

Product Development

Bringing the Idea to Life

Startup Management (IPIRI 63749B), Aleš Špetič, 2024

Recap Lecture 3

Business Strategy

- Strategy provides a **clear direction** for the business
- A strong strategy includes a well-defined **vision and mission**, clear **goals and objectives**, a **unique value proposition (UVP)**, and efficient **resource allocation** to stay competitive in the market.

Introduction to Product development

Charting Your Path to Product Development Proficiency

- **Customer Empathy:** Recognize the importance of customer empathy in product development and learn techniques for understanding user needs and preferences.
- **Conceptualization:** Explore the processes of creating a clear product vision and concept.
- **MVP:** Define what a Minimum Viable Product (MVP) is and its critical role in validating product-market fit.
- **Rolling out and Developing Features:** Comprehend the benefits a structured approach to measure user engagement and feature development.

Introduction

Turning Ideas into Reality

- **Role of Product Development:** It's structured process that takes a startup from idea to execution.
- **Product Development Process:** Gain insight into the steps involved in product development, which include ideation, design, prototyping, testing, and launch

Understanding Your Target Audience

Empathy as a Key to Success

- **User Interviews:** Engage in one-on-one conversations with potential users to uncover their motivations and challenges. These insights can inform your product's design and features.
- **Surveys and Questionnaires:** Collect quantitative data to identify trends and preferences among your audience. Surveys can help you gauge user expectations and priorities.
- **User Personas:** Create detailed user personas that represent different segments of your target audience. Personas help you visualize and address the diverse needs and behaviors of your users.
- **User Stories:** Develop user stories to map out specific user interactions with your product. These stories provide a narrative framework for understanding user behavior and needs.
- **Observation and User Testing:** Watch how users interact with your existing solutions or similar products. Observing their actions in real-life situations can reveal critical insights.

Understanding What Customers Want

Product development from an IT failures perspective



How the customer explained it



How the project leader understood it



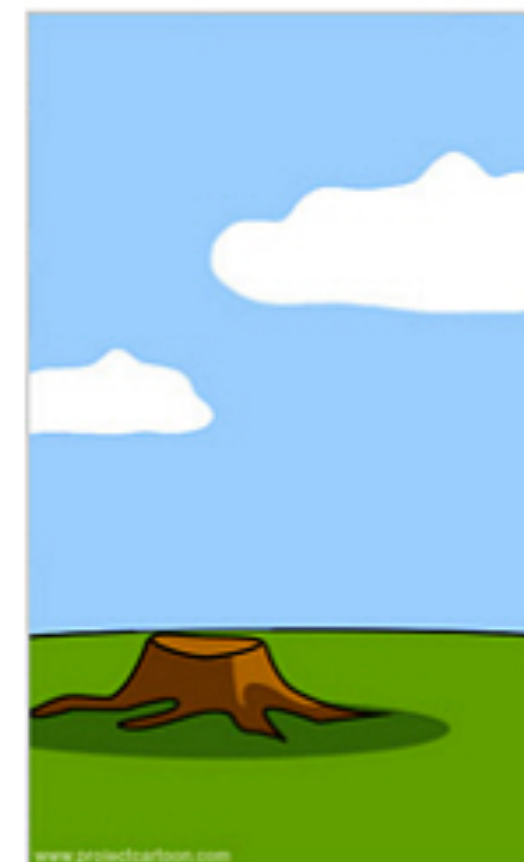
How the analyst designed it



What operations installed



How it was documented



How it was supported



How they advertised the open source version



How they applied open source patches



How the business consultant described it



How the programmer wrote it



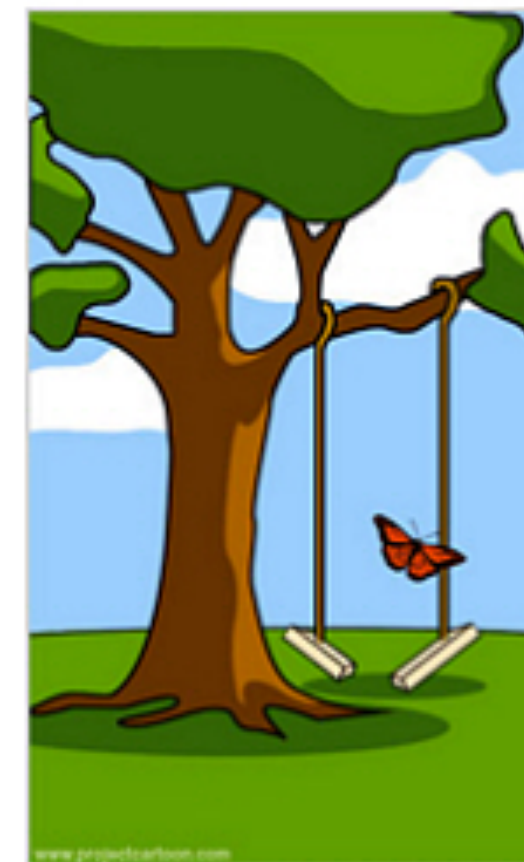
What the beta testers received



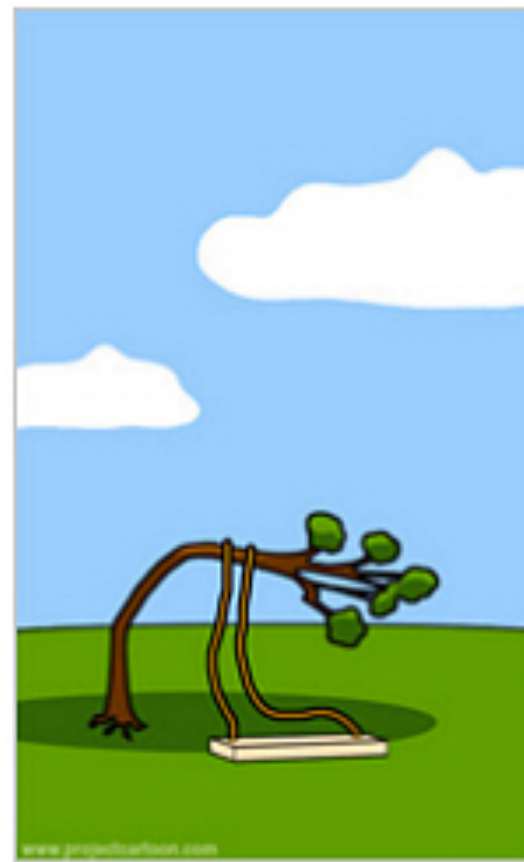
What marketing advertised
iSwing



What the customer really needed



How it performed under load



The disaster recover plan

Understanding Target Audiences

The Local Sport Enthusiast



Mike Carter, 32, Sales Manager, Suburban Area, 70k/y, Married 1child

- **Hobbies:** Regularly attends local sports games, passionate about supporting local teams, enjoys spending weekends at community events.
- **Tech Usage:** Highly active on social media, uses mobile apps for event bookings and news updates.
- **Motivations:** Loves the sense of **community** and enjoys taking his family to local events for entertainment.
- **Pain Points:** Struggles with **finding tickets** easily for smaller, local games, and hates dealing with complicated or hidden fees during purchases.
- **Needs:** Seeks a **simple, hassle-free ticketing platform** with transparent pricing for local sports events that also offers family-friendly deals.

Understanding Target Audiences

The Casual Sports Attendee



Sarah Mitchell, 24, Marketing Coordinator, Urban, 45k/y, Single

- **Hobbies:** Occasionally attends local sports events with friends, prefers to spend weekends on social activities and discovering local entertainment options.
- **Tech Usage:** Primarily uses mobile devices for social media and event browsing, looks for **discounts and deals online**.
- **Motivations:** Goes to sports games for the **social experience**, not necessarily because of a deep connection to the sport itself.
- **Pain Points:** Finds ticket prices to be unpredictable and dislikes long lines or **last-minute inconveniences**.
- **Needs:** A platform offering **early bird pricing** and last-minute deals that is easy to navigate on mobile, and offers a seamless way to buy tickets digitally.

Understanding Target Audiences

The Loyal Team Fan

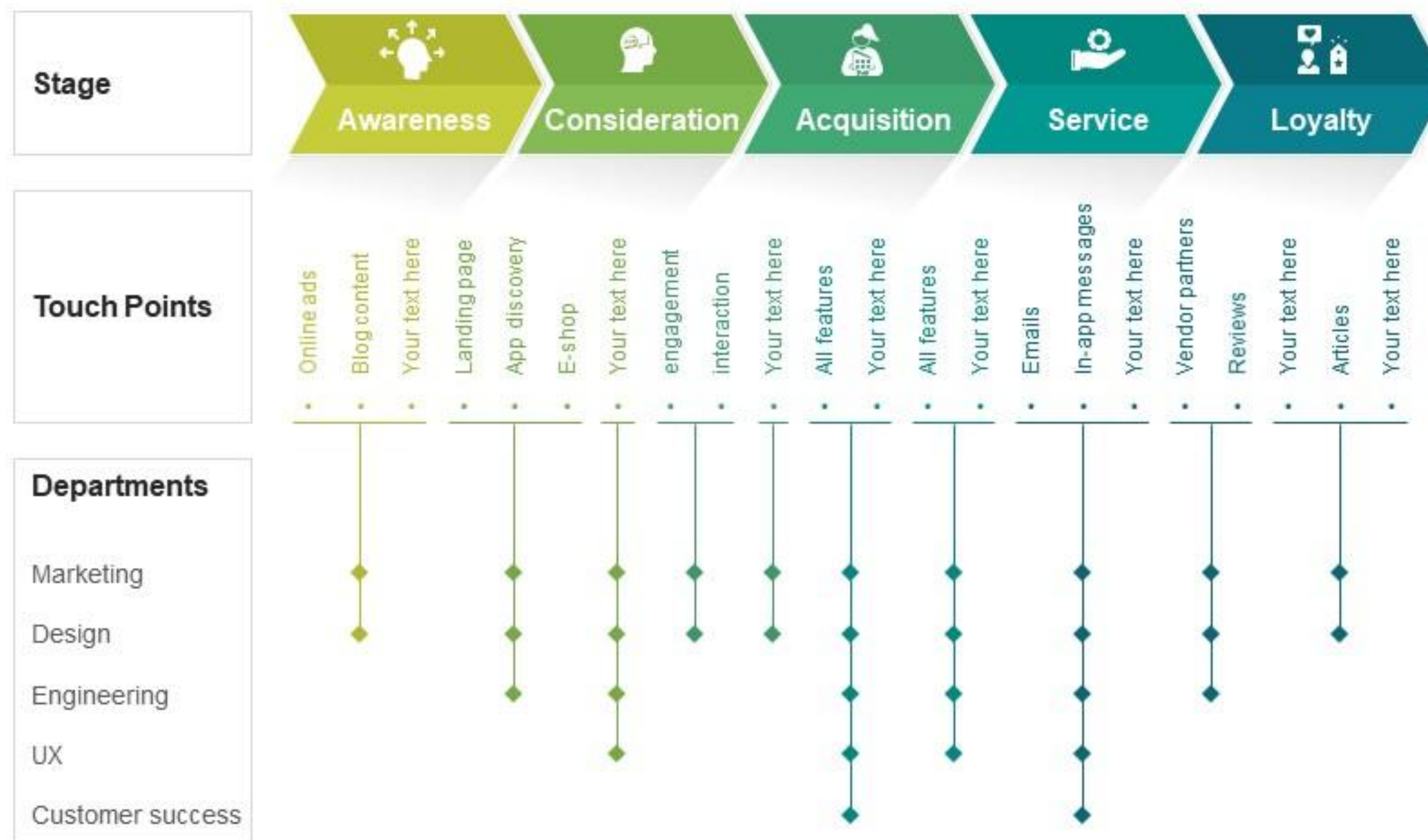


Carlos Rivera, 40, IT Professional, Small town, 85k/y, Married, 2 teenagers

- **Hobbies:** Follows local and regional sports teams closely, attends as many games as possible, and is actively engaged in online sports communities.
- **Tech Usage:** Uses sports apps and team websites for news, schedules, and updates, prefers having all information easily accessible.
- **Motivations:** Deeply committed to supporting his local team, enjoys being part of the **fan community** and attending games with his family and friends.
- **Pain Points:** Frustrated with **inconsistent ticket availability** for popular games and the lack of loyalty programs for frequent attendees.
- **Needs:** A platform with **season pass options**, exclusive deals for frequent buyers, and notifications about **early access** to popular games.

Understanding Your Target Audience



















Touch Point Map - understanding specific interaction



Understanding Your Target Audience

Customer Journey - understanding the full experience of the customer

Online Shopping Customer Journey Map

Stages of Journey	Motivation	Searches for Websites		Browses the Site	Evaluates Products		Pay		
Activities	Wants to buy a Christmas gift for a friend	Searches products keywords on search engines	Clicks the 1st ads. result.	Checks online again and go to the 1st. original result	Checks out ongoing deals and hot sale products	Opens a product page to check product details.	Opens more product pages to compare info.	Processes to pay a preferred product.	Contacts online service for help.
Feelings									
Very Happy									
Overall Satisfied									
Unhappy									
Experiences	Excited to give a surprise to the friend.	<ul style="list-style-type: none"> Happy to see many options Confusing about how to choose. 	Annoyed at the useless info.	<ul style="list-style-type: none"> Happy with the informative shopping website. Not sure about how to find the best price. 	Surprise to see lots of discounts	Frustrated about reviews from other customers.	<ul style="list-style-type: none"> Pleased with usages & designs. Sad to see out of stock products. 	Frustrated to find only the Paypal payment option.	<ul style="list-style-type: none"> Satisfied with bank card payment. Feels unhappy to wait for a bit of long time.
Customer Expectations	Easily to obtain discount news.	More user-friendly search engine.	Allow to hide unnecessary ads.	Clear and innovative website design.	More discounts during holidays.	Higher quality products.	Faster supply chain system.	More payment choices.	Faster website speed.

Conceptualisation

Creating a Product Vision and Concept

Uniqueness - how does the feature differentiate from competitors

User-centric - features prioritisation to users' needs and preferences

Prioritisation - analyse which features are necessary and which are commonly use

User Experience

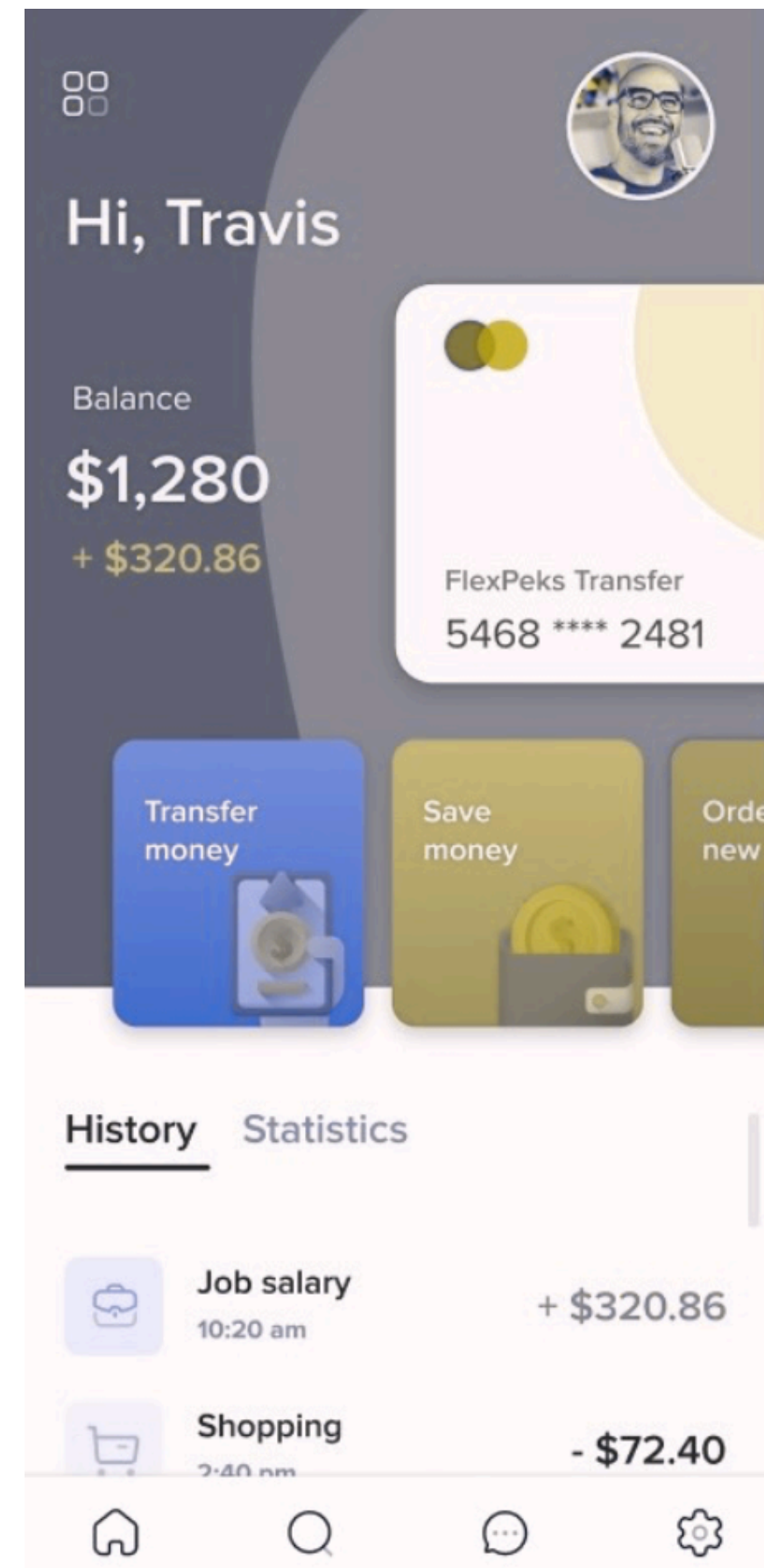
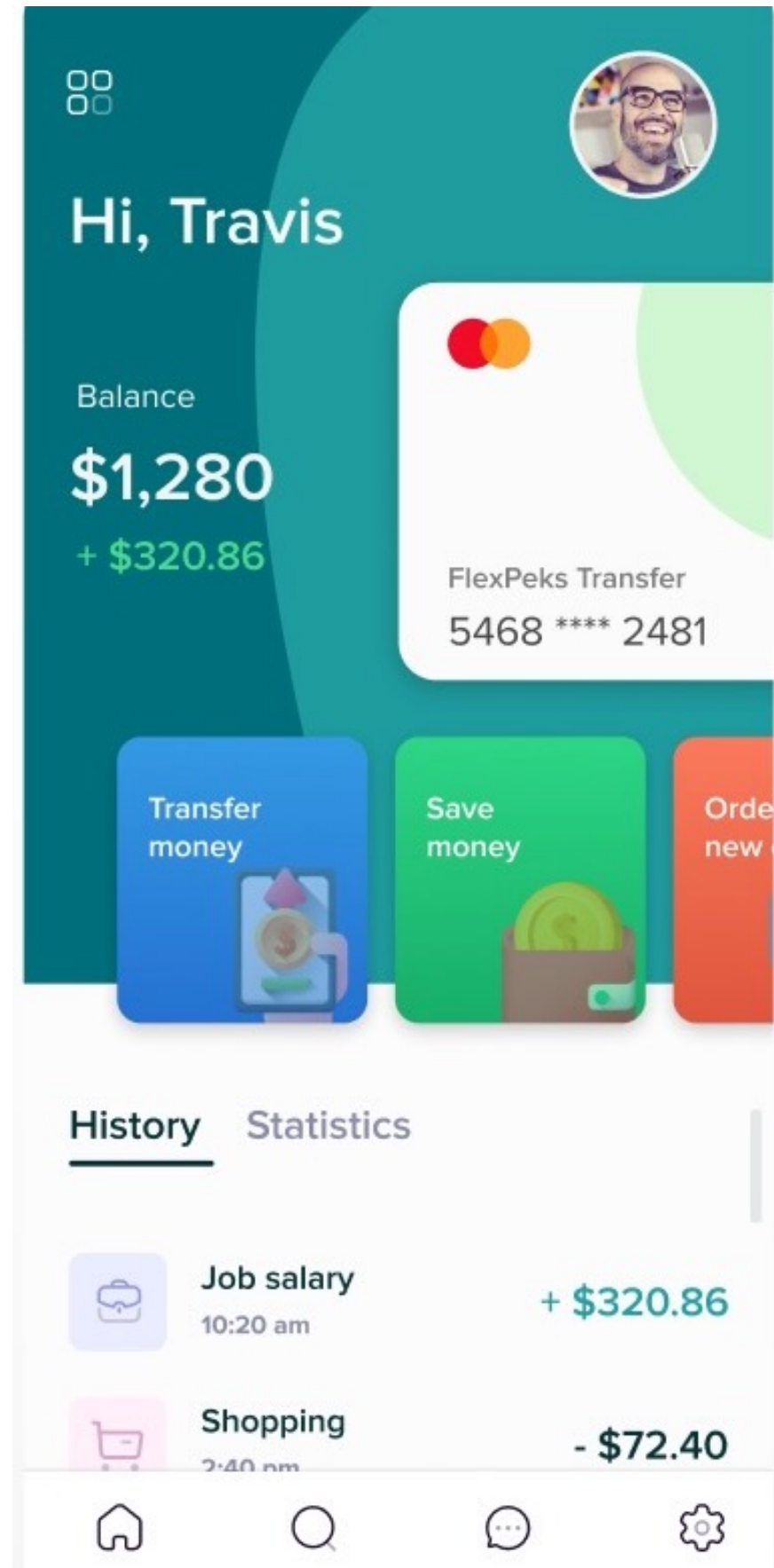
UX considerations

User Experience (UX) encompasses all aspects of the end-user's interaction with the company, its services, and its products.

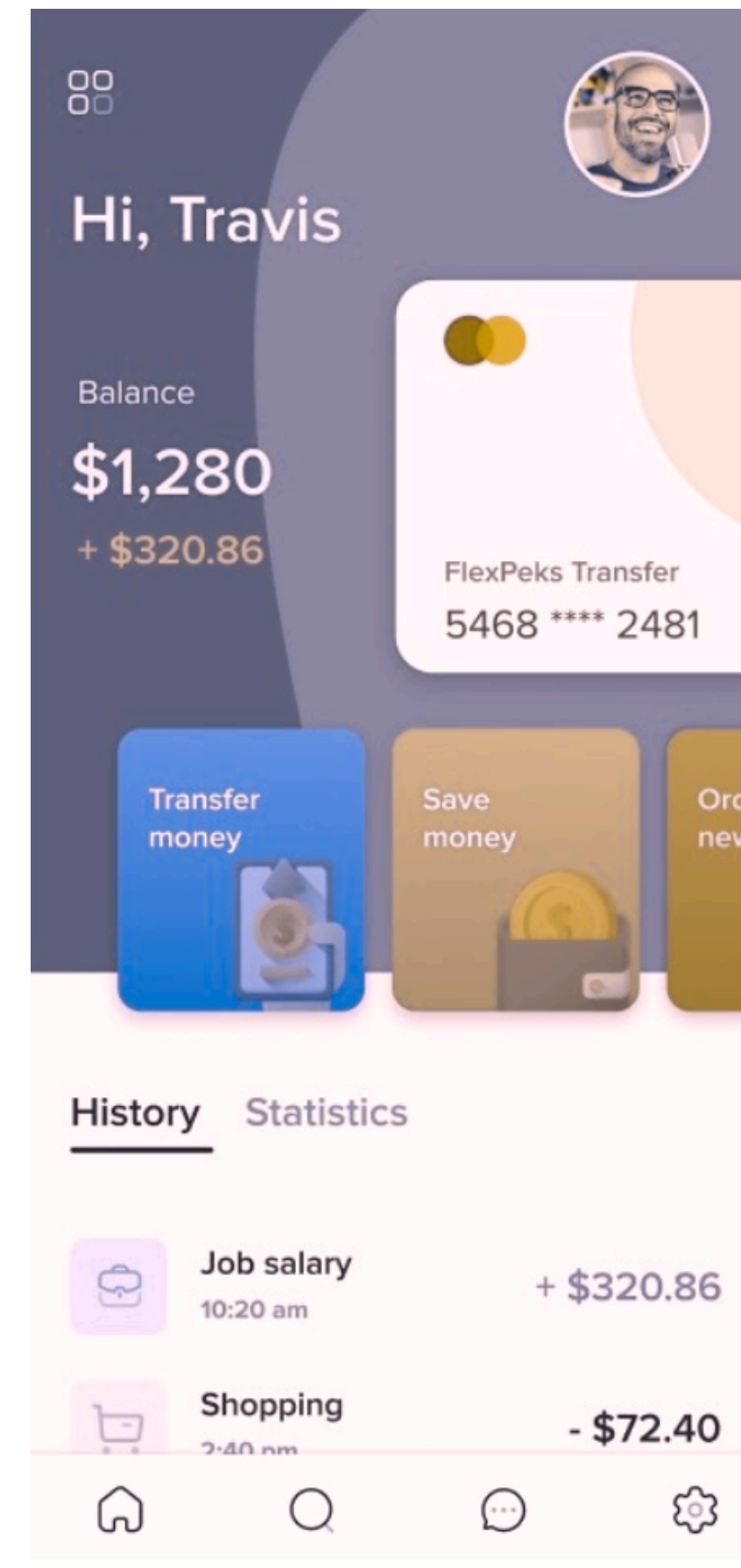
- **User-Centered Design:** Focus on user needs, preferences, and behaviors from the start of the design process.
- **Consistency:** Ensure consistent design patterns, interactions, and terminology across the product.
- **Feedback:** Provide immediate and clear feedback to users' actions (e.g., confirmations, errors).
- **Accessibility:** Make sure the product is usable by people of all abilities and disabilities.
- **Simplicity:** Avoid unnecessary complexity. Keep the design intuitive and user-friendly.

User Experience

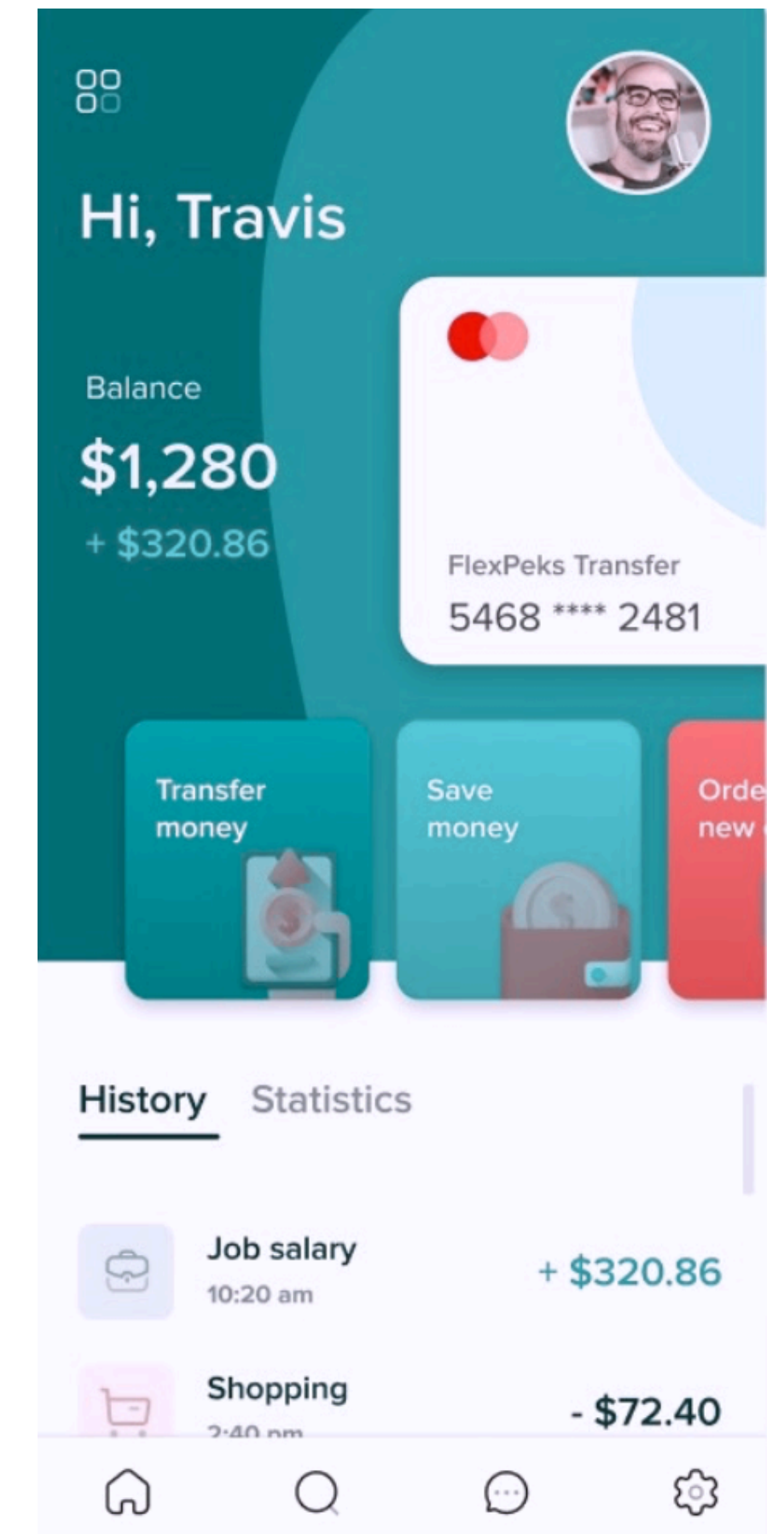
Color Blindness Samples



Hint: click on the image at any time to show the original.



Hint: click on the image at any time to show the original.



Hint: click on the image at any time to show the original.

User Experience

Feedback



User Experience

Measuring UX - examples

Task Completion Rate: How many users successfully complete tasks?

Time on Task: How long does it take users to accomplish their goals?

Error Rate: How often do users encounter issues?

User Satisfaction: Use surveys or feedback forms to assess satisfaction.

Net Promoter Score (NPS): Measures users' likelihood to recommend the product.

Minimal Viable Product

Validating Ideas With Precision

Cost-Efficiency: Building a basic version of your product minimizes initial development costs and conserves resources, allowing you to allocate funds more strategically.

Speed to Market: An MVP can be developed quickly, enabling you to enter the market sooner and gain a competitive edge.

Reduced Risk: By testing your assumptions early, you minimize the risk of investing in a full-fledged product that may not have market demand.

Learning Opportunity: The MVP offers a valuable opportunity to gather real-world data and feedback, learning more about your users and their preferences.

Minimal Viable Product

MVP Development Process

- Define the Core Features
- Build a Simple Prototype
- Collect User Feedback
- Iterate and Improve

Planning

Feature Planning / Review

	few	some	most	all
ALWAYS	?	👍	👍	👍
OFTEN	✘	?	👍	👍
RARELY	✘	?	?	👍
NEVER	✘	✘	✘	✘

Product Features

Sport Tickets



Feature	Description
Event Listings	Users should be able to easily browse the events..
Search Functionality	Search for upcoming local sports events, filtering by date, location, or sport type
Seat Selection	Allow users to view a seating map and select specific seats for the event, providing a clear visual representation of availability.
Buy Now	A seamless, easy-to-use checkout process with payment options such as credit card, PayPal, or digital wallets like Apple Pay.
Mobile Ticketing	Enable digital ticket delivery that users can store in their mobile wallets, allowing for QR code scanning at the event venue.
Price Transparency	Ensure that ticket pricing is transparent, with no hidden fees during checkout to build trust with users.
User Registration and Login	Simple and secure user registration and login process, allowing users to save their event preferences, payment details, and previous purchases.
Event Details	Provide clear event details, including location, time, team information, and any important updates, ensuring users have all the information they need.
Ticket Management	A section for users to manage their tickets, view past purchases, and download or resend tickets in case they lose access.
Push Notifications for Event Updates	Send users push notifications for event reminders, updates, special promotions, and last-minute tickets.
Customer Support and FAQs	Offer a support center
FAQ	FAQ section, as well as easy access to customer support for resolving ticket issues or answering common questions.

Product Features

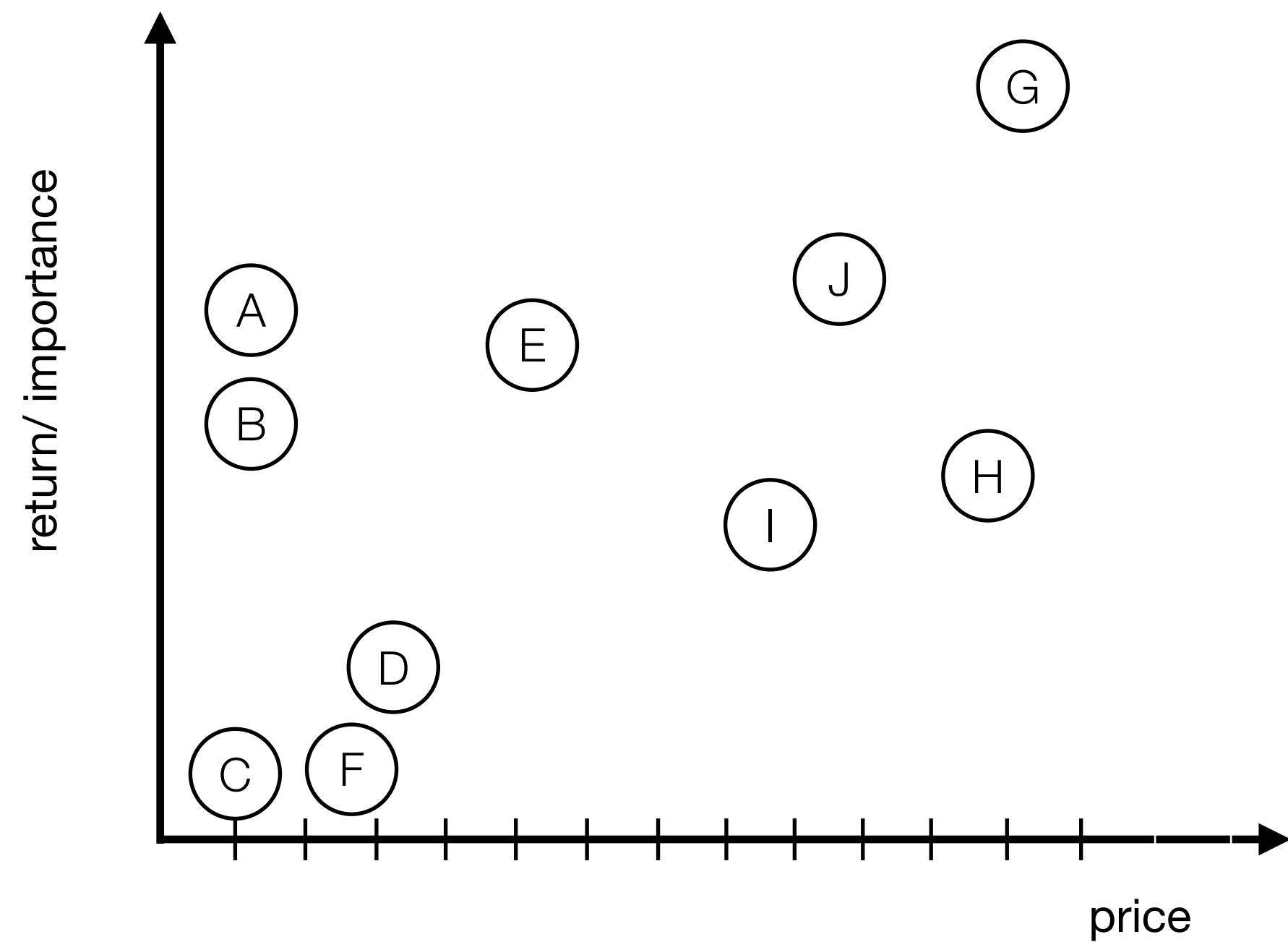
Sport Tickets - MVP features selection



Feature	frequency	# users	selection
Event Listings	often	most	👍
Search Functionality	rarely	some	?
Seat Selection	always	all	👍
Buy Now	always	all	👍
Mobile Ticketing	always	most	👍
Price Transparency	always	all	👍
User Registration and Login	always	all	👍
Event Details	always	all	👍
Ticket Management	often	some	?
Push Notifications for Event Updates	often	most	👍
Customer Support	rarely	some	?
FAQ	often	some	?

Planning

Budgeting a Development Plan



Budget: 10

A + B + E + D

	Feature	Cost
A	Event Listings	1
B	Search Functionality	1
C	Seat Selection	1
D	Buy Now	3
E	Mobile Ticketing	5
F	Price Transparency	3
G	User Registration and Login	11
H	Event Details	11
I	Ticket Management	9
J	Push Notifications for Event Updates	10
K	Customer Support	3
L	FAQ	5

Rolling out the Product

Stages of the Rollout

Team testing: Team testing ensures that the product is free of critical bugs, functions as intended, and is ready for more extensive testing.

Company testing - Alpha: In the alpha testing phase, the product is released to a select group within your company.

Restricted Beta: The restricted beta phase expands the testing group to a limited number of external users.

Beta - The beta phase broadens the user base, making the product available to a larger, yet controlled, group.

Testing the Usability


Strategies for User Testing

- **Usability Testing:**
 - Observe how users interact with your product, paying close attention to areas where they encounter difficulties or confusion.
 - This process can uncover usability issues, allowing you to make user-centric improvements.
- **A/B Testing:**
 - Compare different versions or features within your product to determine which ones perform better in terms of user engagement, conversion rates, or other key metrics.
 - A/B testing provides insights for optimizing the product.
- **Surveys and Feedback Loops:**
 - Gather structured feedback through surveys and questionnaires.
 - Create feedback loops to encourage users to report issues and share suggestions for improvements.

Testing

A/B testing

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Testing

Usability testing



Adding Features

Continuous Feature Development

- **Does it fit your vision?** Assess whether the proposed feature aligns with your product's long-term vision and goals.
- **Long term?** Will it remain relevant and valuable in the long run, or is it a short-term trend? Prioritize features that offer lasting value to your users.
- **For everyone?** Focus on features that benefit a significant portion of your user base.
- **Does it grow the business?** Determine if the new feature has the potential to attract more users, increase engagement, or generate additional revenue.
- **Can we support it?** Assess whether you have the resources, both in terms of development and customer support, to maintain and troubleshoot the feature.
- **Can we do it well?** Ensure that you have the expertise and technology required to implement the feature effectively.

Choosing the Right Features

Saying NO!

- **But the data looks good!** - Focus on data that aligns with your product vision and user needs.
- **It will only take a few minutes!** - While a feature may seem quick to implement, consider the broader impact on the product's complexity and user experience.
- **A customer is about to quit!** - Evaluate if the request supports your broader user base and vision.
- **We can just make it optional!** - Ensure that optional features truly enhance the user experience for a significant portion of your user base.
- **We have time to do this!** - Assess if the feature aligns with your product's immediate objectives.
- **Our competitor has it!** - Focus on differentiators and improvements that make your product stand out.

Feature Improvements

Enhancing User Experience Strategically

- **Deliberate Improvements:** Identify areas where your product can outperform competitors and invest in improvements to maintain your advantage.
- **Frequency Improvements:** Allocate resources to improve features that are crucial to fulfilling your strategic vision and driving user engagement.
- **Adoption Improvement:** Identify features that users don't frequently use but hold potential value. Develop strategies to promote these features, such as user education, guided onboarding, or highlighting their benefits.

Feature Improvements

Deliberate Improvements

The Netflix logo is displayed in a bold, red, sans-serif font. The letters are closely spaced and have a slightly irregular, hand-drawn appearance.

A streaming service like Netflix notices that its competitor is offering better recommendation algorithms.

Improvement investment:

- invest in enhancing their machine learning algorithms to improve personalized recommendations

Feature Improvements

Frequency Improvements



Instagram notices that users engage the most with stories.

Improvement investment:

- allocate more resources to optimize stories recommendation
- add interactive stickers, polls
- include music

Feature Improvements

Adoption Improvements



Slack has a feature for integrating external project management software that users are not fully utilising.

Improvement investment

- add onboarding tutorials
- educational webinars
- highlight integration to improve adoption

Conclusion

Charting Your Path to Product Development Proficiency

- Understanding Customer Behavior
- Product Conceptualisation
- MVP
- Rolling out the Features

Assignment

Develop your Product Plan and MVP

- Write out your product vision and concept (list the features, key consideration, benefits, UX and UI)
- Develop an MVP
- Create product roadmap