Disruptive Innovation in Digital Platforms and the Rising Power of Competitors, Consumers and Producers

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An IFIP SELECT paper for IT-professionals based on the research paper:

The argument: The dynamics of digital platforms is challenging disruptive innovation as we know it

The classical digital innovation theory was developed through the examination of the manufacturing sectors and was later extended to include services. Its propositions are: 1) new technology surprises incumbents, 2) incumbents are slow to take decisions to change their production lines, acquire fundamentally new technologies and change their industrial processes; and 3) new technology is adopted by entrants while incumbents struggle to cope, eventually failing to adopt it and consequently being pushed out of their markets. In Elbanna (2017), I argue that this theory has not considered the role of consumers beyond their gradual adoption of low-cost innovation with simpler functionality. It also portrays incumbents as stranded and stifled by their production lines, their existing technological and labour capability, and their need to attend to existing customers; a view that is consistent with manufacturing but not necessary digital platforms and app-based platforms. Indeed, these assumptions do not hold well in the case of digital platforms. Digital platforms attend to two or more sides of the market; mainly end-consumers and producers. Digital platforms act as
an intermediary between these sides where all consumers are producers are customers for the digital platform. A digital platform cannot operate without sufficient customers that attract producers and sufficient producers that attract customers. I argue that the nature of this dialectical relationship and the intermediary position of digital platforms makes digital platforms vulnerable to both consumers and producers and hence digital platforms need to attend to all sides of their market to ensure their sustainability.

The research: Uber and the Challenges it faced in different market
The study examines the case of Uber and how passengers and drivers have contested its operation in different markets. It shows that in many cases, incumbents were powerful enough to stop the operation of Uber and ban it from certain markets. Incumbents have managed—in many cases—to digitally catch up with the digital disruption innovation of Uber developing competing Apps. I also show that incumbents had used other tactics to compete with the disruptor. They successfully tainted the work on the Uber platform in other markets making producers (drivers) less attracted to join the platform. Without having enough drivers, Uber’s business as a digital platform is threatened. As less drivers are attracted to the platform, less customers will also attracted since the later will not be able to find the service the need. Also as customers contest the operation of Uber in some markets for different reasons including ethical, environmental, security and safety, less drivers will be attracted to the platform. In this regard, a digital platform like Uber presents s with a new model of disruptive innovation that is different than what the classical theory of disruptive innovation proposes.

The practical advice:
Consumers and producers hold a significant power in digital platforms. While digital platforms could be initially disruptive, this disruption cannot be taken for granted as it is rather fragile and temporary. A Digital platform business should account for the challenges and setbacks it could face from customers and producers. They also need
to account for the fierce competitions on Apps developments. With digitally educated population and low-cost Apps developments, different market stakeholders can catch up with the disruptive technology much quicker than before. Digital platform business has a narrower window of opportunity for disruption, after which they could face tough market competition and hence will need to rapidly innovate their products and business model.

Customers and producers on the sides of the market of digital platforms should recognise their power of disruption and embrace it. A platform that is breaking laws or carrying misconducts in dealing with data for example could be severely disrupted if customers and/or producers take actions. Digital platforms in that sense democratise disruption and empower all stakeholders if the latter chose to use their power.

Smaller competitors should also recognise that they stand good chances to claim their market back and earning part of the market of the disruptive digital platform as they can catch up in Apps development and functionality quicker.

To sum, the disruptive innovation of the digital platform business presents a new model of disruptive innovation than the popular one introduced by Clayton Christensen in 1997 and was based on traditional manufacturing and service.

References