Lecture 03 - Platform ecosystems, Design & Launch

Designing & Launching Digital Platforms

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★ Lecture Structure

- · Designing digital platforms: approaches & concepts
- Launching platforms: challenges & solutions

Platforms & Innovation

Creative Destruction (Schumpeter, 1942)

- · Innovation is a process of creative destruction: new industries arise by disrupting old ones.
- · Entrepreneurs drive this transformation.
- · Innovation studies are rooted in this principle.

Examples of Disruptive Platforms

Industry	Platform Example	Disruption
Transportation	Uber, Lyft	Ride-hailing over taxis
Hospitality	Airbnb	P 2 P accommodation
Retail	Amazon	Online shopping
Entertainment	Spotify, Apple Music	Music streaming
Finance	LendingClub, Prosper	P 2 P lending over banks

Mathematical Challenges of New Ventures

- Viable idea and vision
- Funding
- Team and partnerships
- · Resources (facilities, tools)

X Designing a Platform

Why it's hard:

- · Platforms are complex, multisided, and non-linear.
- Traditional business (pipeline) logic doesn't apply.

Start with the Core Interaction

Core Interaction = Participants + Value Unit + Filter

Example: Airbnb

- Participants: Hosts (producers), Guests (consumers)
- · Value Unit: Property listing
- Exchange: Earnings ↔ Lodging
- · Filter: Search, location, dates

Participants/Sides

- Producers: Create value (e.g., content, services)
- Consumers: Use the value
- · Role swapping is ideal: e.g., Airbnb users can be both hosts and guests

Value Unit

- · The information that lets users evaluate the offer.
- Examples:
 - eBay: Listings
 - Kickstarter: Project descriptions
 - Uber: Available drivers
 - YouTube: Videos
- · Must be high quality and relevant to succeed

6 Filters

- · Determine which value units users see
- · Can be:
 - · Weak: Headings (e.g., newspaper sections)
 - Strong: Algorithms (e.g., search, location, behavior, social signals)

Case Study Prompts

For each case, answer:

- · Core interaction?
- What value is exchanged?
- Role swapping?
- Value units?
- Filters?

Cases: Uber, Facebook, Foodora, Yelp, OnlyFans, Quora

Core Interaction is Key

- · Build features around enhancing the core interaction
- Can add new interactions later:
 - Planned (e.g., Uber → UberPool)
 - Emergent (e.g., LinkedIn → Recruiting/Ads)

Track user behavior → detect new interaction opportunities.

III Driving Growth: Pull, Match, Facilitate (Cusumano et al., 2019)

1. Pull

- Attract and retain users
- Solve the chicken-or-egg problem
 - Not enough users on one side → other side doesn't join

· Use standalone value or incentives

2. Match

- · Match supply and demand effectively
- Use user data and value unit data

3. Facilitate

- · Provide tools & infrastructure
- · Governance: rules, quality assurance, rewards/penalties

Solving the Chicken-or-Egg Problem

Strategies:

- OpenTable:
 - Gave restaurants free table management software
 - · Later onboarded diners
- Airbnb:
 - Scraped Craigslist for property listings
 - · Offered free photography for hosts
- Facebook, Twitter, LinkedIn:
 - Built same-side network (users)
 - · Then added advertisers
- · Subsidizing: Free usage, content creation, delivery
 - Risky, requires:
 - Big investment
 - · Barriers to entry
 - · Chance at winner-take-all

Feedback Loops

Single-user Loop

Personalized algorithm → better content → more engagement

Multi-user Loop

Creator posts → user reacts → creator is rewarded → cycle continues

Facilitation Tools

- Image tools (Instagram)
- Editing tools (Vimeo)
- Quality assurance
- Payment integration
- Search, location services

Matching

- Use user & product data to match:
 - · Preferences, demographics, history
- Encourage data sharing:
 - Gamification: e.g., LinkedIn profile progress



Types:

- Trust-in-provider/consumer (personalized)
- Trust-in-platform
- Generalized trust (less studied)

Trust Mechanisms (Teubner & Dann, 2018)

Category	Examples
Transaction-based	Ratings, reviews
Expressive profiles	Full name, photo
Implicit signals	Badges, duration
Identity verification	Email, phone, social media
Risk management	Escrow, insurance

Escrow Example:

- · Alipay: Holds funds until buyer confirms delivery
- Finn. No: "Pengene holdes hos FINN til varen er levert"

▲ The Platform Canvas (Allwein et al., 2021)

Building Blocks:

- 1. Producer & Consumer Segments
 - Who are you connecting?
 - · What roles do they play?
- 2. Value Proposition
 - · What problem are you solving for each group?
- 3. Interaction
 - What are the core and additional interactions?
- 4. Facilitation
 - · Technology (search, filters)
 - · Governance (rules, trust, disintermediation)
- 5. Substitutes
 - Alternatives to your platform (Finn. No, direct contact)
- 6. Stimuli
 - · Strategies to solve chicken-or-egg problem
- 7 Monetization
 - · Revenue strategies: subscriptions, ads, extra services
- 8. Cost Model
 - Infrastructure, support, development, delivery
- 9. Metrics
 - User growth, transactions, reviews, revenue

Airbnb Platform Canvas Example

Element	Details
Segments	Hosts (producers), Renters (consumers)
Value	Lodging access ↔ Earnings
Core Interaction	Booking a property
Substitutes	Hotels, Finn. No
Filters	Search, location, dates
Stimuli	Free listings, photography

Element	Details
Monetization	Transaction fees, premium placements
Costs	Hosting, support, marketing
Metrics	Listings, bookings, customer growth

Final Takeaways

- Start with core interaction
- Solve chicken-or-egg strategically
- Build trust
- Encourage repeat use through feedback loops
- Use data to match, facilitate, and expand
- Design for growth, but adapt to real user behavior