POINT OF VIEW | ANALYTICS

How to Build a
Self-Driving Business

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NTT DaTa

Defining the self-driving business

How can your business accelerate for growth with confidence?

Start with a more powerful fuel — the data necessary to make quick, sophisticated contextual decisions that would be near impossible for humans. Then add a powerful navigation system — artificial intelligence (AI) tools that interpret the data. Finally, supercharge your transmission — through automation that ensures you can move forward quickly. In other words, a self-driving business, where humans leverage the power of emerging technologies to create a new type of organization that's faster, smarter and optimized for success.

In a marketplace full of noise and moving at an unprecedented pace, such ideas will be increasingly crucial. Today's business leaders face a common challenge: how to make time to focus on what's important for future revenue growth and innovation, rather than what's necessary to maintain the status quo. A self-driving business uses digital technologies to fast-track necessary actions with precision, speed and efficiency, leaving business leaders with the bandwidth and insights to identify, prioritize and capitalize the drivers of their growth agendas.

What does that mean in practice?

A self-driving business makes better informed decisions more rapidly by leveraging its data more effectively and exploiting data intelligence, or AI and automation capabilities.

It's capable of anticipating the future to deliver competitive advantage. Its enterprise and staff productivity are higher, thanks to integrated technologies that provide a consolidated view of all business functions, enabling the right action at the right time. And, above all, self-driving businesses are able to make decisions that delight the customer — whether consumer, partner or employee — with an enhanced experience offered through the right mix of digital platforms and devices.

For businesses that get it right, the benefits are compelling, as NTT DATA clients in a range of sectors have proved:

Healthcare: 50% faster application response times for clinicians, with IT cost savings of $2.3 million

Insurance: 100% accuracy in detecting duplicate claims, with a 76% improvement in team productivity

Technology: 22% improvement in first-time fixes via machine learning, and 50% faster development time with automated workflows

Above all, a self-driving business can help your organization reach its true potential by blending the creativity and ingenuity of people with the efficiency and precision of advanced technology.

Three key capabilities that underpin a self-driving business

Although technology plays a key role in building a self-driving business, it's only one part of the story. Your organization needs to develop the business acumen to make smarter decisions about how and where to apply automation, and about how to use data and intelligence in the most productive way. It's the closing of these loops and the ability to thread learnings back into the system for continuous improvement that will enable your organization to stay ahead of its rivals. The technologies that will help your organization achieve this advantage include:

- **Data intelligence.** Having the right business intelligence and analytics capabilities, as well as the ability to unlock actionable insight, is key to building a self-driving business. Capabilities include big data, business intelligence and analytics, data integration, data management and analytics. Using data intelligence tools, self-driving businesses can make sense of the volume, variety and velocity of data, and use it to build smarter decisioning systems.

- **Artificial intelligence.** Leveraging deep learning, machine learning and cognitive intelligence capabilities, self-driving businesses refine the decision-making process iteratively, constantly improving processes across the enterprise with fine-tuning based on the system's self-learning capabilities. Together with human intelligence, this creates tremendous potential for your organization.

- **Automation.** Self-driving businesses build on the promise of robotic process automation (RPA), sophisticated autonomics capabilities, virtual agents and more to support a process of collaboration between man and machine to drive innovation and growth across the enterprise.

Benefits of a self-driving business:

- Make better informed and accurate business decisions with integrated automation and AI systems
- Deliver better customer experiences with customer data analytics, automation tools and the right mix of digital platforms and devices
- Predict and forecast events with smart data solutions and AI, thus helping you better prepare for the future
- Increase enterprise efficiency and staff productivity with an integrated, automated and consolidated view of all business functions
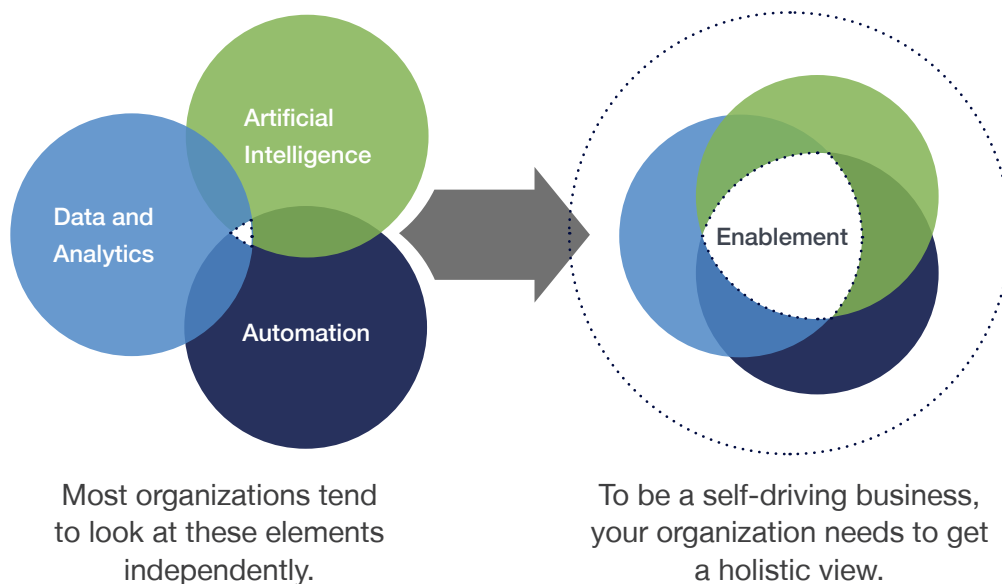
These tools must be integrated through solutions that streamline business processes and technology across your organization to enable enterprise agility, market responsiveness and business growth. And when built, integrated and managed in the cloud, the potential is for even more scalable solutions to guide your organization forward. Such a system, at once business-centric and technology-grounded, can create autonomous reporting and alert your organization to trends or threats. It can recommend actions — and sometimes even execute on those actions.

Figure 1: Powering the self-driving business

Most organizations tend to look at these elements independently.

To be a self-driving business, your organization needs to get a holistic view.

How NTT DATA can help you establish a self-driving business

We provide our clients with a set of end-to-end data and analytics capabilities. These capabilities are the enablers for creating systems of intelligence, including the ability to ingest data from varied sources and to integrate, blend and visualize information. We feed this data into AI capabilities built on machine learning and deep learning and executed with our robust autonomics and RPA. These capabilities sit within an architecture that provides a foundation for continuous enhancement and improvement.

NTT DATA's vision of a self-driving business is built on a four-step process.

1. **Define key events for your business.** Every industry is defined by certain events. For a retailer, it might be inventory or a holiday season; for a pharmaceuticals company, it might mean stock-outs; and for a bank, it might mean specific customer behavior, such as credit applications. Your organization must first identify the key events upon which it needs to act.

2. **Identify stimuli and the data required.** As with events, each industry is also affected by certain stimuli. In the case of a retailer, it could mean the absence or presence of certain trends. For a hospital, it could mean patient relationships. Your organization must identify the stimuli that influences its industry and the data that's required.

3. **Configure data intelligence and automation and integrate key tools.** Once your organization defines key events and stimuli, it needs to build its AI capabilities and determine automation tools to close the loop.

4. **Focus on continuous improvement and sophistication.** The buck doesn't stop here. Once a self-driving business is set into motion, the data it generates is fed back into the system to build a model that delivers continuous improvement.

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The results can be dramatic — and they may touch every part of your organization. In manufacturing, for example, digital decisioning helps businesses build ever-greater supply chain efficiency and improve their maintenance processes, reducing downtime. In transport, this process enables much higher levels of customer service through apps that integrate services and operations from across the organization. In healthcare, digital decisioning helps clinicians practice more efficiently while reducing their IT costs. In insurance, these capabilities help businesses manage claims more effectively and efficiently, to the delight of their customers.

About the author

Kris Fitzgerald, Vice President and Chief Technical Officer, NTT DATA Services

Kris leads the client innovation programs and IT Strategy Consulting Practice. His team leverages NTT Group research and development to help clients develop IT strategies that maximize return on innovation, modernization and transformation efforts.

Let's get started

At NTT DATA, we offer a wide variety of services to help you build a self-driving business. Partner with us today to fuel enterprise speed and efficiency and delight your customers.

Data and intelligence:
- Over 20 global partnerships
- Internet of things sensing from devices in over 11 million homes and businesses
- More than 5,000 resources worldwide
- #1 on the Hadoop Global Community Contribution Index among system integrators

AI and automation:
- Award-winning RPA solutions for insurance, banking and healthcare
- Over 3,000 bots in production
- Rated top 2 in autonomics in the world by HfS
- Premier partnerships: UiPath, IPsoft, Blue Prism, Automation Anywhere

Cloud:
- Expertise in Amazon Web Services, Azure, VMware, OpenStack
- Over 2,500 cloud architects and engineers
- 6,000 researchers worldwide
- $2.2 billion annual research and development investment
- Microsoft Gold Cloud Platform Competency