

EMERGING TECHNOLOGY CENTER

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# DESIGN THINKING

## - Wanxing Dai

2020

## **FIVE SEMESTERS**

Summer 2019 – Summer 2021

## **18+ PROJECTS:**

Functional, Platform, Employee  
focused and  
Client focused

## **BUSINESS SECTIONS:**

Enterprise Customer Engagement,  
Marketing, and IT

Competitive Intelligence Playbook

User Research Framework

Sam's Club persona creation

Pay My Bill journey mapping, persona  
development

### **Habit Study**

Digital Adoption (QR code for top call drivers)

Hispanic marketing insights

Lifecycle journey map it

Alerts best practices - Paypal

Generational archetypes – Chevron

Solution Prototyping – Cathay Pacific

### **CX Toolkit**

**Solution Prototyping – Verizon**

IT Ticket Analysis

**Hoteling App Testing**

**Persona Identification - K-Mode Clustering**

# CX TOOLKIT

# Problem | Solution

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## Problem:

How can Synchrony stakeholders uncover root cause needs of customers and create improved, relevant, and meaningful experiences.

## Solution:

Develop a CX Toolkit for Synchrony stakeholders to learn how human centered design methodologies can be used to solve business objectives and apply design thinking tools to assess customer needs and create improved experiences.



- Innovative problem-solving process that has a human-centered approach
  - Integrates the needs of people, possibilities of technology, and requirements for business success to transform products and services or internal organizational processes and strategies  
([designthinking.ideo.com](https://designthinking.ideo.com))
- Promotes **divergent** and **convergent** thinking
  - Identify problem and solution
    - See where user frustrations lie and make experiences more fulfilling to create **value**

# Process

## Research & Writing

Preliminary research + identifying best practices

**Deliverables:**  
CX Toolkit Research  
Report of Best Findings/Practices

## Organizing & Designing

Compare and contrast the resources

- Structure contents with Synchrony workflow

**Deliverables:**  
CX Toolkit Draft

## Designing & Building

Structure tools into a streamlined, intuitive interface

**Deliverables:**  
CX Toolkit Prototype

## Final Delivery

Finalize deliverables with additional business tools

**Deliverables:**  
CX Toolkit Templates  
CX Toolkit Design & Implementation Plan



**VALIDATE**

To Prioritize Opportunities

Design Tools:

- [Validate Matrix](#)
- [Aspirations & Concerns](#)
- [Research Plan](#)
- [Heuristic Review](#)

Business Tools:

- [Business Case](#)
- [Charter](#)
- [Prioritization](#)
- [AO Request](#)
- [VOC Request](#)

- Build a SharePoint website for internal users to access the resources
- Create templates and instructions for each design tools
- Add business tools and research tools for internal stakeholders to access and use with ease

# VERIZON INTERSTITIAL PROTOTYPING



# Verizon Interstitial Prototyping

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## OBJECTIVE

Create a more user-friendly and effective card activation section on website

## PROCESS

Review existing activation section, hypothesize on user experience issues, ideate on potential solutions, and create concept prototypes

## CUSTOMER BENEFIT

Collective prototypes provide clearer information, simplified direction, guided steps, and engaged interaction

## BUSINESS VALUE

Increased customer activation, registration, paperless billing, and mobile wallet

### Customize your Verizon Visa® Card

- Register for online access
- Go paperless and enroll in account alerts
- Make credit card default payment option for all Verizon and other monthly bills
- Add card to mobile wallet
- Download the mobile Verizon Card app
- Add someone to my account

- Single static image
- Not clickable
- Not interactive

# Gamified Interstitial Concepts

Frame

Customize your Verizon Visa® Card

My Verizon Visa Card to-do list:

- ☒ **Register** for online access
- ☐ **Go** paperless and enroll in account alerts
- ☐ **Make** credit card default payment option for all Verizon and other monthly bills
- ☐ **Add** card to mobile wallet
- ☐ **Download** the mobile Verizon Card app
- ☐ **Add** someone to my account

Progress bar: 100% complete

Frame

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Progress bar: 100% complete

- Hyperlinked bolded action items
- Check mark boxes
- Auto updated progress bar

# HOTELING APP TESTING

# User Persona

**Employee User Persona**

**Goals**

- I want to reserve/cancel a desirable room/desk successfully.
- I want to collaborate with my team.
- I want to plan out my week easily.
- I want to sit where I should sit.
- I want to submit request to ServiceNow/Facility.
- I want to network.**

**Needs**

- I need to know where my team sit.
- I need to receive a notification when my booking becomes valid/invalid.
- I need to know the equipment of the space.
- I need to book from home/on demand.
- I need to know where are the available seats.
- I need to confirm booking/cancellation.
- I need to keep my movement consistent on the app.
- I need to see who are sitting in my neighborhoods.**

**Mobile**

3:03

Sit-Stand

Desk 77

Description:

- ☐ Dual monitor
- ☒ Mouse & Keyboard
- ☒ Sit-Stand desk

Availability

- 9:00 am - 9:30am CT
- 9:30 am - 10:00am CT

Book

**Kiosk at the entrance**

3:03 PM

Room, Name, desk etc.

Availability

- 9:00 am - 9:30am CT
- 9:30 am - 10:00am CT

**Opportunities**

- Resource/Teammate filter
- Quiet/Collaboration zones with rules
- Adequate number of notifications
- Kiosk at the entrance for visitors/employee without phone
- Priority when booking simultaneously for the same space
- Communication strategy and employee training with hoteling
- User profile of preferred space, hobbies, etc.
- Facility/Helpdesk Request plugin
- Realtime visualization of neighborhoods with Business Unit.

- Conduct 7 internal stakeholder interviews
- Gather role-based user goals, needs, and wanted features
- Create prototypes for web and mobile app

# UX Questionnaire

**Hoteling App User Experience Questionnaire**

\* Required

Goal One - Book a Desk (Web App)

I want to work in the office tomorrow by myself with dual monitors to accomplish some projects more efficiently than I can at home with my laptop and distractions.

2. \*

	Very Easy	Somewhat Easy	Neutral	Somewhat Difficult	Very Difficult
Ability to locate a desk with dual monitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to locate a desk for a specific day and time	<input type="radio"/>				
Ability to successfully book that desk	<input type="radio"/>				

3. Comments on the desk booking experience

Enter your answer

**Pre-Testing Questionnaire**

\* Required

Pre-COVID (2019) Working Experience

In 2019 (pre-COVID) what was your working experience like?

2. When did you go into your office? \*

☐ Every day

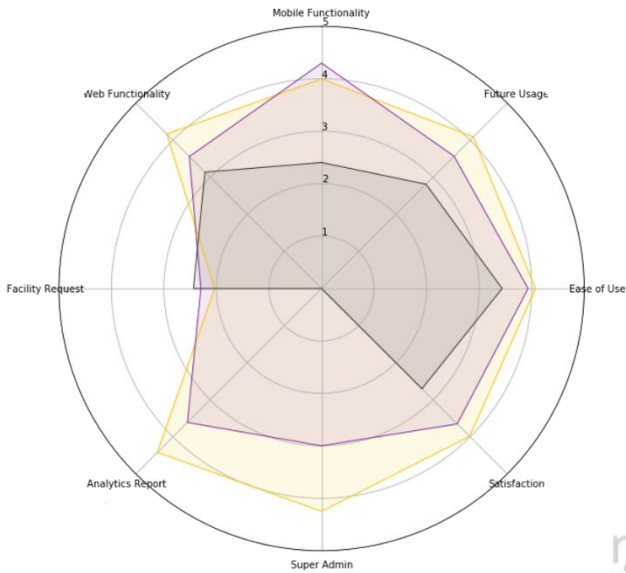
☐ Half days

☐ A few days a week

☐ Other

- Pre-Testing Questionnaire to understand office habit
- Assign 5 tasks (user scenarios) for testing in Web and Mobile App.
- In POC phase, design UX Questionnaire to gather user feedback.

# Survey Analysis



In Python:

- Uncover user pain points by running word clouds
- Analyze quantitative user feedback to determine go/no-go decisions

Gather UX designers' feedback on the interface of PoCs and make suggestions.



CHANGING WHAT'S POSSIBLE

