Reconstructing Penta-Helix: A Study of A Literature Review

Andrea Basworo Palestho¹, Dheanita Sekarini Octanisa²
¹²Universitas Putra Bangsa
andreabaswara2@gmail.com¹

ARTICLE INFO

Article History:
Received: February 13th, 2023
Accepted: February 17th, 2023
Published: February 22nd, 2023

Keywords:
Stakeholders, Deep Pentahelix, Tourism, Consciousness

ABSTRACT

This study is a literature review on the Penta-helix in tourism studies, which focuses on dialectical discussions to reconstruct the Penta-helix and generate new ideas. The literature review in this study uses a narrative review to describe each article that has been reviewed and to yield the essence of the papers. The result of this study constructed a new model for the implementation of the five tourism stakeholders, namely the Deep Penta-helix. This model uses the awareness and perspective of local communities to implement tourism development and tourism management.

Introduction

Questions that may oftentimes arise in tourism, particularly tourism development are "How do we build and run a good tourism?", Or "Does a good tourism indicate responsible and sustainable?", Then "How do we achieve tourism-sustainability? ".

We all know that tourism development requires the participation of many aspects, components, and also many branches of knowledge in various sources to smooth the path of the development. Regardless of tourism development, the things previously mentioned are also very useful in the context of tourism management. This is due to the increasingly fierce competition in tourism by the dynamics of modernization, forcing tourism development and management to adapt to creating a smooth way on its implementation. Besides, paradigm alteration is also getting stronger in tourism nowadays, namely tourism sustainability. The point is, responsible tourism must be able to bring benefit in social, economic and environmental impacts in which tourism occurs, and these positive impacts must be enjoyed in the long term.

Sustainability in tourism is an effort to embody tourism which is ethically and morally considered good, proper, and responsible, which in the process is maximizing the positive impacts of tourism and minimizing the detrimental impacts (Cornelisse, 2020; Lovelock & Lovelock, 2013). In a deeper concept of tourism sustainability, development in tourism is a form of development that integrates good synergy in natural resource management, so that it can meet economic, social, aesthetic or nature needs, while this development can also maintain...
To realise tourism sustainability, where tourism maximizes the beneficial impacts and minimizes the adverse impacts, it requires good planning from the upstream; namely the collaboration between stakeholders in this study known as Pentahelix. Penta-helix is a term for the five elements of stakeholders in a destination related to development and management; namely academic, business, community, government, and media. These five stakeholders have their respective roles in tourism. Collaboration between stakeholders is a mechanism that establishes a specific system of relations needed for developing the potentiality in an area, place or tourist destination (Fitriani et al., 2020; Sukarno et al., 2020).

This study focuses on the dialectical discussion in the Penta-helix subject in the context of tourism sustainability. Furthermore, the purpose of this study is to reconstruct the order and paradigm of the Penta-helix in tourism, both in tourism development and management. Also, this study promotes a new approach to tourism development using re-construction Penta-helix

Literature Review

Tourism-Sustainability

Over the decades, tourism has been critically assessed as having a damaging impact on the environment or society. This is due to the very dynamic mobility of the era so that tourism is required to develop swiftly on its movement. Thus, this demanding movement leads tourism towards developmentalism, where all aspects that are indicated as having tourism potentiality must be built or developed, even without thoughtful planning. Consequently, it makes tourism to have negative impacts on society, environment, or even the economy if the equality of benefits is not achieved. The empirical phenomenon which exacerbates the fact that tourism can have adverse impacts has brought and forced tourism to shift its old paradigm (Arrobas et al., 2020), and led to the idea of sustainable tourism, where the general paradigm of sustainability is included in tourism.

The exposure by the World Tourism Organization regarding sustainable tourism as “tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities” (WTO, n.d.), is fundamental ideas about what sustainability is in tourism. Thus, the benefits of tourism are required to bring positive impacts in the long term if tourism development is carried out. Since sustainable tourism is an idea that can be applied in many places and destinations (Lozano-Oyola et al., 2012; WTO, n.d.), this is also a new vision that tourism can provide overall long-term benefits by prioritizing three fundamental aspects of sustainability. namely, environment, economy, and socio-culture (WTO, n.d.).

Sustainable tourism cannot just occur. Many fundamental aspects must be well planned, explicit development trajectories, and good relationships between related stakeholders. Ideal sustainable tourism development should provide what the tourist or tourism industry needs, and at the same time maintain and increase good benefits in the future. Also, this form of sustainable tourism development is required to maintain synergy between management so
that three aspects of sustainability, namely environment, economy, and social, can be well maintained (Sgroi, 2020).

Pentahelix
The concept of five tourism stakeholders appeared in the Regulation of the Minister of Tourism of The Republic of Indonesia Number 14 of 2016, namely academic, business, community, government, and media which whose its ecosystem and synergies in "creating a harmonious orchestration and ensuring the high quality of activities, facilities and services as well as creating experiences and beneficial tourism values in order to gain the yield and benefits to the communities and the environment" (The Ministry of Tourism of Republic of Indonesia, 2016), and in its progress, it is called the Penta-helix. Penta-helix in tourism development and tourism management is important due to its role in the respective fields to create sustainable conditions in destinations under development or management. A harmonious Penta-helix system will direct a tourism destination towards success, as well as relevant stakeholders in the process (Kamil et al., 2020).

Each stakeholder in the Penta helix has their primary role in developing and managing destinations; namely academics who research specific destinations, develop theories, help to improve human resources, spread knowledge and innovation; business stakeholders providing jobs, commercialization of tourism products, promoters or budget contributors; the community that plays an important role in maintaining culture, destinations, maintaining and supervising the direction of tourism; governments that have legitimacy in forming policies, supporting research innovation in destinations, controlling the development progress, and development funding; media as facilitators to expand information, create brand images and promotion of the destination, familiarise policy, et cetera (Halibas et al., 2017; Novianti, 2020; Nurulwahida et al., 2020; Putra, 2019; Slamet et al., 2017; Sukarno et al., 2020). On its employment, the five Penta-helix stakeholders with their respective roles must have a synergistic and harmonious relationship so that sustainable tourism can be achieved.

Methods
This study is a literature review in the tourism discipline that concentrates on sustainability planning in Penta-helix management. The literature review in this study was conducted to generate new ideas based on the evaluation and study of case studies (Snyder, 2019), which in this context is the application of the Penta-helix. Also, this study is conducted on the curiosity and situational factors experienced by the author regarding the idea of the Penta-helix; that the authors suggest reconstructing the concept of the Pentahelix framework.

The material used is research papers from various multidisciplinary journals whose case studies are taken in national and international coverage. Papers searches are conducted on the internet within keywords; Penta-helix, stakeholders, tourism, sustainability between 2010-2020. When the papers are collected, the authors sort the research papers that have been collected one by one to confine the scope of the study so that the discussion does not go too far from the purpose of this study. The review method in this study uses a narrative review, where this type of method is very suitable for the study due to its implementation is a process of collecting several works of literature in a specific discussion and the next step is the process of synthesizing ideas (Guy Paré et al., 2016) so that from the results The synthesis obtained a notion to develop the idea of the Penta-helix framework (Figure 1). Researchers used the Regulation of the Minister of Tourism of the Republic of Indonesia No. 14 of 2016 concerning
guidelines for sustainable tourism and the Global Code of Ethics for Tourism as guidelines and benchmarks regarding how tourism development using the Penta-helix should occur. By means, there are various critical aspects of these regulations that become concentrations and must be realized to achieve sustainable tourism. From here we will go to the dialectical discussion.

Result and Discussion
### Table 2. Previous Studies

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ho et al., 2013)</td>
<td>Problems And Stakeholder Responsibilities In Island Tourism: The Case Of Tioman Island In Malaysia.</td>
<td>This research was conducted in Tioman Island, Malaysia with the aim of the study is to; identify the negative tourism impacts (or problems) on Tioman Island and to examine the extent to which stakeholders are involved in resolving problems in the area. The researchers found problems in the field through a questionnaire start from the shortage of water supply, ferry problems, dirty beaches, to airport issues. The researchers also found a lack of consensus between particular stakeholders on certain problems, which in turn the researchers provides solutions for each problem faced by Tioman Island also by examining the stakeholder theory. The advantages of this solution can create synergies that are good to stakeholders because the method used is considerably comprehensive.</td>
</tr>
<tr>
<td>(Cárdenas et al., 2015)</td>
<td>An exploratory study of community awareness of impacts and agreement to sustainable tourism development principles</td>
<td>This study conducted in the five North Carolina counties to determine the maturity level of stakeholder knowledge and awareness. Hence, this research is also carried out to measure whether the relevant stakeholders are appropriate and adequate or not when carrying out a project both in the planning process and management about tourism through the Stakeholder Understanding of Sustainable Tourism Development Index (SUSTDI) in numbers. This Penta-helix study tuning method is considered to be very good because, by understanding the knowledge and awareness of stakeholders, tourism development and management will have a higher potential to be sustainable. However, there are some drawbacks related to this method, namely for things that cannot be measured such as emotions, conflicts, feelings, et cetera.</td>
</tr>
<tr>
<td>(Soemaryani, 2016)</td>
<td>Pentahelix Model To Increase Tourist Visit To Bandung And Its Surrounding Areas Through Human Resource Development</td>
<td>This research conducted to investigate the synergy between related stakeholders to increase tourist visits in Bandung, West Java. The results showed that there was integration between stakeholders, although in some cases the relationship between stakeholders was disrupted due to ego problems. The researcher then gave a solution with Penta-helix planning in Bandung. The advantage of this solution is that the planning is deemed suitable for the Bandung area, but it needs reconstruction if it will be implemented elsewhere.</td>
</tr>
<tr>
<td>(Shone et al., 2016)</td>
<td>Evolving roles for local government in tourism development: a political economy perspective</td>
<td>This research was conducted in Hurunui, a rural district in New Zealand, to analyzze the changing role of local government in tourism development and to deepen the understanding of the role of government in tourism and the impact of policies/regulations on tourism development. The researchers found a change in the role of local government in tourism, where tourism was developed as a substitute due to a decrease in income from the agriculture sector that previously supported the livelihoods of the area. The researchers also found several problems in the field from the perspective of the population where the role of the government could not only be limited to changing people's livelihoods from the agriculture to the tourism sector, but the government also had to continue to be an umbrella for proper regulations so</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title</td>
<td>Summary</td>
</tr>
<tr>
<td>-----------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>Burgoyne &amp; Mearns, 2017</td>
<td>Managing Stakeholder Relations, Natural Resources and Tourism; a Case Study from Ololosokwan, Tanzania</td>
<td>This research discusses the complexities and challenges in managing conservation areas in Ololoswan, North Tanzania. The issue in this study is about problems with stakeholders in the past that made the people around Ololosokwan are less in trust whether with the stakeholders or other communities. Consequently, when developing tourism they competed with each other to shows who is the best. Therefore, the researchers suggest that the good relationship between stakeholders and communities are necessary to yield good benefits for all.</td>
</tr>
<tr>
<td>McComb et al., 2017</td>
<td>Stakeholder Collaboration: A Means to the Success of Rural Tourism Destinations</td>
<td>The purpose of this study is to determine the success of stakeholder collaboration in Mournes AONB. In its context, this collaboration has not been successful due to the absence of conditions that led to many negative consequences which affect the competitiveness of destinations and opportunities for effective collaboration in the future. Fundamentally in terms of rural tourism destinations, collaboration with stakeholders can be beneficial in certain factors. However, in the article, it is explained that these efforts in implementing stakeholder collaboration have been limited.</td>
</tr>
<tr>
<td>Putra, 2019</td>
<td>A Review on Penta Helix Actors in Village Tourism Development and Management</td>
<td>This study aims to identify the stakeholders involved in rural tourism development. The results showed that not all tourism stakeholders proposed by the Penta helix model played a significant role in the development of village tourism. Most studies on rural tourism do not pay attention to the role of academics and social entrepreneurs, because society, government and the business sector take precedence. By assessing the Penta Helix as a collaboration of several sectors in rural tourism, this study provides a model for the role of Penta Helix in the development and management of rural tourism.</td>
</tr>
<tr>
<td>Suherlan et al., 2019</td>
<td>The Synergy of Penta-Helix Stakeholders in The Development of Smart Destination in Dieng Tourism Area, Central Java – Indonesia</td>
<td>This study aims to obtain a comprehensive picture of the Penta-Helix in realizing the concept of Smart Tourism. This study found that there are still problems regarding synergy in the application of Smart Tourism in Dieng. To solve this problem by optimizing the promotion of Dieng area, the Government must also develop regulations and socialization in implementing Smart Tourism to all Stakeholders.</td>
</tr>
<tr>
<td>Sihotang et al., 2019</td>
<td>A New Perspective in Science and Technology Park Model (STPM) for Eco-Social Development Using Penta-Helix Concept: Case Study in Sumedang Regency</td>
<td>This research conducted in Sumedang Regency, West Java Province of Indonesia, based on the researchers’ curiosity about what development model is suitable for the Science and Technology Park (STP). Thus, this study aims to identify and analyze the appropriate Science and Technological Model (STPM) in Sumedang from an eco-social aspect in Sumedang Regency. The researchers propose a potential model for the construction of the Science and Technology Park also by carrying out the Penta-helix concept for its management. The advantage of this model is that the management system is considered quite compressive because it presents a scenario of what every stakeholder involved in the development and...</td>
</tr>
</tbody>
</table>
Government Collaboration Of Pentahelix Models In The Management Of Ecotourism D’Bendungan View Telaga Tunjung (Case Study Management of Ecotourism D’Bendungan View Telaga Tunjung in Timpag Village, Tabanan Bali)

This research conducted to determine how is the implementation of Penta-helix management in D’Bendungan Telaga Tunjung area, Tatuhi Village, Tabanan Regency, Bali. The problems faced in this area are; lack of local community awareness of tourism potential, lack of strategic management regarding the utilisation of vehicles for tourism, and lack of synergy between the government, villages and investors. The researchers provide solutions in the form of a managerial framework in the area. The advantage of this framework is that it is very suitable for the area under study, while the disadvantage is that the framework will be rhetorical if applied elsewhere in general.

(Naldi & Fatimah, 2019)

Implementation of The Penta-Helix Approach Model Against Development Sustainable Tourism

This study aims to determine how the Penta-Helix model in developing sustainable tourism in Bukittinggi. In developing tourism in Bukittinggi, the Penta-Helix has been used. However, it was found in collaborative research between stakeholders in Bukittinggi that there is still no synergy.

(Destiana et al., 2020)

Analisis Peran Stakeholders Dalam Pengembangan Destinasi Pariwisata Halal Di Pulau Penyengat Provinsi Kepulauan Riau

The objective of this research is to identify the involved stakeholders, analyze the role, the relationship, as well as the supporting and inhibiting factors between stakeholders. The results obtained from this research are that the development of halal destinations on Penyengat Island involves stakeholders with the Penta Helix concept consisting of academics, business, community, government and mass media, as well as the relationship between stakeholders in terms of form and activity. Value and communication are supporting factors in the development of halal destinations, and trust and policies are inhibiting factors in halal tourism on Penyengat Island. This research conducted by investigating the implementation of the Penta-helix in Lake Toba at Toba Samosir Regency. This research was conducted with a phenomenological approach through an analysis of the pattern of social life sustainability of the community. The results of research and observations from the researchers show the inadequacy of the government's role in the Penta-helix, where its policies and roles are not optimal, as well as a shift in roles where the government becomes too superior. Other prominent problems that were found were the lack of community participation in decision making and tourism management which led to prolonged conflicts, and the lack of media participation so that the wider community did not know about policies and ideas being discussed and generated related to tourism in Lake Toba. The researchers then provide a fairly structured solution not only to the protruding helix problem, but also suggestions and scenarios for developing and building synergies for other helixes.

(Fitriani et al., 2020)

The Synergy Effect of “ABCGM” for management of the Science and Technology Park should do.

This study focuses on the assessment and investigation of the relationship between the Penta-helix stakeholders in
small and medium-sized enterprises in the bandung area. The results showed a good relationship between stakeholders, although in some aspects there were obstacles for each stakeholder in implementing synergy. The researchers present solutions for stakeholders such as deliberations between stakeholders, training programs, stakeholder guidance, new policies, et cetera. The advantages of this solution are a more comprehensive and structured solution to the problem, while the disadvantage is that this solution requires a more in-depth study if applied elsewhere.

(Kamil et al., 2020) Dialectic of environmental communication in Indonesian conservation area

This research is focused on examining the kind of conflict that occurred between the government and environmental activists regarding the change in the conversion of conservation land in Kamojang, West Java to a tourism destination. The researchers found several problems that trigger conflict; environmental damage, lack of public knowledge, tenure conflicts, companies in conservation areas, lack of good management in the use of natural resources. The researchers present a solution that is comprehensive enough for the short term (soon), that can also be done for the long term. The advantage of this solution is that it is very suitable and comprehensive for the area, while the disadvantage is that it requires a lot of effort and serious commitment to ensuring its success.

(Calzada, 2020) Democratising smart cities? The penta-helix multistakeholders social innovation framework

This research conducted to investigate 3 smart cities that implemented a regulation called the horizon 2020 program, namely Essen (Germany), Lausanne (Switzerland), and Nilüfer (Turkey). Researchers consider that these policies and programs tend to be technocratically oriented. Therefore, this study also examines and unfold the unique multistakeholder composition by comparing the three cities. The researcher found problems regarding the lack of role or participation of several stakeholders and considered undemocratic. From these findings, a solution was born regarding Penta-helix management that extends the Triple-helix and Quadruple-helix in the form of a framework and narrative through the Social Innovation (SI) paradigm. The advantage of this solution is the great potential for good, fair and democratic synergy because all relevant stakeholders must participate and hear by their opinion, but the disadvantage of this solution is that it is not necessarily applicable if implemented in a place with a very complex community, social, and cultural character.

(Novianti, 2020) The Penta-helix: A sustainable tourism strategy of Bali’s village

This study is conducted to propose a framework and strategy regarding the Penta-helix management on Bali’s village as tourist attraction. The research is well implemented and provide a framework for the management of Penta-helix on the destination through in-depth observation and comprehensive examination of sense of place. Although the framework is suitable for the destination and convenient on the situation of aforementioned area, there seems inappropriate aspect if implemented on some occasion due the framework is only focus on academics and private sector, rather on the community where they have sense of belonging of the
| (Chamidah et al., 2020) | Marketing Communication and Synergy of Penta-Helix Strategy on Satisfaction and Sustainable Tourism | This study aims to present explicit findings from the inside, in the pattern of marketing communication interactions between the Penta-Helix and to examine tourists' expectations of tourism activities through simulation models between variables. The results of this study found that the involvement of Penta-Helix elements was not maximal. In the patterns of interaction and communication between elements, there are also gaps, including interests, expectations, and reality. To get benefits for sustainable tourism, it is necessary to have a marketing communication concept approach that is combined with stakeholders. |
| (Sumarto et al., 2020) | Penta-Helix and Quintuple-Helix in the Management of Tourism Villages in Yogyakarta City | The purpose of this study was to determine the interaction of the Government, Academics, Stakeholders, Society, Community and Media in the management of tourism villages in Yogyakarta. The results obtained show that the management of tourist villages in Yogyakarta requires integrity from ABCGM. This interaction can at least be a solution to improving the quality of tourism village management. With the presence of ABCGM and an interacting environment, the management of tourist villages in Yogyakarta City has become more optimal and attracts more tourists to visit. |
| (Maturbongs & Lekatompessy, 2020) | Kolaborasi Penta-Helix dalam Pengembangan Pariwisata Berbasis Kearifan Lokal di Kabupaten Merauke | This study tries to describe and analyze the Penta-Helix in developing local community-based tourism. This research indicates that local community-based tourism and Penta-Helix can support by prioritizing all forms of local wisdom with collaboration between actors in the Penta-Helix model. |
| (Sukarno et al., 2020) | Improve Creative Industry Competitiveness Penta-Helix and Human Capital in Digital Era | This study aims to apply the Penta-Helix and Human Capital concepts to strengthen competitiveness and have an impact on the performance of the creative industry business in the culinary industry sub-sector. The results of this study that Penta-Helix, Human Capital, and Competitiveness can provide a strong enough contribution to business performance. |
| (Hardianto et al., 2020) | Performance of Integrated Capital Investment and Licensing Service of Batu City on Tourism Development with Penta-Helix Perspective Activation | The performance of the Batu City Government in promoting its tourism has proven successful, it can be seen from the many investments that continue to arrive in the tourism sector. In PentaHelix’s idea, it is explained that the implementation of sustainability synergy among stakeholders in pentahelix must occur as a mutually supportive and interrelated force, especially in the service sector. |
| (Nastiti et al., 2020) | Activation Simulation Design of City Branding Gresik Halal Life Style According to Participatory Concept in Smart City Based | In this study, the concept of the Penta-Helix model in Tourism is developed to create City Branding. The City Branding concept will be effective if it can integrate ABCG's role with the media as the strength of Penta-Helix. The media function as a tool to create a broader picture and an attempt to communicate urban branding to a larger market. |
Penta-helix is regulated to create good and responsible tourism to achieve sustainability. The use of the Penta-helix method is in the context of tourism development and management. The idea of sustainability here must be understood by the paradigm which; not in the sense that stakeholders have to fulfill the principle of responsibility to endure the 'development', but rather in terms of tourism which performed thoughtfully where benefits of tourism are sustainable. This is a fundamental aspect that must be considered by all related parties so that tourism development does not become anarchic and leads to 'developmentalism'; that everything could and allowed to be built, while it does not always work that way. Radically, there is a lot of consideration in determining every step in tourism development and management. The absence of this awareness will lead tourism in a catastrophic direction; be it damages to social, economic, and environmental aspects such as excessive and irresponsible extraction and use of natural resources.

Planning and development in tourism can be started by examining the empirical phenomena that occur in the field, as well as the situational factors in a place that will become a tourism destination. The point is, at the initial stage or pre-condition tourism, related parties should make projections regarding the appropriateness of the related destinations being used as tourism attractions; whether in terms of social, cultural, and environmental. This is since not all destinations can be used as tourism attractions. In terms of the environment through environmental impact assessment, for example, natural resources are considerably not adequate, and the predicted natural damage will be great if tourism occurs, especially tourism activities and development that change the landscape and require a lot of natural resources. Also, several vulnerable places have very complex socio-cultural aspects, so that a sufficiently in-depth study is needed before implementing tourism, in this context the implementation of Penta-helix management. This gave the authors the idea of developing a new model for the Penta-helix.

Therefore, we propose the Deep Penta-helix (Figure 2). A holistic and specific approach at the same time, to the common Penta-helix implementation. Deep Pentahelix is an approach in which the four stakeholders, namely academics, business, government, and the media use the awareness, consciousness, and perspective of the local community/people in carrying out tourism development and management. The point is, in creating a tourism policy or determining steps in a particular destination, the first four stakeholders mentioned above must have awareness, point of view, and even become local communities so that policies and their implementation are truly suitable and feasible in that destination. For example, academics could investigate with an ethnography-based approach to be able to examine and analyze phenomena in more depth regarding the aspects that must be considered for a place to become a tourism destination. This is because each destination has different characteristics.

Next, the government, who is a party that has a role for a legality and tourism policymaker. The government must have an awareness that is integrated with the local community and as well as the local community's perspective. This is due to the fact that the local people are the group that is affected when tourism occurs, be it good or bad. The role of the community, in this case, accommodates the aspirations and thoughts of the local people that must be heard by the government, academia, business and the media. Furthermore, if the government is already immersed in the awareness of the local community, the policies issued are expected to have a lasting positive impact on the local population; in line with the Global Code Ethics for Tourism article 5 on the benefits of tourism for local communities (UNWTO, 2001).
policy was born from the results of an in-depth analysis of phenomena occurring in the area where the population lives. In this regard, the government can collaborate with academics who carry out in-depth research in related destinations.

Furthermore, businesses stakeholders in destinations act as intermediaries between residents and tourists or the tourism industry. Business stakeholders bridge prosperity due to its ability to facilitate tourism products from residents, or existing products such as natural attractions to tourists. Business stakeholders have the expertise and approaches to facilitate the process of the economic chain in tourism, which of course it must to work together with other stakeholders, especially policies that are right on target from the government. In the context of welfare and economy, a business stakeholder employs residents, which of course must be accompanied by a decent standard of salary. In the Regulation of the Minister of Tourism of The Republic of Indonesia No. 14 of 2016 on Guidelines for Sustainable Tourism Destination, for a tourism destination to succeed in achieving sustainability, one of the criteria that must be taking place is job opportunities for local communities (The Ministry of Tourism of Republic of Indonesia, 2016). Of course, all these things must be carried out with genuinely responsible management. Nevertheless, residents were given good training and education before about tourism, and how to manage their destinations. This program can be implemented with good synergy by academics as the investigators of empirical phenomena and the social structure of local communities, good regulation from the government, and provision of supervised training by business stakeholders through corporate social responsibility.

Next up is the media. The media certainly has an important role to play in bridging information from the core elements (destinations, local communities, systems, regulations) to
the world and the wider community outside the destination. Also, the media can provide tourism information, be it information, regulations, systems, applicable regulations to stakeholders to obtain good planning. Media as one of the stakeholders, as stated in the Global Code of Ethics for Tourism Article 6 phrase 1 where “Tourism professionals have an obligation to provide tourists with objective and honest information on their places of destination and on the conditions of travel, hospitality and stays” (UNWTO, 2001), is indeed responsible for providing transparent information to the wider community, but if it is examined more deeply, the media must also have ethical principles in disseminating this information. Some things should be known by the wider community, some are not. Certain destinations must be protected by their existence and comfort by not disseminating everything that exists in these destinations, for example; secured hereditary culture, local community civilization, systems, values, and problems that are not fundamentally understood by the wider community. The media can also play a role in protecting a destination due to restrictions on that information. Indigenous people who consider that their environment must be properly preserved according to local wisdom and prevent mass tourism, the media can also limit the awareness of the existence of authentic destinations. So there are two sides to the coin and some contexts that must be understood by the media because things that exist in certain destinations can be very sensitive. This is what is meant by the media having the awareness and perspective of the local community. When the awareness of the media as a stakeholder has integrated with the local population, the media will know which ones should be disseminated to the wider community and the world, and which are not.

The four stakeholders above (academics, business, government, media) are progress with the awareness and perspective of the local community. The essence of awareness is, the four stakeholders have a sensitivity or sensibility to what is in the environment, while consciousness indicates that the sensitivity, point of view or even the way of life of the local community are embedded within the four stakeholders' mind. The local community is certainly considered a stakeholder as well, due to our discussion here is Penta-helix. Yet, since local communities are the people who live in the destination, local communities have an important role and must be included. First, local communities are indigenous people in the local area who have a sense of belonging. Thus, they are the ones who best know the characteristics of their environment. Second, since they have a sense of belonging (Cater & Cater, 2007; Novianti, 2020) and know the characteristics of their environment, their daily life forms unique habits that become their culture. The culture of the local community in socializing and heeding for the environment is called local wisdom. Local wisdom is very important to consider in tourism development and tourism management. Therefore, through this local wisdom, tourism will know how to treat destinations responsibly and with this, tourism regulations can be generated that provide good benefits for all. This is the main topic of the Deep Penta-helix which is being discussed by the authors. Furthermore, the four stakeholders that have been mentioned must have awareness, namely sensitivity or sensibility to what is in the environment, while consciousness indicates that the sensitivity, point of view or even the way of life of the local community can be embedded within the four stakeholders. If the awareness and way of life of the local community have been embedded into the awareness of the four stakeholders (academic, business, government, media), consequently it is not a difficult thing if tourism and the synergy of the Penta-helix run in harmony.

Conclusion
This study promotes Deep Penta-helix. Deep Penta-helix is a new approach and form of Penta-helix, which uses local perspectives, awareness, local wisdom and lifestyle for tourism development and management. Deep Penta-helix can help implement tourism more comprehensively since all stakeholders (academic, business, government, media) must have a sense of local communities, or at least have the same awareness and perspective understanding in embodying the noble values of the culture that exist in certain destinations. Deep Penta-helix does not negate local communities as stakeholders, instead, local communities are the main benchmark in development and tourism management, and not only at the centre. This new model enriches the literature on tourism, it can also generate ideas in development and tourism management, which of course must be done with commitment and strict supervision.

References


Fatimah, S., & Naldi, J. (2019). Implementation of the pentahelix approach model against development sustainable tourism in bukittinggi city towards a national leading tourism


Sgroi, F. (2020). Forest resources and sustainable tourism, a combination for the resilience of the landscape and development of mountain areas. *Science of the Total environment, 736*, 139539.


