

# Online market makers: How they work to reach critical mass.

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## **Purpose**

Online market makers bring together two or more distinct different parties to interact and transact with each other. By doing this, they either reduce search costs, reduce shared transaction costs, or both. Reducing search costs reduces asymmetric information among users and makes sampling of candidates easier. Reducing shared transaction costs means making the transaction more flexible, less costly, and less time consuming. Previous research states that online market makers need to attract a critical mass of users for network effects to appear and help further growth. The subject of critical mass is interesting, but evidence is scarce on how online market makers work to reach it. Thus, our research question is the following:

*“How do online market makers work to reach critical mass, and what factors decide this?”*

## **Methodology**

Our work was conducted with an exploratory purpose. Through semi-structured interviews we gathered empirical data of fifteen founders of online market makers from Sweden and Denmark. As a robustness test of these interviews, we also conducted seven interviews with stakeholders surrounding

the online market makers. These included professionals from incubators, accelerators, and venture capitalists, as well as people with extensive experience from startups and online market makers.

## **Background**

The rise of the Internet led to all kinds of companies aiming for online presence. This meant that an excessive amount of supply was gathered on the Internet, but there was nothing that coordinated supply and demand to enable the actual trade. The effort of searching, i.e. the search cost, was too high, which led to people only shopped online from stores they already knew. This paved the way for the first online platforms, search engines including Google and Yahoo, to be the first to solve this problem.

Another problem with general trade was the shared transaction costs, which are the costs incurred during the transactions themselves, i.e. after search is over and the transacting parties have found each other. The shared transaction cost can be monetary, but can also include aspect such as time, place, flexibility, simplicity, or the number of participating agents.

The need for a reduction of search cost and shared transaction cost enabled multi-sided platforms to evolve. One type of multi-sided platforms is the online market maker, which creates a market for direct transactions between distinct different parties. The interesting bit is that they only provide a platform on which transactions can be made. Since no active participation of the online market maker is necessary, they are very easy to scale. Examples include Alibaba, Spotify, and Uber, who all have become global actors in just a few years.

Particularly the initial growth, including a chicken-and-egg problem, is interesting.

When there are no sellers, the platform is not attractive for buyers, and vice versa. The platform simply does not offer sufficient value for people to spread the word about it, which makes growth of the user base very difficult. But once a critical mass of users is reached, the platform becomes sufficiently attractive for people to join, which makes the platform increasingly attractive.

Current research by Evans (2003, 2009) describes critical mass as a certain total number of users, see figure 1. Evans also provides examples of how a few companies have done to reach critical mass. However, there has not been made any extensive studies showing how online market makers work to reach critical mass. Hence, this is what we have looked at.

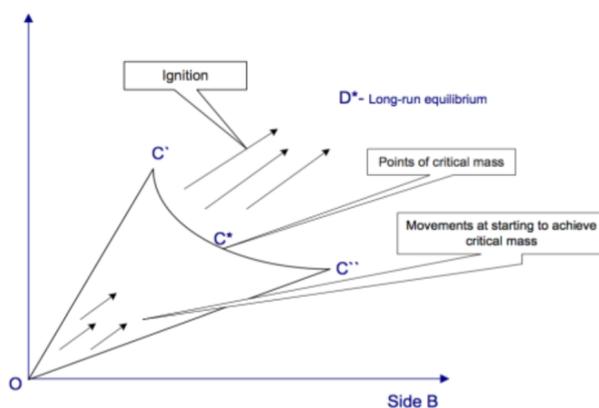


Figure 1. *Traditional view on critical mass.* (Evans, 2009)

## Results

As opposed to what Evans (2009) describes, online market makers seem to view critical mass as the sum of having reached enough users in small geographical areas or specific social groups, see figure 2.

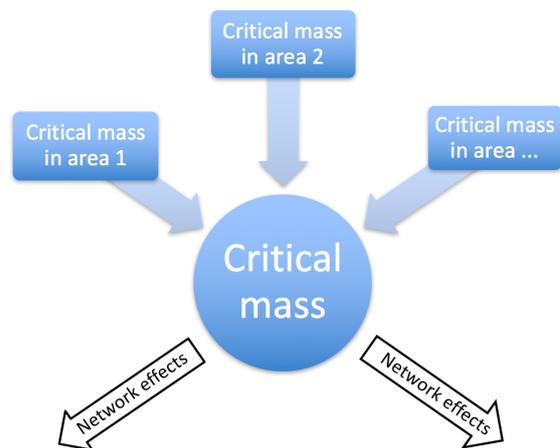


Figure 2. *Alternative view on critical mass.*

The ways, in which online market makers try to reach critical mass, appear to depend on two factors: level of local presence required (i.e. if all parties of the transaction need to be physically present) and broadness of value proposition (i.e. how many problems that are being solved).

We find that the level of local presence affects the customer segments that are aimed for. In the cases where a high local presence is required, online market makers try to acquire enough users in small geographical areas before expanding. In the cases where the transaction can be completed online, the online market makers try to spread within a social niche instead. In the cases where it is possible, they create online communities so that users can interact and provide feedback to each other, which creates engagement and improves user retention.

We also find that the broadness of the value proposition affects the strategies for expansion. Companies starting with a narrow value proposition have two options when they are about to expand: either they improve existing functions to increase the value for the existing user segment, or they extend their value proposition to attract new types of users. Companies

with a broad value proposition need to present a specific value to the corresponding user segment. Once users are converted, companies try to make them expand their current usage.

### **Discussion**

Further research should look into whether our findings are replicable in other countries than Sweden and Denmark, and if they are replicable in other businesses where strong network effects are present. Further, it would be interesting to conduct a research on “best practices” to reach critical mass.

### **Sources**

Evans, D. S. (2003). Some empirical aspects of multi-sided platform industries. *Review of Network Economics*, 2(3).

Evans, D. S. (2009). *How catalysts ignite: the economics of platform-based startups*. Cheltenham, UK and Northampton, MA, US: Edward Elgar.