

Design Model for Yoga Industry Development in Indonesia

Safrin Arifin¹, Dumilah Ayuningtyas², Renny Nurhasana³, Budiman M Mustofa⁴, Bintang Mukhammad Burhanudin Akbar⁵, Muhammad Arsyad Subu⁶

Abstract

The yoga industry is part of wellness tourism and a mainstay for development in Indonesia. This is due to the encouragement of achieving health security targets, sustainable development goals, and economic advancement. This condition encourages the need to develop a development model to give the yoga industry a competitive edge. The data collection process uses the Penta helix to obtain comprehensive, detailed, and precise information. The data obtained is then processed using the Soft system method approach. The results show that the yoga industry has excellent potential to be developed with the support of several important things: Policy, Brand Image, Communication, Flexibility, Local Wisdom, and Trust. On the other hand, the development process requires a roadmap and continuous performance measurement.

Keywords: *Yoga Industry, Development Model, Wellness Tourism.*

Introduction

Wellness tourism is now an international trend for health-conscious consumers who want to improve their fitness and health. The Global Wellness Institute (2013) defines wellness tourism as a travel effort associated with maintaining or improving personal well-being. Therefore, in its report, the agency describes wellness tourism as having the main objective, namely to provide travel wrapped in improving health for oneself and efforts to maintain health in activities continuously. The Global Wellness Institute (2022) illustrates that the amount of spending related to health tourism has increased to \$651 billion and is estimated to grow at an average of 16.6% each year. This high growth is because users of wellness tourism activities are tourists with high incomes, spending more money per trip than non-health tourists. Health issues are one of the points in the Sustainable Development Goals, so many countries are starting to pay attention to development for various reasons. Health is an important part that must be developed because it is related to a country's resilience in facing shocks (Witter et al., 2023). Small business development (Page et al., 2017) minimizes the negative impact of the increasing number of elderly citizens (Aluculesei & Nistoreanu, 2016).

On the other hand, health development is often associated with diversifying a country's competitive strengths to improve the economy, health, and education systems (Csirmaz & Peto, 2005). Health development in the 4.0 era requires collaboration and is directed towards fitness activities. This condition increasingly encourages the development of competitive wellness tourism. It is known that Indonesia is one of the countries with advantages in wellness tourism; however, based on the Global Wellness Institute (2020), Indonesia's position is only 19th with a value of only \$36 billion. Yoga is an essential key in developing wellness tourism in Indonesia. Yoga has become an industry that interests many people and is predicted to grow by an average of 9.6% annually until 2027 (Allied et al., 2023). The background to this condition is because yoga has deep roots and has various approaches to it. (Joukes & Gerry, 2010).

On the other hand, it is known that the significant growth is due to yoga targeting healthy people with a proactive interest in maintaining or improving their health. In the end, developing the yoga industry will be one of the steps to increase wellness tourism in Indonesia, especially at the global competitive level.

¹ Universitas Indonesia, Email: safrin.arifin@ui.ac.id, (Corresponding Author)

² Universitas Indonesia, Email: dumilah@ui.ac.id

³ Universitas Indonesia, Email: rennynurhasana@ui.ac.id,

⁴ Universitas Indonesia, Email: budimanmm@gmail.com

⁵ Universitas Indonesia, Email: bintangmba11@gmail.com

⁶ University of Sharjah, Email: msubu@sharjah.ac.id

Therefore, in this case, a particular model is needed to provide insight into developing a competitive yoga industry.

Methodology

The research developed a model design to provide a basis for developing a competitive yoga industry using a qualitative approach. The primary data in this research uses a Penta helix reference involving several parties, namely 1) Academics, 2) Practitioners, 3) Organizations, 4) Media, and 5) Government, each with three people. Data was obtained using in-depth interviews assisted by questionnaires and literature studies on relevant and reliable sources. The research method used is Checkland-developed Soft System Methodology. Soft System Methodology centers on the decomposition, explanation, and synthesis of a problem occurring in an object (William, 2005). Zarei et al. (2013) stated that soft system methodology is used to build and develop a model and develop a model. Daellebach and Mcnickle (2005) explain that a suitable method can be a soft system methodology that is integral to comprehensively clarifying the conditions and development plans of the object being studied.

Result

The stages of the soft systems methodology described by Checkland and Scholes (1991) include seven stages, each with unique features; in this study, it was only carried out up to the delicious stage. (1) The first stage identifies the problems faced comprehensively and structurally; at this stage, information is collected from parties related to the yoga industry. (2) The second stage describes the problem's situation using the information obtained from the first stage. The output of this stage is the creation of a comprehensive picture of the representation of existing conditions within the object. (3) The third stage is to define the problems faced by the research object; the basis for defining using the P approach is carried out through Q to achieve R. (4) The fourth stage is to carry out analysis using the CATWOE approach (Customer, Actor, Transformation, World View, Owner, and Environment). (5) The fifth stage compares the model created with the actual model. Benchmarking activities are carried out to identify opportunities that need to be maintained, improved, or reviewed. The first stage in the soft system method begins with describing the problematic situation. The basic concept of social analysis is an effort to analyze the logic, reasoning, structure, and interests behind the phenomena to obtain knowledge and information about what occurs (Rouse & Daellebach, 2002).

This stage focuses on understanding each informant's situation and interests (Fitriani, 2015). The initial stage tries to prioritize the reality of social conditions as a basis for consideration in making proposals for change (Hardjosoekarto, 2012). The data collected from the informants is then grouped to obtain standard information about the actual conditions (Praningtyas, 2019). The initial stage focuses on social analysis, which describes the essential elements of each actor involved, including elements, values, norms, and roles (Checkland & Poulter, 2006). Values are associated with standards or criteria for assessing the role of each stakeholder. Norms are associated with the expected behavior of each role carried out by stakeholders, and roles are social positions that differentiate each actor. The results of observations involving experts are described in Table 1.

Table 1 Social Analysis of Each Actor in The Development of The Yoga Industry in Indonesia

Actor	Value	Norm	Role
Regulator	Professionalism, Justice, and transparency	Firmness in implementing regulations and involving the community in implementation	Protecting the public, encouraging compliance, maintaining quality standards, and balancing interests.

Actor	Value	Norm	Role
Academics	Intellectual honesty, impartiality, and academic freedom	Peer review, collaboration, and knowledge sharing	Educator, researcher, and community contributor.
Local Trainer	Community engagement, diversity, and sustainability	Openness to local context, active participation and collaboration	Facilitator of local development, supporter of local education and training, and social glue.
Internasional trainer	ulticulturalism, flexibility, and openness	Global engagement and collaboration	Skills development, intercultural education, and global program facilitation..
Association	Solidarity, Professionalism, and Development	Code of ethics, openness, transparency, and active participation	Advocacy, education, training, and network development.
Public	Collaboration and caring	Ethics, obedience, and politeness	Supporting education and maintaining cultural identity

A conflict was found from social analysis, namely, 1) there is yet to be optimal synergy between academics and trainers to optimize education in the yoga industry. 2) More local trainers are needed in image building. 3) Special policies for the development of the local yoga industry in Indonesia, 4) The need for encouragement from associations to increase the number of certifications so that they can have clear standardization, and 5) Alignment of development models in order to face competition in wellness tourism on a global scale. These findings are strengthened by political analysis to obtain information to group the power of actors to decide whether something happens. Prasetyaningtyas (2019) explains that political analysis aims to obtain information on power and ways to manage that power. The description of the political analysis is presented in Table 2.

Table 2 Political Analysis of Each Actor in the Development of the Yoga Industry in Indonesia

Actor	Strength
Regulator	Autonomy is related to regulatory authority, ease of building relationships, legitimacy, flexibility, adaptability, and managing interests.
Academics	Research policy analysis in order to provide input for policy making, collaboration with industry, formation of public opinion, and credibility
Local Trainer	Community involvement results from local understanding, collaboration with authorities, adaptability, education, community empowerment, and local development.
International trainer	Global networking, development cooperation, new skills training, recognition, and enhanced global reputation.
Association	Organizing shared interests, participation in policy-making, and collaboration with other associations.

Stage two in soft system methodology describes the problematic situation using rich pictures. At this stage, connect the conditions and issues of each stakeholder or party involved. Dunning and Lewis (1992) explain that rich pictures are a tool for expressing all the relationships within the system. Marton and Booth (1996) explain that rich pictures can support several features to explain in depth by integrating content and process, offering choices and feedback from each stakeholder. Horan (2000) explains that rich pictures are a flexible and universal communication tool in describing conditions because rich pictures have no rules or constraints.

The information obtained from experts is then compiled into a rich picture to explore the condition of the yoga industry in Indonesia practically. In creating a rich picture, you must be able to provide information related to the problem, be informative and communicative, and be careful about ambiguity and misperceptions. Rittel and Webber (1973), Checkland and Scholes (1991), Lewis (1992), and Berg and Pooley (2012) suggest that rich pictures are an essential element for providing comprehensive information to the audience. This requires that the preparation process be structured in an informative, communicative manner, precisely on the problem, to avoid misperceptions even though there are no rules. They are tied into it. Figure 1 describes how the yoga industry is an integral part of wellness tourism, a way to achieve national health and economic improvement. The government desires to develop the wellness tourism industry, but the policies to date still need to be deemed more attractive to be competitive with the global industry.

On the other hand, the main actors in the industry are 1) Local Trainers, 2) International Trainers, and 3) Associations, which require increased collaboration within them. The participants compared local and international trainers, and they still needed to trust local trainers for several reasons. The complete description is presented in Figure 1

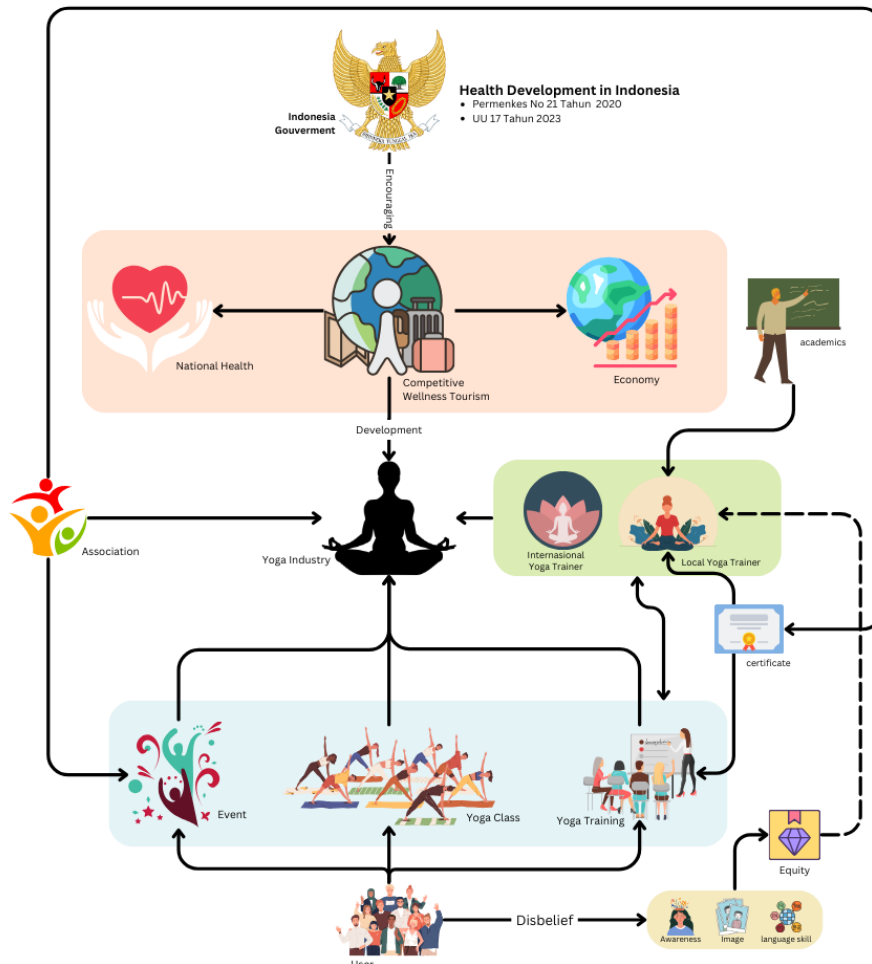


Figure 1 Rich Picture

The third stage is entering the system thinking section. At this stage, the aim is to obtain the root definition of developing a competitive yoga industry. Mehregan et al. (2012) explain that the root definition is intended to provide a description related to the ideals of a system: 1) Who is and will be in it? 2) Who takes part in it? Moreover, 3) Who can be affected, and who can influence it? Checkland and Scholes (1991) have defined root definition as an abbreviated verbal expression of a system of activities that is purposeful and considered relevant for exploring a problem situation. The preparation of the root definition has a formula that needs to be entered so that the design of the definition is far from errors in meaning.

Checkland and Scholes (1991) explain that the formulation formula must be based on a system to do P by Q to achieve R. The preparation of the root definition needs to consider the conceptual model of the elements from CATWOE (C as customers; A as Actors; T as Transformation process; W as Worldview; O as Owners; and E as Environmental Constraints) (Mathiassen & Nielsen, 2000; Hardjosoekarto, 2012). The root definition of the problems in this research is based on the description of interviews conducted with respondents. The root definition based on this research is as follows:

"Yoga Industry Development System (P) through Collaboration between Stakeholders, Use of Information Technology and Application of Local Wisdom (Q) to improve national health and economy."

The root definition obtained in the development of the yoga industry in Indonesia is used as a basis for designing a development system that can achieve the expected results. The industrial development system must be accepted by all stakeholders involved; this is the basis for objectivity. Root definitions were tested using CATWOE analysis to prioritize objectivity (Kareborn & Grahn, 2010). The results are presented in Table 3.

Table 3 CATWOE Yoga Industry Development

Element	Identification	Result
<i>Customer</i>	Who benefits from the change? Who is involved in the change process?	Users, Local Trainers, International Trainers, local communities, associations, academics and government
<i>Actor</i>	What changes do you want to see in the system?	Government, Associations, Academics, Local Trainers, International Trainers and media
<i>Transformation</i>	What are the significant picture changes expected?	The yoga industry is competitive and can support health and economic improvements.
<i>Worldview</i>	The broad impact of the challenge?	Collaboration between Stakeholders, Use of Information Technology, and Application of Local Wisdom
<i>Owner</i>	Who owns the issue being researched?	Yoga industry stakeholders
<i>Environment</i>	What factors can influence the solution of the problem being studied?	Policy, Brand image, Communication, Flexibility, Local wisdom and Trust

Measurements were carried out using the 5Es approach in order to obtain the information expected when carried out. Checkland and Scholes (1991) explained that an expectation contained in a root definition needs to be tested regarding its performance to determine suitability. Kotiadis et al. (2013) confirmed that measurements using the 5Es are still considered relevant for use as performance measurements. The performance measurements are presented in Table 4.

Table 4. Performance Measurement With 5E To Achieve Yoga Industry Development

Element	Information
<i>Efficacy</i>	Collaboration between stakeholders can increase the competitiveness of the yoga industry to improve public health and the national economy.
<i>Efficiency</i>	Promotive and preventive actions in health should be implemented so that savings can be made from individuals to the national level.
<i>Effectiveness</i>	Improving health indicators and increasing state income.
<i>Elegance</i>	Changes do not confuse stakeholders, making it not easy to follow the process.
<i>Ethicality</i>	The change process involves all interested stakeholders so that it can be accepted, supported, and carried out together.

The fourth stage in the soft system method is preparing a conceptual model. Pereira et al. (2015) explain the conceptual model related to the description of the expected model in development based on the fourth stage. Checkland and Poulter (2006) explain that creating a conceptual model is based on

- Preparing an outline of the guidelines, namely PQR, CATWOE, and root definition,
- Compiling three groups of activities, each of which is a group of activities related to something being transformed,
- Activity groups related to the party carrying out the transformation and activity groups related to the entity transforming.

Conceptual models are used as intellectual tools to discuss world situations and problems (Hardjosoearto, 2012). The conceptual model must be relevant to the situation and not representative but related to what the system must do (Fitriati, 2015). The preparation of a conceptual model has several vital guidelines explained by Hidayat et al. (2020), namely, 1) The conceptual model must be constructed based on the words contained in the root definition without relating it to the situation. Including several activities or groups in the conceptual model must be supported by words or phrases in the root definition. 2) Researchers must use words that can describe the activities in the transformation process that are described accurately. This concept is related to the explanation that activities in a conceptual model can be a source for developing root definitions for relevant system analysis and more detailed conceptual models. 3) The conceptual model must be accountable.

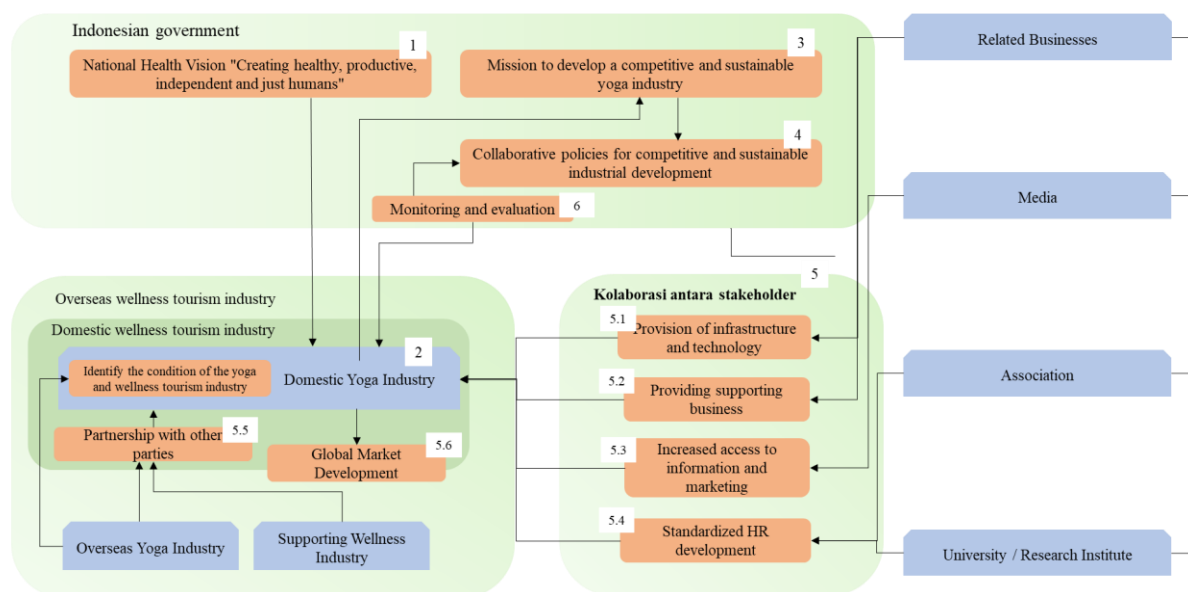


Figure 2 Conceptual Yoga Industry Development Model

The fifth stage in the Soft Systems Method is to compare the resulting conceptual model with reality in the real world. Triyonggo (2016) explains that the Soft System Method requires another point of view in order to obtain refinements and improvements related to the model offered. Prasetyaningtyas (2019) explains that comparisons between the model and the natural world are carried out to produce a debate on perceptions, which ultimately results in changes that are beneficial to the model. In comparing conceptual models, there are several critical primary identifications to find gaps in the model form, including 1) Actors involved in the activity. 2) Time of implementation activities. 3) Activities carried out in the model. 4) Opportunities for improvement. 5) How to make repairs.

Two kinds of differences will be found between the conceptual model and the real world, namely 1) Conditions that are not found in reality can be recommendations for change; (2) Conditions that are not found in reality and the researcher feels dissatisfied because they did not answer the study questions, then the researcher can return to stage two to collect data again and carry out the following stages: rich picture, root definition, and creating a conceptual model (Fitriati, 2015). Another perspective is needed to improve the actual world situation, which is considered the fundamental problem. Checkland and Poulter (2006) explain that at the comparison stage, it is possible to find that Soft System Method practitioners experience difficulties in answering questions related to performance measurement. The complexity of the natural world causes this difficulty; the emergence of diverse points of view is expected to encourage the emergence of the will to carry out core activities, which will then take the form of formulating suggestions for changes, improvements, or improvements to real-world situations that are considered problematic

Table 5 Comparison of Situations in the Context of Yoga Industry Development

No	Conceptual	Reality	Activity Output	Reflection	Expert
1	National Health Vision "Creating healthy, productive, independent and equitable people"	Indonesia currently has a national health vision, which can be the basis for optimal development to achieve the expected goals.	Basically, the vision becomes the basis for strategy development, operational planning, monitoring, evaluation, and adjustment.	Vision is the basis that must be combined with other stakeholders, so that the formulation of strategies, policies and implementation can run well.	
2	Identify the state of the yoga and wellness tourism industry	Identification of the current condition of the yoga and wellness tourism industry only focuses on macro conditions so that data and information can be confusing for stakeholders.	There is a need for comprehensive profile identification related to the yoga and wellness tourism industry at home and abroad. This can be one of the information related to 1) Industry conditions, 2) Ways of development and 3) Future development plans	Identification of industry conditions is basically to know the exact industry, on the other hand this is a strong basis for accountability for each decision.	
3	Mission to develop a competitive and sustainable	The current development of the yoga industry is more directed towards health, physical and	Development today must focus on multiple aspects such as sustainability and competitiveness in order to excel in	This condition needs to be done with several things, namely 1) Promoting environmental friendliness, 2)	

No	Conceptual	Reality	Activity Output	Reflection	Expert
	yoga industry.	spiritual development.	domestic and foreign markets.	Promoting activities that involve nature, 3) Involving local communities, 4) Development of yoga methods, tools and applications, 5) Building a competitive advantage through certification, 6) Establishing strategic partnerships and 7) Strengthening the local yoga brand to be strong and internationally recognized.	
4	Collaborative policies for the development of an empowered and sustainable industry.	The current government has supported with various policies and harmonization, but in its implementation there is no common view regarding the urgency in developing the yoga industry.	Collaboration between decision makers is important to create an attractive and thriving ecosystem.	Collaborative policies that come from a common perspective can provide great support for the development of an industry.	
5	Collaboration between Stakeholders.	Collaboration between stakeholders has basically been done, but the implementation is still found individually.	Collaboration between stakeholders is done by working together for focused implementation of the strategy.	Stakeholders who play a role in industrial development have their own advantages that can be used to optimize industrial development.	
	- Provision of infrastructure and technology	The Indonesian government is currently carrying out a lot of infrastructure development in various regions to support the development of various sectors.	Conceptualized infrastructure support is important to form a strong wellness tourism ecosystem.	Infrastructure development is an important part of creating an ecosystem that is different, unique, sellable and environmentally conscious.	
	- Provision of supporting business	The supporting business in the development of the yoga industry currently focuses	Supporting businesses become a part that can encourage joint development and can	Excellence in business is an important part of achieving comparative and competitive advantage.	

No	Conceptual	Reality	Activity Output	Reflection	Expert
		on equipment, it is necessary to re-identify supporting businesses that are able to strengthen each other.	become an advantage in business.		
	- Improved access to information and marketing	Indonesia has done a lot of information dissemination about tourism, but in this case the activities of disseminating access to information and marketing still focus on the same socialization that other countries do.	Increased access to information and marketing must be unitized in order to gain attention and increase the interest of many parties to use products from the yoga industry.	Activities to improve access to information and marketing need to involve competent parties from all conventional and digital mass media and with strong messages.	
	- Standardized human resource development	Indonesia already has Yoga-related certifications to standardize trainers and undergraduate degrees.	Excellent human resources are one of the important factors that play a role in building capabilities for sustainable development and competitiveness.	Human resource development requires an approach that matches the needs of the Yoga industry.	
	- Making partnerships	There have been several events involving external parties in order to increase the interest of various parties related to the yoga industry.	Partnership activities are basically aimed at developing methods, approaches and business cooperation.	The partnership is directed at business cooperation efforts between the two sides of the country for the development of the yoga and wellness tourism industry.	
	-Global market development	The domestic yoga industry currently lacks the competitiveness to enter the global market.	The development of the global market is an extra point that shows that the domestic yoga industry has advantages that can be taken into account in other countries.	The global market is an important part that needs to be included in building a competitive and sustainable industry.	

No	Conceptual	Reality	Activity Output	Reflection	Expert
6	Monitoring and evaluation	Monitoring and Evaluation currently focuses on the growth of business activities in general, but does not yet have clear indicators for the development of the yoga and wellness tourism industry	Yoga industry development indicators document.	The indicators developed can be a basis for monitoring and evaluating the yoga industry development process.	

Conclusion

Developing a competitive and sustainable yoga industry requires strategic approaches and steps that can support improvements in health and the national economy. In this case, unifying meaning and vision is essential for collaboration between stakeholders so that they can be effective in implementing ideas. On the other hand, stakeholders need to identify and prioritize factors that must be encouraged to develop the yoga industry. Currently, stakeholders are required to be able to carry out open communication and trust between parties and implement local wisdom. Roadmaps are an essential part of the yoga industry so that it can have appropriate plans based on the period (short, medium, and long). In the implementation process, it is necessary to support it with specific policies so that it is attractive to support the expected development of the yoga industry and that the domestic yoga industry is considered high quality; it is necessary to develop the yoga industry. Industrial development must monitor and evaluate measurements, and continuous improvements must be made. In the end, promotion is an important thing that needs to be considered to increase interest from users and potential users of the yoga industry.

References

- Allied Market Research. 2023. Yoga market size, share, competitive landscape and trend analysis report by type (online yoga course, offline yoga course and yoga accreditation training program): global opportunity analysis and industry forecast 2021-2027. Canada : Allied Market Research
- Aluculesei AC, Nistoreanu P. 2016. Romanian Wellness Tourism – A Potential Solution with Positive Implications for the Effects of the Aging Population in the European Union. *The amfiteatru economic journal*. 18(10) : 767-780
- Berg T, Pooley R 2012. Rich Pictures: A valuable means to explore complex IS . issues UK Academy for Information Systems Conference Proceedings 2012. Paper 1
- Checkland P, Poulter J. 2006. *Learning for Action*. England (GB): John Wiley & Sons Ltd.
- Checkland, & Scholes. 1991. *Soft Systems Methodology in Action*. Chichester: Wiley
- Crismaz E, Peto K. 2015. International Trends in Recreational and Wellness Tourism. *Procedia economics and finance*.32(2015) : 755-762
- Daellebach HG, McNickle DC. 2005. *Management Science: Decision Making Through systems*
- Dunning, Lewis P. 1992. Rich picture building in the soft systems methodology. *European journal of information systems*. 1(5) : 351-360
- Fitriati R. 2015. *Menguak daya saing UMKM industri kreatif: Sebuah riset tindakan berbasis Soft System Methodolgy*. Jakarta (ID) : Yayasan Pustaka Obor.
- Global Wellness Institute. 2013. *What is wellness?*. Florida (US) : Global Wellnes Institute. Diakses pada 3 Oktober 2023 <https://globalwellnessinstitute.org/what-is-wellness/what-is-wellness-tourism/#>
- Global Wellness Institute. 2020. *The Global Wellness Economy: Country Rankings*. Florida (US) : Global Wellnes Institute.
- Global Wellness Institute. 2022. *The Global Wellness Economy: Country Rankings*. Florida (US) : Global Wellnes Institute.
- Hardjosoekarto S. 2012. Construction of Social Development Index as a Theoretical Research Practice in Action Research by Using Soft Systems Methodology. *Systemic practice and action research*. 25(6) : 493-509
- Hidayat N, Hubeis M, Sukmawati A. Eriyatno. Model pengelolaan sumberdaya manusia berbasis kompetensi era industri 4.0. *Jurnal aplikasi manajemen dan bisnis*. 6(3) : 501-513
- Horan P. 2000. *Using Rich Pictures in Information Systems Teaching*. 1st International Conference on Systems Thinking in Management. Australia.

- Joukes V, Gerry C. 2010. Website Effectiveness in Wellness Promotion By Portuguese Spas. *Journal of hospitality and tourism management*. 17 (1) : 136 – 143.
- Kareborn BB, Grahn . 2010. Multi-modal thinking in soft systems methodology's rich pictures. *World Futures: The Journal of New Paradigm Research*. 47(1) : 79-92
- Kotiadis K, Tako AA, Rouwetter EAJA, Vasilakis C, Brennan J, Gnadhi P, Wegstapel H, Sagias F, Webb P. 2013. Using a model of the performance measures in Soft Systems Methodology (SSM) to take action: a case study in health care. *Journal of the operational research society*, 66(2013) : 125-137
- Lewis. 1992. Rich picture building in the soft systems methodology. *European journal of information systems* . 1(5) : 351-360
- Marton F, Booth S. 1996. The learner's experience of learning, in Olson D.R. and Torrance N. (eds) *The handbook of education and human development: new models of learning, teaching and schooling*. Oxford (UK) : Blackwell
- Mathiassen L, Nielsen PA. 2000. Interaction and Transformation in SSM. *System research and behavioral science*. 17(2000) : 243-253
- Mehregan MR, Hosseinzadeh M, Kazemi A. 2012. An application of soft system methodology. *Procedia-social and behavioral sciences*. 41(q) : 426-433.
- Page SJ, Harthwell H, Johns N, Fyall A, Ladkin A, Hemingway A. 2017. Case study: Wellness, tourism and small business development in a UK coastal resort: Public engagement in practice. *Tourism management*. 60(2017) : 466-477
- Pereira TF, Montevechi JAB, Miranda RdCM, Friend JD. 2015. Integrating soft systems methodology to aid simulation conceptual modeling. *International transactions in operational research*. 22(2015) : 265-285
- Prasetyaningtyas SW. 2019. Strategi keberlanjutan bisnis pertanian hortikultura organik di Indonesia [Disertasi]. Bogor (ID) : Institut Pertanian Bogor
- Rittel HWJ, Webber MM. 1973. Dilemmas in a general theory of planning. 4(1973) : 155-169
- Rouse M, Daellebach US. 2002. More Thinking on Research Methods for the Resource-Based Perspective. *Strategic management journal*. 23(10) : 963-967
- Thinking. Hampshire (UK) : Palgrave Macmillan
- Triyonggo Y. 2016. Rancang bangun model pengembangan kompetensi profesi manajemen sumberdaya manusia di Indonesia [Disertasi]. Bogor (ID) : Institut Pertanian Bogor
- Williams B .2005. *Soft Systems Methodology*. The Kellogg Foundation. Diakses pada 1 Januari 2024 pada link <https://www.bobwilliams.co.nz/ewExternalFiles/ssm.pdf>
- Witter S, Thomas S, Topp SM, Barasa E, Chopra M, Cabos D, Blanchet K, Teddy G, Atun R, Ager A. 2023. Health system resilience: a critical review and reconceptualisation. *The lancet global health*. 11(9) : 1454-1458
- Zarei B, Azizian S, Ghapanchi AH. 2013. Road freight information systems: a soft system methodology approach. *International journal logistic systems and management*. 14(2) : 161-174.