

Fun Station Cashier-less Complex

Fun Station, the world's local station.

-Ruoyu Xu

Slogan: Fun Station, the world's local station.

Fun Station Cashier-less Complex



Production Description

Final 5-second-pitch:

My idea is to build a cashier-less complex empowered by multiple advanced high-techs.

Description:

Based on what I did for my first assignment, I've decided to make a cashier-less complex that offers refreshing shopping experience with less effort to be made. This time, I would like to upgrade my initial concept by adding more technologies to create stunning experience architecture for my potential customers. The complex contains a mini store, a mini restaurant, and a mini hotel, which are all empowered with facial recognition technology to make the payment much simpler and more efficient. Customers could just get what they want and leave immediately, and they would be charged automatically according to what they consumed. Customers would be required to link their bank cards to their faces; all services would be available afterward.

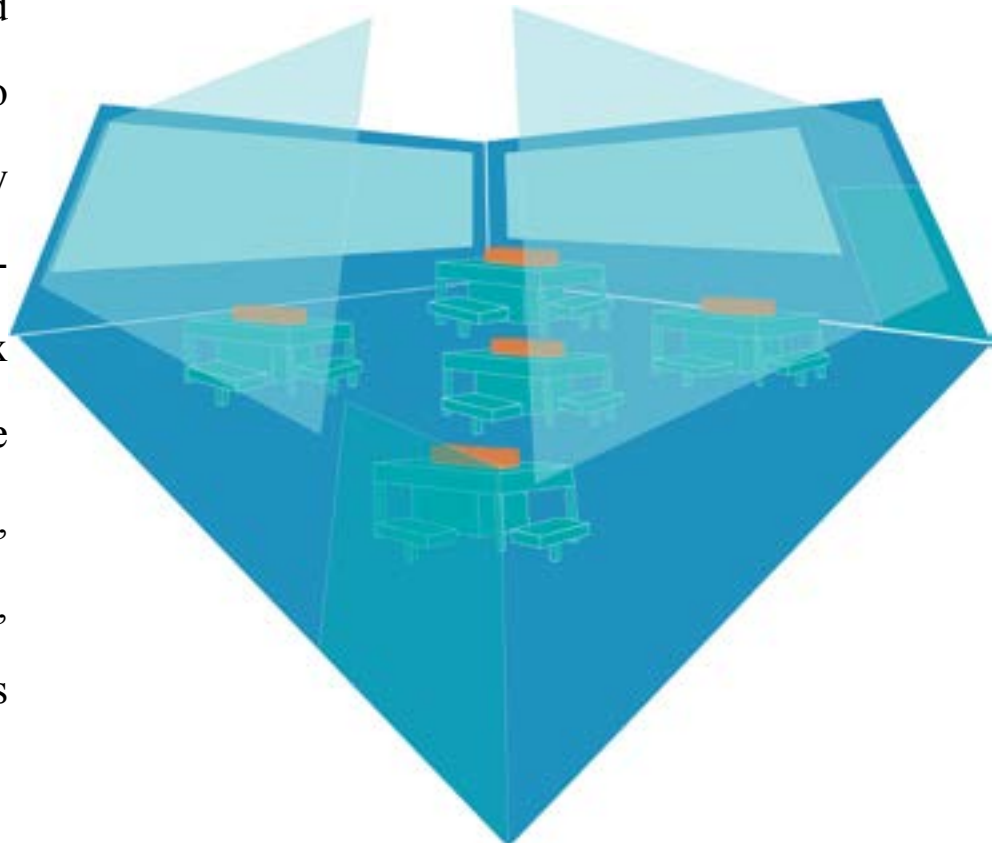
Furthermore, I would like to add some caregiving ideas, in terms of "extreme service," "understanding each customer as a person," and

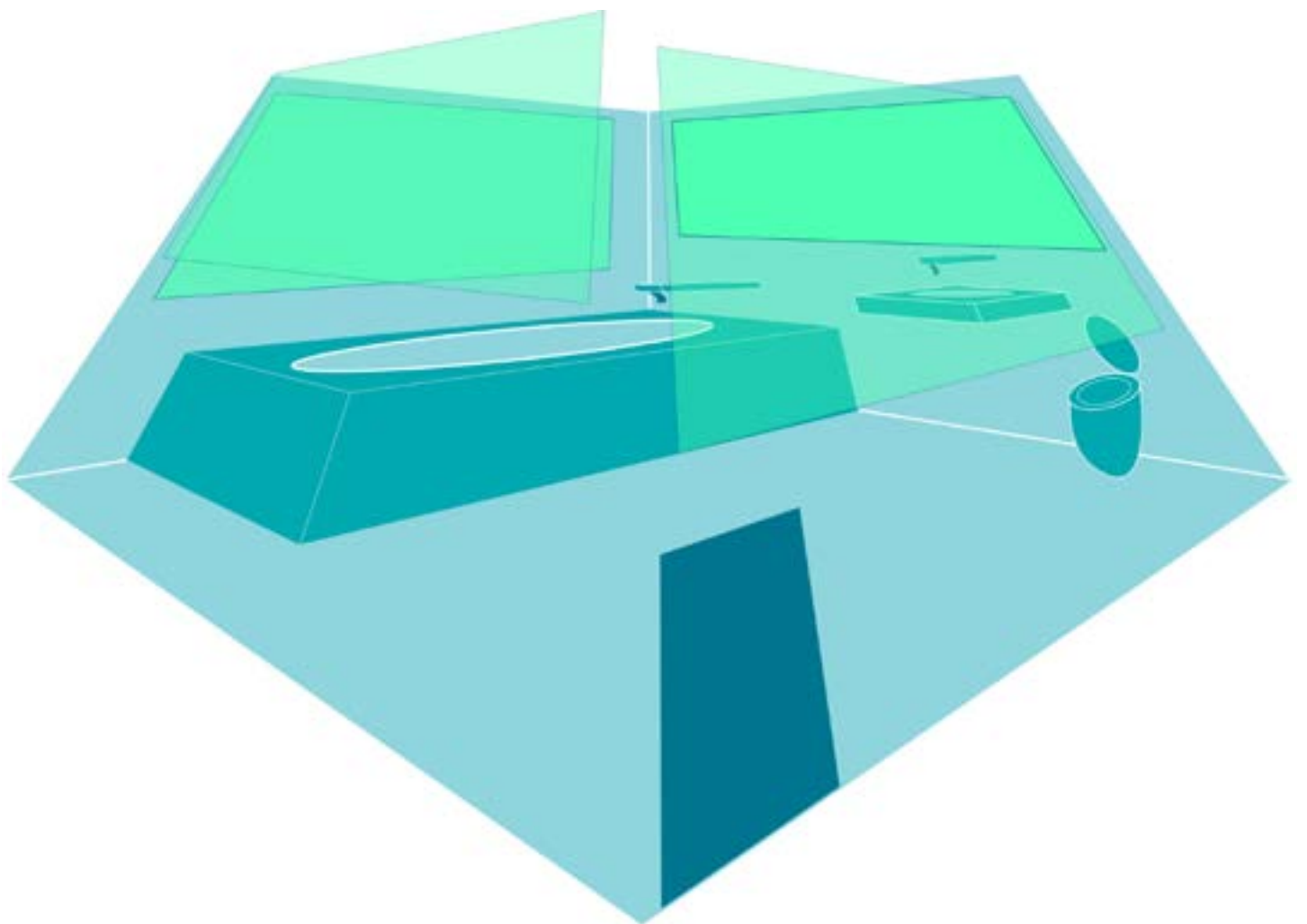
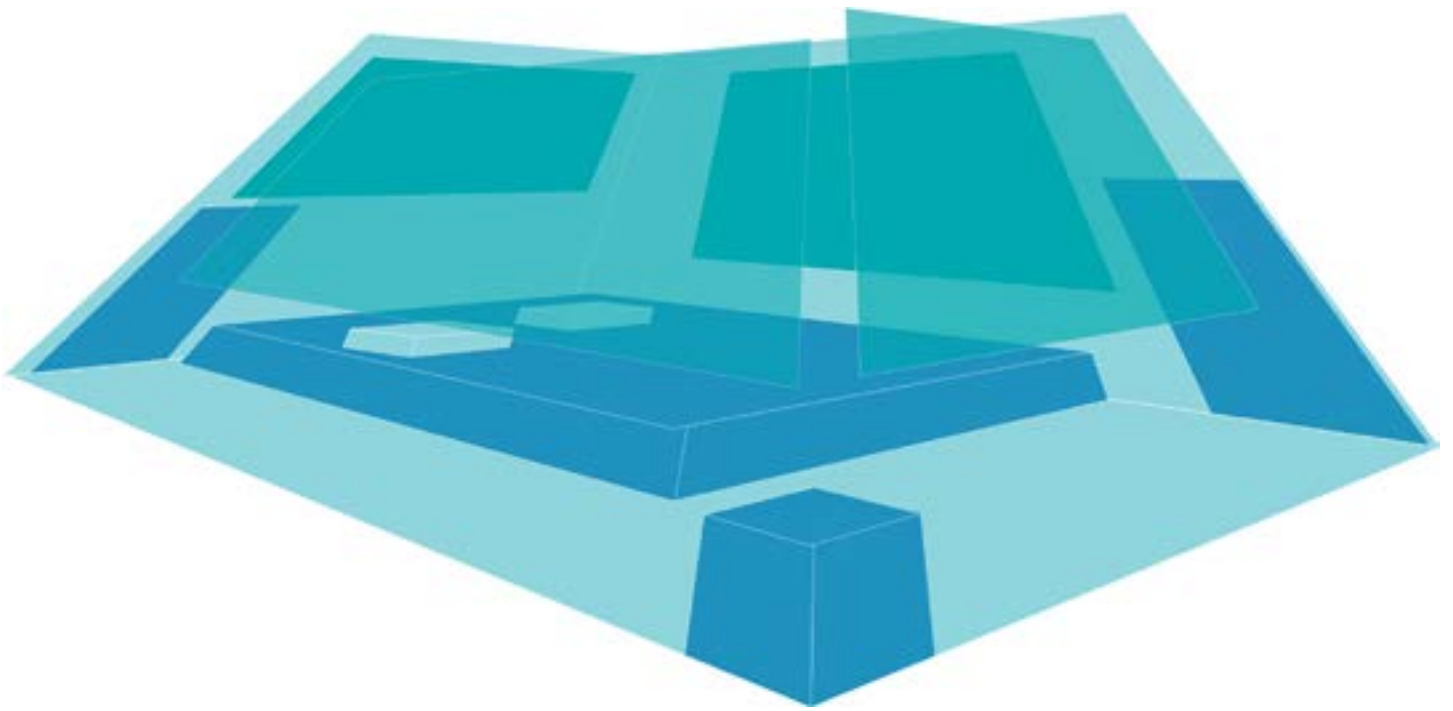


“extending the relationship.” Specifically, I would like to establish a system of my cashier-free complex. The cashier-free complex’s value would be maximized when there are lots of them. In the mini hotel, there’s smart assis-

tant system works like Google Assistant or Apple’s Siri. Customers could ask questions and control every electronic device in the room by talking to the room. Things like an umbrella would

be free for customers to rent, they can return at any of the cashier-free complexes. Every complex or station would offer the same high-quality service, which is my slogan says, “Fun Station, the world’s local station.”



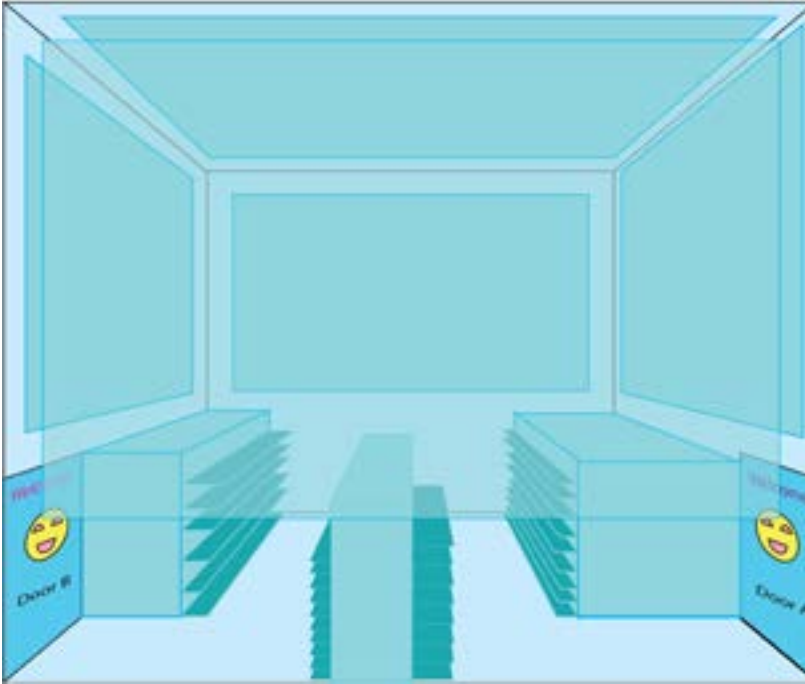


Specifications of product

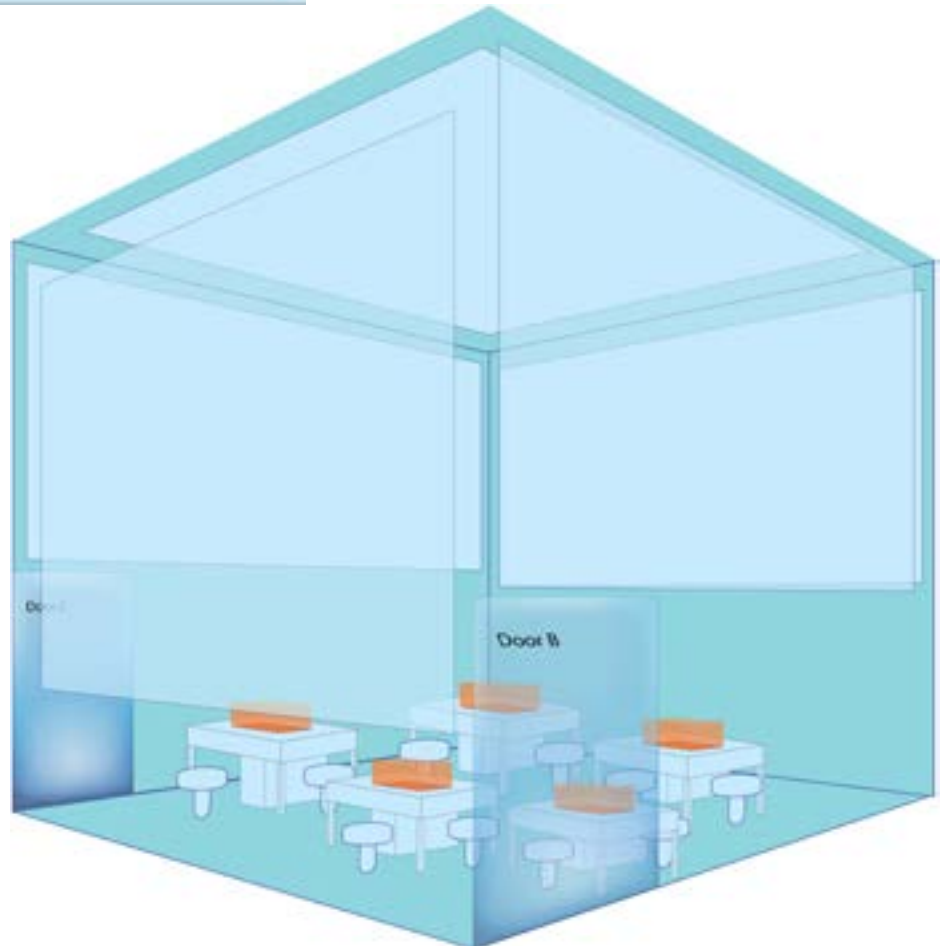


Exterior of space

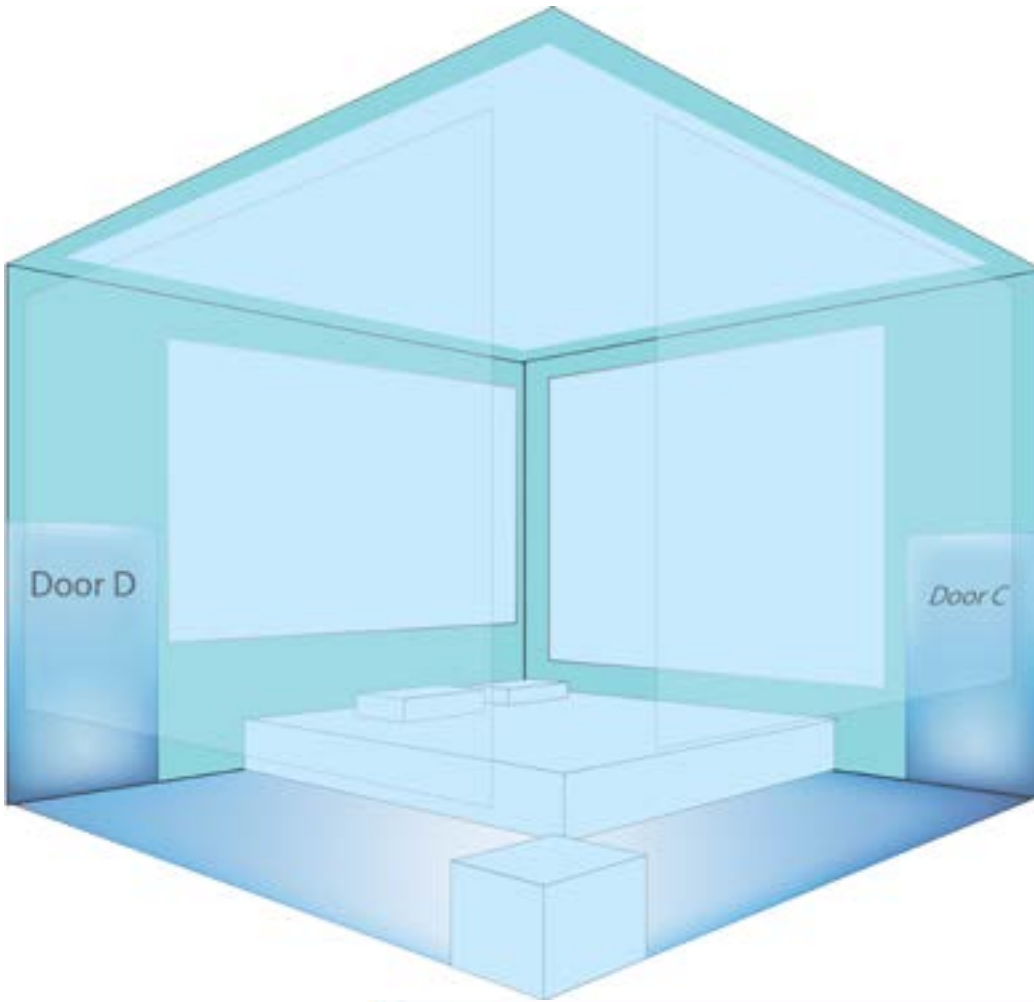
Interior of space



Fun Station Cashier-free Store



Fun Station Mini Restaurant



Fun Station Mini Hotel
Bedroom



Fun Station Mini Hotel
Bathroom

Research Related to product

Related method of production: Flow production (often known as mass production) involves the use of production lines such as in a car manufacturer where doors, engines, bonnets and wheels are added to a chassis as it moves along the assembly line. It is appropriate when firms are looking to produce a high volume of similar items. (Riley, 2015)

Related technologies: Auto 3-D (autostereoscopic imaging): is a display technology that enables a 3-D (three dimensional) effect without requiring the viewer to wear special glasses. (technosnowball, 2015)

SuNing Unmanned stores with face recognition and RFID tags: To check out, shoppers only need to carry their goods along the payment pathway. The system will automatically recognize the shoppers and their items with the facial recognition and RFID technology – making the entire check-out process shorter than 15 seconds. (Clark, 2017)

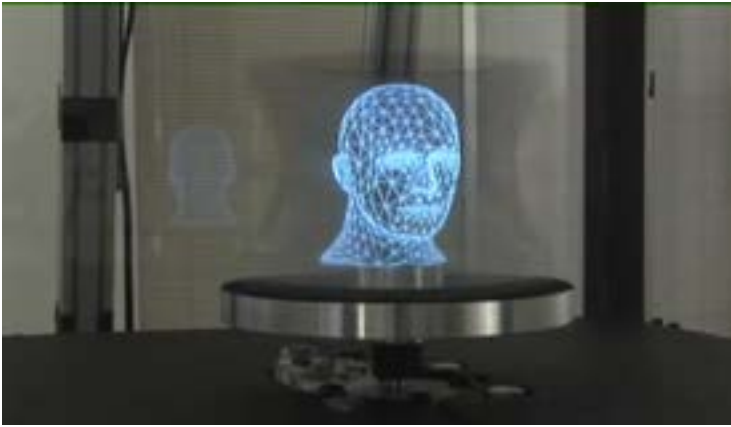
How Amazon Go works: The technology automatically detects products whether they are returned to the shelves or added into a virtual cart. Customers would be charged and get a receipt from their Amazon account. (Amazon Go, n.d.)

Holography: is a photographic technique that records the light scattered from an object, and then presents it in a way that appears three-dimensional. (Workman, 2013)



Example:

(MessageToEagle, 2017)

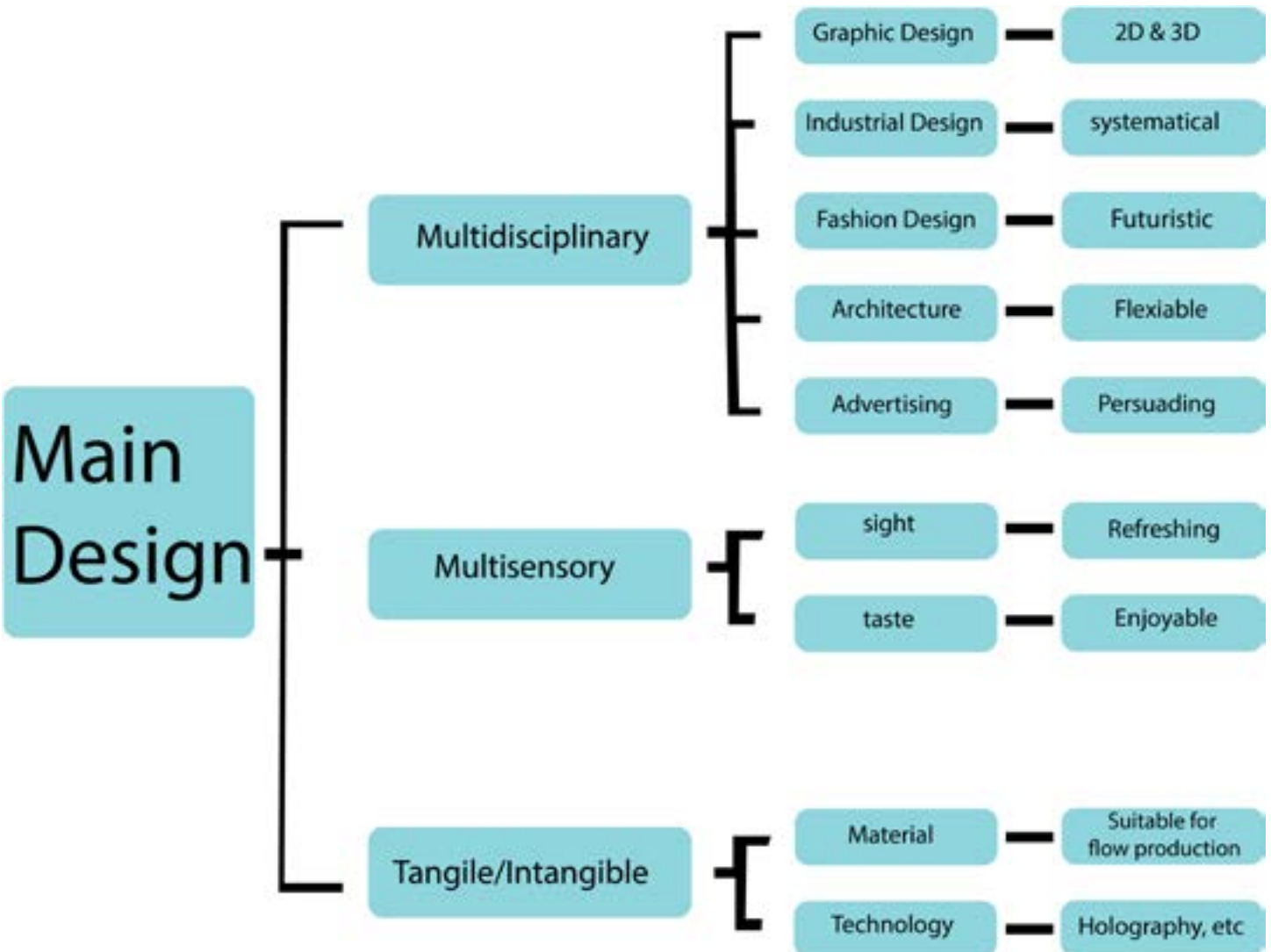


(Smith, 2015)



(Sohu, 2018)

Metadesign



Print AD

Come on, grab a Tim Hortons Iced-Cup and go!

Come and sit down, there's a wonderland.

Talk to the wall and be "silly" (SMART)!

Swipe in the air and pick your favourite cuisine.

Forget to bring your wallet? No problem.

Fun Station, the world's local station.



Experience Architecture

For this upgraded brand-new design, I incorporated plenty of impressive technologies to achieve an enhanced cross-pollination and unprecedented experience architecture, including autostereoscopic imaging, enhanced facial recognition technology, and holography. The goal is to offer 3D effect menus for our customers, whether the customer is standing outside the store and checking if there's anything they need or the customers are sitting in the mini restaurant would like to check out how food exactly looks like. The ideal way for the customer to choose is simply by swiping to left or right or up or down, and push to confirm choice with hands. The effect is shown in the orange areas in my drawings.

If you look carefully, you would notice that I added a lot of screens for all the rooms and made them as big as possible. There are functions and ambitions behind those screens. For the Mini-hotel, customers could customize the theme they want in the bedroom. For instance, if you feel too hot and too dry, you would like some rain, the screen would generate information and make a 3D effect. You would feel like it's raining, but there's no water coming. Or, if feel too cold, the screens would make you feel like you are under great sunshine without getting actual UV irradiation. When people need to sleep, the screens would create an illusion of a starry sky. In the bathroom, you could watch 3D movies without wearing 3D glasses. The enhanced facial recognition system is very smart; the sensor would always follow your face. You don't have to worry about which screen to look at because it's always the one that you are looking at will display the movie, working like face-tracking instead of eye-tracking. For the mini-restaurant, the giant four screens on the top would form a 3D effect of an ocean of all the food we offer in the restaurant. The food would be floating just like fish would be swimming in the real ocean. If a customer is interested in one of the dishes, he/she can look carefully by using the small holography on his/her table, which again is shown in the orange areas in my drawings. The functions of the screens in the cashier-free store would be flexible. News, ads, movie trailers, promotions, and so much more are all possible to be shown in there. In addition, the screens will be made based on transparent glasses, people outside could look through.

I also consider that many people might lose the chance to enjoy these experiences just because they have no knowledge of these technologies. That's why I put a holography wall outside. It would demonstrate some basic tricks to attract potential customers.



Commerical AD



Bibliography

- Amazon Go. (n.d.). *Amazon Go*. Retrieved March 26, 2018, from Amazon Go: <https://www.amazon.com/b?ie=UTF8&node=16008589011>
- Clark, S. (2017, November 10). *Chinese retail giant to open unmanned stores with face recognition and RFID tags*. Retrieved from nfcworld: <https://www.nfcworld.com/2017/11/10/355521/chinese-retail-giant-open-unmanned-stores-face-recognition-rfid-tags/>
- MessageToEagle. (2017, May 23). *World's Thinnest Hologram Has Been Created – It's 1,000 Thinner Than A Human Hair!* Retrieved from messagetoeagle: <http://www.messagetoeagle.com/worlds-thinnest-hologram-created-1000-thinner-human-hair/>
- Riley, J. (2015). *Production: Flow Production Method (GCSE)*. Retrieved from tutor2u: <https://www.tutor2u.net/business/reference/production-flow-production-method>
- Smith, J. (2015, April 29). *3D Hologram and the Future of Technology and Entertainment*. Retrieved from business2community: <https://www.business2community.com/tech-gadgets/3d-hologram-future-technology-entertainment-01214803>
- Sohu. (2018, January 12). Retrieved from sohu: http://www.sohu.com/a/216185452_99979048
- technosnowball. (2015, October 6). *Autostereoscopy: The Wonder Of 3D Displays*. Retrieved from technosnowball: <http://technosnowball.co.uk/blog/autostereoscopy-the-wonder-of-3d-displays/#>
- Workman, R. (2013, May 23). *What is a Hologram?* Retrieved from Live-Science: <https://www.livescience.com/34652-hologram.html>