

## **Competencies of Travel Department Students in e-Commerce- Based Business**

**Yenni Susanto<sup>1</sup>, Mukarramah Machmud<sup>2</sup>, Darmayasa<sup>3</sup>, Masri Ridwan<sup>4</sup>, Aris Baharuddin<sup>5</sup>**

<sup>1, 2, 3, 4</sup>, Politeknik Pariwisata Makassar, Indonesia

<sup>5</sup> Universitas Negeri Makassar, Indonesia

E-mail: [yennysusanto00@gmail.com](mailto:yennysusanto00@gmail.com)<sup>1</sup>, [Mukarramahmahmud@gmail.com](mailto:Mukarramahmahmud@gmail.com)<sup>2</sup>, [Darmayasa@gmail.com](mailto:Darmayasa@gmail.com)<sup>3</sup>, [Masriridwan@gmail.com](mailto:Masriridwan@gmail.com)<sup>4</sup>, [Aris.baharuddin@unm.ac.id](mailto:Aris.baharuddin@unm.ac.id)<sup>5</sup>



This is an open access article distributed under the Creative Commons Attribution License CC-BY-NC-4.0 ©2022 by author (<https://creativecommons.org/licenses/by-nc/4.0/>)

---

### **ABSTRACT**

Contributing to research on industrial revolution 4.0 era , this study investigates e-commerce practices carried out by tourist travel businesses in relation to the preparation of human resources in the tourism education sector. Key informant managers in two cities, Bali and Yogyakarta were interviewed to explore their adopted employee training and development models. The resulting data, triangulated by informal observation and document study, were analyzed using a theoretical framework that emphasizes seven indicators of interdependent employee development. The findings indicate that the global-oriented education management will be able to answer various needs in the job market through curriculum reconstruction with a digital human approach.

**Keywords:** E-commerce; Tourist travel businesses; Competencies.

---

### **INTRODUCTION**

The tourism sector is one of the supporters of Indonesia's economic growth (Hidayat & Asmara, 2017; Steelyana, 2012; Susilawati et al., 2020; Sutawa, 2012; Tayibnapis & Sundari, 2020). The government through the Ministry of Tourism and Creative Economy is promoting 'Wonderful Indonesia' as a destination for local and foreign tourists (Chollisni et al., 2022; Fahmi et al., 2017; Kong, 2015; S1teelyana, 2012). In 2015 according to the Travel and Tourism Competitiveness Report from the World Economic Forum that Indonesia has won the 50th position in the tourism sector. In 2015 the Indonesian tourism sector contributed 4% of the total economy and the government wants to increase it to 8% in 2019. Unfortunately there are still many Indonesian tourist destinations that have not been managed, well known by domestic and foreign tourists. This is because the infrastructure and tourism support facilities including Human Resources (HR) are felt to be not ready. February 2015 BPS data shows that 9% of the workforce is from the tourism sector. So it is necessary to have professional standard human resources equipped with international competence because the government in 2016 targets to reach 20 million foreign tourists and 270 million domestic tourists .

In the current era of globalization (Dustkabilovich & Oktyabrovna, 2021; Jessop, 2017; Liñán et al., 2020; Pradana et al., 2016), the tourism sector is moving into the largest and strongest industry in financing the global economy. The tourism sector will become the main driver of the world economy in the 21st century and become one of the globalized industries. Tourism is a non-oil and gas industry which is used as a leading sector in generating foreign exchange in several countries in the world such as: America, Australia, Thailand, Singapore, Malaysia and Indonesia. In its activities, the tourism industry involves several sectors such as: economic, social, economic, cultural, psychological and geographical sectors.

Rapid technological advances make the dissemination of information faster (Coppi & Fast, 2019; Houston et al., 2020; Rigaud et al., 2018; Zhu et al., 2020). Likewise with the development and promotion of tourism looks increasingly real. The use of websites as a means of promoting tourism is increasingly being used, we can see by the rise of tourism sites on the internet.

Rapid technological advances make the dissemination of information faster. Likewise with the development and promotion of tourism looks increasingly real. The use of websites as a means of promoting tourism is increasingly being used, as we can see by the rise of tourism sites on the Internet. Information System is a system that aims to produce information. A system with a system procedure approach can be defined as a collection of procedures that have a specific purpose. Information is defined as data that has been processed into a form that is useful to the recipient, in the form of value that can be used as consideration for decision making either now or in the future. The internet is a worldwide global computer network that can provide information needed by the public, and can be accessed from anywhere.

According to (Atwa et al., 2011; Guo et al., 2010) the development, distribution and evaluation of online tourism services in China shows that most of the tourism information and online services, by questionnaire survey, indicate the identification of types of web users and their evaluation for tourism websites that assess the level of user satisfaction. at present and discuss the main obstacles to the implementation of online tourism services in China from a technical, financial and organizational point of view respectively found that obtaining information is still the main goal of web users, but the difficulty of Internet access is slow and costs are high. Meanwhile, (Sari & Herawati, nd) suggested that exposure to internet media information affects the motivation of traveling fans to visit Yogyakarta, motivations influenced by exposure to internet media information are cultural motivation, social and interpersonal motivation, and fantasy and status motivation. While the relationship between internet media information exposure and the motivation of traveling fans to visit Yogyakarta is moderate, this is caused by the frequency of traveling fans accessing the www. Jogjatrip.com is classified as very low.

The development of an increasingly competitive era indicates the use of the internet touches all walks of life. Therefore, the utilization and use of internet technology is expected to provide great benefits to the competitive business world. Analysis of human resource needs in the field of travel business is important to do in order to be able to compete in competition, one of which is implementing technology and information (e-commerce) into the travel business.

Indonesia is a country with the largest growth in e-commerce value in the world. Of the 10 countries with the largest growth of 'e-commerce' with a growth of 78 percent, Indonesia is ranked 1st (Ministry of Communication and Informatics, 2019). Mexico is the country that ranks second fastest in e-commerce growth with a growth of 59% in 2018. Meanwhile, the

Philippines is in third place with e-commerce growth of 51%. BPS (Statistics e-commers, 2019) reports that the five largest business fields that carry out the sales model as sellers are: the processing industry as much as 97.26 percent, the provision of accommodation and the provision of food and drink as much as 95.50 percent, education as much as 93, 39 percent, agriculture, forestry and fisheries 92.97 percent and construction 88.64 percent.

The basic idea of analyzing human resource needs in the field of travel business and the benefits of e-commerce in improving service to customers and increasing the competitiveness of the travel business are the points of view of researchers who are used as objects in this study. Seeing this fact, the analysis of human resource needs in the tourism and travel business sector and the application of e-commerce technology are important factors in supporting the success of the tourism travel business. Therefore the purpose of this study is to determine the readiness of the education sector in implementing e-commerce based travel business. Besides that, to prepare tourism academy students with relevant majors as a strategy to improve the quality of human resources for e-commerce-based tourism travel businesses

## METHOD

In this study used qualitative methods with a comparative approach. The researcher describes the problem of events through respondents or other data sources related to Travel Business HR and E-Commerce in each representative E-commerce-based travel business in several different places, namely in Jakarta, Bali and Surabaya. Furthermore, data processing was developed at the Makassar Tourism Polytechnic.

The informant or sample collection technique in this study was by purposive sampling or selection based on certain criteria (criterion based selection). Whereas specifically for key informants, non-random sampling was carried out, namely a sampling technique in which samples were taken based on predetermined criteria. In addition, to confirm the validity and credibility of the data, data triangulation techniques are used to compare information about the same thing obtained from various parties so that there is a guarantee about the level of trust in the data (Sugiyono, 2012).

## RESULTS AND DISCUSSION

This section will explain the research findings from several aspects that are targeted for research. Based on the processed data, the following are some of the findings obtained.

### Description of Research Locations

The research was conducted for 4 (four months) starting from May-September 2022 in cities that are representative as tourist destinations in Indonesia. The provinces of Bali and DI Yogyakarta are the research locations. The following is the location identity and data collection profile:

**Table 1**  
**Tourism Business Profile**

<b>Name of Company/Tourism Business</b>	<b>Location</b>	<b>Information</b>
---	-----------------	--------------------

<b>Name of Company/Tourism Business</b>	<b>Location</b>	<b>Information</b>
Indonesia Pacific World	JL. By Pass I Gusti Ngurah Rai, No. 9-X, Pemoggan, Kec. Denpasar Sel., Denpasar City, Bali 80361	BP, AP, EO
PT Asian Trails Indonesia	Jl. By Pass Ngurah Rai No. 260, Sanur, Kec. Denpasar Sel., Denpasar City, Bali 8022	BP, AP, EO
Hotel Mercure Legian Bali	Jln Legian No. 328, Legian, Kelod, Badung Regency, Bali 80361	Hotels, Restaurants
Werkudara Group	Jl. Pandean Sari Block IV No.10A, Condongcatur, Depok, Sleman, Yogyakarta 55283, Indonesia	BP, AP, EO, handcraft, souvenirs, etc
The 101 Hotels	Jl. Margo Utomo No. 103, Gowongan, Kec. Jetis, City of Yogyakarta, Special Region of Yogyakarta 55232	Hotels, Restaurants

Source: Processed data, 2022

One approach to determining the sample is the existence of tourism businesses using electronic internet in conducting promotions. E-tourism is a way of modern promotion and up-to-date information about tourism sought by tourists, such as tourist attractions, hotels, travel agents, events as well as culinary and entertainment which can be accessed 24 hours anytime, anywhere and anyone. E-tourism has principles that are aligned with its utilization, namely in increasing tourism development. There are three elements that are prerequisites for e-tourism, namely ICT, Tourism and Business, as well as support from the government (Pyke et al., 2016; Rogerson, 2021; Sharafutdinov et al., 2020; Urbano et al., 2010).

### **Tourism Business**

**Table 2**  
**Distribution of Respondents by Gender , Position , Last Education and Business Name**

<b>Variable</b>	<b>Amount (n)</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Man	4	80
Woman	1	20
<b>Position</b>		
Manager Meeting & Incentive	1	20
HRD	1	20
GM	1	20
CEO	1	20
Administration Secretary	1	20
<b>Last education</b>		
S1	3	60
S2	2	40

<b>Business Name</b>		
Werkudara Group	1	20
PT Asian Trails Indonesia	1	20
Hotel Mercure Legian Bali	1	20
Indonesia Pacific World	1	20
Hotel Mercure Legian Bali	1	20
<b>Business Location</b>		
Bali	3	60
Yogyakarta	2	40

Source: Primary data, 2022

The table above shows that the number of male respondents was 4 people (80%) and 1 woman (20%). Respondents' positions included meeting & incentive manager, HRD, GM, CEO and administration secretary. The last education S1 as many as 3 people (60%) and 2 people (40%). Respondent's business name Werkudara group, PT Asian Trails Indonesia, Hotel Mercure Legian Bali, Indonesian Pacific World, and Hotel Mercure Legian Bali . The business location is in Bali with 3 respondents (60%) while the other 2 (40%) are from Yogyakarta.

**Table 3**  
**Respondents Distribution by Theme Tourism Business**

Tourism theme	Amount (n)	Percentage (%)
Tourist Attraction Manager	1	20
Travel Bureau / Travel Agent	4	80
Tour guide	3	60
Hotels/ guest houses/ homestays	1	20
Diner/restaurant	1	20
Event Organizer (EO)	3	60
Souvenirs./ Handcraft	1	20
Digital printing	1	20
other	1	20

Source: Primary Data, 2022

Based on this table, the business themes most owned by respondents are travel agents/travel agents, tour guides and event organizers (EO).

### Human Resources

**Table 4**  
**Respondents Distribution by Aspect Human Resources**

Statement	Category			
	there are (n)	%	None (n)	%
The educational curriculum in the environment around Your Business is oriented towards mastering science and technology	5	100	0	0
Availability of competent HR / Outsourcing on ICT	5	100	0	0
The impact of the lack of ICT human resources	5	100	0	0

on performance				
The impact of the lack of ICT human resources in the network	4	80	1	20
The impact of the lack of ICT human resources on ICT security	4	80	1	20
The impact of the lack of ICT human resources in business solutions	4	80	1	20
The impact of the lack of ICT human resources in ICT maintenance	3	60	2	40
Improving employee performance through ICT training	5	100	0	0
Updating the skills of employees through ICT training	5	100	0	0

Source: Primary Data, 2022

Based on the table above it is shown that the educational curriculum in the environment around your business is oriented towards mastery of science and technology as much as 100% of the answers are yes. Availability of competent human resources / outsourcing in ICT as many as 4 respondents (80%) said yes and 1 respondent (20%) said no. The impact of the lack of ICT HR staff on performance is as much as 100% saying there is. The impact of the lack of ICT HR personnel in the network, The impact of the lack of ICT HR personnel in ICT security, The impact of the lack of ICT HR personnel in business solutions as many as 4 respondents (80%) said yes. The impact of the lack of ICT human resources in ICT maintenance as many as 3 respondents (60%) said there was. Improving employee performance through ICT training, Updating employee skills through ICT training as much as 100% say yes.

**Table 5**  
**Respondents Distribution by Aspect Employee Understanding in E-Tourism**

Statement	Category					
	Height (n)	%	Medium (n)	%	low (n)	%
Employees have knowledge and understanding of e-tourism	3	60	2	40	0	0
Employees have a tourism education background	4	80	1	20	0	0
Employee understanding of data collection, accounting systems	2	40	3	60	0	0
Employee understanding of system design	2	40	1	20	2	40

Application of systems that occur in the framework of product marketing through the delivery and dissemination of information	2	40	2	40	1	20
---	---	----	---	----	---	----

Source: Primary Data, 2022

The table above shows that employees who have knowledge and understanding of e-tourism as many as 3 respondents (60%) are in the high category while the other 2 (40%) are in the medium category. Employees have a tourism educational background as many as 4 respondents (80%) are in the high category while 1 other (20%) is in the medium category. Employee understanding of data collection, accounting system as many as 2 respondents are in the high category (40%) while the other 3 (60%) are in the medium category. Employee understanding of system design, application of systems that occur in the context of product marketing through the delivery and dissemination of information as many as 2 respondents (40%) are in the high category, 1 respondent (20%) is in the medium category and 2 respondents (40%) are in the low category.

**Table 6**  
**Respondents Distribution by Aspect Employee Training and Development Model**

Statement	Category			
	there are (n)	%	None (n)	%
On The Job Training	5	100	0	0
Vestibule	5	100	0	0
Demonstrations and Examples	5	100	0	0
Simulation	4	80	1	20
Apprenticeshi / Apprentice	5	100	0	0
Classroom methods	5	100	0	0
Training of Trainers	5	100	0	0
Other	4	80	1	20

Source: Primary Data, 2022

Based on the el tab above could it is explained that the statements of the respondents regarding the model of employee training and development on the job training, vestibule, demonstration and example, Apprenticeship/ Apprenticeship, Classroom methods and Training of Trainers as many as 100% of the respondents are in the category there. While in the simulation, 4 respondents answered in the category there (80%) and 1 respondent (20%) answered in the category not.

**Table 7**  
**Respondents Distribution by Aspect Employee Coaching and Development**

Statement	Category			
	there are (n)	%	None (n)	%

Support from top management	5	100	0	0
Commitment of specialists and generalists	5	100	0	0
Advances in technology used	5	100	0	0
The complexity of the organizational structure	5	100	0	0

Source: Primary Data, 2022

The table above shows that as many as 100% answered in the category there were statements about receiving support from top management, the commitment of specialists and generalists, technological advances used, the complexity of the organizational structure .

### Marketing strategy

**Table 8**  
**Respondent Distribution Based on the Type of E-Commerce Business used**

Business Type	Amount (n)	Percentage (%)
Listings / classified ads	5	100
Online Marketplaces	2	40
Shopping Malls	0	0
Online store	1	20
Online Promotion on social media (Twitter, FB, IG and Youtube)	4	80
Crowdsourcing and crowdfunding websites	3	60
Other	0	0

Source: Primary Data, 2022

The table above shows that the types of e-commerce businesses most used by respondents are listings/classified ads by 100% and online promotions on social media (twitter, FB, IG and YouTube) by 4 respondents (80%). The trend of using social media in Tourism marketing is currently dominated by online promotions. The above data is in line with Rafif Andyka Dzulfiqar's research (2016) which outlines the existence of social media and the internet in tourism promotion, that throughout 2014 those who accessed the internet, 5 out of 10 selected websites frequently visited by Indonesians included Traveloka, Tiket.com, Agoda, Wego Indonesia, and Pegipegi as OTA choices in Indonesia.

**Table 9**  
**Respondent Distribution Based on Electronic Media used to market products and services**

Media	Amount (n)	Percentage (%)
PC/Laptop	5	100
Smartphones	4	80
Tablet	4	80
Other	2	40

Source: Primary Data, 2022





<i>to one or direct advertising</i> which is more effective than mass advertising											
Save costs and time in handling orders because of the electronic-based ordering system	0	0	0	0	0	0	0	0	0	5	100
Presenting virtual or virtual markets ( <i>marketspace</i> ) as a complement to traditional markets ( <i>marketplaces</i> )	0	0	0	0	0	0	0	0	0	5	100

Source: Primary Data, 2022

The table above shows that as many as 5 respondents (100%) answered in the strongly agree category to feel the impact of e-commerce in each statement.

## Discussion

### Readiness of Tourism HR

In the last few decades, the tourism sector has continued to grow rapidly and significantly. This is supported by advances in information and communication technology (ICT). Development of tourism potential that can be done by utilizing technology such as improving and renovating tourist areas, opening new tourist destinations, promoting using mass media , and there is still much that can be done to support tourism development. The all-digital era of e-commerce is facilitated by internet technology. Even in the era of the industrial revolution 4.0, it had the effect of narrowing the distance between producers and their target market. In the field of the tourism industry, the application of e-commerce is better known as e-tourism (Bessie. JLD, 2019).

According to Ismayanti (2010) that e-tourism is a concept by utilizing ICT to increase efficiency in the field of tourism, providing various tourism services to tourists in the form of telematics, and making tourism marketing more accessible. The essence of e-tourism is all forms that make it easy for tourists and producers to offer and convey information on tourism products.

In line with this research found a positive impact of e-commerce. As many as 100% of respondents said they strongly agreed to feel the impact of e-commerce. The positive impacts they feel include providing convenience in promoting products and services, being able to reach more customers in almost all parts of the world, saving costs for sending information and products because they have been digitized, facilitating administration, more responsive and satisfying customer service because customers can get more information, saving costs and time in handling orders due to electronic-based ordering systems, and finally presenting virtual or virtual markets ( *marketspace* ) as a complement to traditional markets ( *marketplace* ). The type of e-commerce business used by respondents in the study was through listings/classified ads, online marketplaces, online stores, online promotions on social media and through websites.

In Indonesia, the concept of e - tourism still needs more attention from related parties in the tourism sector. This is due to the limited IT infrastructure in several regions and the ability of human resources who master technology to make the application of e-tourism not optimal like other countries (Bessie. JLD, 2019). In this study, 100% of respondents said they had a business environment education curriculum that was oriented towards mastering science and

technology, the availability of competent human resources, but almost all respondents still felt the impact of the lack of human resources in performance, lack of human resources in ICT security, lack of human resources in maintenance of ICT security . Even so, there are still obstacles, but the company continues to improve employee performance through ICT training and updating employee skills such as *on the job training, vestibule , demonstration and example , simulation , apprenticeship, classroom methods , and training of trainers .*

According to Simamora (2004) that training (training) is "a learning process that involves acquiring skills, concepts, rules or attitudes to improve employee performance ". Types of training that are often organized by an organization such as *skills training , retraining , team training training )*, and creativity training ( *creativity training* ). Research by Suherlan, et al ( 2014) in his research found that tourism HR education and training activities in West Java Province in 2016 - 2019 totaled 1,240 activities and consisted of seven training materials including material on room division, food and beverage production and service, scouting, design packages, product designs, therapists, and product arrangement with types of training including *skill training , retraining and creativity training.*

### **Tourism Higher Education Readiness**

Human capital is considered essential for the success of companies in today's world, but in the Industry 4.0 revolution, researchers and management practitioners have predicted this scenario to take a different form, given the characteristics of the changes anticipated. Capital characteristics Humans who are the key to success are education, experience and knowledge that organizations need to utilize to achieve success in a competitive world. Human capital theory assumes that knowledge brings greater cognitive skills to individuals, thereby encouraging their productivity and efficiency potential to develop. From a national perspective, "Human capital can be defined as a set of knowledge, abilities and skills, which are used in activities, processes and services that contribute to stimulating economic growth " . (Liza, 2019).

To answer the challenges of technological developments in industry 4.0 such as e-commerce, new roles and functions of human resources are needed, not only administrative roles but to go further in business and strategic roles and functions as follows:

a. *As Employee Champion.*

These roles and functions are oriented towards the importance of high employee morale ( *high employee morale* ) to continue to be committed and contribute in achieving organizational success.

b. *As an Agent of Change ( Change Agent ).*

The demand to have initiatives in making changes that primarily focus on creating *high-performing teams , reducing cycle time for innovation ,* and implementing new technologies that have been defined and developed in a relatively short time.

*e-commerce-* based tourism businesses requires upgrading skills ( *up-skilling* ) or skills renewal ( *reskilling* ) for the workforce. Educational institutions have an important role in preparing human resources who are ready to implement *e-commerce-based tourism businesses.* It is realized that advances in digital technology and the internet must have started in the world of education the first to progress.

Tourism industry business actors such as hotels, travel businesses, and tourism universities are no exception to immediately evaluate and adapt to the situation and demands of developments in the field. This is in line with Meade's opinion (in Lloyd's List , 2017 ) which

stated that the industrial revolution 4.0 uses a lot of digital and sophisticated models that require all parties involved or stakeholders to evaluate what has been implemented and must adjust to the needs.

The digital disruption era has forced businesses in the tourism industry to be more selective in accepting graduates from universities. Simply put, disruption is an innovation. This is an innovation that will replace all old systems with new ways. Disruption has the potential to replace old players with new ones. Rhenald Kasali (2017) in his book entitled " *Self Disruption* " suggests that Disruption replaces all-physical old technology with digital technology which produces something that is truly new and more efficient, as well as more useful. Thus, Tourism Colleges are required to provide human resources who are ready to work with the challenges of the new era, where all the businesses they face involve technological sophistication and data literacy. The demands of the tourism industry are a challenge for tourism universities in Indonesia in preparing their graduates, so that the competence of graduates is able to compete and meet the needs of the world of work both in the tourism industry. Besides that, graduates are also required to be more innovative and adaptive to advances in digital-based technology.

To produce quality graduates according to expectations, Tourism Colleges must carry out various analyzes related to education management, so that they can determine strategies in accordance with the expected graduates' competency achievements. Globally oriented education management will be able to answer various needs in the labor market, through the preparation of learning facilities and infrastructure based on information technology, quality human resources, and reconstructing the curriculum with a *digital human approach*.

Travel Services Business Management Study Program (MJP) Diploma 3 Makassar Tourism Polytechnic as part of the Tourism Higher Education Institution plays a role in improving the quality of *digital human resources*. The aim of this study program is that after completing this educational program, graduates will have competence in managing the operations of travel agencies and tour operators. While Graduate Competencies, including:

1. Develop a noble personality and a spirit of nationalism;
2. Applying the values of attitude and professional ethics;
3. Manage the Travel Bureau (BPW) business units in a professional manner ;
4. Leading group tour trips, both domestically and abroad;
5. Providing domestic and international ticketing services manually as well as the *Computerized Reservation System (CRS)*, using both Indonesian and English;
6. Carry out BPW office administration tasks (operation, ticketing, accounting, marketing) ;
7. Designing and implementing marketing strategies for BPW products ;
8. Planning, recruiting, selecting, managing and developing BPW Resources ;
9. Planning, managing and evaluating BPW finances ;
10. Planning, packaging, developing BPW products in accordance with applicable ethics, regulations and laws;
11. Handling passenger services and loading of goods at the airport (ground handling) ;
12. Entrepreneurship in BPW business units that are environmentally sound;
13. Carry out BPW internal and external teamwork to produce quality service ;
14. Researching and compiling tourism research reports ;
15. Updating and developing tourist information and communicating it both orally and in writing;
16. Utilizing information technology in BPW business development ;

17. Guide tourists professionally at a tourist destination ;
18. Communicate in English;
19. Communicate in another foreign language .

In developing human resources oriented towards e-commerce-based tourism management at the Makassar Tourism Polytechnic Study Program, there are several aspects needed to support this development as stated by Akib, Erwin (2020) including physical aspects, aspects of tourism attractiveness, aspects accessibility, aspects of activities and facilities, as well as socio-economic and cultural aspects. Thus the formulation of the strategy to be implemented in the Travel Services Business Management Study Program (MJP) includes:

- a. Commitment of Management (Directors, Quality Assurance, Study Programs and related parties ) to increase investment in developing digital skills.
- b. Lecturers and teachers try and apply the latest technology prototypes, learn by doing!
- c. Explore new forms of collaboration for certification or education models in the realm of improving digital skills.
- d. Collaboration is carried out between industry, academia, and the public to identify demand for and availability of skills for the future digital era.
- e. Develop an education curriculum that includes material related to *human-digital skills* .

All of this can be achieved if all parties are involved. The Central Government through the Ministry of Tourism and the Creative Economy Agency , Universities and Policymakers sit together to formulate the needs of the tourism sector nationally and not partially. Because, educational institutions as the spearhead and determinant of the success of tourism in Indonesia. Prof. Dr. Aris Munandar (2013) mentions the term " *Manpower Requirement Planning*" , that higher education products produce human resources who are responsive to technological advances. It is necessary to carry out workforce planning in accordance with the economic sector of each economic corridor. The manpower requirement planning approach is one of the appropriate approaches to be applied because it has the advantages of being able to forecast future workforce requirements and being able to determine the type and educational qualifications that educational institutions need to produce. The application of this approach must be carried out in conjunction with a thorough evaluation of educational institutions that produce the current workforce so that they can adapt to the workforce needs for economic development in the country. future .

## CONCLUSION

The conclusion of this research is; 1. Competence of educated and trained human resources will determine the success of E-commerce-based tourism. This is evident from the research findings which state that several respondents who have university graduate qualifications in tourism are very proficient in utilizing the digital world (ICT) and have a strategic role or position in the company structure; 2. Education management that is globally oriented, for example by preparing special vocational education levels in tertiary institutions, will be able to answer various needs of the labor market. In this case for competent human resources in the field of E-commerce-based tourism. Through the reconstruction of the curriculum with a digital human approach, it is hoped that there will be new efforts and strategies to be adaptive to technological sophistication in the field of travel; 3. With reference to the Graduate Competency Standards of the Travel Services Business Management Study

Program (MJP) Makassar Tourism Polytechnic, graduates can be said to be competent HR spearheads as agents of change and renewal of the tourism business in the future.

## REFERENCES

- Atwa, Y. M., El-Saadany, E. F., Salama, M. M. A., Seethapathy, R., Assam, M., & Conti, S. (2011). Adequacy evaluation of distribution system including wind/solar DG during different modes of operation. *IEEE Transactions on Power Systems*, 26(4), 1945–1952.
- Chollisni, A., Syahrani, S., Shandy, A., & Anas, M. (2022). The concept of creative economy development-strengthening post COVID-19 pandemic in Indonesia. *Linguistics and Culture Review*, 6, 413–426.
- Coppi, G., & Fast, L. (2019). *Blockchain and distributed ledger technologies in the humanitarian sector*. HPG Commissioned Report.
- Dustkabilovich, R. O., & Oktyabrova, R. D. (2021). Educational quality in the era of globalization. *Проблемы Науки*, 1 (60), 36–39.
- Fahmi, F. Z., McCann, P., & Koster, S. (2017). Creative economy policy in developing countries: The case of Indonesia. *Urban Studies*, 54(6), 1367–1384.
- Guo, Z., Song, Y., Zhou, R., Ren, Z., & Jia, J. (2010). Discovery, evaluation and distribution of haplotypes of the wheat Ppd-D1 gene. *New Phytologist*, 185(3), 841–851.
- Hidayat, A. R. R. T., & Asmara, A. Y. (2017). Creative industry in supporting economy growth in Indonesia: Perspective of regional innovation system. *IOP Conference Series: Earth and Environmental Science*, 70(1), 12031.
- Houston, R. D., Bean, T. P., Macqueen, D. J., Gundappa, M. K., Jin, Y. H., Jenkins, T. L., Selly, S. L. C., Martin, S. A. M., Stevens, J. R., & Santos, E. M. (2020). Harnessing genomics to fast-track genetic improvement in aquaculture. *Nature Reviews Genetics*, 21(7), 389–409.
- Jessop, B. (2017). The Future of the State in an Era of Globalization. *Challenges of Globalization*, 13–26.
- Kong, L. (2015). Ambitions of a global city: arts, culture and creative economy in ‘Post-Crisis’ Singapore.’ In *Cultural Policy in East Asia* (pp. 19–34). Routledge.
- Liñán, F., Paul, J., & Fayolle, A. (2020). SMEs and entrepreneurship in the era of globalization: advances and theoretical approaches. *Small Business Economics*, 55(3), 695–703.
- Pradana, G. Y. K., Suarka, I. N., Wirawan, A. A. B., & Dhana, I. N. (2016). Religious ideology of the tradition of the Makotek in the era of globalization. *Electronic Journal of Cultural Studies*, 9(1), 6–10.

- Pyke, S., Hartwell, H., Blake, A., & Hemingway, A. (2016). Exploring well-being as a tourism product resource. *Tourism Management*, 55, 94–105.
- Rigaud, S., Manen, C., & García-Martínez de Lagrán, I. (2018). Symbols in motion: Flexible cultural boundaries and the fast spread of the Neolithic in the western Mediterranean. *PLoS One*, 13(5), e0196488.
- Rogerson, J. M. (2021). Tourism business responses to South Africa's covid-19 pandemic emergency. *Geo Journal of Tourism and Geosites*, 35(2), 338–347.
- Sharafutdinov, V. N., Onishchenko, E. V, & Nakonechnyi, A. I. (2020). Tourism Technology Platforms as a Tool for Supporting Competitiveness of Regional Tourism Products. *Regional Research of Russia*, 10(1), 48–55.
- Steelyana, W. (2012). Batik, a beautiful cultural heritage that preserve culture and support economic development in Indonesia. *Binus Business Review*, 3(1), 116.
- Susilawati, S., Falefi, R., & Purwoko, A. (2020). Impact of COVID-19's Pandemic on the Economy of Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(2), 1147–1156.
- Sutawa, G. K. (2012). Issues on Bali tourism development and community empowerment to support sustainable tourism development. *Procedia Economics and Finance*, 4, 413–422.
- Tayibnapis, A. Z., & Sundari, M. S. (2020). Boosting indonesia's tourism sector to be competitive. *International Journal of Management & Business Studies*, 10(1), 9–14.
- Urbano, D., Toledano, N., & Ribeiro, D. (2010). Support policy for the tourism business: a comparative case study in Spain. *The Service Industries Journal*, 30(1), 119–131.
- Zhu, X., Kim, Y., & Park, H. (2020). Do messages spread widely also diffuse fast? Examining the effects of message characteristics on information diffusion. *Computers in Human Behavior*, 103, 37–47.