

## How to define strategy for data-driven 'winner-takes-all' markets

### Data drive the value of the top Fortune 500 companies

For any strategist *the world risk assessment* published annually by the World Economic Forum makes interesting reading. This document shows that the power of the largest data-based companies may destabilize the world order as we today know it. Together with climate change and related migration flows, the techies are considered to form one of the world's largest sources of potential future societal and economic instability.

Since 2017, for the first time in history, companies that were data-based made up the top of the Fortune 500 list in terms of market capitalization. Think of Alphabet (Google), Microsoft, Apple, Amazon, Facebook and Alibaba. In the distant past the list was topped by for example steel companies. Construction and production, among others of cars, drove the future. Later natural-resource-related companies like ExxonMobil succeeded them at the top of the chart. This was the time that the global growth was driven by tangible consumables like fuel. In contrast, today's most valuable companies hardly own or produce tangible assets. Where the previous generation of Fortune 500 top companies based their competitiveness on the economy of scale of their tangible assets and businesses, today companies come out on top based on their scale in collecting, analyzing and most of all owning data.

Previous leaders like Standard Oil developed a 'winner takes all' business model. Their aggressive acquisition policy was aimed at nothing less than total market dominance. So much so that it triggered trust-busting moves in the US, to correct the inequity that resulted from Standard's monopoly. The standards that for example Microsoft, Amazon and Facebook have set with their services, especially for the Western world, amount to even stronger monopoly positions than Big Oil ever had. There is de facto only one software platform (Microsoft Windows), one Western on-line retailer (Amazon), one Western social network (Facebook), one search engine (Alphabet/Google) etc. All these companies have turned themselves into utility providers, not different from drinking water or electricity producers, but entirely privately owned. The latter brings their pricing power almost fully in their hands. And indeed, today's (free) world leaders increasingly contemplate reigning in the power of the big techies.

Data generation and processing power in addition improve exponentially – something that is hard for linear-thinking humans to imagine and understand at the best of times. Where does this lead us? At least it has led and continues to lead to a change in global power balances.

### Big cats and voluntary mice

The data companies may well be casted as today's hunting cats. As consumers we allow the cats to be prying on us as willing midget mice. Our willingness is voluntary. It relates to us having so strongly adapted our lives to working with the cats often generously provided tools, *because everybody does it*, that the balance of power between cats and mice feels to have become rather uneven. Formally the cats are powerless.

Rejection of all digitalization is still an option. My 92-year-old mother defies all these companies. In most of today's world she is, however, increasingly the exception. Understandably to most of today's world population her choice is not aspirational.

In practice the cats thus have gathered power. Take Amazon. When publishing a book, it should be on Amazon. When it is not, nobody will find it or so we wish to believe. When it is, it is most of all Amazon that will make money on it. Such is the power of being top-of-mind as (on-line) bookseller to the world's consumer base. This triggers the question: would, going forward at an exponential rate, this be all there is? Will this be a stabilizing end-state? I guess not.

### **Technologies proliferate**

There is always a risk in using historical analogies. Let us postulate that today the destabilizing power of the techies is the risk. As a cold warrior that had my formative years in the early 1980s, I can, however, not resist the temptation to look back to the biggest risk of that era. Mutually assured destruction it was called – and it was a real risk. Probably when more and more currently still secret documents concerning that period will be declassified over time, we will see that in 1983 we were closer to that risk than we knew at that time. Nothing happened, but that was not a given...

Initially, one country had a nuclear weapon. The weapon resulted from what up to that time had been the single largest scientific-military-project that the world had ever witnessed: project Manhattan. Alas, the US held this technology-based power advantage only for some four years; by that time the USSR had developed its own weapon. Despite major efforts to prevent proliferation, several other countries followed. The message of this example is that no matter how well you protect know-how, it will proliferate.

What was true for the breakthrough nuclear technology in the 1940/1950s will be true for the breakthrough data collection and processing algorithms of today. Where some companies are leading the data-race and today thus capture enormous value, others will follow. In business, successful models always tend to converge. What works best for one leading company will usually develop into the 'industry paradigm on how to compete'. Operating according to the same paradigm, contenders will start copying the initial leader. Intruders will ultimately also find a place under the sun. When this happens, margins of today's leaders in the business lines they are in will erode. This usually happens up to a point where new contenders will no longer see a merit to step in. When technology proliferates, business entry barriers usually decline in relevance and industries and markets commoditize. Moreover, as in the case of Standard Oil, governments may interfere when the above process falters.

### **Tomorrow belongs to the fast**

There is even more to this. Today's data-based leading companies are (still?) only active in a limited number of industries. Today's data-science developments proceed so quickly that tomorrow (only) belongs to the fast<sup>1</sup>. I sincerely believe that almost any company – regardless of the industry in which it operates – can outperform its peers by being the first to embrace data science as a smart instrument of competitive advantage.

As developments move so fast it will take a 'fail fast' i.e. start-up-mentality within a company to play. When, however, hitting gold during your data mining and analysis it will pay back fast too.

Data science may for example be applied in predictive analytics to forecast market supply, demand and for example commodity prices. It may also be applied to analyze 200,000 on-line customer reviews of a frequently traded consumer good; something old fashioned approaches would never be able to do cost-effectively. For this we today can use natural language processing. The technique allows you to identify real consumer usage and attitudes which in turn may feed your innovation roadmap. Data science methodologies may both replace or complement classical consumer focus group discussions.

The data-analysis possibilities are endless. It only requires the imagination to define how to start data mining and - analyzing at the location where for your company possibly the largest gold deposit may be. In summary, for any company, except perhaps for today's behemoth Fortune 500 leaders, the above thus suggests considering pursuing two parallel strategies:

- avoid being a vulnerable mouse when you with your business propositions roam in core markets of the truly big cats; I would rather not compete in the area of a larger or more powerful competitor's strength when I could avoid it.
- define data-science based strategies to become your industry's first and fastest-moving cat, in the process hunting down your share of mice that failed to see you coming and regretted that for ever after.

The cold warfare approach – even when it fortunately never became a hot war - and the strategies to compete in today's data-based world seem to offer a remarkably similar lesson. As every cat will confirm, catching a disproportional share of mice requires being:

- accurately, completely, and timely informed where and how to attack.
- undetectable before you attack.
- fast when you attack.

What data-driven strategies in today's high-speed war in business are you developing to enable your company doing just this?

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Note

- .1. Acknowledgement to mr. Paul Santilli at Hewlett Packard for this beautiful one-liner.