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# SAMPLE FOR 70+DI

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#### THÔNG TIN LIÊN HỆ:

**f** DrKhanhAssignmentService
 ⊕ www.drkhanh.edu.vn
 **(**+84) 939 070 595 hoặc (+84) 348 308 628



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Subject Code:	BUSM4553
Subject Name:	Innovation management
Location & Campus (SGS or HN) where	SGS
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## Assignment Cover Page (GROUP)

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## Phase 1

## A. Problem indentification

Long waiting time for luggage checkout is no longer a novel problem in the Vietnamese airport management. VnExpress (2022) recorded "long lines of dozens of people crowded the room and there was a 2-5 minute wait time between each customer during the immigration procedure". It takes visitors up to 1 hour in total to complete the procedure and claim luggage (Le 2023). It turned out that the lengthy luggage return time is mostly caused by the growing number of foreign flights and the large influx of passengers, as evidenced by the survey over the current quality of the infrastructure of Tan Son Nhat International Airport (Nguyen 2023). Passengers might experience delays during busy periods as they are required to undergo immigration processes before collecting their luggage. Furthermore, the passenger terminal's infrastructure remains constrained. The domestic passenger terminal at the airport was constructed many years ago and has undergone multiple renovations. While the area designated for the luggage conveyor remains limited, resulting in difficulties for passengers to access the conveyor. Therefore, this has led to delays in the release of luggage for flights with a high number of passengers or a significant amount of luggage.

## Purpose:

To identify the problem, its root causes and consequences. Following the application of the secondary research approach, the purpose is to comprehend prevailing patterns, issues, and insights associated with the problem domain prior to delving further into the specific topic at hand. Ultimately, it is to develop a clear problem statement (Largan and Morris 2019).

#### Implementation:

Collect pre-existing material from public sources such as government archives, libraries, journals, and online databases relating to long waiting time for luggage checkout, reflect them with news articles from credible publishers, synthesise what are relevant and condense the most important discoveries into a single paragraph.

## Output:

Long waiting time in immigration procedures is caused by the increasing number of passengers and outdated infrastructure. The consequences are delays and time consuming after departure.

## Insight:

The problem must be thoroughly analysed in order to identify its underlying cause, and it should be substantiated by relevant and dependable evidence. The reason is that identifying a plausible problem is a fundamental step in the process of developing solutions.

## **B. Problem statement**

A 70-year-old female passenger who is concerned about her painful knees needs to find a place to sit but faces a long waiting line in the immigration and customs. **Purpose:** 

To concentrate on a central issue and propose a solution; to act as a compass for the rest of the design thinking process, directing the phases of ideation and prototyping.

## Implementation:

Considering the identified problem, its causes and effect, the problem statement is constructed following the formula: a (user) who feels (negative feelings) about (reason) needs to (steps/ actions) but faces (obstacles).

## Output:

Due to the long waiting line in the Immigration and Customs at the airport, the elderly passenger finds it a concern when seeking a place to take a rest. **Insight:** 

This stage builds on the previous one by assisting the team in conducting user research to have a better understanding of the demographic that will be using the developing product as well as their wants, requirements, and hurdles.



## Purpose:

Arrange information and ideas visually in layered and interconnected levels linked to and arranged around a central keyword or idea. Mindmap can enhance creativity, memory retention, problem-solving, and help visualising connections and relationships between different useful concepts (Tanriseven 2014).

## Implementation:

Identify the main key phrase of the topic and put it in the middle. We then observe various perspectives and personal experiences connected to those keywords. Within each main problem, there are sub-problems noted and considered.

## Output:

We identified the keyword for mind mapping of airports is "Airport Queue Management" and the main causes of the problem are out-dated facilities and lack of effective management systems.

## Insight:

After using the mind map, we can objectively observe the problem at hand and then provide a thorough analysis, in-depth comments, and solutions on each aspect of the overall picture.

## D. Personas

#### Vietnamese

Mr. Nguyen	<ul> <li>Background:</li> <li>30 years old.</li> <li>A frequent traveller.</li> <li>Flying domestically and internationally for business and leisure.</li> </ul>	<ul> <li>Needs and Goals:</li> <li>Focus on efficiency.</li> <li>Like everything fast.</li> <li>Prefers clear communication.</li> </ul>
	<ul> <li>Frustrations:</li> <li>Long queues.</li> <li>Miss flights.</li> <li>Arrive late for important meetings.</li> </ul>	<ul> <li>Expectations:</li> <li>Separate lanes for regular travellers.</li> <li>A smooth and hasslefree experience.</li> </ul>

## Visitors

	<ul> <li>Background:</li> <li>45 years old.</li> <li>A tourist visiting Vietnam for the first time.</li> </ul>	<ul> <li>Needs and Goals:</li> <li>A stress-free and enjoyable trip.</li> <li>Clear instructions and assistance in unfamiliar processes.</li> </ul>	
	Frustrations:	Expectations:	
Mr. Smith	<ul> <li>Crowded checkpoints.</li> <li>Confusion and anxiety.</li> </ul>	<ul> <li>Dedicated lane for visitors with clear</li> </ul>	
	Struggle with	signage and English-	

Priority people (disable, pregnant and elderly people older than 70 years old)

Ms. Le	<ul> <li>Background:</li> <li>34 years old.</li> <li>A wheelchair user who travels with a caregiver.</li> <li>Require additional assistance to travel.</li> </ul>	<ul> <li>Needs and Goals:</li> <li>Accessibility and support in the airport.</li> <li>A simple and dignified process that meets her mobility needs.</li> </ul>
	<ul> <li>Frustrations:</li> <li>Long waiting times.</li> <li>Lack of accessibility for disabled people.</li> <li>Difficulties in moving through crowded areas.</li> </ul>	<ul> <li>Expectations:</li> <li>Dedicated lanes and trained staff.</li> <li>Clear communication and personalized support for a comfortable journey.</li> </ul>

#### Purpose:

Illustrate different target audiences, with the goal of understanding their background, needs, goals, frustrations, and expectations. Personas make decision-making easier by visualising a clear picture of the potential users and informing the design and development of products, services or marketing campaigns, ensuring meeting users' needs and preferences throughout the process (Hsu et al. 2024).

#### Implementation:

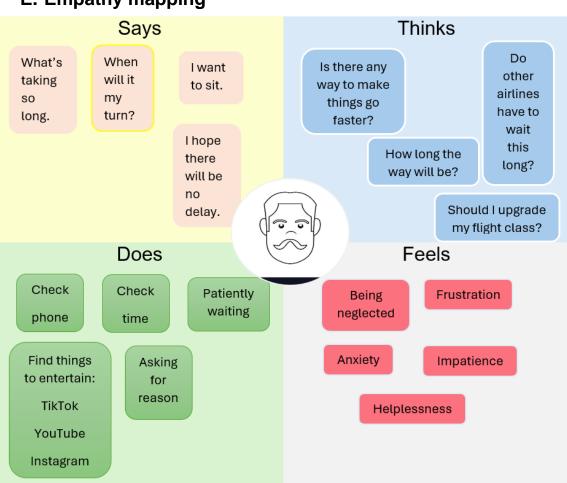
Start with deep research, using methods such as surveys, interviews, observations and analytics to gather information about your target audience then create fictional characters for each segment. Finally, document personas in a clear and easy way to ensure they are useful for everyone involved in the design and development process (Duda 2018).

## Output:

Characters representing different target audience segments, created from data to support design and development process.

#### Insights:

Helps achieve multiple goals in marketing and user experience design. They help understand the different needs and goals of each user segment, allowing managers to prioritise features and make design decisions effectively.



E. Empathy mapping

Purpose:

Following Cameron (2018) using empathy mapping in this setting, firms can gain insight into the perspectives, emotions, and needs of those who endure lengthy wait times at airport check-in, check-out, and immigration.

## Implementation:

Our team gathered airport comments (Farrukh 2023), observations, and personal experiences to generate suggestions.

## Output:

The output highlights areas for improvement and potential solutions to alleviate wait times and enhance the overall airport experience. Opportunities for improvement, such as implementing technology solutions for self-check-in/out, the optimization of personnel assignments, or the reform of queueing systems to alleviate overcrowding

## Insights:

Long wait times have a major effect on how satisfied and stressed out travellers are. Additionally, long wait times are caused by problems with the immigration, check-in, and check-out procedures.

## F. Ishikawa



## Purpose:

The use of Ishikawa diagrams in practice facilitates the resolution of problems. By thinking more broadly or providing a comprehensive perspective on the subjective causes that lead to a certain outcome(Manuel and Francisco 2019).

## Implementation:

After the problem identification of the project. We determine the effects of this issue is that 'Why does it take so long to wait'. Then initiating five generic headings to target. For each heading we have at least one related cause that impacts the main problem

## Output:

Following completion, we also identified the causes and issues that contributed to the 'Why does it take so long to wait' using five categories.

## Insight:

A closer study of Ishikawa helps to have a better overview of the crucial aspects that lead to the main problem.

## Phase 2

# A. Brainstorming (La Salle Innovation Matrix) (Divergent thinking)

Future	Our app allows customers to get online order numbers for the		
Gazing	exit and entry process at the airport. At the same time, the app		
	also displays the current order number and notifies customers		
	of the next order number so they can prepare which can help		
	reduce the number of customers queuing too long at the		
	airport.		
<b>Re-Question</b>	Instead of wasting too much time waiting in line, we wondered if		
	there was restructuring waiting line distribution at Tan Son Nhat		
	airport and any technological method that could solve the		
	problem of congestion during exit and entry procedures at the		

	airport. Besides, it can bring convenience, comfort and reduce frustration to passengers every time they take flights. => Our answer is to divide the waiting line system for entry to Vietnam into three categories which are Vietnamese, visitors and priority people. Moreover, our group will also create a mobile application that allows customers to get their order number before check-in time to minimize waiting time and combine some additional amenities in the airport for customers.	
New Material	For departure, our app will provide a map with directions to the departure gate and will also notify customers if the departure gate changes. For immigration, this application will also display information about the baggage claim area of each flight for customers. In addition, customers can order all food and beverage outlets at the airport using this online application which helps them save time when ordering eat-in or take-away.	
New Technology	In the 4.0 era, we will use information technology to create an online application on smartphones instead of doing everything in person which helps solve airport congestion as well as bring convenience for customers when they use it.	
Reduction	Solve the crowded situation at the airport, reduce stress during the waiting process and avoid negative feedback from customers.	
IYFIHYDIW	Reducing the number of people queuing at exit and entry, avoiding complaints as well as bringing convenience and comfort to customers.	

Extension	In addition to the online order number feature, the application		
	also supports the ability to order food and drinks at the airport.		
Furthermore, it also features directions to the departure gate			
	and displays information about the baggage claim area for		
	customers.		

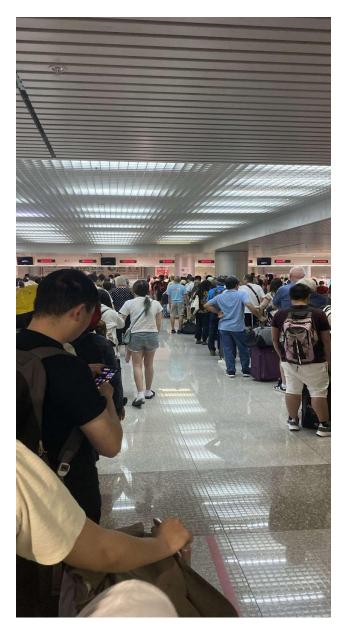




Figure 1,2: Check-in and check-out process at TSN airport in Vietnam (photograph by Nhu in this group)

## Purpose:

Divergent thinking is the process of coming up with multiple solutions to a specific problem that the group is trying to solve. Offering many solutions will help find the most optimal solution for that problem (Airfocus 2024).

### Implementation:

Group members took turns raising problems occurring at TSN airport and providing solutions to show the correlation between the solution and the problem raised.

### Output:

Our team uses the La Salle Innovation Matrix so that after each catalyst, our team can generate additional ideas to improve the initial solution to make it more perfect.

#### Insight:

Divergent thinking will help come up with many methods that help develop creative ideas, through which the most feasible ideas can be explored and selected (Kalargiros and Manning 2015).

## B. Decision making (convergent thinking)

During the discussion, our group will present a series of issues surrounding TSN airport and include solutions for each issue. After that, we will focus on each problem to see which problem is the most serious, which is considered a clearly defined goal so that we can develop ideas and provide the most effective solutions to solve that problem more completely rather than solving many problems at the same time to avoid situations which is the problems are not completely resolved.

#### Purpose:

Convergent thinking's purpose is to identify and focus on a specific problem and from there select potential solutions as well as evaluate the most effective results to respond well to the problem at hand (Asana 2024).

## Implementation:

After group members come up with a series of solutions to solve the problem, these options will be considered based on practicality and effectiveness. At the same time, we also develop new features through the app that help bring more convenience to customers.

### Output:

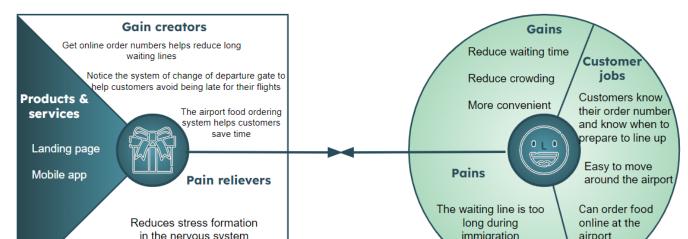
After selecting solutions, our team decided on the most feasible solution, which is to create an online application and landing page specifically for the airport with the main function of taking order numbers online for the exit and entry process. We choose this option because smartphones are an essential part for Vietnamese people at present (MIC 2022).

## Insight:

The solutions and ideas of divergent thinking are sometimes unrealistic and do not work effectively when implemented in reality. Thus, convergent thinking will be the process towards identifying clear specific goals that can help evaluate and find the most suitable ideas and bring optimal efficiency when operating them into reality (Beaty et al. 2023).

## C. Value Proposition Canvas (VPC) Value proposition canvas infographics

## Value Proposition



Customer Segment

Figure 3: VPC model

### **Purpose:**

Building this model aims to bring optimal results and solve problems with dissatisfied customers. Consequently, the VPC model is one that we find can be attractive and highly effective for the identified target (B2B 2024). After learning about customer complaints about the crowding problem occurring at TSN airport, we will then come up with ideas and consider the most suitable methods to solve this situation.

## Implementation:

After defining clear goals and problems, our team will create features that help satisfy customer needs as well as completely solve the situation.

## Output:

After implementing the VPC model, it helps us to know the key focus of the current situation and have a clear vision which facilitates in coming up with effective methods. Hence, we know the main focus of the current situation and have a clear vision that facilitates the introduction of optimal methods. Through the application we create, we will help customers easily flex their time during the check-in and check-out process, simplify travel in the airport and avoid the situation of too many people gathering in one place.

## Insight:

VPC will help us identify customers' essential needs and from there will help us come up with ideas more clearly and easily.

## **D. Visualization**

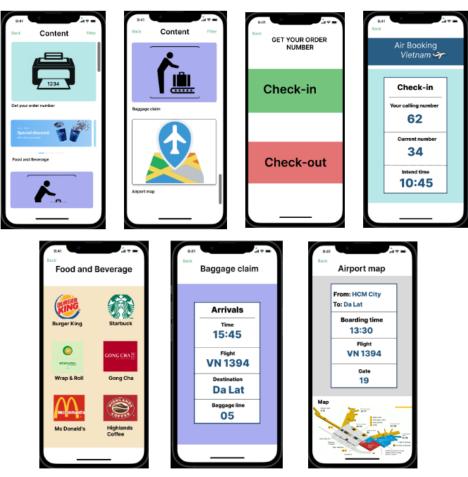


Figure 4: Features of Air Booking Vietnam application

This application will provide a full range of features to completely solve the ongoing problem that we identified as mentioned in Phase 1.

## Phase 3

## A. B-M-L table

The BML table is a cyclical approach with three steps build-measure-learn for product development to increase the chances of market success in the early stages (Nguyen 2020). The assumption that requires to be examined here is that long-waiting lines cause congestion and lead to discomfort among customers at Tan Son Nhat Airport. Continuous feedback and comments from customers will show that the necessary features should be given more attention to develop and be able to survive in the market.

MVP	Assumptions	Experiments	Metrics
Product video explainer	People who feel inconvenienced by having to wait too long in line at the airport.	Billboards, flyers about queuing applications, running ads on social media and government applications.	Analyse data on the numb times the application is down and the number of clicks o application link.
Landing page website	Diverse features help users more easily access utilities around the airport.	Decide which app functions are truly necessary for users.	Frequency of use of functions user's application.
Mobile application	A trial version will be released so customers can experience the functions soon.	Improve the real-life experience of the app and see user reactions.	The data will be analysed b analysis team based on met continuously update and eve produce the most complete v

## **B.** Visual presentation

https://drive.google.com/file/d/1vpy-F-22vtem1TXKddUb3\_3eGzt7N8LK/view?usp=sharing

## C. Lead-generation landing page



Figure 5: Our Landing Page of Air Booking Vietnam

Landing page: https://s3891786.wixsite.com/air-booking-vietna-2

## Purpose:

The main reason for creating a landing page, not a website is because the landing page will help customers find the information they want as quickly as possible, without being as confusing as website design.

## Implementation:

Integrate the features on the application into the landing page to help customers learn about our services most thoroughly.

## Output:

In addition to integrating service features, our landing page decided to add a contact feature to be able to connect with customers to explain to them better if they encounter any problems while using the landing page.

## Insight:

Creating a landing page helps customers better understand the mission and vision of Air Booking Vietnam, which in turn will assist in building trust between customers and our brand.

## References

Airfocus (2024) *What is divergent thinking*?, airfocus website, accessed 27 April 2024. <u>https://airfocus.com/glossary/what-is-divergent-thinking/</u>

Asana (2024) Convergent vs. divergent thinking: Finding the right balance for creative problem solving, Asana website, accessed 28 April 2024.

https://asana.com/resources/convergent-vs-divergent

Beaty ER, Brewer AG, Ellis DM, Christensen AP, Zeitlen DC, Kenett YN and Luchini S (2023) 'Convergent thinking and insight problem solving relate to semantic memory network structure', *Thinking Skills and Creativity*, 48:101-277, doi:10.1016/j.tsc.2023.101277.

B2B (2024) What is the Value Proposition Canvas?, B2BInternational website, accessed 29 April 2024.

https://www.b2binternational.com/research/methods/faq/what-is-the-valueproposition-

canvas/#:~:text=The%20Value%20Proposition%20Canvas%20is,between%20th
e%20product%20and%20market

Cameron CD (2018) 'Motivating empathy: Three methodological

recommendations for mapping empathy', Social and Personality Psychology Compass, 12(11), doi:10.1111/spc3.12418

Duda S (2018) 'Personas—Who Owns Them', *Omnichannel Branding*, Springer Gabler, 173-191, doi:10.1007/978-3-658-21450-0\_8.

Farrukh Q (2023) Improve Queue Management in Airports, Wavetec website,

accessed 3 May 2024. <u>https://www.wavetec.com/blog/airports/improve-queue-</u> management-in-

airports/#:~:text=Long%20and%20unorganized%20queues%20resulted%20in%2 0excessive%20waiting%20times%2C,for%20passengers.

Faruk O, Haque N, Heuermann A and Al Noman A (2022) The Impact of Digital Media and Artificial Intelligence on the SMEs in Developing Countries: An

Exploratory Desk Study, ieeexplore website, accessed 19 April 2024.

https://ieeexplore.ieee.org/document/9845206

Hsu P-F, Lu Y-H, Chen S-C and Kuo PP-Y (2024) 'Creating and Validating

Predictive Personas for Target Marketing', *International Journal of Human-Computer Studies*, 181:103-147, doi:<u>10.1016/j.ijhcs.2023.103147</u>.

Le L (27 April 2023) Baggage clearance at Vietnamese airports takes too long -VnExpress International, VnExpress International website, accessed 19 April 2024, <u>https://e.vnexpress.net/news/readers-views/baggage-clearance-at-</u> vietnamese-airports-takes-too-long-4598772.html

Manning RM and Kalargiros EM (2015) *Divergent Thinking and Brainstorming in Perspective: Implications for Organization Change and Innovation*, researchgate website, accessed 27 April 2024.

https://www.researchgate.net/publication/282240385\_Divergent\_Thinking\_and\_B rainstorming\_in\_Perspective\_Implications\_for\_Organization\_Change\_and\_Innov ation

MIC (2022) Vietnam among 10 countries with largest number of smartphone users, MIC website, accessed 28 April 2024. <u>https://english.mic.gov.vn/vietnam-among-10-countries-with-largest-number-of-smartphone-users-197153596.htm</u> Manuel F and Francisco G (2019) 'Cornerstone root causes through the analysis of the Ishikawa diagram, is it possible to find them?: A first research approach', International Journal of Quality and Service Sciences, 11(2):302-316, doi:10.1108/JJQSS-12-2017-0113

Nguyen AD (2020) 'An Analytical Framework for Planning Minimum Viable Products', *Fundamentals of Software Startups*, 81-95, doi:10.1007/978-3-030-35983-6\_5.

Nguyen T (2023) Inspection of Tan Son Nhat airport due to long waiting time and extra fees for passengers, Vietnam Insider website, accessed 19 April 2024. https://vietnaminsider.vn/inspection-of-tan-son-nhat-airport-due-to-long-waiting-time-and-extra-fees-for-passengers

Tanriseven I (2014) 'A Tool That Can Be Effective in the self-regulated Learning of pre-service teachers: the Mind Map', *Australian Journal of Teacher Education (Online)*, 39(1):83–98, doi:10.3316.

VnExpress (28 December 2022) *My impression of Vietnam's largest airport: frustrations and exhaustion - VnExpress International*, VnExpress International website, accessed 19 April 2024, <u>https://e.vnexpress.net/news/readers-</u> <u>views/my-impression-with-saigon-s-largest-airport-frustrations-and-exhaustion-</u> <u>4552811.html</u>.





## **UU ĐÃI 25% CHO FIRST ORDER**

Tận hưởng trải nghiệm học tập với DrKhanh Assignment. Đặt hàng ngay hôm nay để nhận được sự hỗ trợ chuyên nghiệp và đạt được thành công trong học tập của bạn!



Đừng ngần ngại liên hệ với đội ngũ của chúng tôi nếu bạn cần bất kỳ thông tin bổ sung nào hoặc muốn biết thêm về dịch vụ của chúng tôi. Chúng tôi luôn sẵn lòng hỗ trợ bạn!

