

MORPHOSIS

MODULAR MODERNITY

Problem Statement

To create: sustainable, long-term, trend-focused, adaptive furniture

Description

- Morphosis is a no-tool-assembly modular solution to trend-focused, environmentally aware consumers.
- Part service: Replacement parts can change the function/aesthetic of the design.
- Sustainable materials paired with longevity assure the environmental credentials.
- Morphosis is functional, sustainable and adaptable.

Vision:

Morphosis creates a modern solution to flat pack design bridging current modular design with designer furniture eradicating questionable materials, frustrating assembly procedures and short life span. We embrace:

Japanese minimalist aesthetic.
Easy assembly/disassembly.
Sustainable materials.
Stylish design.

The following pages will now show Morphosis' vision in action from the purchase to assembly and individual products.

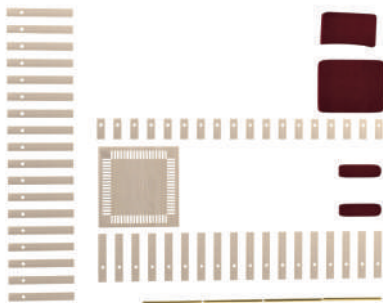
Web Presence:

Morphosis' website allows customers to purchase entire products or individual components with varied materials/styles. It also provides an opportunity to replace older parts which allows for the change in function/style or replace damaged parts.



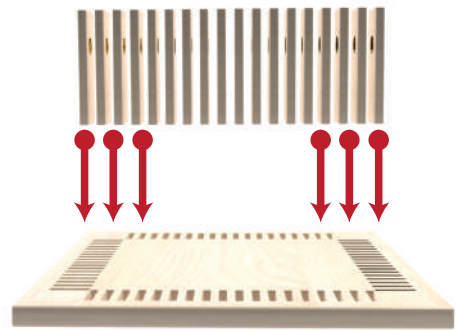
The following pages will show the assembly process of the chair.

1.



Parts of a chair.

2.



Insert front slats into perforations.

3.



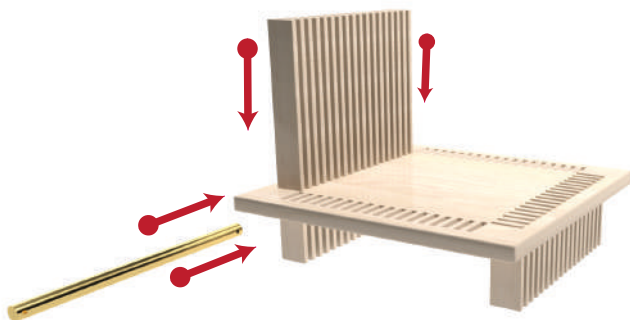
Insert metal stabilising bar into slot provided.

4.



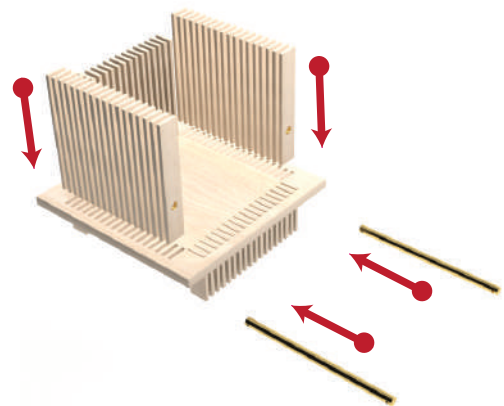
Insert metal pin into stabilising bar for security.

5.



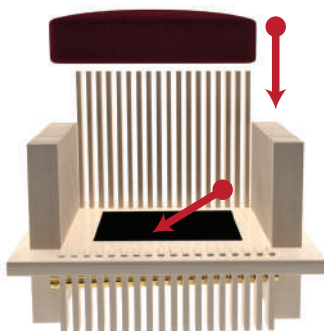
Insert back slats/metal stabilising bar into slots provided, secure pin.

6.



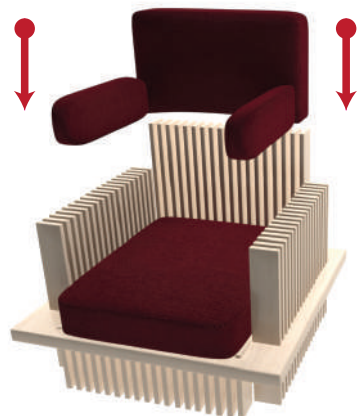
Repeat step 5 for arms slats.

7.



Adhere valcro to seat. Secure upholstered seat to chair

8.



Secure back and arm rests

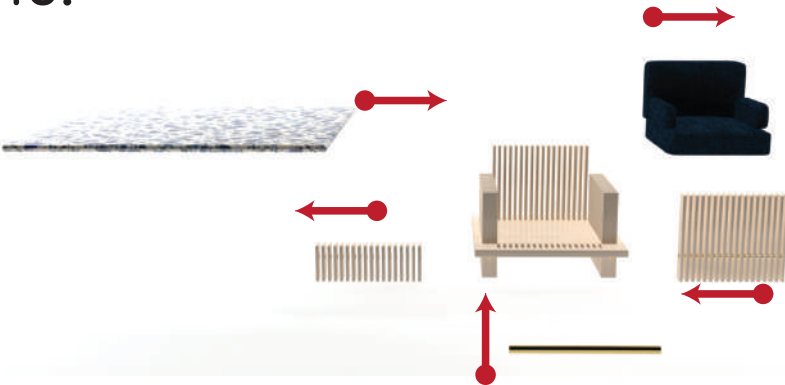
9.



Completed tool-less assembly.

Modular design mean different assembly creates different functionality.

10.



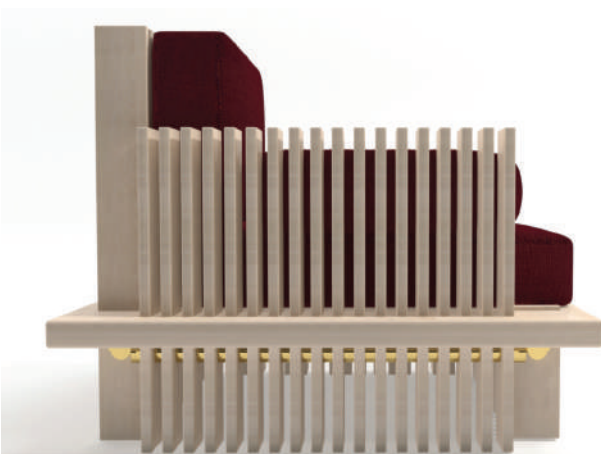
Removing front & side slats of chair, replace with taller slats. Remove upholstery and replace with terrazzo table top.

11.



Chair morphed to a dining table.

12.



Modularity ensures variation on functions.

The following pages display assembled mutations.

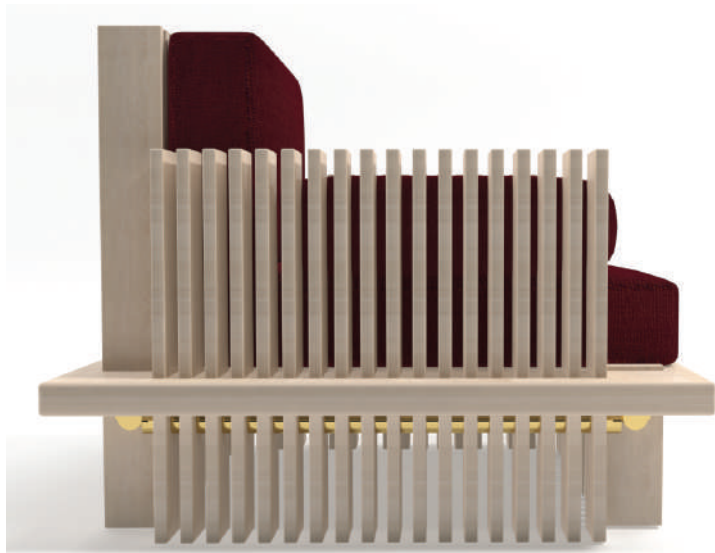
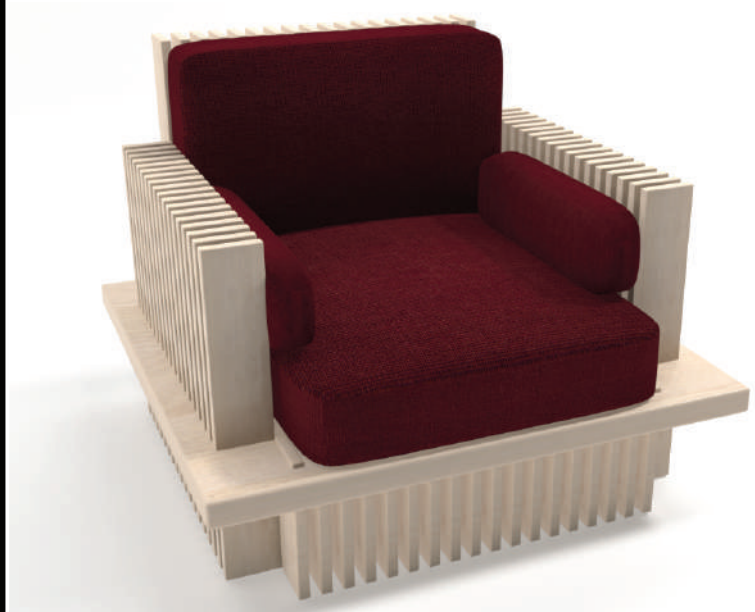
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Lounge Chair

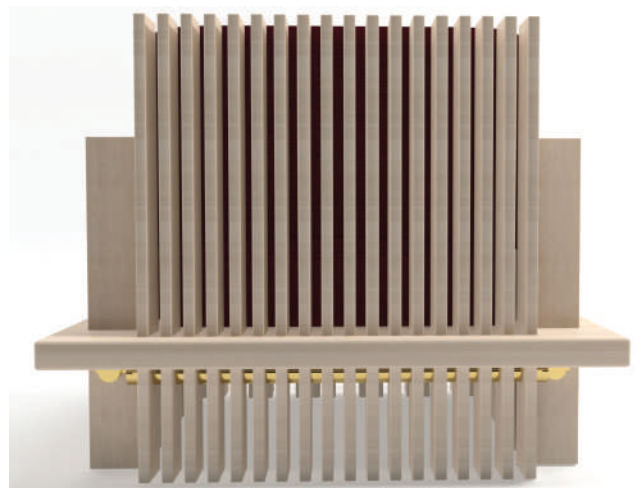
Morphosis Lounge Chair:

Design pays homage to Japanese minimalism with a modern edge.

Lounge chair is fully customisable and exudes a strong, simple elegance usable in many different environments.



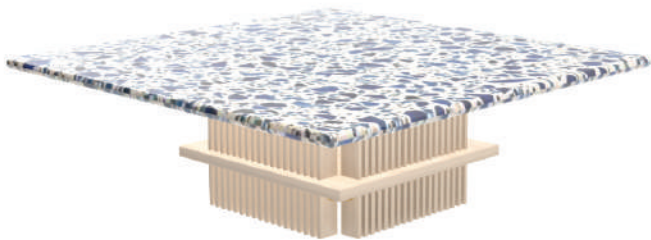
Modular Modernity



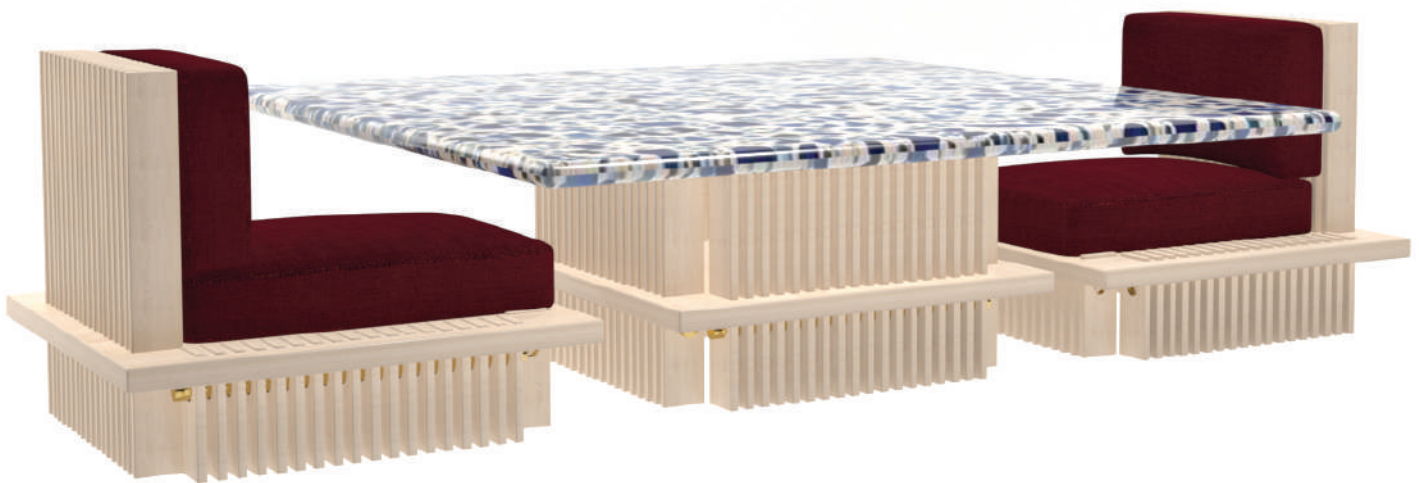
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Tables

Replacement parts and addition of a terrazzo top changes the function to a dining table.



Shorter slats changes the function to a coffee table.



Functionality

Sustainability

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Sofa



Larger perforated bases forms the sofa foundation – a comfortable seat for two.

Different slats mutates the sofa into a chaise longue.

Or bed frame for a child



Adaptability

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Private

Utilising longer slats creates a privacy screen.
This application is useful in commercial environments or a focal point in stylish homes.

Commercial



Modular Accessibility

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Customisation

Latest styles,
changeable functions.



Modularity provides variable functionality. Replacement pieces changes the style/function at a fraction of the price, whilst reducing waste.

Infinite Combination

Context

Bridge the divide between economical self-assembly furniture and high-end design to an environmentally aware customer base.

Correcting some existing product omissions:

- Elimination of inferior material
- Elimination of frustrating assembly processes.
- Creating product durability

Breaking from disposability, Morphosis' modularity allows product to grow with customer in a sustainable, stylish way.



Osetacoleur



Current competitors

People:

The stake holders that form part Morphosis' product and service:

Investors:

- Investors assisting in finance.

Manufacturing:

- Designers
- Production staff

Sales:

- Sales
- Website designers/developers/maintenance.
- Administrative staff
- Marketing

Distribution:

- Delivery/collection
- Warehouse departments

Customers:

Demographic created with personas

- Young professional family: Furniture that will grow with family
- Young single professional: Trend-conscious consumer.
- Professional users interested in quality/sustainability.
- Commercial environment application.

Materials:

Materials adhere to stringent sustainability records and limited harmful production.

Bamboo:

Frame created with bamboo. Benefits include:

- Sustainable material for furniture (Wood Finishes, n.d.)
- Customizable for colour/design
- Stronger than oak: Bamboo's tensile strength is 28,000 per square inch versus 23,000 for steel (Overstock, 2018).



Images above shows the pliability of bamboo in terms of strength, flexibility and customisability when is applied to furniture

Metal Support:

Variety metals available. Recycled metals will be used and all metal parts returned to the company for refurbishment (Copper.org ,n.d.).

Materials continued:

Upholstery Foam:

Natural Latex is obtained from renewable sources and is considered a superior upholstery foam. The material is breathable, non-toxic and has a longer life span than other foams (Oceotextiles, n.d.).



The above image shows Natural latex, manufactured with breathability holes throughout the material.

Upholstery Fabrics:

Fabrics will be natural: Linen, a plant-based fabric processed without chemicals. European sources ensure product quality with strict sustainability records (Goodonyou, n.d).

Kvadrat (Kvadrat, 2018): Danish textile company with sustainability at its core.

kvadrat



Implementation:

Composed from available materials. Manufacturing is kept technically uncomplicated utilising existing manufacturing techniques.

A website will negate retail space. Items are produced upon ordering with a wait time for the customer, allowing careful stock control.

Operational costs can be kept as low as possible while the product grows. Financial investing will allow greater marketing and subsequent awareness.

Technical & practical feasibility:

The design was deliberately uncomplicated to avoid intricate production methods.

All materials are currently available. Upholstery methods are feasible. Attention to detail ensure a high-quality product that sustain longevity.

Technical and practical feasibility easily achieved with the intentional simplistic designs.

Sustainability:

A core objective. Materials has been carefully chosen to reflect this:

Bamboo:

- Fast growing, strong, durable. This material is endlessly renewable as it grows from shoots. More sustainable than hardwood (ecodesignz, n.d.).

Linen:

- Plant-based fabric made from flax. Can grow on terrain unsuitable for agriculture. Processing completed without chemicals. Strong, durable, biodegradable (goodonyou, 2016).

Natural Latex:

- From rubber trees from sustainable supplies. Recyclable and biodegradable with little to no off-gassing associated with production. More durable than chemical equivalent foams (oecotextiles, 2013).

Recycled metals:

- Recycled metals is in support bars. No virgin metals utilised in this small part of the design (copper, n.d.).



Economical Viability:

Morphosis breaches the divide between current economical flat-pack furniture and designer furniture.

Financial Viability:

The product positions itself as a high-quality, modular design.

Unique aesthetic combined with sustainable aspirations appeal to investors either as an addition to current product lines or as an individual company.

Commercial Viability:

Created for particular demographic that values quality design, a modern aesthetic & longevity/modularity therefore attracting targeted consumers.

Economic Viability:

Adhering to stringent environmental concerns & the highest quality materials will make this entry-price point high.

Replacement parts can change the functionality at a fraction cost of new pieces. Initial investment will be rewarded with longevity/changing functionality.

Bibliography:

Ecodesignz (n.d.) Why Bamboo? [online] available at <http://www.ecodesignz.com/whybamboo.html> accessed on 24 May 2018.

Ecotextiles (n.d.) 'Sofa cushions - Foam, soy foam or latex?' [online] available at <https://ecotextiles.wordpress.com/2013/09/12/sofa-cushions-foam-soy-foam-or-latex/> accessed on 28 May 2018.

Copper (n.d.) 'Copper Recycling and Sustainability' [online] available at <http://resources.schoolscience.co.uk/CDA/16plus/sustainability/copper8.html> accessed on 23 May 2018.

Goodonyou (2016) 'Material Guide: How sustainable is linen?' [online] available at <https://goodonyou.eco/how-sustainable-is-linen/> accessed on 25 May 2018.

Overstock (n.d.) 'Top 5 reasons to choose bamboo furniture' [online] available at <https://www.overstock.com/guides/top-5-reasons-to-choose-bamboo-furniture/> accessed on 26 May 2018.

Wood Finishes (2014) 'Everything You Should Know About Sustainable Wood' [online] available at <https://www.wood-finishes-direct.com/blog/everything-you-should-know-about-sustainable-wood/> accessed on 23 May 2018.

Word Count: 854