

Tourism 4.0 Trend

I Nyoman Sudapet, Agus Sukoco, Elok Damayanti, Ani Wulandari and Amrun Rosyid

Department of Management, Narotama University, Surabaya, Indonesia

Ronny Durrutun Nasihien and Muhammad Ikhsan Setiawan

Department of Civil Engineering, Narotama University, Surabaya, Indonesia

ikhsan.setiawan@narotama.ac.id

Che Zalina Zulkifli

Faculty of Arts, Computing and Creative Industry, Sultan Idris Education University, Malaysia

Muhammad Isradi

Department of Civil Engineering, Universitas Mercu Buana, Jakarta, Indonesia

Paisal Halim and Syamsiah Badruddin

Universitas Nasional, Jakarta, Indonesia

Abstract

Digital tourism promotes tourism products and the creative economy through technology-based or digital platforms. This research was conducted descriptively based on SCOPUS.COM data, where researchers obtained 203 documents whose article titles were digital tourism for the last ten years. Global digital tourism especially in East Java, Indonesia, is increasing nowadays. The UK has had the most research articles on digital tourism over the past ten years, followed by China and Indonesia. Al Farabi National University Kazakh (Kazakhstan) has the most research articles on digital tourism, followed by Hochschule Aalen (Germany), Instituto Politécnico do Porto (Portugal), and Universiti Tun Hussein Onn Malaysia. The fields of study in Business, Management, and Accounting are the favorites for research articles on digital tourism, followed by the areas of study in Computer Science and Social Sciences. The European Commission has the most research funding sponsors on digital tourism, followed by the European Regional Development Fund and the Russian Foundation for Basic Research

Keywords

Digital tourism, creative economy, tourism products, Indonesia

1. Introduction

Digital tourism promotes tourism products and the creative economy through technology-based or digital platforms. This research was conducted descriptively based on scopus.com data, where researchers obtained 203 documents whose article titles were digital tourism for the last ten years. Scopus has more than 75 million records, 68 million post-1970 records, including references, and 6.5 million pre-1970 records. Since 1788, there have been more than 8.5 million Open Access articles, 9 million Conference papers, 24,600 active titles, 23,500 peer-reviewed journals, of which 4,000 are Gold Open Access. In addition, Scopus also includes 740 book series, 300 trade publications, and more than 8,000 articles that have been accepted for publication from international publishers, such as Cambridge University Press and the Institute of Electrical and Electronics Engineers (IEEE) of more than 94,000 books. Scopus' coverage comprises monographs, edited volumes, key reference works, and graduate-level textbooks, focusing on the social sciences, arts & humanities and covering science, and technology & medicine (STM). (M.I. Setiawan, Abdullah, Lestari, & Yuniningsih, 2019).

2. Literature Review

Based on years 2018-2020 research papers that include:

- 1) Sudapet, I.N., Nasihien, R.D., Ibrahim, M.H.B.W., Sukoco, A., Setiawan, M. I. (2020). Tourism 4.0, digital-based tourism to improve the welfare of people in east java. *Proceedings of the 5th NA International Conference on Industrial Engineering and Operations Management*, 3927–3933.
- 2) Sudapet, I.N., Sukoco, A., bin Wan Ibrahim, M. H., Setiawan, M. I., & Bon, A. T. (2019). Indonesia research in tourism and digital tourism. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, November.
- 3) Sudapet, I.N., Sukoco, A., Ibrahim, M. H. B. W., & Setiawan, M. I. (2019). Exploring the mediating role of supply chain management between logistic management, supplier selection, supply chain planning, and sustainability supported the tourism business in Indonesia. *International Journal of Supply Chain Management*, 8(6).
- 4) Sudapet, I.N., Sukoco, A., & Setiawan, M. I. (2019). Influence of supply chain integration, practices, and visibility on modular design and supply chain agility supported maritime and tourism business in Indonesia. *International Journal of Supply Chain Management*, 8(6).
- 5) Sudapet, I.N., Sukoco, A., Setiawan, M. I., & Bon, A. T. (2019). Tourism, marine research in the world, and its impact in Indonesia. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, November.
- 6) Sudapet, I Nyoman, Durrotun Nasihien, R., Wan Ibrahim, M. H., Ikhsan Setiawan, M., Lin, C., & Wiwoho Mudjanarko, S. (2020). Tourism, Accommodations, Food Services, and Regional GDP. *IOP Conference Series: Earth and Environmental Science*, 498, 012110. <https://doi.org/10.1088/1755-1315/498/1/012110>
- 7) Sudapet, N., Sukoco, A., Setiawan, M. I., Halim, P., Badruddin, S., Tuswoyo, Hidayat, A., Napitupulu, D., Abdullah, D., & Saleh, A. A. (2018). Small and medium enterprises, Central Business District (CBD) for accelerating regional development. *International Journal of Engineering and Technology(UAE)*, 7(3.6 Special Issue 6).

Researchers get information that global digital tourism in East Java, Indonesia, is increasing nowadays from the above reference. Also, logistic management, supplier selection and supply chain planning, and sustainability support the tourism business in Indonesia. Modular design and supply chain agility help the maritime and tourism industry in Indonesia. Tourism, Accommodations, Food Services, and Regional GDP improves as well.

3. Methods and Data Collection

Digital tourism promotes tourism products and the creative economy through technology-based or digital platforms. This research was conducted descriptively based on scopus.com data, where researchers obtained 203 documents whose article titles were digital tourism for the last ten years. Scopus has more than 75 million records, 68 million post-1970 records, including references, and 6.5 million pre-1970 records. Since 1788, there have been more than 8.5 million Open Access articles, 9 million Conference papers, 24,600 active titles, 23,500 peer-reviewed journals, of which 4,000 are Gold Open Access. In addition, Scopus also includes 740 book series, 300 trade publications, and more than 8,000 articles that have been accepted for publication from international publishers, such as Cambridge University Press and the Institute of Electrical and Electronics Engineers (IEEE) of more than 94,000 books. Scopus' coverage comprises monographs, edited volumes, key reference works, and graduate-level textbooks, focusing on the social sciences, arts & humanities and covering science, and technology & medicine (STM) (M.I. Setiawan, Abdullah, Lestari, & Yuniningsih, 2019). Mode of analysis uses (1) research country documents; (2) affiliation documents; (3) affiliation documents; and (4) funding sponsor documents.

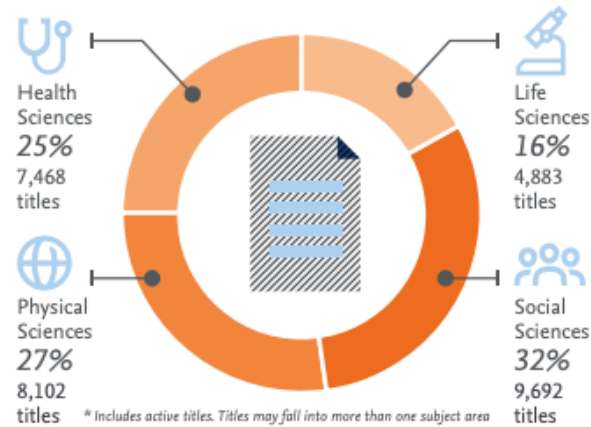


Figure 1. SCOPUS.COM content coverage by subject area

Figure 1 above shows the SCOPUS.COM content coverage by subject area

4. Results and Discussion

First, the results obtained are in the form of state research documents. Researchers obtained 27 documents from England, China 23, Indonesia 21, Russian Federation 16, Italy 16, Portugal 12, Malaysia 12, Spain 12, United States 10, Kazakhstan 9, Germany 7, and Japan 7 documents. The UK has had the most research articles on digital tourism over the past ten years, followed by China and Indonesia.

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

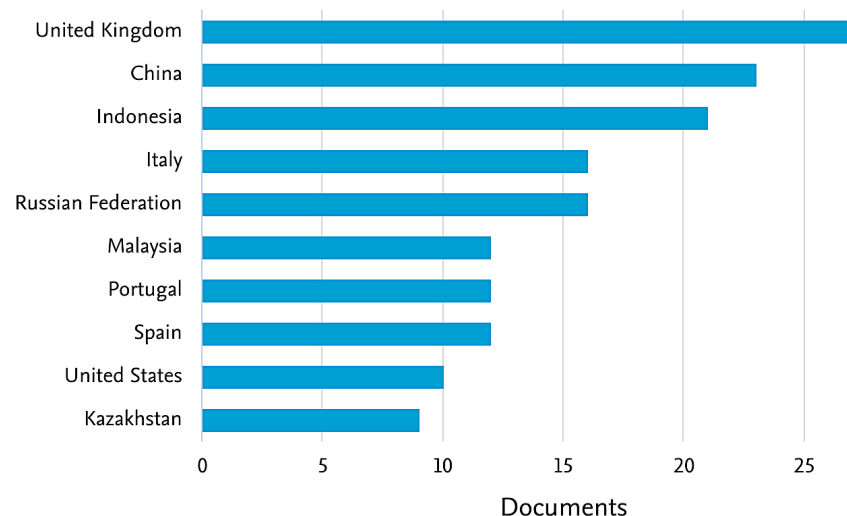


Figure 2. the documents of the research country

Figure 2 above shows the SCOPUS.COM the documents of the research country about Global Digital Tourism Research

Second, the researcher obtained affiliation documents. The documents obtained were from Al Farabi Kazakh National University 5 documents. It was then followed by Hochschule Aalen 4, Polytechnic Institute of Porto 4, Universiti Tun Hussein Onn Malaysia 4, Kookmin University 3, USI - Universita' Della Svizzera Italiana 4, the Nanjing University of Aeronautics and Astronautics 3. Lastly, researchers found 3 documents each from Plekhanov Russian University of Economics, Volgograd State University, Prifysgol Metropolitan Caerdydd, Instituto

Politécnico do Porto, and Escola Superior de Hotelaria e Turismo. Al Farabi National University Kazakh (Kazakhstan) has the most research articles on digital tourism, followed by Hochschule Aalen (Germany), Instituto Politécnico do Porto (Portugal), and Universiti Tun Hussein Onn Malaysia.

Documents by affiliation

Compare the document counts for up to 15 affiliations.

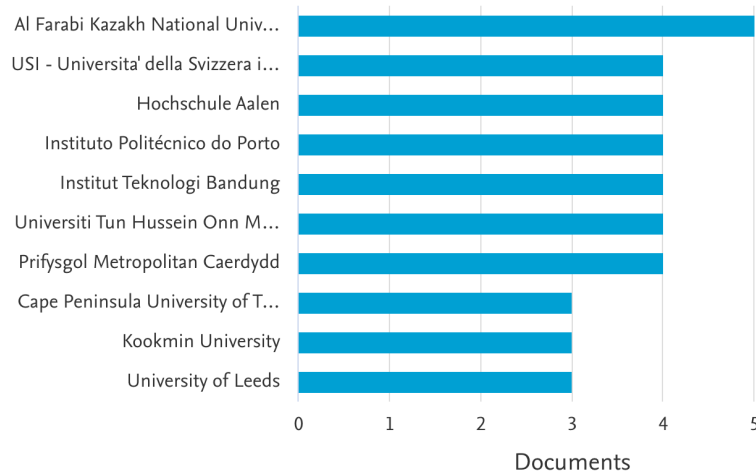


Figure 3. the documents of the affiliation

Figure 3 above shows the SCOPUS.COM the documents of the affiliation about Global Digital Tourism Research

Third, researchers obtained 63 documents in the field of Business, Management, and Accounting. It was followed by Computer Science 62 documents, Social Sciences 62, Engineering 45, Environmental Science 26, Decision Science 18, Economics, Econometrics and Finance 14, and Arts and Humanities 10 documents. The fields of study in Business, Management, and Accounting are the favorites for research articles on digital tourism, followed by the areas of study in Computer Science and Social Sciences.

Documents by subject area

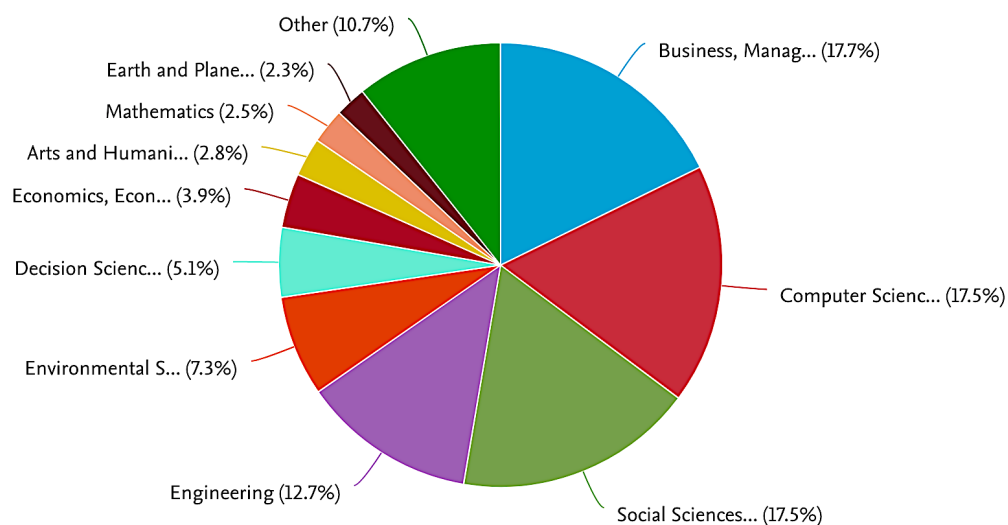


Figure 4. the documents of the subject area

Figure 4 above shows the SCOPUS.COM the documents of the subject area about Global Digital Tourism Research

Finally, researchers obtained funding sponsor documents. The documents obtained were from the European Commission as many as six documents, the European Regional Development Fund 4, the Russian Foundation for Basic Research 4, the Fundao para a Ciênciã ea Tecnologia 3, the Minist rio da Educa  o e Ci  ncia 3, and the National Natural Science Foundation of China 3 documents. The European Commission has the most research funding sponsors on digital tourism, followed by the European Regional Development Fund and the Russian Foundation for Basic Research.

Documents by funding sponsor

Compare the document counts for up to 15 funding sponsors.

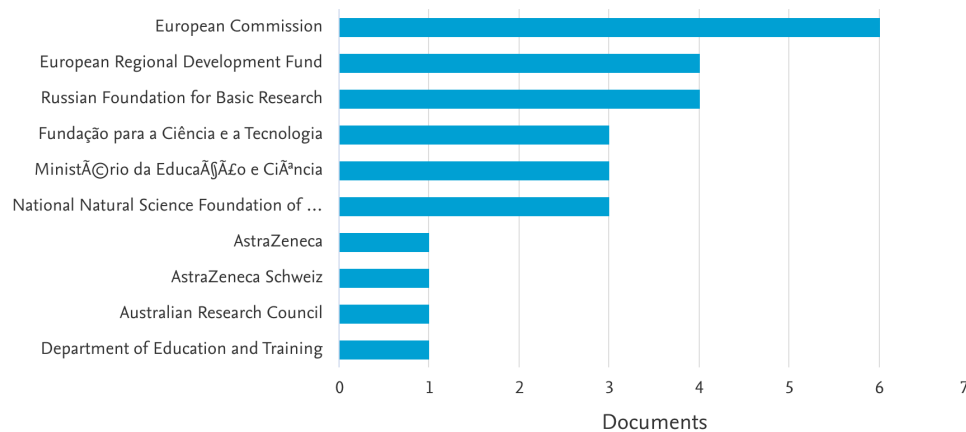


Figure 5. the documents of the funding sponsor

Figure 5 above shows the SCOPUS.COM the documents of the funding sponsor about Global Digital Tourism Research

5. Conclusion

Digital tourism promotes tourism products and the creative economy through technology-based or digital platforms. This research was conducted descriptively based on SCOPUS.COM data. Researchers obtained 203 documents whose article titles were digital tourism for the last ten years. The UK has had the most research articles on digital tourism over the past ten years, followed by China and Indonesia. Al Farabi National University Kazakh (Kazakhstan) has the most research articles on digital tourism, followed by Hochschule Aalen (Germany), Instituto Polit cnico do Porto (Portugal), and Universiti Tun Hussein Onn Malaysia. The fields of study in Business, Management, and Accounting are the favorites for research articles on digital tourism, followed by the areas of study in Computer Science and Social Sciences. The European Commission has the most research funding sponsors on digital tourism, followed by the European Regional Development Fund and the Russian Foundation for Basic Research. So global digital tourism research, is increasing nowadays.

Acknowledgments

The authors thank to Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan Republik Indonesia, for their Grants Financial Support, Penelitian Terapan Unggulan Perguruan Tinggi scheme, 2021

References

- Setiawan, M.I., Abdullah, D., Lestari, V. N. S., & Yuniningsih. (2019). Supply chain and sustainable fisheries development of portable inflated solar power cold storage house technology in Indonesia, bibliometric analysis. *International Journal of Supply Chain Management*, 8(6).
- Sudapet, I.N., Nasihien, R.D., Ibrahim, M.H.B.W., Sukoco, A., Setiawan, M. I. (2020). Tourism 4.0, digital-based tourism to improve the welfare of people in east java. *Proceedings of the 5th NA International Conference on Industrial Engineering and Operations Management*, 3927–3933.
- Sudapet, I.N., Sukoco, A., bin Wan Ibrahim, M. H., Setiawan, M. I., & Bon, A. T. (2019). Indonesia research in tourism and digital tourism. *Proceedings of the International Conference on Industrial Engineering and*

Operations Management, November.

- Sudapet, I.N., Sukoco, A., Ibrahim, M. H. B. W., & Setiawan, M. I. (2019). Exploring mediating role of supply chain management between logistic management, supplier selection and planning of supply chain and sustainability, supported tourism business in Indonesia. *International Journal of Supply Chain Management*, 8(6).
- Sudapet, I.N., Sukoco, A., & Setiawan, M. I. (2019). Influence of supply chain integration, its practices and visibility on modular design and supply chain agility, supported maritime and tourism business in Indonesia. *International Journal of Supply Chain Management*, 8(6).
- Sudapet, I.N., Sukoco, A., Setiawan, M. I., & Bon, A. T. (2019). Tourism, maritime research in the world and its impact in Indonesia. *Proceedings of the International Conference on Industrial Engineering and Operations Management, November.*
- Sudapet, I Nyoman, Durrotun Nasihien, R., Wan Ibrahim, M. H., Ikhsan Setiawan, M., Lin, C., & Wiwoho Mudjanarko, S. (2020). Tourism, Accommodations, Food Services, and Regional GDP. *IOP Conference Series: Earth and Environmental Science*, 498, 012110. <https://doi.org/10.1088/1755-1315/498/1/012110>
- Sudapet, N., Sukoco, A., Setiawan, M. I., Halim, P., Badruddin, S., Tuswoyo, Hidayat, A., Napitupulu, D., Abdullah, D., & Saleh, A. A. (2018). Small and medium enterprises, Central Business District (CBD) for accelerating of regional development. *International Journal of Engineering and Technology(UAE)*, 7(3.6 Special Issue 6).

Biographies

I Nyoman Sudapet received his Bachelor of Economics (1986) from Universitas Surabaya, Indonesia, and Master of Management (2011) from Universitas Narotama, Surabaya, Indonesia. He is currently an Assistant Professor at the Department Management, Narotama University, Indonesia. He leads a research team in Sustainable, Digital Tourism and Regional Economic, a grant from Indonesia's Ministry of Education. He is also a Director of SURABAYA TV, Indonesia. He has been recognized as a professional broadcast and multimedia consultant with over 40 years of experience

Agus Sukoco is an Assistant Professor at the Faculty of Economics and Business, Universitas Narotama, Surabaya, Indonesia. He earned a Bachelor of Marine Engineering in faculty naval engineering from Institut Teknologi Sepuluh Nopember (1996), Master of Management Business from Narotama University (2006), and Doctoral of Management Business from STESIA Indonesia (2021). He has been recognized as a professional management business consultant with over 18 years of experience working with closely-held businesses. He is also Editor in Chief of IJEBD International Journal of Entrepreneurship and Business Development, indexed International DOAJ, as Head of Department Management, Narotama University, Indonesia.

Elok Damayanti graduated at Universitas Surabaya, Indonesia and then continued her study at Sekolah Tinggi Ilmu Ekonomi YAPAN, Surabaya, Indonesia. She completed her Master's Degree of Management at Narotama University, Surabaya, Indonesia. She focuses in Human Resources Management, Business English, Business Management and Business Administration. Previously she was a Head of Treasury at Public Service Commission, a government-owned organization. At present she is a Lecturer at the Economy and Business Faculty at Narotama University. In addition, she is a Head of ASEAN Study Centre, responsible for the ASEAN cooperation, information and studies. Also as a Head of National Partnership, responsible for the domestic cooperation at the University.

Ani Wulandari received her Bachelor of Literature from Airlangga University (2008), Surabaya, Indonesia and Master of Management from Narotama University (2015), Indonesia. At present she is a lecturer of Management Major & Director of International Relations Office and International Class of Narotama University since 2011. Her forte in strategic management has led her into various researches in management and business field indexed in national and international journals. Her professional contributions expand Narotama University global outreach as well as international student management within the university.

Amrun Rosyid received his Bachelor of Mechanical Engineering (2002) from Sepuluh Nopember Institute of Technology (ITS), Surabaya, Indonesia and Master of Management (2018) from STIE YAPAN Surabaya. He is currently a Lecturer at the Faculty of Business and Management, Narotama University, Indonesia, and a Mendeley

advisor and often gives workshops on reference managers. His research interests include Human Resource Management, Strategic Management, and Tourism. He is also an International Journal Editor and often offers workshops on writing papers for international publications.

Ronny Durrotun Nasihien is an Assistant Professor at Faculty of Engineering, Universitas Narotama, Surabaya Indonesia. He earned a Bachelor of Architecture from Institut Teknologi Adhi Tama Surabaya, Indonesia (1997), Master of GIS from Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia (2011) and Doctoral of Management Business from STESIA Indonesia (2021). He has been recognized as a professional architecture and construction management consultant with over 20 years of experience.

Muhammad Ikhsan Setiawan received his Bachelor of Civil Engineering (1998) from Universitas Merdeka, Malang, Indonesia, and Master of Civil Engineering (2000) from Universitas Indonesia before pursuing a Doctor of Philosophy (Civil Engineering) at Universitas Tarumanagara, Indonesia (2018). He is currently an Assistant Professor at the Faculty of Civil Engineering, Narotama University, Indonesia, and registered as Engineer Expert Certified. He leads a research team in Sustainable and Digital for Transportation, Tourism, and Regional Economic, a grant from Indonesia's Ministry of Education. His research interests include Smart City and Sustainability. He is also a Chairman of WORLD CONFERENCE. I.D., IPEST commerce, SONGSONG rdt, member of IEEE, editors, and reviewers of some journals indexed in SCOPUS, DOAJ, CROSSREF, and GOOGLE. He is a Vice-Rector of Narotama University, Indonesia

Che Zalina Zulkifli (Universiti Pendidikan Sultan Idris) is a Professor in the Computing Department, Faculty of Arts, Computing and Creative Industry at Sultan Idris Education University, Malaysia. She has over 22 years of professional teaching experience as a lecturer and active researcher in Electronics & Electrical Engineering, IoT, Embedded Systems, and Wireless Sensor Network. Her research projects have collaborated with a multinational company that contributes to a network that leads to new ideas and concrete research projects. The developed automation projects that focused on Automation, IoT, and Wireless Communication fields have been successfully adopted by the industry to date. A total of more than 3 million Ringgit has been generated as an income to the University mainly from the Research grant, Commercialization of innovative research products, and the services as a principal consultant. She has expertise in the agriculture sector with a new invention to improve crop production by adopting high technology. Seberang Perai City Council appointed her as a Project Leader for the Edu-Green Centre located in Seberang Perai, Penang, Malaysia, a green technology hub site.

Muhammad Isradi, born in Kandangan on 18 August 1972. He is the secretary of the Civil Engineering Department at Mercu Buana University. He earned a degree in Civil Engineering from Universitas Muhammadiyah Malang in 1998 with the thesis entitled "One-Way Flat Plate Planning at Ratu Plaza Madiun. He then obtained a Master's degree in Civil Engineering, Transportation Concentration from Brawijaya University in 2001 with a thesis entitled "Family Movement Awakening Model in Sawojajar Housing Area, Malang." He also teaches several subjects such as Pavement Planning, Geometric Road Planning, Transportation Planning, and Environmental Engineering.

Paisal Halim received a bachelor's degree in Social Science Education – Pancasila Moral Education (1985) from the Indonesian Teacher Training and Education Institute (IKIP), Masters in Humanities in 1997 from Hasanuddin University Makassar Indonesia, Doctor of Social Science Philosophy (Sociology) 2008 Hasanuddin University, Makassar Indonesia. Currently, he is a lecturer and professor in the postgraduate government administration study program at the National University of Jakarta, Indonesia. Actively providing various training and mentoring for young lecturers in writing journals, books and other scientific works related to the fields of sociology, government science and public policy at several universities in Indonesia. Currently, he is the President of IPEST (an international association of economic, social and technology researchers and founder of various e-journals: JILPR Indonesia Law and Policy Policy, IJESS International Journal of Education and Social Science. His research interests include Human Resource Management, development sociology, public policy, leadership, government science and tourism

Syamsiah Badruddin received her Bachelor of Education Administration (1987) from Institut Keguruan dan Ilmu Pendidikan (IKIP) Ujung Pandang, Indonesia and Master of Population And HR Development from Universitas Hasanuddin, Indonesia (1997) , before pursuing Doctor of Social Science at Universitas Hasanuddin, Indonesia (2004). She currently an Professor at Faculty of Social Science and Political Science, National University, Indonesia

and registered as Certified International Human Capital Management (CIHCM). She currently leads a research team in Community Social Network As Engineering WFD (Work Form Dieng) The Economy During The Implementation Of PPKM During The Covid-19 Pandemic, grant from National University, Indonesia. Her research interests include Social Entrepreneurship, Management and Supply Chain, Social Engineering and Tourism. She also a Member of IPEST commerce, ADRI, editors and reviewers some Journal of National University indexed GOOGLE, also until now as Chairman of Indonesian Institute of Public Policy Studies (LKKPI), South Sulawesi Province, Indonesia and as Head of International Journal and Publication Clinic at Faculty of Social Science and Political Science, National University, Indonesia.