STYLISH COFFEE TABLE INFLUENCE BY MODULAR CONCEPT FOR STUDENT CENTER

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Abstract

There are plenty of different styles of furniture on the market, but with so many terms getting thrown around it’s hard to know what the different type is. Today, there are many type of modular furniture that we can find in the market or furniture shop. Modular furniture are made up of independent work surface and storage units with panels used as end panels or space dividers. This paper presents the study on stylish coffee table furniture that influenced by modular concept design. The general aim of this study is to identify characteristic of stylish modular coffee table for student center. The student center is a like place of our home where most of us spend leisure time with housemate, lecturer and others. The design of coffee table must be safe for all user. This is why adding a nice mirror of coffee table in student center will be surely useful and decorative pleasing. Mirror of coffee tables are what other people address as glass top table design. The methods used to develop the ideation in designing process are specifying the direction for design concept and make a visual research. The study is expected will develop a new design of stylish modular coffee table for student center with suitable material and suitable color to apply to modular coffee table for student center.

Keywords
Modular, coffee table, stylish and innovative, furniture design

1. Introduction

Furniture is a big deal in the design industry in Malaysia. A well-executed concept can result in a timeless piece of furniture that never goes out of style and innovative design. There are plenty of different styles of furniture on the market in the Malaysia which is suitable for all people to use. Furniture has been a staple of wealth and luxury for centuries, from the Jacobean style of the 1600s through the Scandinavian contemporary style of the 1900s (Eerduosi, 2017). Since then, furniture fashion has deviated from the more ornate classical looks to more contemporary, bold styles that blur the lines between artistry and functionality (Ifa deccor, 2017). In today's modern era with less space available and when people do not have time to maintain the things the most challenging part of furniture innovation would be to build furniture that is attractive, multifunctional and optimally uses the ever reducing space. Customers would demand of products that are easy to maintain, but Wooden Furniture will never go out of fashion because of their durability and unmatched look. The globalization of the economy in Malaysia has created great competitiveness in the furniture market. The Malaysian furniture industry gives out an impressive
growth for the past nine years as it contributes from 2.6 billion in 1997 to 6.3 billion in 2009 (MIFF, 2010). The globalization of the economy in Malaysia has created great competitiveness in the furniture market.

1.1 Coffee Table

The history of coffee tables dates back to the late 18th century during the Victorian Era. During this period, they were actually used for placing cups of tea-as that was the de rigueur drink of the time, at the height of fashion—everyone drank tea. (Bill William, 2017). The coffee table design led to an increasing demand for tea tables. There were generally taller than today’s low slung coffee tables; however, as time progressed and as the high backed settees that were so popular during the second half of the seventeenth century were replaced by low back sofas, what we now know as coffee tables were put into use. The low height may have come about with influence from the practically floor level Japanese tables in tandem with the Ottoman-styled table found in tea gardens. Coffee tables, then are a relatively new invention (Bill William, 2017).

The coffee table developed with the increasing availability of materials and with the rise of mass production and thus affordability. As a result of the Industrial Revolution, wooden furniture making was eventually industrialized. During the Arts and Crafts movement in Britain, there was a desire to restore hand crafted furniture, in particular, the individual style of the craftsmen. During that time coffee tables were made, but examples are hard to find. During the Art Nouveau period, which grew out of the Arts and Crafts Movement, a variety of styles emerged. The coffee tables of this period stayed away from the ornate embellishments so favored by the Victorians; instead, clean, simple lines and emphasis on natural forms were encouraged. Art Deco combined contrasting points of inspiration; artists of the era were influenced by primitivism and modern technology, such as airplanes and locomotives. Followers of the movement adhered to geometric shapes and curves, as well as straighter lines, more attuned to the machine age (Bill William, 2017).

1.2 Modular Concept

Modular furniture refers to pre-made units that can be combined in different ways to furnish a room. Modular furnishings are often flat packed for home assembly. Most furniture companies have a showroom with their modular furniture products set up so customers can see what the items look like assembled. Online shoppers may shop through virtual furniture galleries (Ayah Shita, 2014). There are many types of attractive modular systems available for each room in a home. Kitchen modular furniture systems are popular today. Most manufacturers of modular kitchen furnishings offer upper cabinets with options such as single or double doors and solid or glass door panels. Box-shaped cabinets with pre-drilled holes on the sides allow shelves to be added according to how much space is needed between each shelf. A lower modular kitchen unit may have a sink already inserted in the top with cupboard space underneath. Lower units may have shelves, drawers or a combination and may be adjusted to fit a specific kitchen. For example, after a rectangular base unit is chosen, it may often be expanded by adding on a rounded modular section to increase a kitchen’s workspace and storage space. Dining room furniture may also be modular. Some modular furniture systems for dining rooms feature tables that may be added on to create more seating by placing several of the same table sections together (Aleenaa Dandona, 2016).

Living room modular furniture often includes sectional sofas. Sectional sofas have different units or sections that create a whole sofa and some of these may include beds or large footstools as part of the design. Modular closet designs consist of many different components that can be fitted into closets to create a storage system that looks built-in. For example, shoe racks that sit on the floor or that are wooden shelves that fit near the center of the closet can be added to create modular storage. Hanger bars that can be hung at different levels are space savers, as they hang two rows of clothing in the amount of space used by clothes that hang from a single top bar. Bedroom modular pieces include dressers, head boards and night tables that are pre-made and ready to assemble. Dressers may have the option to add an extra hutch or top dresser section to allow for more storage. Children’s bedroom modular furniture is especially popular as different pieces can be added or modified as the child grows. For example, some baby cribs are designed to be converted into a single bed after the child outgrows the crib. There are also bunk beds that convert to twin beds or to a larger bed if the twins are pushed together (Ayah Shita, 2014).
1.2 Student center

A student center is a type of building found on university campuses. In the United States, such a building may be called a student union, student commons, union or student center. The term "student union" refers most often in the United States to a building, while in other nations a "students' union" is the student government. Nevertheless, the Association of College Unions International (largely US-based) has several hundred campus organizational members in the US; there is no sharp dichotomy in interpretation of union in this context. The US usage in reference to a location is simply a shortened form of student union building. The first student union built at a public university in the United States was the Ohio Union (1910) at the Ohio State University. The largest student union is at Oklahoma State University, Stillwater, Oklahoma (World Finder, 2016).

2. METHODS

2.1 Stage 1: Overall Research

The earliest phase of this research is conducted through secondary data collection. Secondary data is obtained from reviewing the literature that is interrelated to subject of design identity, including article, journal, report, book and sources from the authority’s website page about furniture. The data collections will focuses to current issues (scenario), problems identifications, trends in housing minimalist, criteria stylish modular of coffee table, visual research, material uses, identity of design and existing product.

2.2 Stage 2: Visual Research Selection

At this stage, the main key in this research are on the visual research. The collected data were used as the basis of consideration in selection of visual design and direction to the design concepts of stylish modular coffee table. The selection of visual research (Appendix 1) consists of geometric form (top and legs), glass table top, square table top, solid and engineered wood, wood table top, and minimalist dining table based on the available and existing product. Design composition can help in identifying the differences criteria between the simplicity, complexity, modern, and classic design (Figure 1)
2.3 Stage 3: Thumbnail and Ideation Sketches

Idea from visual research will help in thumbnail sketches and design ideation. A thumbnail sketch is a vital preparatory step in drawing and designing. The sketch can be of what are seeing in physical reality, drawn purely from imagination or combination of both (Figure 2). Thumbnail sketches are drawing quick, abbreviated drawings done very rapidly and with no corrections; usually very small sketches. The goal of thumbnail is to put down concepts of dining table with different perspectives, tones, locations, sizes, and features. Set the direction selection helps a lot for ideation sketches. Hibiscus flowers, Spider lily flowers, and KLCC tower become the focuses direction in ideation sketches concept for stylish modular coffee table.

Figure 1. Design composition

Figure 2. Thumbnail sketch from what are seeing in physical reality
2.4 Stage 4: Development of Sketches

The design will develop from thumbnail sketches, direction concept, ideation sketching, and more combining sketches. Refer Figure 3(a) and (b). Development helps to discover the best ideas and solution to any problems arises in ideation sketches stage. Any potential design of dining table will be selected from development of sketches for next stage of mockup construction.

Figure 3(a) and (b). Development of sketches
2.5 Stage 5: Mockup Development

Mockup is constructs or creates with scale size (not actual real size of dining table) based on design selection in develops the sketches as sample or model in order to verify a design. The number of mockup created can be more than one design. Generally, it used for demonstration, design evaluation process, and to understand the analysis requirement. Mockups can be used to test whether they suit typical human shapes and sizes. Designs that fail to consider may not be practical to use. Development for mockup involved the testing of various color, finish, and design details which cannot be visualized from the initial drawings and sketches.

2.6 Stage 6: Principal Design (2D and 3D)

Characterization or principal design is the stage of hard-core design. At this stage, the potential mockup design of dining table will be selected and applied using computer application or design software for design analysis in detail drawing of two-dimensional (2D) image and three-dimensional (3D) model. This is where the fundamental engineering is involved for resolution of issues before finalize the production of real size dining table.

2.7 Stage 7: Real Size Prototype and Testing

Early real size prototype is built to test a concept or process to provide specifications for a real, working system rather than theoretical information. Prototypes may be made using different fabrication processes than the final product. The size will be same as detail drawing to keep all the proportions consistent. Full-size prototyping is essential for testing stage to measure the performance and product safety. Study on ergonomic and human proportion for standard dining table will be applied for testing and involved the design critic session. A good furniture design must answer to the main objective of effective design in various ways. Product architecture involves with various parts including design development, costing, prototype construction and prototype testing. The design must concern about strength and function so the design was developed further.

2.8 Stage 8: Final Product

Initial ideation has become a sketch, applied into a two-dimensional image and 3D model and turned into a prototype ready for final product production. For a last stage, a new piece of furniture is ready to produce by finalize the materials and jointing system (engineering). Exploded view of the dining table become the reference for finalize the finishing and fabrication process before final production. This stage must concern about design for manufacture and assembly for efficiency in manufacturing process.

3. Conclusion

For the last stage, researchers will identify the findings based on data analysis and experiments that were carried out. This will determine whether the study have achieved its objective or not. This research is focused to stylish modular coffee table for student center which is right selection of coffee table for big space that need right selection and decorating idea. From this study all parties can find out about the characteristic of modular coffee table for student center, suitable material for modular coffee table design, and identify suitable colour to apply to modular coffee table for student center. With this, all the problems can be overcome and improved better to make the coffee table more attractive and harmless so that students are more interested and safe using the coffee table at the student center.

References

2. Creative Bloq Staff, September 05, 2013 /design/furniture-design-10121063 33 inspirational examples of furniture design http://www.creativebloq.com/design/furniture-design-10121063
Appendix 1. Difference types of visual research
Appendix 2. Design development sketches

Appendix 3. Design development sketches
Appendix 4. Hibiscus design direction

Appendix 5. KLCC Tower design direction