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Gaining a Competitive Edge in a Digital World

WHY IS IT FUNDAMENTALLY IMPORTANT FOR COMPANIES TO INCREASE THEIR AGILITY AND RAISE THEIR SPEED LIMIT?

THE WORLD IS CHANGING FASTER

As most business leaders would agree, the world around us is rapidly changing and becoming ever more complex. Nowhere is this more apparent than with consumer behavior, where change is exceedingly easy and, given new digital and mobile capabilities, the pace of change is accelerating. In 2010, Blockbuster entered bankruptcy, only six years removed from its peak revenue. In China, the WeChat messaging app took less than four years to go from zero users, to a billion. And last year, Pokémon Go reached 130 million worldwide downloads in its first month, the fastest ever for a mobile app.

"*If change is happening on the outside faster than on the inside, [then] the end is in sight***"**

Jack Welch

While consumers can change at exponential speeds, organizational rate of change is much slower, linear at best. Large, incumbent corporations often have thousands to tens of thousands of employees, complex systems, and lengthy time horizons for decisions. Left unaddressed, the gap between customers and businesses will grow wider, leaving room for value to be created elsewhere. (See Exhibit 1.)

The critical issue then for organizations is not simply change for the sake of change, but the rate at which change takes place: If you cannot change faster than the world around you, then inevitably you will be left behind; conversely, the ability to change faster than the outside gives you a significant, sustainable competitive edge.

THE RETAIL ENGINE

For a broader perspective, it is good to look back at the successful retail business model. (See Exhibit 2.) Based on this "retail engine" model, retailers maximize cash generation by driving operational improvement and trading the business harder, which then is reinvested into expansion, upgrades, and growth.
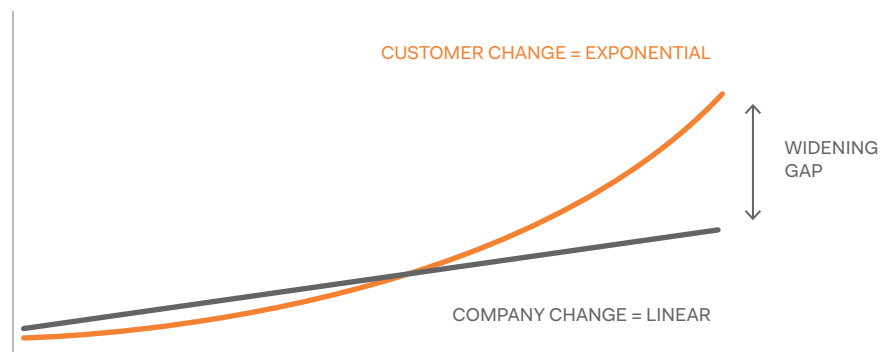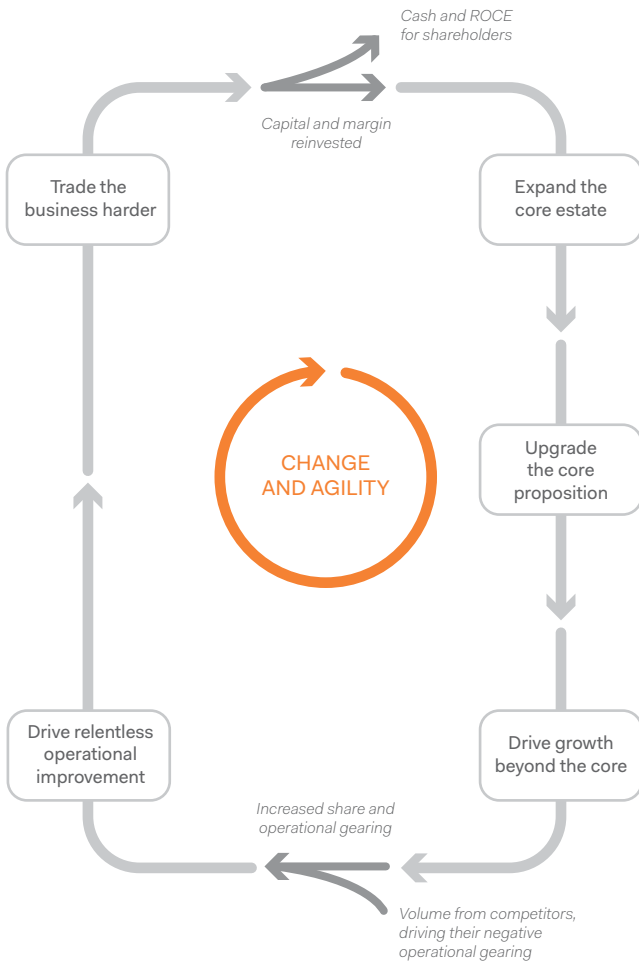
Exhibit 1: Pace of change

CUSTOMER CHANGE = EXPONENTIAL

WIDENING GAP

COMPANY CHANGE = LINEAR

Exhibit 2: The successful retail business model

MAXIMIZING CASH GENERATION

REINVESTING FOR GROWTH

Cash and ROCE for shareholders

Capital and margin reinvested

Trade the business harder

Expand the core estate

CHANGE AND AGILITY

Upgrade the core proposition

Drive relentless operational improvement

Drive growth beyond the core

Increased share and operational gearing

Volume from competitors, driving their negative operational gearing

FASTER THAN COMPETITORS

But getting the retail engine to turn in the right direction is fundamentally a challenge: In the long run, retailers are only able to raise prices in line with inflation, whereas a significant portion of costs (mainly wages) grow at a faster rate. In the US, this dissonance creates about a 40 basis-point headwind that must be confronted every year.

Your ability to change has been and always will be fundamental

If a retailer is unable to continuously find efficiencies and new offerings, the headwind is a pressure that, when translated into sales impact, will slowly crush the business model. Even before the model stops working, it takes little sales loss for stores to become non-viable.

It is the core of the business model that provides the fuel to drive the engine forward – your ability to change, be agile, and keep up with customer behavior. This ability to change has always been fundamental to retail profitability, and may be even more so as change in the merchandizing world accelerates.

STRATEGIES FOR AGILITY

How should companies run their businesses to become more agile?

Business as a decision-making factory

Companies in practically every industry – with the exception perhaps of startups – find organizational change to be frustrating. Projects take longer than expected, and existing infrastructure feels sticky.

To simplify your thinking, one way to frame a business is as a series of decisions. In insurance, for example, you can map out the decision-making process from hiring and customer targeting, to underwriting and claims management. (See Exhibit 3.) In retail, the decision process would include head-office choices, assortment management, in-store operations, and more.

If you think about the decision map along with the business components focused on efficient and optimal decision making, it brings clarity to how you can unbundle the different components of the business. Certain decisions are fundamental to your competitive advantage, while others are less important. You can view this business model as a game with two simple rules:

1. You can gain points only when making decisions. The number of points you gain is determined by how well you make the decision and how important that decision is.

2. Everywhere else, you can only lose points due to the cost of moving information between decision spots, dealing with messy data, and other process components.

Viewed in this way, an optimal strategy to maximize your points becomes clear:

- **Identify which decisions really matter to your business**, and which don't

- Make improving these decisions one of your **highest strategic priorities**

- **Manage these decisions like assets** – they need to be cared for, stewarded, and continuously improved year-to-year, and ideally quarter-to-quarter

- **Streamline everything else** – engineering out the costs, the time sinks, and the gridlocks that lose you points in between decisions

The second derivative

Even if you follow this strategy of building your organization around the decision map, moving quickly can still be quite frustrating.

To at least partially explain why, we can look back to a 1990 paper in the *Harvard Business Review*, "Re-engineering Work: Don't Automate, Obliterate." A classic paper, it lays out a set of rules on what "good" re-engineering looks like. Since then, companies have collectively spent billions of dollars and dedicated an enormous amount of resources to process improvement… yet, processes today still don't hold up very well against the

rules outlined in the paper.

The basic reason for that is that the world around us has changed; put simply, improved processes do not continue to remain improvements. To think about how to approach this problem, consider two concepts:

- **The first derivative** is the rate that businesses change. For the most part, businesses have learned to manage change reasonably well, where the outcome of most projects is a step forward from the original state. The problem is that while many businesses may have turned their loose processes into something much more structured and efficient, these new systems are also much more rigidly embedded and often entangled.

Therefore, it becomes very hard to change again when needed.

- In other words, **the second derivative** – the "rate of change of change" – has been slowed down by these first derivative changes because processes have been set in stone. The resulting challenge is that businesses are decelerating while the world is accelerating in change.

The key message here is to make change happen in a way that removes bottlenecks in your business and increases the second derivative, making it easier to change again and again.

To do that, you should define your second derivative strategy by **identifying all of**

Exhibit 3: A "decision map" from insurance
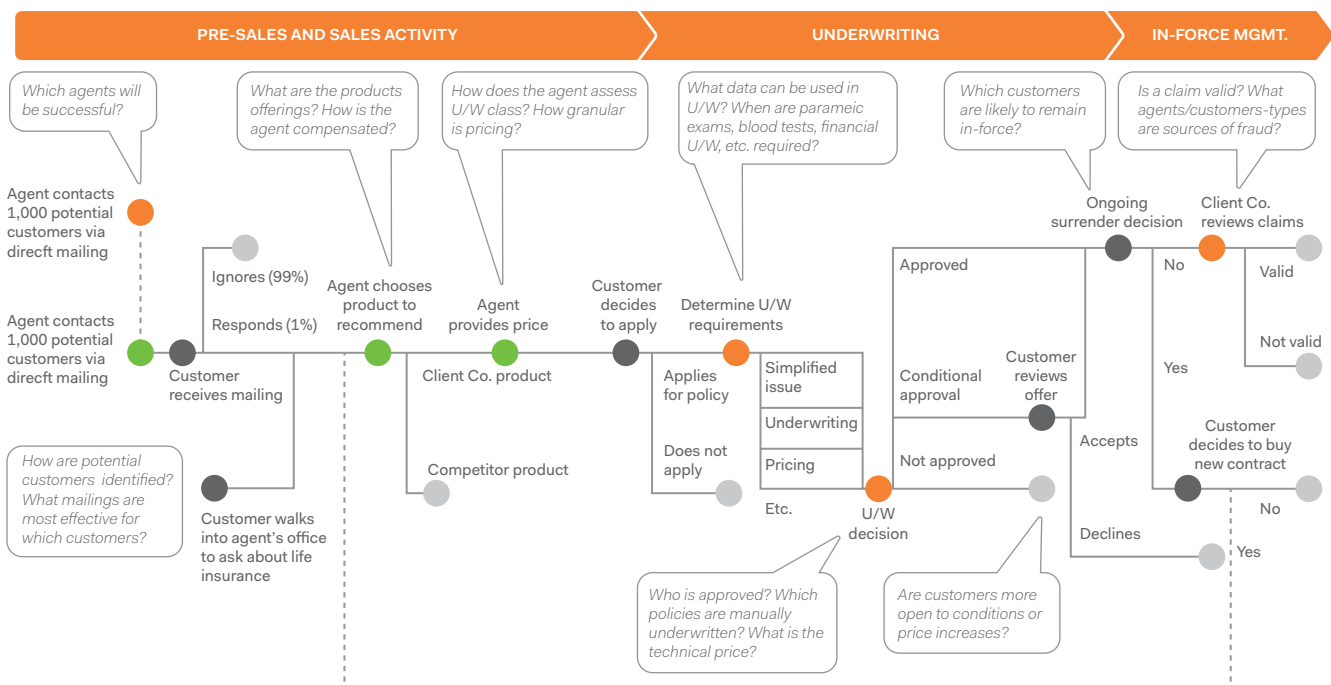
CASE STUDIES

AMAZON'S FIVE-PAGE MEMO

As a case study, we can examine how Amazon has redefined the process for making some of their most important and complex decisions at the senior executive level. At senior level meetings, project teams put together annual five-page memos in full prose, outlining a business plan that incorporates budget, innovation, and continuous-improvement plans. A typical memo may look like the following:

- Page 1: A **reflection** on the prior year's plans compared to the actual outcome and accomplishments for the year

- Pages 2-3: Plans to **improve the core business** for the upcoming year

- Pages 4-5: How the business unit would **put itself out of business** in the next year

During meetings, stakeholders spend the first 20 minutes reading through the memo and taking notes, and then devote one hour to discussion. This process has a few implications:

- **Most of the decisions have already been made by the business unit.** The prose-style narrative forces teams to think through the implications of their plans, and the short format means they are forced to prioritize the most important decision points. **To increase agility, teams have almost complete autonomy** in working out the details within the broader plan.

- **Innovation and experimentation are embedded into the mindset.** A significant portion of the discussion is focused around putting yourself out of business, and these innovation ideas are seen as a core part of budget and planning decisions.

- **Constant benchmarking and iteration** are made possible by revisiting the plan weekly to make improvements based on learnings and to monitor progress.

What types of results has Amazon produced with this approach? AmazonFresh, their grocery offering, took less than a year from initial project approval to launch. Further, all business units have forward-looking experimentation plans that are several generations beyond what is public, leading to products like Alexa, Echo, and the Kindle.

WHAT ARE HUMANS FOR?

As we think about the breakneck pace of advancements in data processing, artificial intelligence, and automation – all facilitating the flip between art and science – a provocative question is raised about the future of the workplace: What are humans for?

Elon Musk has predicted that in the future, most jobs that exist today will be automated, and the government will pay humans a universal basic income to survive. While that world may seem distant, current capabilities in technology and artificial intelligence may begin to impact retail in the near future.

Amazon recently launched a pilot for **Amazon Go,** a convenience store format that has no checkout lines. Using a wide array of cameras, computer vision, and machine learning techniques, Amazon has implemented their "Just Walk Out" technology that automatically detects when customers pick up and return items to shelves. Customers scan their phone to be identified as they enter, grab their items, and walk out of the store with a receipt automatically sent to their phones.

Beyond eliminating a major pain point in the customer experience, the checkout line, Amazon can also run these stores with bare-minimum labor costs. Currently, the pilot store mainly sells pre-packaged, ready-to-eat meal options along with convenience staples, although the assortment can easily be expanded to a full grocery offering.

While the Amazon Go model is pushes boundaries, the answer to the main question above is more nuanced. Certainly, you should look to automate rote processes from both the customer and the employee perspective (because your competitors will be doing so).

However, **the key to re-engineering the role of humans is to focus on what only humans can do, and what they are good at** – generating emotion, empathy, the feeling of connection with another human being. The role of brick-and-mortar stores also changes to become a hub for social interaction, enjoyment, and experience, rather than just a fulfillment center. In this future, **clearly defining the role of humans will become *more* important, not less.**

the bottlenecks that can slow you down. For example, many businesses today have inaccurate data, IT systems that are too complex, and enterprise architectures that are entrenched in too much of the organization.

Make change happen in a way that removes business bottlenecks

While it is difficult to make a business case to address these in isolation, one solution is to think about the second derivative during existing change programs. **Explicitly lay out second derivative benefits that can be achieved as a byproduct** of existing projects, which will make each successive project easier and easier in a self-accelerating process.

Art vs. Science

There is another ceiling as to how much you can improve your capabilities even if you nail down your decision-making priorities and your second-derivative strategy.

We refer back to another study, "The Robust Beauty of Improper Linear Models in Decision Making," published in *American Psychology* in 1979. There, research showed that humans, even subject experts, are not good at assimilating multiple input factors when making predictions – even deliberately simplistic ("improper") math models are able to systematically outperform humans.

While people may be good at identifying the various factors that are important to making a decision, it turns out that they are not comprehensive (taking into account only two or three factors) and inconsistent when making predictions. On the other hand, even improper linear models at least take into account all variables in a structured manner.

The consequence is that the current prevailing model in businesses, where human make decisions that are supplemented by

data and information, has a fundamental speed limit. Humans have a bandwidth limitation for the amount of information they can consider, even as more and more data becomes available.

Humans are not good at assimilating large amounts of information when making predictions

To get past the limit, you need to make a paradigm shift: **You need to flip the "art" vs. the "science" of decision making**, and allow the algorithm to be the starting point. Humans can then apply their expert judgment, where needed, with information not available to the model. Your ability to improve the algorithm is immeasurably greater than your ability to improve human judgment as you add more and more data. Two examples illustrate this point:

Example: Freestyle chess

In the game of "freestyle chess", teams of humans and computers work together to determine optimal moves. Winning teams do not necessarily have the best chess grandmasters, nor are they completely reliant on the best computer algorithms. Rather, the best performers are teams where experts, whether they are chess players or developers, can contribute meaningful insights into computer-suggested moves.

Example: Retail assortment

In retail, many assortment and category management decisions used to rely simply on sales and margin data. Later, more data become available, so factors such as trend, promotional sales, demographics, and regionality were incorporated. As more and more information is added, humans simply cannot process all of the data meaningfully. Instead, retailers should consider moving to algorithm-led decisions supplemented with category manager insight.

CONCLUSION

In a digital age with new entrants, rapidly evolving technology, and increased volatility, the ability to run your business with agility is indispensable. To raise the speed limit of your organization, you must first **decide that it is part of your strategic vision** to become more agile, and make that vision a core part of your business. Next, recognize that **your decisions are your most important assets** – the ones that can give you a competitive advantage – and manage these decisions like assets. Then, remove the bottlenecks in your organization by thinking about **second-derivative goals** that will make future change easier, not harder. **Finally, break through the barriers** of what humans in your organization can fundamentally do, thinking about both the art and science of decision making.

"*In today's era of volatility, there is no other way but to re-invent. The only sustainable advantage you can have over others is agility, that's it...***"**

Jeff Bezos | Founder, Amazon

Once you've made speed and agility a core part of your strategy, the next step set is to think about the direction of your customer experience. In that context, you need to answer these key questions fast:

- What's your current portfolio of innovations, and what's the timeline for each? Which ones do you need to learn more about?

- What's your learning agenda? What are the top five things you want to find out about your customers and how they think?

- How do you turn yourself into a venture capitalist, creating small teams to experiment with innovation? How can you organize the experiments so that participants understand failure is okay?

- What's your unique vision of where your customers will be two, three, and five years down the line?

- What do you need to do to meet the customer at that point in the future?