

Homework 5
Managing Disruptive Technologies
Fall 2021

1.

- a. **Multi-homing costs:** Multi-homing happens when users or service providers are affiliated with multiple platforms at the same time. Multi-homing costs are the costs incurred by either side (consumers or suppliers) of the network to affiliate with more than one platform. For example, in the entertainment industry, the costs incurred by a content watcher to different content platforms like Netflix, Prime Video, etc together are called multihoming costs. This generally occurs when the cost of adopting an additional platform is low.
- b. **Demand for differentiated services:** When different user segments require different features of a product, i.e. when the demand for a particular product depends on the user segment it is serving, this is called demand for differentiated services. If the demand for differentiated services is less, then a single provider with strong network effects that provides all the fundamental services thrives and takes over the market. Whereas if different users have different needs, demand for differentiated services is high, then different providers catering to individual needs thrive together and share the market.
- c. **Winner-take-all-markets:** Winner-take-all-markets are described by three key characteristics- network effects, multi-homing costs, and demand for differentiated services. When more number of consumers lead to even more consumers join a platform or more suppliers lead additional suppliers to join the platform, these are called direct network effects. When more consumers lead to more suppliers joining the platform and vice versa, these are called indirect network effects. When the network effects are strong, it becomes difficult for other platforms to survive. When multi-homing costs for consumers or suppliers are high, they tend to stick to one platform with strong network effects, and hence, other platforms don't get enough users to stay in the market. When the demand for differentiated services is high, different platforms co-exist by providing services catering to individual user segments. But when the demand for differentiated services is low, the consumers and suppliers prefer to use a platform that provides fundamental services with strong network effects and thus reduces the likelihood of other providers entering the market. Hence, all of the three characteristics combined, strong network effects, high multi-homing costs, low demand for differentiated services lead to a winner-take-all market.

2.

- a. Online shopping is one of the most popular online activities worldwide. Over the past decade, the online retail market has grown manifold with players like Amazon, Walmart, Target, Best Buy, Instacart, eBay, etc serving as platforms for sellers and buyers. The timeframe used in this case study ranges from 2010 to 2020. The primary platform being studied in the case is Amazon and its strategy to become a winner-take-all platform.

Two sides of the market :

Suppliers - product sellers/ small businesses on Amazon retail.

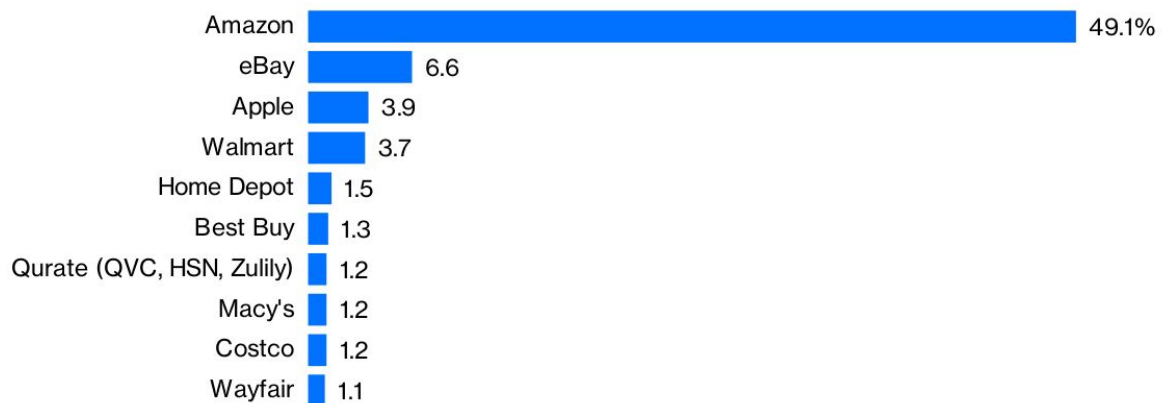
Consumers - any customer shopping for a product on the platform

E-commerce in the U.S. is increasingly dominated by a single platform -- Amazon.com Inc. As of 2018, the e-commerce giant had grabbed about half of the online retail market

Not Even Close

Amazon's already dominant position in e-commerce is only growing. It is expected to capture 49.1 percent of the market this year, up from 43.5 percent in 2017.

■ Forecasted share of U.S. e-commerce sales, 2018



Source: eMarketer

BloombergOpinion

As it continues to grow, it may not take all of retail, but as its market value reflects, there is no No. 2 anymore.

b. **Network effects :**

Sellers : -/+ Direct network effects, + Indirect network effects

The more sellers on the platform, the more sellers will choose to sell on a platform that has less competition implying negative direct effects although Amazon tackles this problem by showing the results listed among the top products by sellers who have better ratings. This may lead sellers to join the platform to compete with other sellers. The more consumers join the platform, more sellers will join too indicating positive indirect network effect

Buyers: + Direct network effects, + Indirect network effects

More buyers lead to more buyers joining the platform and more sellers on the platform incentivize more buyers to join the platform to access a wide range of products.

Multi-homing costs: Multi-homing costs for both buyers and sellers are relatively low. Sellers can list their products on other websites at low costs and buyers to compare relative prices at different websites before making a purchase. Amazon tries to reduce multi-homing on the seller side by charging higher fees to sellers if their products are not listed on Amazon's Marketplace, incentivizing them to sell exclusively on it. Amazon with its prime subscription offers free two-day shipping on most products, reducing multi-homing on the buyer side. However, the multi-homing costs are still medium to low on both sides making it possible for sellers and buyers to simultaneously use other e-retail platforms.

Demand for differentiated services: There is high demand for differentiated services for products in different domains on both sides. A grocery store only wants to target grocery buyers, a kids apparel seller might want to target only the buyers having kids, and so on. Whereas buyers have demands for different products. A buyer who wants to only buy electronic gadgets may not be interested in Amazon's apparel or home decor section. This demand is internalized by Amazon by providing products of different types like electronics, apparel, home decor, sports, groceries, daily essentials, etc. Amazon internalizes almost all of the differentiated services in the retail market. Even though there are different competitors specializing in different services, like Best Buy specializing in electronics, Amazon tries to capture the market well in competition to its rivals.

Conclusion :

With strong network effects, medium to low multi-homing costs, and high yet internalized demand for differentiated services, online retail is not necessarily winner-take-all in the given timeframe. While Amazon's business model tries to push towards being a winner-take-all, small businesses will not be able to thrive in such a model and hence the market doesn't qualify to be a winner-take-all.

3.

Paytm was launched in 2010 as a prepaid mobile and DTH recharge platform, adding additional mobile and other bill payment services. It further expanded into Paytm Wallet as a payment option and jumped into e-commerce with online deals and bus ticketing, allowing to pay educational fees, metro recharges, electricity, gas, and water bill payments. Basically becoming a one-stop-shop for all e-commerce applications. Paytm has retail banks as suppliers to provide payment options and merchants and bill payers as consumers for using the payment services. After receiving a license from the RBI in August 2015, they launched Paytm Payments Bank in May 2017. Payments bank is an Indian banking model conceptualized by RBI, it is a banking system that provides the same functions as a retail bank such as a checking account and a savings account, but unlike a retail bank, it cannot issue credit. This means it cannot offer credit cards and loan services (they can however loan to their employees, but only from the bank's own funds, not as a service).

They already had a huge customer base of over 100 million using their payment app. By expanding the online services they provide to banking solutions, it was an envelopment attack on their suppliers (Banks) qualifying Paytm as a cross boundary disruptor. And the payment banking almost seems like a direct expansion of Paytm wallet to having an account you can deposit to, get a debit card and checkbook for. It was the first payments bank in India to become profitable and has been profitable since its setup.

They essentially bundled all the previous e-commerce and payments to introduce paytm payments bank. Paytm still lets you use traditional banks as a payment option without signing up with Paytm Payments Bank. Hence, they used both versioning and bundling in this case. By being involved in all the steps of the virtual economy it was just a platform envelopment for Paytm getting into the banking system.

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