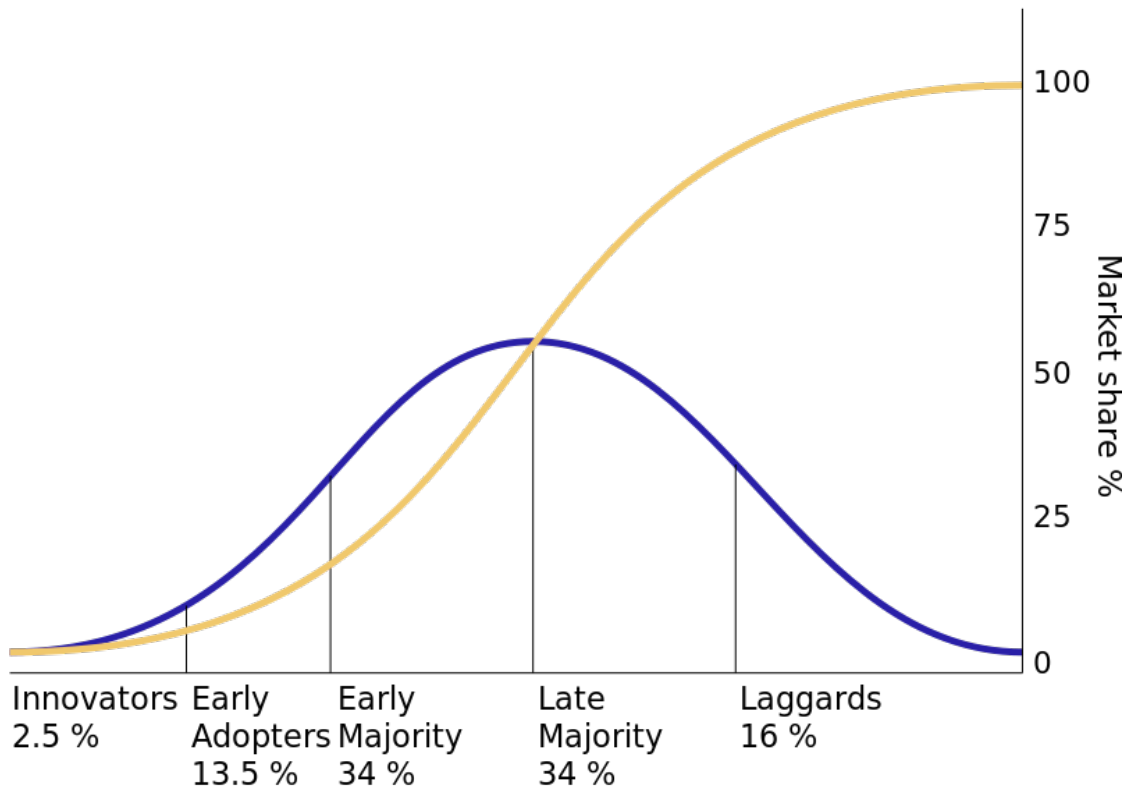


A Preliminary Study of Early Technology Adoption and Commercialization Success

Hamid Akbari
Assistant Professor of Strategic Management
University of Ontario Institute of Technology
Faculty of Business and Information Technology
hamid.akbari@uoit.ca

When it comes to new technologies, would you consider yourself an innovator or a laggard? An early adopter or part of the late majority? Or in other words, are you a follower or a leader?



The adoption rate of new technologies: Where do you fall?

As a technologist once said, “Technology is stuff that doesn’t work yet.”¹ In fact, the technology itself may work but people tend to only see the full

¹ Stephen Goss and Kate Anthony, *Technology in Counselling and Psychotherapy*. NY: Palgrave Macmillan, 2003

benefits after it's been used by the masses. As a culture so dependent on technology, whether that is through the internet, our smartphones, or cars, we forget that in the beginning all of these things were exclusive to a few pioneers who were willing to experiment with a new invention. Now, they are the things the masses cannot imagine a world without. So how did they come to be? They're here solely because there were those few, the innovators, who believed the impossible to be possible.

At UOIT, the idea and implementation of innovation is ever present. There have been many patents coming out of the university each year, and the spirit of innovation and entrepreneurship is alive and well within the UOIT community. But let us think a little bigger. As an institute that promises to provide a “learning environment [that] challenges students to push the boundaries of innovation and discovery,”² UOIT strives to become a centre for innovation; not just for Durham Region, but for Canada. In order to do so, the supply and demand of technological innovation need to grow.

There are two sides to innovation, supply and demand, and without one the circle of innovation is non-existent. Supply consists of talent, having the advanced technologies and equipment and expertise. In order for the supply to exist, the government spends money where it's needed, such as hiring professors and equipping labs, so that the right technology can be supplied and invention of new technologies encouraged, which in turn would make technological advance possible. Now let's assume that Canada is equipped with everything listed above and Canadians do invent many new things; what good would it be if there was no demand for it?

In order for new technologies to grow and succeed, there needs to be a demand for it, a hunger to try new things. Let's take Silicon Valley for example, a place and name that the majority of people associate with pushing the frontiers of technology. It is home to big names such as Google, Apple, Intel and Facebook. So what contributed to its success? People in the Bay Area (Silicon Valley) are willing to try new things, and the adoption rate of new technologies in Silicon Valley are often much greater than any other community. The high demand invites and attracts invention. The media puts much emphasis on inventions happening in Silicon Valley, but to a great extent the role of early adopters in successful commercialization of such inventions has been ignored.

² “About UOIT,” UOIT. 2015. <http://uoit.ca/about/index.php>

Considering inventions alone, Canada has the same potential to have its very own Silicon Valley. According to Michael Helander, co-founder of OTI Lumionics, Canada doesn't need more invention but more commercialization³. The problem is that even though there may be great technologies being built in Canada they don't become popular in Canada, leading them to be "commercialized abroad, or worse, never make it out of the lab."⁴ Therefore, the question to be asked is: Why can't we successfully commercialize our inventions?

Again, it comes back to the demand within our community. Often a critical mass of users needs to be reached, a community that is open to trying new technology, which will allow technology to evolve. When this is achieved, both adoption and usage rates grow which paves the way for more invention coming out of that community. There seems to be no downsides to the results this would yield: more high paying jobs, higher level of skill set, economic prosperity and with that, a certain level of sophistication. A sophisticated demand will adjust the supply, meaning encouraging individuals to attain the proper training and think above and beyond for the next invention.

A case study by Blancride, a new carpooling platform, suggests that we may have sufficient number of innovators and early adopters in the UOIT and DC community. In the case of Blancride, it targets the need at UOIT for an eco-friendly, convenient, and cost effective commute. Those who adopted the carpooling app early on understood the difference a transportation technology such as this could make, not just for students, but for solving broader issues such as traffic gridlock and decreasing carbon footprint. Within eight weeks, about 1200 (roughly 10% of the commuters) from both UOIT and DC's north Oshawa campus have adopted Blancride suggesting that there may be many innovators and early adopters among us.

³ Michael Helander. "Breaking Research Out of the Lab: Canada doesn't lack innovators, it lacks entrepreneurial innovators" *Financial Post*. October 1 2014.

³ http://business.financialpost.com/2014/10/01/breaking-research-out-of-the-lab-canada-doesnt-lack-innovators-it-lacks-entrepreneurs/?_lsa=61b6-c1e1

⁴ Michael Helander. "Breaking Research Out of the Lab: Canada doesn't lack innovators, it lacks entrepreneurial innovators" *Financial Post*. October 1 2014.

http://business.financialpost.com/2014/10/01/breaking-research-out-of-the-lab-canada-doesnt-lack-innovators-it-lacks-entrepreneurs/?_lsa=61b6-c1e1

Without early adopters and innovators, society would not be able to get a new idea off the ground. Building an entrepreneurial community is vital; they build new companies which create high paying jobs, and thus growing the economy.

Does UOIT have what it takes to become the next regional cluster for innovation? Do we have a community of innovators and early adopters, whose sophisticated demand drives inventions and economic prosperity? Only time will tell.