

**UNIVERSITI TEKNOLOGI MARA**

**CONCEPTUALIZING KNOWLEDGE CREATION  
FOR BATIK AESTHETICS**



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for the degree of  
**Doctor Of Philosophy**

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## ABSTRACT

The research aims to conceptualize community-based information system model to enable batik aesthetics knowledge creation addressing cultural erosion phenomenon. The Malaysian batik community consists mainly of microenterprises is a viable selection of case because it represents a viable route in utilizing ICT as an enabler towards preservation of culture.

Malaysia's participation in batik making traced back as early as 1900 dominantly located in the east coast region of Malaysian Peninsular. The Malaysian batik making business is experiencing culture erosion, deskilling and degradation due to a manifold of issues. The cultural erosion phenomenon is translated into traditional knowledge loss due to lack of knowledge transfer mechanism to enable batik makers to gain individual and community empowerment in preserving cultural identity. Within organizational model of product development, ICT has been acknowledged to have an enabling effect towards organizational knowledge creation cycle. However artisan community views technology as promoting imitations, a catalyst for cultural erosion problem through technology intoxication.

A qualitative research design is chosen to conduct a case study exploration. Grounded theory in combination with hermeneutics textual analysis is adapted. As a strategy the research starts with sensitizing concepts from literature from both cultural erosion and knowledge creation aspects. The data collection approach includes indwelling in order to gain acceptance by the batik community and to gain understanding of the community knowledge creation practice. The data collection and analysis are done iteratively by juxtaposition between penetration and concept formalization to ensure constant comparison. The iterations involve multiple data source to concretize findings by triangulation. The methodology guides in performing two (2) pilot informal interviews before conducting six (6) semi-structured interviews. A content analysis of domain documentations, digital documentaries and batik artefact (photographs) is strategized for

triangulation besides fieldwork observation (3 scenarios). Three (3) focus group sessions were conducted to review and agree upon emerging category of concepts. Atlas-Ti qualitative tool, conditional relationship guide and reflective coding matrix are used in data analysis. The findings explains that cultural erosion due to discontinuity of traditional aesthetic attributes in contemporary batik design is a dissenting phenomenon to the Malaysian batik community due to socioeconomic and socio-cultural factors. However knowledge creation episodes taking place during batik making process can be used as avenues to promote batik aesthetics knowledge. As a consequence of investigating the community knowledge creation practice a batik knowledge model emerged besides the Community-based Information System Model as the main research contribution. Besides the model, a multi-dimensional research problem approach and harmonized approach for technology conceptualization are the highlights of the research approach.

Conclusively this research has contributed knowledge from a theoretical, methodological and practice perspectives. In view of the contributions, the potential of findings transferability is to open up avenues of future work towards development and implementation of the community-based information system model in the craft industry.

**Keywords:** cultural erosion, technology conceptualization, batik aesthetics, knowledge creation, Community-based Information System Model.

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