"Netflix is ruining my life!"

So said my then 11 year-old daughter back in 2010. Fridays had been movie night at our house forever, and part of our routine was for me to pick up the girls from school and go to Blockbuster to browse their voluminous video collection and agree on a movie or two. Although the process was sometimes a bit arduous, the kids enjoyed the smell of popcorn at the store, the experience of looking at obscure and older movies, and the feeling that the weekend was finally here. It was quaint, and we were very late adopters to digital movie experiences, with an old tube TV and even a VCR in regular use until quite recently. (This was an attempt at parenting -- to make books the primary form of entertainment at home -- and this particular daughter, much to her credit, still resists the digital convergence we've succumbed to at our place).

In 2008 Jim Keyes, the CEO of Blockbuster, had been interviewed regarding the changes facing his industry, and famously quipped that: "neither RedBox nor Netflix are even on the radar screen in terms of competition." Well, maybe not his radar. Although we never saw much from Redbox in Prince George, Blockbuster filed for bankruptcy in the US 2010, and not long afterward, the last of the stores closed down in Prince George forever as folks bought in to the new way of seeing things. Netflix and other similar streaming services have since become ubiquitous.

This week we take notes from a strong piece by RBC's Economics, and dig a little deeper in to the idea of game-changers, also known as disruptors, and how they might impact our portfolios in the future.

Disruptors, Part 1 of 2:

Disruption will likely accelerate as new services or products are made possible by technologies which require low levels of capital investment. For example, consider the modest capital requirements Airbnb initially needed to disrupt the hotel industry.

Outgoing General Electric CEO Jeff Immelt recently stated that global disruption was "breathtaking" and unstoppable. "None of it is going to get any easier. It's only going to get harder."

Sectors at risk

The auto industry faces enormous technological challenges with the advent of the electric vehicle (EV) powered by lithium-ion batteries. Adopting this technology opens the door to a complete rethink of fundamental design and production processes. Clean air regulation is spurring this paradigm shift, and France (2030) and the U.K. (2050) have set emission-free deadlines for cars sold. EVs currently reduce carbon emissions by half compared to petrol-powered cars.

As if this was not enough, the auto industry is also contending with the rise of the sharing economy, itself enabled by high levels of digital connectivity. This has already cut into demand from young adults in large cities, where the average car sits idle for 23 hours each day. Studies by the Organization for Economic Cooperation and Development (OECD) and the Boston Consulting Group suggest the advent of self-driving vehicles would make ride sharing even more pervasive, perhaps accounting for 25% of all miles driven by 2030.

Retail is another industry where business models are facing radical disruption. Amazon has already almost singlehandedly reconfigured much of the industry, and now Wal-Mart is making a massive push. More than 35% of apparel sales are now done online.

Amazon has now trained its crosshairs on the retail food industry, which so far has been largely immune from online disruption, generating a mere 1% in online sales. Its purchase of Whole Foods is a warning shot, and Amazon hopes to use that company's fleet of refrigerated trucks and supply chain managers and embed them into its ecosystem of data and artificial intelligence. If Amazon can be aware, through connectivity and digitization, of when consumers are running out of a product, it can deliver the item to consumers' doors faster than the competition and with more convenience by eliminating a trip to the store.

If Amazon (and now Wal-Mart) succeeds, the ensuing disruption will not be confined to food retail. Given the rapid penetration of online retailers, retail rents are under pressure, which may lead to credit impairments for lenders. Industry observers look for retail space closures in the U.S. this year to exceed those of the 2008 financial crisis year. The U.S. would be most affected given retail space ranges between 20–25 square feet per person, compared to some 15 square feet in Canada, and 2–5 square feet in Europe, according to Morningstar and RBC Capital Markets.

Obsession with a Gold-rush mentality:

This is not to say that the market ignores these ideas and is always caught unawares. On the contrary, many investors are obsessed with the gold-rush mentality that often accompanies potential disruptors. The truth is, it can be a long wait, or a long-shot bet on a company like Amazon. And the market is always trying to be ahead of the game. For example, at the time of writing. AMZN's share price is something like 275X expected future annual earnings.

More on this topic next week.

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