USER-CENTERED DESIGN CSP 588 Homework-2

Name: Satyam Rajput

(A20537375)

srajput3@hawk.iit.edu

Homework-2

Analyse social interaction tools:

1. Specify goals for social interactions in terms of objective UX metrics

We know that if we talk about the goal for **social interaction w.r.t UX** metrics the **social model is the least commonly used model**

- Need it only when social interactions and work culture are complex and problematic.
- Communal aspects of the workplace
- Influences, mindsets, feelings, attitudes.
- Philosophy, ambience, norms of behaviour, influences, attitudes, and pressures.
- Concerns of individuals

Considering the setting of goals for social interactions in terms of objective UX metrics is crucial when considering social interaction tools from the perspective of user-centred design.

Considering online social interaction apps like Messengers and Social platforms as an example

1. Engagement Measure:

- The average length of a session
- Number of interactions in a session

Objective:

Increase average session duration by 15%

- Increase interaction in each session by 20%.
- Return rate i.e. how often the user returns to the platform.

2. Effectiveness of Communication:

- Response time, or the speed at which users get answers to their queries.
- Communication clarity (e.g., comprehension of messages given).
- Level of involvement (e.g., debates, meaningful chats).

Objective:

- Increase readability scores by 10%
- Reduce average time to understand new features or updates by 20%

3. Utilisation

- The percentage of tasks completed (such as leaving a comment or sharing an article).
- Error rate (misspelt remarks, unsuccessful uploads, etc.).
- Navigability (e.g., time taken to locate a certain feature or profile).

Objective:

- A 10% increase in task success rate
- Cut the mistake rate in half.

4. Customer Satisfaction

- Customer Satisfaction Score and Net Promoter Score
- The chance that users would suggest the platform to others is measured by the Net Promoter Score
- Input from users (by reviews, ratings, and surveys).
- User retention rate, or the percentage of users that stick with the platform over time

Objective:

• In nine months, obtain a CSAT score of 85% and a minimum NPS of 40.

5. Performance:

- The time it takes for various features and content to load.
- The platform's responsiveness (e.g., interaction latency, video buffering).
- Scalability, or the capacity to support an increase in users without experiencing a drop in performance.

6. Security and Privacy:

- User confidence in data privacy.
- Total number of security and privacy issues recorded.
- Adherence to data privacy laws (such as the CCPA and GDPR).
- 2. Analyze any current social media tool:
- a) Develop a user persona for the typical user

Considering **LinkedIn** as a **Social Media tool** for analysis And **writing** about the **experience** of **Students** and **working professionals** considering **myself** as one and **analysing LinkedIn**.

Currently, I am pursuing a **Master's degree in Computer Science.** I have a good level of technological proficiency and understanding; and the ability to work with a variety of digital tools and platforms. I recognise the **value of professional growth** and **networking** in the IT sector.

Goals and Motivation

Professional Growth: LinkedIn is a proactive instrument for improving job opportunities. I want to network with tech sector people, present my projects and abilities, and look into tech-related career openings.

Networking: I actively seek ways to grow my professional network since I recognise its importance. I use LinkedIn to communicate with colleagues, instructors, former students, and business leaders to share opportunities, ideas, and insights.

Skill Development: As a computer science graduate student, I am committed to continuous learning and skill development. To remain up to speed on the newest trends and technology in the sector, I consume educational information on LinkedIn, join relevant groups and forums, and follow leaders within the industry with significant thought.

Job Search and Internships: I am keen to find internships and employment that fit my hobbies and professional objectives. I keep on researching possible companies, applying for jobs, and networking with recruiters using LinkedIn's job search function, business websites, and alumni networks.

Usage Pattern:

- I use LinkedIn frequently, multiple times weekly to be informed about new connections, job openings, and industry news.
- I engage in various activities on the platform, including updating my profile from time to time, connecting with peers and professionals, participating in group discussions, sharing relevant content, and applying for jobs.
- I use LinkedIn to engage with material and other users actively. I like and comment on posts, send requests to targeted connections, and message professionals about networking and informative interviews.

Technology Preferences:

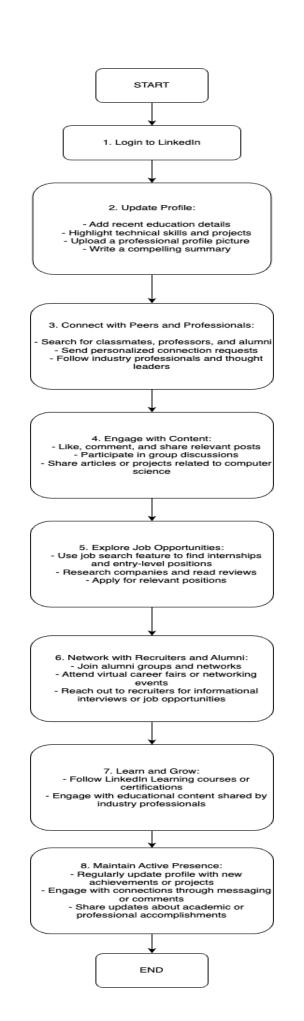
Devices: I usually use a laptop or desktop computer to visit LinkedIn, but he may also use a tablet or smartphone occasionally.

Makes use of several LinkedIn services, including content sharing, messaging, job search filters, and profile optimisation tools.

b) Specify the flow of interactions using a flow model

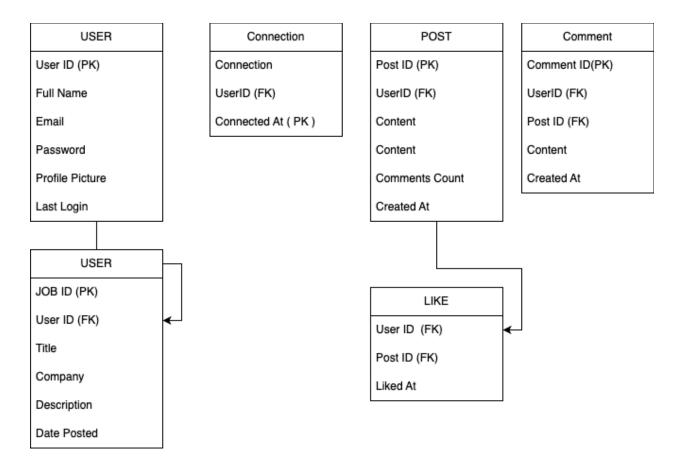
LinkedIn demonstrates strong performance in several parameters, including high levels of user satisfaction, retention, privacy/security measures, usability, and engagement. The platform's success in satisfying the demands of its varied user base may be attributed to its emphasis on professional networking, career advancement, and content exchange. However, to preserve and improve LinkedIn's user experience over time, constant observation, analysis of user input, and incremental adjustments are necessary

The following flow model shows the flow of interaction with the social platform LinkedIn:



c) Describe the information using a data model

The presented data model provides an ordered representation of the **related data** by encapsulating **basic entities** and their relationships within LinkedIn. This approach makes it possible to **efficiently arrange**, **retrieve**, **and manage information** about user profiles, connections, postings, comments, and job opportunities on the platform.



Profile: The profile on LinkedIn is a representation of the user's information and includes details like their full name, education, skills, summary, and unique identifier, or ProfileID.

Connection: Shows a link between members on LinkedIn, signifying their connection on the platform. It contains the following: ConnectionID (unique identifier), UserID (both parties' LinkedIn user ID), and ConnectedAt (timestamp marking the connection's creation).

Post: Indicates a post that a LinkedIn user has shared. PostID (unique identifier), UserID (author's LinkedIn user ID), Content, Likes (the total amount of likes the post has earned), and Comments (comments related to the post) are all included.

Comment: Represents a comment made on a LinkedIn post. It includes CommentID (unique identifier), PostID (ID of the post the comment is associated with), UserID

(LinkedIn user ID of the comment author), Content, and TimeStamp (timestamp indicating when the comment was made).

Employment: Indicates a LinkedIn job posting. It contains the following information: JobID (unique identifier), UserID (job poster's LinkedIn user ID), Title, Company, Description, and DatePosted (a timestamp showing the job was posted).

d) Assess the tool using the metrics from #1

1. Engagement:

Time spent on the platform: Professionals who use LinkedIn for networking, job seeking, and industry insights often spend a considerable amount of time on the platform.

Interaction frequency: Users connect with others, share posts, leave comments, and like material on LinkedIn regularly.

Return rate: Users frequently visit LinkedIn every day or many times a week to remain up to speed on opportunities and professional news. This platform has a high return rate.

2. Privacy and Security:

User confidence in data privacy: LinkedIn places a high priority on user security and privacy, putting in place safeguards including data encryption, two-factor authentication, and privacy settings. The platform wants its user base to continue having a high degree of confidence in it.

Number of privacy/security incidents reported: Although there have been sporadic security mishaps on LinkedIn, the company quickly resolves identified problems and puts precautions in place to reduce risks, upholding user confidence.

Regulation adherence: LinkedIn respects user control over personal data and upholds transparency standards for data handling and processing by complying with important data protection laws such as the California Consumer Privacy Act and General Data Protection Regulation.

3. Usability:

Task completion rate: Through user testing, task completion rates are determined by assigning participants particular tasks to perform on the platform and tracking their success rates. This assessment can be aided by user feedback and usability testing tools such as UserTesting or UsabilityHub.

Error rate: By recording instances of unsuccessful activities, system faults, or problems brought up by users, error tracking tools or logging systems may be used to keep an eye on error rates.

Navigability: Insights into how users traverse the platform and the identification of areas of friction or confusion may be gained through usability testing, user feedback, and heat mapping tools such as Hotjar or Crazy Egg.

4. User Satisfaction:

Net Promoter Score (NPS): NPS surveys are frequently used to determine how satisfied users are with the platform overall and how likely they are to recommend it. Users of LinkedIn may be surveyed regularly.

User input: Through surveys, reviews, ratings, and direct user interactions, user input may be gathered. LinkedIn may also review comments made on social media or through customer service channels.

User retention rate: Analytics technologies that track user churn rates, active user counts, and recurring engagement indicators over time can be used to measure user retention rates.

LinkedIn generally demonstrates strong performance in several parameters, including high levels of user satisfaction, retention, privacy/security measures, usability, and engagement. The platform's success in satisfying the demands of its varied user base may be attributed to its emphasis on professional networking, career advancement, and content exchange. But to preserve and improve LinkedIn's user experience over time, constant observation, analysis of user input, and incremental adjustments are necessary.

- 3. Compare and contrast with previous iterations
- a) Any pre-www computer-based tool for socializing

Examining the features, functionality, accessibility, and user base of both contemporary social media platforms like LinkedIn and pre-World Wide Web (WWW) computer-based socialising tools is necessary. Now let's examine a comparison:

Technological Context:

 Early personal computing witnessed the emergence of pre-WWW technologies, which frequently depended on dial-up connections, online forums, and bulletin board systems (BBS). Usually, only those with personal computers and modem connections could access it.

User Interface:

- The majority of user interfaces were text-based; multimedia and graphical features were absent.
- Command-line interfaces and menu-driven systems were used for interactions, where users entered commands or messages and navigated text menus.

User Base:

 The primary user base for pre-WWW computer-based socialising tools was made up of researchers, beginners enthusiasts, and early users of personal computing technology. Because it required technical expertise, access to computers, and modem connections, accessibility was restricted.

Contrast with Modern Social Media Platforms like LinkedIn:

Features and Functionality

Communication

 Social media platforms enable real-time messaging, video calls, live streaming, and multimedia sharing, fostering dynamic and interactive communication channels.

Content Sharing

 Users can diversify content shared by posting photos, videos, articles, documents, and updates in various formats, enhancing the richness of shared content.

User Profiles

 Modern social media profiles are comprehensive, allowing users to display their personal and professional identities, achievements, interests, and connections in detail.

Networking

• Social media platforms facilitate global networking, connecting users with professionals, colleagues, friends, and interest-based communities worldwide.

Privacy

 Modern social media platforms provide robust privacy controls, empowering users to manage their data, control access to their profiles and content, and customize privacy settings according to their preferences.

Enhanced Technological Features of Modern Social Media Platforms

- Incorporating high-speed internet, mobile devices, and cutting-edge technologies, modern social media platforms provide users with immersive multimedia experiences and instant communication capabilities.
- These platforms are designed with user-friendly graphical interfaces, interactive content, and effortless integration with a wide range of digital services.

Diverse User Base of Modern Social Media Platforms

 With a vast global user base encompassing diverse demographics, professions, and interests, modern social media platforms are accessible to a worldwide audience, including individuals without technical expertise, thanks to their user-friendly interfaces, mobile applications, and widespread internet connectivity.

In essence, the **pre-World Wide Web** (WWW) computer-based socializing tools established the **foundation for online communication** and community development. However, they were constrained in terms of features, accessibility, and user reach when compared to contemporary social media platforms such as **LinkedIn**. The **progression of technology** and internet connectivity has **revolutionized** online socializing into an omnipresent, vibrant, and **interactive experience** that is available to a worldwide audience.

b) Pre-Industrial Revolution socializing

Understanding how individuals interacted, communicated, and established social relationships in completely distinct social and technical circumstances is necessary when comparing socialising before the Industrial Revolution with modern social media sites such as LinkedIn

- Traditional Socialisation Techniques

- The majority of social interaction in the past took place in person at social events, village meetings, and local communities. Said words, body language, and nonverbal clues were used in communication to build relationships between people.
- Social gatherings, festivals, religious rites, and group activities were all important in promoting interpersonal relationships and building community ties.
- Before the Industrial Revolution, societies operated without modern communication technologies. Communication predominantly relied on face-to-face interactions or the exchange of handwritten letters, which posed limitations in terms of reach and speed. Additionally, the underdeveloped transportation infrastructure constrained the geographical extent of social interactions during this time.
- **Communication:** Verbal exchanges formed the primary mode of communication, with individuals relaying narratives, updates, and knowledge through direct dialogue.
- Cultural Norms: Social interactions were guided by established customs and ceremonies, influencing decorum, conduct, and forms of address in diverse social settings.
- Recreation: Social engagement often encompassed collective pastimes like storytelling, music, dance, games, and celebrations, nurturing a collective spirit and unified identity.
- **Social Connections:** Networks were forged through familial bonds, kinship structures, and community associations, with relationships evolving over time through shared encounters and mutual reliance.

- Compare this to contemporary social media sites such as LinkedIn:

- Digital Tool Integration: Modern social media platforms make use of mobile devices, the internet, and digital technology to provide immediate, worldwide networking and conversation.
- Real-Time Interaction and Multimedia Sharing: By enabling users to exchange multimedia material and stay connected across long distances, these platforms promote real-time engagement.
- Physical and Social Barriers are Eliminated: Social media allows people to interact with each other regardless of where they are, what their social standing

is, or their cultural background. It also breaks down social hierarchies and geographic restrictions.

• Opportunities for Global Networking: The reach of networking goes well beyond locality; it allows users to interact with peers, professionals, and others who have similar interests anywhere in the world.

Pre-Industrial Revolution socialising mostly focused on local communities, face-to-face interactions, and public spaces, while modern social media sites like LinkedIn utilise technological innovations to enable immediate worldwide contact and networking. The way people connect, communicate, and build relationships in the digital age is impacted by the evolution of social interaction, which reflects changes in the technological, social, and cultural spheres.