

## Chapter 62

# Implementing Eco– Innovation by Utilizing the Internet to Enhance Firm’s Marketing Performance: Study of Green Batik Small and Medium Enterprises in Indonesia

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### ABSTRACT

*The aim of this study is to explore a proposition of eco-innovation internet-based approach to bridge the gap between market orientation and marketing performance of the batik SMEs in Indonesia. Batik is an Indonesian art of waxed hand painting on the textile by utilizing of natural dyes. The 250 questionnaires were distributed among the SMEs actors; however, 189 out of 250 questionnaires were valid to be further processed. This research has provided some empirical evidence that the approach of e-eco-innovation has a significant impact on marketing performance. Furthermore, market orientation also has a significant impact on both marketing performance and e-eco-innovation. Therefore, the adoption of ICT (Internet & Communication Technology) and eco-innovation may contribute not only to the body of knowledge of green marketing but also for the practice of green marketing amongst SMEs in developing countries.*

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## INTRODUCTION

Nowadays, Batik is an art of Indonesian waxed-hand painting based textile that is now acknowledged by UNESCO as one of the world art heritage to preserve. Batik painting is an ancient art, possibly emanating from India or the Middle East as many as two thousand years ago. However, it is usually related to the Indonesian island of Java and Bali (Wyvill et al., 2004). Liquid wax is painted onto a cloth and the cloth is then dyed. The dye does not disturb the area of cloth where it is painted with the wax. The process is repeated with new colors to add the complexity of the images on the cloth. The wax can be removed from the cloth by scraping and washing between the dye process and paint cycle. During the process, cracks are able to form in the wax, allowing the dye to seep into the cloth. As the cloth undergoes successive dye procedures, the cracks age and become wider. Other subtle effects take place such as cracks become wider at junctions with other cracks. These effects combine to form crack patterns that are recognized as Batik.

The concentration of batik industries is concentrated on the main island of Java of Indonesia. In addition, the total export of Batik amounts to the US \$ 350 annually, the total number of the patent is 3,300, increase by number every year. More importantly, the foreign demand of Batik with natural dyes (green Batik) is gradually increased by number especially from the USA, European Union countries, Japan, and other North American countries. The green Batik industries enjoy the higher price as compared with the regular one. However, an effort to develop Batik's natural dyes has faced some obstacle for instance, the absence of research & development (R & D) among SMEs worsen the problems. Unlike the synthetic dye, the natural dye has some shortcomings on variety of colors and color fixation to insure its stability. Previous studies to tackle the lack of R & D capability set forth by Feldman et al (1999) and Delgado et al (2010), strong industrial clusters and diversity as well as specialization of firm level to share their knowledge will lead to larger return of R & D.

Most of the Batik industries now use synthetic dyes because of practical reason and giving the more glaring effect of color, no matter the size of business scale. The clamor for an environment-friendly way of production, green marketing, and sustainable development lead them to look back from the time immemorial that was prevalent in using natural dyes, accordingly, an environmentally friendly way of doing business needs to be revived. The revival of using natural dyes such as roots of particular bush and tree, leaves, tree bark as matter of fact is in line with local knowledge and wisdom. The inheritance of the ancestor should not be abandoned since it preserves the natural conservation and sustainability. The local taboos in form of doing and don't confine the Batik artisan to respect the environment. However, in contrast, some Batik clusters the way they do business is not in accordance with the environment preservation. They throw their waste haphazardly in the river that pollutes the river stream with heavy metal substance, so other parties such as local farmers and fishermen suffer from the pollution.

To illustrate the problem, for instance, a river of Jenes located in the city of Solo, the condition of river water is deteriorating because the batik industries that lie along the river stream to dump their waste directly into the river. The river becomes a demise river that there is no biotic life anymore. The protracted water pollution along the water stream has adversely worsened the human daily activities. The water quality is below the quality standard, the water is no longer safe to consume and river ecosystem is also damage. These phenomena are prevalence in many Batik industrial clusters including the biggest Batik industrial clusters in Pekalongan Indonesia (Hermawan & Yoshanti, 2016). The municipal government tends to be lenient towards the Batik SMEs' actors haphazard behavior. The common reason is to protect the viability of Batik SMEs but on the other hand, the regulation concerning the green business

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