The Need For Speed

HOW "SECOND-DERIVATIVE" STRATEGIC THINKING CAN ACCELERATE YOUR COMPANY'S ABILITY TO RESPOND TO CHANGE

Managers have been automating and re-engineering processes for decades. While the initial aim may have been to improve efficiency and reliability, the end result has often been to saddle companies with a morass of entangled technologies that make it difficult to keep up with an ever-accelerating rate of innovation in the world at large.

Most companies have tried to drive cost savings and outmaneuver competitors by adopting hulking enterprise resource planning (ERP) systems that are designed to streamline business operations. But instead of enhancing competitiveness, these systems - which usually take several years to design and install - end up being rigid and inflexible, especially when compared to the new-build approaches of aggressive digital disruptors. The complexity of these systems makes it difficult and expensive to drive further change. As the pace of technological advance speeds up, companies that can't change quickly find themselves falling even farther behind their nimble competitors.

Companies that can keep up, or even surge ahead, focus instead on a strategy based on what's known in mathematics and economics as the "second derivative" – improving the rate of change itself. In business, a second-derivative strategy means focusing not just on the one-time change a project is designed to deliver, but also the additional changes an enterprise can create as byproducts that will make future projects easier. By doing so, companies can establish an acceleration effect that cuts development costs from hundreds of millions of dollars, to a fraction of that, and reduce their speed of delivery from months, to days.

Companies that follow a secondderivative strategy stick to a two-part playbook. First, they are clear about the gap between the way they deliver work today and where they want to be in the future – while accepting that their vision of the future isn't static and is likely to change many times. Then, companies identify the hurdles standing in the way of achieving that vision. Knocking down these roadblocks is made an explicit goal of each new undertaking, so that later projects don't encounter the same issues. For instance, if every task requires weeks for server provisioning or bespoke security development, it slows innovation. A better approach is to solve for infrastructure provision, security rules, and budget approval processes all at once and then roll the solutions into assets every project can benefit from. It's hard to make a business case to address these kinds of issues on a stand-alone basis, and so it usually doesn't happen. But the second-derivative approach recognizes that it's cheaper to address them alongside existing work.

Managers should aim to adopt secondderivative strategies that treat agility as a goal in itself – enabled by building a growing toolbox of capabilities, reusable components, and standardized processes that constantly create value at a faster and faster rate.

MAKING CHANGE A CONSTANT FOR A PRODUCT

To understand the power of a secondderivative strategy, consider how rapidly Tesla's cars evolve. Tesla's strategy was to build a car like a smartphone, making it safer, smarter, and more capable over time, thanks to operating systems that could accept over-the-air software updates. Its software Autopilot 8.0, for example, allowed owners of 2012 models to install 2016 model functionalities, such as enabling the car to process radar signals more effectively and let drivers monitor vehicles two or three cars ahead of them.

Tesla has also set the stage for autonomous cars before they are fully feasible - equipping its cars with self-driving hardware even though the software has yet to be written. By installing cameras and sensors necessary to gather data about the car's environment from multiple angles, Tesla smoothed the path for future change. Essentially, data collection from millions of miles of real-world driving allowed Tesla to test and continually improve braking, collision warning, self-steering, and cruise control. Unlike other car manufacturers that are labtesting autonomous cars before introducing them, Tesla recently offered over-the-air downloads of self-driving software to 1,000 real-world drivers so it could learn from realworld testing.

A SECOND-DERIVATIVE APPROACH TO SERVICES

Companies that follow a second-derivative strategy can expand their reach faster and with less investment than competitors.

For example, the German online digitalbank Fidor, which was acquired by Groupe BPCE of France in 2016, has a set of open and standardized processes, protocols, and tools for building application software that exists on top of its legacy operating systems. Because Fidor's interface is essentially just code and has minimal interactions with its operating systems, it (or one of its licensees) can reconfigure the interface and deploy a new bank in another country in the time that other banks would require for merely developing a project plan. With its "no-stack software-as-a-service banking," a digital bank just fires up servers, deploys code, and plugs into a slightly different set of data feeds at the back end. Using this approach, Fidor's costs per customer are only a fraction of what they are for most major banks.

Modularizing standardized IT components also permits Fidor to push out new products at an accelerated pace. Many of these products are not available at other banks. Fidor can offer real-time loans at many different points of sale, and a multi-currency eWallet allows customers to buy currency, make payments, and view balances. Recently, Fidor became the first bank in the world to accept Bitcoin as a currency, and it is now looking to use blockchain to replace traditional low-level banking services that presently cost banks tens of millions of dollars annually to maintain.







REDEFINING AGILITY

Most companies haven't fully recognized the hidden costs of the IT mistakes they began making 25 years ago when reengineering first became a buzzword - so they continue to repeat them today even as they strive for agility. Too many companies, when they think about change, still rush to build huge new IT systems that they hope will lead to big improvements - in three years, if they're lucky. In the meantime, their capabilities will have stagnated, and the complex new system is doomed to be out of date the moment it's finished. When a company's level of competitiveness is determined by the vintage of its last systems re-platforming, it's in bad shape.

To maintain competitive advantage over the long term, organizations must aspire to move faster than the market around them, both in terms of the speed of day-to-day decision making and the rate of their capability development over time. High clock-speed organizations embrace experimentation, constant iteration, and fast decision making. Moving at high clock speed requires agility – not as a software-development discipline, but as a management philosophy.

Elevating agility to a strategic C-suite objective fosters a cultural change that ripples through the whole organization.

Many companies see agility as applying only to the IT department, which is where the concept was first established. Instead, managers should aim to adopt second-derivative strategies that treat agility as a goal in itself – enabled by building a growing toolbox of capabilities, reusable components, and standardized processes that constantly create value at a faster and faster rate. Only then will they be able to raise the speed limit of their businesses, keep up with the world around them, and create lasting competitive advantage.

Elevating agility to a strategic C-suite objective fosters a cultural change that ripples through the whole organization. It changes the mindset from thinking of projects as discrete events, to thinking of them as part of a greater journey toward a more responsive and efficient organization. Organizations that adopt agility as a core strategic tenet concern themselves with the basic underlying assets that allow them to iterate and learn faster. They invest in enabling capabilities that many organizations see as high cost with uncertain returns. Agile organizations realize these investments break the bottleneck of everything they do, and create byproducts from ongoing projects that make future change faster and easier.

Building your strategy around agility itself is a very different thing than simply adopting agility as an enabler of your strategy. It recognizes that in a fast-changing marketplace, your speed of adaptation as a business is a more valuable long-term asset than your specific reactions to the situation of the day. In this paradigm, agility is fundamentally a leadership responsibility. It affects everything about how an organization runs and what it values. Achieving agility as an enabler in business is a good thing. But embracing agility as one of your top-three strategic priorities increases the odds of long-term success in an increasingly complex world.