

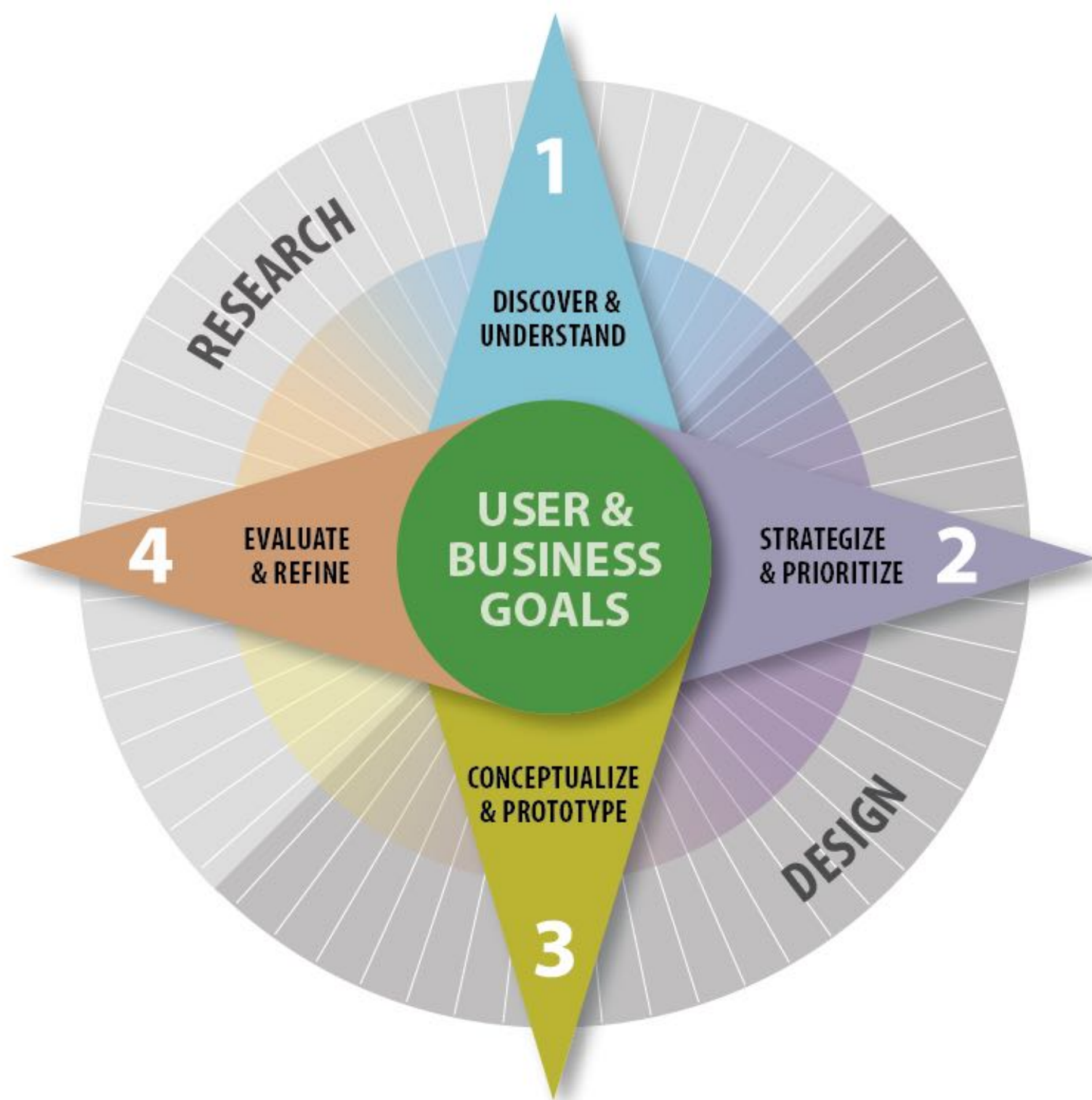
# Strategic UX Design

CMPT 363

“The idea is to focus development not only on the UX, but what the UX enables, and—most crucially—what we want to happen after the UX.”

— Kathy Sierra

*How to make more strategic  
design decisions?*



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# Topics to Explore

1. User Experience Strategy
2. Current State and Future State
3. Journey Mapping

# How to make more strategic design decisions?

User Experience Strategy



April McGee, MS, CUA, CXA  
VP User Experience Strategy  
*Human Factors International, Inc.*

<https://www.youtube.com/watch?v=4r3QvqPwgPU>

What is the difference between tactics and strategy?

# Tactics vs. Strategy

## Tactic

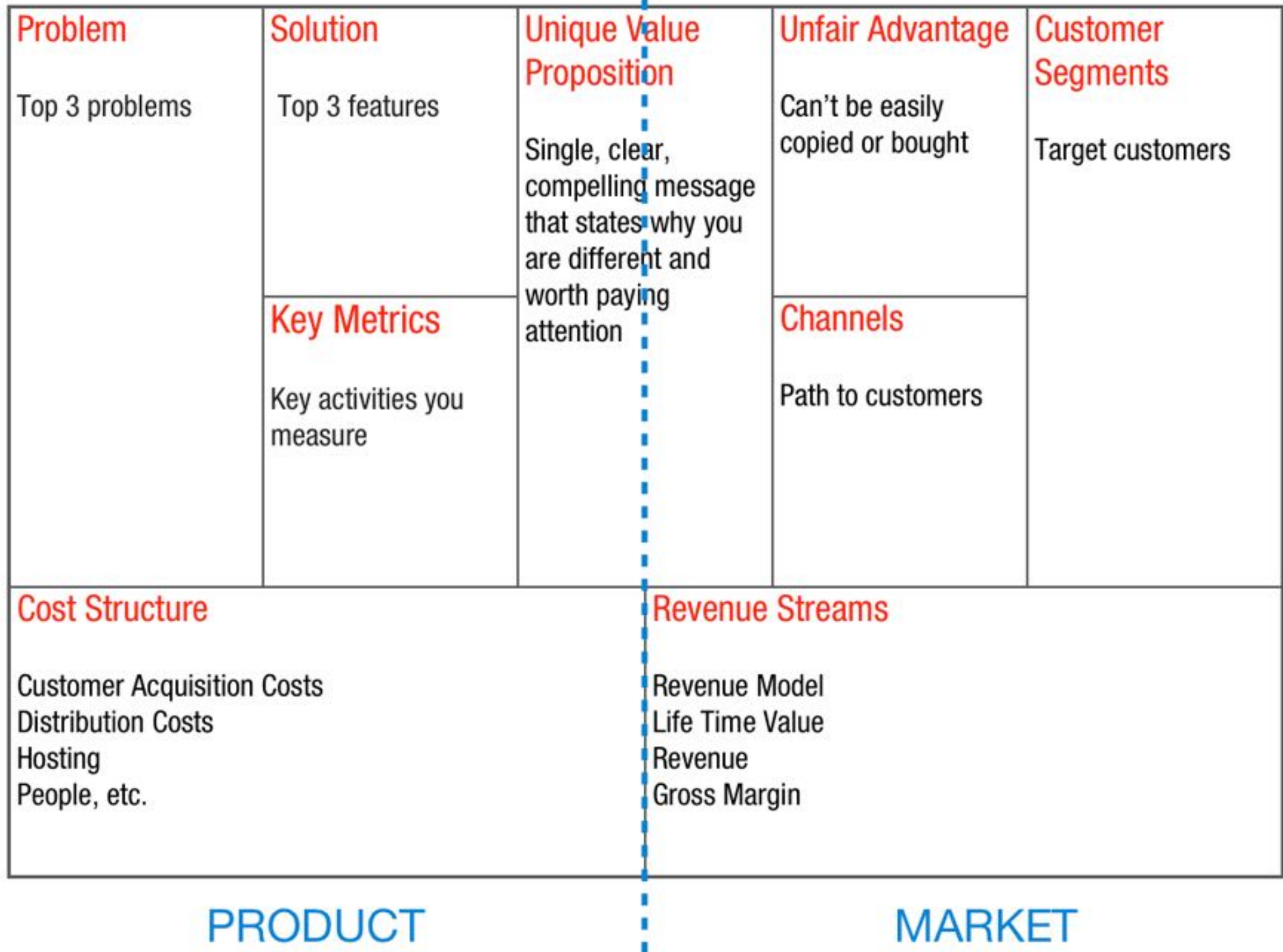
- Shorter term
- To meet a specific product/project need
- Sub-set of available resources
- The 'How', in the form of a plan



# Tactics vs. Strategy

## Strategy

- Longer term
- To meet broad organizational needs
- Full set of available resources
- The 'What', in the form of a system



What are core strategy  
questions?

# What are core strategy questions? (by Joe Natoli)

1. What is worth doing?
2. What are we creating?
3. What value does it deliver? (end-user needs and organizational objectives)

# Business Strategic Priorities



**Increase Revenue**



**Decrease Costs**



**Increase New Business**



**Increase Existing Business**



**Increase Shareholder Value**

# Problem Statement

A brief description of the issue that needs to be solved by a project or group

# Sample Problem Statement Format, by Jeff Gothelf

**[Our service/product]** was designed to achieve **[goals]**. We have observed that the service/product isn't meeting **[these goals]**, which is causing **[this adverse effect]** to our business. How might we improve **[service/product]** so that our customers are more successful based on **[these measurable criteria]**?

# Preferred Problem Statement Format (source unknown)

**[Stakeholder]** needs a way to **[need]** because **[insight]**.

*Grav Open Course Hub Project Examples*

*Example #1: Educators need a means to use and provide educational materials outside their LMS to reach their pedagogical goals while still keeping sensitive student data within their LMS.*

*Example #2: Students need a way to more quickly and easily access all required educational materials so their time online is not wasted by needing to navigate between multiple websites.*



# A Good Problem Statement is:

- ✓ Human-centered
- ✓ Has one objective
- ✓ Provides creative latitude
- ✓ Manageable in scope
- ✓ Not a solution itself

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- ✓ Manageable in scope
- ✓ Not a solution itself

*... but what about ethical considerations?*

# CONSIDERATIONS

## POSITIVE NEED

making a  
task easier

connecting  
people

creating a fun  
experience

pushing out a  
useful tool

helping a group  
of people

spreading  
information

## NEGATIVE COLLATERAL

making people  
dependent?

discriminating  
against anyone?

exploiting  
anyone?

magnifying  
social issues?

putting down  
another group?

spreading  
lies?

# Methods Helpful in Defining Problem Statements

- Observation
- Exploring PoV (Points of View)
- Asking Why?

A Caveat about Asking “Why”

# A Caveat about Asking “Why”

Asking someone “Why” they do something can make them feel defensive, so sometimes alternative phrasing is better such as asking something like “What was your intention in doing that?”

# Activity: Problem Statement

GROUPS OF 2-3

Draft an example problem statement regarding the SFU Library, where the stakeholder is “students”

**[Stakeholder]** needs a way to **[need]** because **[insight]**.

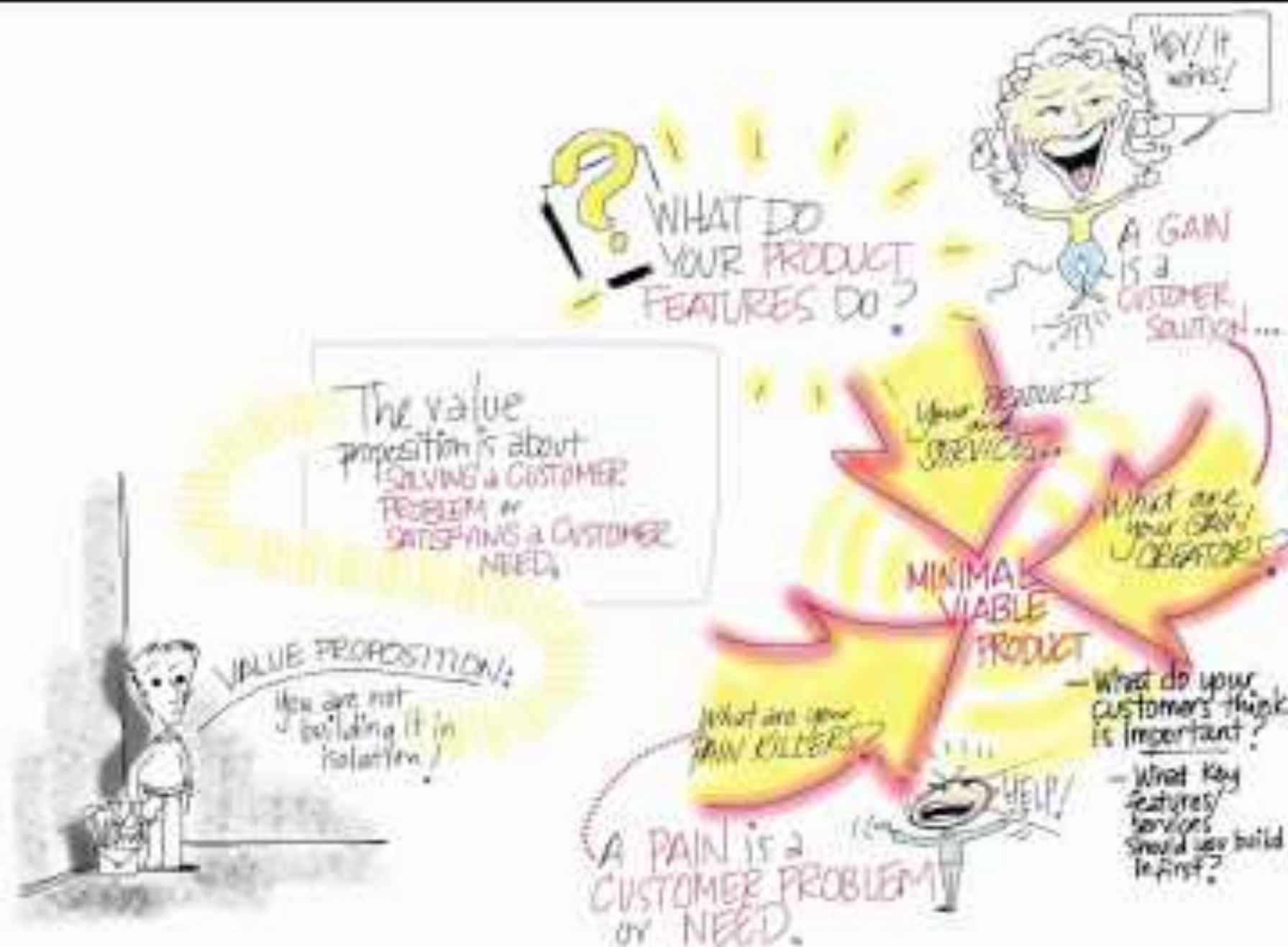
A good problem statement is:

- ✓ Human-centered
- ✓ Has one objective
- ✓ Provides creative latitude
- ✓ Manageable in scope
- ✓ Not a solution itself

# Value Proposition (often called unique value proposition)

A brief statement that captures why a consumer would buy or use a product/service.





<https://www.youtube.com/watch?v=OkdEB8L2IeM>

# Preferred Value Proposition Format (source: Steve Blank)

We help **[X]** do **[Y]** doing **[Z]**

For example: The Grav Open Course Hub project helps *tech-savvy instructors to reach unmet pedagogical and student experience goals by partnering a modern open platform with their current LMS.*

# A Good Value Proposition is:

- ✓ States target audience
- ✓ Highlights the benefit
- ✓ Includes the solution
- ✓ Element(s) of uniqueness
- ✓ Is up to date

What about open source  
software?

“You don’t make money with open-source, you make money because of open-source.”

— Doc Searls

# Open Canvas

project : Title

Project Execution

<b>Problem</b> The top 1-3 problems you want to solve	<b>Solution</b> Outline your proposed solution for each problem	<b>Unique Value Proposition</b> A clear message that states <u>what you offer</u> and <u>why you are different</u> . Can be derived from: 1. The main problem you are solving 2. The finished story and benefits users will have by using your product  Example: Square - start accepting credit cards today	
	<b>Key Metrics</b> How will you measure success?	<b>User Profiles</b> Target audience and early adopters  Who are you building this for? Who will your early adopters be?	<b>User Channels</b> List how you will gain new users
<b>Resources Required</b> What do you need to build an MVP (minimum viable product)? Design, Development, Expertise, Hardware requirements and other costs		<b>Contributor Profiles</b> Contribution types and ideal contributors  What do your contributors look like? Be sure to include the different expertise you outline in "Resources Required"	<b>Contributor Channels</b> List how you will gain new contributors

Your users and contributors will likely overlap

Product

Community

# How to make more strategic design decisions?

Current State and Future State

# Assessing Current State

- Kano Model
- Journey Maps

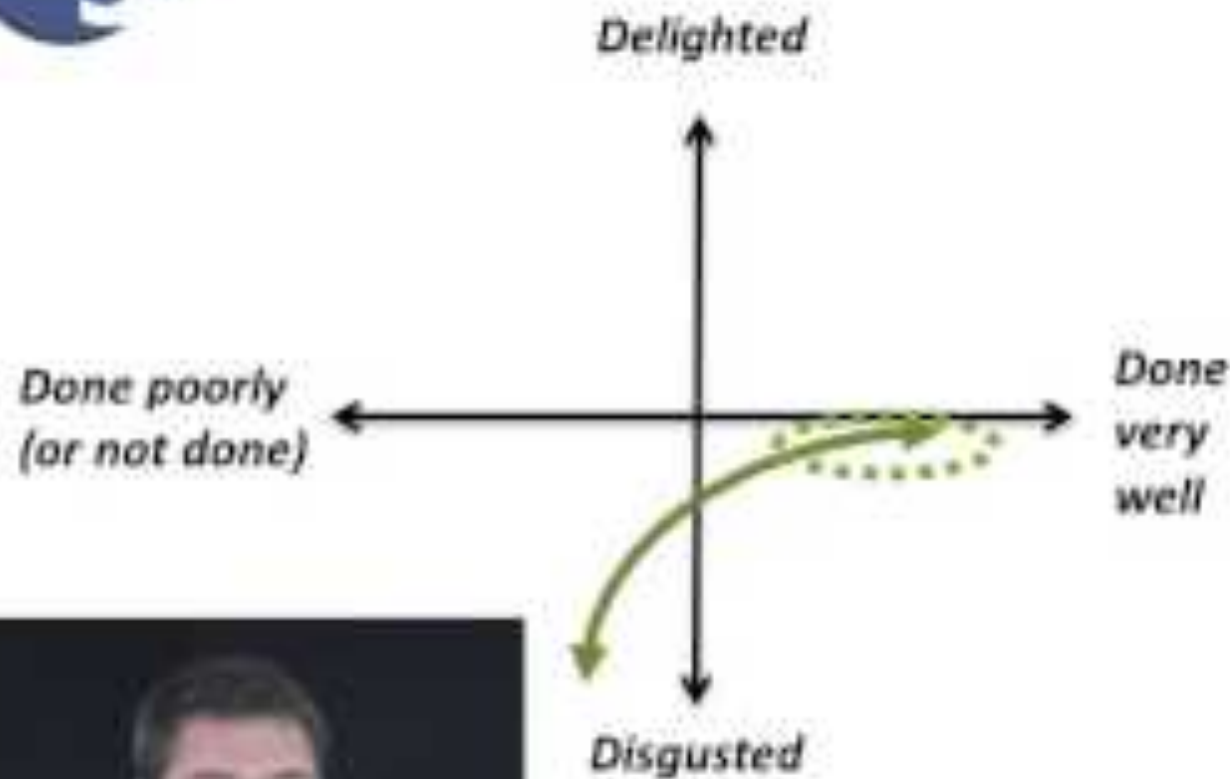


# Kano Model

Developed by Professor Noriaki Kano in the 1980s, the Kano Model can help predict customer satisfaction



## Kano model



### Basic needs

*"Must be" requirements*

- Need 1
- Need 2
- Need 3

Three minute product manager  
Copyright 2014 Kevolve Product Management

KEVOLVE  
www.kevolve.com

<https://www.youtube.com/watch?v=iuOrEIBVQX4>

Satisfied

Performance needs

Delighters

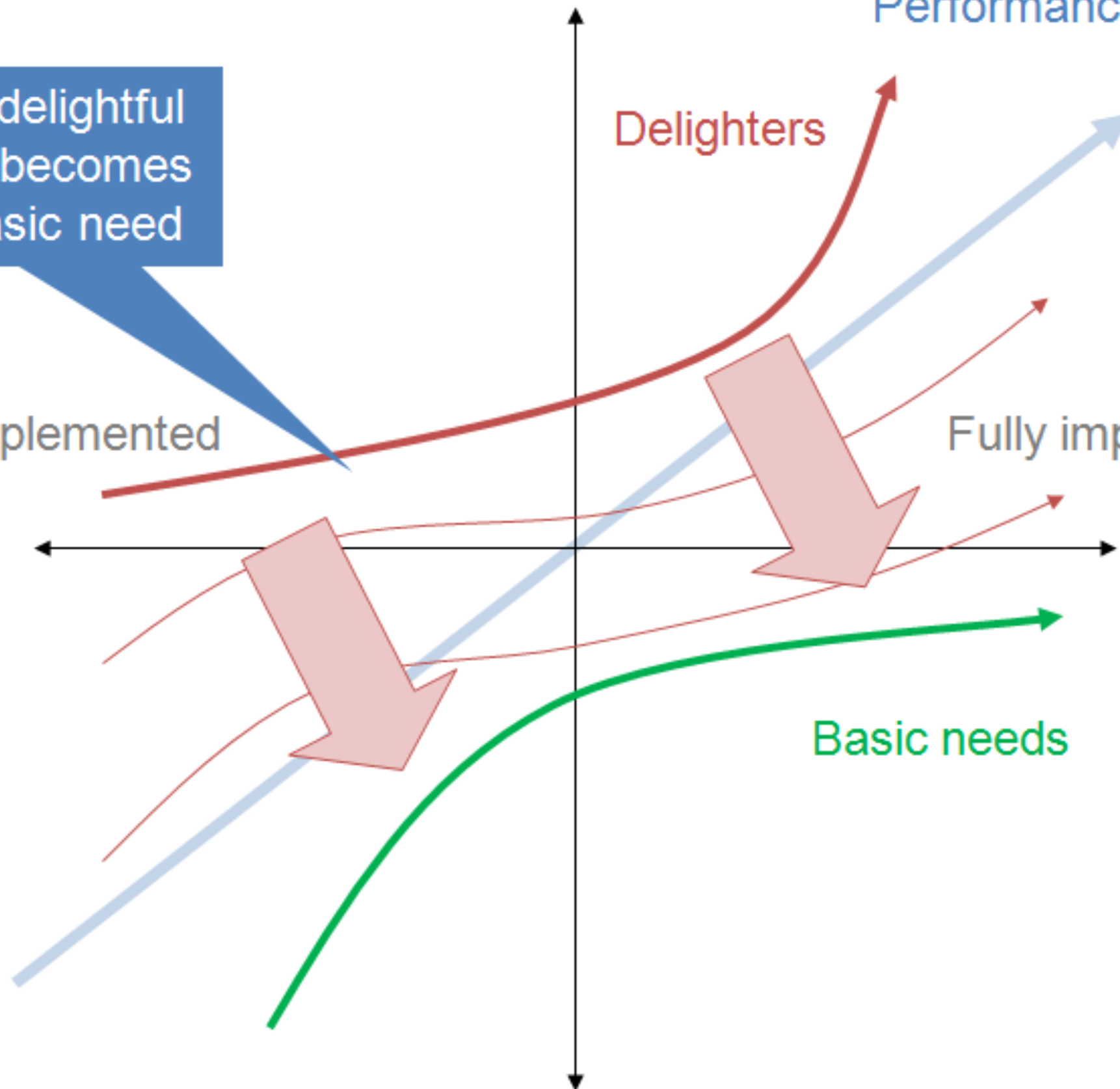
Over time delightful innovation becomes another basic need

Not implemented

Fully implemented

Basic needs

Dissatisfied



# Kano Question Pair

## Functional Form

“How do you feel if you *had* this feature?”

## Dysfunctional Form

“How do you feel if you *did not have* this feature?”

- I like it
- I expect it
- I am neutral
- I can tolerate it
- I dislike it

## CUSTOMER RESPONSES

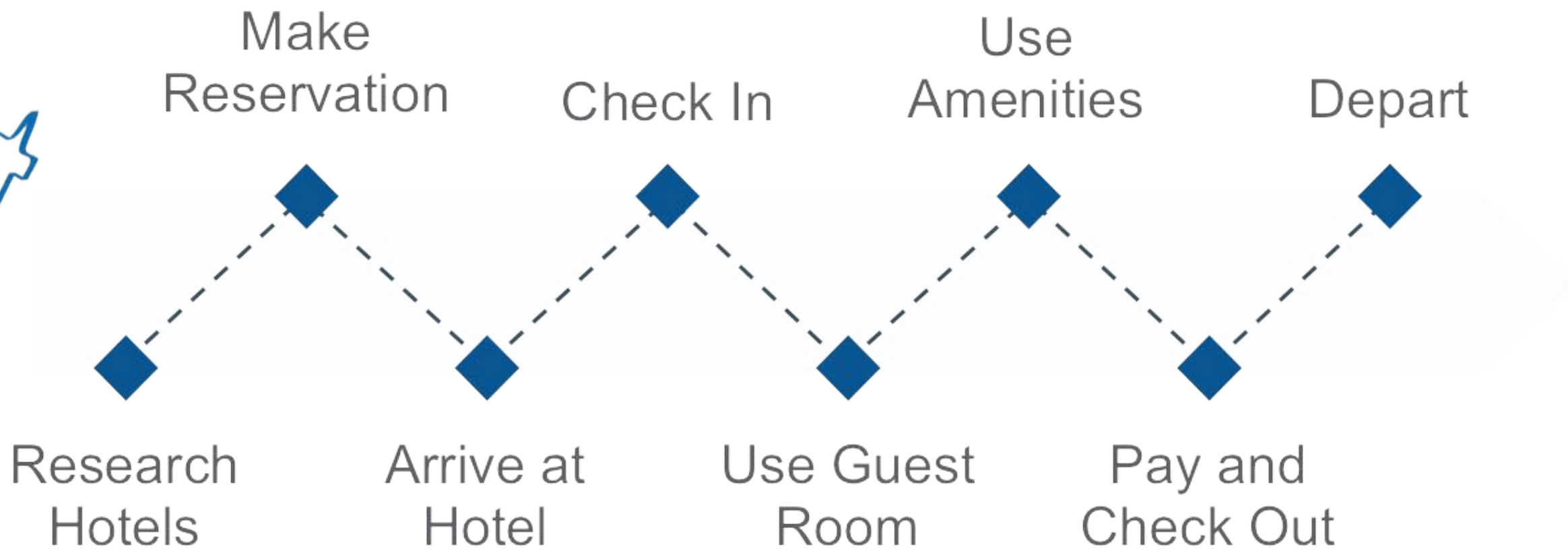
		Negative Question				
		LIKE	EXPECT	NEUTRAL	TOLERATE	DISLIKE
Positive Question	LIKE	-	Attractive	Attractive	Attractive	One Dimensional
	EXPECT	Undesired	Unimportant	Unimportant	Unimportant	Must-be
	NEUTRAL	Undesired	Unimportant	Unimportant	Unimportant	Must-be
	TOLERATE	Undesired	Unimportant	Unimportant	Unimportant	Must-be
	DISLIKE	Undesired	Undesired	Undesired	Undesired	-

# Journey Maps

A timeline-based view of a user's experience, which can be represented in varying levels of detail

# Aspects of experience

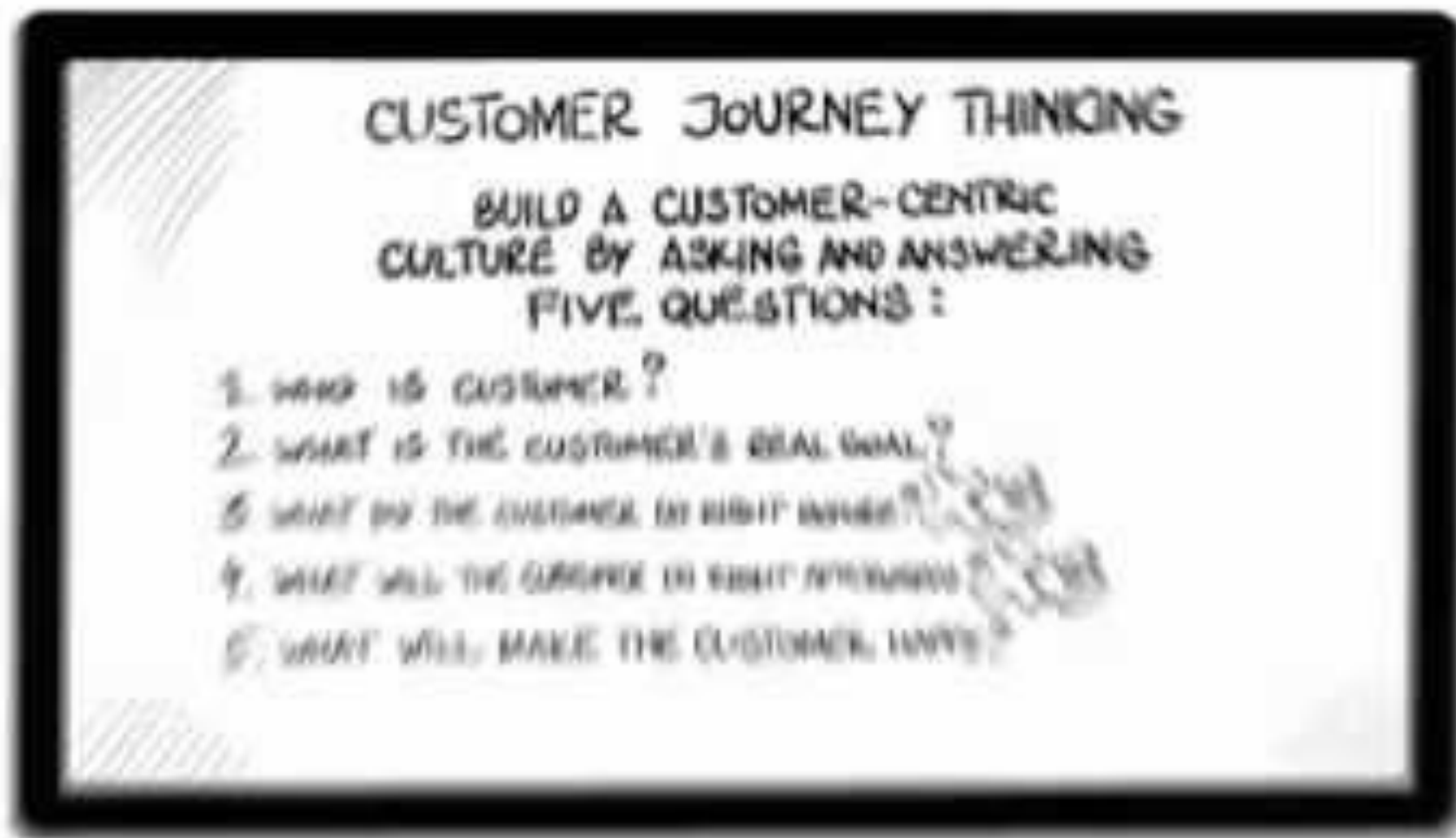
- Holistic
- Personal
- Situational





# The South Mall Visitor Journey SUMMARY OF VISITOR MOMENTS





<https://www.youtube.com/watch?v=SFoofPCDgIg>

# Imagining Future State

- User Stories
- Product Design Principles

# Harnessing User Stories

# What is a User Story?

At its core, a user story is a *collaborative design tool* that helps teams better view their product from the perspective of those who will actually use it.

# (Agile) User Story Structure

As a **role**,  
I want to **goal/desire**  
so that **benefit**

# User Stories for Agile

When used within an Agile approach, story size is often dictated by sprint length

# Example Agile User Stories

*As a Central Canadian Bank customer,  
I want to register for an online account  
so that I can pay my bills online.*

*As a Central Canadian Bank customer,  
I want to log into my online account  
so that I can pay my bills online.*

*As a Central Canadian Bank customer,  
I want to manage the details of my account  
so that I can pay my bills online.*



# User Stories for Requirements

- Includes reaching the user's goal
- User plays a central role
- No interface assumptions are stated
- Can be linked to usage importance and frequency
- Can be initially fairly broad in nature (esp. for strategic usage)

# Example High-level User Stories

*As a Central Canadian Bank customer,  
I want to withdrawal funds from an ATM  
so that I have the cash I need on hand.*

*As a Central Canadian Bank customer,  
I want to transfer funds from one account to another  
so that I have the funds to cover a large cheque.*

# Activity: High-level User Story

GROUPS OF 2-3

What might be a high-level user story for SFU's Library Website?

As a **role**,  
I want to **goal/desire**  
so that **benefit**

- ✓ Includes reaching the user's goal
- ✓ User plays a central role
- ✓ No interface assumptions are stated
- ✓ Can be linked to usage importance and frequency
- ✓ Can be initially fairly broad in nature (esp. for strategic usage)

# Product Design Principles

Unlike generic design principles (i.e. 'easy to use'), product design principles are a set of design principles specific to a particular product or service

# Windows UX Design Principles

- Reduce concepts to increase confidence
- Small things matter, good and bad
- Be great at “look” and “do”
- Solve distractions, not discoverability
- UX before knobs and questions
- Personalization, not customization
- Value the life cycle of the experience
- Time matters, so build for people on the go

# HTC Sense's Design Principles:

- Make it Mine: personalization needs to reach a level never before possible.
- Stay Close: staying in touch with the people in your life means managing a variety of communication channels and applications.
- Discover the Unexpected: many of the most memorable moments in your life are experienced, not explained

# Defining Product Design Principles

- Based on user research/knowledge
- More specific, less generic
- Easily memorized/internalized
- Encompassing broad aspects of the product
- Shared/distributed far beyond UX team

# How to make more strategic design decisions?

Journey Mapping



# Why Use Journey Maps?

- To visualize the entire experience
- To help build empathy
- To identify areas for improvement
- To create alignment among multiple stakeholders/  
teams
- To make better design decisions

# Key Aspects of Journey Maps

- Represents one viewpoint
- Communicates the user's perceptions
- Based on actual user research
- Contains “moments of truth”
- Must be actionable (i.e. help inform design decisions)

# Creating Journey Maps

# Common Elements







- Phases of journey
- Goals or needs (1 or more per phase)
- Touchpoints (1 or more per phase)
- Actions (1 or more per phase)
- Emotions and thoughts (1 or more per phase)
- Ideas for improvements (1 or more per phase)

# Website Customer Journey Analysis For SaaS Business

Search	Evaluate	Experiment	Purchase	Retain
How are prospects finding you? Where are they originating outside of your site	What are the details of your solution? How do they compare with other solutions?	How can prospects engage with solution before spending money?	What are the steps to payment? Do customers start with a free trial period?	How do customers get ongoing support?
Customer goals				
Locate a solution	Asses if this solution is the best option/fit for needs	Decide if this solution is worth paying for	Get access to all features and benefits according to chosen plan	Get ongoing support and customer service when needed
Touchpoints				
Google	Case studies	Trial registration	Cart page	Help pages
Twitter	FAQ page	Account creation	Checkout	Customer support contact
LinkedIn	Pricing page	Product tour		
	Blog posts			

Cite specific URLs once you're ready to make recommendations for testing.

# Rail Europe Touchpoints by Channel

Stage	Research & Planning	Shopping	Booking	Pre-Travel (Documents)	Travel	Post-Travel
						
<b>Website</b>	Maps Test itineraries Timetables Destination Pages FAQ General product & site exploration	Schedule look-up Price look-up Multi-city look-up Pass comparison	Web booking funnel - Pass - Trips - Multiple Trips	Select document option (from available options) - station e-ticket - home print e-ticket - mail ticket	Contact page for email or phone	
<b>Call Center</b>	Order brochure Planning (Products) Schedules General questions	Site navigation help	Automated booking payment Cust. Rep booking Site navigation help	Call re: ticket options Request ticket mailed Resolve problems (info, payment, etc.)	Call with questions regarding tickets General calls re: schedules, strikes, documents	
<b>Mobile</b>	Trip ideas	Schedules	Mobile trip booking		Access itinerary Look up schedules Buy additional tickets	
<b>Communication Channels (social media, email, chat)</b>	Chat for web nav help	FB Comparator Email questions Chat for website nav help	Chat for booking support	Email confirmations Email for general help Hold ticket	Ask questions or resolve problems re: schedules and tickets	Complaints or compliments Survey
<b>Customer Relations</b>						Request for refund, escalation from call center.
<b>Non-REI Channels</b>	Trip Advisor Travel blogs Social Media General Google searching	Airline comparison Kayak Direct rail sites	Expedia		Travel Blogs Direct rail sites Google searches	Trip Advisor Review sites Facebook



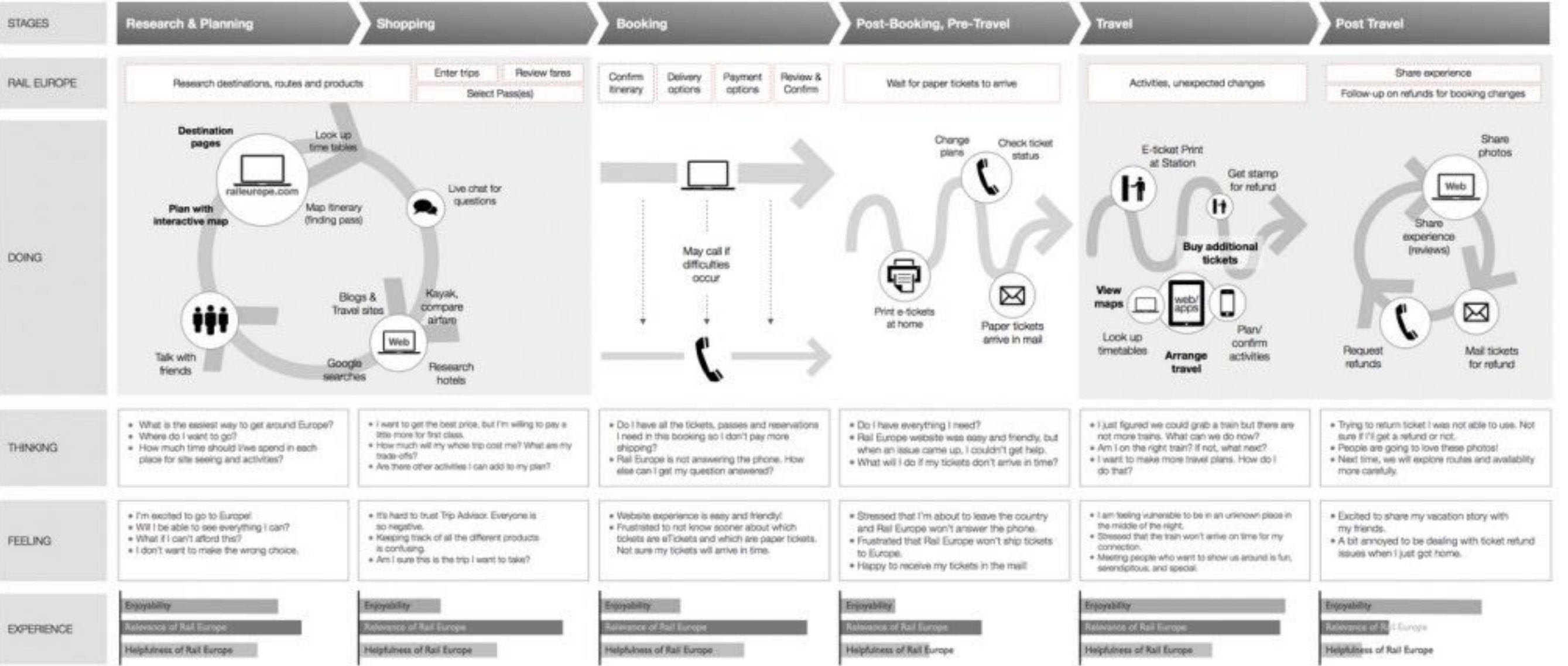


Rail Europe Experience Map

Guiding Principles

- People choose rail travel because it is convenient, easy, and flexible.
- Rail booking is only one part of people's larger travel process.
- People build their travel plans over time.
- People value service that is respectful, effective and personable.

Customer Journey



Opportunities

GLOBAL			PLANNING, SHOPPING, BOOKING			POST-BOOK, TRAVEL, POST-TRAVEL	
Communicate a clear value proposition. <small>STAGE: Initial visit</small>	Help people get the help they need. <small>STAGES: Global</small>	Support people in creating their own solutions. <small>STAGES: Global</small>	Enable people to plan over time. <small>STAGES: Planning, Shopping</small>	Visualize the trip for planning and booking. <small>STAGES: Planning, Shopping</small>	Arm customers with information for making decisions. <small>STAGES: Shopping, Booking</small>	Improve the paper ticket experience. <small>STAGES: Post-Booking, Travel, Post-Travel</small>	Accommodate planning and booking in Europe too. <small>STAGE: Traveling</small>
Make your customers into better, more savvy travelers. <small>STAGES: Global</small>	Engage in social media with explicit purposes. <small>STAGES: Global</small>		Connect planning, shopping and booking on the web. <small>STAGES: Planning, Shopping, Booking</small>	Aggregate shipping with a reasonable timeline. <small>STAGE: Booking</small>		Proactively help people deal with change. <small>STAGES: Post-Booking, Traveling</small>	Communicate status clearly at all times. <small>STAGES: Post-Booking, Post Travel</small>



# Dylan

Tech Writer  
28  
Brooklyn NY

**GOALS** -Open a joint savings or checking account. Manage and transfer funds online

**CHALLENGES**- Not having money set aside for vacations and special needs

"I want to do everything online!"



## Stage: 01 Consider Needs



## Stage: 02 Discovery/Research



## Stage: 03 Shop/Sign-Up



## Stage: 04 Set-Up Payees



## Stage: 05 Manage Bills/Transfer



## Stage: 06 Learn/Become Advocate

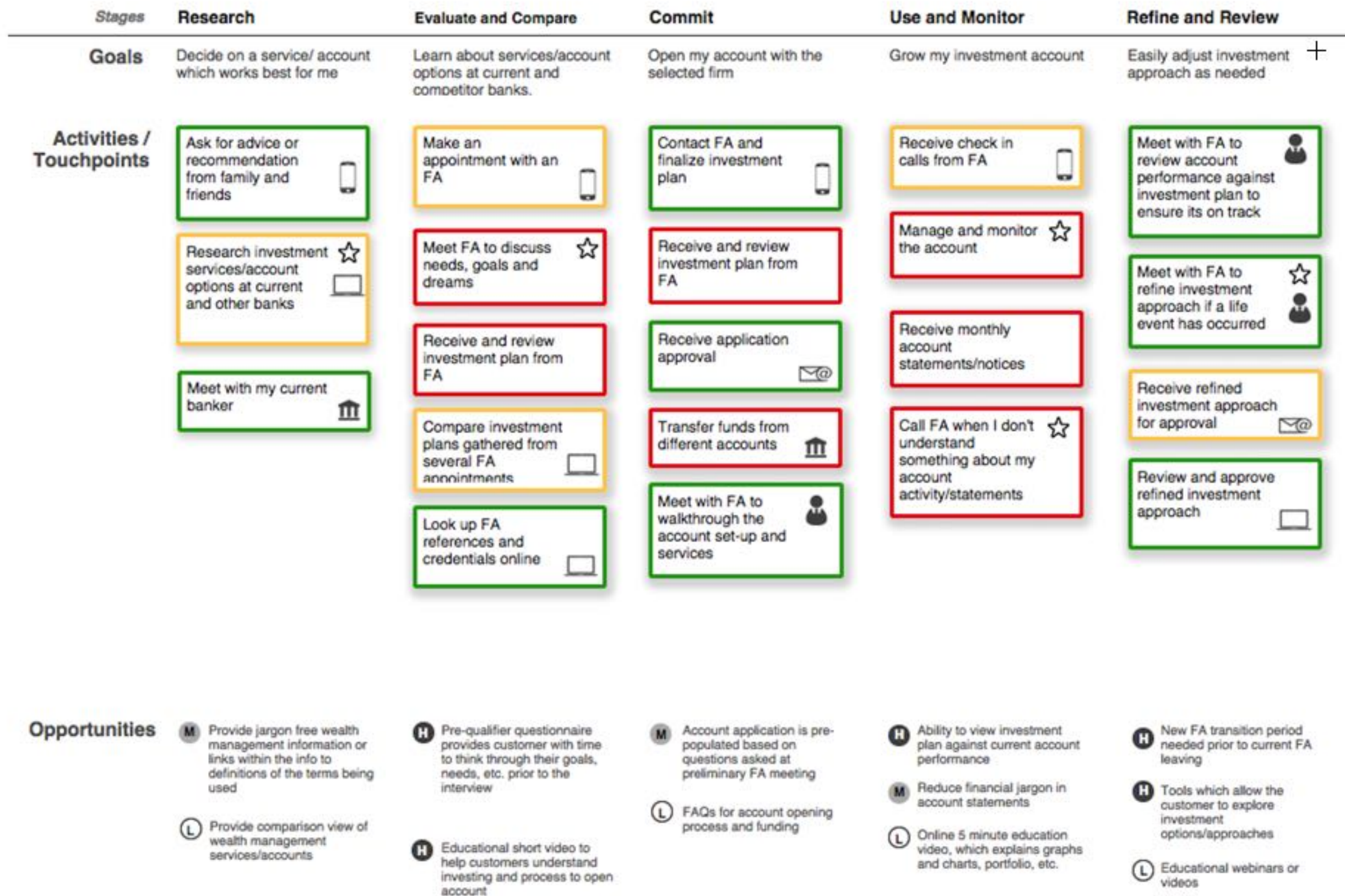


<b>Goals</b>	<ul style="list-style-type: none"> <li>I want to open a joint bank account with my future wife to start saving for a house.</li> <li>I want to open a bank account so that I can contribute to an IRA</li> </ul>	<ul style="list-style-type: none"> <li>I want to evaluate/compare the costs of account services.</li> <li>I want to know the nearest branches with ATMs.</li> </ul>	<ul style="list-style-type: none"> <li>I want to sign-up for an account online.</li> <li>I want to sign-up at a branch so that I may confirm/get sold on advantages.</li> </ul>	<ul style="list-style-type: none"> <li>I want an easy to setup a recurring payment.</li> <li>I want to know the number of pending payments so that I won't incur finance charges</li> </ul>	<ul style="list-style-type: none"> <li>I want to manage and view my account balances.</li> <li>I want to send a one-time payment.</li> </ul>	<ul style="list-style-type: none"> <li>I want a debit card with my local team or mascot.</li> <li>I want a replacement debit card rushed to me so that I may use it on my upcoming vacation</li> </ul>
<b>Opportunity</b>	Targeted leads by area/state	<ul style="list-style-type: none"> <li>Focus on key account service information first then provide deeper dives e.g. No ATM fees</li> <li>Branch locations (proximity) at a universal navigation location</li> </ul>	Online sign-up enables 24/7 account creation	<ul style="list-style-type: none"> <li>Payees/payments in one place</li> <li>No checks to order (save a stamp)</li> </ul>	Transfer funds (person to person, bank to bank) through email	<ul style="list-style-type: none"> <li>Marketing information continues to give me the latest on how to avoid fees</li> <li>New personalized credit/debit</li> <li>New overdraft protection services</li> </ul>
<b>Challenges</b>	Are questions for new and existing customers addressed e.g. Is bad credit a problem to open an account?	<ul style="list-style-type: none"> <li>Where is the high level account comparison information?</li> <li>There are so many navigation options . . . where do I begin?</li> </ul>	<ul style="list-style-type: none"> <li>Assuring identity theft / online sensitive users safety is addressed in branch or online.</li> <li>What if I have questions during this online sign-up process?</li> </ul>	<ul style="list-style-type: none"> <li>Assuring identity theft/online sensitivity to users is addressed.</li> <li>Seniors may need hand holding during first time setup, what are their options for assistance?</li> </ul>	Go to branch for large amounts for complicated transfer	Failure to create learning materials/e-newsletters to speak to changing benefits or extra fees for transactions, e.g. outgoing wire-transfers at branch vs. online fees
<b>Touchpoints</b>	<ul style="list-style-type: none"> <li>Mobile (Friends &amp; Family Advice)</li> <li>TV &amp; Media</li> <li>Ads</li> </ul>	<ul style="list-style-type: none"> <li>Mobile</li> <li>PC or Tablet</li> </ul>	<ul style="list-style-type: none"> <li>Mobile (Assistance Only)</li> <li>PC or Tablet</li> <li>Branch</li> </ul>	<ul style="list-style-type: none"> <li>Mobile</li> <li>PC or Tablet</li> <li>Branch</li> </ul>	<ul style="list-style-type: none"> <li>Mobile</li> <li>PC or Tablet</li> <li>Branch</li> </ul>	<ul style="list-style-type: none"> <li>Email (Promotional)</li> <li>PC or Tablet (Personalized Pushed Info)</li> </ul>
<b>Experience</b>						

Engagement  
Happiness  
Satisfaction






# Journey Map Wealth Management



## LEGEND

MOMENT OF TRUTH 

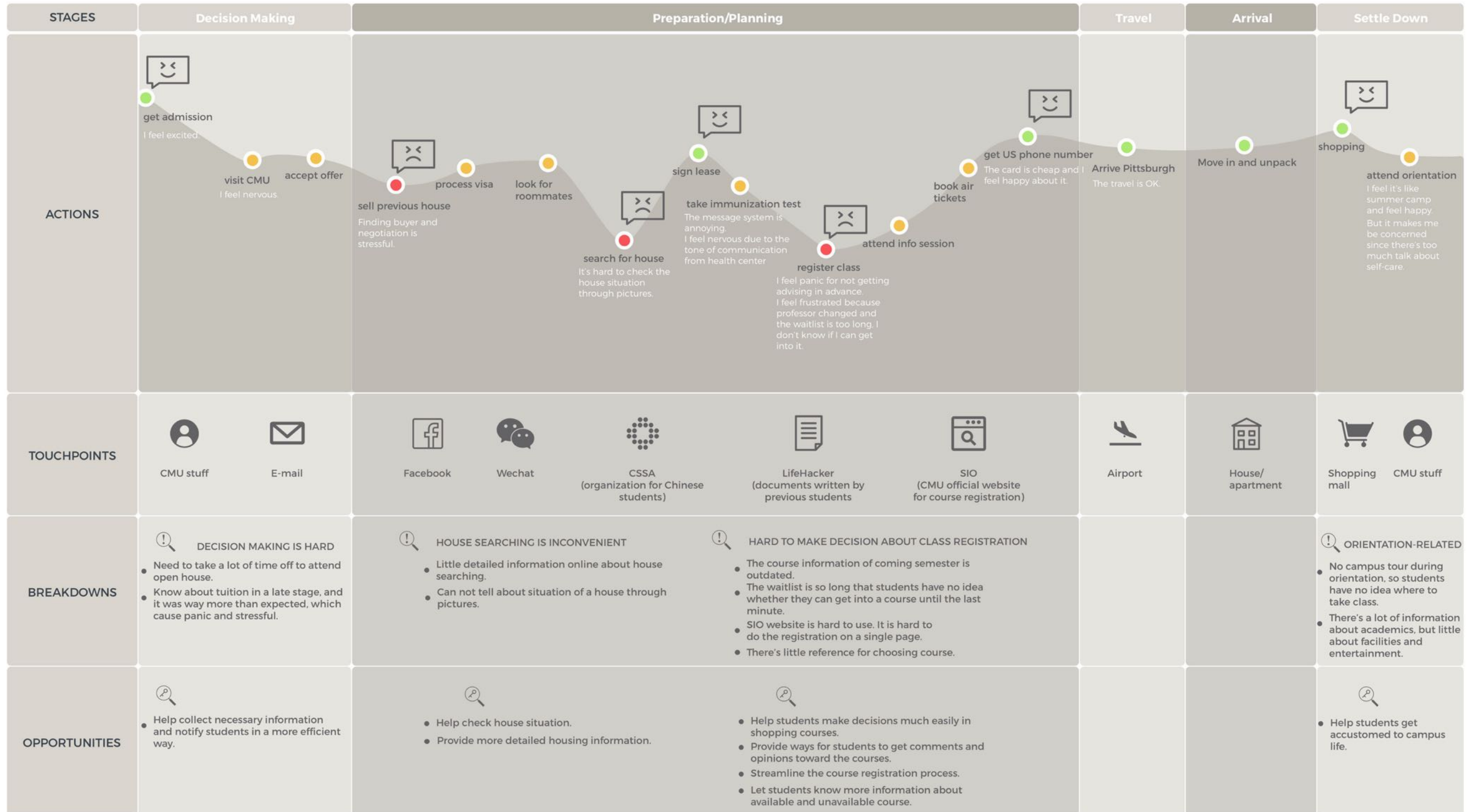
EXPERIENCE Positive  Neutral  Negative 

VALUE TO CUSTOMER High  Medium  Low 

# Customer Journey Map

## Current students' journey to CMU

This is an as-is journey map of current students' journey to CMU, starting from the moment they got admitted till they settled down in Pittsburgh.



# (Suggested) Process

1. Conduct background research
2. Identify user group and map audience/purpose
3. Consider appropriate level of granularity
4. Decide what you need to learn
5. Write down your existing assumptions
6. Talk (and observe if possible) with users
7. Start with touchpoints and actions, and organize as timeline
8. Group touchpoints and actions as phases, and then align user goals/needs
9. Further build-out as text map first, then visualize if appropriate

# Interview Tips

- ✓ Explain the purpose of the interview up-front
- ✓ Minimize yes/no type questions
- ✓ Focus on learning about their circumstances, motivations, experiences and feelings
- ✓ Get comfortable with silence
- ✓ Ask them to share stories and examples
- ✓ Watch out for described workarounds, difficulties, etc.
- ✓ Paraphrase to show you are listening and to confirm facts



# Activity: Journey Mapping

## GROUPS OF 2-3

Create a text-only journey map for a user searching for a book (required by a course) on the SFU Library Web site, checking that book out and returning it

- ✓ Phases of journey
- ✓ Goals or needs (1 or more per phase)
- ✓ Touchpoints (1 or more per phase)
- ✓ Actions (1 or more per phase)
- ✓ Emotions and thoughts (1 or more per phase)
- ✓ Ideas for improvements (1 or more per phase)

# Summary

- User Experience Strategy
- Current State and Future State
- Journey Mapping

# References and Suggested Books

- Kano Model, Wikipedia ([https://en.wikipedia.org/wiki/Kano\\_model](https://en.wikipedia.org/wiki/Kano_model))
- Mapping Experiences: A Complete Guide to Creating Value through Journeys, Blueprints, and Diagrams by James Kalbach
- Running Lean, by Ash Maurya
- The Complete Guide to the Kano Model (<https://foldingburritos.com/kano-model/>)
- Think First: My No-Nonsense Approach to Creating Successful Products, Memorable User Experiences + Very Happy Customers by Joe Natoli
- User Experience Mapping: Enhance UX with User Story Map, Journey Map and Diagrams by Peter W. Szabo

# Image Credits

<https://blog.leanstack.com/business-models-vs-business-plans-4a802e15c51d>  
<http://www.forbes.com/sites/anthonykosner/2013/11/23/how-design-and-user-experience-translates-to-the-bottom-line/>  
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