

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Introducing Indigenous Culture into Online-based Courses

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ABSTRACT

Batik, the fabled cloth, is native to the Southeast Asian society. It is known both as an art and craft, which is employing wax-resist, dye-painting techniques that are applied to the fabric. This paper proposes a viability study for an online course offering batik learning. The discussion summarises contemporary online course platforms, as well as course providers. Despite the fact that other components may be involved in the delivery, the approaches predominantly rely on the use of web-based communication to convey the course materials. A case study research method was employed to discern the phenomenon in a granular view. The study explores the viability of offering the existing, on-campus batik course from an international unit of a respectable university in Indonesia, as an online course. The paper focuses on four aspects, including the instructional delivery, market feasibility, consideration of the legal aspect and operational feasibility of the course. Providing it as an online course, however, might not be as simple as converting the course material into digital versions. The paper concludes with the potential advantages of an online course for the university.

Keywords: Cross-cultural learning, distance learning, ICT in education, online course, viability analysis

ARTICLE INFO

Article history:
Received: 01 December 2016
Accepted: 23 August 2017

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As the collectively regarded arts and other manifestations of human intellectual achievement (Oxford Dictionaries, 2017), indigenous culture is native to a particular group of people or society. Each indigenous culture is distinct and unique to the extent that it marks the identity of the society and

accentuates the community's dignity. Batik, the fabled cloth of Southeast Asian origin, has endured a generation-long history. It is known both as an art and craft, which is employing wax-resist and dye-painting techniques that are applied to the fabric. This technique has been adopted in various societies worldwide (Oparinde, 2012; Shaari, 2015), whereas each local culture's peculiarities influence the design and development of each area's products.

The practice of batik printing has been spread and taught worldwide (Firsta, 2015; HedaBatik, 2015; Hotcourses, 2017; Nicholev, 2013). Reports on traditional culture artifacts in online learning material, however, are rarely found in the international publication outlets. Most of the literatures about batik, for instance, focus on the technical perspective of the painting technique (Situngkir, 2008), the commercial considerations (Anwar, Supadi, Lahab, & Afuan, 2013), or batik as a representation of civilisation (Elliot, 2013). Among the few pieces of literature available, the idea to provide electronic learning material on traditional culture is introduced (Omar, 2014). This work, however, does not adequately address the feasibility analysis of the educational presentation of traditional culture in the internet marketplace and the competitive advantages potentially acquired by the course provider.

Meanwhile, the development of internet connections has transformed education into a completely novel landscape. Internet access has established a ubiquitous marketplace for education with a novel perspective on the learning experience (Schulte, 2011). Generic online courses diminish the need to attend classes in person as a result of its capability to enable worldwide access to course material. Specifically crafted online courses, in this manner, establish a particular segment of online-based students who are beyond space and time boundaries (Simonson, Schlosser, & Orellana, 2011).

Amid the development of massiveopen-online-course (MOOC) platforms (Annabi & Muller, 2015), the competition among online education providers have been becoming fiercer. The open-access online course platform offers 'virtually every course' for the public free of charge (Fricton et al., 2015). Most of them claim to be supported by top universities (Coursera, 2016; edX, 2016) or delivered by the reputable universities themselves (Parr, 2015). The growth in distance learning providers could have been facilitated by the advancement of free distance learning platforms (Coursera, 2016; Global, 2016; mooc.org, 2016; Moodle, 2016). The number has been increasing significantly for the last two decades and counting. On the one hand, the development of the speed of connectivity and widespread internet connections may have helped to accelerate the accessibility of online courses worldwide. On the other hand, while open education provides a quality learning experience, the threat to conventional higher education institutions is imminent. As it is primarily delivered through the internet, an online course differs from conventional education (Carr-Chellman & Duchastel,

2000). In addition to being a supplement for classroom courses, the online course could be used as a standalone curriculum (Limited, 2016) that has the potential to be more efficient, less costly, with reusable material, and more comfortable for the learners.

Providing online courses, however, might not be as simple as converting course materials into digital versions (Stevens, 2013). Let alone marketing a new course in the cloud marketplace. This paper will assess the viability of introducing a particular cultural artifact as an online course. Of specific interest is the possibility of a university delivering an online course on Javanese batik and the potential competitive advantage that could be acquired by the organisation. In order to obtain a comprehensive understanding of the subject, the case of an existing course offered by Universitas Sebelas Maret, a state university at the epicentre of the Javanese batik industry in Central Java, Indonesia, was explored. The study focuses on four aspects of assessment, including the instruction delivery, market feasibility, consideration of the legal aspect, and operational feasibility. A granular view of the case is expected to shine a light on the viability of the development of e-learning course materials.

BATIK, THE LITERATURE

Batik is a cultural artifact indigenous to the Southeast Asian region and a representation of society's wisdom that is rarely represented in international publication outlets. Scholarly publications on batik seem to overly concentrate on batik from technical perspectives (Legino & Forrest, 2016). The advancement in classifying downloaded images based on categories of batik (Minarno, Munarko, Kurniawardhani, Bimantoro, & Suciati, 2014), for example, is hardly related to the preservation of batik as a cultural artifact. Rather, it emphasises the neural network algorithm for image pattern recognition.

Seemingly fundamental information about the philosophical knowledge and traditional patterns of Javanese batik pertinent to Central Java, interestingly, was derived from an old manuscript dating back to the colonial era of early 1900 (Haake, 1989). Batik was appreciated as an ancient method of fabric decoration, practiced and inherited across generations all over Asia. The name was derived from the processes associated with applying vegetable dyes to plain cloth using an inverted drawing technique (Situngkir, 2008). Wherein, melted wax is applied to cloth to create the pattern that will be white.

Despite the dispute between Indonesia and its neighbouring country about the origin of the cultural artifact, the existence of batik has been recognised as one of the world's intangible cultural heritage items (Chong, 2012; Heritage, 2009). The safeguarding of such cultural heritage, therefore, requires the involvement of the global community. Indeed, batik, both as an industrial commodity and cultural merchandise, has been attracting the general public. The Indonesian export of batik-painted fabric, for example, was recorded

as skyrocketing within five years after the investiture of batik as the Masterpiece of Oral and Intangible Heritage of Humanity in 2009 (Center, 2014).

METHODS

A case study research method (Yin, 2003, 2009, 2012) was carried out in an on-campus course offered by a university in Surakarta, Indonesia. A document review (Stake, 2005) was conducted on the course materials listed on the website and other related information published on the official website of the university. A descriptive analysis (Miles, Huberman, & Saldana, 2014) of the course curriculum, the duration of the course, targeted participants and the course fee was carried out to discern how the course was designed and delivered. The investigation also examined the number of students who participated in the past courses, their

countries of origin, and their motivation for attending the course.

RESULTS AND ANALYSIS

The idea to enhance an on-campus cultural course was drawn from a contemporary course offered in the marketplace. An eleven-day batik short course offered by an Indonesian university (Office, 2016) introduces a Javanese batik exploration directly at the heart of the batik industry in Solo, Central Java, Indonesia. According to the provider's promotional flyer, the batik short course mainly targets foreigners. It offers both course materials delivered in class and excursion to batik industries. The course, therefore, requires students to stay in Surakarta, Central Java, for the duration of the course. The analysis of presenting the course as an online course will be discussed in the following sub-sections.

Table 1
Case study data

	1st Round Course	2 nd Round Course
Curriculum	Philosophy, batik-making practise, industry visit	Philosophy, batik-making practise, industry visit
Targeted participant	Overseas students	Overseas students
Course duration	10 days	6 days
Course Fee	\$300	\$300
Participating Students	9	6
Participating student's nationalities	Yemen, Sierra Leone, Rwanda, Nigeria, China, Madagascar, Mozambique, Suriname, Tanzania	Malaysia, Madagascar, Australia, UK, Sierra Leone, Rwanda

Instruction Delivery

According to the data presented in Table 1, the batik course offers a combination

of basic cognitive knowledge of batik and the practical aspects of batik making. The course materials include the philosophy of batik, types of batik, various batik motifs, batik production and colouring techniques, and a visit to a batik industry. Further exploration of the course material reveals that each topic of the batik course has the potential to be presented online in various delivery formats (Ghirardini, 2011).

Table 2
The characteristics of the topics in the batik course material

Topics	Offline	E-Learning Delivery Format		
		Simple learning	Interactive	Webcasting
Philosophy	√		V	√
Variety of batik	$\sqrt{}$	\checkmark	$\sqrt{}$	$\sqrt{}$
Introduction to batik making	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	\checkmark
The batik design	\checkmark	\checkmark	$\sqrt{}$	$\sqrt{}$
Batik making	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	\checkmark
The use of batik	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	\checkmark
Industry excursion	$\sqrt{}$	X	$\sqrt{}$	$\sqrt{}$

The detailed topics of the batik course and their associated delivery formats, presented in Table 2, identify that each topic of the course could be represented as online course materials in the form of a simple learning format, interactive material or webcasting. Regardless, the topic of an industry excursion may not be represented as a simple learning format such as presentation slides or documents, but live video streaming is possible to provide learners with the learning experience of working in batik workshops. Indeed, delivering the aforementioned topic of the batik course would fit into the cognitive domain of Bloom's taxonomy (Krathwohl, 2002).

Resource requirements and infrastructure availability at both ends would be the main consideration in providing e-learning course materials (Ghirardini, 2011). Instruction designers would face a

trade-off in decision making as to whether provide the batik course materials as a fully online course, or in a blended learning format. The fully online materials would reduce the need for human resources from the automatic responses of the learning management systems. The internet connection infrastructure requirement, however, will result in high usage spikes as a result of the interactivity of the contents. A blended learning format, in contrast, would spend less internet bandwidth, but requires dedicated instructors to interact with the course participants.

Market Feasibility

The analysis of the two rounds of batik courses in Table 1 indicates that the course has attracted international students. Due to the \$300 course fee and the requirement to attend the course in person, it is understandable that course participants would spend more

for travel costs and accommodation during their stay in Solo, Central Java. The course participants represent a wide range of countries throughout the world. Despite the fact that the students may have been staying in Indonesia prior to the course, their motivations to join the class and having the personal experience of a batik-making class represent the general public's interest in such a course.

Since a batik course seems to gain a specific market segment worldwide, the providers of a batik course may not solely be Indonesian education providers. In addition to community-based batik workshops in Indonesia (Firsta, 2015), a number of overseas course providers have listed batik-making courses as on offer (Batik, 2017; HedaBatik, 2015; Hotcourses, 2017). Even though the number of participants joining those courses could not be obtained, arguably, batik courses have attracted people to learn under offline circumstances. An online batik course, in this regard, would potentially gain audiences and attract more learners.

Consideration of the Legal Aspect

While online learning is boundary-less education by nature, the course-provider university is bound to the regulatory bodies of the respective country. With regard to the Indonesian university, it has an obligation to conform to the regulations of the Ministry of Education of the Republic of Indonesia. According to the regulations of the Ministry of Education (Kebudayaan, 2012, 2013), distance learning provided

by higher education for the international market may only be offered by an 'A' accredited department. According to the National Higher Degree Accreditation Body of the Republic of Indonesia (BAN-PT), the Sebelas Maret University is an 'A' accredited institution. The university has achieved this 'A' accreditation for a total of 29 out of 62 departments ([BAN-PT], 2014). This achievement could become a point of strength of the university. Moreover, the Ministry of Education of the Republic of Indonesia encourages distance learning that advocates the provision of courses endorsing local wisdom (Kebudayaan, 2013). In this regard, a batik course would fit the characteristics of local wisdom preserved in the Javanese society.

Operational Feasibility

Drawn from the course provider's information, as depicted in Table 1, most of the course participants were foreign students that had been in Indonesia throughout the duration of the course or prior to the commencement of the course. Given that such course is potentially attractive to foreign students rather than the local ones, the online course should address the market residing outside Indonesia. Therefore, it is mandatory that the delivery of the course is bilingual, with English as the main language.

The online course requires a set of dedicated resources, be they human or infrastructure. The main difference between an online and offline course is the delivery of the course materials (Bryant, Kahle,

& Schafer, 2005; Simonson et al., 2011). Whereby, the delivery mechanisms for the two-course types are distinguished by the requirement for resources, as well as the

business model. The comparison between the requirements for campus-based and online courses is suggested in Table 3.

Table 3

The comparison of resource requirements

Resources	Campus-based	Online	Note
Course convener	V	√	
Tutor	$\sqrt{}$	$\sqrt{}$	
Quality assurance		$\sqrt{}$	Ensuring the quality of the course
Graphic designer		$\sqrt{}$	Designing the graphics required for content delivery
Server and network access		$\sqrt{}$	The server to manage both the platform and the active course content
Room & supporting infrastructure	$\sqrt{}$		
Course material	$\sqrt{}$	$\sqrt{}$	
Course handout	$\sqrt{}$		

With regard to resource requirements, it can be comprehended that offering courses online is a project that requires resources from many specialties (Stevens, 2013). It is not merely an IT project; rather, it involves many resources ranging from a course convener to web programmers. The resources work hand-in-hand to prepare and deliver the course regardless of their skills and departments. In this regard, Sebelas Maret University comprises various departments that are relevant to such resource requirements. The delivery of the course could become a project supported by the departments of the university.

DISCUSSION

Batik has been acknowledged as part of the cultural heritage of Indonesia (UNESCO,

2009) and is associated as such by the public in general. In this regard, while it is also suggested as a painting technique (Elliot, 2013; Situngkir, 2008) that could be practiced elsewhere, batik, as a manifestation of an intellectual achievement of the society, remains the Javanese of Indonesia's daily life. Despite modern types of machinery having been used in recent textile production, the traditional processes of batik making have endured across generations. On the other hand, batik, as a cultural artifact, possesses specific characteristics that are intriguing both for education and as a tourism experience. The art and processes of batik making could be exhibited as an attraction for tourists (Anwar et al., 2013) or as something to be observed by passionate students. Batik

maintains particular philosophies, as well as characteristics that could be delivered in a class or as written course materials.

The development of e-learning platforms has enabled multimedia (video, audio, and still pictures) to be embedded into web contents (van Rooij & Zirkle, 2016). The learning materials, therefore, could be delivered using such media. Most of the learning materials could be delivered either as texts, still pictures or videos, or via video conference. The e-learning platforms would facilitate students to obtain the experience of an industry excursion while remaining in their room on the other side of the world. The graphical interface of the platforms, for instance, is becoming less complicated yet powerful (Stevens, 2013), and distinguishes online courses from traditional courses. Such capabilities enable providers to focus more on the design of the course, rather than on the development of the web interface. This also improves the interaction of students with the course convener.

While it is considered feasible to bring the course on batik online, the provision of such a course may be beneficial both for the university and the community practicing the cultural industry. The potential advantages of the provision of an online batik course are elaborated as follows.

The Advantages of the University Emphasising brand identity

Developing an online course on batik philosophy and batik making addresses the need to engage with a particular market that may not be being catered for by competitors. It is specifically developed based upon a local culture that has been acknowledged worldwide. Higher education tends to follow a homogenous marketing strategy; therefore, the university needs to develop targeted strategies focusing on relationship building and bonding (Dennis, Papagiannidis, Alamanos, & Bourlakis, 2016).

Building brand identity has to be aligned with the organisational business processes and services delivered (Ghodeswar, 2008). It is argued that a well-positioned brand should have a competitively attractive position supported by strong associations to a particular desirable attribute. Indeed, the aim to associate the institution with being 'a world-class university that has built upon the local cultural identity' requires underlying support from within the organisation's products/services.

Establishing a network of international students

The target market of the batik course is foreign students in particular. Despite the fact that the export of knowledge and education services may not be directly generating income, offering courses for international students has potential for reaping advantages from overseas institutions (Johnston, Baker, & Creedy, 1997). Since the batik course aims at a particular market segment, it is expected that the students will help to enhance the value of the course through international associations leading to the leveraging of the marketable qualification and the demand for the course.

The literature advocates higher educational institutions engaging in various activities in order to increase their internationalisation (Chen, 2008); this ranges from academic programmes/curricula, scholarly research and international collaboration to the export of knowledge. Developing a course that is widely accepted could become an entry point into the academic programme of internationalising activities. The design of the online batik course could be embedded with the information of Janavese traditional art to tempt international students to experience the culture and other tourist attractions in person by attending the campus-based courses.

Increasing incoming traffic

Since web-based ranking better reflects the web presences of scholarly activities, introducing a web-based cultural course would likely direct traffic to the institution's website and increase the visibility of the university. While initially intended to promote web publication, the Webometrics ranking of the world's universities is now a major reference for the global performance and visibility of the universities (Lab., 2016). The website does not only cover the e-journals and repositories but also informal scholarly communications.

Webometrics analyse universities or research centres upon four unique indicators (Aguillo, Ortega, Fernández, & Utrilla, 2010), namely, the number of web pages (size), number of external links from main search engines (visibility), number

of documents (rich file) and total number of scholarly entries (scholar). The latest update from the Cybermetrics Lab (2016b) mentions that it enhances the policies by counting the number of mentions on the social networks of the so-called Web 2.0. Indeed, the engagement of overseas students on the batik course and subsequent mentions in their social media would be beneficial to attract incoming traffic to the university.

The Advantages for the Community

While the benefits reaped by the university may not be materially quantifiable, the course would be economically advantageous to the community involved in the activities. Indeed, to obtain the intended objectives, the course can be designed as two sections: online and offline. The online course section conveys the conceptual contents of batik makings, such as the philosophy of batik, the varying patterns of batik and the introduction to the processes of batik making. The offline section is essential to deliver the experiences of batik making and life in the traditional batik-making community. Wherein, the section of the course requires the students to visit Solo in Central Java, Indonesia and experience the course in person. Such experience in the vicinity of batik-making communities would potentially promote the tourism industry, enhance the sales of batik handicrafts and absorb workforces.

CONCLUSION

A culturally based online course could potentially benefit the university, the traditional batik community, and even worldwide learners. The provision of an online course on traditional culture would strengthen the university's identity, establish a network of international students, increase incoming traffic and potentially generate additional income. Furthermore, the potential advantages for the community are the promotion of the tourism industry by attracting visitors, making way for increasing sales of arts and memorabilia, and absorbing workforces.

Despite the fact that this paper argues for the prospect of introducing an indigenous cultural course to the electronic learning community, this study is merely on the viability of the course. Further analysis on the financial aspects should be done comprehensively prior to elevating the cause to be a real project. Indeed, it would be beneficial to use the current on-campus course on batik as the role model during the development of the e-learning materials.

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