Model and Urgency of the Role of Academics in the Creative Industry Ecosystem of Malang City

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Abstract

The popularity of the creative industries continues to rise around the world, both among consumers and entrepreneurs due to a variety of factors, including technological advances and changes in consumer behavior. Malang City has also been recognized as one of the cities that has great creative economic potential. The direction of development of Malang City is also increasingly clear leading to strengthening its status as a creative economy city marked by three milestones. To build an optimal industrial ecosystem in the creative economy sector, especially in Malang City, requires a hexahelix synergy approach which refers to cooperation between six entities in developing a better and sustainable innovation ecosystem. Collaboration between industry and academia has a very strategic role because it can provide significant benefits for the quality of innovation and research development of the creative industry. The government also strongly encourages academics to collaborate with industry, government, media, and society, where various programs are directed to encourage collaboration between universities and industry to conduct joint research and development. A concrete example is the existence of an independent research center called ISDEI (Intelligent Systems and Digital Economic Innovation) which has collaborated for research and community service. With great academic research potential with the existence of more than 50 higher education institutions, the Association of Creative Economy Academics (AACE) is committed to being an aggregator in the creative economy ecosystem at the Malang Creative Center (MCC) that synergizes academic activities from academics with creative industry players, the Malang City government, and the creative economy community in Malang City.

Article Info

Keywords:

Creative Economy; Industrial Ecosystem; Hexahelix Collaboration; Academia; AACE

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1. Introduction

In the 17th century, Napoleon Bonaparte asserted, "Imagination rules the world," signifying the profound impact of human imagination. Albert Einstein famously remarked, "Creativity is intelligence having fun." In the contemporary era, the global ascent of the creative industry is evident, captivating both consumers and entrepreneurs alike. This surge can be attributed to multifaceted factors, including advancements in technology and shifts in consumer behavior (Outward & Sinha, 2019).

Moreover, the advent of digital technology has accelerated the growth of the creative industries, extending their reach to a broader audience. Leveraging online platforms and social media, creative industry players can effectively promote their offerings. Governments worldwide are increasingly recognizing the potential of the creative industry in fostering economic growth

and generating employment opportunities. Consequently, numerous countries have implemented supportive measures such as facilitating financing, providing training, and enhancing access to global markets (Shin & Mynt, 2021).

Furthermore, changes in consumer behavior towards accessing creative content have fueled the industry's popularity. With an escalating reliance on digital platforms for entertainment, including streaming services, video games, and mobile applications, consumers present substantial opportunities for creative industry players to innovate and generate revenue (Wang, 2022).

Presently, Malang City stands out as a hub of immense creative economic potential. Boasting diverse sectors such as fashion, culinary arts, handicrafts, and tourism, Malang City's government has spearheaded various initiatives to cultivate its creative economy. These efforts are evident in the multitude of community-driven initiatives and governmental programs aimed at fostering creativity and innovation across various domains (Bidang Informasi dan Komunikasi Publik, 2021).

Fostered by an environment rich in creative spaces, cultural diversity, and the presence of numerous academic institutions, Malang City has emerged as a nurturing ground for a sustainable creative ecosystem. Initiatives such as the Malang Creative Fusion (MCF) Community Forum, Malang Smart City, and Malang Creative Week further underscore the city's commitment to fostering innovation and creativity, inviting public participation in shaping its developmental trajectory.

2. Methods

This study adopts a qualitative research paradigm, specifically aligned with the interpretivist paradigm. The interpretivist paradigm is suitable for exploring subjective meanings and understanding social phenomena within their natural contexts. The narrative approach, characterized by storytelling and rich description, is deemed appropriate for this study, as it allows for a deep exploration of the experiences, perspectives, and interactions of the entities involved in the hexa helix synergy approach.

Data collection will primarily involve document analysis, focusing on relevant policies, reports, and publications from each of the six entities involved in the hexa helix synergy approach. Documents will be sourced from government regulations, industry reports, community initiatives, academic publications, NGO publications, and media coverage. The collection of data through document analysis will provide rich insights into the actions, strategies, and collaborations undertaken by each entity in fostering innovation within the creative economy ecosystem of Malang City. To build an optimal industrial ecosystem, the creative economy sector, especially in Malang City, requires a hexa helix synergy approach in the creative economy ecosystem which refers to cooperation between six different parties or entities in developing a better and sustainable innovation ecosystem (Umam & Astuti, 2022).

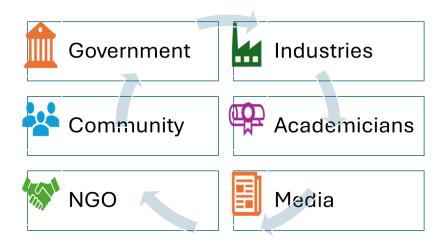


Figure 1. Hexahelix Model of Creative Economy Synergy

- 1. The first entity is the Government which acts as a regulator and strategic decision maker who can create policies and regulations that support innovation.
- 2. The second entity is Industry as a producer of products, services, or technology, and as a party responsible for the commercialization of innovation results
- 3. The third entity is Society or Community: as consumers and users of technology, who can provide input and perspectives to develop innovations that are more relevant and beneficial to society.
- 4. The fourth entity is Higher Education as an educational and research institution that can create new knowledge and technology, and help transfer it to industry and society.
- 5. Non-governmental organizations: as those who have knowledge and experience in addressing social and environmental issues, which can help create sustainable and environmentally friendly innovations.
- 6. Media: as a party that can help introduce innovation to the public, and help raise awareness about the benefits and risks of innovation.

In the synergy of the hexa helix ecosystem, the six actors work together to create better and sustainable innovations, by complementing and complementing each other's roles. This can be done through collaboration in research and development, the creation of policies and regulations that support innovation, as well as through communication and introduction of innovation to society.

The data analysis will encompass several stages. Initially, documents will be systematically reviewed and coded to identify key themes and patterns related to the hexa helix synergy approach. Subsequently, thematic analysis will be conducted to uncover underlying meanings, relationships, and implications within the data. Through an iterative process of coding and theme development, emergent themes will be refined and organized into coherent narratives. The final stage of data analysis will involve the synthesis of findings, culminating in a comprehensive understanding of the dynamics and outcomes of the hexa helix synergy approach within the creative economy ecosystem of Malang City.

3. Results and Discussion

Malang City Towards Creative City

The trajectory of Malang City's development unmistakably aims at solidifying its status as a creative economy hub. Significantly, the Malang City Government has bolstered infrastructure conducive to creative economy growth, evident in the establishment of shopping centers, entertainment venues, art hubs, and IT facilities. Moreover, various incentives such as subsidies, cost reductions, and tax exemptions have been extended to support creative industry players (Indiekraf, 2022).

In addition to this, Mayor Sutiaji, on December 11, 2021, announced full backing for the creative economy's advancement, unveiling seven Creative Economy Manifestos. These encompass areas like circular creative economy, creative diplomacy, digital transformation, hexa helix stakeholder synergy, ten principles of Indonesian creative cities, and creative economy bylaws in Malang City (Indiekraf, 2022).



Figure 2. Mbois Festival as milestone seven manifesto of creative economy Source: https://indiekraf.com/malang-kota-kreatif-7-event-kreatif-keren/

This progression is underscored by two pivotal milestones:

- 1. Malang City's inclusion among Indonesia's ten creative cities/regencies.
- 2. The establishment of the Malang Creative Center (MCC) building, serving as a nucleus for creative economy sector development, hexahelix collaboration among stakeholders, and a platform for collaborative growth.

Hexahelix Approach to Creative Economy Synergy

The hexa helix synergy model underscores the strategic role of collaboration between academia and industry. Academics, bound by the Tri Dharma of Higher Education, play pivotal roles in research, innovation, education, training, partnership building, information dissemination, and advocacy within the creative economy ecosystem. With these duties, according to Law No. 14 of 2005 concerning Teachers and Lecturers, academics have the obligation to be professional educators and scientists with the main task of transforming, developing, and disseminating science, technology, and art, as shown in Figure 3.

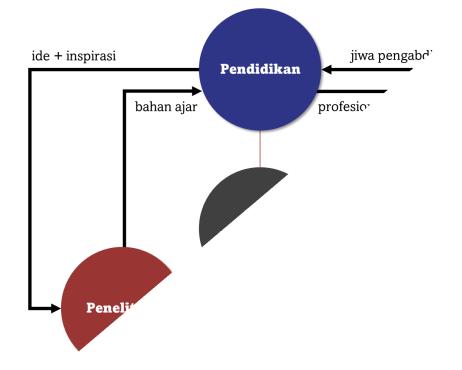


Figure 3. The concept of the tri-dharma of higher education in Indonesia

That way, some of the roles that academics must take in a creative economy ecosystem are:

- Research, innovation, and product downstream. Academics have an important role in conducting research and innovation that can be applied in industry and society. Academics can conduct solution-oriented research to problems faced by industry and society. It is expected that the results of research and innovation can be carried out downstream with the concept of Partnership with the business world and the industrial world (DUDI).
- 2. Education and training.

Academics can help improve the quality of human resources by providing education and training to students and the workforce. Academics can also help develop curricula and training programs that suit the needs of industry and societ.

- Collaboration and Partnership. Academics can build partnerships with industry and government to develop mutually beneficial projects. This collaboration can help come up with better and more effective solutions to problems faced by society.
- 4. Dissemination of information, knowledge, and knowledge. Academics can assist in the dissemination of information, science, and knowledge about technology and innovation to society and industry. This can help increase awareness and understanding of existing and potential innovations in the future.
- Advocacy and influence.
 Academics can have a positive influence on government and community policies in developing sustainable innovation and technology. They can be strong advocates for sustainable development and for creating a climate conducive to innovation.

Notably, the collaboration fosters downstream application of research outcomes, enhances human resource quality, and promotes mutual growth (Rusdi et al., 2020). Collaboration between industry and academia has a very strategic role because it can provide

significant benefits for the quality of innovation and research development of the creative industry (Batoebara, 2021)(Utomo & Harjono, 2021). Moreover, the collaboration yields mutual benefits. Industries gain access to academic expertise and resources, facilitating technology transfer and innovation adoption. Conversely, academic institutions secure funding and real-world problem contexts for research, fostering innovation, productivity, and technology transfer. Noteworthy examples include the ISDEI research center's collaborations, yielding diverse innovative products, and penetrating community service activities (ISDEI, 2023).

The Role of Academics in the Creative Economy Ecosystem

The current government strongly encourages academics to collaborate with industry, government, media, and society. Various government programs are directed to encourage collaboration between universities and industry to conduct joint research and development, such as Matching Fund, Applied Research, Development Research, and Downstream Program of innovation results. The advantage of this collaboration is that companies or industries can access the resources and expertise of academic institutions or research institutions, as well as gain access to the latest technologies and innovations with the circular development of the collaboration in Figure 4 (Rusdi et al., 2020).

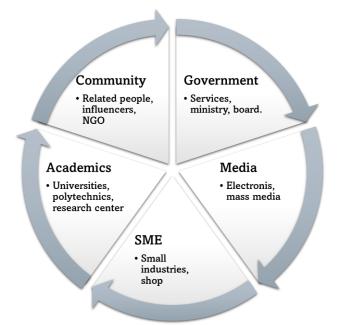


Figure 4. Circular industry collaboration with academia

On the other hand, academic institutions or research institutes can obtain funding and resources from industry to support their research, as well as gain access to real-world problems that can be used as research material. This approach certainly aims to strengthen innovation, increase productivity, and accelerate technology transfer from universities to industry which in turn will be able to produce more effective innovations because it combines industrial and academic perspectives. Industry can provide views on real-world needs and challenges, while academic institutions can provide a strong scientific outlook and research methodology.

Real work in collaboration has been carried out by academics who have strong networks with industry partners by synergizing to answer the needs, problems, and challenges faced by the industrial world today. One example is the existence of an independent research center called ISDEI (Intelligent Systems and Digital Economic Innovation) located in Lowokwaru District, Malang City and fronted by several academics with doctoral degrees from across universities. Currently ISDEI has partnered with several companies, startups, educational institutions, government agencies, communities, and non-governmental organizations to develop various types of innovative products such as automation technology for computer programming learning, adaptive learning technology, surveillance robots for defense needs, smart farming technology, indoor localization detection technology, participatory mapping systems for spatial road conditions, big data platforms for MSMEs, agricultural commodities, and many others.

ISDEI has a vision to produce innovative products in accordance with the researchers' areas of expertise, needs and challenges in the industry, as well as the latest technological developments. With a strong synergy system and supported by a reliable researcher profile, ISDEI has succeeded in obtaining various funding on an international scale, both from companies, universities, and government institutions. Even today ISDEI collaboration has penetrated into community service activities, where various ISDEI research results have been applied and tested to industry partners, communities, and schools that need innovation to increase competitiveness.



Figure 5. Some of the innovative products of universities in Malang City

On the other hand, the creative economy is a concept in the new economic era that intensifies information and creativity by relying on ideas and knowledge from human resources as the main factor of production. Innovation is very important in the creative industries because these industries are based on creativity and the ability to create something new and exciting, as in Figure 5. Without innovation, the creative industry will not be able to survive or grow. In fact, the creative industries are so influenced by ever-changing market trends and tastes that innovation allows companies to stay relevant and interesting to consumers by producing new and exciting products or services (Rofaida et al., 2020).

In addition, innovation allows companies to differentiate themselves from their competitors and provide unique added value. Innovative companies can produce products or services that are better and more efficient than their competitors. Innovation can also allow companies to expand their market share by offering new products or services so as to help the creative industries to grow and develop. For company operations, innovation can help companies to improve efficiency in the production, delivery, and distribution of their products or services. This can help companies to reduce costs and increase their profitability.

It can be concluded that in the creative industry , innovation is very important to stay relevant, differentiate themselves from competitors, and expand market share so businesses in the creative field need to continue to develop new innovations in order to survive and grow in an ever- changing and competitive environment.

Association of Academics as Aggregators

Malang City was previously often referred to as the City of Education because there are more than 50 universities located in this city. In many fields, Malang City offers great academic research potential with the existence of higher education institutions such as the State Polytechnic of Malang, Indonesian College of Informatics and Computer (STIKI), STIE Malangkucecwara, Brawijaya University, State University of Malang, University of Muhammadiyah Malang, Maulana Malik Ibrahim State Islamic University Malang, Kanjuruhan University Malang, Islamic University of Malang, Merdeka University Malang, Widya gama University, Wisnuwardhana University Malang, BINUS University Malang, Machung University, and National Institute of Technology Malang. With an estimated number of more than 5000 lecturers and more than 250 thousand students, according to Table 1, Malang City has tremendous potential to make academic research an opportunity and hope for a better future in the industrial era 4.0, as shown in Figure 6 (Mohammad Naufal Ardiansyah, 2022).



Figure 6. AACE FGD with elements of Government, SEZs, and Communities

With the commitment of the Malang City Government to create a creative economy hexahelix collaboration forum in Malang City through the MCC Building, in 2022 several academics across universities established an association under the name of the Academic Association of Creative Economy (AACE). Supported again by the commitment of the Mayor of Malang, Drs. H. Sutiaji, through 7 creative economy manifestos initiated at the end of 2022, AACE is committed to helping develop the creative economy in Malang City through the management and implementation of research, training, and community service activities within MCC by reliable academics.

From this it can be explained that AACE has a central function as an aggregator in the creative economy ecosystem at the Malang Creative Center (MCC) which synergizes the academic activities of academics with creative industry players, the Malang City government, and the creative economy community in Malang City. This aggregation role is in the form of the process of collecting and unifying data or information from various academic resources that are different and across universities, to become a unity of efforts to develop and innovate a larger and more meaningful creative economy. With the role of aggregators, AACE serves to collect the potential and resources of the tri dharma of higher education in Malang City to be optimized in increasing innovation and competitiveness of the creative industry through the MCC forum (Ferry Agusta Satrio & Sofyan Saqi Futaki, 2021).

Aspect s	Year 2019	Year 2020
Number of Private Universities	56	53
Number of Students	237.477	254.433
Number of Lecturers	8144	8037

Source: BPS

AACE itself has made several strategic steps to realize its vision. The establishment of management has gone through phase 2 period and AACE has been registered as an incorporated association at the Ministry of Law and Human Rights. A series of activities have been carried out by AACE up to the Grand Launching of this MCC, such as the implementation of the Mbois Conference, FGD Strategy for the Implementation of the Creative Economy Manifesto of Malang City through an Action Plan, AACE Working Meeting for Period II Management, AACE Creative Economy Development Planning FGD, and Academic Research Activities in Creativity Economy Exhibition. In addition, various research and community service activities of AACE members have also contributed to creative economic activities at MCC. To optimize aggregation, AACE must build cooperation through an MoU (Memorandum of Understanding) with the Malang City government in particular and various universities in Malang City. Furthermore, AACE must also collaborate with industry and society to build synergies in the creative economy hexahelix ecosystem. In the end, a great mission will create great responsibility. Therefore, AACE also has a mission to educate academics regarding their potentials, as well as duties and responsibilities as academics who are obliged to transform, develop, and disseminate science, technology, and art to society and industry (Arvendo Mahardika, 2023).

In conclusion, academia plays a pivotal role in driving innovation and sustainability within the creative economy ecosystem. Collaborative efforts between academia and industry foster innovation, enhance productivity, and accelerate technology transfer, ultimately contributing to the growth and competitiveness of the creative industry.

4. Conclusion

Malang City stands out as a promising hub for the creative economy sector, showcasing significant potential for economic growth and innovation. The city's trajectory towards becoming a creative economy powerhouse is evident through three pivotal milestones: its recognition as one of Indonesia's Creative Cities, the establishment of the Malang Creative

Center (MCC) Building, and the formulation of seven creative economic manifestos by the Mayor of Malang.

To foster an optimal industrial ecosystem in the creative economy sector, particularly in Malang City, a hexahelix synergy approach is imperative. This approach, emphasizing collaboration between six key entities, including academia and industry, holds immense strategic value. Such collaboration has demonstrated its ability to yield substantial benefits for innovation and research development within the creative industry. Furthermore, governmental support plays a crucial role in encouraging collaboration between academia, industry, and other stakeholders. Various programs aimed at facilitating joint research, exploration, and development have been initiated, reflecting a commitment to fostering innovation and sustainable growth. Moreover, the Academic Association of Creative Economy (AACE) emerges as a central aggregator in Malang's creative economy ecosystem. By synergizing academic activities with industry players, government bodies, and the creative community, AACE facilitates the exchange of ideas and resources essential for fostering innovation and competitiveness.

In conclusion, the research underscores the significance of collaboration and synergy in driving the creative economy forward. Moving forward, further research endeavors should focus on addressing existing knowledge gaps and exploring untapped opportunities within the creative economy landscape. By adhering to these principles and fostering collaboration, we can continue to advance the creative economy, not only in Malang City but also on a broader scale.

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