Automotive Policy (NAP) released on 20th January 2014 emphasizes on the sustainability implementation in producing auto product; car and motorcycles driven by the alternatives energy resources and emphasizing of green automotive life cycle through 3R concept (Reuse, Reduce, Remanufacturer) as in [8]. The new trend of sustainability development embraces on growing research attention for the effective management of eco innovation efforts.