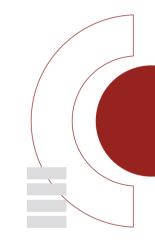




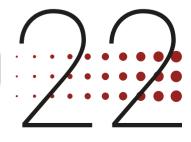
Member of VTC Group VTC 機構成員

# DESIGN THINKING

**Business Casebook** 







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Enhancing Customer Engagement with Gamification in a Fast Food Chain

Project 5

Reinventing Sports Mask for Tertiary Students

Project 6

Addressing the Travel Need of Young-old

The global pandemic has accelerated the importance and power of digitalization. To prepare students to thrive in an ever-changing world, Business Discipline continues to nurture skilled talent through the promotion of Design Thinking, Project-based Learning, Workplace Learning and Assessment, and Technology-enhanced Learning.

Embracing digital transformation for business practices, a more human-centered approach has been encouraged to interact and understand the needs of users. To provide hands-on learning opportunities to solve business challenges, the Discipline has deepened the collaboration with partners, such as the Urban Renewal Authority, to integrate learning with real-world experience.

This casebook outlines the concepts and framework of how to apply Design Thinking. It is an inspiring guide to stimulate innovative and practical solutions that will ease business challenges.

Dr Wallace Lam Academic Director Business Discipline Vocational Training Council

# CREATING A CARING EXPERIENCE FOR PASSENGERS WITH SPECIAL NEEDS IN THE PUBLIC TRANSPORTATION

David Chung

## Background

One of the major public transportation companies in the Greater Bay Area of China wants to be recognized as a provider of safe, effective, caring services.

## **Challenges**

Passenger volume has dropped dramatically since the COVID-19 pandemic, with many people having to work from home. To enhance business, the company decided to create a differentiated passenger experience.

### **Project Objectives**

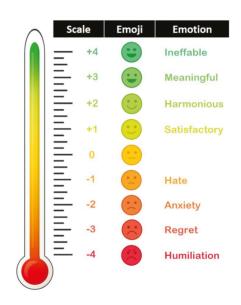
- Discover unmet, hidden & potential needs.
- · Define significant pain points.

- Develop digitalized customer-care services.
- Deliver the execution blueprint with predictable impact.

# **DISCOVER**

After conducting desk research on passengers with special needs, management decided to focus on pregnant women and environmentalists. The team conducted on-site observations and empathy interviews with direct stakeholders such as passengers and indirect stakeholders such as front-line customer service staff and drivers.

The quantitative InnoEdge Human Emotion Measurement System was used to analyze the emotions and feelings behind passenger needs.



InnoEdge Human Emotion Measurement System

# **DEFINE**

Over 100 sets of findings were analyzed. 24 pain points for pregnant passengers, and 15 pain points for environmentalists, were identified across seven customer journey stages: Navigating the Station, Non-paid Area, Ticketing, Paid Area, Waiting for Train, In-train, and Exiting Station. Two Personas were also developed for these segments.

#### **Persona: Pregnant Women**

| Major Pain Points  | Feeling       |
|--|---------------|
| Some passengers were unaware of their condition and abused them for occupying courtesy seating, and ordering them to leave the seat. | Humiliation   |
| The gates were too narrow and dangerous.   | Scared        |
| The design of the customer service center was inconvenient because pregnant bellies hit the counter.                                 | Uncomfortable |
| Insufficient handrails for support in the train.   | Worried       |

#### **Persona: Environmentalists**

| Major Pain Points  | Feeling      |
|--|--------------|
| Posters were made of paper.  | Hate         |
| Escalators operate during non-peak hours.                            | Depressed    |
| Paper-based receipt<br>dispensed after ticket<br>add-value services. | Disappointed |
| Lighting for the station was too strong.                             | Dislike      |

## **DEVELOP**

The team invited staff from different departments to conduct brainstorming sessions and develop workable solutions:

#### **Pregnant women**

- Wider gates (with notification on the mobile App).
- Accessible toilets.
- · Specific train compartments.
- · Iconic badge with RFID tab.

#### **Environmentalists**

- Use eco-friendly ink and paper for printing.
- Provide information through mobile App or electronic notice board
- Suspend unnecessary escalators during non-peak hours.
- Operate-on-demand through IoT technologies.

The team then prioritized the ideas into five categories: Emotional Impact, Feasibility, Originality, Cost Effectiveness, Corporate Social Responsibility.

## **DELIVERY**

The project team predicted the emotional impact on the passenger experience after implementation of prioritized ideas.

|                                   | women | Environmentalists |
|-----------------------------------|-------|-------------------|
| Before                            | -1.7  | -1.4              |
| After                             | +2.1  | +1.2              |
| Increment of passenger experience | 64%   | 52%               |

We would like to thank Mr David Chung, Founder, InnoEdge Consulting for sharing his expertise and experiences. His contributions are invaluable and gratefully appreciated.

# **ACKNOWLEDGEMENTS**

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Ng Ho Ming

# **Building Money Management Concept for Children**

Chiu Sin Ying Lai Hiu Wah Ho Man Chung Law Ming Chung

# Designing a Bus Apps for Elderly Commuters

Fan Kwok Mau Ng Wing Sang Ng Kwan Ming Tam Wing Kwan

# **Enhancing Customer Engagement with Gamification in a Fast Food Chain**

Chan Ka Fu Ma Xing Fa Huang Jia Cheng Ng Sau Kwan Lam Oi Hon Wong Siu Lung

# Reinventing Sports Mask for Tertiary Students

Chow Yin Tung Ho Cheuk Ying

Chung Ka Yan

### **Addressing the Travel Need of Young-old**

Au Sze Kiu Lam Ka Yam
Chen Chun Lin Lam Kin Lok
Cheong Chun Yung So Yim Lam
Kwok Ho Yin Wong Pui Sze

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