

# WUCB113 Human Centred Systems Design

Student Name	Student Number	Contribution (%)
Quoc Van Khanh An Tran	6778100	
Gia Bach Nhu	7547821	
To Huy Viet	7559926	

## **1 Overview, Strategic Aspects, Systems-Related Factors (General)**

We've had a difficult time since the Covid 19 outbreak, which resulted in severe losses for many businesses. However, other businesses, such as food delivery services like Uber Eats and DoorDash, see an increase in demand. After all, people must eat, and in times of crisis, people appear to place higher importance on healthful food. More restaurants are shifting their business models to include online ordering, home delivery, and scheduled pick-ups. Consumers receive a fresh, high-quality dinner with no effort. However, in some households, people would like to give their family the best of all for every meal by providing their families own- cooked foods and Hello Fresh can satisfy that urge in people. Fresh ingredients and household necessities are delivered right to people's doorsteps through grocery delivery services. Following the example of HelloFresh, we have created FreshForBest with the focus placed on putting ease into people's life.

However, Hello Fresh still needs some improvements in providing incentives for uni students as well as allowing customers to customize their favourite and needed meals besides providing the ingredients they need and that is the reason Fresh For Best is established, in order to improve those disadvantages that people are getting.

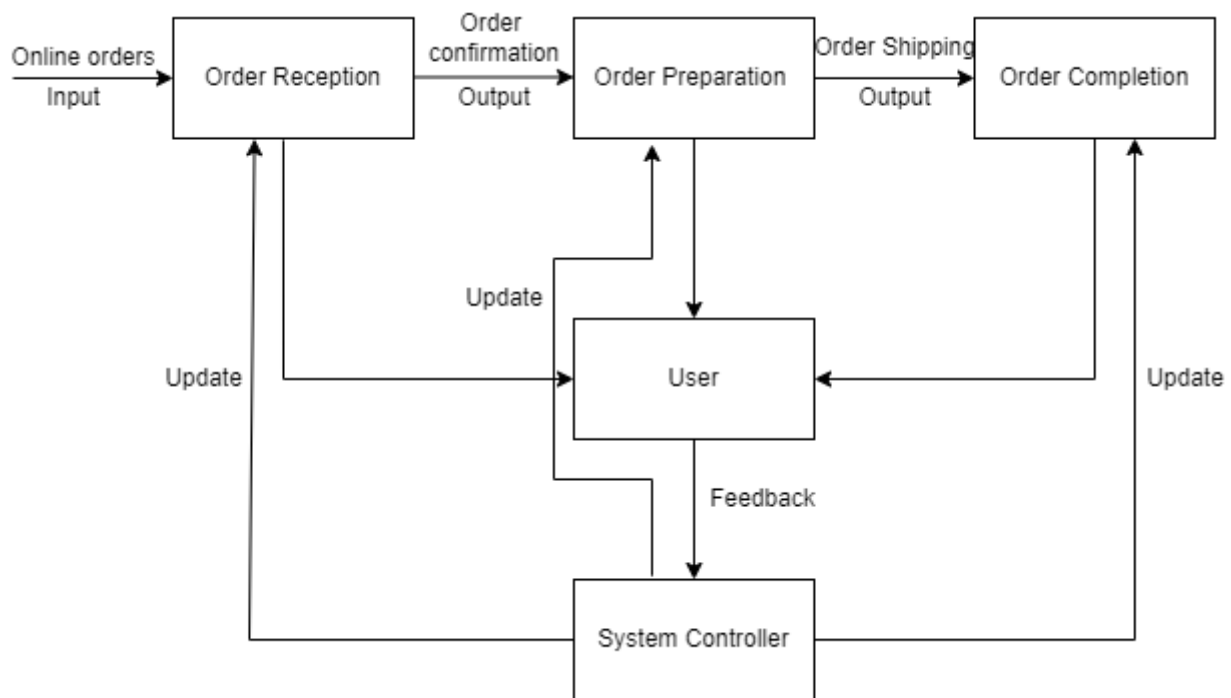
### **1.1 Overview of Business/Organisation/Strategic Direction**

Our mission is to supply nutritious ingredients and recipes to everyone in order to awaken the chef within us. Customers can choose how many meals they want per week, how many people the meal should feed, and what kind of components they want in their meal using the subscription model. FreshForBest will deliver a number of recipes with the assistance of expert chefs from across the world. All of the ingredients are prepared ahead of time, so all the consumer has to do is follow the directions and cook their favourite meal. Beyond HelloFresh, we added the ability for clients to request ingredients separately from the recipe. This means that the consumer can order a large number of components without respect to the recipe, and we also focus on student incentives such as annual discounts or promotions during the exam period, free delivery, and so on. It turns out that this platform we developed is 75 per cent less expensive than regular grocery retailers. This is because FreshForBest eliminates the middleman and buys ingredients straight from vendors without adding a markup. Because the recipes are seasonal and the ingredients are prepared in the proper portions, there is no food waste. Furthermore, HelloFresh meticulously sources all of its products to minimise environmental impact.

### **1.2 Generic Model of System Description**

The order reception will receive online orders from customers. Then the system will prepare the orders for customers. When the system finishes preparing orders for customers, orders will be delivered to customers at the output of the system. The system controller will receive feedback from users and update it to the order reception, order preparation and order completion.

### 1.3 Generic Model of a System Diagram



### 1.4 System Characteristics

Our system has 4 prime characteristics:

1. Our system has a clear purpose: Serve people who order meals on our apps and help students reduce their time ordering food.
2. FreshForBest is an accountable system: every part in our system is responsible by a group of employees in each suburb. on each step, a group of employees will analyse and bring the best choices for customers.
3. Our system has to be documented. If the system isn't documented, it may or may not exist in the minds of employees, resulting in an infinite number of interpretations. Employees can't be expected to follow a system that isn't stated on the paper, and a potential buyer can't be sure it exists.
4. A repeatable system is required. Your systems do not fulfil the "repeatable" requirement if they only operate when you are present to run them. If you can't outsource your position in one system to another, that system isn't repeatable. Your processes may be dependent on a certain role, but to be readily reproducible, they must be independent of any one individual.

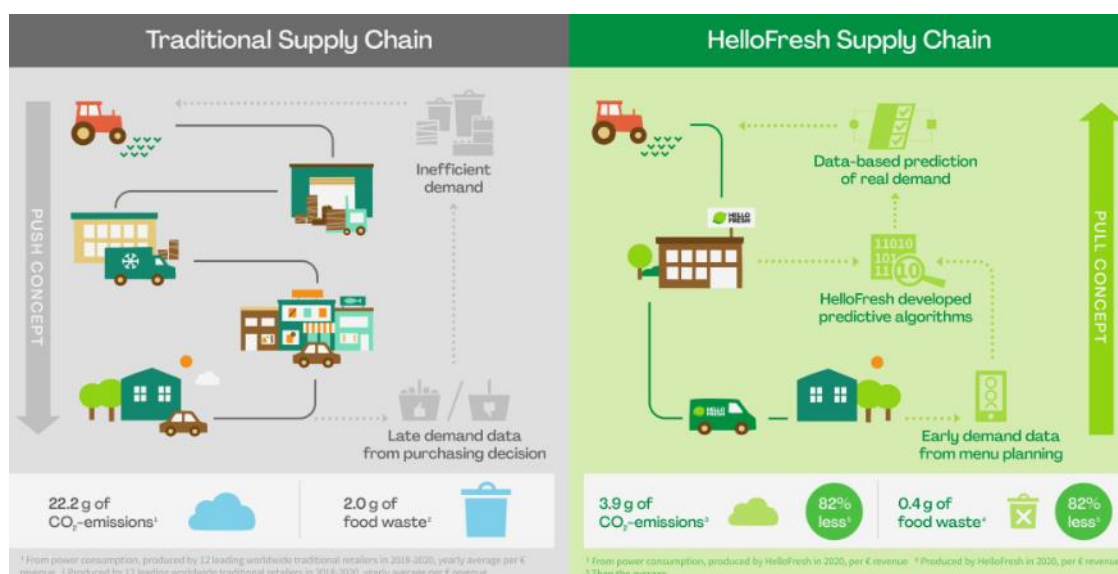
## 2 Systems Identification and Evaluation (Specific) about everything in the system.

### 2.1 System Identification – Functional, Enterprise

- FreshForBest itself has been considered an independent provider cooperating with suppliers in the food industry. Just like HelloFresh, FreshForBest system processes based on a specific supply chain.

### 2.2 System Function and Example

- The supply chain system of HelloFresh is a thing that FreshForBest has to be looking up. This kind of supply chain is considered to be more efficient and more environmental- friendly in comparison to the traditional supply chain (Hello Fresh Group, 2022).
- The supply chain is typically complicated and dynamic. Complex because it may require resource-intensive labour, technology to keep food fresh during shipping, or import hurdles that require special clearance before commodities can enter the country. The word 'dynamic' here means that there are no constants in food production. This causes pricing and resource variations, which affect the kind of products and prices available at the local providers (Fabian Post, viewed 2022). Before the foods can reach our hands, they may go through another phase of processing or distribution. Furthermore, every level involves forms of marketing and sales (Fabian Post, 2022). Because of the complexity and unpredictability, we have determined to navigate a different way for the FreshForBest business system model from the traditional supply chain.
- We have found that the reason that has made HelloFresh revolutionary in comparison to the traditional chain is that they want to reduce the number of checkpoints that a product must pass before reaching customers. They can do that because there are fewer organisations and processes involved. By doing that, they have more control over their systems which can help them provide to customers in a very short time besides better cost control (Fabian Post, 2022). Simple and efficient, that is the main reason FreshForBest has taken the HelloFresh supply chain system as an ideal model.



## 2.3 Resources Required

In order to establish a business system model which has been proposed. FreshForBest is required to have:

- Human resources: Staff will be needed to perform activities related to transporting raw materials from suppliers, packaging, and shipping products to consumers. In addition, it is necessary to have employees carry out commercial, marketing especially technical activities since the sales will be conducted online.
- Financial assistance: To get our business work, we know that it depends significantly on funding. The money is used to register the name of the business, marketing works, obtain the license and the other paperwork.
- Storing facilities: Warehouses and refrigeration are compulsory in storing and preserving raw materials and fresh ingredients.
- Server rooms: Because our business operates mainly online, having servers is compulsory in storing customer and order information when they access our website or mobile application besides managing and operating software of the company.

## 2.4 Operations and management function support

- Besides the functions of the operations and management, we have comprehended the specific skills being needed as support.
- Resourcefulness: This skill taught us that as an operations board, we'll be responsible for managing your team while also keeping the company's well-being in mind (asana, 2022). Indeed, we need to keep our team stay ready for the changes. The improvisation is necessary.
- Financial Planning: Financial planning is the process of determining whether your company has enough money to meet its strategic objectives and goals (asana, 2022). Our plan is to find the high legit providers while keeping the cost low since our products are considered to stay within our customer's budget (small households and uni students).
- Conflict Management: After one round through the production process, not every product owns the best quality. Several rounds of design and a few times looking back to the product sketch are necessary to create products that can meet the standard quality (asana, 2022). We have had to be learning to accept the feedback although it was very hard to hear at that moment so the best version of our products can be created. In order to create a product that can satisfy our customers, strong conflict strategies have been set.
- Problem-Solving: As our system is operating on a particular supply chain, problem-solving is critical as it's a process of tackling a specific problem or conflict (asana, 2021). This skill helps us to come up with quick solutions when things go wrong in order to keep the flow of the supply chain steady.

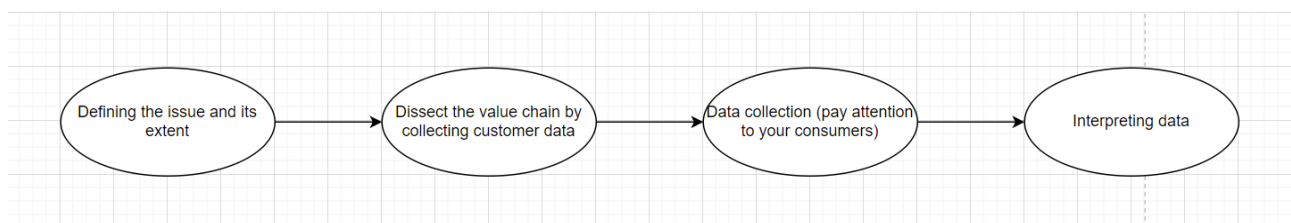
### 3 Systems Analysis and Design (Recommendations)

- FreshForBest's system analysis and design are part of its evolution, and we're always looking for new approaches and methodologies to help us create the system more effectively and efficiently.

#### 3.1 Fact-Finding Techniques

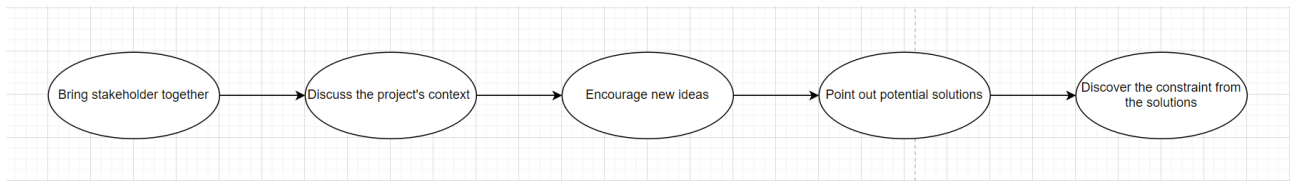
- There is a lot of fact-finding technique to improve our system. But FreshForBest mainly focuses on questionnaires and surveys also prototyping, observation, and interview.
- Questionnaires and surveys are excellent tools for gathering data and feedback from customers because they are inexpensive and can be analysed rapidly. It could be a paper form or a digital form obtained via the internet. Here are some ideas for designing questionnaires that we use:
  - + Keep it short, simple and friendly for the customer (we don't want the customer to be annoying or misunderstand us)
  - + Provide instruction for the customer to complete our questionnaire.
  - + Maybe we are not limited only to questions, customer can also write their own comment.
  - + We test it first and then we can publish it to the customer.
- Prototyping is also a great strategy because there are so many recipes out there and we want to figure out which ones are the greatest for taste, budget, and health. After we've made our decision, we'll run a test with 100 people to see if more than 80 people love and like the dish, which will then become one of our new offerings.
- Observing the system in operation provides you with a different viewpoint and a better knowledge of how it works, decide which process needs to improve, upgrade, or part of the process needs to be cut off. We can learn how employees spend their days by employing this strategy.
- Interview, this one might be the most common fact-finding technique by far. First, we gotta identify the information we need and then we can begin to interview the right people for the right question. There are 3 types of questions: open, close, and range of response questions. We should take notes during the interview because we might miss important information. Some interviewers may strive to assist you by answering your questions even if they lack the essential knowledge to deliver correct answers.

#### 3.2 Systems Analysis – Diagrams (Inspiration)



- At this point, our goal is to gain a more understanding of our customers. This is a crucial phase since it assists us in defining our scope, organising our thoughts, and getting started on the correct foot. Create a project plan and a team to work with after that.
- Create an interdisciplinary team that blends industry knowledge and technical competence with new perspectives and ideas.

### 3.3 Systems Analysis – Diagrams (Ideation)



- This step entails coming up with ideas based on the first stage's findings, recognising design opportunities, and putting potential solutions to the test. We must collaborate with our colleagues to develop exceptional products and services that clients will appreciate.
- We can now produce as many ideas as possible by brainstorming different solutions based on your design opportunities. As I previously stated, this is critical because we want FreshForBest to be known worldwide. Stakeholders can sometimes limit options and ideas. Divergent thinking and more ideas, on the other hand, are what lead to innovative solutions and are ultimately useful.

### 3.4 Systems Design – Outline Redesign (Implementation)

- The best ideas gathered in the previous step must be tested and attempted again in order to find the final solution. The team produces and tests prototypes in sub-groups; ideally, a test with a representative sample of end-users would be ideal.
- It is typical for an idea to be disturbed and revised during the testing process in response to feedback from the person who tested it. This will allow us to start working on a truly useful and performant solution that meets the user's expectations... and fully meets the original brief's objectives!

## 4 Discussion

#### **4.1 Significance of Redesign - Operations**

- When consumers pay for their meals, our system will be powered by money. Otherwise, folks with a lot of orders will have a voice in our system. Customers will be able to purchase a monthly pass for a low price that will be renewed every month. Customers will be able to take advantage of several attractive offers when ordering food with a monthly pass and will receive free delivery.

#### **4.2 Significance of Redesign – Management**

- In terms of management, our system can verify everyone's accounts to determine the account type. To gain access to the student account with numerous more savings, students must present their student cards. Every client input will be taken into account in order to enhance our system and deliver the best service possible to our customers.

#### **4.3 Strategic and Competitive Role**

- To begin with, our goal is to provide several discounts to students, who are our most essential consumers. For students, we'll have lower shipping prices and special offers when they need to study for their exams. Otherwise, students must present a genuine student card, which will be verified by our system. Other customers will benefit from numerous discounts, including a 50% discount on their first order and numerous more reductions on key occasions such as birthdays, Christmas, and the New Year.
- Second, our system must compete with other companies such as Uber Eats, Doordash, and others. They are well-known brands with a large following in Australia. Because HelloFresh is not well-known in Australia, we chose students as our initial consumers in the hopes of attracting more customers each year.

#### **4.4 Social and Ethical Implications**

- There are many Social and Ethical Implications for a company but our company will mainly focus on Health and Safety, Environment Responsibility and Data Privacy.
- About Environment Responsibility: Environmental responsibility in business may appear to be aimed at large oil firms, lumber companies, farming, and other enterprises with a direct influence on the environment. That isn't the case, however! Even if your company operates exclusively within the limits of an office building, environmental stewardship should be on your list of ethical concerns. Every company's carbon footprint is the responsibility of the owner. That includes how your company affects air quality, water purity, endangered species' safety, the usage and conservation of other natural resources, the pristine condition of protected nature reserves, and so on. Fortunately, most environmental-related ethical concerns in business have been addressed by legislation.
- About Data Privacy: These days, it's difficult to find anyone – even your staff – who doesn't have some sensitive data saved online. In reality, more than 80% of Americans possess a smartphone, with the typical person using about 25 apps every month. That's a lot of ways for data to end up in the wrong hands! So, how does this relate to ethical issues in business? Well, the ethical difficulties are less about how your employees behave on business computers, cellphones, and tablets (though that is really essential to handle!). When deciding how to execute a cybersecurity plan for your company, ethics come into play.
- About Health and Safety: It's also important to note that physical safety isn't the sole consideration; psychological well-being is an important aspect of having a safe and



healthy workplace. Consider this: nearly 63 per cent of the US population is employed, and roughly 71 per cent of adult Americans have at least one stress symptom (like headaches or anxiety). It's not all doom and gloom, though; there are steps you can do to protect workplace health and safety.

## 5 References

asana, 7 functions of operations management (plus the skills you need to master them) 2022, *Business Strategy*, viewed 22nd May,

<<https://asana.com/resources/functions-of-operation-management>>.

asana, Turn your team into skilled problem solvers with these problem-solving strategies 2021, *Collaboration*, viewed 22nd May,

<<https://asana.com/resources/problem-solving-strategies>>.

Ben Shabat, 8 common Ethical issues facing businesses in 2021 <<https://www.become.co/blog/ethical-issues-businesses/>>

Fabianpost, How HelloFresh and Co are disrupting the food supply chain, *Disrupting the Food Supply Chain*, viewed 21st May,

<<https://fabianpost.com/hellofresh-disruption/>>.

HelloFresh Group, 5 facts about the HelloFresh Supply Chain 2021, *Stories*, viewed 22nd May,

<<https://www.hellofreshgroup.com/en/newsroom/stories/1DxsD3cL6lk2wbK7srj1Kk/>>.

Jesse Vimgaleon, Fact-Finding Methods 2013, *System Analysis and Design*, viewed 23rd May, <[https://jessevimgaleon.blogspot.com/2013/07/fact-finding-methods.html?fbclid=IwAR2rE0y2rsObgx-tP6fBd1OYcJweDYkdOT\\_Cs6sXuMrIte8yd6JVfMMbs9Y](https://jessevimgaleon.blogspot.com/2013/07/fact-finding-methods.html?fbclid=IwAR2rE0y2rsObgx-tP6fBd1OYcJweDYkdOT_Cs6sXuMrIte8yd6JVfMMbs9Y)>.

Ukessays, Effective Fact-finding Methods for Gathering Information 2021, *Information Technology*, viewed 21st May, <<https://www.ukessays.com/essays/information-technology/definition-of-fact-finding-techniques-information-technology-essay.php?fbclid=IwAR3BqL4GvMRptmAq3vE0L4Ko4SPxfVr4ZaYUOWuGYbVVsaHcmA8Kf0zWuhM>>.

Douglas, Strategic Discipline Blog, *Jun 25, 2015*,

<<https://strategicdiscipline.positioningsystems.com/blog-0/what-is-a-system-four-characteristics>>

## **6 Appendix**

Insert any supporting work that you wish to include in your report here. This information will not be marked. It is an opportunity to demonstrate that significant work has been undertaken to prepare this report.

Examples of attachments you could include worksheets for personas, empathy maps, journey maps.

A log of your activity as per the activity worksheet would also be appropriate to include here.