

The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power

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Summary

1. Book that discusses the emergence of platforms, strategic issues in building and managing a platform, and what platforms may look like in the future.

Key Takeaways

Chapter 1: Platform Thinking

1. Many new products have transitioned to being not stand-alone products that compete on quality, price, or timing but rather turned out to be platform businesses where success is judged on the complementary innovations that determined what users could do with the product; these complementary innovations consisted of the number and quality of software applications or digital services produced.
 - a. These complements added significant value essential to the core product.
 - b. Who won or lost depended not on product quality or features but who could best bring multiple “sides” of the emerging market together and generate positive “feedback loops”.
2. Google Android has over 2 billion users and the iPhone has an installed base of about 1 billion devices; in the new world, these large installed bases are important for “distribution” of complementary services.
3. Goal: to harness power of platform thinking and avoid some of the negative consequences.
4. Platforms: in general, connect individuals and organizations for a common purpose or to share a common resource; these platforms create building blocks or common functions for use within and outside the firm and function at the level of the ecosystem; finally, they bring together individuals and organizations so they can innovate or interact in ways not possible, with potentials for non-linear increase in utility and value.
5. Network effects
 - a. Can be strong or weak, and positive or negative.
 - b. Direct network effects: more users encourage more users which is a positive feedback loop.
 - c. Indirect network effects: when one side of the market (i.e. users) attracts another side of the market (i.e. developers or sellers). What makes these valuable is it allows a platform to generate revenue without directly building products or delivering services itself; platforms can also access different market sides to substitute contracting with traditional suppliers, investing in internal firm capabilities, or directly owning critical assets.
 - i. Apple, Google, and Microsoft did not have to have engineering teams who made software applications for their platforms.
 - ii. Uber and Airbnb did not have to own the cars and hotels.
 - iii. Facebook does not have to pay its suppliers; instead it commoditizes them.

Chapter 2: Winner Take All or Most

6. Positive feedback can arise with more users or complementary innovations like software apps or digital content stores. Insight: I hadn't realized that complements could be as significant in generating or reinforcing network effects.
7. Platforms make money by facilitating connections and associated innovations.

8. This is not new: **Complements are important to grow new businesses!** Railroads, electricity, radio, and television all relied on complementary innovations before those businesses really took off.
 - a. Railroads: took government land grants to build complementary businesses and to attract third party investment such as local transportation, real estate development, banking, construction, and other services.
 - b. Electricity: needed electrical appliances.
 - c. Radios and television: needed content / programming to add users.
 - d. Other examples: Yellow pages as a complement to the phone system and google search as a complement to the global internet.
9. Multi-homing: users use multiple platforms given lack of differentiation or a viable niche and if firms can enter the market and compete with better services or a lower price. This can inhibit a platform with strong same-side network effects and from fully monetizing cross side networks effects.
 - a. Twitter cited as a poor quality of time and attention thus lower advertising.
 - b. How to limit this an important goal for all platforms.
10. Winner take all or most dependent upon the strength of network effects, the difficulty of multi-homing, lack of opportunities for differentiation and niche competition, and the strength of entry barriers.
11. **“Platformizing” a market with digital technology does not change fundamentals of business. For example, Amazon must still deliver groceries in the real world and understand how the supply chains work. For this to become profitable, Amazon needs to link different business units and use its assets in unique ways to achieve economies of scale and scope.**
 - a. **The secret could actually be the physical network of warehouses and delivery vehicles Amazon invests in to complement its digital platforms.**
 - b. The laws of business do not go away; you still need an edge.
12. Platform businesses have a mix of old world and new world factors that they use to compete. For example, reducing the ability of other firms to exploit differentiation or raise entry barriers is like old businesses whereas generating network effects or eliminating multi-homing are new age.

Chapter 3: Strategy and Business Models

13. Platform strategy revolves around 1) choose the market sides of your platform, 2) launch: solve the “chicken or egg” problem, 3) design your business model, and 4) establish and enforce ecosystem rules.
14. To select right strategy and business model, managers and entrepreneurs must start with the value proposition they intend to deliver.
 - a. If the value coming from enabling third parties to build their own products and services that utilize and enhance the platform, you should develop an innovation platform.
 - b. If value comes from allowing different sides of the market to interact, you should develop a transaction platform.
15. Timing matters in bringing new sides on board; brining advertisers in too early may damage user experience.
 - a. Note: I feel like this is happening with Amazon.
16. Lessons from Airbnb:
 - a. No need to start from scratch and use existing groups, information and data. Zillow also did this with MLS data.
 - b. Once the platform identifies the different sides, it can offer a service to help attract members to the platform.

17. Facebook took the approach to build up one side of the marketplace strong (users) to let direct network effects kick in and worried about generating cross side network effects later.
18. Uber had driver churn of 12.5% per month and had to replace the equivalent of 375,000 drivers every month and the cost was almost \$240M a month; very similar to the trucking industry.
19. To keep a platform open, they must open up their APIs as it sends a strong signal to complementors that they are trying to improve the business.
20. Innovation platforms add transaction platform capabilities (i.e. marketplace to facilitate and control the distribution of complements).
21. Many companies have discovered becoming a hybrid with an innovation platform allows you to add new capabilities and features without high internal R&D costs and access external supply instead from around the world.
22. Apple Discussion
 - a. Tight integration benefits Apple as the App Store provides a distribution channel allowing iPhone app developers to access the installed base; this integration creates value for app developers who want to sell their apps.
 - i. Insight: App store functions as a “distribution” channel to the installed base.
 - b. Apple provides complementors and content providers with a global distribution channel increasing their incentives to stay in the Apple ecosystem.
 - i. Insight: this creates lock-in and switching costs.
23. **To recap, the goal is to identify platform market sides, solve the chicken-or-egg problem and generate network effects, find a workable business model and establish governance rules.**
24. Hybrid platforms are the next generation of thinking and are all about leveraging complementarities among existing assets and organizational capabilities.
 - a. Sometimes the goal is to drive engagement to make it attractive to advertisers or application developers or leverage a shared-assets by making it available to third parties for their own innovations.

Chapter 4: Common Mistakes; Mispricing, Mistrust, Mistiming and Hubris

25. First mover advantage can work, but there is no guarantee of success.
26. **A platform requires underwriting to one side of the market to encourage the other side to participate and knowing which side gets charged and which gets subsidized may be the most important strategic decision.**
27. Trust is very important in a platform and Alipay’s escrow model triumphed over Paypal’s model and in China trust and security were issues. Also, China didn’t have credit cards: Ben Thompson mentioned this as a path dependency in payment markets illustrating the difference between China who essentially skipped credit cards and the US.
28. The four most common mistakes include mispricing and inadequate subsidies to get network effects going, not establishing sufficient trust, not paying sufficient attention to competitors, and entering markets that have already “tipped”.
 - a. Learn from failures.
 - b. Since platforms are driven by network effects, getting prices right and identifying the right side to subsidize are important.
 - c. Put trust front and center.
 - d. Timing is crucial.

Chapter 5: Old Dogs and New Tricks (Build, Buy, or Belong to a Platform)

29. **Once a platform has a large installed base, the platform has significant market power and can extract most of the value.**

30. Amazon reduces search and transaction costs for customers; product variety enabled by third party sellers helps to reduce this as well.
31. Toys 'R' Us made some mistakes in its pact with Amazon.
 - a. When it joined, it failed to extract maximum concession up front by not adequately defining the word "exclusive" in its contract.
 - b. Should have built its own platform.
 - c. Should have bought a competing platform.
32. GE faced this issue if an analytics / software platform captured all the data generated by its machine and would cede all the value of its equipment and maintenance service to the owner of the platform.
 - a. This data would commoditize its complement being GE's installed base of equipment and maintenance services.
 - b. GE has learned building a platform from scratch is a large effort.
33. Things to consider include:
 - a. The choice between buying and building comes down to time to market and what is available.
 - b. Belonging to someone else's platform creates the opportunity for them to leverage platform economics.
 - c. Small or new firms generally better off building their platform on top of existing ones.

Chapter 6: Double-Edged Swords

34. Platforms reduce search and transaction costs, and change industries quickly.
35. Platforms should not abuse this power and it consists of: don't be a bully, balance openness with trust, respect labor laws, and curate (self-regulate).
36. Microsoft was guilty of bundling complements to its operating system at no cost such as media player or internet explorer and this restricted competition.
37. Android did the same thing with giving away its operating system to sell advertisements.
38. Classifying workers as employees adds 20-30% more in costs and the ABC test in California.
39. Amazon can use data from customers to enter other markets or even have a pricing advantage; this is a benefit to bundling.
40. Curation is a tricky trade-off for platforms as curation limits growth but may be needed.
41. Platforms have long lives; Ben Thompson's End of the Beginning discussion.

Chapter 7: Looking Forward; Platforms and the Future

42. The Business of Platforms summarized:

- a. Understanding the potential for strong network effects, limiting multi-homing, restricting differentiated / niche competition, and building high barriers to entry.
 - b. Platforms are not new and the telephones, the yellow pages, railroads, electric power, radio and television all depended heavily on network effects and complementary innovations to grow their business.
 - c. Today's platforms are digital allowing for rapid, exponential growth on a global scale with much less "distribution" cost.
43. A lot of platforms started as innovation platforms and now we have seen tons of transaction platforms come on.
 44. Reasons why "voice" is not a strong platform yet.
 - a. Multi-homing is easy.
 - b. No switching costs for consumers (yet).

- c. Many opportunities for differentiation and niche competition: Apple focused on the quality of the music; Amazon on media and e-commerce; Google on search-related inquiries; and Microsoft on enterprise needs.
 - d. Each player has a different business model: Amazon has various ecosystems to profit whereas Apple tried to make money on its hardware.
- 45. We are headed for a future where people will own and buy fewer products and will contract for more services directly with each other and platforms will manage this.**

What I got out of it

1. The business world is transitioning from single-product firms to platforms that enable innovation and / or facilitate transactions and are driven by network effects and global distribution.
2. **You must view an installed base of devices as “distribution” of digital products in the new world.**
3. Complements are in some ways as important if not more important than attracting users in generating a strong platform as they increase the underlying value; many older technologies such as telephones, railroads, electricity, radio, and television all relied on complements and network effects to improve and grow their businesses.
4. Winner take all effects determined by ability to multi-home, opportunities to differentiate / niche competition, and strength of entry barriers and switching costs.
5. People will buy fewer products in the future and contract more for services; **this is an opportunity where you need to ask yourself: do I need to own this? How can it become a service?**
6. **Insight: Zero marginal costs driven by the internet has enhanced economies of scale and scope for the strongest players.**

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