

Digital Platforms Architecture: Interactions Design – Core & Extended

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Digital Platform Architecture

- Involves
 - Building a platform that invites participation & create significant value
 - Tools and services to be provided to ease interaction between producers and consumers
 - Designing technological infrastructure
 - Encouraging positive and minimizing negative network effects
- Difficult to identify a logical starting point
- Two ways of value exchange
 - By directly connecting the users
 - By establishing mechanisms for value exchange without any direct connection between users e.g., Blogpost, Youtube etc.

Types of Exchanges: *value unit*

- Exchange of information
 - All platforms exchange information, but not all exchange only information
 - One of the fundamental characteristics
 - E.g., Amazon, JustDial, Quora, Uber
- Exchange of goods or services
 - Each item exchanged among platform users
 - This exchange may occur through: the platform; specific tools provided by the platform to enable the exchange; outside of the platform
 - E.g., HackerEarth, Airbnb or Zomato
- Exchange of currency
 - Real currency (Paytm), Other forms of value like attention, fame, influence, reputation etc. (Likes, Followers)
 - Either on platform or through tools provided by the platform – required for monetization

Goal of Platforms

To bring together producers and consumers and engage them into these three forms of exchange:

- Exchange of information
- Exchange of goods and services
- Exchange of currency

Platform Design: The Core Interaction

- Exchange of value that attracts most users to the platform in the first place
- Single most important form of activity that takes place on a platform. E.g., LinkedIn
- Three key components:
 - The participants
 - The value unit
 - The filter
- Focus of the platform: To facilitate the core interaction

Core Interaction

➤ Participants

- Producer – Users who create value units; Consumer – Users who consume value units
- Side-switching is possible; Well-designed platforms enable and facilitate side-switching
- Different types of users may perform one role, i.e., producer or consumer. e.g., YouTube

➤ The value unit

- Information – Product/service listing information
- Technical challenge detail – Hacker Earth; Professional profiles – LinkedIn

➤ The filter

- An algorithmic, software-based tool used by the platform to enable the exchange of appropriate value units between users
- E.g., Airbnb - search query; Uber – location, occupancy;

Core Interaction

- Google search engine
- Facebook
 - Value units – status updates, pictures, comments, news feeds
- Platform Design
 - Decide on the core interaction, then decide on the participants, the value units, and the filters to make such core interactions possible
 - Over period interactions expand over time. For each interaction, this exercise is required
 - Design filters to deliver valuable units while blocking others – no control over production of value units

Beyond the Core Interaction

- New interactions
 - Long-term business plan – UberPool & Lyft Line
 - New interactions emerge from experience (Uber), and necessity (LinkedIn)
- Ways to generate new interactions
 - Changing the value unit exchanged between existing users – e.g., LinkedIn - posts
 - Introducing a new category of producers and consumers – e.g., LinkedIn recruiters
 - Curating members of an existing user group to create a new category of users – Instagram influencers, LinkedIn thought leaders