

Social Media Analytics - CS-EJ5621

Lecture 2

Contents of the lecture

- Few course practicalities
- Social media affordances and motivations
- Features of social media platforms
- Attributes of social media data
- Formulating research question(s)
- Ethical considerations

Course practicalities

- Quiz 1
- Readings
- Twitter/Google accounts
- Twitter developer account

<https://developer.twitter.com/en/apply-for-access.html>

- Start thinking about case projects

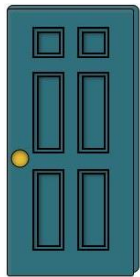
Social media affordances and motivations

Affordance

- **Coined by James Gibson in 1966**
- *“The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill”*

Affordance in design

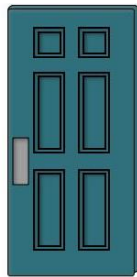
- Property of an object that prompts user to perform a certain action
- Relationship between an object and humans
- Clues/indicators/hints - how and what to do
- Features **afford** a certain UX



↻ TURN



↓ PULL



↑ PUSH



Social affordances of social media

Affordances	Twitter	YouTube	Facebook
Social Connectivity			
Connecting	– Follow	– Add Friend – Subscribe	– Add Friend – Like Pages/Community Pages
Connection Search/ Suggestions	– Browse Interests – Find Friends – Recommendations – Search	– Recommended Channels – Search Channels	– Connection Search – Friend Finder – People you may know – Recommended Pages
Connection Lists/Groups	– Lists	-	– Join Groups/Networks – Friend Lists
Social Interactivity			
Asynchronous Communication	– @Mention/@Reply – Direct Message – Tweet/Retweet – Automated Tweet	– Bulletin Posts/Channel Comment – Video Posts – Video Comment – On-site messaging system	– Comments/Posts/Notes – Messages (Text/Video) – Pages/Community Pages/Groups – Like/Tag/Places/Events
Synchronous Communication	-	-	– Chat/Group Chat – Video calling
Rating/Liking	– Favorite	– Favorite – Like/Dislike	– Like
External Interactions	– Facebook Application – Share/Link (External)	– Auto-share – Share/Embed Content	– Share/Link (External)
Profile Management			
Manage/Edit Profile	– Avatar – Bio – Design – Handle/Real Name – Profile Picture	– Channels – Homepage – Hometown/Location – Insight – Subscriptions	– Add Applications – Comments/Messages/Posts/Notes – Join Pages/Groups/Networks – Profile Photo/Information/Content – Like/Tag/Places/Events
Profile Updates	– Email Notifications – RSS Feed/OAuth	– Email Notifications – YouTube Newsletter	– Email Notifications – Internal Notifications
Location Tagging	– Geotagging/Geolocation	– Video Location	– Places
External Profile Management	– @ Anywhere – Buttons/Widgets – Connections (applications)	– Auto-share – Embed/Share Content – YouTube Direct/Facebook/Twitter	– Instant Personalization – Linking to Twitter/External Login – Social Plugins
Mobile Application	– Mobile Application – Mobile: Short Code/Sleep Time	– Mobile Application	– Facebook Mobile Texts – Mobile Applications

Content affordances of social media

Affordances	Twitter	YouTube	Facebook
Content Discovery			
Interaction/Community Content	<ul style="list-style-type: none"> - @Mention/@Reply - Lists - Tweet/Retweets/Top Tweets 	<ul style="list-style-type: none"> - Annotations - Bulletin Posts 	<ul style="list-style-type: none"> - Applications - Comments /Messages/Posts/Notes - Pages/Community pages/Groups
Content Search	<ul style="list-style-type: none"> - #Hashtags/ Trends - Browse Interests - Searches/Saved Searches 	<ul style="list-style-type: none"> - Search - Browse 	<ul style="list-style-type: none"> - Search
Social Awareness Streams/Content Feed	<ul style="list-style-type: none"> - Timelines (Tweets/Retweets/@Replies/Favourites/Lists) 	<ul style="list-style-type: none"> - Charts/Featured/ Spotlight/Trend - Browse/Category/Topics - Recommendations/ Suggestions - Subscriptions 	<ul style="list-style-type: none"> - News Feed - Related Posts - Wall
External Sources of Content	<ul style="list-style-type: none"> - RSS Feed - Widgets 	<ul style="list-style-type: none"> - Citizen Tube - Creators' Corner Blog - YouTube Facebook/Twitter 	<ul style="list-style-type: none"> - Share/Link (external) - Social plugins
Content Sharing			
Interactions/Community Content	<ul style="list-style-type: none"> - #Hashtags - @Mention/@Reply - Favourite - Tweet/Retweet - Promoted/Auto Tweet 	<ul style="list-style-type: none"> - Annotations - Bulletin Posts - Description - Favourite - Live-Streaming 	<ul style="list-style-type: none"> - Applications - Comments /Messages/Posts/Notes - Like/Tag/Places - Pages/ Community pages/Groups - Photos/Videos
External Sources of Content	<ul style="list-style-type: none"> - Buttons/Widgets - Applications - RSS Feed/OAuth 	<ul style="list-style-type: none"> - Share/embed content - Auto-share 	<ul style="list-style-type: none"> - Share/Link (external) - Social plugins
Content Aggregation			
Aggregated Content/Lists via SAS	<ul style="list-style-type: none"> - #Hashtags/Trends/ Top Tweets - @Reply/Favorites/ Retweet - Lists - Saved Searches - Timeline 	<ul style="list-style-type: none"> - Annotations - Browse/ Category/Topics - Charts/Featured/ Spotlight/Trend - Favourites/Playlists - Recommendations/Suggestions - Subscriptions 	<ul style="list-style-type: none"> - Applications - Comments /Messages/Posts/Notes - Like/Tag/Places - Pages/Community pages/Groups - News Feed/Wall - Photos/Videos
External Aggregation of Content	<ul style="list-style-type: none"> - Buttons/Widgets - RSS Feed/OAuth - Applications 	<ul style="list-style-type: none"> - Citizen Tube - YouTube Facebook/Twitter 	<ul style="list-style-type: none"> - Share/Link (external) - Social plugins

Gratifications

- **Why someone uses a medium (social media)?**
- **Understanding motives**
- **Seeking information, social interaction, expressing opinions, entertainment, passing time, surveillance**

Facebook photos gratifications

- Affection
- Attention seeking
- Disclosure
- Habit
- Information sharing
- Social influence

Instagram gratifications

- **Social interaction**
- **Archiving**
- **Self-expression**
- **Coolness**
- **Creativity**
- **Surveillance**

Pinterest gratifications

- Fashion
- Entertainment
- Organization
- Virtual exploration
- Creative projects

Features of social media platforms

Features of social media

- **Hashtags**
- **Comment**
- **Like**
- **Favorite**
- **Share**
- **Follow**
- **Up vote**
- **Rating**

Attributes of social media data

Attributes of social media data

- **Big (volume, velocity, variety)**
- **Vague/dirty/incomplete**
- **Viral**
- **Valuable**
- **Always on**
- **Sensitive**
- **Non-representative**
- **Access limits**
- **Drifting opinions**

Formulating research question

What is a research question

- A question (or set of questions) around which the planned research will be centered
- Focused: defines and limits the research scope
- Clarity: necessary details for others without additional explanation
- Conciseness: expressed in fewest possible words
- Complexity: not a simple yes/no answer, or overly difficult
- Arguable: beyond known facts, potential answers that can be debated

How to formulate a RQ (stepwise)

- Topic of personal interest
- Preliminary topical research
- Audience
- Ask questions to yourself
- Evaluate your question(s)
- Revise and refine question(s)
- Initiate research

Sample RQ's

RQ1: How social media impacts us negatively?

- All social media?
- Us – everyone on planet earth?
- All negative impacts?
- Negative impacts are proven?

RQ2: Does loneliness lead to Facebook addiction?

- Clear
- Precise

Sample RQ's

RQ1: How is sexual abuse being discussed on social media?

- **Unfocused**

RQ2: How males are reacting to #MeToo on Twitter?

- **Focused**

Sample RQ's

RQ1: How many users tweeted about #MAGA2020 during last 30 days?

- Too simple

RQ2: How the sentiments about #MAGA2020 have evolved since its inception?

- Appropriately complex

Ethical considerations

Ethical/legal issues

- **Personal, identifiable, sensitive information and content** (name, date of birth, occupation, photos, videos etc.)
- **Use of content may be considered private by the users**
- **SM platforms different content sharing policies**
(Snapchat > private, Facebook > technically semiprivate, Twitter > technically public)
- **API data (personal data) across different countries have a different status**
- **Interpretation of sensitive data is different across the globe**
(religion, sexual orientation, and politics)

Ethical practicalities

- **Respect the users**
- **Respect the law**
- **Benefits vs. risks**
- **Informed consent**
- **Anonymization**
- **Institution review board (IRB)**
- **Safe principles** (people, project, settings, data)

Next lecture – 25.09.2020

- Twitter basics
- Anatomy of a Tweet
- Data collection and storage
- Case project proposals

Thank you