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The science of spotting new markets

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Intel researcher uses hackathons and accelerators to conduct experiments on emerging markets

Think of **Brandon Barnett** as an **Intel Corp** researcher who applies scientific techniques to the discovery of emerging markets. He's sort of a venture capitalist with a lab coat.

This director of business innovation has been consumed recently with big data. Last year, he launched an experiment to see whether big data could be shared among startups to crack open new business models and enhance the value that data can bring.

It was a project with big horizons, and one where he relied on a series of hackathons Intel was a part of to select six companies and seed them in the **Intel Labs Data Services Accelerator**.

The goal was to encourage these entrepreneurs to create new sources of value by combining data and finding new big-data revenue streams in the process. He provided each company with access to the data analysis platform from the startup **ColdLight**.

The companies left the accelerator in April, but Barnett continues to work with them.

He said the Data Services Accelerator piece of the experiment was the crowning element of work conducted inside Intel Labs with colleagues who have social science backgrounds and who look for social, cultural and economic change taking place to identify new markets.

"We think there is a more systematic way, based on the research we've done, to identify these opportunity areas," Barnett said. "I look for the properties of the system that suggest a transition from a disordered network – a bunch of little companies doing kind of random things exploring small value – to the start of an ordered network, a market, if you will."

VCJ caught up with Barnett to ask him about his project and how he goes about spying emerging markets. An edited transcript of the conversation follows.

Q: What hypotheses did you test with the Data Services Accelerator companies?

A: It is the notion that individual data sets gathered by apps are limited in value. It is in the combination of data streams through analytics that value can explode. That's one.

Number two is that if we provide the basic data-science-as-a-service that it would enable these consumer facing applications developers to do things they couldn't otherwise do. They would have the data sophistication to do new things.

The third thing is whether there is enough value in the data creation that we can break the predominant business model? They don't have to have an advertising-based business model to be successful. Can we create this ecosystem of companies that have the ability to make money in different ways because they are creating value in many different ways?

Q: What did you learn?

A: We learned enough about this uncertain early market, or ecosystem, that suggests we are highly confident that the combination of those data sets is very valuable and will create an explosion of new development and innovation activity and new business opportunity. I would say our confidence is higher after the program than it was before.

Q: How do you envision companies collaborating with the data?

A: Think about each individual app as an isolated and whole unit of value creation, be it your Fitbit collecting your running data, or your sleep app, or chloric intact app, or your financial tracking app. There is certainly value in what they create, but it's limited to financial services, or to your running time.

The hypothesis is that it is the combination of those data sets that allows you to discover what is really valuable, things that you didn't even know to ask. For example, when I have this much sleep and I eat these foods, my running time seems to go up. You have no visibility of that if you just limit your data to your Fitbit app.

Q: Do Data Services Accelerator companies receive investments or cash from you?

A: They do not. At least not in this round. We may choose to change our tactics going forward. That's not really what they need at this stage. What they need is the guidance to get to that next step.

Q: Talk about your broader strategy of using hackathons and accelerators to test hypotheses on new markets. What is your reasoning behind this?

A: I mentioned that data is the new oil. If something has economic value today that it didn't years ago, the system of exchange that defines the market has to respond. So we can identify that shift and we can start experimenting through things like the accelerator and the hackathon with what that change is.

I don't think we get better answers. We get the ability to ask really good questions about where to target an experiment. Then a hackathon or an accelerator can be used very strategically to test a hypothesis about this new thing.

Q: What factors do you examine when you look for emerging markets?

A: We've modeled our framework for thinking about this after the Business Model Canvas (an entrepreneurial tool developed) by (author) **Alexander Osterwalder**. And we've worked a bit with Alex. He's helped us shape this framework into what we call the Business Opportunity Canvas, to be analogous to his Business Model Canvas, for when you don't have a business model because you don't know what the opportunity is yet.

Q: How is this applied to startups?

A: Most startups have an opportunity in mind and they need a business model.

If you think about the VC industry, it is really about the search for new opportunities, and so the process we have in this canvas is to identify through our social science research what are those factors in the world that are changing culturally, socially and economically.

I'm lucky enough to be part of a group that is doing that to define the next experience of computing going forward. We see transitions in underling markets. Is it socially acceptable to wear a camera on your eyeglasses, for instance?

And as those things shift, we can start to anticipate the market dynamics.