Designing engaging social sites and the engagement lifecycle

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Learning objectives

- At the end of the class, students should be able to:
  - Describe social design and list the challenges of social design for social software
  - Describe the framework for social design and why it is important to have one
  - Describe the AOF framework for social design
  - Explain the usage lifecycle
  - Describe design strategies for sign-up, return visits, ongoing engagement, collective intelligence and sharing
  - Explain funnel analysis

Social Design

- Social design is the conception, planning, and production of web sites and applications that support social interaction
- Ongoing, and will likely keep evolving
- Important because
  - Humans are innately social creatures
    - We exhibit social behaviour

Key aspects of social behaviour

- Humans are complex social animals who interact with each other for almost every need: food and water, shelter, technology, friendship, learning, fun, ritual, sport
- Humans organize themselves into groups, often belonging to multiple groups at the same time
- Groups can be as small as two people or as large as a religion, and can be for any purpose
- Groups can be made up of family, friends, acquaintances, or any set of people with something in common
- Humans act as both group members and individuals at the same time
- Humans behave differently in groups than they do individually, and vice-versa
- Humans play different roles in different parts and periods of their lives
- When humans are uncertain, they rely on social connections to help them out
- People usually compare themselves to those in their social group, not to society at large
- The people we know greatly influence how we act

Social Design

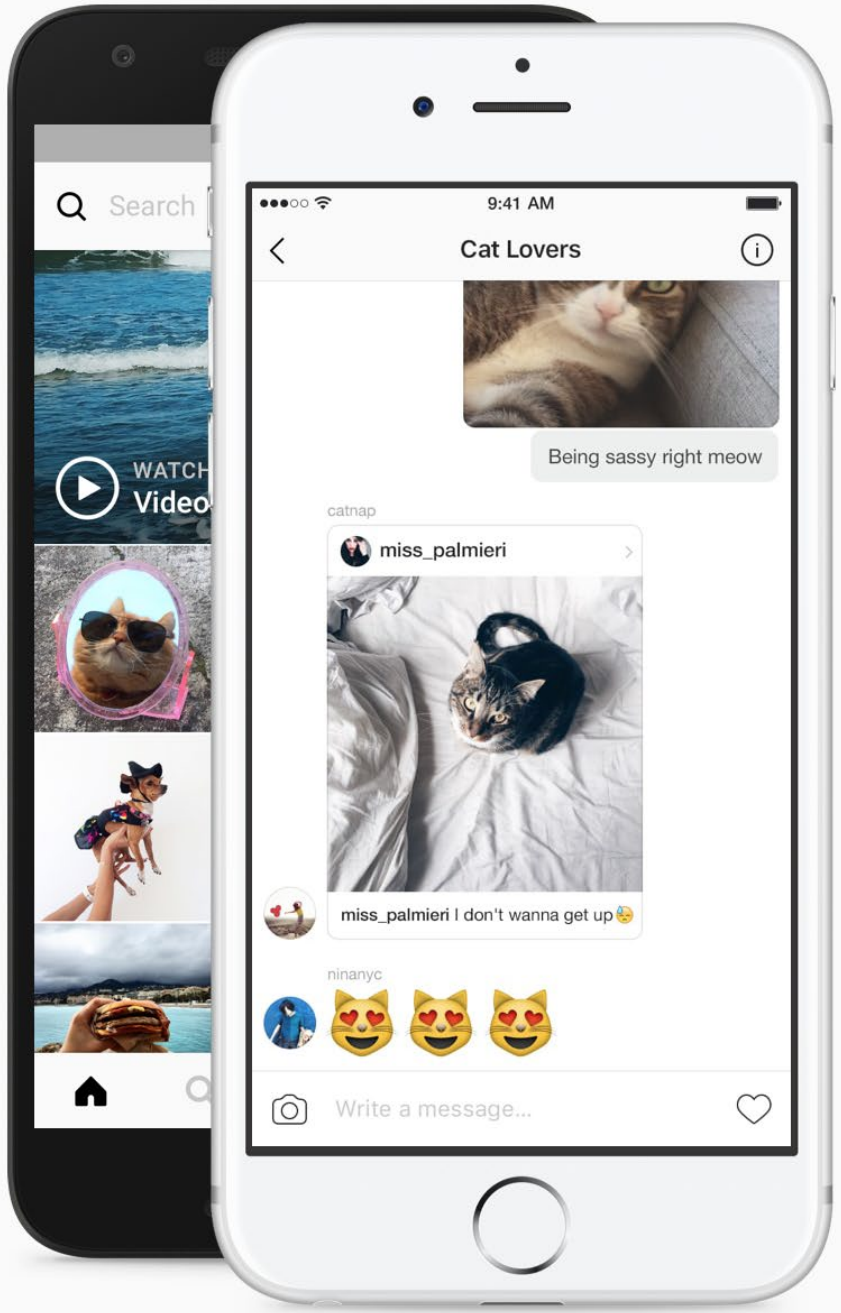
- Social design is the conception, planning, and production of web sites and applications that support social
- Ongoing, and will likely keep evolving
- Important because
  - Humans are naturally social creatures
    - We exhibit social behaviour
  - Social software is a *"forced move"*
    - We rely on social networks when making decisions making it *forced*
    - *Think of the last time you shopped online, did you rely on the reviews to make a decision?*
  - Social software is *"accelerating"*
    - Social software is trending upward: it is already the fastest growing and most widely used software on the web.
    - Social software has evolved from one-way conversations (read only) in the early nineties to two-way conversations (read-write) and finally to a many-way conversation (social)

Social design

- Early social design concepts about human behaviour (Sigmund Freud)
  - We act according to our personality; designs should be personality based
  - Our personalities/ inborn tendencies dictate our behaviour
- Recent research (Kurt Lewin)
  - Human behaviour is a function of personality and environment
  - Environment can be physical
    - Physical environment dictates how we behave; when it's cold outside we wear a jacket
  - Environment can be social
    - The action of others affect how we behave
  - Environment can also be a social software (online social media)

Challenge of social design for social software

- To design interfaces that support the *current* and *desired* social behaviour of the people who use them
  - If the interface is too confining, people won't use it.
  - If the interface is too flexible, people won't know how to use it.
  - But the current and desired behaviour of people change frequently
- Find a mid-point to create powerful social software that
  - supports people and their personality and
  - the social environment and the groups they belong to



Instagram

Phone number, username, or email

Password

Log In

OR

Log in with Facebook

Forgot password?

Don't have an account? Sign up

Get the app.

Download on the App Store

GET IT ON Google Play

Framework for social design

Why we need a framework

- “Feature creep” problem
- Happens when there is a lack of sustained focus on what’s most important
- Building too many features instead of deciding on a few core ones
- Software ends up becoming too difficult to use as many features compete with each other
- Can help focus a team on what’s most important
- Helps answer the questions
  - “What is the primary activity our software is supporting?
  - What features do we need to effectively support that activity?
  - What features can we leave out?

- Think of the social media platforms you use frequently. Which ones do you think suffers from too many features? Why?

Reasons for feature creep

- Competing interests (between marketers, engineers and management)
- Political infighting
- Lack of audience clarity
- Fuzzy strategy
- No vision for success

The AOF method

- Prioritization scheme for designing social web applications
- AOF = Activities, Objects, Features
- **Focus on the primary Activity**
  - what is your audience doing?
- **Identify your social Objects (noun)**
  - the objects that people interact with while doing the primary activity
- **Choose your core Feature set (verb)**
  - what are the actions people perform on the objects and which are important enough to support in a web-application

Focus on the Primary Activity

- Have a deep understanding of the specific activity you're supporting with your design.
- Know all the steps taken in performing the activity, the decisions people need to make at each step, the influencing factors in those decisions, and what types of roles people are in when making them
- Most important question is not "who is using your software?" but **"what are the people using your software doing with it?"**
- Only one activity is usually primary
  - The most successful applications support one specific activity
- Think of the commonly used social media platforms. Do they support only one main activity? (Flickr, Facebook, Instagram, YouTube, Netflix

Identifying the Primary Activity

- The applications people find most compelling allow them to excel at a single activity
  - Do you agree?
- Identifying it –ask yourself "What do people have to do in order **for us** to be successful? "
  - Purchase goods (Amazon), choose movies to watch (Netflix), upload /watch videos (YouTube), share pictures (Flickr)
- User Goals, Activities and Tasks
  - Goals – end conditions people are striving, e.g. purchasing items on Amazon
  - Activities – Set of tasks people do to achieve their goal, e.g. Shopping
  - Tasks – Individual functions that make up a set of activities, e.g. searching for product, comparing products, adding to shopping card, paying…
  - Focus on larger activity instead of tasks, e.g., instead of focusing on task of "purchasing goods", focus on the activity of "shopping"
- Methods used to discover the details we need to know about activities:
  - Interviews, usability testing, on-site observation, observing yourself, listening to people…

Identifying the Primary Activity

Service	Goals	Activities	Tasks
Amazon	Purchasing goods	Shopping	Adding to shopping cart, performing a product search, comparing products
Netflix	Entertainment	Watching movies	Rate movies, browse movies,
Monster	Making money	Finding a job	Searching for a job sending a resume
Flickr	Staying up to date with family	Sharing photos	Uploading a picture, sharing photos

Porter, Joshua. Designing for the Social Web (p. 27). Pearson Education

- Let's think about Facebook, Instagram, YouTube, WhatsApp, Snapchat, TikTok. Can we differentiate between Goals, Activities and Tasks?

Identify your Social Objects

- Social objects are the objects that mediate social activities
- Huge part of software design is managing objects and the social interactions that happen around them
- In social networking, a huge focus is usually on networking and not the social objects that connect us together
- Social networks are not only made up of people but the objects that connect people.
- E.g. Flickr – Photos; Amazon – Products, YouTube – videos
- Can we think of the social objects in Facebook, Instagram, Snapchat, TikTok. Can you think of *uncommon* social objects and where they are used?

Identify your Social Objects

- Social objects can be real-life artifacts
  - Facebook – actual book given to Harvard students containing bio of incoming freshmen
  - Amazon wish list – Modeled after an actual wish list people make and share with others
- Social objects can be abstract
  - They don't have to have an exact representation of physical objects
  - *Jobs* and *dates* are abstract but are objects in LinkedIn and Monster
- Focus on designing for social objects

Choose your core Feature Set

- Core feature set – set of possible **actions** that people can do in your application
- Define the **activities** that go on the application
- Features are usually actions – verbs
- See this phase as *"finding your verbs"*
- Could be *personal* and *social*
- Collections of objects people make can be used to create features

Nouns (objects)	Verbs (Actions)
Videos	Play, stop, edit, store, upload, share, comment on, embed in blog
Articles	Upload, read, archive for later, quote, link to, share, comment on, annotate
Photos	Upload, store, view, add to favourites, link to, share, comment on, tag, share
Books	Read, add to cart, purchase, add to wish list, share, add to registry, comment on, rate, discuss, review

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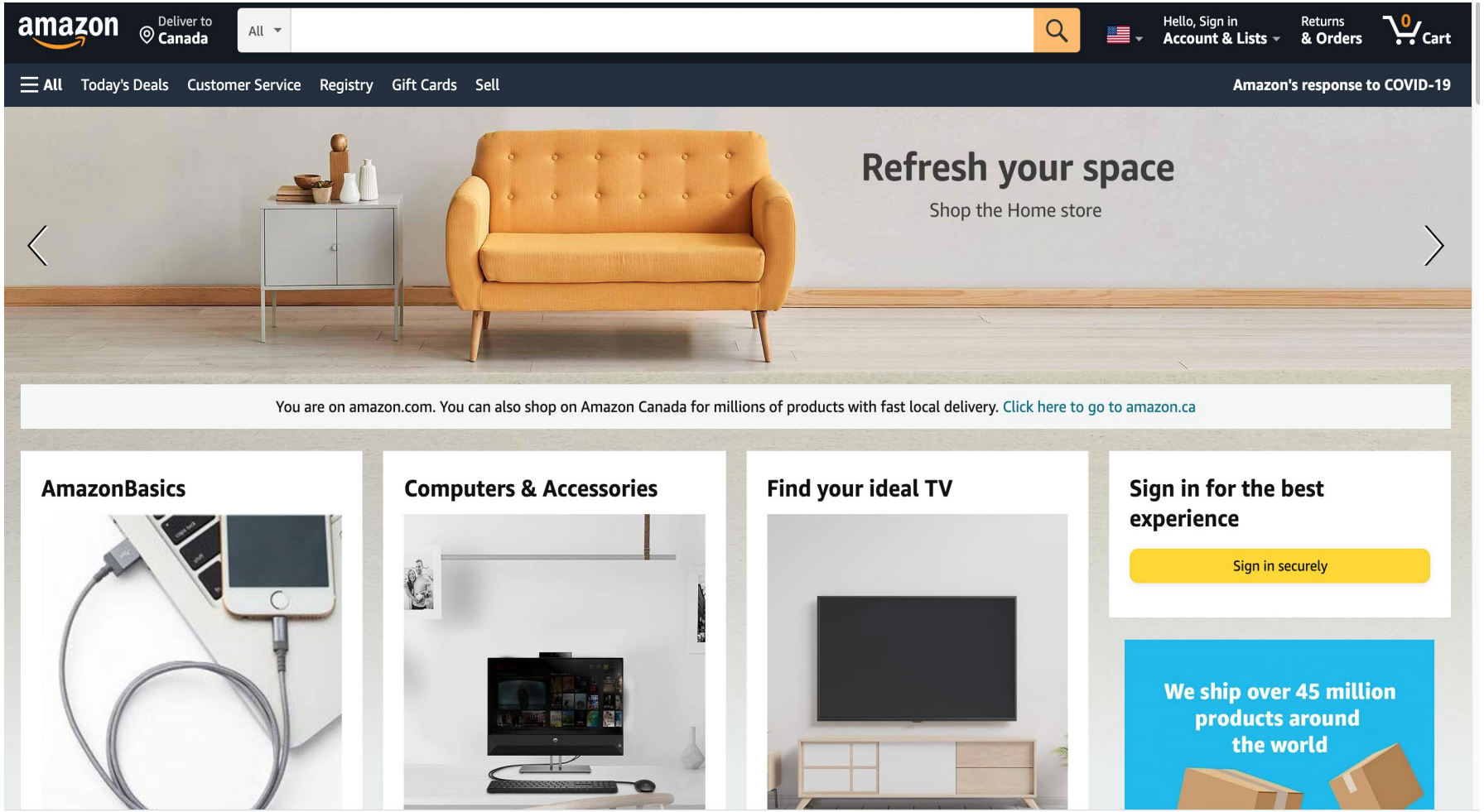
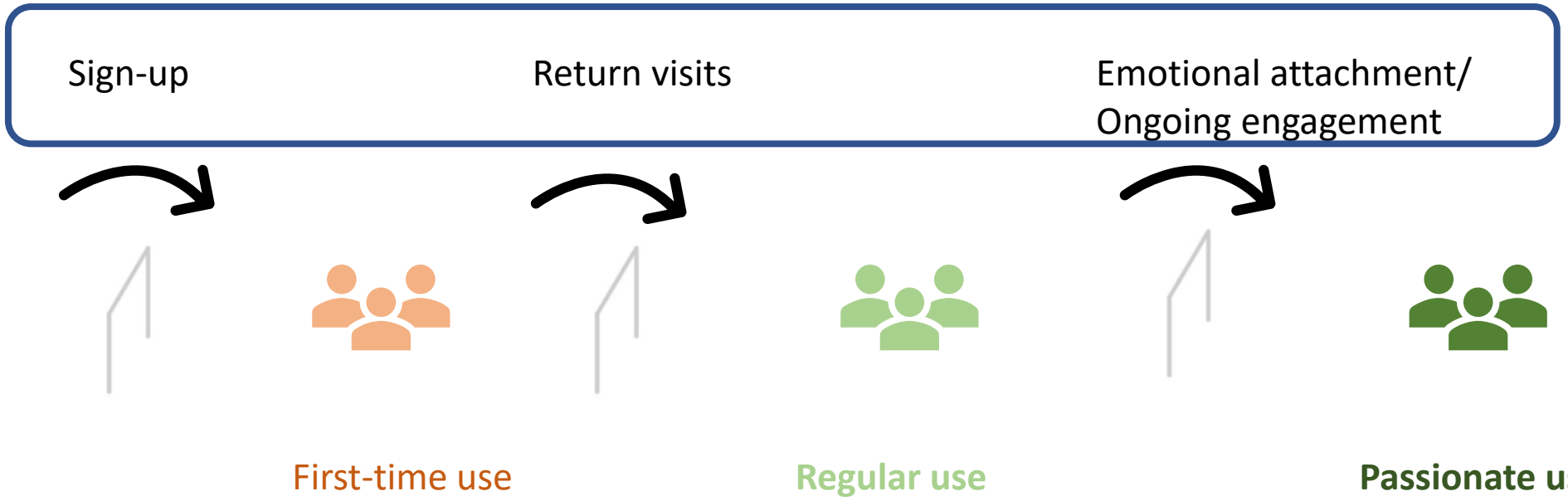
Amazon’s social features



- Activity, objects and features are now in place
- How do you motivate people to actually use the site you will create?

Usage Lifecycle

3 main problems
of social software



Role of designers at each stage

Stage	Design Goal	Role of Designer
Interested Use	Sign-up	Selling
First-time Use	Positive first experience	Teaching
Regular Use and Passionate Use	Engagement over time	Enable & Support

Usage lifecycle
Sign up hurdle

The sign-up problem

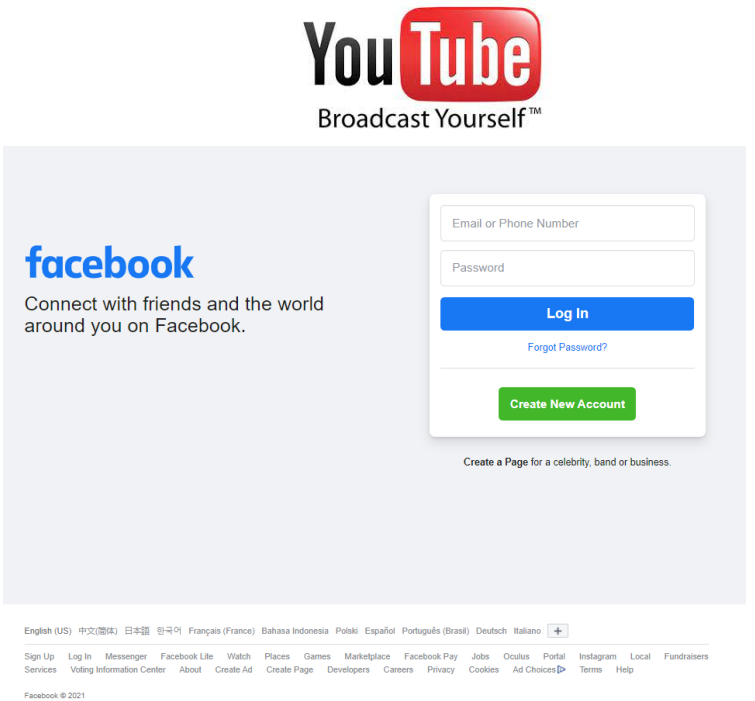
- People seem interested but are not motivated enough to give it a try
  - How is the software valuable to me?
  - I already have software to help me with this
  - I don’t have time to try anything new
  - My team is already using software that does that
  - What does this software do exactly?

Usage lifecycle
Sign up hurdle

Design for sign-up
Sign-up framework

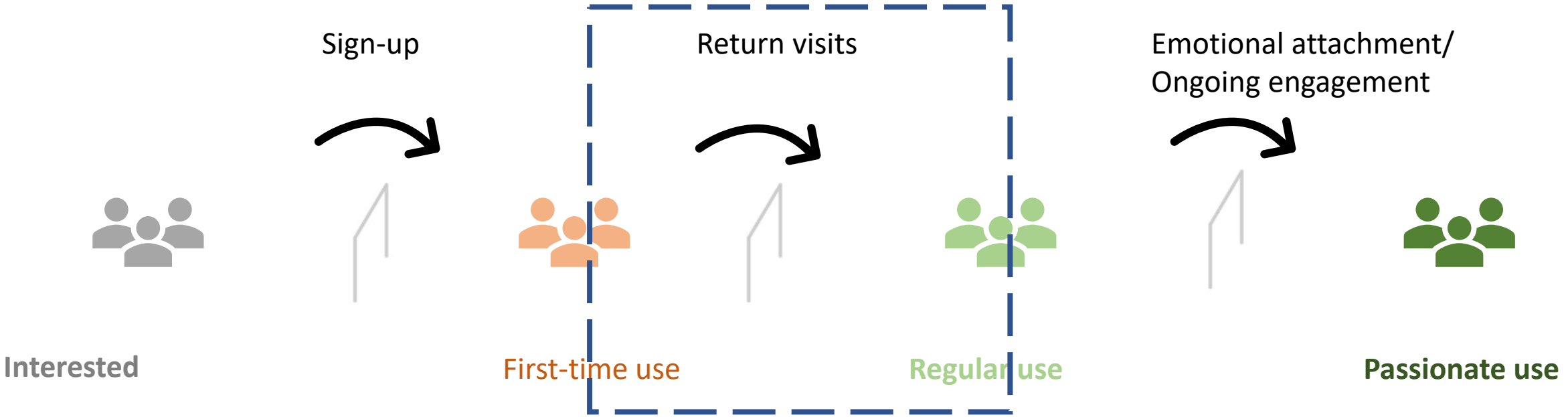
- Create a sign-up framework. It could contain:
  - An elevator pitch or tagline that explains the service you are providing
  - Graphics or illustrations that show how your software works
  - Carefully crafted copywriting that describes your software
  - In-depth feature tour or feature pages
  - Video or screenshot showing actual use
  - Get people started using the software as early as possible
  - Don’t make account creation a requirement until necessary
  - Evidence of other people using the software successfully
- A good sign-up framework should:
  - Clearly communicate the capabilities of the software
  - Allow a person to decide if the software is right for them
  - Answer any outstanding questions people have about the software
  - Confirm or refute any preconceptions people have about the application
- Role of designers at this stage is selling

- Let’s look at https://ca.nextdoor.com/



Usage lifecycle
Return visits hurdle

Return visits problem



- People are giving your software a try, but they don’t know what to do or how to get going.
  - I’m not sure what to do now
  - I set up my profile, now what?
  - I don’t want to learn something new. I need to start immediately
  - Where are my friends?

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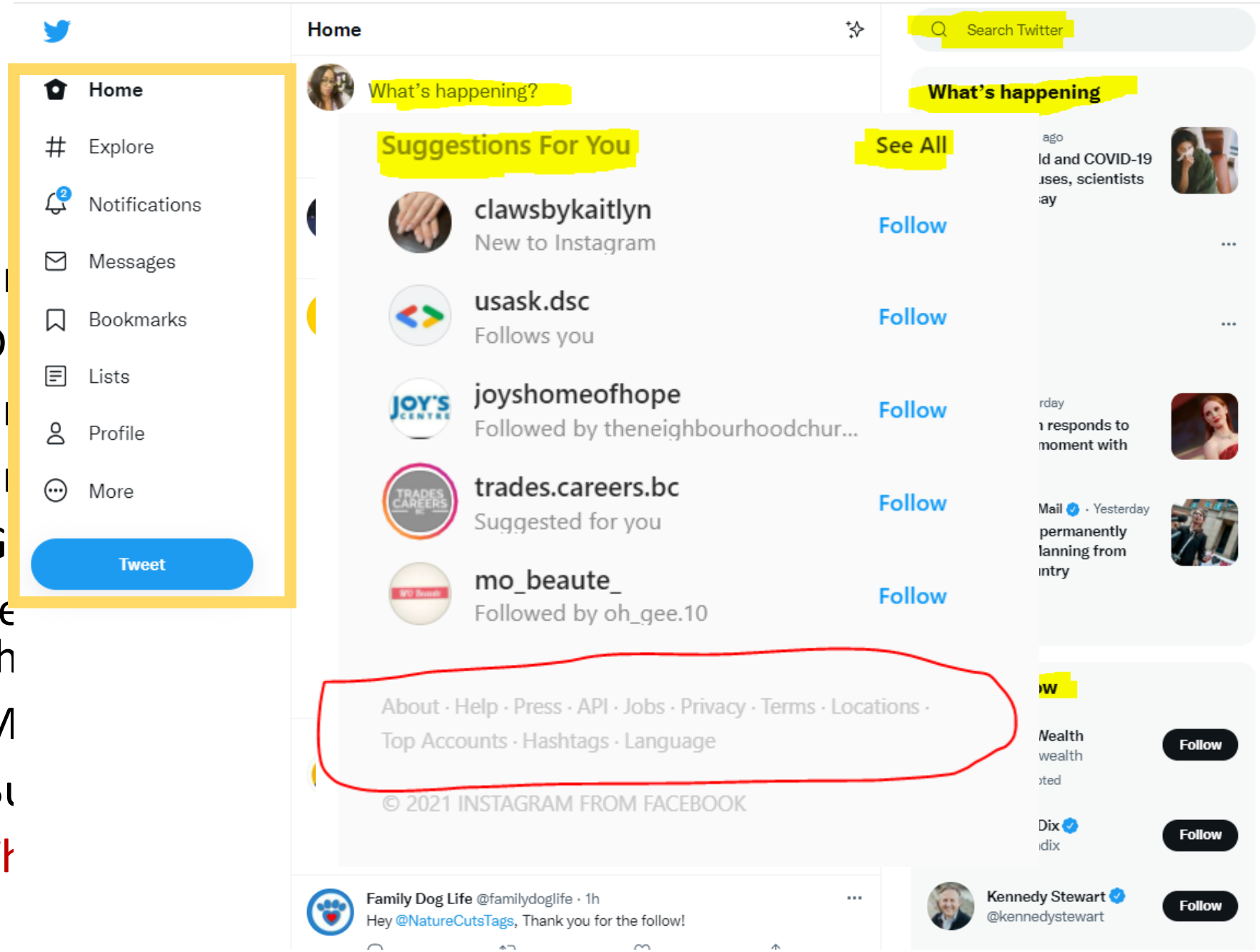
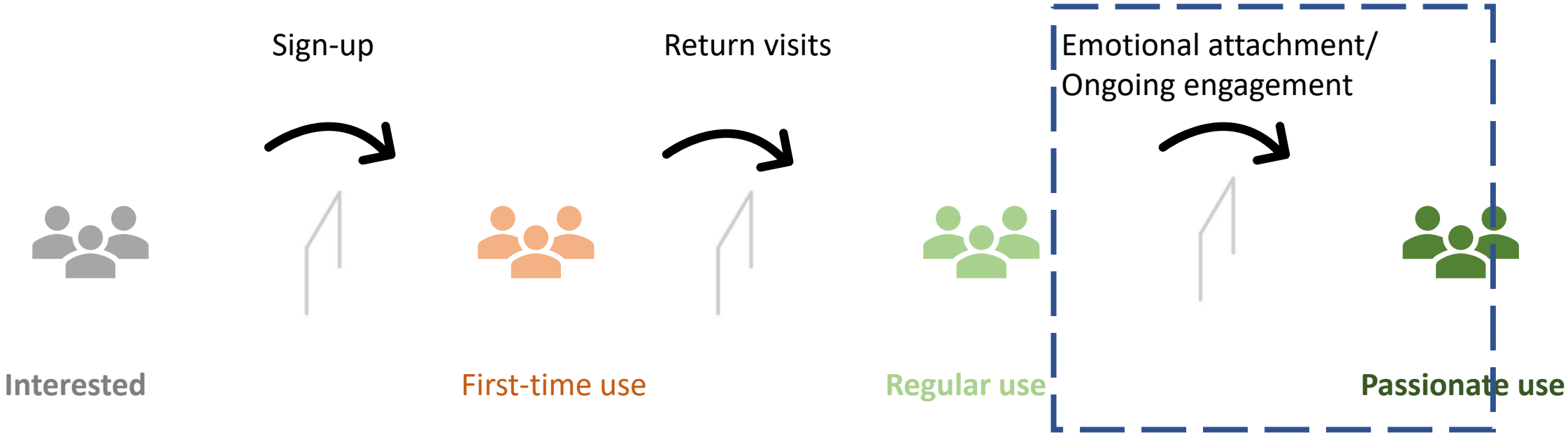


Usage lifecycle
Return visits hurdle

engage

Ongoing engagement problem



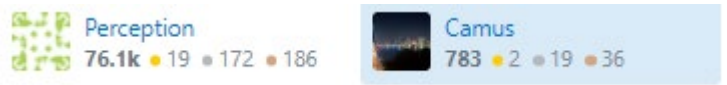
- This product doesn’t do what it says it does
- I kind of forgot about it
- I really don’t see anything compelling me to come back
- None of my friends are here
- I like my current one better

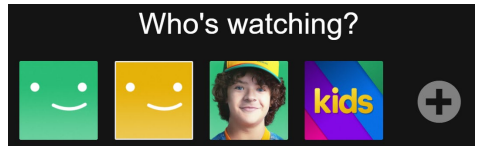
Design for ongoing engagement

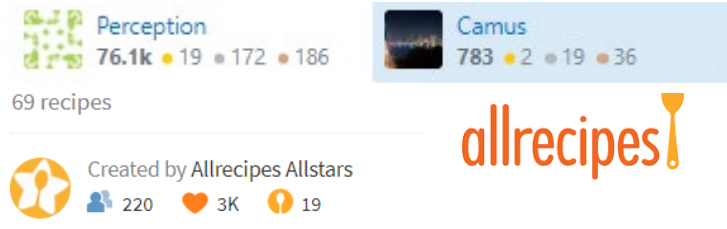
- Motivation is key at this stage; design for motivation
- Identify the right motivations to use
- Create interfaces that support and encourage those motivations
- People are motivated for different reasons.
  - Writing Amazon reviews could be because of the feeling of reciprocity – one recognizes the values they get from reviews so they want to give back.
  - It could also be because of a sense of efficacy – I feel the urge to tell others about my experience so I can help others make a tough decision
- Key is to identify what motivates your users and design your application to support them

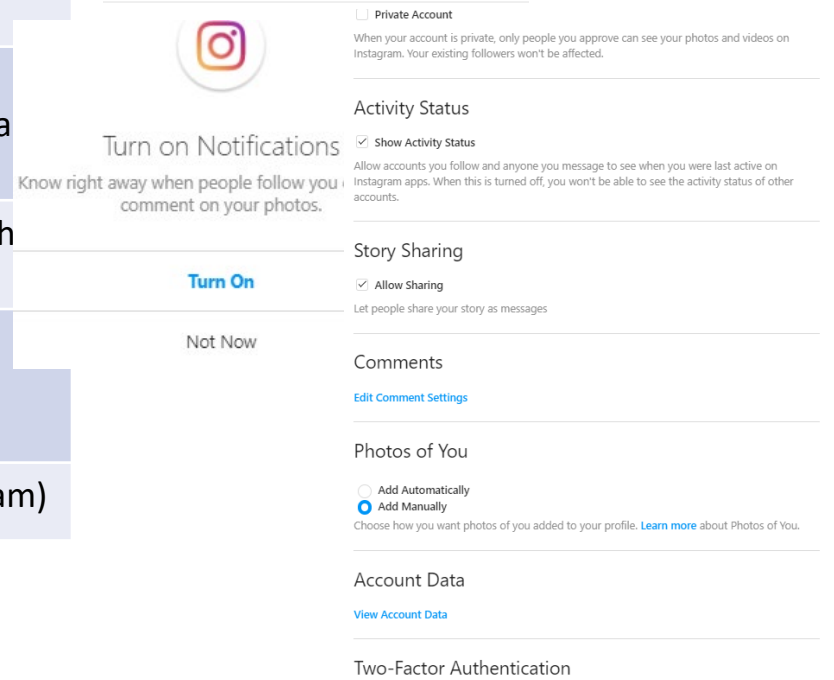
List of common motivations

Motivation	People use social media…..	Possible design solution
Identity	To manage their identity within their social groups	Enable identity management (profile pages, bio, demographics, accomplishments – dependent on platform
Uniqueness	Because they feel their contribution is unique and valuable	Customize the experience to the user. Ex. Netflix. Recommendations are dependent on user
Reciprocity	Because they want to give back, expect others to do same	Common on sites where you have to rate/review items. People can review/rate others and can be rated too
Reputation	Because they want to build reputation, improve relationship with others	Number of friends, number of followers, number of reviews written, ratings of reviews written, number/quality of comments, number of firsts, member since, elite status
Sense of efficacy	To do good work and have a positive effect	Focus on elements that provide feedback to people about how valuable their contribution was (upvoting a review on Amazon, upvoting comments, posts)
Control	To control how their information is shared and displayed	Tools that users can use to control their activities on th site (privacy settings, block users, turn off comments)
Attached to a group	To find like-minded people who share the same values, activities	Ability to create specific groups, join groups, leave groups, moderate groups (ex FB groups, subreddit on Reddit, any other examples?)
Fun	Because it is fun to participate	Fun features such as filters, emojis (Snapchat, Instagram)







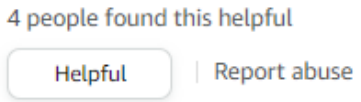


Design for collective intelligence

- Collective intelligence is the intelligence of a group instead of an individual; to aggregate the individual actions of many people in order to present the best/most relevant content
- Works in complex adaptive systems (a system composed of interconnected parts which as a whole is continuously changing)
- Examples include:
  - Amazon. Aggregates the collective opinion of people reading and writing reviews to determine which reviews are helpful
  - Netflix. Aggregates the collective ratings of millions of people to provide better recommendations
  - Wikipedia. Aggregates collective knowledge of editors to provide a single, authoritative encyclopedia

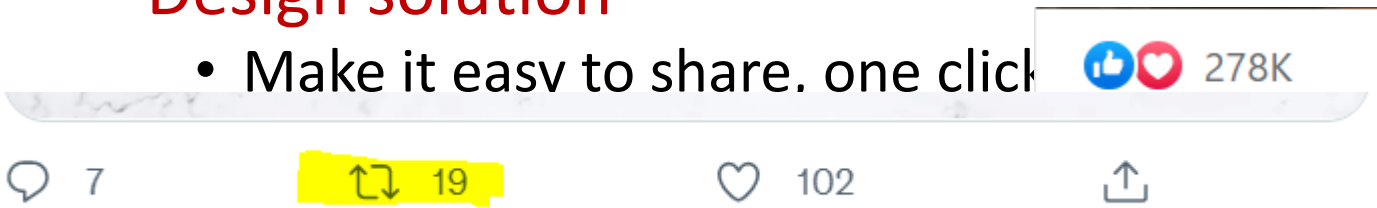
How complex adaptive systems work

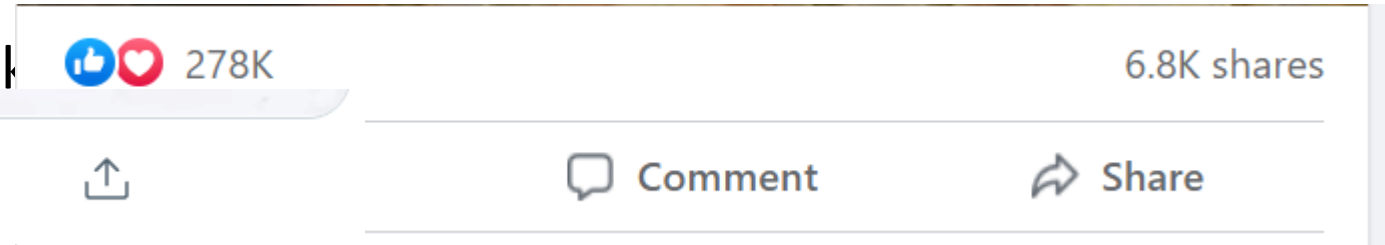
- Record the actions of people using the system and look for patterns
- Three main steps:
  - Initial action.
    - Content is submitted into the system (E.g., on Amazon, someone writes a product review, on Stack Overflow, someone posts an answer/question)
  - Aggregate and Display.
    - Content is aggregated and displayed for others to see and act on
    - Display is based on the goals of the site & algorithm (e.g. most recent)
    - Aggregation can be based on chronological order, popularity, ranking, relevance
  - Feedback.
    - People using the system can give feedback on the content to assess its quality, e.g., "helpful" on Amazon
    - Feedback can be positive or negative
    - Feedback can be implicit (e.g. watching a recommended movie on Netflix) or explicit (vote review as "helpful" on Amazon
    - The system re-aggregates and re-displays content (feedback loop)



- Design solution
  - Make feedback easy
  - Leverage points or incentives to make people give feedback

- Building feature … peal to the "sharers"
  - Sharers adverti…
- We share to enj… ion for others, improve our soc…
- Sharing can be:
  - Implicit. When … bation (Twitter notifies my foll… s new job posts with followers …
  - Explicit. Sharing …
- Design solution
  - Make it easy to share. one click …





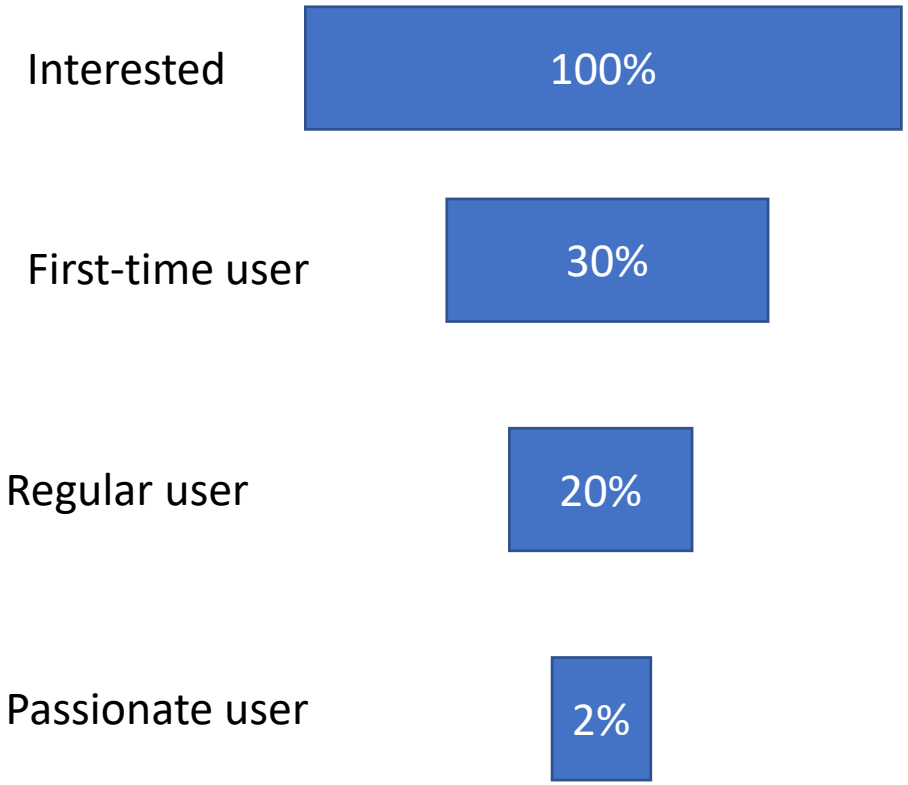
- Activity, objects and features are now in place
- Motivation strategies are now in place to move people along the usage lifecycle from interested user to passionate user
- How do you know if it’s working?

The funnel analysis

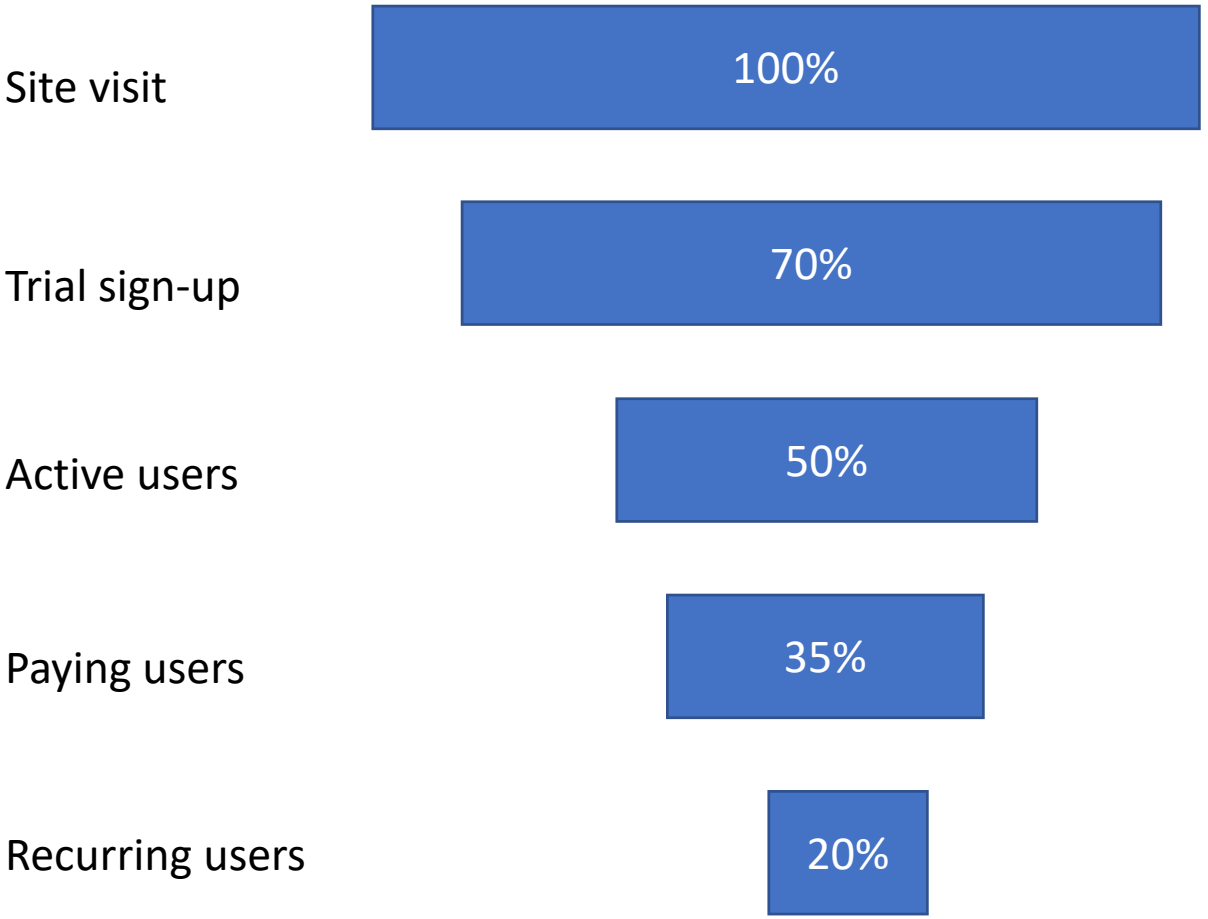
- A simple analysis tool to assess the health of your website
- Can show how good your site is at moving people along the usage lifecycle from interested users to passionate users
- Of the people who are interested in your application, only some will use it for the first time
- Of those that use it once, only some will continue on and use your site regularly
- Of the regular users only some will become passionate users.
- The passionate users often make up only 2% of the original, interested group
- Acknowledge that you will have leaks at every level

The funnel analysis

Conversion funnel for the major milestones in the progression of use



Customized for a website that allows for a trial period with upgrading to paid membership



Metrics for analysis

Metric	What this means	How to measure
Visit	Visiting the site for the first time	Analytics program (e.g. Google analytics)
Trial sign-up	Confirming a trial registration	Analytics program (e.g. Google analytics)
Active users	Logging in a certain number of times (e.g. five a month)	In-house analytics
Paying users	Completing a payment transaction	In-house analytics
Recurring users	Creating several payment transactions	In-house analytics

- It is common to run in-house analytics for lower levels of the funnel
- For in-house analytics, run periodic reports on your database by creating queries that show the information you're looking for

Discovering what needs to change

- Create a baseline. Funnel data for the current design before making any changes
- Choose a level of the funnel to improve. Address the glaring leaky levels, starting at the top of the funnel. Look for numbers that seem rather low/high
- Investigate level for leaks. Analyse the interface, watch people use the app., talk to people in the community or the manager
- Make design changes. Keep changes small to be able to tell if there is any effect
- Measure change and compare to baseline
- Rinse and repeat. To improve your site even more, refine the funnel to show smaller steps

The big picture

- Idea for a social application
- What are the Actions, Objects and Features
- What design strategies will you adopt to move people through the usage lifecycle
  - Design for sign up
  - Design for return visits
  - Design for ongoing participation
  - Design for collective intelligence
  - Design for sharing
- Measure success using Funnel analysis

Summary

- Social design and list the challenges of social design for social software
- Framework for social design and why it is important to have one
- AOF framework for social design
- Usage lifecycle
- Design strategies for sign-up, return visits, ongoing engagement, collective intelligence and sharing
- Funnel analysis

Acknowledgement

- Designing for the Social Web, Joshua Porter (New Riders, 2008) and the tutorial slides “Designing for Social Traction” (http://bokardo.com/talks/designing-for-social-traction.pdf)
- Some of Prof. Julita Vassileva’s lecture notes (with permission)