



SD3468 Design Report Group 5

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Summary of the report

Summary of the report

In a view to solve the space problem in Subdivided Units in Hong Kong, out project is designed to create a new living experience for nano flat households. Titled Integrated Living Platform, it is a compact, upgradable and modular living platform design for SDUs in Hong Kong.

From Gao's family case study, we see the opportunity to design an all-in-one integrated furniture in the view to save space and to a more organised home arrangement. From the research and case study of Gao's family, we explored with empathy the scenarios and story of user experience, defined the group of people designed for and how do they live. We see diversity in the three family members. For example, the father needs a diary writing place, the mother needs more storage room, while the son needs his private sleeping area and space for doing his homework. From the user experience map, storyboard, timetable, persona and interior drawing, we found several problems regarding the living space of the family. Including hard to reach and messy storage space, three people sleep in same bed, small dining and working space etc.. As a result, our challenge is to satisfy individual needs in this extreme living environment with only 70 sq ft of a three people apartment. At the end of the day, to create a meaningful and pleasurable living experience for the Gao's family and to the household of Hong Kong SDUs.

Summary of the report

Our project aims to design a compact and upgradable modular system, which is accessorised and provide private sleeping opportunity, a working plus dining platform as well as expandable storage area. At the same time with the consideration of safety issues, to give a design solution for the sake of a higher living quality for the Gao's family.

The furniture will cover and integrate the three main activities of the family: sleeping, working and storage. We see the opportunity in designing a compact and upgradable modular system on an integrated living platform. The project also introduced an innovative joint system which allow easy assembling and disassembling of the furniture, also maximise its customizable feature in order to save more space in SDUs.

The Integrated Living Platform includes a height adjustable table, a transformable sofa, wardrobe and a customized storage area. As well as a standard size single bed and a double bed. All three joints applied metal folding technology, which makes them low-cost and durable. The joints are also easy to assemble and reassemble, allowing users customize and construct in different living environments. Also, the universal joint is applicable to different structures, which enables constructing the entire Integrated Living Platform by itself.

Finally, we hope to spread the idea of green furniture, innovative joint system as well as the raise of public concern on subdivided flat living issues, by our design, the Integrated Living Platform.

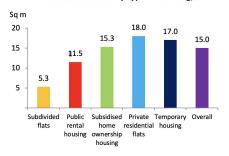
According to Statistical Highlights 2018 by Research Office Legislative Council Secretariat,

Demand for subdivided units ("SDUs") has remained high as

- 1. limited housing supply,
- 2. **rising flat rentals** and
- 3. long waiting time for public rental housing ("PRH")

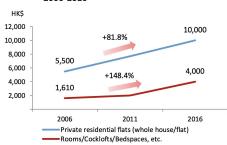
have prompted many people to live in smaller flats.

Figure 2 – Median per capita floor area of accommodation by type of housing, 2016



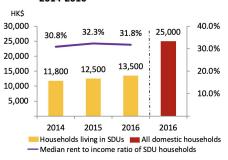
The median per capita floor area of accommodation was 5.3 sq m in 2016, which was lower than that of other types of housing (Figure 2).

Figure 5 – Median monthly domestic household rent, 2006-2016



Notwithstanding the substandard living conditions, rents of SDUs had reportedly been on the rise in recent years. As a proxy measure of rental increase of SDUs over the past decade or so, the median monthly rental payment by households living in rooms/cocklofts/bedspaces etc. more than doubled during 2006-2016 (Figure 5), markedly outpacing rental increase for households living in private residential flats.

Figure 6 – Median monthly household income, 2014-2016



Rising rents are of particular concern to SDU households, as their median monthly income was much lower than that of all domestic households in Hong Kong in 2016. The median rent to income ratio for households living in SDUs stood at a high of 31.8% (Figure 6), meaning that **limited amount of money was left for them to spend on daily necessities after paying the rent.**

Relationship of small space and mental health

Tiny spaces can cause

- claustrophobia
- increased stress
- higher rates of domestic violence and
- higher rates of substance abuse (in worst-case scenarios) (Mawis 2018)

According to Susan Saegart, director of the Housing Environments Research Group in New York, was quoted as saying that micro-apartments are best for millennials working in the city. Children or middle-aged people, however, might find the tiny spaces unhealthy. As per Saegart, crowded apartments can **prevent children from studying and concentrating**.

Mawis, V. L. (2018, June 23). Are small spaces bad for the health? Retrieved from https://business.inquirer.net/252928/small-spaces-bad-health.

Conclusion

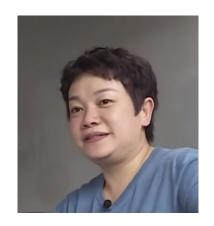
- 1. Demand for subdivided units ("SDUs") has remained high.
- 2. The living space of SDUs is tiny and cramped.
- 3. Households living in SDUs faced financial difficulties.
- 4. Crowded living are can lead to mental health problems.

Case study - Gao's Family

Persona – Gao's Family



Mr. Gao (Father)



Mrs. Gao (Mother)



Little Gao (Son)



Mr. Gao (Father)
"I will give my family the best I have."



Mrs. Gao (Mother)



Little Gao (Son)

Persona – Mr. Gao (Father)

Demographics

Age: 55

Occupation: Chef Location: HK

Income: ~14000HKD

Gender: Male

Education: Secondary 3

Characteristic

- Optimistic
- Torlerant
- Sensitive
- Caring
- Honor his family
- Industrious
- Generous
- Frank

Goals

- Successful application on public housing
- Provide a better environment for his family
- Build a brighter future for his son

Background

- Lives in subdivided-flat: 70 ft.
- In his point of view, the subdivided flat cannot provide a good learning environment to his kid.
- The only entertainment for his family is watching TV. They can enjoy the happiness of a family union so as to strengthen family units and nurture harmonious.
- He loss most of his properties after the financial crisis. He work hard in order to improve their living environment and works for 11 hrs or more in a day. He is also applying for the public housing.

Motivation

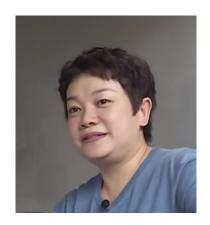
- Achievement: He wants to be a role model of his son that he teaches him to be hard-working on his study. Gao counts on and believe in his son's future.
- Skills: Cooking, Writing, Salesperson before crisis
- Incentives: Buy a larger house for his family, at least a room for his son
- Fear: Being poor, feel sorry for not able to give a larger living space for his family

Frustrations

- Take turns to share and use the common-kitchen
- Same table for dining, working and entertaining
- Living size is too crowded



Mr. Gao (Father)



Mrs. Gao (Mother)

"I will support my husband and take good care of my son."



Little Gao (Son)

Persona - Mrs. Gao (Mother)

Demographics

Age: 45

Occupation: Housewife

Location: HK Income: 0HKD Gender: Female

Education: Secondary 3

Characteristic

- Optimistic
- Torlerant
- Caring
- Sociable
- Enthusiastic

Goals

- Nurture and take care his son
- Build a brighter future for his son

Background

- Lives with her husband and her son in a subdivided-flat.
- Prefer to cook at the Food Angel for dinner since the area is larger and the environment is more comfortable.
- She can also meet and talk to her friends who are also living in subdivided flats in Food Angel.
- She could make use of her cooking skills in the spacious kitchen and share her cooking ideas with her friends in Food Angel also.
- She could feel the sense of self-confidence, sympathy and guardian help from Food Angel.

Motivation

- Achievement: To nurture her son, cook the best food for the family, support her husband mentally.
- Skills: Cooking
- Incentives: Take care of his son
- Fear: Being poor

Frustrations

- Feel stressed in a compact home
- Take turns to share and use the common-kitchen
- Same table for dining, working and entertaining
- Living size is too crowded
- Not enough money to buy good and healthy food for his son



Mr. Gao (Father)



Mrs. Gao (Mother)



Little Gao (Son)

"I will study hard for my family and my future, though I like playing games."

Persona – Little Gao (Son)

Demographics

Age: 9

Occupation: Student

Location: HK Income: 0HKD Gender: Male

Education: Primary 3

Characteristic

- Diligent
- Understanding
- Dynamic
- Energetic

Goals

- Study well
- Play with friends

Background

- Lives with his father and mother in a sub-divided flat.
- Take his father as his role model to work hard on his study for their family.

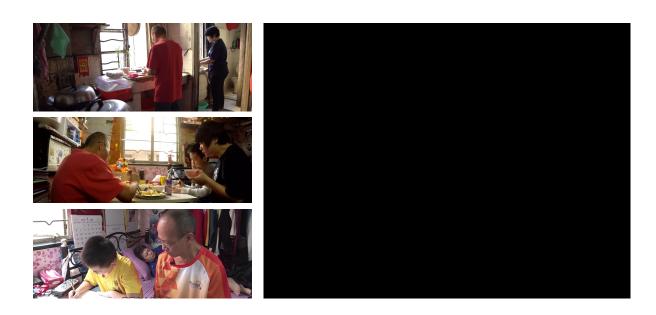
Motivation

- Achievement: Get good grades in school
- Skills: Writing, basketball, football, computer game
- Incentives: Study well and get appreciation from his parents
- Fear: Schoolmates discrimination in his family background, No money to social with friends or buy toys.

Frustrations

- Same table for dining, working and entertaining
- Living size is too crowded
- Doesn't have his own desk for doing homework and studying
- Lack of entertainment equipment and space
- To spend time with his busy father

How we live



How we live

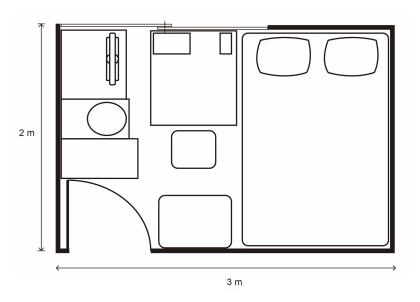








Floorplan



Location: Shek Tong Tsui

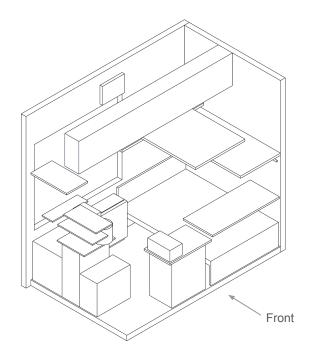
Size: 68.9 sq. ft (2m x 3.2m)

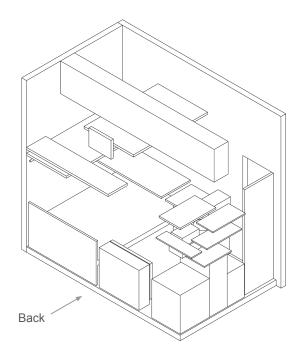
1:1 Floorplan





Isometric view





Elevation view

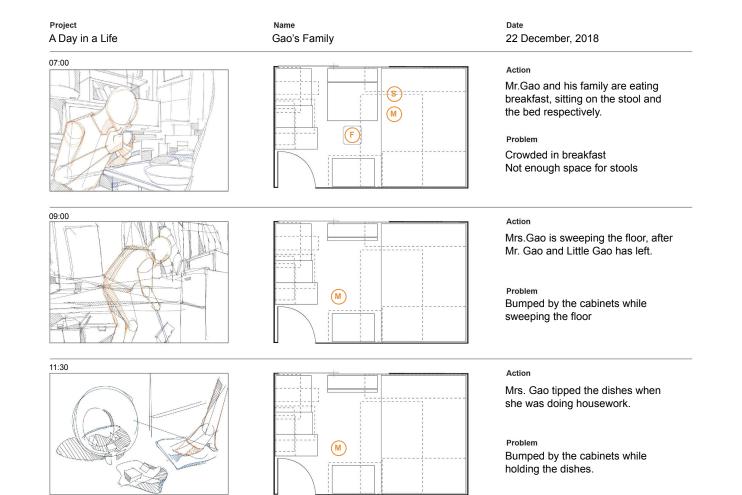


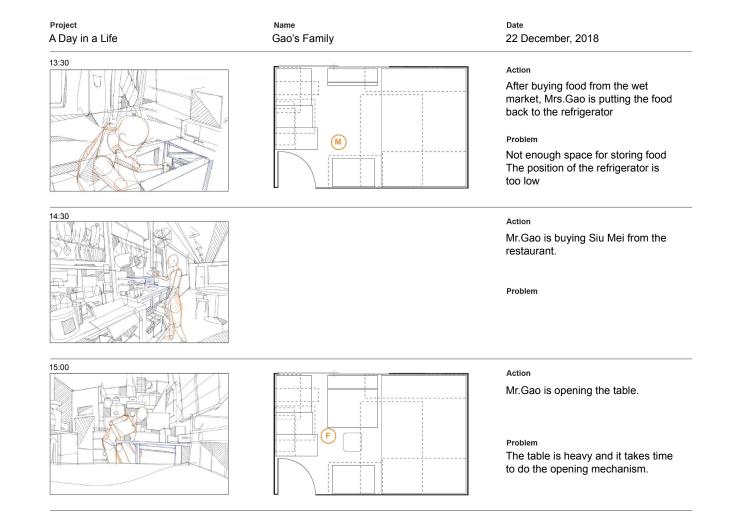
Timetable

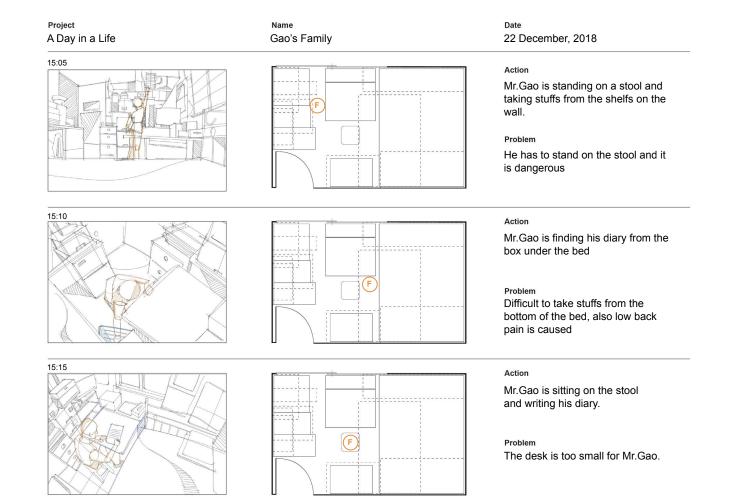
	Father Gao - Teddy	Mother Gao - Mrs. Wu	Little Gao	
6:00		Wake up		
	Wake up	Prepare Breakfast	Wake up	
7:00	Breakfast			
	Go to work	Send little gao to school	Go back to school	
8:00				
9:00		Do Housework		
10:00				
44.00	Wasta	Ocalelanah		
11:00	Work	Cook lunch		
		Quick lunch	School	
12:00		Wash dishes		
		Buy food in market		
13:00		7		
14:00		Entertainment		
	Buy food in market			
15:00	Back home & Write diary	Pick up Little Gao from school		

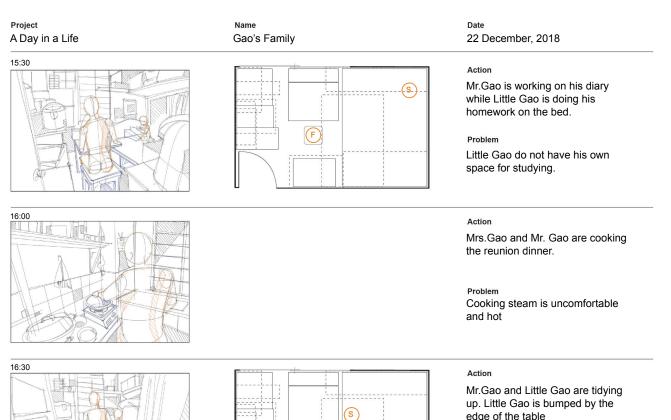
	Father Gao - Teddy	Mother Gao - Mrs. Wu	Little Gao		
(Cook Back home				
16:00	OUUK	Cook	Entertainment		
	Reunion meal				
17:00 F	Parenting time (homework)	wash dishes	Parenting time (homework)		
E	Back to work	Parenting time			
18:00		Go to the Neighbour	hood Kitchen (開檯食飯)		
19:00		Cook with neighbourhood	Homework tutorial & Entertainment		
21:00			Pinner		
		Wash dishes and Chit-chat	Chit-chat		
22:00		Back home			
		Bath	Bath		
23:00	 -				
0:00		Entertainment	Sleep		
E	Back home & Bath				
1:00	Sleep				

Storyboard

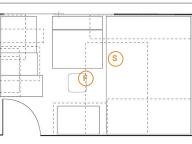








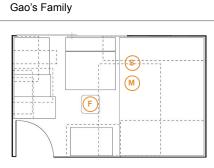




edge of the table

Problem

Little Gao may easily get hurt, due to the lack of space



Name

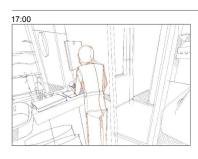
Date 22 December, 2018

Action

Mr.Gao and his family are having the reunion dinner. They are sitting on the stool and the bed

Problem

Crowded and not enough space for stools



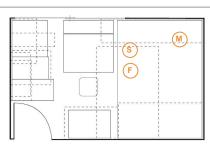
Action

Mrs.Gao is washing dishes in the common kitchen of the subdivided flat.

Problem

The place will easily get wet while dishwashing, have to dry everything immediately.



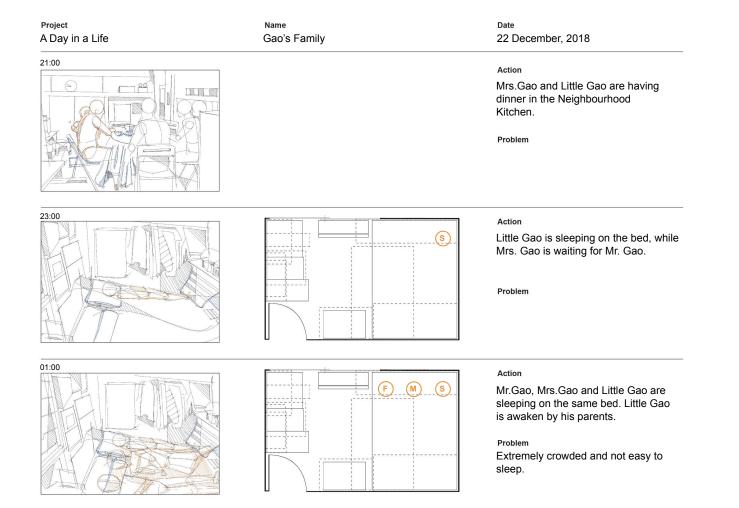


Action

Mr.Gao is teaching Little Gao to do homework, while Mrs. Gao is playing her phone on the bed.

Problem

They have to clear the table immediately after meal.
Too crowded for 3 person sitting on the bed in the same time

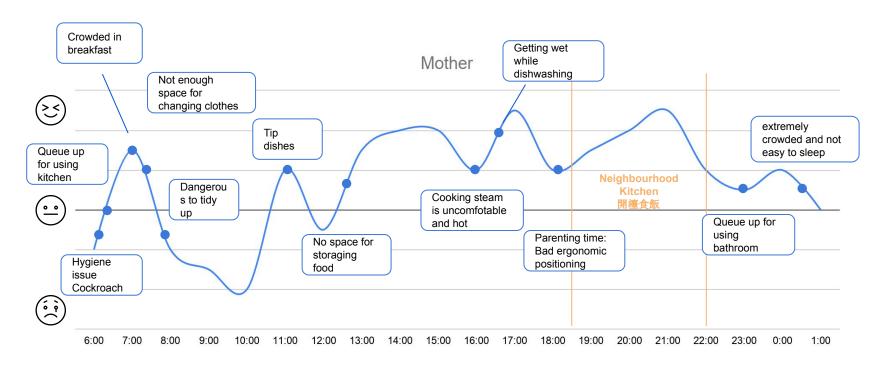


User Experience

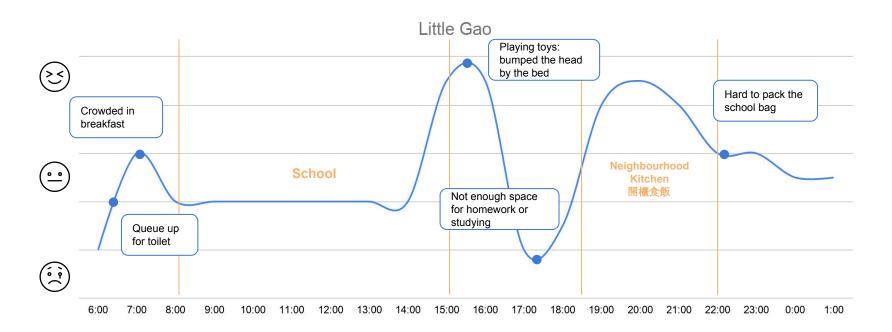
User Experience



User Experience



User Experience





Gao's Family

Problem

- Crowded breakfast and dinner
- Not enough space for stools
- Not enough space for changing clothes
- Too crowded for 3 person sitting and sleeping on the bed in the same time

Needs of Space



Family dining



Sitting and resting



Clothes changing and hanging



Working space for diary writing



Easy-to-reach storage



Sleeping



Parenting



Gao's Family

Objects

- Bunk bed
- Dining table
- Stools
- Sofa
- Wardrobe
- Working desk
- Storage box
- Cabinet/ Cupboard



Gao's Family

Possible Technology

- Foldable table
- Attaches to walls desk
- Height adjustable storage
- Hidden bed
- Transformable sofa
- Height adjustable desk
- Triangle steel bracket



Father Gao

Problem

- The table is heavy and it takes time to do the opening mechanism.
- The top shelf is too high to reach
- Difficult to take stuffs from the bottom of the bed, also low back pain is caused.
- The desk is too small

Needs of Space



Family dining



Sitting and resting



Working space for diary writing



Easy-to-reach storage



Sleeping



Parenting



Father Gao

Objects

- Stool
- Sofa
- Double bed
- Working desk
- Under bed storage box
- Shelf



Father Gao

Possible Technology







- Foldable stool
- Hidden Sofa
- Hidden Bunked bed
- Foldable Desk attached to walls
- Modular storage box



Mother Gao

Problem

- Bumped by the cabinets while sweeping the floor and holding the dishes.
- Not enough space for storing food
- The position of the refrigerator is too low
- Cooking steam is uncomfortable and hot
- The place will easily get wet while dishwashing, have to dry everything immediately.
- They have to clear the table right after meal.

Needs of Space



Free moving space



Tools storage



Food storage



Socialing space for friends and vistors



Private and large space to cook



Mother Gao

Objects

- Stove
- Storage for cookware
- Dining table
- Working desk
- Cabinet and cupboard
- Sofa



Mother Gao

Possible Technology







- Hidden Sofa
- Hidden Bunked bed
- Foldable Desk attached to walls
- Modular storage box
- Height adjustable storage



- Do not have his own space for studying.
- May easily get hurt when moving in the flat with more than one people, due to the lack of space

Needs of Space



Gaming Space



Private studing space



Working space for homework



Storage for books



Sleeping



- Playing zone
- Working desk
- Cabinet
- Bunk bed/ Single bed



Little Gao

Possible Technology





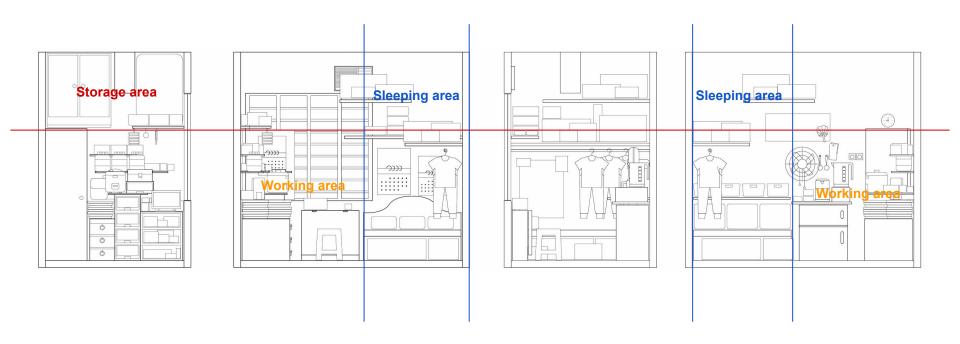


- Foldable Desk attached to walls
- Modular storage box
- Hidden bed

Area to be addressed:

- 1. Sleeping area
- 2. Working area
- 3. Storage area

Orthographic

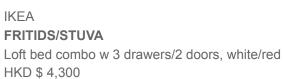


Hong Kong Furniture retailers positioning map













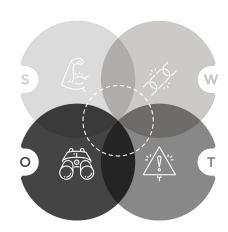
FRITIDS/STUVA
Loft bed combo w 3 drawers/2 doors, white/red
HKD \$ 4,300

Strength

- Allow some storage space
- Decent outlook
- Play with feature colour
- Small working desk

Opportunity

- Detachable working desk
- Variety of colours and style



Weakness

- Size can only accommodate 1 kid.
- Storage space is not fully utilised.
- The dimension of the panels are not customisable.
- The bed is too large to fit into most of the SDUs in HK for 2-3 household size.
- Household living in SDUs may found it expensive and costly.

Threats

- Need to dismantle if moving house
- Short material life and less able to stand for wear and tear due to the joint system







Pricerite

Transformer2.0

Deformed bunk bed desk (left ladder)-wood grain color with off-white HKD \$ 23,399



Pricerite

Transformer2.0

Deformed bunk bed desk (left ladder)-wood grain color with off-white

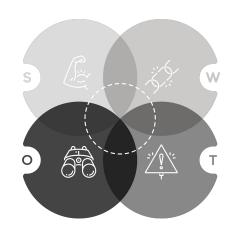
HKD \$ 23,399

Strength

- Sufficient storage space
- Decent and warm outlook
- Transformable hidden bed and working desk
- Space saving
- No need to tidy up the table to transform to bed

Opportunity

 Transformation between working desk and bed



Weakness

- Not affordable for household living in SDUs
- Not applicable to double bed
- The dimension of the panels are not customisable
- The bed is too large to fit into most of the SDUs in HK for 2-3 household size

Threats

- Need to dismantle if moving house
- Difficult to assemble and disassemble

After the competitive research, we found that there is no a best furniture to tackle the existing space problem for Gao's family.

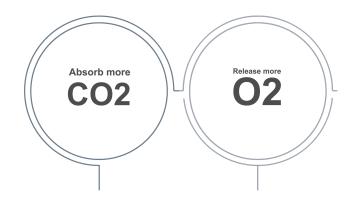
Issues found are that most of the ready-to-assemble furnitures in the current market are **not fully customisable** with an **unfit dimension**. Relatively it is a **waste of space** in a compact subdivided flat or a small home environment (Human).

We also see the complicated yet **not upgradable and modularised joint system** in the current bed design market (Technology). This **limited the life span or durability** of a furniture when it comes to a change of dwelling place (Financial). As well as the waste of **not sustainable material** (Sustainability).

On the other hand, it is **rare to find an affordable** (in terms of subdivided flat household financial state) and compact **integrated bed** covering all three living activities, sleeping, working, storage due to the small market size **for extreme living environment**.

Material Research

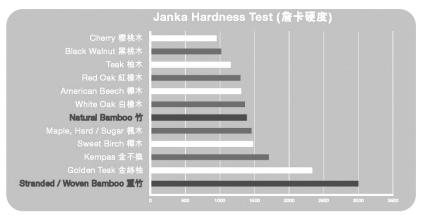




Green:

- Absorbs relatively more CO2 than trees, thereby
- Releases relatively more O2 than trees
- Great natural carbon sink àFast biomass generation
- Fast re-growth even after regular harvesting





Source: Martin Tam, 2019. Bamboo for the 21th century.

Feature:

- Bamboo can be harvested within 5-7 years
- Extraordinary physical characteristics
- Suitable for all types of structures and constructions
- Light building material for easy transportation & storage
- Hard and strong (Janka Hardness Test)



Economical

Bamboo also widely known as resources that empower the poor. They already play a critical role in supporting poverty alleviation contributing to livelihoods of millions for people worldwide.

Source: INBAR Proposing an International Standards Organisation Technical Committee for Bamboo and Rattan https://www.youtube.com/watch?v=sw7qBKR9Glg

Challenges and opportunities

From the research and case study of Gao's family, we explored with empathy the scenarios and story of user experience, defined the group of people designed for and how do they live. We see diversity in the three family members. Below are the summary of the method used and its study area respectively.

A

Acitivities
User experience map

E

EnvironmentFloor plan, Interior drawing

Interaction
Timetable & Storyboard

0

Objects
Indentification of user problem with objects (Furniture)

U

User Persona

We define the problems and identify the user needs. We would like to have a balance in financial requirements, human needs, the application of technologies and environmental sustainability.

Design criteria

- 1. Compact and upgradable modular system
- 2. Accessorised
- 3. Sleeping with privacy
- 4. Cater for working and dining at the same platform
- 5. Expandable storage area
- 6. Safety

Design strategy

Our project aims to design a compact and upgradable modular system, which is accessorised and provide private sleeping opportunity, a working plus dining platform as well as expandable storage area. At the same time with the consideration of safety issues, to give a design solution for the sake of a higher living quality for the Gao's family.

The furniture will cover the three main activities of the family: sleeping, working and storage.

We see the opportunity in designing a compact and upgradable modular system on an integrated living platform. Our project is going to design an innovative joint system which allow easy assembling and disassembling of the furniture, also maximise its customizable feature in order to save more space in SDUs.



Compact, Upgradable, Modular

Initial Idea Development

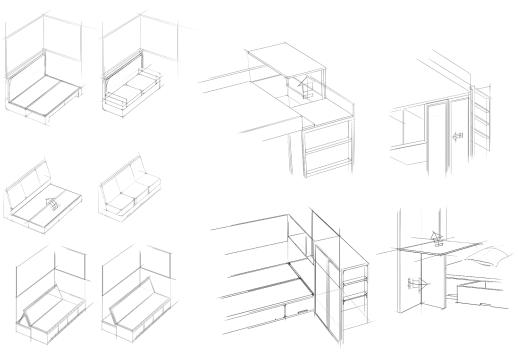
Sketches

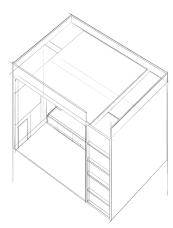


Features:

- Storage + Stair case
- Raised bed by steel angle bar frame
- Hidden working desk
- Pegboard storage
- Storage box with seat pad
- Tatami

Sketches



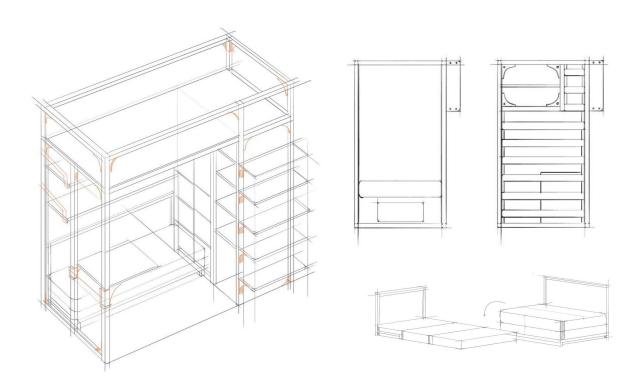


Features:

- Foldable table
- Hidden working desk
- Transformable sofa
- Customized Storage area
- Inculde Wardrobe
- steel angle bar frame Structure

Final Idea Development

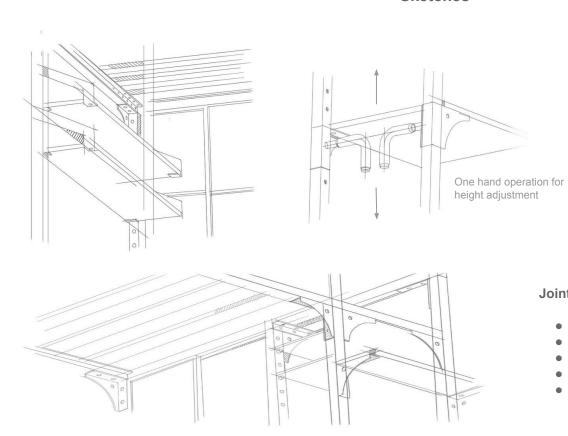
Sketches

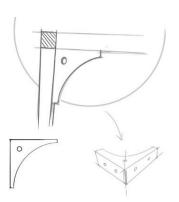


Features:

- Compact and small footprint
- Height adjustable table
- Transformable sofa
- Standard size of single bed and double bed
- Customized Storage area
- Inculde Wardrobe

Sketches





Joint Features:

- Metal folding technology
- Economical
- Safe
- Easy assemble and reassemble
- Can be applied on different structures

Renderings of the final furniture modular system





Compact, Upgradable, Modular

The Integrated Living Platform is designed in small footprint to fit nano flats. It is all-in-one integrated, as to avoid stand alone furnitures and save room. It includes a height adjustable table, a transformable sofa, wardrobe and a customized storage area. Not to mention the standard size single bed and double bed.

SD3468_20191_A: Furniture Design

















Construct with Joints

Strong, Low-Cost, Durable

The joints are also easy to assemble and reassemble, allowing users customize and construct in different living environments. Also, the universal joint is applicable to different structures, which enables constructing the entire Integrated Living Platform by itself.













Colour, Material and Finish Design



Bamboo lumber + White faced MDF board

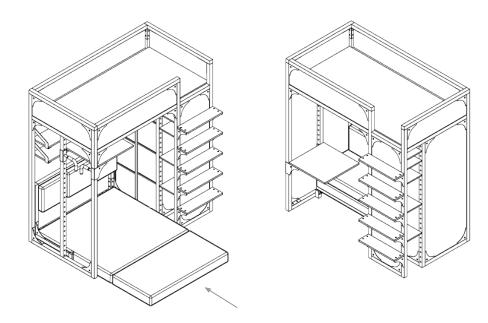


Black matte steel bars + Pressed wood board

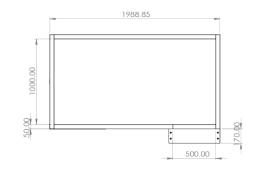


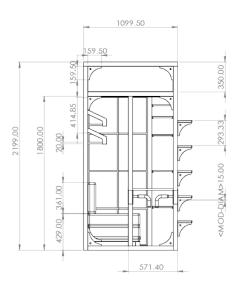
Grey matte steel bars + White faced MDF board

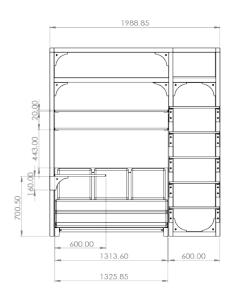
Scale 1:20

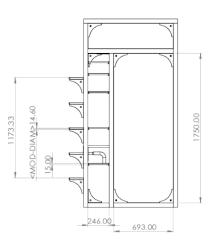


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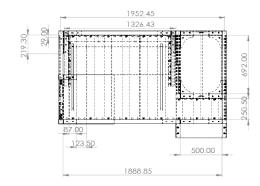


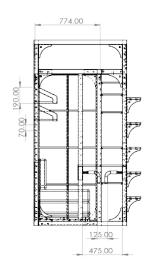


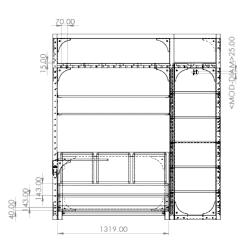
Group 5 - Integrated Living Platform

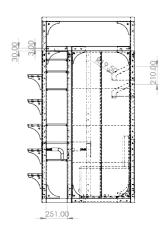
SD3468_20191_A: Furniture Design

Scale 1:20

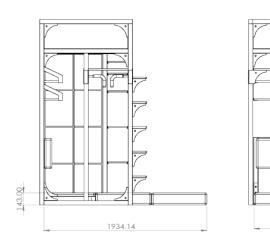








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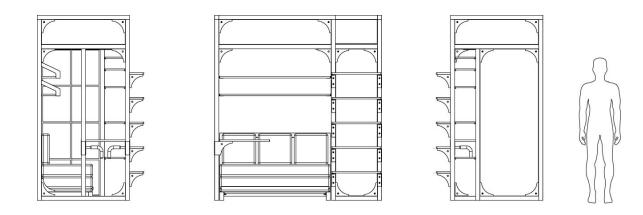


Group 5 - Integrated Living Platform

SD3468_20191_A: Furniture Design

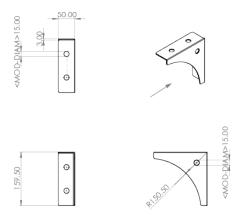
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Scale 1:20



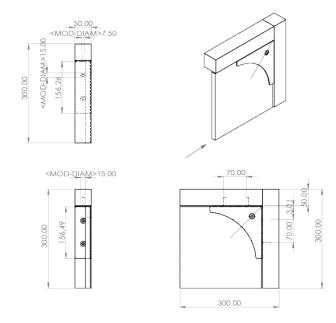
Universal Joint

Scale 1:5



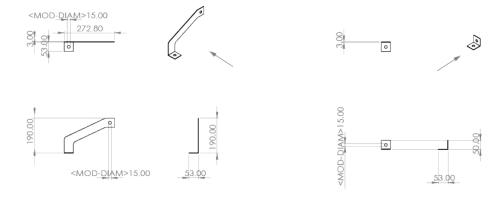
Universal Joint

Scale 1:5



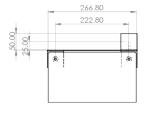
Tribe Joint

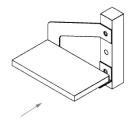
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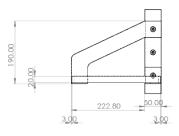


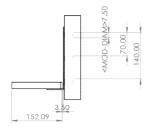
Tribe Joint

Scale 1:5



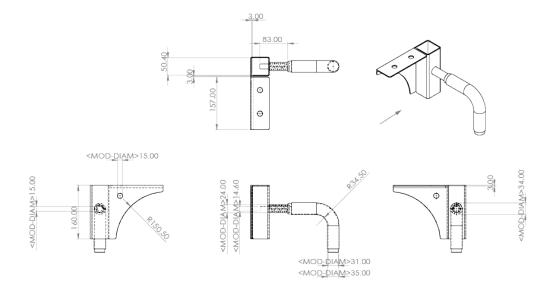






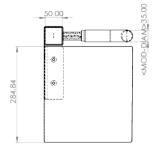
Grip Joint

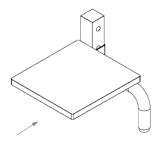
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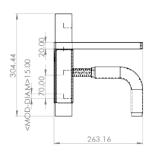


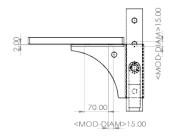
Grip Joint

Scale 1:5



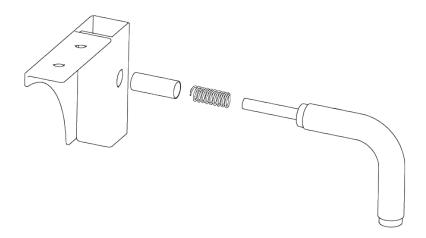






Grip Joint

Scale 1:5



Renderings of the interior environment

















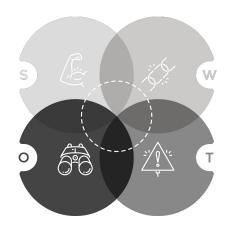
SWOT Analysis - Intergrated Living Platform

Strength

- Compact and upgradable modular system
- Accessorised
- Sleeping with privacy
- Cater for working and dining at the same platform
- Expandable storage area
- Sustainability
- Relatively more affordable than the competitors

Opportunity

- 3 colours and style
- Upgradable and customisable
- Transformable sofa and double bed



Weakness

- It can be a big project to install the furniture by the user
- New beddings and mattress need to be purchased which will add to the cost

Threats

 Competition from other ready-to-assemble furniture retailer such as Ikea and Pricerite



Gao's Family + Integrated Living Platform

Individual Benefits

Father Gao

- One hand operated table
- Reachable shelves

Mother Gao

More room for housework

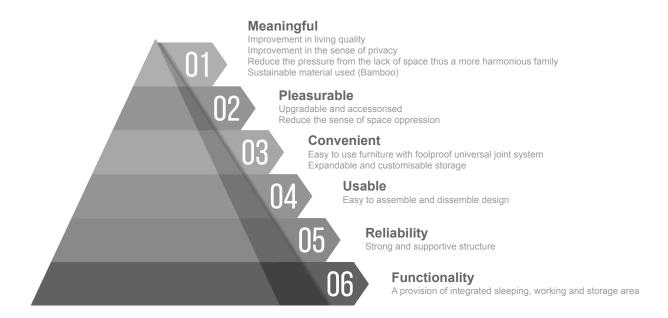
Little Gao

- Private and individual sleeping space
- More storage for books and sundries
- Study area



Gao's Family + Integrated Living Platform

User Experience Benefits



Recommendations for future development

Recommendations

In this project of the integrated living platform, we do concern its future development opportunities. Thus we have several recommendations for the possible things that can be done.

First it's the **material selection and collection**. In this project, we took bamboo as the feature material used in the bed frame, in the view of the enhancement of the sustainability of our project. However, it is only an ideal way until we see **possible manufacturers** of bamboo furniture in Hong Kong or China. We hope to be able to contact the manufacturers of bamboo in Hong Kong for a better understanding of the possibility of this kind of green material on furniture.

On the other hand, **packaging** is another important factor in furniture design in terms of the transportation. The user guide for self-assembly should be counted in the consideration after the investigation in the manufacturing method.

Third, the project will need a **cost calculation** and possible funding and **financial support** from NGO, concerning the affordability of our furniture to the household living in SDUs.

Finally, it comes to the **branding and image** of our project. We hope to spread the idea of green furniture, innovative joint system as well as the raise of public concern on subdivided flat living issues, by our design, the integrated living platform.

Division of labour

Wong Ho Ting, Dan

Concepts drawing 3D rendering Design Report (Final idea development) Poster Design

Wong Chi Yin, Zenas

Concepts drawing
Dimensional drawings
CAD Modeling
Design Report (Final idea development)
Poster Design

Chong Man Yee, Melody

Concepts drawing Design Report (Research, Case Study, Summary, Analysis, Recommendations)

Wong Ho Ting, Dan

Throughout this project, I have managed how to conduct an authentic case study and construct furniture with innovative joints. Without a doubt, it is crucial for product designers to design products that are considered from the user's perspective. By studying a real subdivided flat environment and the Gao's family in different methods, such as the personas, user journey, and the 1:1 floorplan; I learnt how to put myself in other's shoes and design a piece of furniture that fit such a small living area.

Also, it is thought-provoking to design a furniture piece by applying joints and unexpected materials. Since we are designing for families living in subdivided flats, we have to make the furniture piece easy to assemble, affordable and space-saving. Constructing the structure by joints and applying bamboo lumbers is definitely an unexpected and impressive idea.

However, it is regrettable that we could not have a field study to the real flat, nor the chance of building mock-ups by real bamboo lumbers. Instead, we tried to observe and reconstruct the whole subdivided flat inside 3D software. Also, we visited furniture stores and observed the joint system of real bamboo-made furniture. I believe our design could be further developed if we are able possess the mentioned learning opportunities.

In short, I have derived much benefit from this design project and the SD3468 course, which enriched my knowledge and interest in the field of furniture design.

Wong Chi Ying, Zenas

With completing the Integrated Living Platform (ILP) project, I can reap benefit from the class and tutorials. Putting the environment and real-life situation in context is significant for a design project, I can substitute for their role to have a better understanding of their needs and difficulties in the subdivided flat. A detailed timetable, user experience and storyboard are needed to visualize their daily life for me to provide a corresponding solution to tackle each of the problems. Therefore, we can conclude the precise and concise design criteria for further development.

As well as the case study, I realize that naming my products and design is essential. Since the name help to communicate with others so as to develop the final idea. However, the biggest hurdle is how to give an appropriate name for the products. I notice that the name need to contain different messages like reflecting the usage, performance and shape for the sake of providing the basic understanding and attracting people's attention. So, it is extremely necessary to name the products.

Another challenges are designing the final concepts and building the CAD model of ILP. I need to consider different combinations and assembling methods of the screws, joints and bamboo lumbers in order to make an easy assemble and disassemble modular system with the minimal materials. Therefore, we come up with several design solutions and gather the ideas to develop the final concept, which makes sure it is small-footprint and economical for the grassroots family who live in the subdivided flat. However, the only regret is we cannot test our design solution with 1:1 joint model for further improvement.

To sum up, I have a great learning experience in the lessons and assignments. I am looking forward to apply my new knowledge in the future.

Chong Man Yee, Melody

In this furniture design subject, my initial expectation is that I will be able to design something grand and magnificent. Eventually, my teammates and I had to design furniture for people living in the subdivided unit, which to me, I found it a lot more challenging than to design those fancy furniture. No matter the challenge from the limited living space, the limited use of materials due to cost, and the user experience consideration in a specific family living in SDUs, all the limitations allowed myself to look deeper in the role of a designer.

I realised that a designer will not only need to design something with the consideration of form and function. From our personas, storyboard, user experience map, SWOT analysis etc., I acquired more design thinking tools for a human centered design project, which I believed will greatly strengthen my design quality in the future.

More importantly, the design of our Integrated living platform reminds me the role of a designer to design not just for people, but also design for the planet. Sustainability is by all means a criteria when we design. Never should a designer turn a blind eye to the fact that more and more plastic waste are being produced, more and more products are planned obsolescence, more and more fancy but material demanding products. Not only should we try our best to reduce our own consumption, but also as a designer, try our best to reduce our designed waste. Make reflection from the durable joint system by the old craftsmanship as a comparison to the present furniture with short lifespan. I believed that, designers play an vital role in the current capitalism time, who are the ones able to choose to build and design one more trash to the planet, or one more product that help the sustainable development of the world.

Overall, I feel grateful to have studied this furniture course and I appreciate the hard work by my team.





Make Platform Yours.

Group 5 - Integrated Living Platform