Application of Easy-to-Clean Materials in Designing ZALORA Office Workstation

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ABSTRACT

In the current conditions where the COVID-19 pandemic occurs, cleanliness is very important for us to apply. Likewise, with the office area where there is a lot of interaction and is a gathering place for people. This certainly has an impact on the field of interior design, especially office furniture, because the furniture is in direct contact with the user. So to reduce the risk of COVID-19 transmission, it is necessary to adjust office furniture materials by using materials that are easy to clean. The design process used is the Design Process Diagram by Rosemary Kilmer and Otie Kilmer. Using parameters in designing furniture with materials for office furniture that are easy to clean. The form is in modular system, the reason is that the Zalora office requires its employees to be able to work in groups. By using furniture with a modular system, employees can more easily interact and coordinate with each other, making work easier where the arrangement of furniture can be adjusted according to needs. For the color concept, the use of black and white terrazzo presents the Zalora's corporate color. For addition, this furniture are using copper color and wood patterned HPL so the furniture does not look monotonous. The shining effect from the copper makes the furniture look more elegant. For the material concept, the use of glass partitions on furniture serves as a barrier between furniture which is expected to reduce the spread of the corona virus. Copper is used because the virus cannot survive long in this material (die within a few minutes).

Keywords: Antibacterial, Furniture, Hygiene, Material, Treatment.

1. INTRODUCTION

Talking about the current condition where there is COVID-19 pandemic around the world, cleanliness is very important for us to apply. As well as the office area where there is a lot of interaction such as working, discussing, group work, etc. Office is a gathering place for many people many employees feel anxious about the virus while working at the office[1]. Quoting from the Indonesia Minister of Health published on the official website of the Indonesia Ministry of Health. That the workplace is a place of interaction and gathering of people, so it is necessary to anticipate the transmission of the virus because of the high risk[1].In addition, the Minister of Health urges that the workbench and equipment are cleaned before and after work using liquids disinfectant.[2] This certainly has an impact on the interior design field because it is direcly have a contact with users [3]. Quoting from CNN, to maintain cleanliness in the office environment, we need to pay attention to objects or surfaces that are often touched, for example by cleaning desks, computer mice, office phones, and other objects or surfaces. We also have topay extra attention to the most frequently touched objects [4]. So to reduce the risk of COVID-19 transmission, it is necessary to adjust office furniture materials by using materials that are easy to clean, Especially, for office furniture, for example materials such as terrazzo and anti-bacterial ceramics or materials where the corona virus does not last long, for example, according to Professor Bill Keeliv environmental health professor at the University of Southampton when a corona virus attaches itself to copper or brass, it dies within minutes [5].

2. METHOD

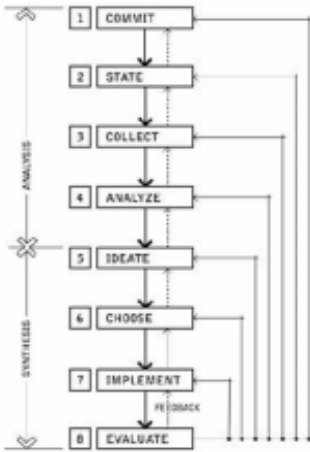The design process used is taken from the Design Process Diagram by Rosemary Kilmer and Otie Kilmer [6]

Figure 1 Rosemary Kilmer and Otie Kilmer, 2014:178

This design process method is divided into 2 parts. The first part is analysis, the method of breaking down the problem into its smallest components it includes commit, state, collect, and analyze. The second part is synthesis we placing the problem component with other components, the linkage of the two things will form a system that is explained objectively and scientifically. This part includes ideate, choose, implement, evaluate and feedback. The design process starts from the commit stage. In this stage we have to know the design problems and have a commitment to solve them. In this part we are collecting data which is related to the topic so we can find out the design problems. Data collection is done by collecting literature data such as: (a) Materials that are easy to clean, (b) How to reduce the risk of spreading the Covid-19 virus in the office area. The second step is state, in this step the problems that have been obtained must be confirmed first before being resolved by the designer. To do this we have to know the preferential requirements of the Zalora office, in order to find out the problems and design the furniture appropriately according to the data [7]. Then enter the collect stage this is the data collection stage or programming stage. In this stage the data are collected from field data of Zalora office [8]. Entering the analyze stage when the information that has been collected will be categorize which is done with analyzing the information obtained in the previous stage in order to produce the right solution for problems at Zalora's office. After getting a thorough understanding of the problem we will then proceed to ideate stage by creating a design concept, alternative designs, material and color concepts, and shape concepts. In the choose and implement stage, choose the best design alternative and provide a final design drawing. The last step is evaluate and feedback, in this stage assess and critically review what has been achieved, and whether it solves the problems. After doing all this design process it came to the conclusion that there are three parameters that must be considered. The parameters used in designing furniture with materials that are easy to clean are as follows:

Table 1 Parameters for designing Zalora office furniture

No	Parameter
1	Using materials that are easy to clean on surfaces that are often touched by office employees.
2	The COVID-19 virus can be easily killed with soap andtype disinfectants *Clorox-*.
3	Materials and finishes that are easy to clean and can be disinfected.

Source: Results of personal processing, 2021.

3. RESULTS

3.1. Concept of Form

Figure 2 Office desk perspective designed by Catherine Patricia Wijaya, 2021

The form is in modular system, the reason is that the Zalora office requires its employees to be able to work in groups [7]. By using furniture with a modular system, employees can more easily interact and coordinate with each other, making work easier where the arrangement of furniture can be adjusted according to needs [9].

Figure 3 Office desk perspective designed by Catherine Patricia Wijaya, 2021.

There are pedestal cabinet on each table that employees can use to store things There are many curved elements in the furniture so that the shape of the furniture is not stiff.

Figure 4 Office desk perspective designed by Catherine Patricia Wijaya, 2021.

There are many variations in arranging this furniture. Furniture can be arranged facing each other or sideways.

Figure 5 Office desk perspective designed by Catherine Patricia Wijaya, 2021

Overall, the concept of this furniture shape is simple, adapting Zalora's focus on simplicity. Furniture size is adjusted to ergonomics and anthropometry [10].

Figure 6 Office desk perspective when applied in office interior designed by Catherine Patricia Wijaya, 2021

3.2. Material and Color concept

For the color concept, the use of black and white terrazzo presents the Zalora's corporate color. For addition, this furniture are using copper color and wood patterned HPL so the furniture does not look monotonous. The shining effect from the copper makes the furniture look more elegant. For the material concept, the use of glass partitions on furniture serves as a barrier between furniture which is expected to reduce the spread of the corona virus in the office environment so that employees can work safely and comfortably. This glass partition is placed on the sides of the furniture where there can be contact between employees.

Figure 7 Moodboard designed by Catherine Patricia Wijaya, 2021.

Copper is used because the virus cannot survive long in this material (die within a few minutes) [4]. Copper material is applied to places that are often touched such as pedestal cabinet handles. The rest of the material are using an easy-to-clean materials such as terrazzo [11],and plywood with HPL finishing.[12]
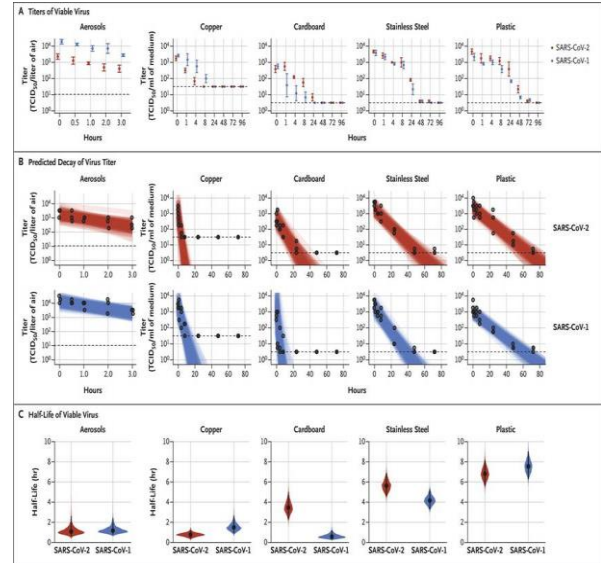

Figure 8 Covid-19 exposure on materials (interiorkantor.com).The selection of this furniture material certainly follows the parameters that have been set earlier. The following is the parameter adjustment table with the used material.

Table 2 The sustainability of the use of materials with parameters

No	Parameter	Copper	Terrazo	Moru glass	Plywood with HPL finishing
1	Material that is easy to clean.	v	v	v	v
2	Material which Covid-19 virus can easily be killed	v	v	v	v
3	Maletials and finishes that can be disinfected	v	v	v	v

Source: Results of personal processing, 2021.

4. CONCLUSION

Cleanliness in the office environment needs to be considered, especially in the current conditions where the COVID-19 pandemic occurs because there is a lot of social interaction in the office environment. Therefore, as interior design, we need to design furniture with materials that are easy to clean in order to minimize the spread of viruses in the office environment. The use of materials on furniture follows predetermined parameters. The parameters are material that is easy to clean, material which covid-19 virus can easily be killed, material and finishes that can be disinfected. The materials used consist of terrazzo, moru glass, copper and plywood with HPL finishing. Virus cannot survive in copper material, terrazzo and moru glass can be easily cleaned because the surface is waterproof so it is easy to disinfect with cleaning liquid.

In addition, the plywood uses HPL finishing which is also easy to clean and disinfect..The purpose is to prevent and minimize the spread of the virus in the office environment, so Zalora office employees can comfortably work in the office.

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