



Gartner®

Gartner for Software Engineering Leaders

Accelerate Digital for Future-Ready Business

Frameworks for composable tech, empowered
customers and the future of work



Introduction

The technology-driven innovations that were once transformational have become table stakes for staying in business. It's no longer enough to execute on a digital transformation at the speed of business. Now you need digital acceleration.

For the enterprise as a whole, digital acceleration means making faster progress using data and technology to optimize and transform — potentially both your business and operating models. Digital acceleration lets fast followers catch up with faster movers on digital commerce and services while optimizing the customer experience. It lets pioneers extend their lead in creating new data- and tech-enabled products and business models that can change the dynamics of their industry.

Software engineering leaders — whether their enterprise is a fast follower or a pioneer — are responsible for delivering the software and digital products that underpin digital transformation and enable business units, functions and teams to improve productivity and customer experience.

To do that, software engineering leaders must inspire their teams, develop talent, and shift their culture and delivery approach to maximize value with the right capabilities and customer experience — preparing their business to weather disruptions such as COVID-19 or more recent recovery-driven shortages and supply chain pressures.

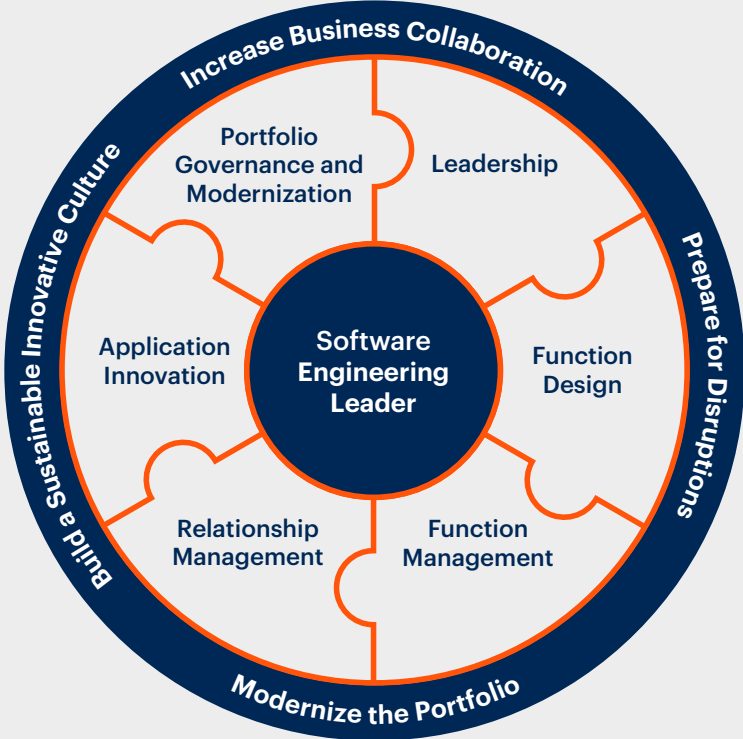


Charles Smulders
Practice Vice President,
Software Engineering



Mike Gilpin
Managing Vice President,
Software Engineering

The broad mandate of software engineering leaders



What senior leaders are focused on to accelerate digital

Among surveyed board directors:



69% say COVID-19 prompted their organization to accelerate their digital business initiatives.



66% say digital tech initiatives are a top strategic business priority.

Source: Gartner 2021 View From the Board of Directors Survey

Why accelerate?

Enterprises from retail to healthcare to manufacturing were forced during the pandemic to speed up digital initiatives to drive their response to the crisis.

The first wave of digital acceleration enabled some to respond to crisis-driven market and customer needs. It helped others to leapfrog the competition through more compelling customer experiences, greater efficiency or better decisions informed by data.

Internally, digital initiatives supported the large-scale move of thousands of employees to remote work and drove the rapid migration of commercial operations — and business and functional processes — online.

“Some of our clients call the lockdown the ‘honeymoon period’ for digital, because for the first time ever, projects and initiatives were pursued in a matter of days, if not a week or two, because the leadership team was aligned,” says Hung LeHong, Distinguished VP Analyst.

But the honeymoon is over; organizations are locking in their gains and progressing to the next phase of transformation. Digital acceleration today is about enhancing customer engagement, generating new revenue and serving customers through the digital channels they’re choosing to use.

Enhanced customer engagement and value top expected outcomes from digital business investment



n = 227, those who have accelerated/increased focus or investment focus on digital business initiatives, excluding “can’t say”
 Source: 2021 Gartner View From the Board of Directors Survey
 Q. You mentioned that digital business is still a focus or an investment focus in your organization. Please choose the top 3 expected outcomes from this investment for your organization.

Set up for acceleration

C-suite and functional leaders can leverage four digital business accelerators:

Digital business acceleration is execution at speed



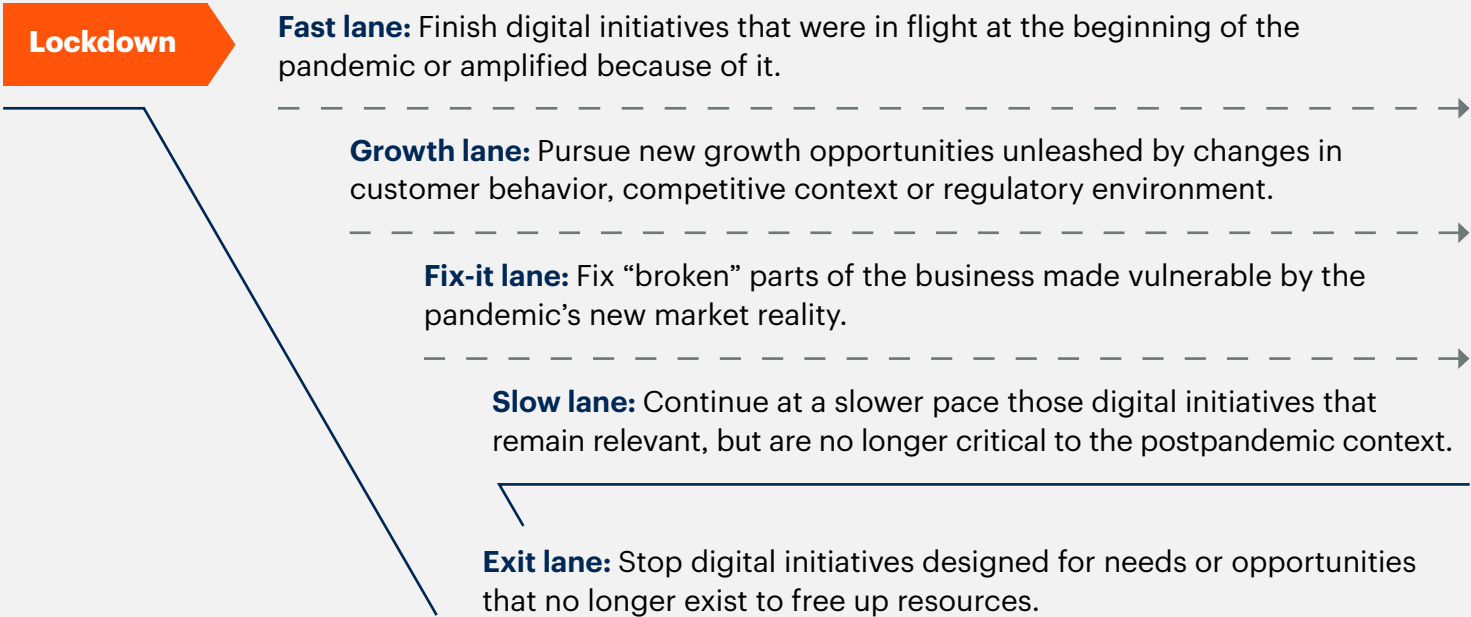
Source: Gartner

Prioritize what to accelerate

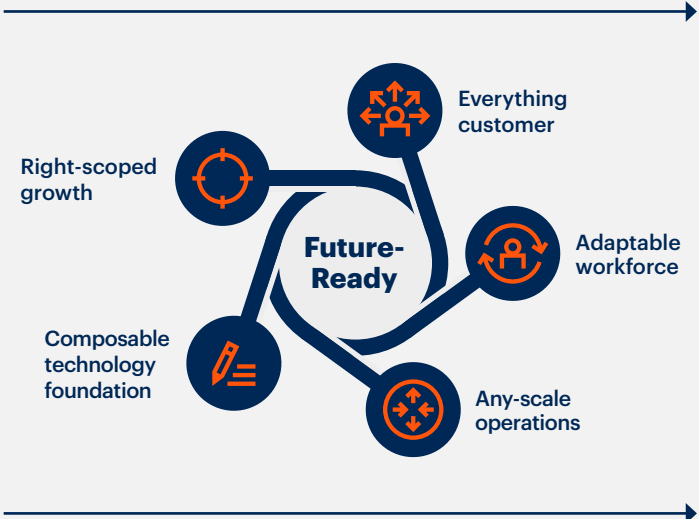
To prioritize near-term digital investments, define the urgency by categorizing investments into five speed lanes according to their strategic intent and use case and balance investments across them in a “portfolio” model:

Digital business acceleration is execution at speed

Immediate direction



Longer-term capabilities



Source: Gartner

Invest in future-ready capabilities

Balance near-term digital investments (as outlined on page 6) with longer-term aspirations. Gaining future-ready capabilities is critical, especially to build a resilient organization able to sense and respond to volatility and disruption.

Digital business acceleration is execution at speed

Longer-term capabilities

Pursue **right-scoped** growth, combining incremental growth with wholesale value proposition changes.

Build a **composable technology** foundation based on a modernized data and technology core that lowers costs and provides agility.



Serve the **everything customer** who wants everything to be in person and digital. This requires the speed and ease of digital and the hand-holding of human interaction.

Craft an **adaptable workforce** that adopts agile learning to shape talent to demand and leverages nontraditional workforce models.

Deliver **any-scale operations** that can flex in size or scope and across workforce models without too much impact on operating expense ratios or infrastructure.

Keep up digital momentum

While COVID-19 vaccine distribution is gaining momentum, pandemic fatigue still threatens to allow a backslide into suboptimal, predigital ways of working.

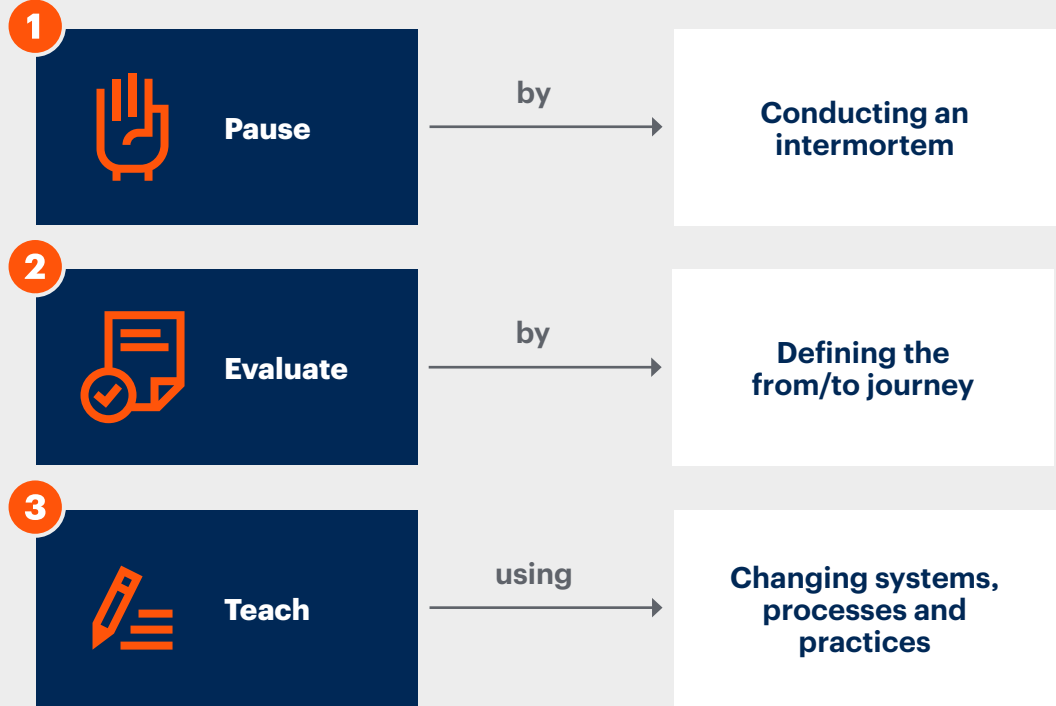
As organizations begin to return their people to the office, environmental cues could especially trigger old behaviors and stall digital ambitions.

To sustain momentum, leaders must institutionalize their new digital ways of working using systems, processes and practices and (re)commit to execute digitalization at speed.

To reinforce behavior and culture change:

- Pause, discuss and document the progress made on your digital plans.
- Evaluate what adjustments are required to maintain or accelerate digital plans.
- Teach the organization what needs to be done differently.

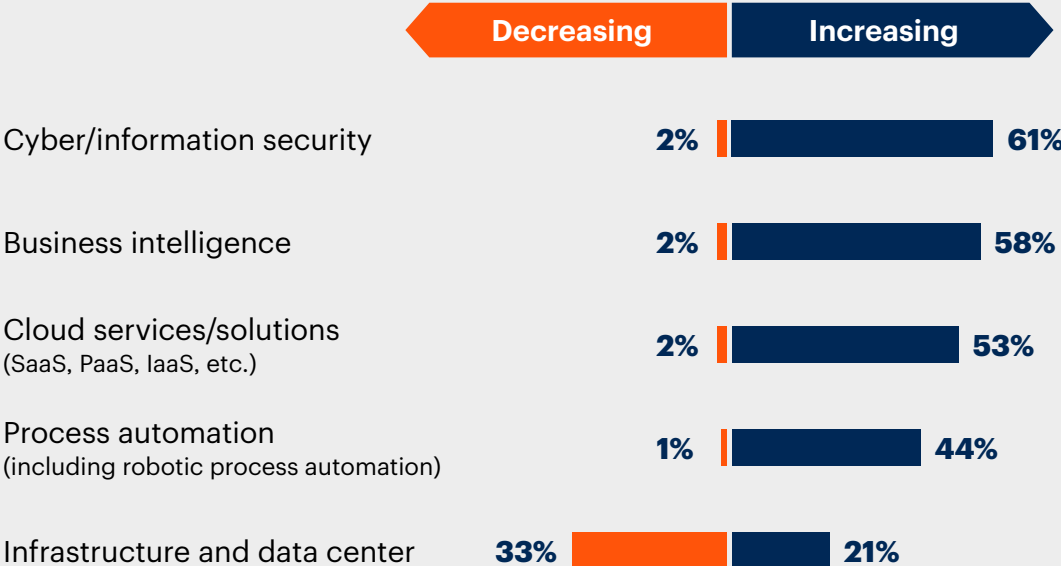
Three steps to prevent digital backsliding



Digital acceleration creates imperatives for all IT leaders

Rebalance the technology portfolio

Investments: Percentage of respondents



Source: 2021 Gartner CIO Survey

Digital transformation mandate: By role



C-suite and board

The Gartner 2021 View From the Board of Directors Survey found:

- 69% of board directors have responded to COVID-19 with digital business acceleration.
- 48% responded to COVID-19 disruption by increasing investment in digital business.
- 67% of board directors planned to increase investment in IT/technology as a result of COVID-19.



CIOs

- Collaborate with organizational leaders to drive digital transformation efforts.
- Strategize digital capabilities needed for innovation and to deliver new value through digital transformation.
- Communicate mission and goals across the IT organization.



Software engineering leaders

- Align software priorities with digital business and product strategy.
- Adopt the best technologies and delivery practices to accomplish their software mission.
- Accomplish business outcomes through continuous product improvement and engineering.



D&A leaders

- Provide intelligence and business insights for information planning and strategy.
- Focus on alignment of decision making capability to business moment.
- Deliver data modeling, data analytics, algorithmic models and other tools that facilitate decision making.



Enterprise architects

- Establish business outcomes and alignment across stakeholders.
- Foster an environment that encourages experimentation with new technologies and design solutions to enable business innovation.
- Support technology alignment needed to achieve digital transformation ambitions.



Infrastructure and operations (I&O) leaders

- Contribute insight about I&O competencies.
- Help guide planning activity for requisite infrastructure and operational changes.
- Develop I&O service strategy and technical roadmap and deliver integrated IT service management (ITSM) landscape.

3 key goals for software engineering leaders



Build, develop and retain the talent that drives success.



Deliver breakthrough customer experiences at scale.



Sustain success with a scalable and secure digital platform.

Build, develop and retain the talent that drives success

To drive the digital ambitions of the enterprise, software engineering leaders must develop in themselves and their people the competencies they need to ensure high performance software delivery.

Digital leaders are snapping up in-demand talent, while also developing their people — for example to increase customer centricity while innovating with technology.


A delivery approach based on agile and product-centric principles aligns teams with customer and business priorities, rapidly delivers and improves digital products, and empowers teams to make decisions — enabling the business agility crucial to success with digital business.


The use of what Spotify has termed “guilds” — also known as communities of practice — is one tactic that can drive organizational learning, talent development and flexible career paths to retain that talent.

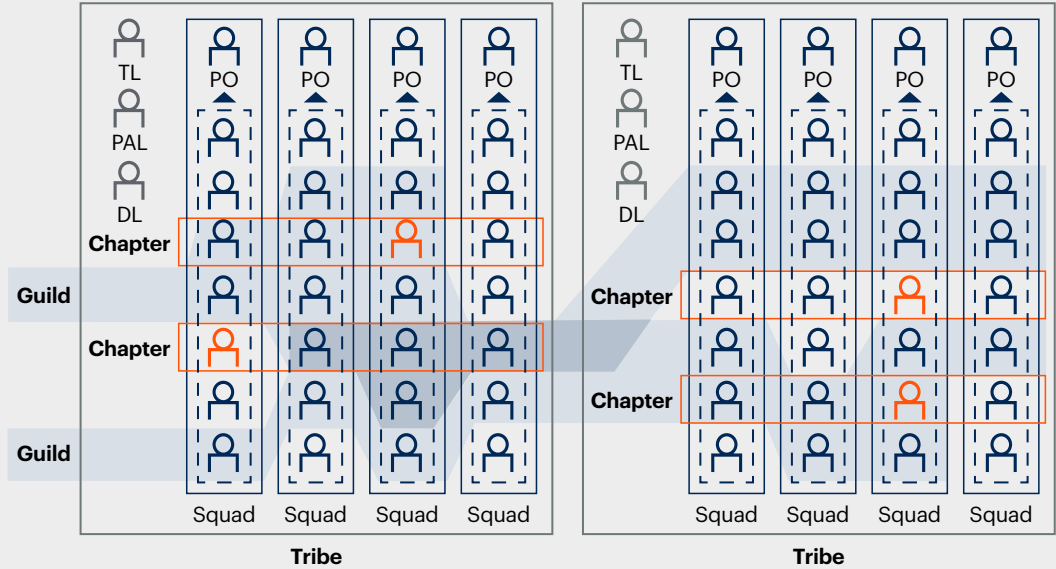
➔ **Read More: 6 Best Practices for Remote Work by Agile Software Development Teams**

Spotify chapters and guilds

- A Chapter provides personal growth and professional development. It meets regularly to discuss its subject area and to develop members’ expertise.
- Guilds are lightweight communities of interest that promote collaboration to develop competencies.

 **Chapter Lead:** Line manager for members.

 **Guild Coordinator:** Creates an active learning space to help members to develop their skills.



Source: Gartner
Note: TL = Tribe Lead; PAL = Product Area Lead; DL = Design Lead; PO = Product Owner

Deliver breakthrough customer experiences at scale

In an increasingly cloud-based environment, social and immersive computing scenarios have raised people’s expectations for customer or user experience (CX/UX), availability, performance, security and even business impact.

In this dynamic environment, traditional, technology-centric approaches to software quality fail to quickly deliver the innovation and breakthrough experiences required to succeed at digital business today.

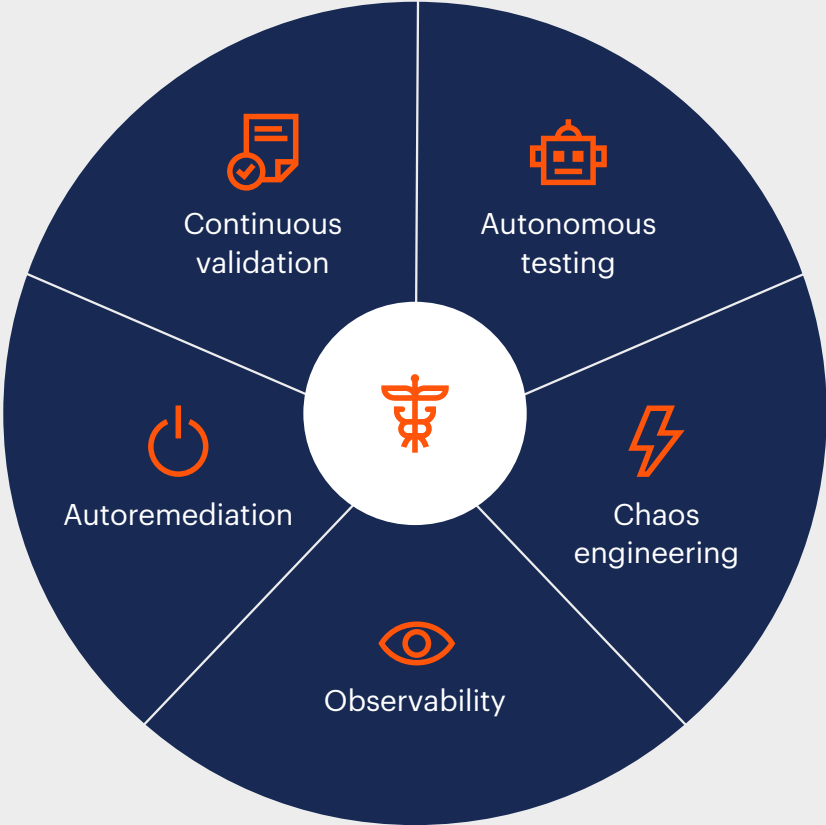
Instead, software engineering leaders must cultivate a shift in how their people think to focus less on whether applications fulfill a long list of requirements written by a business analyst, and more on whether they deliver a compelling CX/UX.

That means moving away from the traditional technology-centric model of quality to an outside-in, customer-driven perspective. By infusing quality into every step, from the inception of an idea through to operations, and by building links among CX, multiexperience (MX), UX and employee experience (EX), you build what Gartner calls digital dexterity — which rapidly drives tangible business benefits.

By 2025, organizations that invest in building digital immunity will increase customer satisfaction by decreasing downtime by 80%.

➔ **Read More: Digital Workplace Trends You Can’t Ignore**

Elements of the digital immune system



Sustain success with a scalable and secure digital platform

The most successful digital businesses use a wider range of products, architectural techniques and services than others. Progressive software engineering leaders must therefore champion the move from legacy monolithic systems to the kind of flexible digital foundation that digital leaders employ.

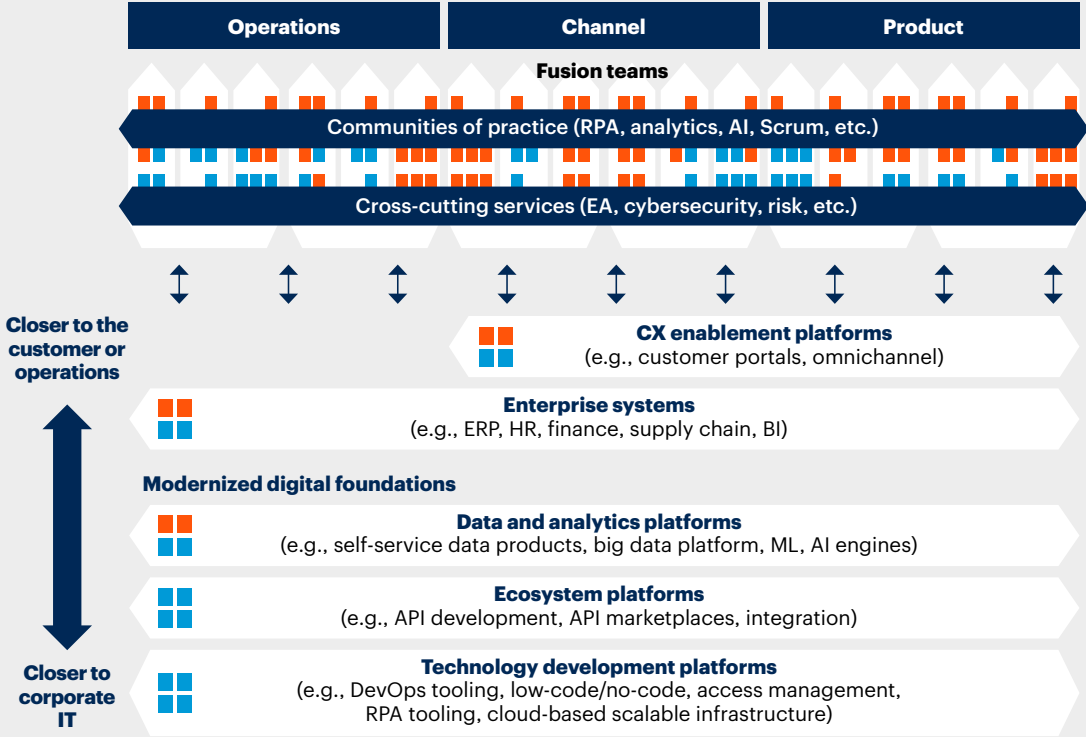
A composable digital platform flexes with today’s ever-changing business demands, allowing you to switch building blocks in and out as teams assemble or reassemble business processes and customer or user experiences.

Composable digital platforms are more fitting for modern digital experiences — and reflect the reality that the IT organization is no longer the sole provider of information and technology delivery.

The challenge for software engineering leaders is to envisage and enable the composable architecture that brings digital capabilities closest to the point of value. You’ll also need to equip people with the tools and practices they need to innovate, regardless of where they sit in the organization.

➔ **Read More: The Future of Business Is Composable**

New model for enterprise I&T including the digital foundation



■ IT department ■ Business areas

Source: Gartner

Note: AI = artificial intelligence; BI = business intelligence; CX = customer experience; EA = enterprise architecture; ML = machine learning; RPA = robotic process automation

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