

E-tourism: A communication strategy of Yogyakarta's tourism potential marketing in industrial revolution 4.0 era

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Abstract

Digital technology development during the industrial revolution 4.0 era can be a way to promote tourism. Nowadays, the concept of *e-tourism* (electronic tourism) has become popular in Indonesia. E-tourism in itself is an IT-based system applied in tourism sector that provides various information digitally. This research aims to describe a communication strategy in marketing Yogyakarta's tourism potential through e-tourism. This research uses descriptive-qualitative approach with library research method. The Special Region of Yogyakarta (DIY) has a vast variety of tourist attraction, ranging from historical places to shopping districts. Those tourism potential have drawn many tourists, locals and foreigners alike. As an effort to raise tourism visit, the DIY Tourism Department has implemented website and mobile based applications. Such method to promote tourism digitally is a right choice since e-tourism provides easiness for tourists in accessing tourism information as well as making activity plan.

Keywords: *E-Tourism, Digital Marketing, Tourism, Yogyakarta*

INTRODUCTION

The Special Region of Yogyakarta (DIY) is blessed with a myriad of natural beauty and cultural heritages that attract tourists. Yogyakarta has become a tourist destination not only nationally, but also internationally.

Tourism objects with historic, cultural and natural themes filled this city. It also appears that the titles of “city of struggle” and “cultural center” have their own charm that attract tourists in droves. In addition, the less-explored natural objects add the impressive attraction Yogyakarta has already had. Many facilities like hotels, restaurants, public transport net, and amusement parks also support these potentials. Based on Regional Regulation No. 1, 2012 on Tourism Development Main Plan, every tourism potential will be developed to realize a special tourism of Yogyakarta which matches the city’s slogan, making it as the most famous tourists destination in Southeast Asia on 2025 (Dinas Pariwisata DIY, 2022).

The various tourist destinations DIY has not only attract domestic tourists, but also those from foreign countries. That is the result intensive developments on the tourism sector, promoting it widely to the people. Annual visits also shows a relative increase for each year as shown on the following table.

Table 1: DIY Tourists Visit, 2016-2021

Year	Domestic Tourists	International Tourists	Total
2016	4.194.261	355.313	4.549.574
2017	4.831.347	397.951	5.229.298
2018	5.272.718	416.373	5.689.091
2019	6.116.354	433.027	6.549.381
2020	1.778.580	69.968	1.848.548
2021	4.279.985	14.740	4.294.725

Source: DIY Tourism Statistic 2020 and 2021

Based on the table 1, we can infer that the visit every year increases. Tourists who visited Yogyakarta on 2017 raised as many as 679.724 or around 14,9% than 2016. An increase also happened on 2018, with 459.793 or approximately 8,79% from the total of previous year. From 2018 to 2019, the percentage is around 15,1%. Contrary to previous years, on 2020, a significant drop of visit happened. The cause is the COVID-19 pandemic that spread in Indonesia since early 2020, landing a heavy blow to Indonesian tourism sector. On the following year, the condition gradually recovered. DIY as a tourists destination also began to receive visits after the almost vacant year. Therefore, the government committed countless efforts to attract more tourists.

To raise the tourists visit, a good marketing strategy is needed. In tourism, communication is a key to the lifeline of a tourism destination. Marketing communication functions to provide information the public about the existence of a tourism object. The marketing these days also shifted to digital medias. In this case, WTO said that the key of success lays in the swift identification of consumer’s need, reaching them potentially with comprehensive, personalized and actual information at hand (Kumar, Internet Marketing in Tourism 2016). Internet has revolutionized in promoting tourism, affording easiness to business owners to advertise their products and services. Although the technology-awareness program in Indonesia is still on the way, internet users in this country that reach 55 million people with 22,1% penetration rate would be a great boon to offer a chance for tourism industry e-commerce (Jonathan dan Tarigan 2016). In accordance to that reality, Probosari (2019: 37) mentioned that digital economy era this age is also known as *marketing 4.0*. Marketing 4.0 is a new approach in marketing world that combines online interaction with real world one between the company and the client. This kind of marketing can reach more consumers effectively and efficiently. This marketing approach in tourism has gained popularity in recent years, proven by e-commerce sites that become platforms to sell travel ticket, hotel accommodation booking and so on.

The e-commerce sites that become the tourism marketing platform is called *e-tourism*. As stated previously, e-tourism provides an eased of access to the users in planning their vacation, starting from the tickets down to the tour packages. This also opens an opportunity for the tour service providers to promote their product easily and cheaply since they don’t need to print out product advertisement (Hasouneh dan Alzeat 2020). Seeing the

tremendous tourism potential Indonesia possesses, e-tourism has become a good choice to manage the system. Manuputty and Tanaamah (2006: 64) in this regard emphasized that optimization of tourism potentials is not merely committed by improving and developing the location or object, but also employing internet technology to advertise and provide direct ticketing for the tourists.

There have been many researches about tourism industry in Indonesia. The first one among them is “A Study on Digital Marketing and its Impact” by P. Sathya on 2015. His research gives some insights for business owners in refreshing their marketing mode based on comparative study on the strengths and weaknesses of digital and online marketings. The next one, more concrete than Sathya’s, is “Sistem Informasi E-Tourism Sebagai Sarana Promosi Pariwisata Kota Padang” by Faradika and her colleagues on 2020. This study is a report on a development of an Android-based e-tourism application as a means to promote tourism in Padang city. This e-tourism application gives an easiness to Padang City Tourism Department in serving tourism information, tourism data input, tourism promotion and reports on frequently visited objects. A similar study also came from Mar’atus Sholehah with her research on 2019 titled, “Analisis Dampak Aplikasi Electronic Tourism Sebagai Media Promosi Pariwisata Terhadap Kunjungan Wisatawan Kabupaten Tanggamus.” The result shows that e-tourism application usage as promotion media has successfully raised tourists visit until 40%, positively pushing the tourism development of Tanggamus Region.

E-tourism can be a solution for promoting Yogyakarta tourism. In this era of industrial revolution 4.0 where everything uses the intricate technology, e-tourism is an excellent option that supports the tourism promotion. It is easy and fast since it is digitized. In that regards, Yogyakarta still needs a right strategy to promote the vast tourism potentials through digital medias. This research describes the implementation of e-tourism by DIY and aims to analyze the best marketing strategy through the use e-tourism.

LITERATURE REVIEW

a. Industrial Revolution 4.0

Industrial revolution 4.0 is a term that explains the boom in industrial technology, marked by automation engineering. Purba (2021: 92) stated that industrial revolution 4.0 is a form of industry that combines automatized and cyber technologies, thus also called cyber physical system. The main characteristic of this revolution is the integration of IT into industrial sector that finally replaces human laborers completely or fully mechanized. Thus, technology plays a key role in human life in this era that is signed by massive digitization, increasing an interaction between humans and machines. This raise in digital technology usage opens an easy and fast access to information. Industrial revolution 4.0 has five pillars: *Internet of Things*, *Big Data*, *Artificial Intelligence*, *Cloud Computing*, dan *Additive Manufacturing*.

b. E-Tourism

E-tourism is a digital platform that provides every information and various needs for tourism. Simply speaking, is a form of technology usage in tourism industry. Pan Bing (2015) mentions that e-tourism is an adoption of IT and communication by tourists and business owners that changes the process and value chain in the tourism industry. Furthermore, e-tourism includes three things: 1) the tools and system to operate the tourism, hotel business or an organization to raise efficiency and competition; 2) the consumer’s platform that the tourists use for searching information, planning their travel, purchasing stuff and sharing experience; 3) the distribution and trading means that offers distribution channel and transaction intermediary between the tourists and tour service providers. E-tourism is a part of e-commerce that includes all business functions in tourism industry (Andreena, et al., 2012: 6). Heliany (2019: 13) explained that there are three requirements that should be met in e-tourism. They are information and communication technology, tourism business and government’s support.

c. Digital Marketing

The availability of internet through electronic devices drastically has changed the way people behave and communicate, including business owner's strategy in marketing (Kumar dan Saroj 2022). The term digital marketing or digital technology usage in marketing has become very common. Wati and her colleagues (2020: 11) stated that digital marketing is a term that relates with the activity of selling products of services which have a target, measured and interactively uses digital technology to promote the brand, forming preferences and raising sales. Generally, this marketing has the same principles with its conventional counterpart. The difference lays in the device and the method, which heavily relies on internet. Elida and Raharjo (2019: 17) explained that in digital marketing, the buyer and the seller meet in a market space within internet. Thus, it should be underlined that the concept of digital marketing is not merely adding digital aspects into conventional one since it does truly digitize every promotion and marketing process. To create a unique and valuable competitive environment for the users, a digital strategy comes, employing various internet-based medias like Facebook, YouTube, Instagram and so on (Putri dan Sanica 2022).

METHODS

This research uses qualitative-descriptive through library study. Through this method, the researchers tried to understand, explain and describe a phenomenon in more detail based on the actual condition. Saleh (2017: 3) stated that the use of qualitative approach is meant to acquire a deeper understanding about the phenomenon or problem that becomes the topic of study. This kind of research demands a full involvement of the researchers as well as abundant and whole data. Library research is the method of this research for collecting data that are relevant with the topic of the research. The data sources are books, scientific journals, research reports, theses, dissertation, articles and other written sources both printed and digital forms. From the collected data, the researchers tried to understand the phenomenon and give a view about the use of e-tourism as a digital marketing strategy to promote Yogyakarta's tourism.

RESULTS AND DISCUSSION

DIY Tourism Promotion Media

The Special Region of Yogyakarta is one among many famous tourists destination in Indonesia. The great tourism potential this region has has attracted many tourists from inside and outside the country. The DIY tourism statistic shows that the total of tourists visit to this region has a relative growth from year to year. This increase signed that DIY tourism develops, drawing in more tourists. The richness in art and culture and special value of this region becomes a magnet for the tourists to come in and enjoy their travel. From natural aspect, all four of DIY's sub-regions are blessed with beautiful objects like mountains and beaches. Beside natural beauty, DIY also keeps rich historical and cultural assets like Sultan Palace of Yogyakarta, temples, historical sites and a ton of traditional customs and shows that are still exist today.

To raise the tourists visit and introduce DIY's tourism potentials, a promotion is needed. The yearly growth of tourists visit proves that this sector is a promising one should the government manage it well. Beside creating and improving tourism objects, Manuputty and Tanaamah (2006: 54) said that promoting the objects through brochures and other medias. This promotion in return will affect the tourists visit. If the promotion strategy is carried right and continuously, more people will know the object and come, raising the visit. The regional government of Yogyakarta has commitment regarding this matter, relentlessly developing DIY tourism that includes promotion. The promotions are usually carried out through advertisements and public relation activities (Prastiyanti dan Yulianto, 2019: 174).

The advertisement Tourism Department has published uses many kinds of medias. The promotion aims to provide a complete information about a tourist destination, thus attracting tourists as well as promoting tourism events. Printed and electronic medias are two choices for carrying out the promotion (Prastiyanti dan Yulianto,

2019: 179-180). The printed medias are usually in the form of tourism events brochures, tourism calendar, guide books, tourism map, billboards and banners. The Tourism Department also put their advertisements on TV, digital billboard and even films. More modern medias include websites and various social medias on the net. These advertisement are a right way to promote up to date information about the objects and related tourism agendas, keeping them to public's close attention.

Beside through advertisements, the Tourism Department also promote tourism through public relation activities. Aw (2018: 359) said that public relation activities are vital in supporting an organization to promote their product. This promotion is to introduce tourist destinations in the region to the tourists through special events. Prastiyanti and Yulianto (2019: 181) stated that the Tourism Department of DIY launches public relation program to promote the region's tourism through some national as well as international events. Some events that are held in the region are Jogja Air Show, Jogja Travel Mart, Tour de Jogja, Road to Jogja Fashion Week, Malioboro Night Festival, Jogja Digifest, Jogja International Heritage Walk, Jogja International Street Performance, *Pawai dan Pameran Pembangunan*, and *Pameran Pasar Malem Sekaten*. The department also partnered with General Consulate of Indonesian Republic and Visit Indonesia Tourism Officer. Meanwhile, to promote the events internationally, the department holds some exhibition in several countries like NATAS Travel Fair in Singapore, MATTA Fair in Malaysia, JATA Tourism Expo in Japan and Thai International Travel in China (Prastiyanti and Yulianto, 2019: 181-182).

E-Tourism as A Digital Marketing Strategy of DIY's Tourism

The leap in digital technology development which marked the industrial revolution 4.0 has born the concept of digital economy. In essence, digital economy is an economic activity that utilizes digital technology with internet as its support. This transformation has changed the people, industries rely heavily on this development in technology to run their business. From production to marketing, digital economy principles has taken the all the roles. Asnawi (2022: 403) explained that in this era, IT has directed nearly every economic process. Utilizing this sophisticated technology, digital economy is meant to accelerate all economic activities and widen their reach. In other words, digital economy will raise the productivity and efficiency in production process and provides easiness and convenience to the consumers. This industrial revolution will become a trend of economic development from today onward.

One among digital economy concept implementations in tourism business is the use of digital marketing. Heliany (2019: 30) explained that digital marketing in tourism is an effort to promote an area or a tourist destination through the use of digital media. This utilization of digital media allows an efficiency in marketing process which is advantageously lucrative for tourism business owners. In this era where nearly every person uses digital technology, tourism digital marketing can widely reach the public. Komalasari (2020: 168) in this case mentioned that IT integration as a tourism digital marketing strategy will bring a great gain to the tourism service providers as well as the tourists, gathering other stakeholders into the tourism platform. Thus, the utilization of digital technology in tourism promotion can be a strategy to develop tourism industry which in return raises the visits due to its service and its capability in reaching the tourists.

Digital marketing strategies in tourism industry that developed recently mostly are e-tourism. E-tourism as a technology-rich system contains many kinds of information about tourism, digitally served for public purpose. Through this digital platform, people can access an up-to-date information from a certain area or tourism object, inn and even from a travel agent anytime and anywhere. E-tourism has become a choice for promoting modern tourism since it is digital-based, affording an ease of access for both the tourism service providers and the tourists. This is in accordance with Heliany's (2019: 31) opinion which stated that e-tourism is an interactively online system that helps tourists to get some information and order the provided tour elements on the system like lodging and travel agent. In other words, e-tourism serves a complete tourism information and helps the tourists to plan their vacation.

The use of e-tourism generally is meant to push the growth of the tourism industry. E-tourism as a publication means is also deemed effective since it is cheap and has a wide reach, providing an up-to-date information. There are also information about some additional services and needs, allowing the tourists to make a more flexible choice in planning their travel agenda. These advantages packed in e-tourism fully supports the selling means of tourism. Basically, the utilization of e-tourism in the related industry has a greater aim than its original goal. Komalasari (2020: 163) mentions that beside as a digital marketing device for raising tourists visit, e-tourism that integrates tourism and IT in the end can provide service accessibility and information visibility as well as other products to earn the tourists' satisfaction.

As for today, DIY has developed a website-based e-tourism system. The tourism websites provides many kinds of information related to a tourism object and the available facilities on the spot, helping the tourists to plan their agenda. The information is also accurate and safely guaranteed. The DIY Tourism Department has an official tourism website, visitingjogja.jogjaprov.go.id. This website provides provides tourism information about tourist destinations, culinary, tourism events, accommodation, tourism map and even traveling tips around the region. Moreover, visitingjogja.jogjaprov.go.id also shows various data in the form of electronic documents about regional tourism such as tourism statistics, studies on local tourism, digital brochures and newly issued regulations and policies, all available for free download. This website actively updates the information. Beside the government-owned website, there are also some tourism information portal that are maintained privately. Those websites are shown in the following table.

Table 2: Portal Informasi Pariwisata DIY

No.	Government-owned Tourism Portals	Private Tourism Portals
1.	visitingjogja.jogjaprov.go.id	www.yogyes.com
2.	pariwisata.jogjakota.go.id	www.kotajogja.com
3.	pariwisata.bantulkab.go.id	www.gudeg.net
4.	dinpar.kulonprogokab.go.id	https://garasijogja.com
5.	wisata.gunungkidulkab.go.id	https://eksotisjogja.com
6.	pariwisata.slemankab.go.id	https://tripjogja.co.id

Sources: collected from various websites

E-tourism with mobile application base named "Visiting Jogja" is also under development by the DIY government. The development of this application is one of the forms of the building of "Smart City" for helping the tourists when they visit DIY. Similar to visitingjogja.jogjaprov.go.id, Visiting Jogja also covers the all the info regarding the tourism in DIY. To provide more convenience, this application also has several supporting features like User Profile, Tour, Tour Package, Events, Culinary, Accommodation, Tourism Village and integrated connections to social media websites. The user can also buy travel ticket through this application. The tours promoted through this application are all tourism that cover the city of Yogyakarta and its four sub-regions: Bantul, Sleman, Gunungkidul and Kulonprogo. Based on Jalauddin and Permatasari's research (2021: 137) on Visiting Jogja, the application has several advantages: 1) helping travel ticket reservation, 2) facilitate the tourism activities in DIY, 3) helping the tourists to access the preferred tourist destination in DIY with 4) more flexibility.



Figure 1: The display of “Visiting Jogja” Mobile Application
(Source: “Visiting Jogja” Application, 2022)

CONCLUSION

E-tourism can be used as an effective promotion and marketing strategy for Yogyakarta Special Region. The concept of e-tourism optimizes the usage of IT in tourism industry to support the promotion. The Special Region of Yogyakarta with its great tourism potential needs to apply the right marketing strategy to raise tourists visit. In this industrial revolution 4.0 era where internet plays a great role in almost every human’s activity, the concept of digital marketing comes as a new choice. The utilization of digital technology will help tourism business-owners in providing information promote their products. The same also goes for the tourists, who will be eased by the new digital system where they can access all information they need about tourism. In this regard, the DIY Tourism Department has developed an e-tourism system with a website and a mobile application as an information portal. The website and mobile application provides information about tourism spots, tourism events, accommodations, tourism maps and so on. The development of the website and mobile application is for helping the tourists who visit DIY.

REFERENCES

- Andreea, M., Donici, A. N., & Teofil, P. A. (2012). Electronic tourism (e-tourism)-A theoretical Approach. MPRA: Munich Personal RePEc Archive, No. 41745, 1-16.
- Asnawi, A. (2022). Kesiapan Indonesia membangun ekonomi digital di era revolusi industri 4.0. *Syntax Literate: Jurnal Ilmiah Indonesia*, 7 (1), 398-413.
- Aw, S. (2018). An evaluation of a public relations program in promoting synergistic cooperation between schools and industries. *Problems and Perspective in Management Journal*, 16 (4), 353-364. [http://dx.doi.org/10.21511/ppm.16\(4\).2018.29](http://dx.doi.org/10.21511/ppm.16(4).2018.29)

- Bing, P. (2015). *E-tourism*. Pennsylvania State University.
- Dinas Pariwisata DIY. (2021). *Statistik kepariwisataan DIY tahun 2020*. Dinas Pariwisata Daerah Istimewa Yogyakarta.
- Dinas Pariwisata DIY. (2022). *Statistik kepariwisataan DIY tahun 2021*. Dinas Pariwisata Daerah Istimewa Yogyakarta.
- Elida, T. & Raharjo, A. (2019). *Pemasaran digital*. IPB Press.
- Faradika, F., Zulfahmi, Z., & Astri, R. (2020). Sistem informasi e-tourism sebagai sarana promosi pariwisata Kota Padang. *Jurnal Edik Informatika Penelitian Bidang Komputer Sains dan Pendidikan Informatika*, 7(1), 85-96. <https://doi.org/10.22202/ei.2020.v7i1.4359>
- Hasouneh, A., & Alzeat, H. A. (2020). A framework for Tourism electronic marketing in Jordan. *Journal of Innovations in Digital Marketing*, 1(1), 40-49.
- Heliandy, I. (2019). Wonderful digital tourism Indonesia dan peran revolusi industri dalam menghadapi era ekonomi digital 5.0. *Destnesia Jurnal Hospitaliti dan Pariwisata*, 1 (1), 21-35. <https://doi.org/10.31334/jd.v1i1.551>
- Jonathan, C. J., & Tarigan, R. (2016). The effects of e-tourism to the development of tourism sector in Indonesia. *CommIT (Communication and Information Technology) Journal*, 10(2), 59-62. <https://doi.org/10.21512/commit.v10i2.1669>
- Jalaluddin, F. & Permatasari, A. N. (2021). Peran aplikasi “Visiting Jogja” dalam mengembalikan kepercayaan wisatawan untuk berwisata ke Yogyakarta. *JPT: Jurnal Pariwisata Terapan*, 5 (2), 128-144.
- Komalasari, R., Pramesti, P., & Harto, B. (2020). teknologi informasi e-tourism sebagai strategi digital marketing pariwisata. *Jurnal ALTASIA*, 2 (2), 163-170.
- Kumar, A., & Saroj, K. (2022). Role of social media in Marketing 4.0. *Establishing Sustainability Context: First Step for Businesses on Their Sustainability Journey*, 7(1), 213.
- Kumar, P. (2016). Internet marketing in tourism. *Indian Journal of Applied Research*, 4 (11). 286-289.
- Manuputty, A. D. & Tanaamah, A. R. (2006). Kepariwisataan berbasis E-Tourism di Indonesia. *Jurnal Teknologi Informasi-Aiti*, 3 (1), 52-65.
- Prastiyanti, D. P. & Yulianto. (2019). Media promosi pada Dinas Pariwisata Daerah Istimewa Yogyakarta dalam meningkatkan kunjungan wisatawan. *Journal of Indonesian Tourism, Hospitality and Recreation*, 2 (2), 174-184.
- Probosari, N., Hartati, A. S., & Kussujaniatun, S. (2019). Strategi pemasaran wisata berbasis e-tourism: Khususnya strategi promosi wisata di Dlingo, Bantul dengan berbasis e-tourism (IOS dan Android). LPPM UPN “Veteran” Yogyakarta.
- Purba, N., Yahya, M., & Nurbaiti. (2021). Revolusi industri 4.0: Peran teknologi dalam eksistensi penguasaan bisnis dan implementasinya. *JSPB: Jurnal Perilaku dan Strategi Bisnis*, 9 (2), 91-98.
- Putri, A. M. A., & Sanica, I. G. (2022). Digital marketing strategy to survive during Covid-19 pandemic. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 6(1), 27-33.
- Saleh, S. (2017). *Analisis data kualitatif*. Pustaka Ramadhan.
- Sathya P. (2015). A study on digital marketing and its impact. *International Journal of Science and Research (IJSR)* 78-96.
- Sholehah, M. (2019). Anaisis dampak aplikasi electronic tourism sebagai media promosi pariwisata terhadap kunjungan wisatawan Kabupaten Tanggamus. *Jurnal Signaling STMIK Pringsewu*, 8 (1), 7-14.
- Wahyudi, R., Utami, E., & Arief, M. R. (2016). Sistem pakar e-tourism pada Dinas Pariwisata D.I.Y menggunakan metode forward chaining. *Jurnal Ilmiah DASI*, 17 (2), 67-75.
- Wati, A. P., Martha, J. A., & Indrawati, A. (2020). *Digital marketing*. Edulitera.