



Technology has long held out the promise that it will not only change the world, it will improve it in a way that touches the lives of those who are fortunate as well as unfortunate. Without question throughout history, technology has played a large role in fundamentally altering the quality of life for society.

The quintessential example of this is the Gutenberg press invented by Johannes Gutenberg in 1455. Prior to Gutenberg's invention of the moveable type printing press, books were painstakingly copied by hand enabling a few pages to be copied per workday. The printing press, by contrast, enabled thousands of pages to be copied in a single day. This single innovation enabled individuals to build their fortune on the act of publishing their work – by becoming the author of a bestseller and selling hundreds of thousands of copies of their work or in claiming credit for new discoveries in the scientific realm. It enabled the spread and debate of ideas both in religious dialogue and in scientific query ultimately leading to the period known as the Enlightenment.

In a very similar way, as the Internet took hold of the world through the 90's into the twenty-first century, a new inflection point took place in which current information was quickly disseminated in real time to the very individuals who were seeking that information. With the spread of mobile and broadband networks, this

information began to reach the vast corners of the world at increasing speeds and with ever more bandwidth. The societal impact of this technology and rapid, real time dissemination of information has had a democratizing impact within the world. The widespread implication appears to be that individuals with talent and initiative will no longer be subject to the chokehold of the small minority who today may control distribution of goods, services, and information that control our economy.

It used to be that for everything from college admissions to getting venture capital funding for a startup required a person to know the right people at the right time in the right place. With college admissions as an example, one of the most exclusive private boarding schools in the country is Philipps Exeter which matriculated 33 students to Harvard and 33 students to Yale from 2011-13. Most elite high schools would be lucky to have 1-3 students matriculate to these schools. Being at the right school clearly matters in a student's ability to have access to the right resources. In much the same way, starting a business that is potentially the next Google or Facebook also has relied on resources that have been available to a small number of individuals. Brand name venture capital firms like Kleiner Perkins and Sequoia Capital that provide financing to fledgling startups are all located on a single street, Sand Hill Road in Menlo Park, California. Getting a meeting with one of these firms requires a "warm" introduction – an introduction needs to come from someone the partner knows and respects. Clearly, the ability to raise capital for a startup company has been limited to the few who had access to that network of

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individuals. In the last ten years, this chokehold on resources has fundamentally changed. The Internet has democratized opportunity for the masses. Democratized opportunity requires that everything from education to jobs to funding to information to supply and demand be accessible and available. The Internet and the companies (primarily startups) that have leveraged the potential of the Internet has provided the infrastructure that makes this universally possible.

At the age of 15, Battushig Myanganbayar, a boy from Mongolia, earned a perfect score on a MIT sophomore level circuits and electronics course offered online. Not only was this remarkable because Battushig had not taken any of the pre-requisites for this course, he was also mastering the class in a second language, English. Ultimately his performance in the class earned him entrance into MIT as an undergraduate.^(注1, 2) Although Battushig lived in the capital of Mongolia, it is still quite remarkable that a boy who comes from a country where a third of the population is nomadic, would be discovered and admitted to a world class university through an online course.

The Internet has given global access to resources whether it is knowledge or best practices or people or an audience. In the past, these were all closely guarded industry secrets but today are available to the world with the literal click of a button. Pop sensation Justin Bieber was discovered out of rural Canada through uploaded YouTube videos and has garnered over 3.75 billion YouTube views. An even bigger YouTube sensation is Felix Arvid Ulf Kjellberg (also known as PewDiePie). Felix is a Swedish video game commentator on YouTube with nearly 30 million followers commanding over 5 billion video views. His influence is so great that he is credited for helping to propel Flappy Bird from relative obscurity to the most popular free game on the iOS App store. PewDiePie and others like him not only impact the industry they cover but shape the tastes of their audience and in so doing have created mini-empires for themselves. While celebrities of the past were manufactured by media and by agencies, these social media celebrities created their own celebrity

(注1) <http://www.nytimes.com/2013/09/15/magazine/the-boy-genius-of-ulan-bator.html?pagewanted=all&r=0>

(注2) http://www.slate.com/articles/technology/future_tense/2014/04/battushig_myanganbayar_aced_an_edx_mooc_then_gave_lessons_to_mit.html

by organically building an audience.

Jobs are no longer positions that are to be held for 20 or 30 years. Not only has the economic promise of careers followed by pension funds been fundamentally broken in the United States, the new generation of Millennials appears to be much more restless generally staying at a particular job for a few years before moving on. There are increasingly flexible means by which individuals can acquire income so that they can spend the rest of their time pursuing their passions. For some, the flexibility has allowed them to acquire income based on their passions whether it is through marketplaces like Etsy or oDesk.

On Etsy, a marketplace for handmade objects, a small shop owner can go into business by putting up a few of her handmade objects onto the site. Twenty years ago, that very same store owner would have had a very limited audience largely based on who she knew or where she lived. Today, a mother in Austin, Texas who is an excellent seamstress, can sew Snow White costumes in her free time and set up a store on Etsy to sell homemade costumes for \$50 each. In fact, one of the top Etsy sellers is ThreeBirdNest from Livermore, California who sells homemade headbands, socks and scarves. She has over 11,000 reviews and has logged over 85,000 sales. Her estimated sales per month are as high as \$65,000.

With other marketplaces, it is possible to find supplemental income with a great deal of flexibility. On Lyft, a mobile application that enables people seeking a car ride to locate a driver close by who is willing to drive them to their destination, the driver is not a professional driver but has been checked by Lyft to make sure that their car is appropriately clean and that the driver has a clean record. One Lyft driver is a former stock broker who decided that he wanted to pursue his dream of being a private fitness instructor and drives for Lyft to help supplement his income. Another driver is an IT administrator at a tech company who has an expensive photography hobby. He drives Lyfts so that he can freely purchase camera lenses without having his wife complain. Riders for Lyft sit in the front of the car next to the driver to make it seem as though your friend has come to pick you up. The experience is incredibly social, convenient, and inexpensive.

Communities like these are powerful in that they have unleashed a new generation of professionals whether they are software developers or crafters and provided them an ability to access new opportunities and customers through the scale of the Internet. In that sense, the Internet has provided not only a great platform for the discovery of talent, it has also provided a great means for dissemination of that talent and opportunity. It has provided an incredible mechanism for enabling a new generation of individuals to literally set up shop without having to purchase the infrastructure of an actual storefront or office. We call this new generation of professionals micro-entrepreneurs. Micro-entrepreneurs can move from a hobby business to brands that are global in scale using the exact same infrastructure.

Startups now have ways in which they can prove demand for their product before they seek financing. This has enabled startups to drastically cut the amount of venture capital they seek in the early days of their business. Today, an engineer can put together a product leveraging the infrastructure of Amazon Web Services and open source software and essentially launch the first version of their product. In the world of startups 20 years ago, a founder needed \$5 million just to get started and an investor would get 50% of the company for providing that financing. Today, a founder really only needs \$1-2M and needs to sell much less of their company (20-25%) to get started. The need for this level of investment has spawned a new generation of venture capital firms who have \$50-150 million funds rather than the \$500 million to \$1 billion funds that traditional venture funds have raised. These micro-venture capital firms like Floodgate and First Round Capital have invested at the very early stage of a company's development called the seed stage and over

the last 5 years have been backers of companies like Twitter, Lyft and Uber.

Because the upfront capital required to start a company has been reduced, the barrier to becoming an investor in startup companies has similarly been reduced. New platforms have emerged like AngelList and Kickstarter which have enabled startups from around the country to gain access to angel investors who also live throughout the US. This mass availability of capital as well as the reduced barrier to starting up a business has fueled the democratization of entrepreneurship. Over the past decade, new businesses completely changed the landscape of existing industries whether it is in DVD rentals (Netflix replaces Blockbusters) or retail (Amazon replaces Best Buy and Circuit City and threatens Costco and Walmart) or video (YouTube threatens cable TV).

As startups continue to massively disrupt existing stagnant industries, the potential for change and innovation is at an all time high. The optimism found in the coffee shops of San Francisco and the lofts in New York City is driven by the belief that this change will continue to provide new opportunities to the masses and create an awareness of the possibilities for everyone globally.

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