Research Article

The Pilot Creation of Sustainable Temporary Pottery Market in Baan Muang Kung Community, Chiang Mai Province

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Abstract

Although local intellectual property products have received support from both the government and private sectors, including increasing consumer interest in craft products, the residents of the Muang Kung community, Chiang Mai province, who produce handmade clay pottery with unique and distinctive shaping techniques and intricate patterns, still lack a market space to accommodate their products. Therefore, it is necessary to study the sustainable market format to help promote community products appropriately and stimulate tourism in this area. This research aims to achieve the following objectives (1) Study sustainable market pattern design principles suitable for community markets (2) Explore the potential capabilities and the local community's requirements in market (3) Propose sustainable market design guideline to promote community products. This research primarily explores the sustainability value of a sustainable market within the field of retail design, employing qualitative research methods such as interviews, observational note-taking, photography, and comparative case study analysis. The research study period is one year, from April 2565 to April 2566. The on-site survey to determine the project's feasibility involved convening a community meeting with 50 residents to discuss findings. The outcomes of this gathering were then used in designing the temporary market. The findings present design guidelines that illustrate how markets continue to play important socio-economic roles in local communities, serving as key components that can be transformed to promote sustainable development. The proposed design practice guidelines encompass considerations such as site layout, the application of sustainable design principles, including the thoughtful selection of sustainable materials, the incorporation of flexible design, and the creation of participatory area experiences to attract people.

Keywords: Temporary market, Sustainable stall design, Baan Muang Kung, Community participation

1. Introduction

This research is based on 'the development of community cultural areas and cultural revitalization, customs, and creation of new culture to stimulate the economy in the area. The project duration is one year, under the Program Management Unit on Area-Based Development funding. The project has designated Baan Mueang Kung area, Chiang Mai province, as the research area and carry out community market activities. Engaging personnel from the Faculty of Arts and Architecture, Rajamangala University of Technology Lanna, as committee members to participate in planning and designing the community market activity area.

Baan Muang Kung is a neighborhood known for the production of traditional clay pottery and is an ancient village in Chiang Mai with a history of crafting traditional clay water jars for over 200 years. A village located along the Chiang Mai to Hangdong Road, is situated approximately 6 kilometers away from the provincial center. In the past, almost every household pursued pottery crafting as their main livelihood. It is a community known for skilled pottery craftsmanship. The occupation used to be in various forms where individuals would produce and sell to middlemen, resulting in insufficient income to support their families. Over the past several years, some residents especially young people of Baan Muang Kung have shifted to occupations in the town. Eventually, there was the establishment of a pottery crafting group within the community, leading residents of Baan Muang Kung. They embraced the profession of pottery crafting, which now contributes to approximately 70% of the community's main income. The traditional pottery crafting of Baan Muang Kung community has undergone modern design development and has started to be marketed in various tourist destinations. At times, production is carried out based on orders from distributors who sell them in different tourist locations. This has caused the community's products to lose their distinctive characteristics, which are valuable for preserving the local culture. There is rental space for community members by a 15 self-established storefront, located only at the entrance of the village. Additionally, there is a tourist center that sells retail products to the community and space for the workshop, but it lacks organization because only the head of the village and volunteers occasionally assist with management. As a result, it is not open full-time; instead, it is open only when booked in advance. Built upon local wisdom accumulated since the past, the products crafted are not only of high quality but also affordable. This renders

Baan Muang Kung a potential tourist attraction. There has been an attempt to establish a walking street within the village, but it was not successful and had to be canceled. The community has not received the attention it deserves and remains unfamiliar to tourists from various sources (Ratchadaphon., L & Wichian, 2014). However, the community still welcomes tourists who come to study. There are demonstrations of molding and firing clay pottery at each learning base, as per the community. In total, there are 15 learning bases, each relying on the expertise and techniques of its respective base.

The study found that the community has not yet established a specialized market or a regular showcase that highlights the uniqueness of this community. Therefore, it is crucial to study the possibility of a sustainable market design to promote pottery products in the Baan Muang Kung community. This initiative aims to enable individuals without handcraft skills to generate income by selling various products related to Goal 1 of the Sustainable Development Goals (SDGs), which focuses on ending poverty in all its forms everywhere and fostering participatory community development for the long term. This paper focuses on finding guidelines and determining a suitable approach for designing a sustainable market to promote pottery temporary market.

2. Temporary market

The temporary utilization of space has emerged as a prominent urban trend, capturing growing attention from the general public, policymakers, and scholars (Bishop & Williams, 2012; Cochrane, 2010; Colomb, 2012). This focus has generally been positive, viewing it as an opportunity for urban regeneration and revitalization (Berwyn, 2013; Steele, 2013). Analysts, civil society activists, real estate professionals, as well as individuals from the creative and cultural industries, and government regulators appear to share a consensus regarding its importance and positive impact (Department for Communities and Local Government [DCLG], 2009; London Assembly, 2013; Meanwhile Foundation, 2016; Portas, 2011). The temporary use of space is widely regarded as a critique of the existing order and a catalyst for change (Eberle et al., 2001; Haydn & Temel, 2006; Jovis, 2007; Oswalt et al., 2013), seen as a progressive force that empowers local communities and activists as active participants in urban transformation (Andres, 2013; Fabian & Samson, 2016; Langegger, 2014). It is commended for offering new development models and providing alternative experiences of places (Foster, 2014; Jodidio, 2011; Nemeth & Langhorst, 2014). This research concentrates on privately-owned spaces,

distinguishing them from the temporary utilization of public spaces, which constitutes a related yet distinct process. When referring to the 'temporary use of space,' we mean the short-term, unconventional utilization of privately-owned and managed vacant spaces. The combination of 'alternative' and 'short-term' establishes the conditions of flexibility necessary to make the space accessible and usable. The choice of various stages of urban development, allowing the tracking of the site's conditions before, during, and after its temporary use. The case study also facilitates the presentation of diverse stakeholder perspectives, encompassing their intentions, claims, and roles. Data for the study are derived from publicly available records of the planning process, statements from various stakeholders, and reports in local and national media (Madanipour, 2018)

2.1 Sustainable market stall design

The design of kiosks or stall serves various purposes, acting as platforms for announcements, displays, events, marketing tools, or any other creative concept one can imagine. Even well-established businesses with a strong brand identity may take the opportunity to experiment with a new service, product, or interior design for a limited period to assess its success. Kiosk stores are remarkably versatile and can be situated both indoors and outdoors. They have the capability to function simultaneously as flagship stores, concept stores, showrooms, and more (Haydn & Temel, 2006). Additionally, by occupying previously vacant areas, kiosks have the potential to rejuvenate entire neighborhoods. Customers and businesses are becoming increasingly interested in sustainability (Vadakkepatt et al., 2021). According to a 2021 global sustainability study, 85% of consumers are willing to pay more for environmentally friendly or sustainable goods and services, and 60% of consumers now consider sustainability to be the most essential aspect when making a purchase (Navapan & Charoenkit, 2022). According to the Global Web Index (2019), over 50% of consumers in the US and the UK are inclined to move to a brand that is more environmentally friendly than the ones they presently use. The shift in consumer behavior towards sustainable consumption has prompted firms to implement eco-friendly policies and programs (Su et al., 2022). This makes it challenging for designers to create sustainable stalls in temporary markets that align with current trends.

2.1.1 Sustainable stall design case study

Retailers and brands are experimenting with sustainability on various levels, including local assortments, waste reduction, and energy-neutral stores. However, the design of the interior of stores, stalls and popup store remains challenging to fully grasp. Therefore, the case presents guidelines for sustainable outdoor retail design. Table 1 illustrates the alternative ideas for a sustainable stall design which suitable for temporary pottery market.

2.2 Sustainable community development

Achieving sustainable community development is a challenging task that necessitates significant changes in our structures, attitudes, and values. Sustainable development implies a fundamental shift in the way individuals, companies, and nations utilize resources, which, according to current legal and economic arrangements, they have the right to use and are encouraged to use. While even conventional analyses acknowledge the need for alterations in these arrangements, few openly admit that moving towards a sustainable society demands more than minor adjustments to existing practices (Roseland, 2000). Wachtel (1989) notes that the key to a sustainable future lies not in making us more competitive, but rather in making us more perceptive enhancing our ability to understand what we have and our necessities and the long-term consequences of our short-term choices. Developing a sustainable society requires both a shift away from values that encourage unsustainable behaviors and a shift toward values that promote sustainable practices. Initiatives such as active social learning programs, involving social experimentation to change behavior, can be effective not only in preventing environmental and related social disasters but also in creating healthy, sustainable communities that are more pleasant and satisfying for their residents than the communities live in today (Roseland, 2000).

2.2.1 Local markets and community sustainable development

Local markets serve as accessible hubs for quality food and fresh produce, providing a platform for farmers, producers, and local workers. They facilitate urban-rural connections, fostering community economic development. Being public spaces, local markets function as gathering places where diverse individuals interact for various purposes. Consequently, they play a crucial role in promoting social inclusion within communities. The vibrancy of these markets is heightened by face-toface trading activities, offering more authentic experiences compared to other forms (Caramaschi, 2014). As significant urban settings, local markets imbue cities with a unique sense of life, appealing to both locals and tourists alike (Giriwati et al., 2013; Sezer & Janssens,

Table 1 A case study on the guidelines of sustainable stall design

No	Design format sustainable pottery stall	Sustainable Concept	Sustainable materials:	Eco-friendly transporta-tion:
1.	(Klipklap, 2023)	The size is 2x2 m. and is provided with table, shelves and awning. The concept of the square is conceived to serve multiple functions, taking place within a simple structure that is easy to set up and move.	Wooden surface with varnish and canvas awning.	Disassemble the stall and then puts it easily inside a van for transportation
2.	Geneva-based architect Aurélie Monet Kasisi (Treggiden, 2015)	Mobile station is based on street stands. It is a micro-social platform enabling different events to take place around it: information dissemination, distribution of materials, discussions, workshops, or film projections."	A framework made from beech rods, containing wooden boxes. A canopy made with material recycled from boat sails protects the stand and its visitors from the weather.	Brass-tipped handles at one end and two repurposed wheelchair wheels at the other enable it to be moved around like a wheelbarrow.
3.	(Etsy, 2024)	The overall size is 1.2 x 0.6 x 2.14 m. The practical design allows for single-person assembly and does not require any tools for setup. It can also be styled in many different ways, providing a unique and interesting look. Additionally, it can be used repeatedly, limiting waste production during both the construction and dismantling of the stand.	The counter is made of renewable raw materials: constructional spruce wood and plywood.	After folding, the furniture fits in comfortable covers that facilitate transport to the fair and the car.
4.	(DEKK Istanbul, 2024)	The concept is a hybrid where multiple purpose during the day:, minimized in a small rectangular, easy to set up and move.	Plywood and decorate with the tiles.	It can be folded for storage or set up semi-permanently.

2013). These distinctive urban experiences contribute significantly to the identity and livability of cities (Navapan & Charoenkit, 2022).

3. Methodology

The research used qualitative methods, divided into:

- 3.1 A site survey has been conducted to assess the feasibility of the project's location. The surveys and observations involve taking notes and photos.
- 3.2 The study on community product marketing design is conducted by gathering information from the community. Opportunities for community involvement are created by collecting essential input from 50 residents and 25 sellers through surveys. This aims to obtain accurate and relevant data to facilitate the proper and suitable design of the temporary market, promoting community products. The outcomes of this gathering were utilized in sustainable designing stalls in the market.
- 3.3 The focus group provided an opportunity for practical discussion with the head of the village and 20 community members from the market, ranging in age from 25 to 70 years.
- 3.4 The study of data analysis involves employing methods to analyze strengths, weaknesses, opportunities, and threats (SWOT analysis) and analyzing the possibility of the capability to establish a standing stall for selling items in the pottery temporary market.

3.5 The study involves a comparative case study analysis, and the findings illustrate design practice guidelines. These considerations include site layout, the application of sustainable principles, such as the thoughtful selection of sustainable materials the incorporation of flexible or movable design, and the creation of participatory area experiences. These elements aim to attract people and are suitable for user behavior.

4. Baan Muang Kung Market context

The findings illustrate that the distribution channels for Baan Muang Kung pottery are simple and straightforward between buyers and sellers, categorized into the following product sales formats. The pottery business is divided into four types of stores such as the permanent store and temporary events.

Store type 1: the temporary store is a rental space priced at 150 baht per month. It involves community members in the production and sale of small to mediumsized goods. Some shops act as middlemen, acquiring products within the community bases for distribution. Additionally, there is the acceptance of pottery products from other sources or the sale of items related to the store's products. For example, a pot-selling shop may also offer additional products such as plants and soil to enhance the variety of goods within the store. The approximate size of the small-sized shop is 3 x 4 meters. The figure 1 shows the shop features individual sections separated by partitions, utilizing temporary structures for construction. Located adjacent to the main road, there are a total of 15 shops.

Figure 1 Temporary stores in rental spaces



Convenient access to the shops is facilitated by their proximity to a major road, serving as a thoroughfare from the town to Hang Dong district. Vehicles passing by can easily stop and purchase products as there is convenient parking in front. The shops have operating hours from 08:00 a.m. to 05:00 p.m.

Store type 2: the permanent store this functions as a consignment store or a central hub that gathers and sells community products (Figure 2). The center also organizes product displays for tourists who wish to learn and engage in workshops, particularly in pottery making. Products are sold directly to consumers, with prices marked up by 20-50% from the acquisition cost. The total income is then divided to cover all expenses, including caretaker wages, electricity and rental space from the Tourism Authority of Thailand (TAT). A committee is established to oversee the center and product distribution, along with the management of tourism guidance. Tourists are also taken to various bases for pottery workshops.

Store type 3: the houses within the village engage in both selling and producing pottery products. They specialize in selling and producing products based on their own expertise, with a focus on wholesale and attracting customers to purchase directly from their homes. Each house exhibits a diverse range of products, with production methods varying according to their individual skills. Some houses emphasize firing work, catering to both retail and wholesale markets, and produce larger items such as water jars, bowls, or plant pots. The figure 3 shows the workshop based on the community, which has set up a total of 15 learning bases where individuals can engage in hands-on learning through workshops, including pottery making. Additionally, these bases serve as outlets for the sale of unique pottery products.



Figure 2 The atmosphere of exhibitions store of the tourism learning center



Figure 3 The workshop base where products are crafted and sold



Figure 4 Examples of coffee shop and groceries shop in the community

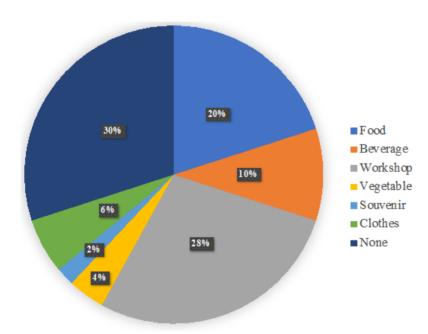


Figure 5 The percentage of a unique skill among the local villagers, enabling them to sell their products in the temporary marke

Store type 4: The figure 4 demonstrate the examples of general stores are retail establishments that sell various items, including food, groceries, and beverages. The majority of the sellers are elderly individuals, as well as middle-aged individuals who are responsible for caring for their grandchildren.

4.1 Study of readiness potential in product sales.

Figure 5 shows, during an observational research in a participatory meeting with 75 villagers in the area, it was found that there is potential readiness for product sales in the temporary market, which is divided into 7 categories; The percentage of sales for general products is slightly higher than that for pottery products and workshop-based items. Additionally, Figure 1 demonstrates that most people in the village lack the knowledge and skills to make pottery; more than half of the community falls into this category.

Therefore, the committee conducted three meetings with community representatives to discuss directions and strategies. Subsequently, a community assembly was organized, led by the village head of Baan Muang Kung, Mr. Wachira Seechan, in one session. The desired guidelines were then summarized for the committee to proceed with the design and to determine the format of activities, including suitable days and times aligned with the community's way of life.

4.2 Study of the physical characteristics of the community

The village area is divided into three main parts: Zone 1: The area along the road connecting to the inside of the village, featuring community shops. Adjacent to this is the Tourism Authority of Thailand (TAT) building, serving as a welcoming front for guests to come and make purchases. Zone 2: The internal village area, consisting of learning bases related to pottery. Zone 3: The majority of the area consists of houses belonging to the community members, showcasing various significant works. This serves as a pathway that can be connected to the main road (Figure 6).

When studying and analyzing the location where the market will be established (Table 2), the idea was then presented to find ways to engage with the community. The villagers will cast their votes from these locations and choose only one which suitable for their community for be a pilot design. Based on the voting the option area: 2 was selected.

4.2.1 The selected site of temporary market for design analysis

Based on the voting results from local people regarding the site location, it can be concluded that the majority of the villagers prefer the temporary stall market to be set up behind the 'Namton,' the prominent landmark of the village or the option area: 2. The temporary market opening event is divided into three areas: the parking area, stalls selling products from both the local community and vendors from other areas, and an area for displaying research and development products from research project collaborated booth. Additionally, there is a designated area for the stage. In the front, space is reserved for activities during the opening ceremony, such as traditional dances performed by community members, including the elderly and youth teams.



Figure 6 The map of the selected site of the temporary market for design analysis

Table 2 showing a comparison of alternative areas for designing a market to promote community products.

Criteria used for analysis	Option area: 1	Option area: 2	Option area: 3
Location position	Located near the main road at the Hang Dong intersection in Samoeng.	Located near the main entrance of the village.	Locate inside the village and the land is Private property.
Access to the project	Access to the area is possible through the use of private vehicles and public transportation.	Access to the area is possible through the use of private vehicles and public transportation, as well as by walking.	Access to the area is possible through the use of private vehicles and public transportation, as well as by walking.
Contextual relationship	The existing shop area is retained, and there is a pavilion for seating near the entrance.	The area is adjacent to the sales center and connected for workshop activities.	The area is surrounded by neighbors
Perspective or viewpoint	Adjacent to the main road, easily visible to passing traffic.	It is possible to clearly see the community entrance stalls and the iconic Nonglueang water source from this vantage point.	One must enter an alley shared with meatball shops, which is a private area.
Physical characteristics of the area	It is an open, rectangular space that allows for flexible building placement to suit the direction of the sun, wind, and rain in the design. There are also large trees that can be preserved for green space design in the architectural project.	It is an open area surrounded by large trees. The location is within an alley, making it somewhat challenging to see. However, it is close to the landmark of the water source and the unique community entrance stalls. Additionally, there are painted walls, artworks, and old shops selling products and providing information to traditional tourists. This allows the design to create more opportunities for people to use the space.	It is an open, small-sized area within a residential compound, surrounded by fences, making it challenging to see. The space is narrow and rectangular with a fabric floor.



Figure 7 The analysis of current situation of stall

4.2.2 Analysis of current situation of traditional stall in Bann Muang Kung

The pilot study observed the following characteristics design of current temporary market that can be enhanced via the five key aspects highlighted following the figure 7.

After observing the current conditions and structure of the temporary market, it can be inferred that there is ample opportunity for enhancing the stall by incorporating and integrating the aspects into its sustainable design guideline.

5. Conclusion

5.1 Conceptual design practice guideline

In considering sustainable stall design to promote a temporary pottery market in the Baan Muang Kung community, the circular economy model is implementable as a concept of sustainable development (Halkos & Gkampoura, 2021; Kirchherr et al., 2017) characterize this definition with a systems perspective, as it encompasses the

regeneration of natural systems as a key principle. Alternative definitions incorporate various R frameworks such as the 3R, 4R, 6R, and 9R frameworks. For instance, the 4R framework includes: reduce, reuse, recycle, and renew. Additionally, the consideration of sustainable stall design includes the selection of sustainable materials and the incorporation of flexible, modular, and easily installable designs (Barretto, 2021).

5.1.1 The selection of sustainable materials

Choose materials that are eco-friendly and sustainable, such as bamboo, recycled wood, or biodegradable materials. Avoid using non-sustainable materials like PVC and other plastics (Jadhav, 2023). Importantly, ensure that these materials are easily available in the market. Consider selecting eco-friendly transportation options, such as choosing materials that are not far away to keep costs low. Additionally, opt for hybrid or electric vehicles, or use public transport where possible.



Figure 8 The existing conditions of the areas before design

5.1.2 Flexible design

Flexible designs empower retailers to promptly respond to both supply chain requirements and customer needs. Apart from cost-effectiveness, retailers gain advantages from straight forward designs in various aspects, particularly in terms of brand representation. A more streamlined design consistently implemented across the store ensures effective communication of the brand identity to shoppers. This results in a unified design that shifts the focus from individual departments to the overall messaging and product presentation (Casey, 2022). Besides the core idea of mobility, this concept integrates key characteristics of contemporary stall retail, specifically flexibility and modularity. The main structure of the stall consists of a central body and two side modules connected by a link, enabling them to rotate around a vertical axis. The product modules should maintain a relatively consistent form to facilitate effortless recombination (Hölttä-Otto, 2005).

5.2 Sustainable optimization design findings

The picture 6 depicts the existing temporary market before design, while figure 8 illustrates the guidelines for the new layout of the temporary pottery market. The new design is based on collecting essential input from 50 residents and 25 sellers through surveys on the community's requirements, activities, and shop categories.

The figure 9 shows the design layout of a stall for a sustainable pottery temporary market, intended to efficiently accommodate activities and usage, foster internal connectivity within the project, and create an aesthetically pleasing environment that adequately supports traffic and transportation. The stall provides a space that efficiently caters to various activities, such as changing pottery workshop techniques every week. It is divided into five categories, each related to the potential sales of local products in this community, such as food and beverage, pottery products, and clothes. Additionally, the market includes an eating and relaxation zone, along with a collaborative area for research projects.

The atmosphere in the relaxation and workshop activities area is calm and flexible, conducive to creativity, providing a comfortable space for visitors to unwind and engage in various hands-on activities. Adequate space is provided for product display, customer interaction, and transaction processing, ensuring that vendors can conduct their business smoothly. Additionally, communal areas are incorporated into the design, providing opportunities for social interaction, and fostering a sense of community among vendors and visitors (Figure 10).

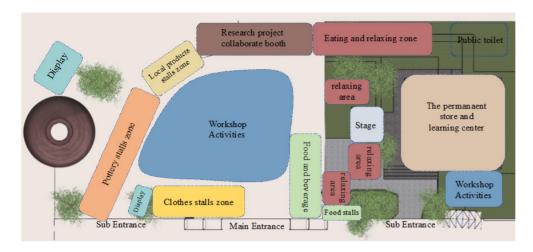


Figure 9 The layout of the temporary pottery market



Figure 10 The atmosphere of relax and workshop activities



Figure 11 The atmosphere installation for stall design in the temporary market.



Figure 12 The design of stall installations in the temporary market.

Overall, the sustainable stall design in the temporary market enhances the overall experience for both vendors and visitors by creating a welcoming, aesthetically pleasing, and functional environment. It promotes sustainability, encourages economic activity, and fosters a sense of community, making all stakeholders involved (Figure 11).

The sustainable stall design (Figure 12) considers dividing into 4 points: 1) Environmental Impact: Further measures are taken to minimize the environmental footprint of the stalls, such as utilizing reclaimed materials or sourcing local materials from the market, including assembly of wood, bamboo, unused wood from individual houses, and hardwood easily found in the community. 2) Accessibility: The design ensures that accessibility is prioritized for all members of the community, including people with disabilities and those with limited mobility. Incorporating universal design principles can enhance inclusivity. 3) Long-term Viability: Assessing the longterm viability of the stall design in terms of durability, maintenance requirements, and potential for future expansion or adaptation to other markets or events. The use of canvas cotton in the design offers several benefits, particularly in terms of long-term waterproofing. Canvas cotton is a durable and resilient material that has been widely used for various applications, including outdoor equipment and clothing, making it suitable for environments where protection against moisture is essential. 4) Cost Considerations: Evaluating the costeffectiveness of the sustainable design features to ensure feasibility within budget constraints while still delivering long-term value.

The satisfaction of people in the pottery community: To address Objective 3.3, the focus group provided feedback with the head of the village and 20 community members from the market, ranging in age from 25 to 70 years. The findings show that the community agrees with the importance of aesthetic appeal, while also emphasizing that functionality is paramount. This design guideline's aesthetic appeal of the stall design could help attract customers and create a welcoming atmosphere. However, there is significant concern about the cost of setting up the entire temporary market. It might be necessary to seek funding from the government or investors to support this endeavor. Additionally, approximately 12 people mentioned that it would be possible to use this design as a guideline for installing future events. However, they suggested that it would be better to provide examples or workshops for constructing stalls based on this design to make it easier for people to follow.

Advantages: The benefits of marketing planning and design include being able to see the overall picture of the market in terms of context and patterns. The design is created using wood materials, featuring small-sized or floating booth structures. It is designed to be movable and foldable, providing convenience for a single person to install.

Recommendations: The choice of materials for floating retail booths includes opting for locally sourced wood and canvas fabric that is waterproof and sunresistant. However, due to the design's versatility, allowing for various usage patterns, it tends to be relatively heavy, considering the durability and weightbearing capacity of the products. Therefore, future designs must take into account the crucial aspect of weight.

Designing sustainable pottery stalls is one part that helps build the image of the community. A market stall selling environmentally friendly and economically sustainable pottery contributes to the long-term economic viability. This design approach likely involves the use of sustainable materials and environmentally friendly practices, certifying the pottery stall's economic life in line with the principles of sustainability.

6. Limitation and suggestion for further study

While investigating strategies for designing markets that enhance community product promotion, the research has analyzed market formats, market attributes, and the characteristics of local products within the region. This gathered information can be utilized in multiple contexts, including the following:

- As a design guideline for a temporary market focusing on pottery and culturally oriented products from communities with similar characteristics, the format may include strategically arranged stalls, thematic zones showcasing diverse cultural elements, and interactive spaces for artisan demonstrations, creating an immersive and engaging experience for visitors.
- Applying these findings as guidelines to enhance the sustainable temporary market in alignment with the context of the desired area, improvements can be made by selectively incorporating some of these aspects, such as the layout of the site location, the selection of sustainable materials, including consideration for waste management in the temporary market. Additionally, local community participation can be encouraged for long-term organization.

CRediT Authorship Contribution Statement

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Conceptualization, Methodology / Study design, Software, Validation, Formal analysis, Investigation, Resources, Data curation, Writing -original draft, Writing -review and editing, Visualization, Supervision, Project administration, Funding acquisition.



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Reference

- Andres, L. (2013). Differential spaces, power hierarchy and collaborative planning: A critique of the role of temporary uses in shaping and making places. Urban Studies, 50(4), 759-775.
- Barretto, K. (2021). Designing a trade booth system for the circular economy [Bachelor's thesis, Aalto University].
- Berwyn, E. (2013). Mind the gap: Creating opportunities from empty space. Journal of Urban Regeneration and Renewal, 6(2), 148-153.
- Bishop, P., & Williams, L. (2012). The temporary city. Routledge.
- Caramaschi, S. (2014). Public markets: Rediscovering the centrality of markets in cities and their relevance to urban sustainable development. In Syngellakis, S. (Eds.), Urban regeneration and sustainability. Proceedings of the 9th international conference (pp.1187 - 1197). WIT Press. https://doi.org/10.2495/ SC141002
- Casey, D. (2022, February 24). Flexible store design: Simplicity is key. BHDP. https://www.bhdp.com/ insights/flexible-store-design-simplicity-key
- Cochrane, K. (2010, October 12). Why pop-ups pop up everywhere. The Guardian. http://www.theguardian. com/lifeandstyle/2010/oct/12/pop-up-temporaryshops-restaurants
- Colomb, C. (2012) Pushing the urban frontier: Temporary uses of space, city marketing, and the creative city discourse in the 2000s Berlin. Journal of Urban Affairs, 34(2), 131-152.
- Department for Communities and Local Government. (2009). Looking after our town centres. DCLG.

- DEKK Istanbul. (2021). DEKK. https://www.behance.net/ gallery/127584831/DEKK-Istanbul?tracking source= search projects recommended%7Ckio
- Eberle, M., Klanten, R., Hendrick, H., & Mischler, M. (2001). Temporary spaces. Die Gestalten.
- Etsy. (2024). Browse collections hand-picked by Etsy shoppers. https://www.etsy.com/listing/1381696600 /serving-station-vc-01-cf-in-coffee-color?ref=share v4 lx&epik=dj0yJnU9c1oxMG1qdEVTSGJCdHZsVkNB cmVzcHBoUVJOYUQzTlYmcD0wJm49ZDdFQng1dVloe UNKWktiS3JpbHkxUSZ0PUFBQUFBR1hhSGpv
- Fabian, L., & Samson, K. (2016). Claiming participation a comparative analysis of DIY urbanism in Denmark. Journal of Urbanism: International Research on Placemaking and Urban Sustainability, 9(2), 166-184. https://doi.org/10.1080/17549175.2015.1056207
- Feldmeier, K. (2016). Flagship, concept, pop-up store; in a nutshell. Go-PopUp. https://magazine.gopopup.com/ en/flagship-concept-pop-up-store-in-a-nutshell/#:~: text=The%20Pop%2DUp%20Store%20(%20by,day% 20up%20to%206%20months.
- Foster, J. (2014). Hiding in plain view: Vacancy and prospect in Paris' Petite Ceinture. Cities, 40 (B), 124-132. https://doi.org/10.1016/j.cities.2013.09.002
- Giriwati, N., Homma, R., & Iki, K. (2013). Urban tourism: Designing a tourism space in a city context for social sustainability. Proceedings of The Sustainable City 2013, 179(2), 165-176. https://doi.org/10.2495/ SC130141
- Halkos, G., & Gkampoura, E. C. (2021). Where do we stand on the 17 sustainable development goals? An overview on progress. *Economic Analysis and Policy, 70,* 94-122.
- Haydn, F., & Temel, R. (2006). Temporary urban spaces: Concepts for the use of city spaces. Birkhauser.
- Hölttä-Otto, K. (2005). Modular product platform design [Doctoral dissertation, Department of Mechanical Engineering]. Helsinki University of Technology. http:// lib.tkk.fi/Diss/2005/isbn9512277670/isbn951227767 0.pdf
- Jodidio, P. (2011). *Temporary architecture now!*. Taschen. Jadhav, B. (2023, April 13). Sustainable exhibition stall design: How to reduce your carbon footprint. https:// www.linkedin.com/pulse/sustainable-exhibition-stalldesign
- Jovis. (2007). *Urban pioneers: Berlin experience with* temporary urbanism.
- Kirchherr, J., Reike, D., & Hekkert, M. (2017).
- Conceptualizing the circular economy: An analysis of 114 definitions. Resources, Conservation and Recycling, 127, 221-232.

- Klipklap. (2023). CATERING-MARKTSTAND D2. https:// www.klipklap.de/Markt/cateringstand.html https://www.klipklap.de/Markt/cateringstand.html
- Langegger, S. (2014). Reprint of "Emergent public space: Sustaining Chicano culture in North Denver". Cities, 40, 183-189.
- London Assembly. (2013). Open for business: Empty shops on London's high streets. Greater London Authority.
- Madanipour, A. (2018). Temporary use of space: Urban processes between flexibility, opportunity and precarity. Urban Studies, 55(5), 1093-1110.
- Meanwhile Foundation. (2016, June 6). The Meanwhile Foundation is open for business. https://www.mean while.org.uk/
- Nemeth, J., & Langhorst, J. (2014). Rethinking urban transformation: Temporary uses for vacant land. Cities, 40, 143-150.
- Navapan, N., & Charoenkit, S. (2022). Local markets: How the ordinary public places can support urban sustainable development. GMSARN International Journal, 16(2022), 308-313. https://gmsarnjournal. com/home/wp-content/uploads/2021/10/vol16no3 -12.pdf
- Oswalt, P., Overmeyer, K., & Misselwitz, P. (2013). Urban catalyst: The power of temporary use. Jovis.
- Portas, M. (2011). The Portas Review: An independent review into the future of our high streets. Department for Business, Innovation and Skills.
- Ratchadaphon., L & Wichian, L. (2014). Potential development of Muang Kung community as artistic cultural tourism. Modern Management Journal, 12(1), 22-3
- Roseland, M. (2000). Sustainable community development: Integrating environmental, economic, and social objectives. Progress in planning, 54(2), 73-132.
- Sezer, C., & Janssens, F. (2013). *Marketplaces as an urban* development strategy. Alexandrine Press.
- Steele, J. (2013). How 'Meanwhile' came to the High Street. Journal of Urban Regeneration and Renewal. 6(2),
- Su, D.N., Nguyen-Phuoc, D.Q., Duong, T.H., Dinh, M.T.T., Luu, T.T., & Johnson, L. (2022). How does quality of mobile food delivery services influence customer loyalty? Gronroos's service quality perspective. International Journal of Contemporary Hospitality Management. 34(11), 4178-4205.
- Treggiden, K. (2015). Mobile suicide prevention station is based on street-food stands. Dezeen. https://www. dezeen.com/2015/05/29/mobile-stop-suicide-preven tion-aurelie-monet-kasisi-station-street-food-stand/

- Vadakkepatt, G.G., Winterich, K.P., Mittal, V., Zinn, W., Beitelspacher, L., Aloysius, J., Ginger, J., & Reilman, J. (2021). Sustainable retailing. Journal of Retailing, 97(1), 62-80.
- Wachtel, P. (1989). The poverty of affluence: A psychological portrait of the American way of life. **New Society**