

Portable split-level technology in café and Surabi as a design reference theme

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Abstract. Development in Indonesia is very rapid. The dense population in Indonesia makes buildings denser and lifestyles are increasingly modern so that traditional culture begins to erode by the times. Café is one of the most popular places in this day and age. The existence of a café that sells traditional food with modern concept buildings, makes visitors more interested in coming. The study aimed to design a space composition at Café Surabi by taking a concept based on the fibber shape of surabi. The pattern of space sharing in cafes and Kouta visitors who expand is an obstacle experienced by café owners in the comfort of café visitors. With the design of a high-tech ceiling that can be operated to scratch the remote. Use development methods or Research Development (RnD). This RnD method is carried out using 10 steps, namely potential and problems, data collection, product design, design validation, design revision, product trials, product revisions, usage trials, product revisions, and mass production. The results of our research explain the planning and design of a café in the Surabi room. The composition of space is a characteristic of a space that affects the comfort of the interest of café visitors. It can be noted that the composition of the café surabi room gives a new season to the café by paying attention to the building structure.

Keywords: Interior design, Space composition, Café, Mezzanine, technology, Surabi, Modern, Traditional

1. Introduction

Nowadays the Café is a place to relax and chat where visitors can order drinks and food [1]. The design of the café is usually made as attractive as possible which eventually makes the end feel comfortable to linger there. A building will look attractive if it has a space composition that can explain the identity of the building so that it can clarify the function and nature of space in a building. Café that can attract visitors there is the chance of a lack of capacity of visitors, therefore made mezzanine to accommodate visitors who exceed the normal capacity.

That way it can be concluded that the café by having an attractive and ergonomic space composition and the use of a mezzanine can generate strong visitor appeal to increase sales.

Surabi is a traditional Sundanese meal that is very fond of every circle, the presentation of surabi food is very diverse to preserve the food [2]. Starting from a simple way of presentation

to a presentation that uses various toppings and flavours that suit the interests of all circles. The ingredients used are also not separated from traditional ingredients that strengthen the taste of the surabi. Currently, surabi sales have penetrated in modern places such as cafés so that it is increasingly favoured by young people. The atmosphere of the café has also been made as attractive as possible so that visitors are more interested. The magnitude of the anime visitors makes the dining facilities are always filled. The creation of split levels using a mezzanine in the café building can add dining facilities to accommodate more visitors, coupled with the composition of space in the café made in line with the food sold, namely Surabi.

In building a building in a narrow and cost-cutting area, it takes a split level using a mezzanine. A mezzanine is a room or utility room upstairs on a roof slab panel or attic. It's more about the attic where the product is stored. The attic is the ceiling on the mezzanine floor, which is 40% smaller than the room in which it is located [3]. The use of automatic mezzanine is a mezzanine controller module wirelessly using a remote control [4]. A remote control is a wireless device used to control an item or device from a certain distance [5]. The use of folding sliding that can be applied to this mezzanine area can help dispossession of energy using a remote voice control system. A remote voice system is a predefined voice command applied to the system; it can finally be observed how much voice communication is applied [6]. Among others, the base and mezzanine floor use stairs, the ladder system that we will use is a folding ladder. A folding ladder is a series of vertical or sloping steps or stairs. Two types of rigid ladders can stand on their own or that may rest on a vertical surface, vertical folding ladder equipment called a stringer or rail [7]. Ergonomics on folding stairs becomes scientific information about humans to take issue with design [8].

The study aimed to design a space composition at Café Surabi by taking a concept based on the fibber shape of surabi. The pattern of space sharing in cafés and Kouta visitors who expand is an obstacle experienced by café owners in the comfort of café visitors. With the design of a high-tech ceiling that can be operated using a remote. Use development methods or Research Development (RnD). This RnD method is carried out using 10 steps, namely potential and problems, data collection, product design, design validation, design revision, product trials, product revisions, usage trials, product revisions, and mass production.

2. Method

The method used in research is the method of development or research development (Rnd). The development method or Research Development (Rnd) is a research activity that starts with research and then continued with development. The existence of research activities is to get information about user needs (needs assessment) while development activities are carried out to produce development devices [9].

In addition, research and development methods are research methods that can be used to produce a particular product, and test the effectiveness of that product. To be able to produce a particular product is used research that is a needs analysis to reduce the effectiveness of the product to function. Competing Research Grants (funded by the Directorate General of Higher Education), are the research that produces the product, so the methods used are research and development methods [10]. The research and development steps are shown in figure 1.

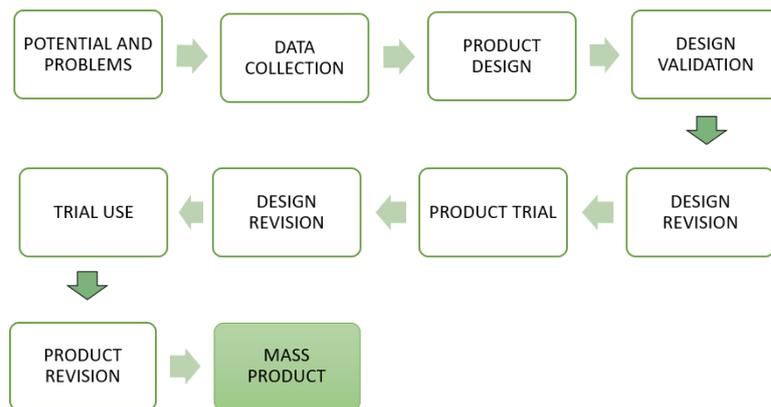


Figure 1. Steps to use the Research and Development (R&D) Method

2.1. Potential and Problems

Research can depart from potential problems. The potential is that anything that can be utilized will have additional value. All potentials will develop into a problem if they do not take advantage of these potentials. Based on the data obtained can be designed, effective handling model.

2.2. Collecting Information

After potential and subsequent problems can gather various information that can be used for the planning of certain products that are expected to be able to overcome the problem.

2.3. Product design

Product design can be realized in the form of an image, so it can be used as a handle to assess and create it. In the field of engineering, product design must be equipped with an explanation of the material used. In addition, the form of a system can explain how the advantages and disadvantages work.

2.4 Product validation

Product validation is the process of activity to assess whether the design of the product in this case a new work system will rationally be more effective than the old one or not.2.2. Collecting Information

2.5 Design improvements

After product design and validation of the meal design will be known the weaknesses. These weaknesses can be understood to be reduced by improving the design.

2.6 Product trials

Testing can be done with experiments, which compare the level of effectiveness and efficiency of old work systems with new ones. The effectiveness of the new work system will be measured based on, the circulation of work becoming short and smooth, employees being easier and more comfortable by following the system, cheaper, agile, productive, and satisfying parties. those served with the system. Indicators of success measured are work speed, work comfort, work productivity, and costs.

2.7 Product revisions

Product testing on the limited sample showed that the performance of the new work system turned out to be better than the old system. But from the test results, it appears that the user's convenience in using the system only gets a value of 60% of what is expected. So the product design needs to be revised so that the user's comfort in using the product gets increased at a high level. Once revised, it should be retested to the actual work. In testing work speed and work productivity did not use questionnaires, but through observation with valid and tested instruments.

2.8 Usage trials

The product in the form of a new working system is applied in real conditions for a wide scope. In the process of the new work system, it still needs to be assessed the shortcomings or obstacles that arise to improve further.

2.9 Product revisions

Product revision is done if in real conditions there are shortcomings and weaknesses. In the usage test, the product maker always evaluates how the product performs in this case is the working system.

2.10 Mass product manufacturing

Mass product manufacturing is done when the product that has been tested is declared effective and worthy of mass production. To be able to mass-produce, researchers need to work with companies.

3. Results and Discussion

3.1 View in café with mezzanine openings standing on 50m2 grounds



Figure 2. Mezzanine Aperture View

This is a visible mezzanine area and stairs with a folded position.

3.2 Display of automatic mezzanine opening area and mezzanine railing



Figure 3. Automatic mezzanine aperture and mezzanine railing

This is the dining area of visitors on the mezzanine floor

3.3 View of the stair opening area



Figure 4. Ladder openings

3.4 View of the stairs openings appears to be back



Figure 5. View of the stairs openings appears to be back

This is the position of the stairs when opened. In the dining area, visitors get natural light that is free to enter the room.

3.5 Visitor area view



Figure 6. Visitor area view

This is the position of the stairs when closed. In the dining area, visitors get natural light that is free to enter the room.

3.6 View the cashier area and make surabi



Figure 7. View the cashier area and make surabi

The position of the cashier and making surabi on the front so that the aroma of surabi can attract visitors

4. Conclusion

This research is designed using the Research and Development (R&D) approach method using 10 steps consisting of potential and problems, information gathering, product design, design validation, design improvement, product trials, product revisions, usage trials, product revisions, and mass production manufacturing. Based on the results of the study can be mentioned planning and designing a café surabi room can produce character characteristics of a space that affect the comfort and interest of café visitors. In addition, the composition of the café surabi room gives a new atmosphere to the café by paying attention to the building structure.

Acknowledgement

The author thanked the Rector Universitas Komputer Indonesia has helped us in writing this paper.

References

- [1] Cahyo, V. B. D. (2018). PENGARUH PROMOSI, KUALITAS LAYANAN, HARGA dan STORE ATMOSPHERE TERHADAP KEPUASAN KONSUMEN DI TITIK KUMPUL COFFEE AND EATERY SURABAYA (Doctoral dissertation, Universitas Katolik Darma Cendika).
- [2] Holinesti, R., & Isnaini, I. (2020). Analisis Kualitas Serabi Yang Dihasilkan Dari Substitusi Labu Kuning. *Jurnal Pendidikan Tata Boga dan Teknologi*, 1(2), 93-99.
- [3] Shamaeva, T. (2021, March). Space-planning solutions for new type of retail and warehouse buildings. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1079, No. 2, p. 022015). IOP Publishing.
- [4] Mahendra, M. (2018). SIMULASI PINTU GERBANG OTOMATIS MENGGUNAKAN REMOTE CONTROL INFRA MERAH DAN ANDROID (Doctoral dissertation, UNIVERSITAS 17 AGUSTUS 1945).
- [5] Santy, R. D., & Alfiana, F. (2021). Information Technology Utilization in Fashion Industry. *International Journal of Research and Applied Technology (INJURATECH)*, 1(2), 18-22.
- [6] Gundogdu, K., Bayrakdar, S., & Yucedag, I. (2018). Developing and modeling of voice control system for prosthetic robot arm in medical systems. *Journal of King Saud University-Computer and Information Sciences*, 30(2), 198-205.
- [7] Lajuddin, S. B., Rokip, A. D. B. Z., TAHIR, R. B., Rodin, N. F. B. M., & Helmi, A. K. B. (2019). Joystick Ladder.
- [8] Sasongko, N. (2015). *Analisa Produktivitas Pemasangan Tangga Dengan Menggunakan Material M-Panel (Studi Kasus: Proyek Pembangunan "Villa Lot Breeze" Di Jalan By Pass Munggu, Bali)* (Doctoral dissertation, Universitas Brawijaya).
- [9] Prasetyo, I. (2012). Teknik analisis data dalam research and development. *Jurusan PLS FIP Universitas Negeri Yogyakarta*.
- [10] Sugiyono, D. (2013). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D.
- [11] Indrawan, B., & Sumitra, I. D. (2019, November). Enterprise Architecture for Higher Education Using Enterprise Architecture Planning Based Three Pillars of Higher Education. In *IOP Conference Series: Materials Science and Engineering* (Vol. 662, No. 3, p. 032030). IOP Publishing.
- [12] Martana, S. P., Yapsie, J. C., Prasetyo, F. S., & Syauqi, I. D. N. (2020, July). Building Façade of the Architect Richard LA Schoemaker in Bandung. In *IOP Conference Series: Materials Science and Engineering* (Vol. 879, No. 1, p. 012170). IOP Publishing.