THE ROLE OF HUMAN RESOURCE MANAGEMENT IN DRIVING CREATIVITY AND INNOVATION IN THE TOURISM INDUSTRY 4.0

Dr. Muhammad Alkirom Wildan



Published By:

Noble Science Press (International Publishing)

Aggarwal Plaza, LSC-1, Mayur Vihar Phase 3, DELHI- 110096

Email Id.: noblesciencepress@gmail.com, submission@noblesciencepress.org

Content © Author(s): Dr. Muhammad Alkirom Wildan

Publication, Printing, E-book & Digital Rights Subject to Copyright of Noble Science Press

Type setting by: Ms. Shama NSP ID: NSP/BP/A-062-25

Printed By: KAAV® Media Pvt. Ltd., Delhi Marketing By: KAAV® Publications, Delhi

Edition: 2025

Print: INR 575/- US\$7 E-ISBN- 978-93-49381-07-0

DOI: https://doi.org/10.52458/9789349381070.nsp.2025.tb

NOBLE SCIENCE PRESS (All Rights Reserved)

Every effort has been made to avoid errors and omissions in this publication, but any errors or omissions that may have introduced are unintentional. Please note that neither the publisher nor authors/editor/contributors are responsible for any damage or loss of any kind suffered by anyone in any way as a result of such errors or omissions. We do not engage in any form of distribution or royalty agreements. Responsibility for the facts stated, opinions expressed, conclusions reached and plagiarism, if any, in this title is entirely that of authors/editors/contributors. No part, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise of this book may not be used in any manner without written permission. For Binding mistakes, misprint or for missing pages etc. the publisher's liability is limited. The few images borrowed from other sources may appear, and might have been given proper sources/citations in the book by authors/editors/contributors. All rights reserved. For more clear guidelines, please check the website.

CONTENTS

Sr.No.		Title	Page no.
	SUMM	MARY	
1.	Intro	duction	1-14
	1	Background	
	2	General Purpose	
	3	Special Purpose	
2.	Litera	nture Review	15-16
	1	HRM Practices in the Tourism Industry	
	2	Creativity and Innovation in the Tourism Sector	
	3	The Role of Digital Skills in the 4.0 Era	
3.	Partn	er Agency Profile	17
4.	Resea	arch Methods	18-20
	1	Research Methodology	
		Research Data	
		 Sampling Techniques 	
		 Hypothesis Testing 	
	2	Development Road Map	
5.	Resul	ts of Research and Discussion	21-34
	1	Research Results	
		 Research Sample 	
		 Descriptive Statistics 	
		 Classic Assumptions 	
		 Multiple Linear Regression Analysis 	
	2	Discussion	
		 Planning and Management of Tourism Villages 	

	Briefing and Creativity of Village Management Organizations	
	 Control & Renewal and Creativity of Village Management Organizations 	
6.	Potential and Concept of Halal Tourism in Madura	35-43
	 Background and Potential of Halal Tourism in Madura 	
	2 Madura Halal Tourism Industry	
7.	The Industrial Revolution 4.0 and Its Impact on the Halal Tourism Industry	44-47
	 Virtual Reality (VR) and Augmented Reality (AR) 	
	2 Big Data	
	3 E-Commerce and Online Booking Platforms	
	4 Social Media and Influencer Marketing	
	5 Internet of Things (IOT)	
8.	The Role of Human Resource Management in The Implementation of IR 4.0 in the Halal Tourism Industry	48-49
9.	Big Data and Artificial Intelligence in the Madura Halal Tourism Industry	50-51
10.	Digitalization and Promotion Strategy for Madura Halal Tourism in the IR 4.0 Era	52-53
	Conclusion	54-60
	Bibliography	61-64

• Organizing and Creativity of Village

Management organizations

SUMMARY

Tourism is one of the sectors that has great potential to support the economic growth of a country, including Indonesia. In the era of industry 4.0 or what is often referred to as the digital era, tourism has also undergone significant changes in terms of management and marketing. Madura, as one of the islands in Indonesia that has great tourism potential, has also undergone changes in terms of tourism management in the 4.0 era. Human resource management and innovation creativity are important factors in dealing with these changes. In the 4.0 era, innovation and creativity are the keys to facing increasingly fierce competition. This also applies to the tourism industry in Madura. Therefore, research on human resource management and innovation creativity in tourism 4.0 in Madura is very important to be done.

This study aims to identify and analyze the factors that affect human resource management and innovation creativity in tourism 4.0 in Madura. Through a qualitative and quantitative approach, this study will provide a clear picture of these factors and how they affect tourism management in Madura. It is hoped that the results of this research can make a significant contribution to the development of the tourism industry in Madura and also provide a clearer view of how human resource management and innovation creativity can affect the success of tourism in the 4.0 era. In addition, this research is also expected to provide input for tourism industry players in Madura in facing changes and increasingly fierce competition in the digital era.

Keywords: Tourism, Halal, Creativity, Human Resources

CHAPTER I:

Introduction

1.1 BACKGROUND

Tourism is one of the important leading sectors that can be developed to improve the quality of human resources (HR) and community welfare. Seen in the 17 Sustainable Development Goals (SDGs), the tourism sector is able to contribute to several points such as reducing poverty, supporting economic growth and providing decent work. The development of tourism village potential is an important part of the development of the tourism industry in Indonesia. Gunn, 2004 tried to formulate a definition of Sustainable Development that is quite relevant to tourism planning, namely, "Sustainable development is a positive socioeconomic change that does not damage the ecological and social systems on which societies and societies depend. Its successful implementation requires integration". The opportunity to compete with other countries is huge, both quantitatively and qualitatively, because of the many potential tourist attractions in Indonesia.

It is well known that the forces of technology and social are only beginning to rapidly change the way we work, questioning traditional approaches to the concept of work itself. Are we ready for that? As in all previous revolutions, the ones we are experiencing are not exempt from pessimistic visions, as was defended in 2016 at the World Economic Forum in Davos through the 'Future of Work' Report, where it was predicted that the "fourth industrial revolution" would destroy about seven million jobs before 2020 in administrative or productive tasks, and generate only about two million new jobs, basically in a field called STEM (Science, Technology, Engineering and Mathematics).

However, as economies and knowledge societies consolidate in successive waves of change and evolution, with advanced robotics and intelligent technologies increasingly applied to everything around us, evidence suggests that we are not moving towards the general elimination of jobs (beyond the gap between jobs lost and jobs generated that usually occurs in the short term) but to a shift from more repetitive roles to tasks greater added value, where human skills are more difficult to automate (creativity, systemic thinking, empathy, etc.). The ability to adapt the workforce, transforming their skills through education and workforce relationships, will be key in this process, as was the case with previous technological transformations.

"Countless opportunities lie ahead to improve the quality of working life, expand choice, close the gender gap, reverse the damage wrought by global inequality, and more. But all of this will not happen by itself. Without decisive action we will head to a world that expands existing inequalities and uncertainties. Advances in intelligence, automation, and robotics technologies will create new jobs, but those who lose their jobs in this transition may be the least equipped to seize new opportunities. Today's skills will not match the jobs of the future and newly acquired skills may quickly become obsolete. Greening our economy will create millions of jobs as we adopt sustainable practices and clean technologies but other jobs will be lost as countries rescale their carbon and resource-intensive industries. Demographic changes are no less significant. Expanding youth populations in some parts of the world and aging populations in others may put pressure on the labor market and social security systems, but within this shift lies new possibilities for affordable care and an inclusive and active society. We need to seize the opportunities presented by these transformative changes to create a brighter future and deliver economic security, equal opportunity and social justice and ultimately strengthen the fabric of our society."

Before analyzing the main trends that will condition the future of work (or those that already do), it is important to highlight that the revolution we are living in will manifest itself in the context of increasingly acute resource scarcity, where climate change will have a dramatic impact. The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals, as well as the Paris Agreement on Climate Change, which came into force in 2016, represent an inescapable framework that will influence and condition the impact of all actions taken at national, international and individual levels.

The emerging reality is that the emergence of disruptive technologies in almost all dimensions of work (face-to-face, telecommunications, privacy and digital rights, creation, attractiveness, location, talent shortage, employer-employee relations, new approaches to entrepreneurship through new business models, etc.) also creates contexts that may be considered insufficient or unsatisfactorily regulated. The challenge for institutions is to regulate without limiting the development capacity of the agencies involved, in a complex balance of interests between different stakeholders.

Related to the emergence of the new business model, is a third reality that has emerged: agile organizations. Due to the largely democratization of access to technology, size is no longer detrimental if one is innovative and can use solutions that until recently were only accessible to large organizations (cloud computing, *e-commerce*, *internet of things* – IoT, etc.). Compared to traditional small businesses, agile organizations tend to achieve a better brand identity, greater deployment of capabilities due to their networks with third parties and a wider spectrum of actions at the geographic level, thanks to their broader market outlook and activities, in a highly flexible cost structure.

The 'liberation' of labor is the fourth reality that emerges. The growth of jobs, mobility, flexibility, or independent and autonomous project-based work is redefining the increasingly diffuse boundaries of traditional work contexts. The rigidity of the conventional hierarchical model gave way to a new form of organization, where people work in a more seamless, distributed, mobile, collaborative, and real-time way. The honest growth over the last decade of new forms of employment

(as opposed to conventional employment concepts, which typically involve full-time employment, physical workplaces and the relationship between employer and employee defined by contracts) will generate, if not already do so, significant challenges. One of the first consequences is termination from work. This would give people the unknown freedom to choose where to live, although such 'physical' freedom may not compensate for the loss of autonomy that comes from working at all times. And in all places and the blurring of the boundaries between work and personal time. The widening of regional gaps in job creation, in education or skills will result, in any case, in a battle for talent attraction as well as the concentration of talent in the most developed and attractive locations, especially in large or large cities.

The concept of a professional career, the balance between professional and personal life or even the end of working life (retirement) is being reformulated and creates very important challenges for both people (professional career extension, lifelong learning and training, permanent technology adaptation, etc.) as for the organization (redesign of training plans to increase intangible capital capacity, multigenerational diversity management, talent retention and loyalty, etc.). A lifetime of reinvention is the fifth reality that emerges, with a clear focus on skills and competencies, beyond theoretical knowledge. The emphasis of the education system on the qualities and capacities that make us different from machines, such as curiosity and creativity, permanent capacity for adaptation or any kind of 'soft skills' will be key in this process.

Potential exclusion from an important layer of the population can manifest both due to a lack of training in technological updates but also a lack of training in unique 'human' skills. Lifelong learning (which includes formal and informal learning from early childhood and basic education to adult learning) combines basic skills, social and cognitive skills (such as learning to learn) and skills necessary for a specific job, job, or sector. It offers a pathway to inclusion in the labor market for

youth and the unemployed. It also has transformative potential: investment in learning at an early age facilitates learning at a later stage in life and in turn is linked to intergenerational social mobility, expanding the choices of future generations.

The decrease in the cost of automation and robotization, the advent of artificial intelligence and the increase in human machine talent relationships give rise to the sixth reality, technology, talent and transformation, where there is a reallocation of tasks and where a more skilled workforce or workforce associated with more complex tasks will see its market value increase compared to other types of tasks that are more automated. In contrast to the perception of job loss (especially related to routine tasks) that this reality can generate, one of the opposite effects that can occur is the relocation of industrial processes back to their home countries, due to a decrease in the relevance of the workforce. Automation and robotization will work to generate, in any case, new scenarios in which health or social protection will be greatly affected, with contributions influenced by workers starting later, irregular contributions of irregular durations throughout the working life.

Finally, the requirement to maintain increasingly high ethical standards encourages organizations to create an efficient framework of relationships with all their stakeholders, especially with their employees: the development of new policies and programs aimed at protecting the 'new' workforce from the uncertainty of the new work environment, both by those responsible for public policy and by the organization itself, raises the seventh reality, work ethics and society.

Consequently, from all of the above reflections come from each of the three groups most critical in the future for the development of work and skills:

1. For those in charge of public policy, the need to identify, from the market itself, what new functions and jobs are being created that do not match existing skills, design an updated special training program for these new jobs. Likewise, it will be key to encourage lifelong learning, both basic skills (technical or STEM) and the most complex of automated (social or empathetic), in a combination known as 'STEMpathy Jobs'.

2. For organizational leaders, their ability to adapt structures to new forms of work will be key, especially in areas related to people management and the promotion of autonomy in decision-making at all levels. Networks and network structures, which have redefined and expanded the classical boundaries of organizations represent the most natural form of relationship in knowledge societies against more rigid organizational schemas, providing flexibility, agility and anticipatory capacity.

According to the ILO's recommendations, organisations also need to invest in lifelong learning that allows people to acquire skills and to reskill and upskill. The government, workers and employers, as well as educational institutions, have complementary responsibilities in building an effective and appropriate lifelong learning ecosystem. organizations need to increase investment in institutions, policies, and strategies that will support people through future work transitions. Young people will need help navigating an increasingly difficult school-to-work transition. Older workers will need expanded options that allow them to remain economically active for as long as they choose and that will create a lifelong active society.

All workers will need support through the increasing number of labor market transitions over the course of their lives. Active labor market policies need to be proactive services and public employment needs to be expanded. Implementing a transformative and measurable agenda for gender equality will also be central. From parental leave to investment in public care services, policies need to foster the sharing of unpaid care work

- at home to create genuine equality of opportunity in the workplace. Strengthening women's voices and leadership, eliminating violence and harassment in the workplace and implementing payment transparency policies are preconditions for gender equality. Specific measures are also needed to address gender equality in future technology-enabled work.
- 3. Finally, providing universal social protection from birth to old age. The future of work requires a strong and responsive social protection system based on the principles of solidarity and risksharing, which supports the needs of society throughout the life cycle. It calls for a social protection floor that provides a basic level of protection to everyone in need, complemented by a contributor social insurance scheme that provides an increased level of protection. For any professional, it will be essential to develop their skills continuously (the 'finished learning to start working' paradigm is no longer valid), with particular relevance in less automated or more complex skills, such as problem-solving, critical thinking, creativity, management and coordination, emotional intelligence or cognitive flexibility. This will be key to ensuring a broader dimension of development where people have the right and opportunity to have a better life.

Emerging realities and their impact on tourism

The transformation of the tourism sector is also being influenced by the trends mentioned above. The way in which these elements impact a country, region or destination can vary, but many of these emerging realities already exist, with different intensities, in many parts of the planet. In relation to the emerging reality related to the emergence of **exponential organizations**, companies like Airbnb represent an exponential organizational paradigm capable of changing the competitive dynamics of an entire industry, without having properties in ownership but with more than a million rooms in almost 34,000 cities.

On the emerging realities related to regulated innovation, the debate on how to legalize new business models remains open and varies greatly from country to country and even within country. The democratization of technology, the saturation of real estate or the economic crisis have contributed to the emergence of the so-called collaborative consumption model that will continue to emerge and evolve in areas such as transportation, restoration or accommodation. Consumers themselves become suppliers/service providers, giving rise to new types of offerings that require countries (destinations) to evaluate new legislative and regulatory frameworks that provide equal and fair competition-based opportunities for all actors in the sector.

Related to the above, and connected to the concept of agile organization, it should be noted that the impact of social networks and collaborative platforms is behind many of the changes that the tourism sector has experienced in recent years. Companies operating under the principles of the so-called 'collaborative economy' represent a new type of intermediation and a truly disruptive business model with respect to the traditional one, essentially a technological platform that markets the property, products or services offered, in many cases by individuals in a cost-benefit balance that is difficult to overcome.

Regarding the emerging realities related to the 'liberation' of labor or the reinvention of life, the first is related to the former, agile organization, and the emergence of the so-called collaborative economy. Capacity that many small actors click on is becoming part of the value chain in the sector as service providers change the global map of tourism services. Likewise, the concept of *reinvention for life* opens up a new dimension regarding the training of the people who are part of the sector, with a special emphasis on the field of technology. Another reality that emerges with the greatest impact in the tourism, technology, talent and transformation sectors revolves around the path in which automation and various technological disciplines (mobile technology, Internet of things -IoT-, artificial intelligence - AI, big data, data analytics, etc.) will affect this sector and if its effects will occur in the

The use of INTENSIVE ICTs in recent years has led to significant changes in consumer behavior and in the travel cycle. There has been a dramatic change in the entire distribution system with the Internet becoming the central axis of transactions. Technological innovation is leading to a new reality in tourism where there is no longer total control over supply and where demand (society) sets priorities, needs and expectations. The reality with the new value chains, the fading of intermediaries (since the internet became a direct distribution channel that allowed the comparison of prices and products) and new players, most of which were with a technological profile.

This first-level change has been very rapid, and the rate of adoption of IIC by the various actors involved has responded to this evolution. However, it is key to highlight other trends that can continue to change the concept of tourism, such as the development of autonomous vehicles, the use of augmented reality technology, the massive adoption of real-time translation software, the use of virtual assistants with artificial intelligence, information management and knowledge generation through big data, increased automation through robotics or the extension of blockchain technology in all kinds of economic transactions.

This trend faces an important obstacle. There is still a relevant shortage in terms of adequate lifelong learning, vocational education, training and skills development, many of these sectors do not fully appreciate the opportunities involved in adopting the use of ICTs and, albeit to a lesser extent, there is also a lack of leadership skills or from a capital investment perspective. Against this background, one of the main reflections has to do with how technology, and in particular robotization / automation, affects the sector. Ahead of the 2030 scenario, several studies have found that this will have an impact not only on advanced economies but also developing ones in terms of jobs that imply direct interaction with customers such as hotels and travel

agents, workers, entertainment assistants or cafeteria workers. In fact, accommodation and food service are one of the sectoral categories with the highest risk of automation in the US.

The recent reality that emerges of work ethic and society also brings to the tourism sector the challenge of managing in an efficient way its impact and relationships. Today, travellers will have a higher trust in the information provided by peers than by the sector. The image and reputation of tourism destinations and companies are thus the key to their competitiveness. Companies and destinations need to 'walk the talk' when it comes to their commitment to society.

The aging of the population, the increase in the number of people who belong to the middle class or enter the market of generation Z and Millennials will make diversity management, in the broadest sense of the word, also a lever of change and differentiation. Future of job and skills development – understanding needs and expectations to better understand trends related to the future of work in tourism.

The tourism sector is able to have a positive impact on the socio-economic conditions of the community as stated by Cohen (1984), Spillane (1987), and Muljadi (2012), namely contributing to foreign exchange revenue, job creation, expanding business opportunities in the formal and informal sectors, increasing central and regional government revenues through various taxes and levies, increasing community income, and equitable development. The development of tourism in this area is also based on regional development, tourist attractions, accessibility, amenities, community and investment. It is the same as the planning for regional tourism development in Sumenep Regency.

Geographically, the Sumenep Regency area is located at the eastern end of the island of Madura which is located at coordinates between 113 32'54"-116 16'48" east longitude and du between 4 55'- 7 24' south latitude, with a land area of 1,146.93 Km2 and an archipelago with an area of 964.54 Km2. based on its archipelago, Sumenep Regency

has 126 islands spread across to form a cluster of islands both inhabited (48 islands) and uninhabited (78 islands). Meanwhile, judging from the demographic map based on BPS data of Sumenep Regency in 2016, the population of Sumenep Regency is as many as

1,123,310 people with a gender composition of 548,441 people (48.82%) and 574,869 people (51.18%) of women.

In terms of demographics and geography, Sumenep Regency has competitive advantages, which in reality is one of the advantages for Sumenep Regency to improve the quality of tourism management with available resources and a very diverse archipelago coverage. With such geographical conditions, Sumenep has many tourist destinations, from various destinations owned by Sumenep, namely cultural tourism, religious tourism, shopping tourism, and others, the majority of which are dominated by marine tourism. Some of the tourist destinations that are often visited by tourists, both local and foreign tourists, include; Gili Iyang (the island with the second highest oxygen level in the world, after Jordan), Gili Labak, Gili Genting Pantai 9, Lombang Beach, Sand Mattress and Sumenep Palace (Alfiyah, 2019).

Table 1.1 Data on the Number of Tourists in Sumenep Regency

Tourist	Amount per Year		
	2020	2021	2022
Foreign	143	.332	.036
Domestic	855.756	54.614	.047.109
Sum	855.899	55.946	.051.145

Source: Culture, Tourism, Youth and Sports Office, 2022.

Judging from Table 1.1 above, the number of tourist visits from 2020 to 2022 has increased significantly, as evidenced by the number of tourist data visiting, this proves that Sumenep Regency has an attraction for domestic and foreign tourists. This increase in the number of tourists is supported by the opening of Trunojoyo airport as one of the accessibility to get to Sumenep Regency with a shorter distance than using land or sea transportation and since commercial flights were opened, the number of tourist visits to Sumenep has increased significantly. The *Visit Sumenep* 2018 program that the government is trying to attract both foreign and local tourists does not fully meet the target launched. This can be seen in the number of tourist visits listed in the table of visitors to Sumenep tourist attractions in 2020-2022 below:

Table 1.2 Sumenep Tourist Attraction Visits 2020-2022

Sights		2020		2021		2022
	Wisman	Isnus	Wism an	Wisnu s	Free Wi High School	Wisnus
Asta Gumuk	0	7.939	38	7.311	0	935
Asta Jokotole	0	0.651	0	8.316	0	7.109
Asta K. Faqih	0	.185	0	8.323	0	5.663
São Paulo, São Paulo	0	.717	0	6.216	0	7.473
Stuttgart	0	3.804	0	92.947	0	72.542
This is Sayid Yusuf	11	59.711	8	112.676	0	280.150
Asta Tinggi	109	24.560	763	256.821	28	293.984
Gili Labak	300	3.419	406	30.683	784	26.053
Gil Squirt	38	.165	88	7.666	221	5.695
Jamik Mosque	222	2.991	945	39.006	280	40.656

The role of human resource management in driving creativity and innovation in the....

Museum	289	4.068	575	65.941	344	46.883
P.Nine	-		464	75.311	785	33.700
P.Badur	6	3.960	4	13.760	0	12.349
P.Lombang	244	9.413	405	60.564	142	74.236
P.Slopeng	52	7.570	260	44.536	60	24.654
R.Sand mattress	32	.341	35	527	26	791
Fort Site	26	.484	8	2.484	6	2.081
Batugong Site	2	.898	0	3.399	0	5.735
Bukit Tinggi	-		10	117.994	0	78.987
T.Tectona	-		-	-	7	51.895
Mutiara Tirta	-		-	-	2	87.622
TSI	0	2.492	0	24.733	0	20.606
Wis.BatuKapur	-		0	12.939	0	10.319
WPS	1	8.220	27	54.956	9	41.271
Yellow Cave	-		-	-	0	53.936
Yellow Cave	-		-	-	0	53.936
SUM	1.332	54.614	4.036	1.047.1 09	2.6 94	1.285.32 5

Source: Sumenep Regency Tourism, Culture, Youth and Sports Office

Based on data on the number of visitors in 2020, the number of visitors in 2020 showed a decrease in the number in terms of foreign tourists, which in 2021 reached 4,036, a decrease in 2022 to 2,694. Meanwhile, local tourists from year to year have increased in line with the incessant tourism promotion carried out by the Sumenep regional government. This is certainly a difficult task for the government to further increase the number of tourist visits, especially foreign tourists, because basically the success and failure of tourism promotion is also supported

by the provision of infrastructure, facilities and transportation that is easy and affordable. Therefore, it is very important to conduct research related to what skills are needed by stakeholders for the sustainability of tourism in Madura, especially Sumenep Regency.

1.2 GENERAL PURPOSE

- a. Encouraging the invention of science, technology, art, and culture of new policies in the measurement of TKT 1-6;
- b. Encourage research cooperation at the national and educational levels in the form of student exchanges;
- Improving the quality and competence of researchers at Trunojoyo University Madura;
- d. Produce scientific publications in accredited national scientific journals and reputable international journals;
- e. Directing, forming, and strengthening the research roadmap of researchers based on RIP within the scope of Trunojoyo Madura University.

1.3 SPECIAL PURPOSE

- Assess the views of various stakeholders: Workers and Students, Private Sector, Public Sector and Educational Institutions;
- b. Provide guidance to the government on key issues shaping the future of work in the tourism sector;
- c. Setting a vision for the future of work in tourism and its potential towards a demographic bonus by 2030.

CHAPTER II:

Literature Review

The literature review explores the themes of human resource management (HR) practices, creativity, innovation, and digital skills in the context of the Madura Halal tourism sector. The 4.0 era signifies a period of digital transformation, where new technologies emerge and shape dynamics in the tourism industry.

2.1 HRM PRACTICES IN THE TOURISM INDUSTRY

Human Resource Management (HR) plays an important role in the tourism industry, as it relates to effective management and deployment of human resources, which is essential for service delivery and customer satisfaction (Baum, 2007). HR practices, which include recruitment, training, performance management, and employee engagement, directly impact employee productivity, creativity, and innovation (Kovach & Millspaugh, 2004; Nickson, 2007). Therefore, understanding the role of HRM in managing human resources is essential to realize the full potential of the tourism sector (Ivanova et al, 2017).

2.2 CREATIVITY AND INNOVATION IN THE TOURISM SECTOR

Creativity and innovation are important drivers of competitiveness and growth in the tourism industry (Kapiki, 2016; Pikkemaat, 2008). In an era of rapid technological advancement, changing customer preferences, and increasing global competition, tourism organizations must adapt to sustainable change by fostering an environment that encourages creativity and sparks innovation among employees (Hjalager, 2010). Alzua et al. (2017) emphasize the relationship between innovative practices and employee training, stating that trained employees develop creative solutions to emerging

challenges. HR practices, particularly training and development, can stimulate creativity and innovation by equipping employees with the necessary skills and mindset (Sheehan et al, 2007).

2.3 THE ROLE OF DIGITAL SKILLS IN THE 4.0 ERA

The 4.0 era is characterized by technological advances such as big data, artificial intelligence (AI), machine learning, and the internet of things (IoT), which have a direct impact on the tourism sector (Li et al, 2018). These advancements require the development of digital skills, as they transform traditional tourism offerings and customer interactions (Gretzel et al., 2015). Sigala (2017) argues that organizations with employees equipped with digital skills are more likely to adapt to technological changes and take advantage of the benefits of innovation. However, it is important to strike a balance between the integration of digital technologies and the traditional human touch in the tourism industry, as both aspects contribute to the overall customer experience (Kiráľová & Pavlíčeka, 2015). The Impact of Work Experience and Demographic Factors on Creativity and Innovation

The existing literature highlights the influence of factors such as work experience, age, gender, collaboration, and knowledge ability on creativity and innovation in the tourism industry (Wang & Wong, 2014; Nor et al, 2016). However, there is limited consensus on the direction of this relationship. Research on the role of work experience in fostering creativity and innovation can provide varied results (Amabile, 1999; Collins & Smith, 2006), with some studies showing that increased work experience reduces creativity and innovation (Ng & Feldman, 2013).

This literature review underlines the importance of examining the relationship between MSDM practices, digital skills, work experience, and creativity and innovation in the Madura halal tourism sector during the 4.0 era. By understanding these relationships, industries can adapt to changing landscapes, take advantage of new technologies, and foster an environment conducive to creative thinking and innovative practices.

CHAPTER III:

Partner Agency Profile

The partner agency involved is Universiti Teknologi MARA (UITM) from Malaysia. Universiti Teknologi MARA (UiTM) is a public university based in Shah Alam, the capital of the state of Selangor, about 28 kilometres (17 mi) west of the country's capital, Kuala Lumpur. Established in 1956 as the RIDA (Rural & Industrial Development Authority) Training Centre, it opened its doors to about 50 students with a focus on helping rural Malays. Since then it has grown to become the largest higher education institution in Malaysia with physical infrastructure, staff organization (academic and nonacademic) and student enrollment. The university consists of one main campus, 13 autonomous public campuses and 21 satellite campuses. With 17,000 academic and non-academic staff, UiTM offers around 500 programs ranging from undergraduate to postgraduate levels. It is home to about 168,000 students: bumiputeras and international students, in both full-time and part-time modes. Teaching is entirely done in English

The slogan used in UITM is SMART UNIVERSITY which has a unique goal, which is to create and enrich student experiences in a sustainable manner and is ready to be used in the world of work, at least as staff through the application of innovative technology as a solution for the industrial world. Looking at the profile of this agency, it is hoped that it will be very in line with the Research Group's scheme in the field of technology transformation for human resources as tourism actors in the Madura area.

CHAPTER IV:

Research Methods

4.1 RESEARCH METHODOLOGY

4.1.1 Research Data

The data of this study using multiple linear regression were obtained from the distribution of questionnaires. In the questionnaire, several questions have been prepared that are in accordance with the variables to be studied. The questionnaire was distributed to all tourist villages that had received permits from the tourism office. The research was conducted in every tourist village in the districts of Bangkalan, Sampang, Pamekasan, and Sumenep.

4.1.2 Sampling Techniques

The data collection technique in this study uses the purposive sampling technique. Some of the categories of purposive sampling techniques are:

- (1) village heads and village administrators,
- (2) management of tourist attractions,
- (3) surrounding communities that utilize tourist attractions, and
- (4) answering all questions directly related to research variables.

4.1.3 Hypothesis Testing

Validity and Reliability Testing

Validity Testing aims to test how valid the data used in this study is. Meanwhile, reliability tests how reliable the research data used is. If the validity and reliability test is in accordance with the specified requirements, then the data used can be said to be valid and reliable

Descriptive Statistical Test

Descriptive statistical testing was used to see the distribution of data in this study. For descriptive statistical tests, only minimum data, maximum data, and mean will be displayed.

Classic Assumption Test

The classical assumption test consists of four tests, namely the normality, multicollinearity, heteroscedasticity, and autocorrelation tests. For the normality and heteroscedasticity test, the alpha limit used was 5% or 0.05. If the significance value is >0.05, then the data is normal and free from heteroscedasticity. For multicollinearity, it can be seen at the Tolerance value of <1 or VIF <1,000. Finally, for autocorrelations, you can look at the Durbin-Watson table with the terms of the lower limit of -2 and the upper limit of 2. If all tests have been met, then testing can be continued on hypothesis testing (Ghazali, 2013).

Multiple Linear Regression Analysis

Multiple linear regression analysis was used to answer the hypothesis for the fraud prevention model. The following is a research model for fraud prevention:

$$Y1 = \beta \ 0 + \beta \ 1 \ X \ 1 + \beta \ 2 \ X \ 2 + \beta \ 3 \ X \ 3 + \beta \ 4 \ X \ 4 + \varepsilon$$

Information:

Y1

: Organizational creativity of halal tourism village

management

 β 1 – β 4: Koefisen X 1 : Planning X 2 : Organizing X 3 : Briefing

X 4 : Control & Renewal

ε : Error

The results of the test using multiple linear regression analysis will look at several important components to answer the hypothesis. The components of the exam are the determination coefficient, the F test, and the partial test. The coefficient of determination can be seen in the adj. R2 column. For the F test, it can be seen in the ANOVA table, if the ANOVA sigfinakan value < 0.05, then it can be concluded that the F test has been successful. Finally, a partial test to see the direct influence of independent variables on dependent variables. If the value is significant on the partial test <0.05 then the hypothesis is accepted or the independent influence on the dependent is said to be mutually influential.

4.2 DEVELOPMENT ROAD MAP

Below is the *Road Map* of research development This systematics will provide an overview of the *research roadmap*.

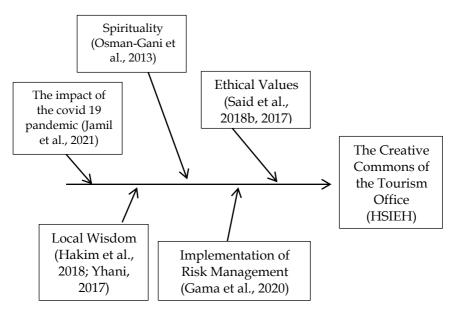


Figure 3.1: Research development road map

CHAPTER V

Results of Research and Discussion

5.1 RESEARCH RESULTS

5.1.1 Research Sample

The object of this research is all tourist villages that have received recommendations from tourism offices throughout Madura. The questionnaire was distributed to tourist attraction managers, village managers, and local residents who took advantage of the tourist attraction. Based on the results of the survey that has been conducted, the number of samples that will be used for this study is 505 respondents. Here are the details of the sample selection process:

Table 4.1 Research Sample

Sum				
Population	560			
Elimination	(67)			
Sample	493			
Details				
Bangkalan	127			
Sampang	129			
São Paulo	114			
São Paulo	123			

Source: data processed, 2023

5.1.2 Descriptive Statistics

Descriptive statistical tests were used to see an overview of the distribution of data used in this study. The descriptive statistical test will display the minimum value, maximum value, mean and standard deviation. Here are the details of the descriptive statistical test:

Table 4.2: Descriptive Statistical Test

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Planning	493	9	20	19,791	1,698
Organizing	493	5	24	23,667	1,917
Briefing	493	7	20	19,840	1,916
Control	493	6	25	24,224	1,389
Renewal	493	14	25	22,224	1,759

Source: data processed, 2023

Based on Table 4.2, it can be seen that Planning has a minimum value of 9, a maximum value of 20, a mean of 19,791, and a standard deviation of 1,698. Furthermore, Organizing has a minimum value of 5, a maximum value of 24, a mean of 23.667, and a standard deviation of 1.917. The briefing has a minimum value of 7, a maximum value of 20, a mean of 19.840, and a standard deviation of 1.916. Finally, Control & Renewal has a minimum value of 6, a maximum value of 25, a mean of 24.224, and a standard deviation of 1.389.

5.1.3 Classic Assumptions

Test Assumption classical Consists from four testing that is test normality, multicollinearity, heteroscedasticity, and autocorrelation.

Table 4.3: Classic Assumption Test

Variable	Heteroscedasticity	Tolerance	VIVID
Planning	0,461	0,631	1,348
Organizing	0,517	0,682	1,466
Briefing	0,113	0,766	1,305
Control & Renewal	0,989	0,849	1,178
	0,113	0,766	1,305

Kolmogorov-Smirnov: 0.085 Adj. R² : 0,894

Durbin-Watson : 1,690
Test F : 40,990
ANOVA : 0,000

Source: data processed, 2023

Table 4.4 shows the entire test of the classical assumption. In Table 4.4, it can be seen that the normality test has a significance of 0.085 > 0.05, meaning that the data used is normal. Next, the multicollinearity test was indicated by the tolerance and VIF values. Based on the results of the multicollinearity test, the tolerance values were 0.631, 0.682, 0.766, and 0.849, while the VIF side had values of 1.348, 1.466, 1.305, and 1.168. The results of the multicollinearity test showed that the data were free from multicollinearity. In the heteroscedasticity test, it was seen that the significance values were 0.461 > 0.05, 0.517 > 0.05, 0.113 > 0.05, and 0.789 > 0.05, meaning that the data used were free from heteroscedasticity. Lastly, the autocorrelation test can be seen in the Durbin-Watson value. In this test, the Durbin-Watson value was 1.690, meaning the data was free of autocorrelation. So based on the four tests, the data used is data that passes all of the classical assumption tests so that it is entitled to proceed to hypothesis testing.

5.1.4 Multiple Linear Regression Analysis

Multiple linear regression analysis also consists of multiple tests. Multiple linear regression analysis will sequentially explain the results of the determination efficiency, simultaneous test, and partial test.

Table 4.4: Multiple Linear Regression Analysis

Variable	t Count	Significance
Planning	4,406	0,000
Organizing	0,880	0,010
Briefing	4,170	0,000
Control & Renewal	7,442	0,000
Adj. R ²	: 0,444	
Test F	: 40,990	
ANOVA	: 0,000	

Source: data processed, 2023

Based on table 4.5, it is shown that the value of the determination coefficient denoted by Adj. R2 has a value of 0.444 or 44.4%, meaning that there is still a chance of additional variables outside of the variables used in this study of 55.6%. Furthermore, simultaneous tests can also be seen in table 4.4 in the F and ANOVA test sections. Based on the simultaneous test, the value of F was 40.990 with a significant value of ANOVA of 0.000 < 0.05, meaning that all independent variables simultaneously had a significant effect on the dependent variables.

The results of the partial test can be seen in table 4.5 shown in column t Calculation and Significance. Based on the partial test, Planning has a significance value of 0.000 and t count 4.406. The results of the Planning variable test prove that Planning is significantly

positive for the creativity of village management organizations. These results prove that the first hopitesis is acceptable. Furthermore, Organizing has a significance value of 0.01 and t calculation 0.780. The results of the testing of the Organizing variable prove that Organizing is significant to the creativity of the village management organization. This result proves that the second hopitthesis is accepted. The briefing has a significance value of 0.000 and a t count of 4.170. The results of the Briefing variable test proved that the Briefing was significantly positive for the creativity of the village management organization. These results prove that the third hopitthesis is acceptable. Finally, Control & Renewal has a significance value of 0.000 and t count 7.442.

The results of the Control & Renewal variable test prove that Control & Renewal is significantly positive for the creativity of village management organizations. These results prove that the fourth hopitesis is acceptable.

5.2 DISCUSSION

5.2.1 Planning and Management of Tourism Villages

Planning is important in achieving goals and increasing creativity in village management. In the context of a tourist village, planning includes everything from planning tourism facilities such as lodgings and restaurants, to tourism activities such as village festivals and art activities. Having good planning can provide direction and structure, allowing tourism village managers to focus on their development goals.

The need for effective planning in the management of tourism villages is seen in a study (Aprilia et al., 2021) that found a significant positive relationship between Planning and the creativity of village management organizations. According to this study, village leaders who are able to plan well and effectively have more opportunities to encourage and spur creativity in tourism village management.

Madura's Potential and the Influence of Planning

The people of Madura have a strong work ethic and high planning, which is reflected in research by Faraby (2016). This shows that they are capable of planning work well to achieve satisfying and creative results. This strength and dedication gives Madura great potential in the effective management of tourist villages.

There is no work activity carried out by the people of Madura without being well planned and praying to the Almighty Creator first. This fact proves that they have a high Planning and that is integrated with their beliefs and culture. Thus, seeing how work ethic and planning are an integral part of Madura culture, it is important to appreciate and utilize these values in the management and development of tourist villages.

The Impact of Planning on Organizational Creativity

In this regard, planning has been shown to have a significant impact on organizational creativity. This relationship paves the way for constructive improvement in the management of tourist villages. With a deep understanding of the important role of planning in organizational management, improved planning can be catalyzed as a tool to influence and increase organizational creativity. This study illustrates how important Planning is in increasing organizational creativity in the context of tourism village management. The implementation of effective planning is able to encourage creativity in tourism village management, which will ultimately produce sustainable benefits and have a positive impact on the people of Madura and visitors to tourist villages. The researchers in this study believe that more research and practical implementation will further strengthen these findings and launch new adventures in increased creativity and management of tourist villages.

5.2.2 Organizing and Creativity of Village Management organizations

Organizing is the process of grouping different jobs into the same division or department and ensuring that all tasks and responsibilities are well coordinated and organized. Organizing in this context includes all aspects such as the distribution of tasks, the determination of responsibilities, and also the arrangement of village resources. Organizing also includes building a good relationship between the management team and the village community.

In fact, researchers (Chun et al., 2013) found that Organizing has a significant influence on the creativity of village management organizations. In addition, in the management of tourist villages, it is also important to carry out good coordination and cooperation between the village head and the community. The village head must have good organizing skills to be able to manage and foster the village community well, produce creative ideas for village management and development.

Globalization and Organizing

With the increasingly advanced globalization, and the increasing sophistication of today's technology, Organizing plays an even more important role to be able to coordinate organizational activities, achieve goals and ensure that all processes run efficiently. For example, the people of Madura are expected to be able to utilize digital tools in the organizing process, such as promoting their tourism villages through digital platforms (Setiawan, 2015). This opens up new opportunities for villages to introduce their local tourism industry to a wider and global audience.

The Impact of Organizing on Organizational Creativity

The results in this study show that Organizing has an effect on the creativity of village management organizations. Efficient organizing can help facilitate the ideation process, manage resources, and overall increase creativity and innovation in village management. This indicates that the creativity of the tourism village management team can be improved through good organization and management.

Overall, the organization plays an important role in creativity and strategy implementation in the management of tourist villages. In addition, Organizing also plays a role in encouraging the people of Madura to adapt to global developments and utilize technology in this process. The final conclusion of this study is that Organizing plays an important role in the creativity of village management organizations and the Madurese community must continue to adapt to technological changes to increase the efficiency and effectiveness of this organizing process.

5.2.3 Briefing and Creativity of Village Management Organizations

Briefing, in this context, is a structured communication process that directs and provides important information to the members of the organization so that they can work efficiently and effectively. In the context of village management, the Briefing not only serves to provide instructions, but also to build a conducive work climate that triggers creativity and innovation.

The research data showed that there was a positive relationship between the frequency and quality of briefings and the level of creativity in village management organizations. This illustrates that effective Briefing is an important foundation to encourage the people of Madura, known for their high work ethic, to be more innovative and creative in managing their villages (Faraby, 2016).

Briefing as Motivation

Briefings are important in motivating teams and individuals in the organization to work toward a common goal. This is explained by (Wedantara and Adi, 2019) that Briefing can be a motivation for every component in the organization to increase creativity. The village head, as the leader of the organization here, plays an important role in being

The Impact of Briefing on Organizational Creativity

A good and effective briefing can influence an organization's performance and increase their creativity. Through the right Briefing, village management organizations can discuss new goals, strategies, and approaches to achieve those goals. This in turn can spark creative and innovative ideas that can then be implemented in village management. The results of this study show that Briefing has a significant impact on creativity in village management organizations. The village head and his team need to conduct the Briefing effectively to ensure that all important information is clearly conveyed and that all team members have a good understanding of what is expected of them. Effective and timely briefing will increase work ethic and positive contribution to creativity in village management organizations.

5.2.4 Control & Renewal and Creativity of Village Management Organizations

Control and Renewal are two key aspects of effective organizational management. Control functions to ensure that all elements of the organization work according to the goals and standards that have been determined. Meanwhile, Renewal plays a role in adapting and responding to changes, both in terms of technology, public demand, and strategic policies.

Both play an important role in village management, especially in increasing the creativity of village management organizations. Good control will improve the performance and efficiency of the operation, while efficient operation will in turn create room for creativity and innovation. Meanwhile, active renewal ensures that the organization remains relevant and up-to-date by balancing maintaining practices that have proven to be effective and supporting new and creative ideas.

Control & Renewal as the Main Driving Factor of Creativity

Control and Renewal work as a catalyst in encouraging the creativity of village management organizations. First, Control through effective coordination and continuous monitoring ensures that the maximum potential of each individual and other resources can be utilized. Second, with Renewal, organizations actively seek out new opportunities and adapt to change, which ultimately results in innovation and creativity.

The Influence of Control & Renewal on Organizational Creativity

In this study, it was proven that there is a positive relationship between Control & Renewal and creativity in village management organizations. With good controls and continuous updates, organizations can create working conditions conducive to creativity. A proper control strategy will allow organizations to evaluate their performance and determine which areas need improvement or change. Meanwhile, with Renewal, organizations can continue to evolve and adapt to changing environments, which can stimulate creative thinking and innovative ideas.

Overall, the implementation of Control & Renewal can positively affect the level of creativity of an organization in village management. It highlights the importance of having a strong control structure and a commitment to renewal and adaptation to environmental changes. Therefore, there is a need to continuously develop and improve the Control & Renewal process in village management organizations. Thus, it will encourage the growth of creativity in village management, as well as strengthen the position of the village in facing future challenges.

The Role of Human Resources in Fostering Tourism Industry Creativity in Madura

The role of human resource management (HR) in fostering creativity and innovation is very important in various industries. The

impact is especially visible in the tourism sector, where competitive advantage often depends on the ability to deliver unique, impressive, and authentic experiences. This discussion explored the factors that affect the creativity and innovation of the Madura halal tourism sector in the era of digital transformation marked by advances in artificial intelligence (AI), machine learning, the internet of things (IoT), and big data.

The Importance of Human Resource Management in the Tourism Industry

HR practices are essential in shaping employees' attitudes, abilities, and contributions to organizational goals, especially in the service-oriented tourism industry. An in-depth understanding of the implications of MSDM practices on creativity and innovation in the halal tourism sector is essential for organizations in Madura, as they face the challenges and opportunities of the 4.0 era (Fernandes & Machado, 2022; Liu et al., 2023). Effective HR practices result in higher motivation, job satisfaction, and lower employee turnover, all of which are factors that contribute to the overall success of the organization. Organizations with strong Human Resources practices can attract, develop, and retain talented employees, as well as foster an environment that supports creativity and innovation (Saks, 2022). In the face of technological advancements, the importance of Human Resources is increasing as employees have to adapt to new digital tools and the rapidly evolving tourism landscape.

Training and Development in the 4.0 Era

In the context of the 4.0 era, continuous learning and adaptation are essential in producing creative and innovative solutions for organizations in the tourism sector. Employee training and development plays a crucial role in driving organizational success, ensuring employees remain well-understood and agile in thinking. Tailored training programs can encourage creativity and innovation by introducing employees to new concepts, improving their problem-

solving skills, and facilitating collaboration (da Silva et al., 2022; Vardarlier, 2016).

In the halal tourism sector, organizations must strike a balance between providing culturally rich experiences and adopting advanced digital tools to stay competitive. Developing digital skills that complement traditional offerings is critical for employees and organizations in the 4.0 era. Organizations operating in the halal tourism sector in Madura can design training programs that equip employees with digital skills while maintaining the importance of cultural offerings (Dabić et al., 2023).

The Role of Digital Skills in Creativity and Innovation

The development of digital skills is necessary to adapt to the demands of the 4.0 era. Employees equipped with digital skills can better analyze complex data, create value through digital tools, and communicate effectively across multiple platforms. Employees who have digital intelligence can leverage new technologies to increase organizational productivity and improve customer experience (Lima & Galleli, 2021; Mikhaylov et al., 2014).

However, it is important to note that the great reliance on technology can undermine the human touch necessary for an authentic customer experience in the tourism industry. Organizations must carefully consider the integration of digital tools and their equally important importance in developing creativity, problem-solving, cultural knowledge, and soft skills among employees (Wang et al., 2022). This balance is important to create a unique, engaging, and innovative tourism experience that serves the halal tourism market.

The Impact of Work Experience on Creativity and Innovation

The influence of work experience on creativity and innovation in the tourism sector is a topic of debate. On the one hand, capable employees with extensive experience and honed skills can bring innovation based on their understanding of the nuances of the industry. Their wealth of knowledge can contribute significantly to the development of new solutions and improvements in organizational processes (Saks, 2022).

On the other hand, extensive work experience in the field may limit an employee's openness to new ideas. The risk of conforming to existing norms and practices can limit the ability to think outside the box and explore unconventional ways to encourage creativity and innovation. Organizations that encourage and adopt a flexible approach to change often benefit from a diverse workforce of employees with varying tenures, which combine experienced skills with new perspectives (Wani, 2023).

Demographic Factors and Collaboration as Catalysts for Creativity and Innovation

As the halal tourism sector develops, the diverse groups of tourists and employees demand an increasingly inclusive and collaborative work environment. Organizations that encourage collaboration and foster a culture of shared purpose are more likely to experience increased creativity and innovation. Collaborative teams representing diverse backgrounds can generate unique ideas, perspectives, and experiences, fostering an environment conducive to creative problem-solving and generating innovative solutions (Dabić et al., 2023; Fernandes & Machado, 2022). Gender, age, and other demographic factors can affect an employee's perspective and contribution to the creative process. A diverse and inclusive workforce ensures a holistic understanding of different customer segments and their needs, thus driving the development of tailored tourism offerings to serve a wider audience.

Aligning HRM Practices with Organizational Goals and Strategies

Aligning HR practices with organizational goals and strategies is critical to ensuring all employees are working collectively to achieve overarching goals. Organizations that strategically design MSDM practices to foster creativity and innovation can further strengthen their

competitive advantage in the tourism industry. Recruitment, performance management, and employee engagement activities must align with the organization's vision, mission, and values, ensuring employees adhere to the company's culture, resulting in increased productivity and innovation (Saks, 2022).

In Madura's halal tourism sector, organizations can focus on employee motivation and strategic alignment, reinforcing the importance of creativity and innovation while meeting the specific needs of this niche. Aligning organizational values with target market expectations results in cohesive management strategies and practices (del-Castillo-Feito et al., 2022; Liu et al., 2023).

Thus, HRM practices play an important role in fostering creativity and innovation in the halal tourism sector in the 4.0 era. This comprehensive discussion emphasized the importance of employee training and digital skills development, emphasized the balance between technology adoption and the human touch, explored the impact of work experience, underscored the value of collaboration and demographic diversity, and highlighted the need for strategic alignment. HRM practices in organizations (Ilic, 2023; Wang et al., 2022).

Organizations operating in Madura's halal tourism sector must leverage these insights to successfully navigate the challenges and opportunities of the 4.0 era. By developing an innovative and creative environment, they can thrive in an increasingly competitive and technologically advanced tourism landscape, providing exceptional experiences to tourists and catering to the growing halal tourism market.

CHAPTER VI

Potential and Concept of Halal Tourism in Madura

Halal tourism has become one of the fastest-growing segments in the global tourism industry. The growth of halal tourism is fueled by the increasing awareness of halal values as well as the sharia lifestyle, which is reflected in the need for products and services that are suitable for Muslim travelers. Madura, an island in East Java Province that has a Muslim majority population and distinctive cultural richness, has great potential to develop the halal tourism industry. In this chapter, we will explore the potential and concept of halal tourism in Madura in more detail as well as the factors that play a role in its growth.

6.1 BACKGROUND AND POTENTIAL OF HALAL TOURISM IN MADURA

Madura is an island located in the east of East Java Province, which has different geographical and climatic characteristics from the surrounding area. These characteristics create diverse and attractive tourist attractions for travelers, such as beaches, hills, historical sites, and art and culture. One of the things that needs to be observed in developing tourism in Madura is the ongoing urbanization process which is a challenge, as well as an important opportunity for the growth of halal tourism.

Madura with its Muslim-majority population offers great opportunities to develop halal tourism, which includes accommodations, restaurants, recreational venues, and public infrastructure that adopts halal and sharia standards in its services. Many of these opportunities have not been fully utilized, which can be improved through innovation and improvement of the quality of products and services that are in line with Islamic values.

6.2 MADURA HALAL TOURISM INDUSTRY

The rapidly growing tourism industry in Madura cannot be separated from its cultural and natural wealth. Madura, an island located in the northeast of Java, Indonesia, has a diverse range of tourist assets, including a beautiful historical, cultural, and natural heritage. A brief introduction to the halal tourism industry in Madura is very important, considering its growth and potential.

Halal tourism, as we know it, refers to a segment of tourism that fully complies with Islamic laws and principles. From food and beverages, to lodging, transportation, and tourist attractions, all are designed to meet the needs of Muslims who uphold the teachings of Islam in their daily lives, including when traveling. Madura, known as an area with a predominantly Muslim population, is an ideal place for the development of halal tourism.

Madura's halal tourism industry has various alluring elements, including the warm hospitality of the local community and various halal tourist objects and destinations. There are rich local traditions and customs, such as traditional dances and music, as well as typical Madurese crafts. Not to mention a variety of halal food that is an inseparable part of the halal tourism experience.

However, it should be noted that the development of the tourism industry must go hand in hand with technological developments and global trends, one of which is digitalization and the implementation of the Industrial Revolution 4.0 (IR 4.0). The importance of digitalization and IR 4.0 in this industry cannot be underestimated. Digital transformation has drastically changed the way we do business, including in the tourism industry.

Digitalization allows for easy access to information for tourists. Starting from finding tourist destinations, making itineraries, booking tickets, lodging, to finding halal restaurants can be done with just a few clicks on a smartphone. This efficiency and convenience have made digitalization a necessity in the current and future tourism industry.

Meanwhile, IR 4.0 with its advanced technologies such as Artificial Intelligence (AI), Internet of Things (IoT), cloud computing, blockchain and others, opens up new opportunities in driving efficiency and providing unique experiences to travelers. This technology can be used to enrich interactions with customers, provide more personalized services, and assist in strategic decision-making with more accurate and timely data and analysis.

Therefore, understanding and implementing digitalization and IR 4.0 in business strategy is an absolute requirement in developing Madura's halal tourism industry. This implementation should be seen as an investment, not a cost, to generate innovation and quality improvement that will provide added value and long-term benefits.

In this chapter, we have seen an overview of the halal tourism industry in Madura and why digitalization and IR 4.0 are so important in the development of this industry. The next chapter will discuss more deeply about the impact of the Industrial Revolution 4.0 and its impact on the halal tourism industry.

The Concept of Halal Tourism and Its Basic Principles: An In-Depth Discussion

Halal Tourism is a concept that has gained significant momentum in recent years. This concept is more than just a vacation destination option or a regular tourism activity; It is a movement focused on creating an environment that provides a vacation experience that unites with religious values and teachings for Muslim travelers. Halal tourism, therefore, not only regulates the places or activities that can be visited and enjoyed, but also emphasizes the overall perception of ethical practices and interactions, in line with sharia law.

1. The Principle of Tawheed (Unity)

Tawheed or "unity" is a profound principle in Islam, and it is also applied in the context of halal tourism. This principle encourages a harmonious and integrated order in the development of halal tourism, blending appropriately between experiences, places, and activities offered to tourists.

This principle reflects a holistic view in the concept of halal tourism, pointing to the comprehensive attachment between humans, the natural environment, the social environment, and the local culture of a tourist destination. The concept of tawheed in halal tourism guides sustainable and sustainable tourism practices by encouraging the protection and appreciation of the earth and the creatures that live on it, as well as fostering fair and harmonious interactions between humans and their environment.

2. The Principle of Al-Masadah (Common Good)

The concept of Al-Masadah, or "common good," is another fundamental principle in halal tourism. This principle emphasizes that halal tourism must provide good for all involved, whether it is travelers, local communities, or the natural environment.

More specifically, this principle encourages tourism that provides economic benefits to local communities, whether it is through job creation, revenue from the local economy, or investment in infrastructure. To the extent that tourism contributes to the well-being and prosperity of local communities, the Al-Masadah Principle is seen as fulfilled.

3. The Principle of Al-'Adl (Justice)

Al-'Adl, or "justice," is another important principle in the concept of halal tourism. This requires fairness in all business practices related to halal tourism. In the context of tourism, this means practices that ensure fair trade, a decent working environment, and the equitable and inclusive distribution of the benefits of tourism.

First, tourism must promote and practice the principles of fair trade. This involves proper appreciation of workers and local communities who participate in the tourism industry, as well as the equitable distribution of the economic benefits of tourism.

Second, tourism must create a decent working environment, both for workers directly involved in the tourism industry and for workers in related sectors. This principle involves protecting workers' rights and creating good working conditions for them.

Third, the implementation of tourism goals should promote inclusive development, by ensuring that the benefits derived from tourism can be enjoyed by all people, regardless of their socioeconomic status.

4. The Principles of Ahlaqiyat (Ethics)

Ahlaqiyat, or "ethics," is another key principle in the concept of halal tourism. This principle demands that all activities and interactions related to tourism must be carried out with a high code of conduct.

This principle involves the application of moral and ethical values in all aspects of tourism. This means maintaining a balance between human needs and the environment, as well as between tourism development and the preservation of natural resources. This principle also urges the tourism industry to work in a fashionable and responsible way, without harming others or the environment.

For example, the principles of Ahlaqiyat can affect how tourists interact with the natural environment and wildlife, how they respect local values and traditions, and how they seek to minimize their footprints.

Overall, the goal of the halal tourism concept and its basic principles is to achieve a vacation experience that respects and embraces Islamic values, while also engaging tourists in fair, ethical, and sustainable practices. Thus, these principles guide the development of halal tourism towards the broader goal of supporting well-being for all stakeholders, advancing social and economic justice, and protecting and promoting respect for the environment.

Halal tourism has gained significant growth in recent years, evidenced by the emergence of countries that focus on the sector and the introduction of halal-oriented products and services. Indonesia, with the largest number of Muslims in the world, has opened up a lot of potential in the development of the Halal tourism industry. Madura Island, as part of the country, with its cultural diversity and stunning natural beauty, is a destination that deserves to be reckoned with in the Halal tourism arena.

Realizing this potential to become real, it requires a measurable and sustainable strategy that involves various dimensions in the tourism industry.

The following are some important dimensions in the development of Halal Tourism in Madura:

1. Accommodation Dimensions

Accommodation is an important element in the development of Halal tourism. Hotels, lodgings, and other accommodations must be tailored to the needs of Muslim tourists. For example, providing ablution baths, qibla, and prayer rooms. In addition, the food and beverages provided must meet halal standards and legal Halal certification. This shows the commitment of the accommodation industry in supplying facilities that are in accordance with Islamic sharia.

2. Food and Beverage Dimensions

The presentation of food and beverages labeled Halal is a very important aspect for Muslim tourists. Therefore, many places to eat in Madura must serve halal food and with a stunning variety of menus. In addition to having Halal certification, restaurants or eateries also need to provide facilities for Muslim travelers such as Qibla directions markers and ablution places. With this, tourists can enjoy culinary comfort and still maintain their worship.

3. Recreation and Culture Dimension

Madura, known for its beauty, has many tourist attractions that can be visited, ranging from natural attractions to historical sites. The integration of the concept of halal tourism in these attractions will provide added value and attract more Muslim tourists. In addition, the uniqueness and richness of Madura's diverse art and culture is also an important aspect that can add to the quality of tourist visits. Cultural and Monday activities that are in accordance with Halal values can be an attraction in itself.

4. Dimensions of Design and Event Management

Promoting tourism activities that highlight the distinctive characteristics of Madura can be an effective way to attract more visitors and tourists. Festivals, carnivals, and cultural exhibitions can be designed and managed according to halal standards and principles, not only showing the uniqueness and diversity of local culture, but also showing Madura's commitment to targeting the Muslim tourist segment.

5. Dimensions of Human Resources Education and Training

Education and training of human resources involved in halal tourism is essential to ensure the consistency and quality of the products and services offered. Knowledge of the demands of Muslim tourists, halal standards, and an understanding of the concepts and principles of Islamic ethics can be an improvement in the quality of tourism services in Madura. In the long run, competent and high-quality human resources will make a great contribution to the successful development of halal tourism in Madura.

Overall, Halal tourism not only generates economic benefits, but also has the potential to develop a more inclusive and sustainable tourism sector. So, it is important for Madura to design and implement strategies designed with this goal in mind. This strategy must ensure that all dimensions in tourism development are found and used in the

best way possible in order to create an experience that leaves good memories for every Muslim tourist who travels to Madura.

Halal Tourism in Madura: Key Factors in Successful Development

Halal tourism is a rapidly growing sector around the world. It refers to an industry that includes tourism services that are designed and implemented according to Islamic principles. Madura Island, as an integral part of Indonesia, has a number of great potentials for the development and improvement of the halal tourism industry. However, there are several important elements to determine the success of halal tourism development on this island. The following are some key factors to consider:

1. Understanding of Halal Tourism

Awareness and understanding of what is meant by halal tourism is very important. It involves an understanding of halal standards and principles and how they apply in the context of tourism. This involves not only knowledge of halal food, but also an understanding of how Islamic principles apply to various aspects of travel, such as accommodation, transportation, and tourism.

2. Training and Education

Training and education are key to building a successful halal tourism industry. It involves training tourism personnel on halal principles and how to apply them in practice. It also involves educating the general public about halal tourism and its benefits, both from an economic and socio-cultural perspective.

3. Local Community Involvement

Local community involvement is an important factor in the development of halal tourism. Local communities should feel the benefits of tourism development in their area and feel part of the process. It can be developed through job creation, income increase, and education about halal tourism and its benefits.

4. Promotion and Marketing

Effective promotion and marketing are essential in the development of halal tourism. This involves targeting the right market, developing effective promotional materials, and disseminating information about halal tourism destinations and facilities in Madura.

5. Quality of Service and Accommodation

The quality of service and accommodation is very important in halal tourism. Accommodations and facilities must be clean, safe, and meet halal standards. The services provided must also be professional and understand the needs and expectations of the customers.

6. Sustainability

Sustainability is another important factor that needs to be considered in the development of halal tourism. This involves the development of tourism that respects and protects the natural and cultural environment of Madura. It also means that tourism development should not harm local communities and lifestyles.

7. Regional and International Cooperation

Regional and international cooperation can play an important role in the development of halal tourism. This can involve working with other countries in the promotion and development of halal tourism, as well as sharing best practices and learning from their experiences.

By paying attention to these key factors, Madura has great potential to become a major halal tourism destination, both in Indonesia and internationally. With the right strategy and commitment to quality and sustainability, the development of halal tourism could be one of the island's key economic drivers in the future.

CHAPTER VII

The Industrial Revolution 4.0 and Its Impact on the Halal Tourism Industry

The Industrial Revolution 4.0 or better known as IR 4.0 is a turning point in the history of technological development where digital, physical and biological are integrated. The core of IR 4.0 is the existence of massive connectivity through the internet network that allows the flow of information between humans and machines.

IR 4.0 is characterized by four main components, namely Big Data and Analytics, Autonomous Robots, Simulation, and System Integration. Big Data and Analytics handle massive data collection and analysis to gain patterns and insights that can be used in decision-making. Autonomous Robots allow machines to work automatically. Simulation facilitates in the planning and development process of new products and services and finally, System Integration encourages collaboration between humans and machines.

For the halal tourism industry, IR 4.0 offers a variety of new opportunities. For example, Big Data and Analytics can be used to understand travelers' behavior patterns and preferences, then tailor products and services as needed. Autonomous Robots can provide 24/7 service and improve efficiency. Simulation can help in designing better travel experiences, while System Integration facilitates collaboration and coordination between various stakeholders in the tourism industry.

However, there are also challenges that go hand in hand with the implementation of IR 4.0. One of them is the issue of privacy and data security. In an era where data is a valuable asset, how to manage and protect data is a challenge in itself. In addition, the adoption of advanced technologies such as Artificial Intelligence and the Internet of Things requires a lot of investment as well as changes in the mind-set and capabilities of existing human resources.

It is undeniable that IR 4.0 has a significant impact on the halal tourism industry, both opportunities and challenges. Adapting and implementing innovation is the key to being able to survive and thrive in the competition of the halal tourism industry in this all-digital era. The implementation of IR 4.0 is needed to encourage creativity and innovation and maximize the potential of Madura's halal tourism industry. In the next chapter, we will delve deeper into the role of human resource management in this era.

The industrial revolution 4.0 refers to the dramatic changes in the way technology is used and applied in various aspects of life, including in the tourism sector. The halal tourism industry is no exception which has felt the substantial impact of this revolution. The industrial revolution 4.0 has brought various digital technology innovations that have turned into powerful tools in planning, marketing, and providing tourism services. This has provided new opportunities as well as challenges for the tourism industry, including halal tourism. The following are some of the significant impacts of the industrial revolution 4.0 on the halal tourism industry:

7.1 VIRTUAL REALITY (VR) AND AUGMENTED REALITY (AR)

Virtual Reality (VR) and Augmented Reality (AR) technologies provide new opportunities in the travel experience. For example, travelers may be able to preview the places they want to visit in 3D format or enhance their visit experience with interactive detailed information. For halal tourism, this could mean the ability to experience or explore a place, event, or product in a halal virtual setting before actually experiencing it.

7.2 BIG DATA

Big data refers to the collection and analysis of large volumes of data generated through digital interactions. In the context of halal tourism, it can be used to understand the travel patterns, preferences, and behaviors of Muslim travelers, thus enabling tourism operators to offer more customized products and services and enhance the traveler experience.

7.3 E-COMMERCE AND ONLINE BOOKING PLATFORMS

E-commerce and online booking platforms have changed the way travelers plan and book their trips. For halal tourism, this opens up opportunities to expand market reach and facilitate access to halal tourism products and services. Currently, many booking platforms provide the option to filter accommodation, flights, and tour packages that offer halal facilities.

7.4 SOCIAL MEDIA AND INFLUENCER MARKETING

Social media has become a powerful marketing tool in the tourism industry, including in halal tourism. Platforms like Instagram, Facebook, and YouTube are used to promote destinations, share experiences, and leave reviews. Meanwhile, influencer marketing, which involves individuals who have large followers on social media, can be an effective marketing strategy to attract Muslim tourists.

7.5 INTERNET OF THINGS (IOT)

The Internet of Things (IoT) creates a network of a variety of physical devices – from smartphone devices to weather sensors – that connect to the internet and share data. In halal tourism, IoT can help improve travel efficiency and comfort. For example, smart technology in accommodations can adjust room temperature, lighting, and other amenities based on guest preferences.

The industrial revolution 4.0 certainly brings many new changes and challenges to the halal tourism industry. The opportunities

brought by this technology need to be leveraged to improve operational efficiency, improve service quality, and create new experiences for travelers. On the other hand, it is also important to recognize and address emerging challenges, such as data privacy issues and increased competition in the tourism industry. Thus, the halal tourism industry must be able to respond and adapt to these changes to remain relevant and competitive in this digital era.

CHAPTER VIII

The Role of Human Resource Management in the Implementation of IR 4.0 in the Halal Tourism Industry

Human Resource Management (HR) plays an important role in the implementation of IR 4.0 in the halal tourism industry. As the main driver of operations, HR has a responsibility to adapt and implement new technologies and align themselves with existing changes. The following are some of the important aspects of HR management that need to be considered during the implementation of IR 4.0:

- 1. Training and Development: To maximize the use of new technologies and tools, constant training and development need to be done. As time goes by, the technology used will become more sophisticated and complex. Therefore, it is important for HR to continue to increase knowledge and skills related to the technology used.
- 2. Job Description Update: With the adoption of new technologies in operations, the definition and work requirements of each position will change. HR management needs to update the job description to reflect these changes and ensure each team member understands the new responsibilities and challenges that must be faced.
- 3. Work Policy Adjustments: The implementation of IR 4.0 will affect how we work, including working hours, workplace and interactions between team members. Work policies need to be adjusted to accommodate these changes and create a conducive and productive work environment.

- 4. Wellbeing & Mental Health: IR 4.0 can affect the well-being and mental health of employees, especially those who are worried about job stability and significant changes in their duties. HR management needs to pay attention to and deal with these issues to keep employees motivated and productive.
- 5. Recruitment: With the adoption of new technologies, the halal tourism industry in Madura needs to look for new talents who have the appropriate skills and knowledge. HR management helps with the recruitment of candidates who meet these requirements.

IR 4.0 implementation is a process that involves the entire organization, starting with the leader and down to each employee. HR management is decentralized in managing these changes and ensuring the well-being and success of each team member, so it's important to prepare and support them on this journey. The next chapter will take a closer look at the use of Big Data and Artificial Intelligence in the halal tourism industry in Madura.

CHAPTER IX

Big Data and Artificial Intelligence in the Madura Halal Tourism Industry

Big Data and Artificial Intelligence (AI) are important elements in the Industrial Revolution 4.0 that are able to increase the efficiency and effectiveness of the halal tourism industry. In the context of halal tourism in Madura, the application of this technology has a number of potential benefits that can help optimize services and develop sustainable businesses.

The following are some of the benefits of using Big Data and Artificial Intelligence in the Madura halal tourism industry:

- 1. Introduction of Tourist Preference Patterns: Big Data and AI can be helpful in identifying tourist preference patterns and predicting future trends. With efficient data analysis, halal tourism managers can tailor their services to better meet the needs and expectations of visitors. In addition, it can also help increase customer satisfaction and maintain their loyalty.
- 2. Effective Market Segmentation: By understanding consumer preference patterns and behavior, Madura's halal tourism industry can segment the market more efficiently. Accurate segmentation allows companies to target their marketing strategies to reach the most potential customers, thereby improving overall marketing efficiency.
- 3. **Product and Service Development:** The data collected and analyzed by Big Data and AI can provide valuable insights into how to develop and improve the products and services offered to travelers. Innovation and quality improvement based on this

data will result in a more attractive and valuable halal tourism experience.

- 4. Better Business Decisions: Advanced AI and Algorithms can be used to process large and complex data, resulting in accurate analysis and knowledge that can be used to make smarter, more informed business decisions. This is important in a competitive and growing industry such as halal tourism.
- 5. Resource Scheduling and Optimization: The application of AI in the operations of the halal tourism industry allows for more efficient scheduling and use of resources such as labor and facilities. AI can reduce manual workloads and routine process automation, allowing human resources to focus on more strategic and innovative tasks.

In order to create successful and sustainable halal tourism in Madura, it is important to combine technologies such as Big Data and AI in business strategy. The utilization of this technology allows halal tourism businesses to reach a wider market, increase efficiency, and create a better and unique experience for visitors. In the following chapter, we will discuss the digitalization strategy and promotion of Madura's halal tourism in the IR 4.0 era.

CHAPTER X

Digitalization and Promotion Strategy for Madura Halal Tourism in the IR 4.0 Era

Digitalization and promotion represent two integral aspects in the spread of Madura's halal tourism industry, especially in the IR 4.0 era. To ensure the effectiveness of these deployments and expansions, several key strategies need to be considered and implemented.

Here are some important digitalization and promotion strategies:

- 1. Creating a Digital Platform: Having a digital platform, such as a website or mobile application, can make it easier for visitors to find information about halal tourist destinations and related services available.
- 2. SEO Optimization: Search Engine Optimization (SEO) is essential for increasing online visibility and bringing organic traffic to digital platforms. With the right keywords and quality content, a website or mobile application can appear at the top of the rankings in search results related to halal tourism.
- 3. Social Media and Influencer Marketing: Social media allows for direct interaction and engagement with the target audience. Through collaboration with influencers who have values and lifestyles that are in accordance with the concept of halal tourism, it can help increase the credibility and reach of the brand.
- **4. Using AI and Big Data Technology in Marketing:** These technologies can be used to analyze visitor data and their

behavior. The results of this analysis can then be used to create a more personalized and effective marketing strategy.

- 5. Virtual and Augmented Reality: Modern travelers are increasingly looking for unique and memorable travel experiences. Technologies such as virtual and augmented reality can be used to enrich the travel experience and provide an exciting preview of the tourist destination before they actually visit it.
- **6. Digital Payment Solution:** Digital payment solutions simplify the booking and payment process, enabling more efficient and faster transactions. This technology also creates a safer and more convenient transaction experience for visitors.

By implementing this strategy, Madura's halal tourism industry can take advantage of the power of technology in the IR 4.0 era to expand its spread and promote its tourist destinations. In the next chapter, we will discuss the challenges that may be faced in the digitalization and promotion of Madura's halal tourism and how to overcome them.

Conclusion

The quality of Human Resource Management (HR) and creative innovation are very important in the development of halal tourism in the 4.0 era, especially in Madura, Indonesia. Here, the development of halal tourism is an important strategy used to increase regional economic growth and achieve social justice, especially in the midst of the Covid-19 pandemic.

The development of halal tourism in Madura requires qualified and competent human resources to support efficient operations and strategies in the halal tourism industry. In addition, creative innovation in human resource management is very important to keep Madura's halal tourism competitive with halal tourism in other regions in Indonesia. Therefore, good human resource management and creative innovation are important factors in the growth of halal tourism in the 4.0 era in Madura.

In human resource management, the government and staff who manage tourism must understand the needs and desires of halal tourism tourists. These tourists are usually looking for a travel experience that is in accordance with Islamic principles, such as halal food, a soothing environment, and sharia-compliant accommodation. By understanding the preferences of tourists, halal tourism products and services in Madura can be developed more effectively to attract tourists.

Regarding creative innovation, the development of halal tourism that follows the trend of the 4.0 era in Madura can improve the quality of tourism experiences. For example, by utilizing advanced technologies such as virtual reality and augmented reality, the travel experience will become more engaging and interactive. In addition, the development of digital-based halal tourism products can also create new opportunities for tourists with certain interests.

However, the development of halal tourism in Madura in the 4.0 era also faces several obstacles, such as inadequate infrastructure, limited funding, and tourism promotion that is not optimal. One solution to overcome this obstacle is to involve the private sector and other partners in an effort to improve infrastructure, obtain funding, and promote halal tourism in Madura.

Thus, quality human resource management and creative innovation are very important in the development of halal tourism in the 4.0 era, especially in Madura, Indonesia. The combination of good HR management and creative innovation will enhance Madura's attractiveness as a halal tourism destination, provide a satisfying experience for tourists, and support the achievement of social justice in the area. However, there is a need for improvements in infrastructure, funding, and tourism promotion so that the development of halal tourism in Madura can be sustainable and achieve greater success. To achieve high-quality HR management, some important steps need to be taken in Madura include:

1. Recruitment and Selection

HR recruitment and selection aims to get employees who have the skills, talents, and expertise that are in accordance with the needs of halal tourism. This process involves searching, assessing, and selecting the best candidates. The use of information technology, such as erecruitment platforms, can help expand the reach and effectiveness of this recruitment process.

2. Training and Development

Training and development of quality and sustainable human resources is essential to improve the competence of employees in the halal tourism industry. This includes training in the form of in-house training, workshops, seminars, and further study scholarship programs. Training topics should include halal tourism business management, general knowledge of Islam, and an understanding of customer needs in halal tourism.

3. Construction and Supervision

Coaching and supervision must be carried out to follow the development of halal tourism policies and improve the quality of work and services provided by human resources. This includes performance evaluation, competency certification, as well as support for innovation and improvement of the quality of halal tourism products and services.

4. Career Development

Career development means creating opportunities for employees to work and thrive within the halal tourism industry. This can include job promotions, advanced training, or the opportunity to work in different halal tourism projects. This career development is important so that human resources in Madura are active in the development of halal tourism.

5. Welfare and Social Justice

HR management must pay attention to welfare and social justice for employees. This includes the provision of fair remuneration, benefits, good work facilities, and adequate pension programs. This welfare and social justice is important so that human resources in Madura halal tourism feel valued and contribute optimally to the halal tourism industry.

Meanwhile, creative innovation in human resource management and halal tourism development in Madura is very important to achieve industrial growth.

Some examples of creative innovations that can be done include:

1. Digitalization and Information Technology

The application of digitalization and information technology in halal tourism operations and marketing can help create efficiency and achieve cost savings. This includes the use of e-commerce platforms, social media, and mobile applications to promote halal tourism products and services.

2. Innovative Product and Service Design

Incorporating elements of local culture or technology in halal tourism products and services can help create a unique experience for travelers. This includes the use of local ingredients in the manufacture of products, the presentation of halal food with a traditional approach, and the use of the latest technology to improve the comfort and safety of tourists.

3. Collaboration with Related Industries

Cooperation with related industries such as the hospitality sector, travel agencies, and transportation can help create more comprehensive products and services for halal tourism tourists. This collaboration also creates synergy between various sectors that support the development of halal tourism in Madura as a whole.

4. Development of Halal Tourism Ecosystem

The development of the halal tourism ecosystem in Madura includes promoting halal tourism globally, facilitating the exchange of information and updates between stakeholders, and supporting the operation of halal tourism industry accreditation and certification. The development of this ecosystem will facilitate the growth and expansion of the reach of the Madura halal tourism industry.

In conclusion, the quality of human resource management and creative innovation in the development of halal tourism are very important to achieve industrial growth in the 4.0 era, especially in Madura, Indonesia. The implementation of good human resource management and various creative innovations will help Madura's halal tourism industry to grow, compete, and make a real contribution to the regional economy and social justice in the midst of the Covid-19 pandemic.

Research and/or Implementation Sustainability Plan

Research Sustainability Plan

The following is a research sustainability plan that is designed in detail based on the results of research that has been conducted so far.

 Every tourist attraction managed by the government or the private sector will be the subject of continuous research. This research will expand the scope of current research to cover as many tourist attractions in Madura as possible. This approach will not only add to the richness of the research data, but also allow comparisons to be made between tourism management in government-managed villages and those managed by the private sector.

This analysis will provide insight into the most effective management practices for halal tourism development and enable the private sector and government to learn from each other. In addition, it will also create an opportunity to understand the uniqueness and challenges that each manager may face in operating and promoting their halal tourism village.

2. Future research will further explore factors other than Planning, Organizing, Briefing, Control & Renewal. This research will include a more comprehensive and inclusive analysis of various other aspects of halal tourism management. Among them is an analysis of the impact of government policies, local community support for the tourism industry, as well as cultural and social factors that can affect the development of halal tourism.

The expansion of the scope of this research is expected to provide a more holistic understanding of the challenges and opportunities in the development of halal tourism in Madura. Thus, the results of this research will be very relevant for the government, policymakers, and halal tourism managers in designing more effective strategies and programs.

3. To ensure the relevance and reliability of the research data, direct interviews will be conducted with related parties, especially tourism object managers and village heads. These interviews will cover a variety of important topics such as an assessment of the current state of halal tourism, the need for halal tourism development, and recommendations for improvement and improvement.

These interviews will give a voice to those related to halal tourism and allow them to share their experiences, opinions, and hopes about halal tourism villages. Thus, the results of this research will bridge the gap between academics and stakeholders and encourage evidence-based and context-specific policymaking and practice.

Subsequent Implementation

The expected implementation of this study is as follows:

- Organizing will be applied more intensively to increase the creativity of village management organizations in the development of halal tourism villages in Madura. It is realized that a good organizational process is very important to achieve goals, the implementation of this organizing strategy is expected to trigger increased creativity and innovation in village management organizations, which in turn will provide added value and competitiveness for halal tourism villages.
- 2. Efforts to improve the work ethic of the village community will be carried out with integrated and systematic efforts. One of the steps in order to realize this is through education and training programs, motivation sessions, and team building activities. The increasing work ethic of the community, especially those who work in the halal tourism industry, will have a positive impact on productivity, service quality, and tourist satisfaction.

3. The promotion of halal tourism villages will be improved not only in Madura but also at the national and international levels. This promotion will involve various channels, such as social media, online tourism directories, print advertising, and cooperation with travel agents. The goal is to increase the visibility and attractiveness of halal tourism villages, thereby attracting more tourists, both local and international, to visit Madura

Bibliography

- Abas, A., Ramli, N. and Daud, N.N.M. (2017), "Sharia Principles in Tourism and Hospitality Services: Malaysian Perspective", Malaysian Journal of Consumer and Family Economics, Vol. 20 No. S1, pp. 22-27.
- 2. Akhtar, N., Sun, J., Ahmand, W. and Akhtar, M.N. (2018), "The effect of non-verbal messaging on Muslim traveler interaction adaptation: a case study of Halal restaurants in China", Journal of Destination Marketing and Management, Vol. 11, pp. 10-22.
- 3. Al-Ansi, A. and Heekyoung, J. (2017), "Motivating Muslim tourists to visit Korea", International Journal of Tourism and Hospitality Research, Vol. 32 no. 10, pp. 19-27.
- 4. Aziz, Y.A., Rahman, A.A. and Hassan, H. et al. (2016), "EXploring the Islamic and halal tourism definition", Conference of Hospitality and Tourism Conference (HTC 2015), Innovation and Best Practices in Hospitality and Tourism Research, pp. 139-144.
- 5. Bastaman, A. (2018), "Lombok Islamic tourism attraction: non-Muslim perspective", International Journal of Supply Chain Management, Vol. 7 no. 2, pp. 206-210.
- 6. Battour, M. and Ismail, M.N. (2016), "Halal tourism: concepts, practices, challenges, and the future", Tourism Management Perspective, Vol. 19 no. Part B, pp. 150-154.
- 7. Battour, M.M., Ismail, M.N. and Battor, M. (2010), "Aiming for Halal Tourism Market", Tourism Analysis, Vol. 15 no. 4, pp. 461-470.
- 8. Battour, M., Ismail, M.N. and Battor, M. (2011), "Impact of destination on the choice of Muslim tourists", International

- Journal of Tourism Research, Vol. 13 no. 6, pp. 527-540.
- 9. Battoyour, M., Hakimian, F., Ismail, M. and Boğan, E. (2018), "The perception of non-Muslim toists towards halal tourism: evidence from Turkey and Malaysia", Journal of Islamic Marketing, Vol. 9 no. 4, pp. 823-840.
- Battour, M., Ismail, M.N., Battor, M. and Awais, M. (2017), "Islamic Tourism: an empirical examination of travel motivation and satisfaction in Malaysia", Latest Issues in Tourism, Vol. 20 No. 1, pp. 50-67.
- 11. Bazazo, I., Elyas, T., Awawdeh, L., Faroun, M. and Qawasmeh, S. (2017), "Impact of destination Islam on destination loyalty through the mediating effect of tourist satisfaction", International Journal of Business Administration, Vol. 8 no. 4, pp. 65-78.
- 12. Blim, Y. and Ozer, O. (2017), "Tourism halal: the case of Turkey", in Conflicts, Reliigion and Culture in Tourism, CABI, Book Chapter, pp. 130-143.
- 13. Boğan, E. and Sarıı, sık, M. (2019), "Halal tourism: conceptual and practical challenges", Journal of Islamic Marketing, Vol. 10 no. 1, pp. 87-96.
- 14. Lukakar, p. (2007), "From Hajj to Hedonism? ParadoXes develops tourism in Saudi Arabia", in Daher, R. (Ed.), Tourism in the Middle East, Continuity, Change and Transformation, Publication Channel View, Clevedon, pp. 215-236.
- 15. Carboni, M. and Janati, M.I. (2016), "Halal tourism de facto: the case of fez", Tourism Management Perspective, Vol. 19 no. Part B, pp. 155-159.
- 16. Carboni, M., Perelli, C. and Sistu, G. (2014), "Is Islamic tourism a viable option for Tunisian tourism? Insights from djerba", Tourism Management Perspective, Vol. 11, pp. 1-9.

- 17. Carboni, M., Perelli, C. and Sistu, G. (2017), "Developing tourism products in accordance with Islamic beliefs: some insights from Nabeul-Hammamet", Journal of North African Studies, Vol. 22 No. 1, pp. 87-108.
- 18. Chae, K.Y. and Lee, H.Y. (2015), "A study on the application for Halal tourism to promote the Islamic tourism market in Korea", Food Service Industry Journal, Vol. 11 no. 2, pp. 95-103.
- 19. Davids, M.N. (2014a), "Islamic Tourism in South Africa: a emerging market approach", in Emerging Research on Islamic Marketing and Tourism in the Global Economy, IGI Global, Book Chapter, pp. 248-268.
- 20. Davids, M.N. (2014b), "Islamic Tourism in South Africa: a emerging market approach", in Hospitality, Travel and Tourism: Concepts, Methodologies, Tools, and Applications, IGI Global, Book Chapter, pp. 585-599.
- 21. Din, K.H. (1989), "Islam and tourism: patterns, issues, and choices", Annals of Tourism Research, Vol. 16 no. 4, pp. 542-563.
- 22. Elaziz, M.F. and Kurt, A. (2017),"Religiosity, consumerism and halal tourism: a study of seaside tourism organizations in Turkey", Tourism, Vol. 65 no. 1, pp. 115-128.
- El-Gohary, H. (2016), "Halal Tourism, is it really Halal?", Tourism Management Perspective, Vol. 19 No. Part B, pp. 124-130.
- Uansaard, S. and Binprathan, A. (2018)"Creating awareness of halal MICE tourism business in Chiang Mai, Thailand", International Journal of Tourism Policy, Vol. 8 no. 3, pp. 203-213.
- 25. Vargas-Sánchez, A. and Moral-Moral, M. (2018), "Tourism halal: state of theart", Tourism Review, Article in Press, doi:

10.1108/TR-01-2018-0015.

- 26. Wardi, Y., Abror, A. and Trinanda, O. (2018), "Halal tourism: antecedent of tourist's satisfaction and word of mouth (WOM),", Asia Pacific Journal of Tourism Research, Vol. 23 no. 5, pp. 1-10.
- 27. Weidenfeld, A. and Ron, A.S. (2008), "The Need for Religion in the Tourism Industry", Anatolia: International Journal of Tourism and Hospitality Research, Vol. 19 No. 2, pp. 357-361.
- 28. Wilson, J.A.J. (2014), "The halal phenomenon: an extension or a new paradigm?", Social Business, Vol. 4 no. 3, pp. 255-271.
- 29. Wilson, J.A.J. (2017), "MarkPlus and Halaltourism", The Marketeers, Vol. 35 (December- January) pp. 95-98. Wilson, J.A.J. and Liu, J. (2010), "Shaping Halal into a Brand?", Journal of Islamic Marketing, Vol. 1 No. 2, pp. 107-123.
- 30. Wilson, J.A.J. and Liu, J. (2011), "The challenge of Islamic branding: navigating emotions and Halal", Journal of Islamic Marketing, Vol. 2 no. 1, pp. 28-42.
- 31. Wilson, J.A.J., Belk, R.W., Bamossy, G.J., Sandikci, O., Kartajaya, H., Sobh, R., Liu, J. and Scott, L. (2013), "Crescentmarketing, Muslim geography and Islamic Brand reflections of JIMA's senior advisory board", Journal of Islamic Marketing, Vol. 4 no. 1, pp. 22-50.
- 32. Wingett, F. and Turnbull, S. (2017), "Halal holidays: exploring the expectations of Muslim-friendly holidays", Journal of Islamic Marketing, Vol. 8 no. 4, pp. 642-655.
- 33. WTM (2007), "Global trends of the world travel market report 2007", World Travel Market, London.