Amplifying Faint Signals as Competitive Advantage:

An Imperative Whose Time has Come

Highly resilient companies do 3 things well. They:

- Predict well – with insight into potential threats and opportunities. This is the 'seeing around corners' capability of capable companies.
- Execute well – able to adapt around those threats and/or opportunities. This is the 'creating value at scale' capability.
- Manage risk well. This is the 'making sure we stick around' capability.

Each is important. But managing risk. Well, let's put it this way: poorly managed risk, fewer customers. Fewer customers, weaker business. Weaker business, time to shut the doors or get acquired. It doesn't matter if you can see around corners or execute better than anyone else if you have no customers with whom to do business.

An extreme position, of course. To make a point. Of the imperative to put risk monitoring and management on the front burner of every strategic agenda and operational decision.

Managing risk – different types of risk, from cyber to competitive, to regulatory to weather, or whatever – particularly in times of great uncertainty has always been top of mind for astute leaders. And certain types of risk, particularly cyber, have burrowed its way into the recurring agenda of many (most?) businesses. But other types come and go depending on the degree to which they can't be ignored. Severe thunderstorms? Deal with the aftermath. New tariffs as a result of ratcheting up political tensions? We've seen this movie before so pass the costs onto customers; in short, deal with it. New start-ups putting pressure on specific parts of the business? Re-allocate capital to blunt, partner or acquire them. Deal with it.

But COVID?

This has been different in kind. It has impacted everyone, every business and every organization around the world (literally). This is not an article on the "structural change" COVID may have on supply chains, on where and how workers work, on how different industries / sectors are likely to recover, or on the 'ripple effects' that such recovery will have across sectors, workforces and locations (although crisp thinking on these topics is clearly needed). It is, however, a point of view on the (let's call it) "cognitive change" COVID will catalyze for those leaders willing to learn from it.

Let's explore how.

Risk Management as Support or Forefront of Enterprise Value?

Here's the good news about what's going on today globally.

Figuring out how to identify – to monitor – potential (new) sources of risk is at the forefront of arguably every organization as a result of what we're all dealing with. Surprises are seldom a good thing for business. We like predictability. Innovation, e.g., new capabilities that keep us on par or ahead of competitors, is goodness. It keeps us sharp, reactions to what new pressures or opportunities we have foreseen. Which we why we have R&D, innovation groups and folks who pay attention to market trends and competitive moves. But surprises can disturb or disrupt what we do and how we do it which may be good (if we jump on it) or bad (if we don't). So surprises by themselves are neither good nor bad. But they are costly in terms of time and resources to figure what they are and how to deal with them.

Here's the bad news.

We tend not to be very good at anticipating / identifying surprises. Well, if we were good at it, they wouldn't be surprises, right? The reality is: few organizations are good are "predicting well." Or, they might be good are predicting the big, slow-moving items – e.g., changes in interest rates, GDP trends, work skills, the extent of automation and how it is likely to impact large swaths of industries and locations. But it's the fast moving activities that are dark *(hard to find anything on them)*, fragmented *(distributed around the world)* or incomplete *(only get piecemeal information at a time)* that make it extremely, extremely difficult to see. And if they can't be seen, then they can't be monitored. And if they can't be monitored, then they certainly can't be predicted. And if they can't be predicted, then surprises will happen. And as we mentioned before, surprises are seldom a good thing for business.

Recall the proverb, "shutting the barn door after the cows are out." Simple phrase. Powerful message. And a good characterization of how we deal with events that, to add yet another metaphor, heat up our competitive water until it's boiling and all we can do is react.

But, hold on. Being reactive makes sense. After all, businesses are buffeted by local and worldwide events with impacts ranging from zero to significant. There may be hundreds of thousands if not millions of events – activities – that occur every day across our operations, our partner networks, our investments, our workforce that *could* impact us. How are we to know which ones are important and when? And, what are their implications across what we do, wherever we do it and with whomever we do it with? How are we possibly to know the relevance to us of people getting sick in Wuhan, a port closing in Los Angeles, a hurricane at the Cape of Good Hope, a work stoppage outside Paris, a cyber-attack on a Dutch Bank, a hurricane in Louisiana, and so many others. How are we, in short, to "amplify the faint signals" of potential impact in a way that we can do something about them.

There are two typical methods to answer these questions.

First. You don't. There are way too many events in the world to monitor. So, build up your capabilities to move quickly once it's clear that something exists that you need to respond to. Which works fine. Until it doesn't. Just look at the topple rate at which companies disappear every year – going out of business, being purchased, or just plain facing ever increasing economic pressure *(note: nearly 1/3 by the way for a combination of the first two comments and 74% for the latter – across industries).*

Second. You rely on what happened before. You have experts. They've seen this movie before. They know that a certain type of tariff will impact your supply chain within a particular economic range. Or they know that BREXIT will have some types of medium to longer term impact on how business is conducted within the European Union (as well as others).

There are three problems with the typical approach.

One, many of these efforts require on what was experienced previously; it is rear-view mirror focused. Which is valuable. Experts are trained to look at certain events in a particular way. Economists look at economic indicators; technologists at technology advances. And so on. It's not surprising that if you just purchased a new green car (which we did long ago), that you

notice, suddenly, more green cars on the road. This is the classic "observation bias." The result? **You can't see what you don't see**.

Two, enormous amounts of data that exists – the dark, fragmented, incomplete data comprising the millions of events that happen... everday – which makes it extremely difficult for experts to identify the patterns of potential relevance. Once, perhaps. Twice, maybe. Three times. Unlikely. Every day? Impossible.

Three, let's assume that you *could* cut through the noise and isolate specific events that matter. Let's say you identify 10 signals a day out of the million of possible events. That provides you 70 in a week and 3,640 in a year of signals that might matter. Multiple this by 10, or 36,400 / year if there are 100 signals that matter to you. If you're not overwhelmed yet, take the next step – because at this point, you run in the "so what" – the prioritization – problem. Where do you focus, based on what criteria, with what implications given a whole host of possible actions you could take across these thousands or tens of thousands of possible signals out of the millions or tens of millions of events that you might be monitoring. This is the "sense making" problem.

Ok, clearly something has to give. And this is where the "cognitive change" comes in. And if nothing else, then COVID has done us all a favor – highlighting the blunt reality that while COVID may be (only) a once in a while disruptive event, others exist that through accumulation create high risks exposures with material financial and competitive implications. So, we need to do something different to enable us to Manage Risk Well, strengthening how we Predict Well to give the possibility to continue to Execute Well.

How do we do **that**?

Amplifying Faint Signals for Competitive Advantage, Algorithmically

Below are recommendations to start the cognitive change necessary – call it where advanced risk monitoring meets sustainable competitive advantage.

Four Questions to Answer to build Risk Monitoring as a Competitive Capability

1. *How *do* we amplify the "faint signals" of events that we need to pay attention?* What don't we see that we should? What can we ignore? Which to highlight? Expected when?

2. *What are the potential impacts of these faint signals on specific parts of our business.* Note the adjective "specific" here. It's easy for experienced people to observe, for example, a tariff (to pick one of hundreds of possible different types of events) is likely to impact our supply chain. A really good expert will refine this indicating that it will impact production costs which will drive up end price of a good for customers. Fine. But ultimately useless. Astute leaders don't make decisions based on generalities but on insight into the specific capabilities and associated measurements (or Key Performance Indicators, KPIs) impacted. What we need is the ability to dynamically map a certain type of tariff (again merely using this as but one of many possible examples) on semi-conductor chips will impact 10 specific capabilities throughout a supply chain – from Fleet Management and Dispatch Tracking, to Demand Planning and

Inventory Management, to Marketing Messaging to Price Promotions, immediately.

3. ***What are the operational, financial, and technology implications of these signals on specific parts of our business, our workforce and our partner network?*** We need to be able to answer this question before we can answer the final one:

4. ***What are we going to do about it?*** There ***will*** be "ripple effects" of any events as well as unintended consequences of decisions made and actions taken. Few signals are isolated events. A particular tariff may result in a counter-tariff, a protest may result in labor shortages, an oil price collapse may trigger a pull-back of specific M&A activities in other sectors. And so on. We need to anticipate what these ripple effects are before we make decisions. But we can't unless we have insight into the "specific" impacts" of faint signals that matter. In short, we can't answer question #4 effectively until we know how to answer questions #1, #2 and #3.

This is where algorithms come in, powered by new techniques of ingesting data with clever ways at visualization resulting insights.

It's interesting.

Monitoring emerging signals is not a new field of expertise. Hedge fund managers and high yield investment managers build their businesses around doing so. After all, they monetize risks to make money. Techniques they've built over the years are spilling over into other sectors. But they hold no monopoly on the techniques needed to do so. Today's technology giants do the same though from a different perspective, stitching together data in service of delivering and monetizing their products. For both, algorithmic-driven event sensing is the foundation of the value they create. ***They "make visible what is typically invisible" – and monetize it.*** For us, it is our turn. The imperative is clear: to execute well around what we predict well rests on our capabilities to monitor risks well, algorithmically.

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