The Dot-com Bubble Historical Case

Overview

The term “Dot-com Bubble” describes a period of rapid growth in the share prices of companies which were believed to have created fundamentally new business models based on the Internet. The technological backbone for the Internet had existed for decades, but until the 1990s it was used primarily by the U.S. government and university researchers.[i] That changed in the early 1990’s with the advent of the World Wide Web. With its hypertext links and browsers, the Web allowed businesses and individuals to access the Internet for any legal purpose.[ii]

Entrepreneurs quickly saw the potential to use the Internet for making money. In particular, they realized opportunities for providing products and services much less expensively than traditional businesses were doing. For example, Amazon.com, established in 1994 by visionary CEO Jeff Bezos, used Internet-based book-shopping to grow at the expense of established retailers such as Borders, which went bankrupt in 2011 after operating nearly 700 stores and employing nearly 20,000 people. Barnes and

Noble another big bookseller, has survived, but its stock price is less than half its peak value.

Blockbuster Video was even bigger than Borders, employing 60,000 workers and operating 9,000 stores. Ten years before filing bankruptcy, in 2010, Blockbuster could have purchased Netflix for $50 million.[iii] Failing to close that deal was one of the biggest business mistakes in history. Today Netflix is worth $50 billion, having put Blockbuster and other video store chains out of business.

Given this disruptive power, it's not surprising that the Internet and the Web created excitement in the 1990s. Actually, in a way it's more surprising that there ever was a Dot-com Bubble which catastrophically burst. Web-based commerce has grown to levels that even the most "irrational[ly] exuberant" Dot-com entrepreneurs and investors would have found surprising in their day.

This essay explores the nature of the Dot-com Bubble and some of the lessons we can learn from it. We try to answer these questions:

- What caused the bubble? What caused it to "burst"?
- Why wasn't the bubble recognized until it burst; was it possible to see at the time that the "New Economy" had been overrated and the "Old Economy" too quickly dismissed? Was everyone convinced that the New Economy was here to stay, or were there some warning voices?

- What guidance did history have to offer to those who wanted to learn from it? Have there been other bubbles like the Dot-com Bubble, or was it unprecedented?
- What does history have to say about the way new technology ultimately changes business models? Consider, for example, technologies such as trains, automobiles, and airplanes.
- Is there evidence today that a "New Economy" based on the Internet was written off too completely when the Dot-com Bubble burst?
- What types of "bubble" behavior can we see in our everyday lives? What are the antidotes to losing perspective and being caught up in the crowd?
- How can a combination of intuitive and intentional thinking help us make the most of innovation and change without falling prey to bubble behavior?

A Tale Human Genius and Human Frailty

Beginning in the mid-1990s, new business opportunities based on the Internet fueled an explosion of start-up companies and a run-up of stock market valuations, especially on the tech-heavy NASDAQ. Many of the brightest minds hailed a supposed "New Economy," in which technology had fundamentally altered traditional models of business. Ordinary people rushed into the stock market in droves. Experienced professionals left their "Old Economy" companies to join the start-ups, as did top university graduates; some students even dropped out of college to ride the wave that was making young entrepreneurs rick. Evidence of the fundamental economic change could be seen in macroeconomic data such as increased employee productivity; the U.S. Government budget showed a surplus for the first time in decades.[iv]

Then, in early 2000, the bubble burst. The NASDAQ lost more than three-quarters of its value in a matter of months.[v] Many individual investors and pension funds were wiped out. The vast majority of the high-flying dot-com companies disappeared (becoming the "dot-bomb" companies). The concepts of "e-business" and "e-commerce," hailed only a few years earlier as the foundations of the New Economy, fell into disgrace. The Dot-com companies which survived, such as Amazon, dropped the ".com" from their names.

The Dot-com Bubble was caused by two persistent flaws in human nature. One is our natural tendency to jump quickly to conclusions, even in the face of obvious evidence that we may be wrong. The other is a tendency to be selfish and even greedy. We'll explore each of these human frailties in turn.

The intuition that the Web would change the world dramatically was actually correct, as we now know. But if the people who got caught up in the Dot-com Bubble had thought more intentionally, they would have realized that not everything would change as rapidly as they presumed.

For example, the founders of Webvan would have done well to thoroughly study the grocery business to distinguish what the web could change and what it couldn't, at least for the foreseeable future. For example, retail grocery stores are highly competitive with one another. As a result, they have very small profit margins. For each dollar a customer pays at the register, the grocer gets to keep just one penny, after covering all the costs of purchased goods, paid labor, and rent expenses.[vi]

On top of that, customers do much of the work for free, walking or driving their own cars to the store and picking their own orders from the shelves. For Webvan or any other web-based home-delivery grocer, replacing these functions with sorting software, warehouses, delivery vans, and drivers was going to be very expensive. On top of that extra expense, the newcomers would have to learn the subtle techniques of satisfying customers without carrying too much inventory—for example, making good guesses about how many pounds of fresh fish or produce to order and how to time price reductions to be sure that these perishables sell before they spoil and have to be written off as a total loss. Ideally, before "disrupting" the grocery business, the new web-based competitors would have become expert in running grocery stores the old-fashioned way.

Ironically, the founder of Webvan should have known that, based on his experience with the hundreds of bookstores he had created. He was none other than Louis Borders, founder and CEO of Borders. Apparently, Louis Borders felt confident that bookstores would always be the preferred place for book shopping. He responded to the dot-com phenomenon of buying books online by simply striking a partnership with Amazon (in hindsight, a move akin to the Trojans' mistake of moving the Greek's wooden horse inside their city walls). While Barnes and Noble went to war against Amazon, striking its Nook e-reader against the Kindle, Louis Borders pursued his intuition that the web would present more trouble for traditional grocery stores than for bookstores.

The Lure of Easy Money

Another mistake Webvan made was to take all of the money which excited investors wanted to give it. Louis Borders had spent almost thirty years slowly building up his chain of stores, starting with just one in his college town, Ann Arbor, Michigan.[vii] He grew the business slowly, taking time to perfect the operating model. But in the case of Webvan, by raising $375 before he really understood the business he was getting into, Louis Borders and the other founders assumed responsibility for growing rapidly, ready or not. A research report published by the Wharton School of Business describes the problem this way:

> *"Even if someone at Webvan had wanted to try its online grocery model in one city, improve upon it, and then expand to other cities, the financial climate of those times would have had little patience with that approach. Many people involved with Internet start-ups believed that they had a narrow window of opportunity, and that they had to act fast before it slammed shut. In an interview with The New York Times, David Beirne, a venture capitalist with Benchmark Partners and an early backer of Webvan, described the situation as a Catch-22. 'We had a unique opportunity to raise a lot of capital and build a business faster than Sam Walton rolled out Wal-Mart,' he said. 'But in order to raise the money, we had to promise investors rapid growth.'"*[viii]

To produce the rapid growth investors expected, the Webvan leadership team began spending money in huge amounts. They signed a billion-dollar contract with Bechtel, a construction company, to build high-tech warehouses at a cost of $30 million each.[ix] They started operations in cities across the United States before they had proven the model in their first city, San Francisco. As a consequence of spending so much so quickly, Webvan's average loss on an order of groceries became $130.[x]

With that much financial red ink flowing, Webvan's bankruptcy was inevitable. It came quickly, less than two years after the initial public offering (IPO). In yet another irony, today Amazon owns the assets of Webvan and is carefully making its entry into the online grocery business. Louis Borders' original intuition was sound: there are people willing to pay a premium for groceries brought to their door, and there is technology which facilitates cost-efficient delivery. But Webvan's combination of too much appetite for profits and too little intentional thinking about profitability doomed a brilliant idea and the investors who eagerly backed it.

What Goes Up [Too Fast] Must Come Down

Though Webvan's bankruptcy became an icon of the Dot-come Bubble, neither Webvan nor any other Dot-com company caused the market bubble to burst. In fact, the Dot-com companies didn't create the bubble. They simply used the bubble to raise more money than they could have borrowed from banks or private lenders.

Market bubbles are common, as we'll see in the next section of this essay. Bubbles begin when the majority of buyers in a market act as though the normal price-setting mechanism has been turned upside-down. Normally, when the price of something goes up, fewer people are willing to but it. If a seller wants to sell more of something, the price must be reduced to stimulate demand. This back-and-forth negotiation between buyers and sellers establishes a market equilibrium.

However, in a market bubble, rising prices are taken by the majority of buyers as a signal that the goods or services offered for sale have been undervalued, so much so that prices will continue to rise from the current higher price. When this belief takes hold, a “herd mentality” may develop, with buyers deciding to buy primarily because they see others doing it. Though they have paid a premium to the old price, they believe that they will be able to sell at an even higher price as the market continues to rise. With the supply-and-demand balancing mechanism thus suspended, prices can take off like a rocket.

At the beginning of the Dot-com Bubble, many investors believed that the Web would make some new business approaches worth more than traditional ones. For example, many marketing specialists assumed that a product advertised via a Web browser would be more likely to sell than the same product advertised on TV or in a newspaper, because buyers could make the purchase immediately, rather than getting up from the TV and going to a store or placing an order by phone.

In fact, that logic is sound, as evidenced by the decline and bankruptcy of many newspapers and the rise of advertising-supported web sites such as YouTube. However, some investors took the logic to illogical extremes. The owners of some Dot-com companies were able to raise millions of dollars simply by citing the “eyeballs” supposedly commanded by their web sites, even though they couldn’t show any revenues or even any products. It was enough to have intuition on their side.

Anybody could see—or at least imagine—how “eyeballs” would lead to purchases, which would lead to revenues and, ultimately, profits for the Dot-com companies and their shareholders. The mantra among many Dot-com entrepreneurs was, “Money will take care of itself.” In the words of Matt Mossman, an expert interviewed for this essay, “Their strategy, effectively, was to sell dollars for fifty cents.” Yet many investors bought the questionable argument that profits would come later. To that point in history, a successful start-up company would need ten to fifteen years of profitability before “going public” on a major stock exchange; in the short-lived Dot-com era, the time required to go public for many companies, even many with no profits at all, fell to eighteen months.[xi]

That’s how the Dot-com market boom began, with intuition which should have been checked by intentional thinking. The boom only became a bubble though, with the addition of another human weakness, greed. As prices rose beyond levels supportable by sound logic, speculators entered the market. They included “day traders,” mostly amateur investors would buy and sell stocks on the same day, simply betting that the market price will go up. These day traders placed these risky bets without knowing or even caring whether the company in question was fundamentally worth more or less than its morning price. As stories of day-trading success circulated, some people quit their full-time jobs to join the craze, tempted by the prospect of earning more in a day than they could in a year at the office. Their entry into the market drove prices up even further.

As the bubble expanded, even the most ardent high-tech dreamers recognized that the market was bound to correct itself via a drop in prices. But it was terribly tempting to stay in the game while there was still such easy money to be made. Long before the bubble burst, in March of 2000, many investors and day traders knew they were part of a herd betting on market conditions that couldn't last. Those who stayed in the market against their better judgment were actually betting not on the stocks themselves, but on the "greater fool theory" that they could sell to someone else and get out before the crash. Many were right, but many others were painfully wrong; the latter included unsophisticated individuals who unwisely invested late in the game and lost their retirement savings when the bubble burst.

All of This Has Happened Before

Even the unsophisticated and vulnerable investors, though, could have hearkened to sage voices of counsel and warning. As early as 1996, a year in which the NASDAQ index of stocks increased in value by more than 20 percent (a small amount relative to the increase in subsequent years), U.S. Federal Reserve Chairman publicly counseled against "irrational exuberance" in the stock markets. His remarks made headlines and produced an immediate market "correction," or a decline in prices. But the correction was short-lived, and the markets continued to rise abnormally fast.[xii]

Two years later, in General Conference, President Gordon B. Hinckley offered similar counsel to beware. After relating the Biblical story of seven years of famine in Egypt and Joseph's wisdom in preparing for it, President Hinckley said: "I want to make it very clear that I am not prophesying, that I am not predicting years of famine in the future.

But I am suggesting that the time has come to get our houses in order." President Hinckley then referred to recent turbulence in the global financial markets. He proceeded to share his personal memories of the Great Depression.[xiii]

The year before the bubble burst, another subtle warning came from the world's most successful investor, Warren Buffet. In his widely read letter to shareholders of his company Berkshire Hathaway, Buffet publicly admitted to having "no insights into which participants in the tech field possess a truly *durable* competitive advantage." He made it clear that Berkshire Hathaway would not invest in any technology company, particularly Dot-com companies. Perhaps harking back to Alan Greenspan's counsel against "irrational exuberance," Buffet assured his shareholders he would not "[get] restless and substitute hope for rationality."[xiv]

History also offered warnings to those willing to consider relevant analogies. The Great Depression, which President Hinckley referenced in his Church-wide counsel, was triggered by the U.S. stock market crash of 1929. Even an amateur historian could have seen the parallels between the 1990s and the 1920s. Both decades brought vast technological change—in the 1920s, it was the spread of radio, automobiles, and airplanes. And both decades saw stock market bubbles burst.

A good historian would have seen an even more apt analogy in the British "Railway Mania" Bubble.[xv] In the 1840s, steam locomotives and railways looked every bit as world-changing as today's Web and the fiber optic cable that provides low-cost, high-speed access to it. As railroad investors saw the potential to connect factories and farms with distant cities, the stock prices of railroad companies soared. The railroads used this bubble wealth to build more rail lines than Britain needed, much as telephone and cable companies laid what would become "dark" (unused) fiber in the 1990s.

Railroad companies aggressively marketed shares of stock directly to individual investors, allowing them to buy with a down payment of just ten percent, much as 1990s brokerages allowed day traders to trade "on margin." Many middle-class British families invested all of their savings. When the bubble burst, they couldn't pay the debts which came due and were thus financially ruined. The rail lines which had been laid proved valuable in the ensuing decades, just as much of the dark fiber laid in the 1990s is now in use. However, the individual and societal cost of that infrastructure was painfully high.

Slow and Steady Wins the Race

History shows that major, lasting change rarely happens quickly by human standards. The dinosaurs may have been wiped out by a single meteor, but it took millions of years for mammals to fill the ecological void. Technology evolves faster than living species do, yet still not as fast as the human mind is prone to project. For example, steam-powered locomotives didn't really change the way grain was distributed until the creation of grain elevators and commodities exchanges. Likewise, the automobile fundamentally transformed U.S. society, but only after the creation of the interstate highway system, decades later. And airplanes, first invented by the Wright Brothers at the turn of the twentieth century, became common for civilian travel only when companies created to build military aircraft for World War II looked for new markets when the War ended, more than forty years later.

Though the Dot-com Bubble was bound to burst, there is ample evidence that the technologies behind it are just as revolutionary as the Dot-com prophets projected, perhaps even more so than trains and automobiles and airplanes were when they fundamentally changed the world. Consider, for example, these innovative companies, all enabled by Web technology, which didn't exist until thirty years ago: Amazon, Netflix, Facebook, Google, Apple iTunes, eBay, Khan Academy, Uber, and Airbnb.

Had the bubble not burst, we might see other dot-com companies on this list which possessed potentially world-changing technology. Unfortunately, with bursting of the bubble it became impossible for all web-based businesses to raise additional funds. Some good companies undoubtedly failed to get the support they needed, hurting not only their employees and investors but also consumers, who had to wait for the financial markets to recover and for new innovators to meet their needs. The costs of the Dot-com Bubble have been borne not just by those who participated in it, but also by people who have never heard of it.

Because bubble behavior is rooted in human intuition, impulsiveness, and desire for self-gratification, we can see variations of it in many realms, not just the financial markets. For example, fashion designers rely on bubble behavior to ensure that most people buy new clothes before their old ones have worn out. Each new fashion trends introduces a style so different that fashion-conscious consumers fear being seen wearing the old style, even if the new one isn't inherently attractive to them. In fact, a quirky, almost ugly style is ideal for a fashion designer, because it all but ensures that the fashion "bubble" created will burst spectacularly when the next new style is introduced, as people ask, "What was

I thinking?" A similar dynamic occurs in popular music, television programs, and movies. There is no performer so "out" as the one who was fabulously "in" just a few years ago.

Disciplined, intentional thinking provides at least a partial antidote to losing perspective and being caught up in the crowd. As a general rule, most things in our world change. But they tend to change slowly relative to the expectations of a human being whose attention and desires are focused on change. To correctly predict the pace of change and benefit from it, we need selfless motives and patient, methodical thought processes.

We also need a dualistic mindset, one that goes beyond binary distinctions such as then vs. now, same vs. different, and fast vs. slow. Life evolves in complex, hard-to-predict ways, and living well requires a combination of spiritual grounding and mature, balanced thinking capacity. F. Scott Fitzgerald, author of *The Great Gatsby*, said it this way:

> *"The test of a first-rate intelligence is to hold two opposed principles in mind at the same time and still retain the ability to function."*

[i] https://en.wikipedia.org/wiki/Internet.

[ii] https://en.wikipedia.org/wiki/World_Wide_Web.

[iii] http://variety.com/2013/biz/news/epic-fail-how-blockbuster-could-have-owned-netflix-1200823443/.

[iv] http://www.davemanuel.com/history-of-deficits-and-surpluses-in-the-united-states.php.

[v] https://www.google.com/search?q=nasdaq+history&ie=utf-8&oe=utf-8.

[vi] http://www.forbes.com/sites/petercohan/2013/06/17/four-lessons-amazon-learned-from-webvans-flop/.

[vii] https://en.wikipedia.org/wiki/Borders_Group.

[viii] http://knowledge.wharton.upenn.edu/article/what-webvan-could-have-learned-from-tesco/.

[ix] http://techcrunch.com/2013/09/27/why-webvan-failed-and-how-home-delivery-2-0-is-addressing-the-problems/.

[x] http://knowledge.wharton.upenn.edu/article/what-webvan-could-have-learned-from-tesco/.

[xi] Pathway student interview with Brother Matt Mossman.

[xii] https://en.wikipedia.org/wiki/Irrational_exuberance.

[xiii] https://www.lds.org/general-conference/1998/10/to-the-boys-and-to-the-men?lang=eng.

[xiv] Berkshire Hathaway Inc. Annual Report, 1999, pp. 15-16.

[xv] http://www.thebubblebubble.com/railway-mania/.