

Designing Compact Products for Communal Spaces to Support Communal Activities

Salsabila Ayunda¹, Gabriella Chrismaditya Putri Mawarni^{2*}, Afdhel Haqiqie Zahidin³, Anisa Silviana Putri⁴, Faisal Amien Prawira⁵, Didit Widiyatmoko Soewardikoen⁶

Universitas Telkom Bandung, Jakarta
Email: gabriella.chrisma@gmail.com

*Correspondence

ABSTRACT

Keywords: compact furniture, communal space, creative activity.

The city of Bandung is dubbed a creative city as a result of a process carried out by local communities engaged in the creative industry. One of the areas that is used as a forum by creative people in the city of Bandung is Laswee Creative Space. Areas and spots in Laswee can be used by various communities regularly for exhibitions, seminars, workshops, event design, and other gathering events. However, from the various facilities and environments that have been provided by Laswee as a creative communal space, there are still some aspects that have not been fulfilled. Based on the emphasis and defined process in this study, it shows that the furniture used in Laswee has not supported creative communal activities. Based on this, this research aims to produce compact furniture designs that can maximize communal and creative activities.



Introduction

The city of Bandung is dubbed a creative city as a result of a process carried out by local communities engaged in the creative industry. Bandung Creative City Forum (BCCF) is an organization founded in 2008 by dozens of creative individuals and communities in Bandung, with the aim of honing creativity as an effort to empower the economy of the city of Bandung (John et al., 2024). BCCF builds collaboration among the creative community so that it has greater potential to develop the city of Bandung as a creative city. Collaborative efforts accommodated by BCCF are considered to be able to influence the creative community, society and the Government (Fitriyana & Sofhani, 2012). The rapid growth of the creative economy has triggered the Bandung City government to continue to develop four main sectors of the creative industry, namely culinary, fashion, film, and events (Pramezwary et al., 2021).

One of the areas that is used as a forum by creative people in the city of Bandung is Laswee Creative Space. Laswee is an area located in Jalan Laswi, Bandung City. The initial concept of Laswee is a restorative building by utilises elements of collaboration from various creative communities to create a new building function from an existing building (Fuadiya et al., 2020). Laswee is designed as an area for exchanging ideas and

ideas of various communities. Areas and spots in Laswee can be used by various communities regularly for exhibitions, seminars, workshops, event design, and other gathering events. In addition to being used as a creative area, Laswee is also a communal area in which several activities can be carried out together. Among the activities that can be done include culinary, sports, fashion shopping, WFA/WFC, and experience (Siu & Wong, 2015).

In a study by (Hasriyanti et al., 2018), it was stated that furniture used in communal areas should be movable, support collaborative creativity, and provide tools that can adapt to climate conditions. In the book *Designing Creative Space* by (Thoring, 2019), it is also mentioned that the furniture used must be able to support communal activities.

Laswee is often used as a place for various communities to gather. Of course, the furniture and facilities provided must be able to support various activities to the maximum. However, from the various facilities and environments that have been provided by Laswee as a creative communal space, there are still several aspects that have not been fulfilled to support creative communal activities. Among them is that the furniture used has not met the ideal aspects for a communal place and has not been maximized in supporting creative activities (Nur & Salomo, 2022). The table can only be used by a maximum of 4 people, is not movable, and there is no solution for climate conditions. In interviews conducted with several communities that have carried out activities in Laswee, it was stated that the facilities used in Laswee are still not optimal in accommodating the activities carried out. It is not uncommon for communities who want to carry out activities in Laswee to have to provide themselves with the items needed for the event such as tents, chairs, and additional tables (Alexandri & Raharja, 2020).

Some of the previous research that is relevant to this topic includes research by (Hasriyanti et al., 2018), which examines the design of communal spaces as a place for student interaction on the police campus. The research highlights the importance of designing communal facilities that can support collaboration and creative activities in public spaces. Another study by (Thoring, 2019) discusses the impact of workspace design on the creative process, emphasizing that flexible furniture and design elements can improve the effectiveness of social interaction and creativity.

In addition, research by (Ekoadyoto et al., 2020) highlights the importance of space design flexibility in supporting creative activities in the community, especially in the context of open spaces used for social and creative activities. This research shows that a well-designed public space that supports joint activities can improve the quality of community interaction (Sari et al., 2020)vv.

Based on this, this research aims to produce product designs that can maximize communal activities. The design is expected to be able to make Laswee a container that can be used by visitors and the community gathered in it.

Method

This research uses a design thinking approach for each stage. The stages are empathize-define-ideate-prototyping-testing. However, this study only runs up to the prototyping stage. The testing stage will be carried out in the next research.

Data collection using purposive sampling, namely the resource persons who are asked for information are those who have interacted directly at Laswee Creative Space. Purposive sampling is used so that the problems to be explored are right on target.

The data processing methods used include qualitative processing, namely SWOT analysis and descriptive analysis of questionnaire results. The results of several analyses will be used to conclude the problems found (Soewardikoen, 2019).

The instruments used in this study are interview guidelines, observation guidelines, and documentation. The interviews were conducted in a semi-structured manner, which allowed the researcher to dig deeper into the participants' experiences, views, and perceptions of the topics discussed. Observation guidelines are used to record various phenomena that arise during activities at the research site. Documentation in the form of photos, videos, and written notes is also used to support data analysis.

Data was collected through three main techniques, namely in-depth interviews, participant observations, and documentation studies. Interviews were conducted with research subjects who were directly involved in the phenomenon being studied. Participant observations were carried out with the aim of understanding the interactions that occur in a natural context, while documentation studies help to supplement the data obtained from interviews and observations. All collected data is then analyzed descriptively with a thematic analysis approach, where key themes relevant to the research will be identified and further analyzed.

Results and Discussion

Empathize Stage

In the empathize stage, what is done is to deeply understand the interactions and experiences felt by stakeholders towards the research object. The methods that have been carried out include observation, interviews, literature studies, and questionnaire distribution.

Observation results: 1. During the rain, some visitors hurriedly finished their food and then went home. Some other visitors moved to the hallway. 2. Visitors find it difficult when it rains because they have to move to an indoor part or hallway that cannot accommodate all visitors so they have to stand.

Interview results: 1. The facilities provided by Laswee did not accommodate the needs of community events at that time. For example, a table that is not easy to assemble according to needs. 2. Visitors find it difficult when it rains because they have to move to an indoor part or hallway that cannot accommodate all visitors so they have to stand.

Define Stage

The next stage is the define stage to classify the problems that have been found in the empathize stage. Problem classification based on relevant previous research. Then the problem validation was carried out by distributing questionnaires to Laswee visitors. Validation through questionnaires using the Likert scale and differential semantics. The results showed that respondents agreed to find it difficult when it rained and had to move to an indoor area.

Based on the criteria mentioned in previous studies, the root of the problem in Laswee creative space is that the facilities provided have not functioned optimally.

Ideate Stage

At the ideate stage, design parameters will be used through the criteria in previous research. The design parameters obtained are facilities used in outdoor spaces in communal areas should be movable, can adapt to weather changes, and support communal activities. Here are alternative ideas:



Fig 1 Alternative Ideas 1

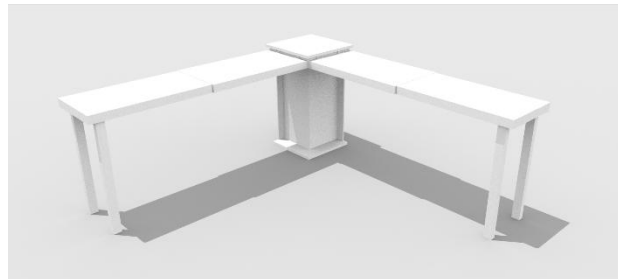


Fig. 2 Alternative Ideas 2

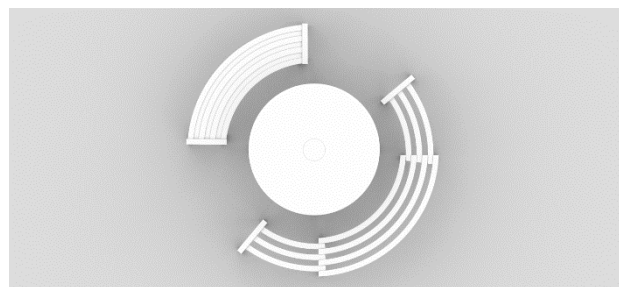


Fig 3 Alternative Ideas 3

Next, a scoring matrix will be carried out to determine the final sketch. Scoring uses a scale of 1-5.

Table 1
Idea selection matrix

Parameter	Ide 1	Ide 2	Ide 3
Moveable	2	3	3
Adapt to climate change	4	4	4
Support communal activity	3	5	4
Total	9	12	11

Prototyping

At the prototyping stage, the final sketch that has been developed will be visualized in 3D. 3D prototyping using rhinoceros 6.0 software.



Fig 4 Final design



Fig 5 Final design



Fig 6 Design Implementation

Feature description:

1. Tables with a compact system, can be used according to the needs of the user. If you only need one table, then you only need to open one part of the table.
2. In the middle is the umbrella place. The system is by pressing the circle and the umbrella will appear up from the box. This is intended if it rains, the user can use the umbrella inside.
3. The folding system uses bolt hinges on the inside.
4. If all parts are folded, it will only be in the shape of a box so that it is easy to move.

Conclusion

Based on the stages of research that have been carried out, several conclusions have been found, namely: With the characteristics of Laswee which has limited space, the design of furniture with a compact system is right to be applied. This is because compact furniture is easy to move, can adjust according to needs, and if you want to store it, it doesn't take up much space.

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