BUILDING A DIGITAL TRANSFORMATION STRATEGY PART 2: UNLEASHING PROCESS REIMAGINED

"The pace of technological change is accelerating."

It's a statement often made but seldom backed by fact. Skeptics argue that technology is diversifying, not accelerating, discounting newer innovations that build on top of existing infrastructure. These innovations don't require the same level of investment in physical infrastructure as, say, cable television or the Internet.

It's a shortsighted view, narrowly defining technological progress to tangible inventions. That's like saying the only way to renovate a house is by knocking it down and laying an entirely new foundation. But these skeptics are proving an important point, albeit not the one they intended: In the digital world, the same rules don't apply. Change—and more importantly, adoption of change—is accelerating precisely because there are no physical limitations.

TECHNOLOGY ADOPTION ACCELERATION

Years until used by one-quarter of American population







What does that mean for middle market businesses operating in this new era of digital disruption? The timeline to react and respond to change is shortening. The velocity of information-how fast (and how much) new data is generated, as well as how fast it can be processed—is increasing exponentially. There are more choices requiring quicker decisions. The pace of business itself is faster. Automation is both threat and opportunity, commoditizing some work but more frequently replacing the tedious and mundane work we'd rather not do. And as more digital natives join the workforce, there are higher expectations for workplace tech and client interactions to match the convenience of their personal tech devices. Size is less important than agility: To stay in the race, all businesses, large, midsized and small, need to operate at the speed of digital.

It does not mean, however, that every organization needs to overhaul its entire business model and start anew. Businesses can reinvent themselves from the inside out by reconfiguring and reimagining their core business processes, building on their existing successes and strengths and drawing outside-in perspectives for inspiration and insight.

DIGITAL 3+1

At its core, digital transformation is the application of today's digital advancements in technology to solve traditional business problems, as well as a tool to combat competitive pressures and economic headwinds. How that actually translates into strategy depends on a combination of internal and external factors that will vary from organization to organization. While every company must follow its own trajectory, we can generally break down digital transformation into three primary strategic drivers, as outlined in our Digital 3+1 approach:



All three transformational areas drive value for the business just in different ways. Digital Business is focused on creating new value via customer-facing solutions; Digital Process on optimizing core processes for operational excellence and embedding digital capabilities into the operational fabric; and Digital Backbone on reducing IT complexities, risks and exposure, thereby increasing agility and scalability in response to evolving market conditions. Digital strategy the overarching vision for transformation—often resides in Digital Business, but the terms aren't synonymous. Some organizations may see the greatest opportunity in transforming their operations to become more agile and efficient—a strategy rooted in Digital Process. However, Digital Process isn't just about operational excellence; it's also the engine of customer experience—what enables you to provide a consistent and efficient experience across all channels and customer touchpoints by integrating data and functionality.

To understand the role Digital Process plays in your digital transformation, ask yourself these questions:

- Is my business profitable—or as profitable as it could be?
- Are my processes as efficient as they could be?
- Is information shared across the organization?
- Do I have the capabilities I need to remain competitive?

If you answered "no" to any of these questions, your digital transformation journey may need to start with Digital Process reengineering your operations to improve performance in one of these key ways:

Process Efficiency

Goal: Reduce costs, accelerate speed and improve quality via process automation and optimization

KPIs: Lead Time, Cycle Time, Turnaround Time, Time to Resolution, Touch Time, Cost per Transaction, Employee Effort Score, Queues

Fundamentally, improving process efficiency is about minimizing the amount of input and effort used to achieve a desired outcome. Strategies to improve process efficiency include streamlining and simplifying overly complex and convoluted processes and integrating disparate systems and information. The biggest efficiency play, however, is automation. Robotic process automation allows organizations to automate certain types of work processes to reduce the time spent on costly manual tasks and reallocate resources elsewhere. More sophisticated machine learning tools can be used to identify and address unforeseen areas of waste.

Process efficiency should not compromise process effectiveness. If your customer is generally more concerned with speed than cost, for example, your process optimization strategy should prioritize cost efficiencies over time efficiencies (though you can achieve both to some degree). Overly rigid processes—while easier to manage—don't account for variations in customer behaviors and process exceptions. While process automation can go a long way to increase both productivity and reliability, it's just the tip of the spear. In a digital economy, process efficiency measures shouldn't look solely at the flow of materials; it's also important to understand the flow of information as a product or service moves through a value stream, including the management and information systems that support the process. The integration of processes and information flow requires a more collaborative way of working, one that demands breaking down artificial barriers. The goal is to improve the way in which people work together to generate collective intelligence and solutions that extend beyond the limited view of a single person, function or entity.

Robotic Process Automation Defined

RPA is the use of software that automates manual tasks. It eliminates the need for employees to perform repetitive tasks by integrating software that performs the same set of steps as the employee. The software is designed to perform routine tasks across multiple applications and systems within an existing workflow. It performs specific tasks to automate the transfer, editing, reporting and/or saving of data. Where there is paper, manual tasks and complex workflow steps, there is rich opportunity to inject RPA to shorten processes from days to minutes and to dramatically improve business performance.



SPOTLIGHT Transforming the Tax Function

Transforming the tax function helps businesses recognize valuable time and cost-savings, make smarter decisions faster, and react and respond more quickly to new regulatory obligations and changing market forces. In the middle market, where experimentation is often constrained by limited resources, digitization efforts frequently start with a contained pilot project, typically focused on automation of routine processes like preparing tax returns with a bot. Software "bots" help the tax function streamline operations by eliminating repetitive, predictive and labor-intensive tasks through the process of automation, thus enabling skilled tax professionals to focus on higher-level, more strategic—and less boring—work. They also deliver immediate ROI, helping to pave (and pay) the way for your next innovation pilot.

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Now, imagine a future where all the tax information you need is available via a visually intuitive dashboard, updated in real time and accessible anywhere, from your desktop to your mobile phone. Tax forms are automatically prepared and filed, and payments remitted, simply requiring your signoff.



Audits are met with a shrug because all your tax documents are organized in one centralized location. Your team of tax professionals is spending fewer hours crunching numbers and more time scenario planning for opening a new office abroad, maximizing business deductions or mapping the impact of a new regulatory reporting requirement.

Your transformation roadmap connects the dots from your first tax reporting bot to a fully optimized tax function capable of assessing your organization's total tax liability in real-time, modeling future scenarios in seconds and AI-fueled decision-making. Every incremental innovation sets the stage for the next one by gradually integrating disparate data sources, increasing information sharing and collaboration across functions, and enabling data mining and modeling over time.

Learn more in **BDO's Tax Transformation Guide**.

Case Study

A client in the restaurant industry with 2,200 locations requested assistance with their corporate filing of sales tax returns. Each year, there were 26,000 returns submitted through states' various websites. A specific challenge for the client was manually keying the data from the return into the state websites.

The client needed an automated solution to file returns to 30 states that were error-free, trackable, documented, and verifiable.

Our Robotic Process Automation team created a sales and use tax return bot to automatically pull data from the sales tax return software and fill out the online form. This automation (or bot) completely accounted for the client's overwhelming need, at a cost that was less than the first year of savings, with an estimated ROI of \$5.4M over the next 10 years.

Q Asset Utilization

Goal: Decrease CapEx by cutting energy consumption and extending the useful life of an asset while improving capacity

KPIs: Return on Assets, Overall Equipment Effectiveness, Asset Turnover Ratio, Employee Effort Score, Plan to Forecast, Burn Rate

Frequently associated with asset-intensive industries like oil and gas, manufacturing, healthcare or retail, traditional asset utilization improvement strategies have focused on the physical supply chain: minimizing equipment downtime (both planned and unplanned), maximizing production yield and optimizing inventory holdings. The tools to achieve these goals have changed dramatically, however, thanks in large part to the Internet of Things (IoT). Embedded sensor technologies can monitor, collect and report information from the surrounding environment, providing real-time traceability and machine status information. Advanced analytics and machine learning can then be deployed to more accurately measure (and manage) performance in the field, more reliably forecast demand, flag anomalies or potential outages, conduct predictive maintenance or perform remote repairs, and reallocate underused assets. Over time, data can also be aggregated to inform and inspire product design based on variable operating conditions and use cases.

That said, it would be a mistake to limit our view of asset utilization to the physical realm. Now that any "thing" can be connected to the Internet, the most valuable—and most underutilized—asset is data. According to IBM estimates, 88% of all data is "dark," meaning it is collected but sitting around unused. Managing data as an asset can unlock additional value for any industry.

Case Study: Rio Tinto – Mine of the Future

In 2008, Rio Tinto saw an opportunity to be at the forefront of the mining industry with a concept they've dubbed "The Mine of the Future." Tinto's future mine operates remotely from the city of Perth in Western Australia via its Mine Automation System (MAS) and comprises 16 integrated iron mines based inland in the region of Pilbara. This sprawling remote project has continued to evolve, undergirded by IoT technology where sensors work in tandem to "sense, think and act" in an increasingly autonomous fashion. Rio Tinto is already successfully extracting minerals from deep underground, while reducing environmental impact and improving worker safety.

Every element of Tinto's "Mine of the Future" is monitored to provide constant feedback on performance and optimize processes with reduced manual input. Rio Tinto receives real-time analytics from upward of 200 sensors in each of its more than 900 trucks generating ~4.9 Tbs/day of data for the MAS system to parse, thereby reducing maintenance and downtime via enhanced decision making and predictive maintenance.

Eighty trucks already operate with autonomy in Pilbara, and Tinto has plans to increase this number to 140 trucks by the end of 2019. These hauling trucks are still further augmented by a 1,700 km system of railroads, operated 60 percent autonomously, and four independently operated ports that all integrate into central command's MAS in Perth.

O Agility

Goal: Faster decision making and implementation, as well as the ability to adapt or change course at any point

KPIs: Decision Velocity, Decision Quality, WIP Limits, Time to Market, Ramp Up Capacity, Ability to Innovate, Number of New Launches

Adapting to accelerated change requires agility. There's no getting around the need for speed: speed to insight, speed to decision and speed to action. The key to speed is the ability to turn information into insight and insight to action. Data is the engine of faster, smarter decision making. Eventually, every business process, from core operational processes to management processes to support processes, should be data driven.

That includes the process of innovation itself. The Agile Manifesto—the standard bearer for agile development methodologies—calls for an iterative, incremental approach informed by a constant feedback loop. Integrating that feedback data into the development process expedites delivery and improves the end outcome.

Insight is the fuel of continuous improvement—but only to the extent it is evangelized and acted on. An organization that has historically been more resistant to change isn't built to move as quickly as an organization comfortable with experimentation, even if they have access to the same business insights. Agility might start with business intelligence and process reengineering, but it ends in people, requiring in many cases a significant cultural shift and a dedicated effort to remove organizational friction.

Case Study: DBS Bank

Founded 51 years ago in 1968 as the Development Bank of Singapore, DBS Bank was struggling with a reputation for underwhelming customer service. The bank's original mandate stemmed from its role as a development bank supporting the early growth and development of then newly independent Singapore. As such, the bank operated as an extension of Singapore's government bureaucracy with prolific inefficiencies.

In the words of DBS Chief Data and Transformation Officer Paul Cobban, "DBS" was known locally in Singapore as "Damn Bloody Slow." Since joining the firm 10 years ago, Cobban has succeeded in reversing this conception and made banking "joyful" with applied agile methodology.

Agile transformation at DBS was business-driven rather than IT-focused with buy-in from key stakeholders in the upper echelons of the bank. DBS focused first on tackling waste within their operations—walking through process improvement with cross-functional teams over a five-day period and implementing refined processes everyone agreed on going forward. DBS differentiated their agile approach by performing a second round of process refinements looking at their customer experience and not just internal processes. They have, to date, performed more than 400 customer journey projects. DBS was able to remove more than 250 million customer hours of wait time and waste out of their operations—going from the worst customer service in Singapore to the top of their class.

Agile transformation has successfully scaled to DBS Bank's global ambitions with current operations across Asia, comprising 22,000 employees and 280 branches across 18 markets including presence in China, India and Indonesia. They have been awarded numerous awards including "World's Best Digital Bank" and "Asia's Best Bank" by Euromoney and continue to be a leading multinational bank.



From Adam Smith's Division of Labor to Six Sigma to Lean and Agile, the discipline of process improvement is practically as old as business itself. While the core objectives and value drivers remain true, the emergence of new digital enablers has both expanded the scope and changed the rubric for operational excellence. Digitizing operations by injecting intelligence and automation into core business processes opens up a new world of digital possibility, where speed is a given and innovation is unleashed.

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