



DEVELOP TEN CAPABILITIES TO ACCELERATE DIGITAL TRANSFORMATION

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The viability of many traditional firms' existing business models is at stake in this increasingly digital era. Saddled with legacy systems, complex processes, and siloed data, such firms have begun digital business transformations to improve customer experience and increase operational efficiency. We identify firms that have transformed on both of these dimensions as being Future Ready.¹ Future-ready firms are top performers, reporting average revenue growth of 17.3 percentage points and a net margin of 14.0 percentage points above their industry average²—a rewarding premium.

MIT CISR research has identified ten future-ready capabilities that top-performing firms develop to achieve progress on both customer and operational dimensions and capture digital value.³ In this research briefing, we describe these ten capabilities and illustrate their development and application with a case study from CarMax.

BUILD FUTURE-READY CAPABILITIES TO CREATE VALUE

Top performers develop future-ready capabilities to create value from four areas of the firm: customers, operations, and ecosystems, and foundational capabilities that enable the other three areas.

Customer Capabilities

Provide a great multiproduct customer experience. Future-ready firms delight customers by integrating products to convert the typical customer journey into a seamless multi-

channel customer experience. They strive to meet customer needs rather than push products.

Be purpose-driven. Increasingly, leaders, customers, employees, investors, and partners demand that firms have a strong purpose for existing beyond maximizing shareholder wealth. Creating a strong purpose around which people associated with the firm can unite encourages excellence and is the North Star of success for any journey to future ready.

Operational Capabilities

Become modular, open, and agile. To continually innovate at low cost, future-ready firms take their "crown jewels"—the components and capabilities that make the firm great—and turn them into modular, digitized services. These services can be combined, like construction blocks, into many different digital offerings, then sold and delivered both through direct channels and via partners.

Strive for ambidexterity. Future-ready firms use digital technologies and practices on the one hand to constantly innovate and on the other to control costs and accelerate transformation. This allows the firm to find new and better ways to solve customer problems and offer seamless experiences at the same time as it improves processes, encourages reuse of data, processes, and technology, and identifies enhancements to productivity.

Ecosystem Capabilities

Lead or participate in ecosystems. Future-ready firms are ecosystem-ready. Firms that lead ecosystems create go-to destinations for their customers, and partner to provide a wide variety of curated products. Firms that participate in ecosystems provide digitized products that easily plug and play in those ecosystems.

Pursue dynamic (and digital) partnerships. In the digital era, the fastest-growing firms digitally partner to increase both reach (by adding new customers) and range (by widening the variety of products they offer to their current customers).

1 S. L. Woerner, P. Weill, and I. M. Sebastian, "Update on the Four Pathways to Future Ready," MIT Sloan CISR Research Briefing, Vol. XXI, No. 2, February 2021.

2 MIT CISR 2019 Top Management Teams and Transformation Survey, N = 1,311.

3 MIT CISR identified these ten capabilities in more than five years of research (2017–2022) that included over fifty interviews with executives and several surveys with a total of over 2,000 respondents. Findings were field-tested in multiple workshops with senior management teams and boards at firms globally across diverse industries and in presentations and master classes.

Much digital partnering is enabled by APIs that automate sharing of data, transactions, and insights.

Foundational Capabilities

Treat data as a strategic asset. Future-ready firms treat data as a single source of truth, supported by data monetization capabilities—accessible across the firm and used to make evidence-based decisions—and norms of acceptable data use. Firms get closer to this single-source nirvana by continuously standardizing, cleaning, simplifying, and learning how to monetize their data.

Develop and retain the right talent. As firms adopt agile methods, data analytics, robotics, AI, and other digital approaches and technologies, what they demand of employees is changing. While ensuring that employees have the right skills for their roles is important, it is just as important to empower employees to work collaboratively to solve complex problems.

Link individual and team behaviors to firm goals. Future-ready firms explicitly link individual and team behaviors to firm goals to help employees in their decision making, complementing the coach-and-communicate leadership style that empowers employees with accountability and data rather than telling them what to do.

Facilitate rapid learning throughout the firm. Given that the future is, by definition, uncertain, being future ready requires the ability to rapidly learn and adapt. Learning from born-digital firms, traditional ones are adopting test-and-learn approaches to explore ideas and create value and then scale the learnings across the firm.

These ten capabilities help firms move from Silos and Spaghetti—a state of having complex processes, systems, and data associated with extensive infrastructure organized in silos—to Future Ready. In our research, firms in the beginning of their transformations described themselves as 45 percent effective on average on the ten capabilities, while future-ready firms assessed themselves as 81 percent effective—a huge difference (see figure 1).

CARMAX DRIVES TRANSFORMATION WITH FUTURE-READY CAPABILITIES

CarMax transformed itself by developing and then leveraging future-ready capabilities. The largest retailer of used cars in the US, in the fiscal year ending February 2022 CarMax sold 1,630,550 cars (up 38.4 percent year-over-year) and had net revenues of \$31.9 billion (up 68.3 percent from fiscal year 2021) and net earnings of \$1.2 billion.⁴ In 2015, CarMax began a digital transformation toward engaging customers on their own terms—online, in store, and at home—by creating a seamless omnichannel experience.⁵

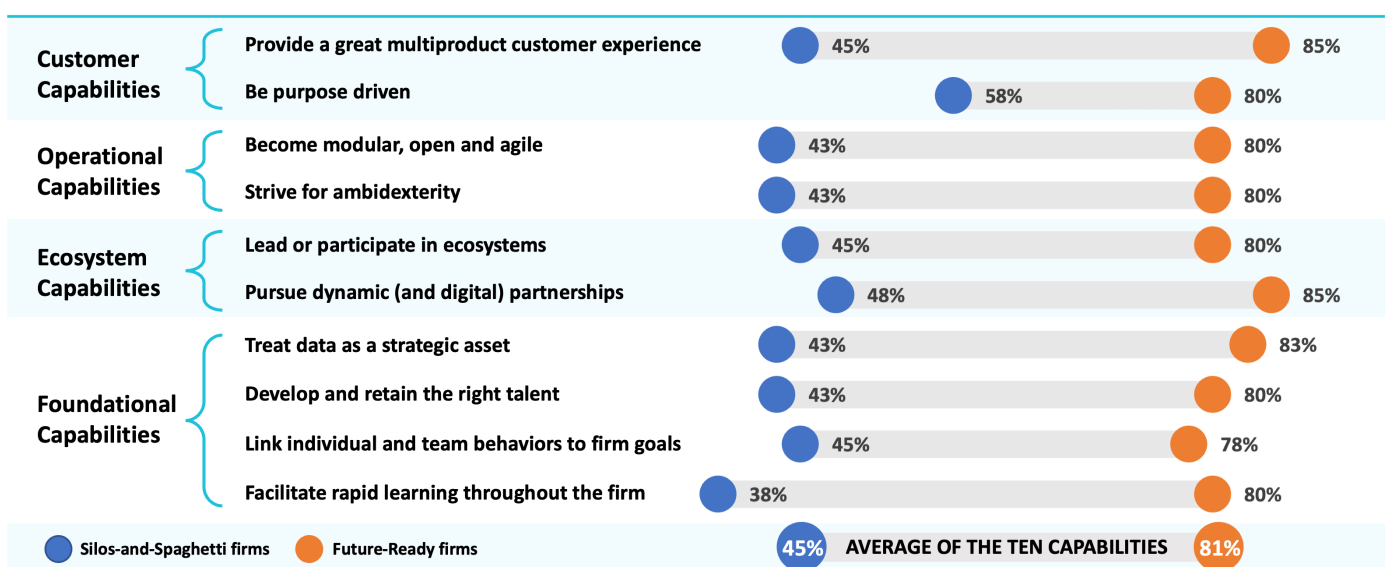
Customer Capabilities

In its efforts to become truly omnichannel, CarMax organized customer-facing product teams that aligned on the firm's

4 "CarMax Reports Fourth Quarter and Fiscal Year 2022 Results," CarMax press release, April 12, 2022, Investor Relations, on the CarMax website.

5 The CarMax case study draws on both J. W. Ross, C. M. Beath, and R. Nelson, "Redesigning CarMax to Deliver an Omni-Channel Customer Experience," MIT Sloan CISR Working Paper No. 442, June 2020 and a case study in Stephanie L. Woerner, Peter Weill, and Ina M. Sebastian, *Future Ready: The Four Pathways to Capturing Digital Value* (Boston: Harvard Business Review Press, October 2022).

Figure 1: Effectiveness of Ten Future-Ready Capabilities



Source: MIT CISR 2019 Top Management Teams and Transformation Survey (N=1311). Differences are significant at the p<.05 level.

purpose (“To drive integrity by being honest and transparent in every interaction”⁶) but independently created elements of the customer experience using digital platforms and data. The teams covered five areas spanning the customer journey—acquiring, transporting, merchandising, selling, and financing vehicles—with each team focused on its specific objective.

What we start with is what we consider a bite-sized piece of the customer experience. So, we may say digital merchandising is a bite. How do we immerse the consumer into the vehicle online? And as we go, if it's a little too big, we break it up, and it becomes two teams with two missions.

**JIM LYSKI, EXECUTIVE VICE PRESIDENT,
CHIEF MARKETING OFFICER**

Operational Capabilities

In August 2020, CarMax completed the roll-out of its omnichannel platform, replacing its monolithic web environment with a cloud-based, API-enabled, digital platform. Technology architects established principles for building up the platform using public cloud services and independent business components (for search, merchandising, financing). Agile product teams leveraged these components to create and enhance new products and quickly put them into production while keeping costs low; then they pivoted to address new opportunities.

As part of our transformation journey, we have adopted a cloud-first, mobile-first mindset. It's not just replacing an old system—which, in our case, would be a ten- to fifteen-year-old system—with a new one in the cloud. That was never our goal. As we're rebuilding this, we're really thinking in terms of platforms. We're thinking, how do we build these new technological capabilities that will scale and enable us to move really fast?

**SHAMIM MOHAMMAD, SENIOR VICE PRESIDENT,
CHIEF INFORMATION AND TECHNOLOGY OFFICER**

Ecosystem Capabilities

In 2021, CarMax estimated that the market opportunity across the broader used auto ecosystem was more than \$1 trillion, encompassing activities such as selling cars, servicing, titling, providing warranties, and financing.⁷ The firm focused on opportunities to participate in ecosystems that leveraged its operational capabilities and logistics scale for dealers, its footprint for car owners, its data and algorithms, and rapid learning to pilot new

ways to buy used cars from dealers. For example, CarMax invested in and later acquired Edmunds, an online guide for automotive information including car reviews and vehicle valuations. By partnering in this way, CarMax could reach Edmund's base of more than 25,000 auto dealers in the US.⁸ The firms jointly developed an online instant offer for sellers of used cars.⁹

Foundational Capabilities

Treating data as a strategic asset was a foundational capability for CarMax and key to its business model. The firm leveraged massive amounts of proprietary data on car sales to develop algorithms that ensured competitive but profitable prices for both the cars it bought and the cars it sold. Product teams set goals by articulating objectives and key results (OKRs) and ran two-week sprints to deliver on them. In biweekly open houses, teams reported progress, received feedback, and realigned with each other and CarMax's overall direction. Leaders used dashboards to make performance transparent and connect teams in real time. As teams worked to meet their OKRs, they could connect their efforts to the bigger picture of value from customers.

We have a daily dashboard that shows the number of web visits, how many people hit our website and our apps yesterday, how many people took the next step of saying, “Hey, I’m interested in a car” ... So, every day, all these teams are focused on their piece of the pie. And that's sort of the marriage of micro and macro.

**GAUTAM PURANIK, VICE PRESIDENT, ANALYTICS AND
CHIEF DATA OFFICER**

FUTURE-READY CAPABILITIES ARE KEY TO CAPTURING VALUE

The ten future-ready capabilities are key to your firm creating digital value and capturing it in financial performance. To begin developing them, first assess your existing capabilities and focus initial efforts on weaker areas. Leverage your stronger capabilities and what you have learned developing them to shore up weaker capabilities. Building these capabilities is an ongoing effort that requires leadership, purpose, metrics, budget, fresh approaches, and perseverance. The payoff is helping move your firm toward future ready and enabling it to achieve and sustain competitive advantage.

⁸ High-performing firms pursue digital partnering strategies for new opportunities to grow; see I. M. Sebastian, P. Weill, and S. L. Woerner, “Three Strategies to Grow via Digital Partnering,” MIT Sloan CISR Research Briefing, Vol. XX, No. 5, May 2020.

⁹ “CarMax to Acquire Remaining Stake in Edmunds,” CarMax press release, April 1, 2021, Investor Relations, on the CarMax website.

⁶ “Our purpose,” CarMax.

⁷ “Analyst Day 2021,” CarMax, May 6, 2021, p. 8.

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