

Creating Value-added Teak Products for The Elderly According to The Creative Economy Concept

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ABSTRACT

The objectives of this research were 1) to study the value-added model of teak wood products for the elderly among teak wood entrepreneurs, 2) to create prototypes of teak wood products for the elderly. This research is qualitative research. The sample group consisted of 30 elderly people in Don Moon Sub district, Sung Men District, chosen by purposive random sampling method. Interview form was used as the research tool used for the for data collection. The outcome was then taken to the experts in wood products to evaluate the quality. The results were analyzed by descriptive statistics, including percentage, mean and standard deviation. The results showed that 1) the elderly needed 3 types of products: (1) Walker 01/ 65, (2) Walker 02/ 65, and (3) backrest chair products. 2) Evaluation results quality from experts in wood products found that the overall quality was at the highest level. The mean was 4.27 and the standard deviation was 0.64.

INTRODUCTION

At present, it is believed that the important factors that enable an organization to survive and compete are creativity and innovation to create value-added to the products by using the basic resources within the organization. The creativity of individuals is the starting point for innovation and creativity is an important factor in creating efficiency and effectiveness for the survival and growth of the organization (Andriopoulos and Lowe, 2000). Thailand under the Cabinet administration of the Prime Minister's National Council for Peace and Order (NCPO), General Prayuth Chan-ocha has set a vision in the 20-year national strategic framework (2018-2037) for Thailand to be stable, prosperous, sustainable as a developed country. With the development of the philosophical approach to the sufficiency economy concept as well as setting a strategy to create fairness and reduce inequality in society. Create opportunities for everyone in society to have access to resources, provide funding sources for careers and employment, raise income levels, drive the grassroots economy, strengthen the economy, and foster sustainable competition, and is putting the Foundation of Thailand 4.0 in place to take care of all Thai people and move forward together (Sub-Committee for National Strategy and Reform Framework, 2016).

The advancement and growth of information and communication technology systems has revolutionized the production of the new world, encouraging the rapid development of new forms of business. As a result, the New Economy and the BCG Economy are economic systems that many countries have adopted as a model for economic development, by linking the creation of value from creativity, identity, and culture with natural resources and digital technology to drive the new economy (The Committee of the National Economic Reform, 2016), and by integrating BCG economic concepts and creative economy concepts. It is thus part of the new economic system using the concept of driving the economy based on the use of knowledge, education, creativity, wisdom, and intellectual property which linked to the roots of cultural identity, the knowledge accumulation of society, and modern technology/innovation to produce goods and services that create "Economic Value Added" and "Social Value" that meet the needs of consumers in the global market through creating value from creativity (Apicha Pornjaroenkul et al., 2017).

However, there were issues that arose. As the government pays attention to community business by providing a large budget to create various projects for the community, it has been discovered that entrepreneurs in the community still lack knowledge and understanding to create jobs and generate income for the community. Therefore, it is an important question as to how to lead to the success of community economic development (Kanyamon Inwang et al., 2008). When considering the overview of community business problems, it was found that the operation of the community business committee still lacked the ability to manage business, lacked the participation of stakeholders, lacked the ability to create added value to existing resources in the community, lacked the distinctiveness to create an advantage for the community business, and was also unable to bring out the potential of the group. The group's basic

resources are fully utilized, but there is a lack of support for members and communities. As a result, the return received is not worth the investment (Della, Zamparelli & Micera, 2013). In addition, the demographic structure and social structure of Thailand have changed into those of an aging society, which indirectly affects the country's economic and social problems. Aside from that, social and economic changes will have an impact on the elderly. As for the elderly, there are still changes in themselves, such as changes in physical, mental, and social aspects, becoming physical, mental, and social problems, which are fundamental problems in the lives of the elderly population. Moreover, changes in the structure of society affect the mind, and the social and cultural relationship system causes society to pay attention and realize that the elderly population is a valuable human resource for families, communities, society, and the nation. They deserve to be cared for, valued, honored, and encouraged to live a good quality of life in accordance with their own selves and to be treated properly, appropriately, and consistently with the community's context (Teerapattra Ekphachaisawat, 2015) by focusing on product development for the elderly and using basic community resources.

The profession of making teak furniture is a unique occupation among people in the Phrae community. There is currently a problem in the furniture trade with limited product distribution along with decrease in purchase orders. The product style is outdated and sold at comparatively lower price. There is no clear target customer group, causing the business situation of teak wood product entrepreneurs in Phrae Province to encounter problems and partially liquidate the business, resulting in the lack of inheritance of the teak furniture making profession in Phrae Province. They also faced the challenge of managing the teak housewares business to gain a competitive advantage in which traditional teak products can still be processed to add value and generate income for the community in the creative economy that corresponds to the aging society. Thus, causing a problem that should be studied to find the answer: what should be the development of teak products for the elderly to increase the value addition of teak products and meet the industrial standards of Thailand. When getting the answers to the above problems, it will reveal the guidelines for modern teak products for the elderly and the cost-effective use of raw materials. Changing the style of teak products for the elderly in order to add more value to the product in order to compete. Increase income and strength for small and medium-sized industry entrepreneurs and community producers, resulting in a stable, wealthy, and sustainable foundation economy as well as convenience and safety in the lives of the elderly. This will lead to the creation of a good quality of life suitable for the elderly, which there will be an increasing number in the future among this group of population. This will allow the elderly to live happily, have access to, and make use of, furniture suitable for the elderly. This type of product is convenient, self-reliant, and safe. It reduces the accident rate and removes obstacles, leading to a better quality of life for the elderly.

RESEARCH OBJECTIVE

1. To study the model of creating value-added teak products for the elderly teak entrepreneurs.
2. To create prototypes of teak products for the elderly.

THEORETICAL REVIEW

Participation

True public participation is where citizens or communities develop their own capacity to manage and control the use of resources and factors of production that exist in society for the benefit of economic and social livelihood as deemed necessary by a member of society with developed wisdom. This is expressed in the form of decisions about suitable and mutually acceptable projects. All parties should be involved in this process from the beginning until the end for understanding and learning joint modification that will benefit all parties. Foreign scholars, Cohen and Uphoff (1980), define participation in organizational development as the organization's cooperation under any condition or circumstance intended to achieve development goals, and they divide participation into four steps:

1. Participation in decision-making: It is the first stage of participation. Members must participate in problem analysis, priority management, setting goals, scheduling resource use, determining methods, monitoring and evaluating them, engaging in co-decision making.
2. Participation in implementation: members must participate in managing and administering the use of resources and be responsible for coordinating the allocation of financial controls and services.
3. Participation in benefits: members must receive a similar distribution of community benefits, which may be personal or collective benefits.
4. Participation in evaluation: members are required to participate in the control, monitoring, and evaluation of all activities within reasonable limits.

Resources Base

The resources base of the organization are an important factor in enhancing the organization competency derived from having basic resources both in the body of personnel who have accumulated knowledge and skills. The organization must be accessible and developed in all areas (Barney, 1991; Grant, 1991). It is the ability to combine the capabilities of human resources and work processes which plays a vital role in success of an organization. The organization must apply existing resources to be able to quickly respond to the needs of all parties in a timely manner and with quality. It is a stationary ability that must adapt to the changing environment (Grant, 1991; Porter, 1980).

Elements of basic resources that produce a competitive advantage, defined by Porter (2011) as a popular concept on the composition of basic resources, which are frequently referred to by various academic groups, are divided into four groups, with the following details:

1. Physical Resources (PR) means physical characteristics that facilitate production, including having a location of production sites that save transportation costs. The use of technology, machinery, tools and production equipment that can produce quality products according to customer needs as well as operational capability, state expenditures, quality of soil and water supply, and electricity.

2. Human Resources (HR) means a person who works both together and alone to achieve the goal of any business in human resource management. will change rapidly according to time and circumstances. Therefore, it must be developed and improved all the time. Personnel qualifications include knowledge and experience among the executive officers, employees, and members. Human Resource Management (HRM or HR) is an organizational function that aims to increase a person's productivity.

3. Funding Resource (FR) means the amount of funds available for operations. Considering the sufficiency of funding sources for the business condition or convenience of access to capital, including the availability of effective capital allocation tools or mechanisms. The amount and cost of available public funds and state support.

4. Knowledge Resource (KR) means the resource resulting from creation, development, and training. It is predominant in specific skilled workers such as scientists, engineers, marketers, technicians, etc. Knowledge development is supported by both the government and private sectors. Any country that places great importance on this resource and has relevant and supportive policies will have the potential to develop and compete with other countries even more.

Design Thinking

Design Thinking is a concept that arises from a group of people in sciences; every idea has a similar aim. It is the creation of inventions, innovations, or creative works that believe these things cannot be created by using only one science but must use the knowledge of many sciences to help work collaboratively, where such principles will lead to learning from groups of people from various disciplines, allowing them to see problems in many dimensions and truly understand problems. with scientific principles, cause and effect, and understanding other people's feelings. There is a similar step-by-step process, depending on the choice of use to suit the group of people or desired goals. The principle of using critical thinking and creativity to help produce design works is known as "design thinking." The designs are creative according to the principles that affect people in society and are appropriate for each period, supporting the concept of self-group, but the principles and processes still exist in a fixed format.

From the design thinking process above, there is a separate design thinking unit led by Camacho (2016) that has divided the thinking process into 5 steps: empathize, define, ideate, prototype, and test. The first and second steps (empathize and peruse) of these five steps are deeply understanding and interpreting the problem. The third step, " Ideate," is the process of using creativity and perspectives from many angles to generate ideas. The fourth and fifth steps (prototype and test) are the steps to test the idea and develop a prototype that is a concept example in order to use guidelines or

innovations that respond to the problem situation that arises. Details can be described as follows:

1. Empathize means to understand the user or target audience by taking care of them and getting them to pay attention to us. The important thing is to understand the target audience first, to find user problems. This may start with observations, interviews, etc.

2. Define is to synchronize data. This step describes the user's problem by asking simple questions such as "How does the problem occur?" and "What is the root cause of the problem?" to determine what steps should be taken to resolve the problem.

3. Ideate is an important step in brainstorming or coming up with ideas to solve problems by focusing on finding ideas to solve problems as much as possible. When finding a solution to the problem, continue to analyze which method is the best fit for that scenario.

4. Prototype is modeling of a product or service for users or target groups for market testing. A good model must solve user problems or meet user needs.

5. Test is carried out by applying the prototype to users or target groups for testing; data and various feedback are needed to be collected during this stage, then analyzed and corrected to further improve the products or services.

Creative Economy

A "creative economy" is an idea that will bring about changes in the manufacturing, service, and sales sectors, as well as the entertainment industry. It is a concept based on new ways of working, with the main factor being individuals' abilities and special skills. It is a new economic system with processes that bring together culture, economy, and technology to produce the creative or cultural industry that exists today. Many countries' development strategies have adopted the aforementioned creative economy concept to be applied in the development of the country. In Thailand's development strategy, there is a way to drive the economy based on such concepts by applying the concept of "creative economy" to drive the economy based on creativity, using intellectual property linked to the cultural background accumulation of knowledge in society and modern technology and innovation. In order to enable local communities to compete on a global scale, the government has attempted to modify the structure of the way to encourage strong communities with self-reliance and in accordance with the concept of the creative economy (Office of the National Economic and Social Development Board, 2017). The government recognizes the importance of grassroots economic development. Thailand 4.0 is the Prime Minister's commitment to changing the economic structure to a "value-based economy" or "innovation-driven economy," with the main idea being to shift from producing "commodities" to producing "innovative" products, from driving the country with industry to driving it with technology, creativity, and innovation, and from focusing on product manufacturing to focusing more on the service sector. As a result of the concept of such government in modern times, many industrial groups have begun to have guidelines

for using technology that can drive production to be more diverse. (Apicha Pornjaroenkul et al., 2017)

The United Nations Conference on Trade and Development (UNCTAD) has defined the creative economy as " an economic system that reflects a process that combines culture, economy, and technology together and is in line with the current environment. In the context of driving economic development, the creative economy is the idea of developing and creating economic growth by using the assets that arise from the use of creativity" (UNCTAD, 2015). Creative and Design Center (2016) defines the creative economy as value creation economics based on knowledge and innovation to create exceptional and competitiveness in the economy. The World Intellectual Property Organization (WIPO) has outlined the elements of industry in the creative economy that emphasize the context of intellectual property rights as "consisting of the cultural industry. This includes all cultural and artistic products, both tangible and intangible, that necessitate efforts to create work, whether it was made immediately at that time, or it had gone through a production process before. " From having researchers and institutions give the meaning of " creative economy" above, the researcher can summarize the meaning of " creative economy" as an economic concept with cultural roots that is based on the use of knowledge, education, creativity, and intellectual property. The knowledge accumulation of society and modern technology and innovation to produce products and services created " economic value added" and "social value," which met the needs of consumers.

Value Added Products

Creating value-added products means adding value to the original product. Value-added creation is a marketing tool that will lead to product development, distribution, advertising, and marketing promotion, which in effect can set higher prices. Adding value, on the other hand, makes consumers feel more benefit from an organization's efforts in developing products or services in various areas, making them more valuable in the eyes of customers (Tiphachartyothin, 2014). Adding value to products is what helps create a competitive advantage through value creation for customers with better production procedures or better service in order to be a leader in that product. In addition to creating a difference in the market, this strategy will help to create value that affects higher consumer perceptions, leading to greater confidence in deciding to purchase products or services in the future. A value-added product is important to businesses to meet customer needs, make consumers more satisfied, and build confidence and trust with consumers. Because it makes customers happy, distinguishes products from competitors in a crowded market, and provides businesses with a competitive advantage (Phromsiri, 2004),

Several famous scholars, both domestic and international, have explained the meaning of value-added products. According to Siriwan Sereerat (1999) research, it means offering complete products or services with quality, service, and price to meet customer needs. Nilson, Solomon, Björck, and Akerström (1992) defined increasing product value as satisfaction in the purchase, possession, and use of a product,

implying product development to achieve maximum consumer satisfaction and exceed consumer expectations. In addition, added value may arise from adding something beyond what the consumer expects to receive. For de Chematony, Riley and Harris (1998) define the value added of a product as "developing a product to create the highest consumer satisfaction and exceed consumer expectations" by adding something new to the product.

Smith and Colgate (2007) presented a conceptual framework for delivering added product value to the consumer, arguing that the basic needs that consumers want will be able to be met by creating added value through the value of the product in 4 main areas, namely, the "functional value" that responds to the use appropriately with good quality, effectiveness, and efficiency. "Symbolic value" refers to the social status, beliefs, and impressive "experiential value" gained from consuming, using, or using the service story perception, which is "cost value" for money on the choice of use, warranty, and environmental impact, as well as various risks related to the ideas described above by Smith and Colgate (2007). There are also many domestic as well as international scholars and researchers, discussed the concept of delivering value-added products to consumers. In relation to this concept, Freeman (2010) stated that the creation of good value occurs when stakeholders have an opinion about common issue. Creating a distinct product experience from competitors can also generate sentimental value for buyers, adding to the positive experience of using the product. According to Watts et al. (1998), delivering a value-added product is one that meets the needs of consumers and makes them satisfied. However, meeting internal needs should also include establishing a symbolically relevant requirement to create an impression of the product. It is also important to contribute to value-added products. Armstrong and Kotler (2009) agreed that customer-purchased products consider the functional and cost value for money paid in relation to the feeling of satisfaction with the goods or services received.

Based on the formulation of the problem, literature review and the conceptual framework of the research above, the conceptual model of this research is:

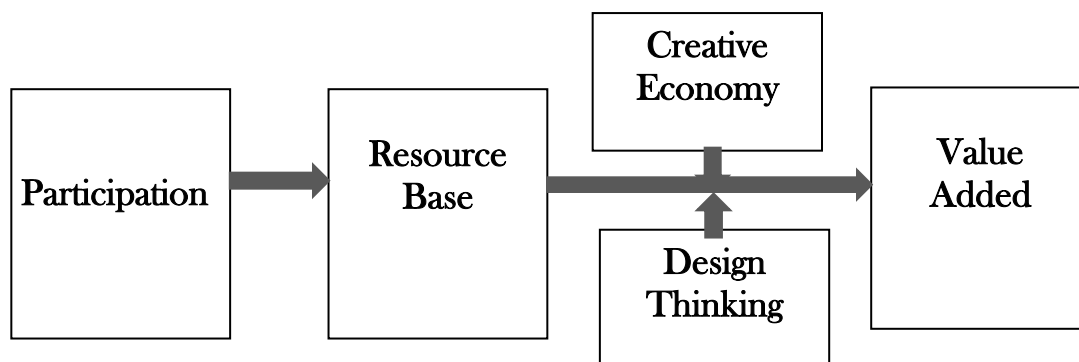


Figure 1. Research Framework Model

METHODOLOGY

This research employed a qualitative research methodology to conduct research by collecting data using qualitative research tools, namely group discussions. The product demand interview form for the elderly and the product quality evaluation form for the elderly have been examined for suitability and content validity and collected data from the sample group, with representatives of 30 elderly people from Don Mun Subdistrict, Sung Men District, Phrae Province through purposive sampling. The representatives of 7 experts were selected by purposive sampling. The data were analyzed through descriptive statistics and content analysis.

RESULT AND DISCUSSION

Results of activities that support research objectives;

Objective 1: To study the model of creating value-added teak products for the elderly teak entrepreneurs. As a result of brainstorming and group discussion to create products for the elderly based on demand information from research methodology, 3 types of products for the elderly are finalized as follows:

1. Elderly walking aid, product model 1 (Walker 01/65)
2. Elderly walking aid, product model 2 (Walker 02/65)
3. Backrest chair product

Objective 2 : To create prototypes of teak wood products for the elderly, the results of conducting research to create prototype teak products for the elderly are shown below:



Figure 2. Elderly Walking Aid Prototype

The results of assessing the quality of teak products for the elderly, users, and experts according to the assessment issues are shown in detail in Table 1 and Table 2.

Table 1. Product Quality Evaluation Results For 3 Elderly Products By User
(n = 30)

Assessment issues	average (\bar{x})				interpret
	W01	W02	CH	total	
1. Products that are useful and meet the needs of users	4.72	4.10	4.17	4.33	the most
2. Products that support a wide range of abilities of people	4.06	3.93	4.27	4.27	the most
3. Products that are easy to understand regardless of user experience and skill level	4.67	4.33	3.90	4.30	the most
4. Efficiently designed products compatible with every place	4.40	4.00	4.30	4.23	the most
5. Products that can reduce accidental harm and unwanted effects or unintended actions.	4.06	4.27	4.30	4.39	the most
6. The product can be used efficiently, comfortably, without causing fatigue.	4.47	3.87	4.33	4.22	the most
7. Products that can be used regardless of the user's body size, posture or movement .	4.73	3.97	4.63	4.44	the most
total average	4.60	4.07	4.27	4.31	the most

Note : W01 is a walker chair 01-65; W02 is a walker chair 02-65; CH is a backrest chair

Table 2. Evaluation Results Of Product Quality For 3 Elderly Products By Experts
(n = 7)

Assessment issues	average (\bar{x})				interpret
	W01	W02	CH	total	
1. Style and size of the product	4.57	4.00	4.14	4.24	the most
2. Selection of materials/equipment	4.71	4.00	4.00	4.24	the most
3. Functional benefits	4.43	4.29	4.00	4.24	the most
4. Convenience/Flexibility of use	4.43	3.86	4.29	4.19	a lot
5. Beauty and suitability	4.57	3.57	4.71	4.29	the most
6. Safety in use	4.57	4.00	4.57	4.38	the most
7. Durability in use	4.43	4.57	4.00	4.33	the most
total average	4.53	4.04	4.24	4.27	the most

Note: W01 is a walker chair 01-65; W02 is a walker chair 02-65; CH is a backrest chair

The research results revealed that products for the elderly are an important part of their lives. This is due to the fact that accidents among the elderly are frequently caused by their physical environment and their physical condition, such as a fall caused by furniture in the house that obstructs the walkway or furniture that is unstable when

holding on to support yourself. The floor of the room, whether it's a bedroom, living room, kitchen, or bathroom, is made of slippery material or has slippery doormats, and the edge of the walkway or door is too high, causing stumbling or an unstable stair railing. There is a railing on one side, but the storage is too high to reach. This is consistent with the findings of Navarat Waichomphu et al. (2019), studied the guidelines for managing a health business to support an aging society. Under the concept of physical and mental aging theory and society, it revealed the significance of those organizing a health business for the elderly or executives having knowledge about changes in the physical, mental, and social aspects of the elderly to be able to apply solutions that are suitable for the conditions or limitations of individual elderly people in today's fast-paced, changing era. In the case of managing a furniture business for the elderly, the concept of the theory of physical changes in the elderly should be applied, such as the skeletal system, the musculoskeletal system, and the nervous system. This industry may sometimes overlook or undervalue the importance of adapting to the physical changes of the elderly. It is better to design products that suit the physical characteristics and way of life of this group, such as a bed that can be adjusted or a low-height wooden chair with a backrest.

Another thing to consider is that it should be taken into account is design for all (universal design), which is product and environment design without special design or modification. It's a design that everyone can make use of as widely as possible without restrictions on age or physical condition. The principles of design for all are a universal concept that the United Nations has attempted to propagate and promote from the original concept of providing people with disabilities with living facilities in buildings and the environment. It is consistent with the findings of Apichai Praisin et al. (2020), discovered that the design for the elderly should adopt the universal design concept to apply in designing the environment, places, and objects, including those working with the elderly, people with disabilities, and disadvantaged people who have limitations in use of or access to the environment, places, and general objects in society so that they can be used and used equally for all human beings in society without the need for special or specific modifications of the design for a particular group of people.

Nevertheless, this concept is also consistent with the research of Nantiya Na Nongkai et al. (2022), studied the design to promote self-esteem in the elderly. It was found that the principles of "approach, fairness, understanding, and sustainability" should be taken into account. Design the space with universal design, a design concept that responds to the operations of the organization and its people. The ability to access information and the involvement of people are what drive sustainable development. Universal Design (UD), or what is called in Thai "Araya Architecture," is the principle of designing the environment for people. Every group, whether it's the elderly, normal people, or people with disabilities, is barrier-free in use, creating equal access to service areas. designing for equal access for all. It is the principle that creates a space for a higher-quality society while leaving no one behind.

CONCLUSION AND RECOMMENDATION

In order to ensure safety in the lives of the elderly, the concept of "design for all" (universal design) will be applied in the design of products for the elderly to suit the environment, usage, convenience, and safety in life, which will lead to an increase in the well-being of the elderly in the future. Elderly people can live happily with easy access and utilization of the product, being self-reliant and safe, reducing the accident rate, and living without obstacles. In addition, the general public, students, product designers, and product entrepreneurs can apply the designed product designs to designing, creating, and improving products suitable for the elderly. This will result in the development of products for the elderly that are friendly to the general, elderly, undivided public. It is a society of equality. and equally solve social problems in order to have a better quality of life for the elderly by brainstorming to create products for them. Based on the information on the needs of the elderly to participate in group discussions, it was concluded that there were 3 types of products created for the elderly, as follows: 1) the elderly walking aids product model 1 (walker 01/65), 2) the elderly walking aids product model 2 (walker 02/65), and 3) the backrest chair product.

With the results of quality assessments from experts in wood products, it was found that overall quality was at the highest level. The average value was 4.27 and the standard deviation was 0.64, with the issue of safety in the use of the product having the highest average. The mean was 4.38, and the standard deviation was 0.49. The evaluation of product quality is the result found in the elderly sample group; it was found that overall quality was at the highest level. The mean was 4.31, and the standard deviation was 0.65. The products that could be used regardless of the body size, posture, or movement of the user, had the highest average; the mean was 4.44 and the standard deviation was 0.66.

Further research should be conducted to investigate the impact of the ASEAN Economic Community on a group of entrepreneurs and local communities in terms of expanding the production sector to benefit commercial and public sectors under the ASEAN Economic Community. It should bring the research results forward in planning to expand the furniture production sector in Phrae community, commercial, and public benefits. Following that, the research should incorporate collaboration with communities outside of Phrae Province with the goal of expanding the research findings to bring more benefits to the public, including planning for the expansion of sector furniture production for commercial and public benefits. It should collaborate with communities in nine ASEAN countries to achieve the most sustainable and mutually beneficial agricultural product development. Entrepreneurs who are already interested and able to develop to achieve real results can use the research that the researcher has studied as a guideline to recommend to the group. Teak product entrepreneurs who do not participate in the project see the importance of adding value to products and providing self-service in order to generate income and help the group of teak product entrepreneurs survive and thrive. At the same time, cooperation should be coordinated with agencies. government and other related organizations in paying attention to, supervising, and following up on group inquiries. Entrepreneur These

groups, which still lack production potential, try to encourage the group. Teak product entrepreneur Develop the operational potential of a group of people to create value added products for the community in accordance with the creative economy.

ADVANCED RESEARCH

This research still has limitations so that further research is still needed on this topic.

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