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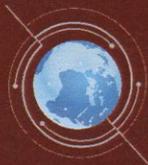
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Review on the Application of Financial Technology for the Wayang Orang Ngesti Pandowo Cultural Creative Industry

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Abstract— Ngesti Pandowo is a wayang orang (traditional Javanese theatre) company, which is trying to preserve this art form. There are many ways to do this. One of them is by utilizing technology to carry out promotion and ticket sales online. Financial technology is an innovation in the field of finance employing modern technology to make financial transactions more practical, easy and secure. **Keywords**—ngestipandowo; fintech; online; wayang orang

I. INTRODUCTION

Wayang orang, or wayang wong in Javanese, is a traditional Javanese theatre combining three art forms: dance, music and drama [1]. Wayang orang is actually a further development of the wayang shadow play (“orang” or “wong” means ‘human’ in Indonesian and Javanese, respectively). Thus, wayang orang is a wayang play where shadow puppets have been replaced by human actors. It should be noted here that in 2008 the Indonesian wayang shadow play has been inscribed in UNESCO’s Representative List of the Intangible Cultural Heritage of Humanity [2][3].

Wayang orang was first developed in the royal courts of Yogyakarta and Mangkunegaran [4][5]. Therefore, to this date there two styles of wayang orang, the Yogyakarta style and the Mangkunegaran or Surakarta style. Initially, wayang orang was an exclusive domain aristocratic art form. In the court of Yogyakarta wayang orang was even considered a state ritual only performed at very special occasions in which the relatives of the Sultan often took part [4].

In the late 19th century the Mangkunegaran court faced a serious financial crisis. To economize, all kinds of costly art performances, including wayang orang, were discontinued; dancers and musicians in the service of the court were laid off. Gan Kam, wealthy batik entrepreneur, saw an opportunity in this development. He asked for and was granted permission from the

Mangkunegaran court to employ the former court artists and establish a wayang orang company [6].

Gan Kam’s wayang orang differed somewhat from the court wayang orang. Instead of being performed at a pendopo, the spacious unwallled reception hall of a princely mansion, Gan Kam’s wayang company performed for a paying audience on a western style proscenium stage, complete with realistically painted backdrops. As a consequence the audience could only see from one side, unlike in a pendopo where the performance could be enjoyed from three sides, much like a theatre-in-the-round [6].

Many followed Gan Kam’s footsteps and set up their own commercial wayang orang companies. Virtually every city in Java had their own wayang orang companies. In addition, there were companies that travelled from one city to another. Among the dozens of those wayang orang companies was Wayang Orang Ngesti Pandowo, established in 1937 by Sastro Sudirdjo. Ngesti Pandowo originally was an itinerant wayang company, but in 1954 it settled permanently in Semarang [7].

Wayang orang became a popular entertainment, especially amongst urban residents. The nightly performances were fully packed and the artists became household names. This continued till the 1980s when wayang orang started to lost its popularity. One by one these companies had to be discontinued. Today, only three commercial wayang orang companies are still extant: Sriwedari in Solo, Barata in Jakarta and Ngesti Pandowo in Semarang [6].

The current management of Ngesti Pandowo has carried out many innovations to make wayang orang popular again [7]. Among others by inviting national artists and comedians as guest artists, organizing joint performances, and publishing a book on Ngesti Pandowo. Ngesti Pandowo must be able to increase its revenues for the benefit of both the organization as well as the individuals members to maintain its sustainability.

Financial technology according to The National Digital Research Center (NDRC) is an innovation in finance using modern technology (internet) [8]. Financial technology can bring in a more practical and secure financial transaction process. The processes include the payment, money borrowing, transfers, as well as the sale and purchase of shares. Fintech startup services have different focus, some focus on micro business, by providing pre-paid card sales, bill payments, and financial services. Others focus on payment gateway to facilitate various kinds of payments. Still others focus on financial products, such as credit cards, insurance, and investments. Financial Technology is the latest trend in financial management which in 2016-2017 has began to grow.

The question is whether financial technology can help Ngesti Pandowo in its marketing, ticketing and scheduling efforts which, in turn, will make Ngesti Pandowo more popular, thus contributing to the endeavour to save wayang orang.

II. LITERATURE REVIEW

Culture is an important part in the life of society. The various local cultures in Indonesia has given character to their respective communities, which in turn has given identity to every Indonesian [6]. In the process of modernization, in any situation culture must remain a national identity. The continuity and development of local culture needs to be maintained in order to be sustainable. Many elements of local cultures are still relevant today and, therefore, need to be further developed to become part of the nation's culture, enriching the national culture [9].

Wayang tells stories taken from the great Indian epics, the Ramayana and Mahabharata which are basically depicts that struggle between good and evil. In Java these stories have been performed for centuries, first in the form of shadow plays and later also as wayang orang dance drama. Wayang orang is one of the thousands of art forms found in Indonesia that need to be preserved and developed because they play an important role in giving character and identity to the Indonesian nation. Wayang is recognized to be a highly developed and sophisticated art form [10].

Culture is important in the concept of creative industry. The concept of creative industry has three aspects: cultural aspects, cultural, artistic, and entertainment values, from the aspect of copyright as an industry that contains various protected activities, distribution and retail sales activities, and aspects of industrial creativity that are cross-sectoral [11].

Nowadays, industrial creativity goes hand in hand with internet technology. Artistic creativity can be enhanced with the touch of technology. Information technology together with innovation are an important part of business transformation, in increasing productivity, and in collaboration and transactions between organizations. Adopting technology and innovation will make the organization strong and competitive. The use of technology has received the attention of various disciplines such as economics, sociology, information systems, management, engineering, and marketing [12].

Information technology helps humans create, transform, store, communicate and / or disseminate information. Culture,

on the other hand, is a symbol agreed and used by humans in the process of self-awareness and self-transformation, understanding and natural transformation. Integrating culture and technology is a rational crystallization of social functions that shape a new culture. This integration can enhance cultural significance of science [13]. Therefore, integrating technology into culture is a challenge that is constantly being explored and developed.

Today, online technology is already widely used by companies to make financial transactions easier and more convenient. With the introduction of online transactions one no longer have to come in person or go to the bank to make money transfers. Currently there are many services intended to make such transactions as expedient as possible.

Many companies have adopted online technology in their payment process, each with their own key features. In essence, however, they are all meant to facilitate transactions, so that payment processes becomes faster and reduce the incidence of late payments. In Indonesia, companies that have developed online payment services have united to form FinTech Indonesia (www.fintech.id). Fintech is an association that gathers companies and institutions in the financial services sector who use technological advances in running their businesses [14].

The emergence of the modern information services industry, has made online payment play an increasingly important role in business. The security, standardization and reliability of online payment has generated enthusiasm for online business, which will ultimately influence the prospects of the development of the e-business industry [15].

Online payment, however, can pose an obstacle to E-commerce development, especially regarding the factor of trust. The problem of distrust between consumers and service providers can be solved by building reliable third-party payment platforms. The existence of a reliable third party which can protect the rights and interests of both the consumers and service providers is an absolute necessity [16]. Growth of online transactions is increasing with the support of government in the form of Government Regulations of the Republic of Indonesia Number 11 Year 2008 on Information and Electronic Transactions. This regulation governs electronic transactions and electronic documentation, as well as procedures concerning transactions and electronic documentation violations [17].

In this era of digital economics, one must continue to develop innovations lending and borrowing related activities, which, among others, is marked by the development of information technology based borrowing and lending services. Information technology is will be able to meet the need for cash fund more quick, easy, and efficient, as well as improve the competitiveness of business units concerned. In addition, this service is expected to be one of the solutions to assist micro, small and medium enterprises (MSMEs) in obtaining access to funding. The Government through the Financial Services Authority (Otoritas Jasa Keuangan - OJK) has issued the Regulation on Information Technology Borrowing Service No. 77/POJK.01/2016 [18].

There are many effective ways to attract tourists, one of them is by providing information about online payment possibilities,

attracting more users to buy online [19]. Promoting online electronic payment systems is urgently needed [20], in order to avoid a knowledge gap between technology and society, so that people are accustomed with online transactions and utilize them in everyday life.

To integrate services from various websites (domains) requires an Application Programming Interface (API). API is a set of commands, functions, components, and protocols provided by the operating system or certain programming languages that can be used by programmers when building a software. APIs are utilized in online / digital businesses because the API is able to connect business processes, services, content, and data to other partners, external teams, and independent developers in an easy and secure way. Currently APIs are becoming the de facto standard where companies exchange data and build consistent cross-channel customer communications [21].

III. RESEARCH METHODOLOGY

In conducting the research on Fintech technology we went through several stages as follows:

1. Coordination with Ngesti Pandowo

Find out what was needed with regards to marketing the wayang orang Ngesti Pandowo, to make it more in demand.

2. Collect data on fintech.

Look for all available websites that provide online payment services that suit the needs of Ngesti Pandowo. Factors taken

into consideration are the limitations faced by Ngesti Pandowo with regards to finance, performers, as well as human resources in the field of technology.

3. Selecting fintech service that suits the marketing and online transactions needs of Ngesti Pandowo.

Many financial technology services have appeared and developed in Indonesia, therefore it is necessary to look for services which meet the requirements of Ngesti Pandowo. In this process we browsed to look for fintech services that are being available in Indonesia.

4. Analysis

After searching all fintech services, the next phase is to analyze whether the services are suitable for marketing purposes of Ngesti Pandowo and at the same time making ticket purchases more convenient for the costumers. We then applied to register to all the selected domains and answered to their responses. We then Integrated the relevant API into the website ngestipandawa.com.

5. Conclusions

Conclude which hosting service can be used for online marketing and payment system.

IV. RESULTS AND DISCUSSION

Coordination with Ngesti Pandowo, which was conducted through interviews, unearthed problems regarding efforts to make more people interested and attend its performances. These problems include limited human resources, limited

technological capabilities, lack of professionalism (because wayang orang is only regarded as a part time job), and limited support from the government.

In Indonesia there are 85 startup companies, 19 financial institutions and 7 associate partners. Fintech in Indonesia is divided into several parts, namely personal finance and investment, payment, point of sales (POS), lending, accounting, comparison, crowd funding, and crypto currency. The distribution percentage is shown in the following chart.

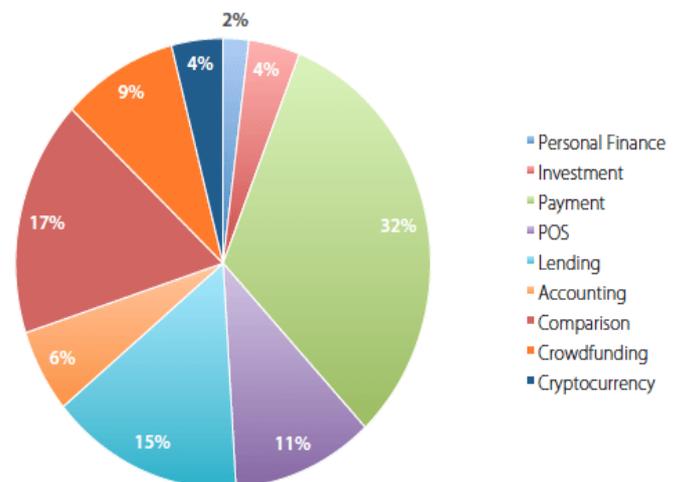


Figure 1: fintech distribution in Indonesia

Payments

Financial technology is divided into six parts, namely payment companies, mobile payment, gift card, bit coin and electronic money, and cross-border payments. These categories include:

- Payment companies, such as: Veritrans.com, DoKu.com, Kartuku.com, iPay88.com, Easypay.co.id, MCPayment.co.id, Padipay.com, Kinerjapay.com, Truemoney.co.id, Faspay.co.id, Fasapay.co.id, Xendit.co, Espay.id, Wallezz.com, Cashlez.com, Mimopay.com, Indopay.com, Firstpay.co.id, IPaymu.com, Nicepay.co.id, alipay.co.id, tiket.com, finpay.com, Kesles.com.
- Mobile payments companies such as Sakuku BCA (bca.co.id/en/sakuku), Dompotku Indosat Ooredoo(www.dompotku.com), Uangku (uangku.co.id), Dimo (dimoco.id/id/dimo), Mynt (mynt-emoney.com), Matchmove (matchmove.com).
- Gift Card: Gift card in the form of GCI Indonesia voucher at giftcard.co.id or tada.id
- BitCoin: the sale of bit coins at (bitcoin.co.id), luno (luno.com)
- Electronic Money: prepayment and other payment services: Sepulsa.com, Davestpay.com, GoPay.com atau gopay.id, Indomog.com, Kudo (kudo.co.id), Ayopop (ayopop.com)
- Interbank transfers: Kliring.co.id, Sudahtransfer.com, flip.id.
- Bill payment: fiserv.com, SatuLoket.com, bebasbayar.com, dompetpulsa.co.id.

- Cross-border payment: paypal.com

Considering the limitations still faced by Ngesti Pandowo it was decided to choose 4 local and 1 international payment services. Paypal.com was selected because it is currently one of the most trusted for international payments.

The selection of payment services was based on various criteria, namely the ease of registration, the simplicity of terms and conditions applied, not requiring detailed terms in the website ngestipandowo.com website, not requiring highly trained IT personnel (in view of the limited IT human resource at Ngesti Pandowo), ease of contact person, and ease of communication.

The five payment services selected are:

1. Finpay is a product of PT Finnet Indonesia which was launched in 2006. Finpay provides electronic payment system solutions (e-Payment) for all kinds of transaction needs. FinPay's business concept is to connect and transform all business entities such as banks, billers / merchants, regulator / Bank Indonesia, agents and end users / customer. The financial transaction is made more simple and practical. Finpay was set up to capture market opportunities in providing electronic payment system services by providing integrated payment system solutions for banking or all sectors related to electronic financial transactions [18]. Finpay divides the payment process into 15 ways.
2. Midtrans facilitates online business in Indonesia by providing a reliable and easy to use payment system. Midtrans cooperates with various banks in Indonesia such as BCA, BNI, Bank Mandiri, CIMB, and also with the digital technology industry. Midtrans provides 16 payment methods in one easy integrated step for various types of online businesses.
3. Tiket.com is part of PT. Global Ticket Network which offers world- wide online booking and paying services. Airline tickets, hotels, trains, events and attractions booking can be done at Tiket.com. Tiket.com has 14 payment methods in various banks in Indonesia.
4. Doku.com: Established in 2007, DOKU is the first electronic payment and risk management service provider in Indonesia. DOKU's services include industrial payments, management systems, and transaction analysis. DOKU obtained an e-money license from Bank Indonesia in 2012, and launched its electronic money for the first time in April 2013. Currently DOKU's electronic money has been used by more than 1 million Indonesian consumers, and in cooperation with more than 22,000 merchants. Doku.com simplifies its payment method into 4 types of payments.
5. PayPal: PayPal is a company that operates realtime internet based payment system worldwide. Paypal is a non-physical, on-line, world-wide, payment alternative. It is currently the largest online payment company, working with companies around the world. Paypal operates as a payment processor for online

vendors, auction sites and other commercial users, charging a fee. Paypal.com uses makes international payments through Visa, Mastercard, Discover, and Mastro.

The five services have the same domain name, i.e. dotcom (commercial). In terms of cost, there are differences depending on the transactions (see the table below). The range is between 2000 to 5000 in each transaction. This will be charged with the ticket price. For example if the ticket price is Rp. 50.000 then in bill will be 50.000 + cost (5000), so the total transfer would amount to 55.000.

TABLE I. PAY TRANSACTION

Type	Midtrans	Tiket.com	Finpaay.com (Telkom)	PayPal.com	Doku.com
1. Payment code or e-Wallet	-	-	4000	2,9% + US\$0,30	2%
2. Bank Transfer	4.900	2000	4500	-	4.500
3. Credit Card	2.500 + 3,2%	3%	3.000+ 3%		2.500 + 3%
4. Klik BCA	2.500 + BCA	5000	-	-	5000 or 3%

There are some domains who apply easy terms, but there are also those require detailed requirements, as seen in table II.

Business units that wish to be part of a fintech system must meet the requirements spelled out in the above table. There should always be communication between the contact persons because not all files can be uploaded online but must be sent in hard copy (paper) form, eg. MOUs between related business units.

The four national fintech services all have features for Web Integration, Mobile Application, Link Payment, Invoice Payment, which can be used optimally for online marketing and sales. Adding Fintech applications to Ngesti Pandowo's website was very easy (Figure 2), because fintech already has an API that greatly simplifies installation on any website whatever its form. Implementation of API can be done independently.



Figure 2: integrated fintech

TABLE II. REQUIRED DOCUMENTS

requirement	Midtrans	Tiket.com	Finpay (Telkom)	PayPal.com	Doku.com
1. Copy Resident Identity Card	√	√	√		√
2. Copy Ministerial Decree	√				
3. Copy of Taxpayer Registration Number	√	√	√		√
4. Copy of Company Registration Certificate	√				
5. Copy of Trade Business License	√				√
6. Copy of Deed of Establishment, Articles of Incorporation	√				
7. Copy of Certificate of business domicile	√				
8. Copy Last 3 Months Bank Statement	√				
9. Copy Proof of Office	√				
10. Rent/Ownership	√				
11. Copy of Company Seal/Stamp	√				
12. Website yang informative	√	√	√	√	√

V. CONCLUSIONS

It can be concluded that services financial technology (fintech), which has features for Web Integration, Mobile Application, Link Payment, and Invoice Payment is very helpful for business units that have very limited resources and only have limited access to technology, making it easier for them to conduct their business.

Fintech can be applied to Wayang Orang Ngesti Pandowo in its website, ngestipandawa.com, using API technology. Online ticketing makes ticket booking much more easy and convenient.

To maintain public trust towards online activities, the government must continue to work to ensure that this trust is sustained by upholding regulations and maintaining control on all online financial businesses

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