

jul17-21-597975586

Back in 2011, crowdsourcing was fueling an explosion in open innovation. At that time, most Fortune 500 firms had launched crowdsourcing initiatives or partnered with startups in order to access outside innovators or cocreate with customers. The providers of crowdsource solutions had their heyday. Kaggle had raised \$11M from Koshla Ventures. InnoCentive raised \$7M and bought OmniCompete. TopCoder stepped from strength to strength, raising

\$11M in 2010. Quirky raised two rounds totaling \$21M. But the glory didn't last. Within six years, Kaggle had been acqui-hired by Google; a struggling TopCoder sold itself to Appirio; InnoCentive has been shrinking for years according to LinkedIn data; and Quirky has declared bankruptcy.

What happened? Many struggling or failed crowdsourcing firms ran into trouble because they didn't understand key principles of successful platform design. As a result, they made mistakes that ultimately undermined them. Here are their top four:

They allowed messy, unfocused core interactions. Good platform design starts with a core interaction between producers on one side and consumers on the other that is clean, simple, and scales. Uber connects drivers with riders. Airbnb connects room owners with room renters. By contrast, each new request to connect with problem solvers on Quirky, Topcoder, and InnoCentive differs from the last one. The criteria for excellence differ from project to project. Expert solvers, who are indispensable, are not interchangeable. The model of "renting a general crowd of solvers" is too ad hoc. By contrast, one provider can substitute for another on Uber and Airbnb. In fact, riders can become drivers and guests can become hosts. Their interactions are so clean and simple that almost anyone can provide them.

They had too much vertical integration and too little orchestration. The original crowdsourcing companies had service models that overcomplicated their core processes. InnoCentive and NineSigma began each innovation contest with a design phase that lasted from two weeks to two months. PhDs and expensive consultants on the payrolls of InnoCentive and NineSigma even got involved. Likewise, Quirky tried to manufacture the products its community conceived rather than find expert low cost producers. These crowdsourcing 1.0 firms became asset heavy, while good platforms are asset light. Firms launching new products today use Alibaba, an effective platform, to find low cost manufacturers with competitive bids. Alibaba makes none of these new products but instead facilitates the match.

They produce too much social waste. Although innovation contests give solution seekers great variety and options, they waste the time of problem solvers who don't win. Over the past 10 years, InnoCentive attracted 380,000 solvers and hosted 2,000 competitions but that means 99.4% of people never won. Threadless, which runs crowdsource contests to produce some of the world's most interesting t-shirt designs, receives over 800 submissions a week from which it chooses only

seven winners. Each winner receives just \$2,500. One author of the Harvard Business School Case Study on Threadless observes that, based on numbers of applications, the odds of winning admission to Harvard are higher than the chance of winning a Threadless contest. Winning six times, which is the number you'd need to match a minimum wage job, is less likely than being struck by lightning. Threadless and others should offer more graduated prizes, share more risk, and share more wealth. Social waste in competitive challenges undermines a community's participation over time. If members never win, their willingness to participate drops. Today, only about 6,000 InnoCentive solvers have visible active user profiles, suggesting a 98.4% fall off. By contrast, well-designed platforms provide both sides, producers and consumers, enough value from interactions that they increase engagement over time. No one, not even top coders or designers, can eat prestige.

They fail to leverage network effects. Many crowdsource 1.0 firms never attracted large enough communities to generate sufficient value for participants. Good platforms understand the importance of network effects – wherein the more participants interact on a platform, the more value they generate for all. Precisely because they are unique, one Quirky product rarely improves another Quirky product, whereas one Uber ride helps benchmark the price and quality of another Uber ride and each Google search helps improve results of another Google search. Henry Chesbrough, one of the top thinkers in open innovation, notes that InnoCentive's hub and spoke model prevents one solver from interacting with another directly rather than through the hub. This puts friction on knowledge sharing.

Similarly, NineSigma's intellectual property (IP) licensing restrictions discourage "permissionless innovation" where third parties are free to explore new technologies or businesses without seeking prior approval. By contrast, the most successful platforms offer web or application programming interfaces (APIs) to their IP and services so anyone can use them in new ways. Thousands of firms have repurposed Amazon's web services to create new merchant interactions. Millions more have used Google mapping software to help consumers locate their stores. These third parties generate more than enough data to help Amazon and Google drive their own selling and advertising services to yet more consumers. Good platforms help users repurpose platform resources in new ways. The crowdsource 1.0 firms that lock their IP and services down rarely achieve network effects that lift their platforms up.

So who will succeed with crowdsourcing 2.0? The future belongs to true platforms that know the design rules. Success will follow the Airbnbs that start with clean interactions, the Alibabas that place orchestration over integration, and the Autodesks whose reusable Building Information Objects create an expansive and collaborative work platform in the construction industry.



Marshall W. Van Alstyne (mva@bu.edu) is Everett Lord Distinguished professor and chair of the information systems department at Boston University Questrom School of Business. He is also a co-author of *Platform Revolution* (W.W. Norton & Company, 2016) and the April 2016 HBR article "*Pipelines, Platforms, and the New Rules of Strategy.*" Follow him on Twitter @InfoEcon.

Alessandro Di Fiore is the founder and CEO of the European Centre for Strategic Innovation (ECSI) and ECSI Consulting. He is based in Boston and Milan. He can be reached at adifiore@ecsi-consulting.com. Follow him on twitter @alexdifiore.





Simon Schneider is an Internet entrepreneur and the UK Director of and ECSI Consulting, based in London and Milan. Follow him on twitter @simon\_crowd