

CIO's DX 2.0 Playbook: The Race to the Future Enterprise

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The new breed of digital disruptors...



"This year we made significant gains in using **digital technology** to improve the services we provide to customers, while also improving our operational capacity and reducing risk. In NZ, we made it easier for customers to interact with the bank through the introduction of a digital assistant, 'Jamie', using **artificial intelligence technology** to help customers with the top 40 most asked banking questions." **CEO**



"In the past year, we have made good progress building capabilities and investing in the platforms to support further growth. Each of our divisions has made substantial progress in the **data and digital** area and our investment in the **Advanced Analytics Centre.**"
Managing Director

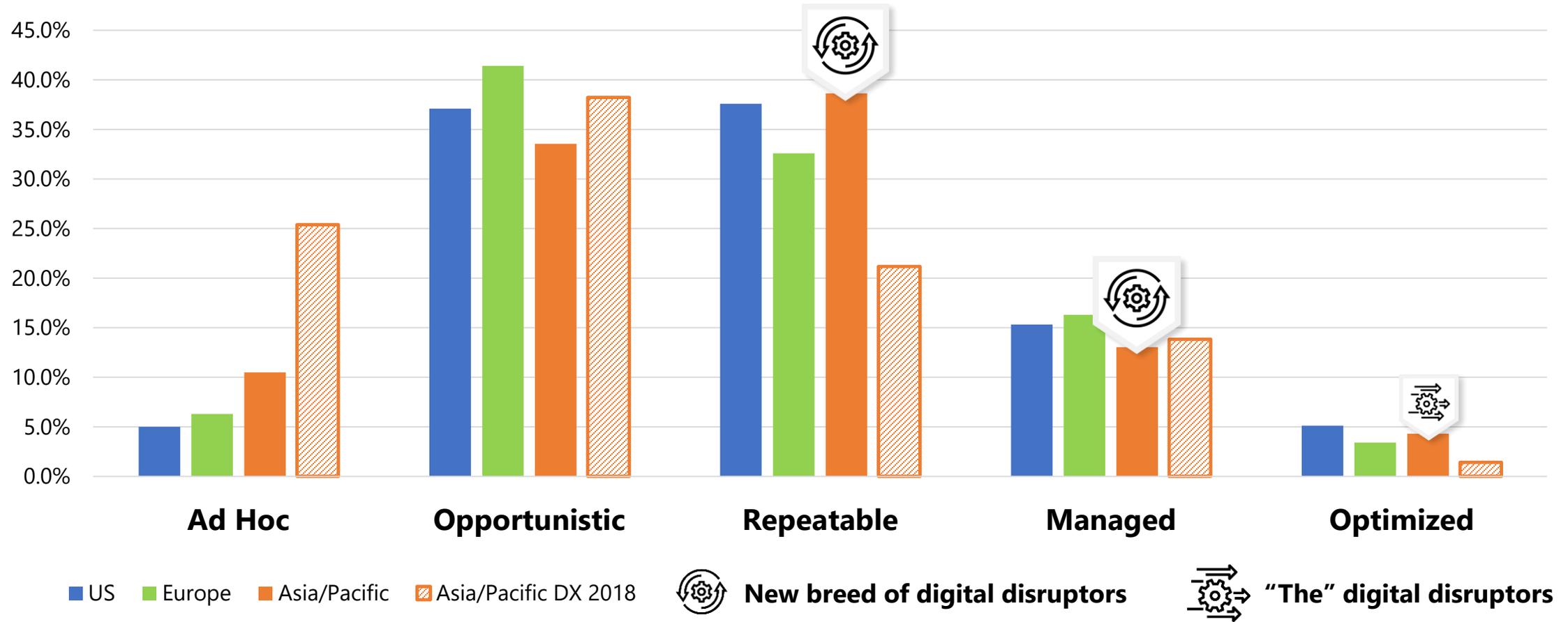


Customers are shopping with us more frequently, in different modes and through multiple channels. We have been on a journey to establish an underlying **digital infrastructure** and store model that can deliver greater convenience and frictionless experiences for our customers. Our work to date is resonating with customers with convenience offerings, in all its forms, significantly contributing to the Group's overall growth in the year."
CEO

Source: Respective brand's financial reports and PR releases

Future Enterprise = DX 2.0

IDC Future Enterprise MaturityScape



Source: IDC Future Enterprise MaturityScape Benchmark (N=500 US, 501 Europe, 773 APeJ and 1,229 APeJ DX 2018)

The Future Enterprise

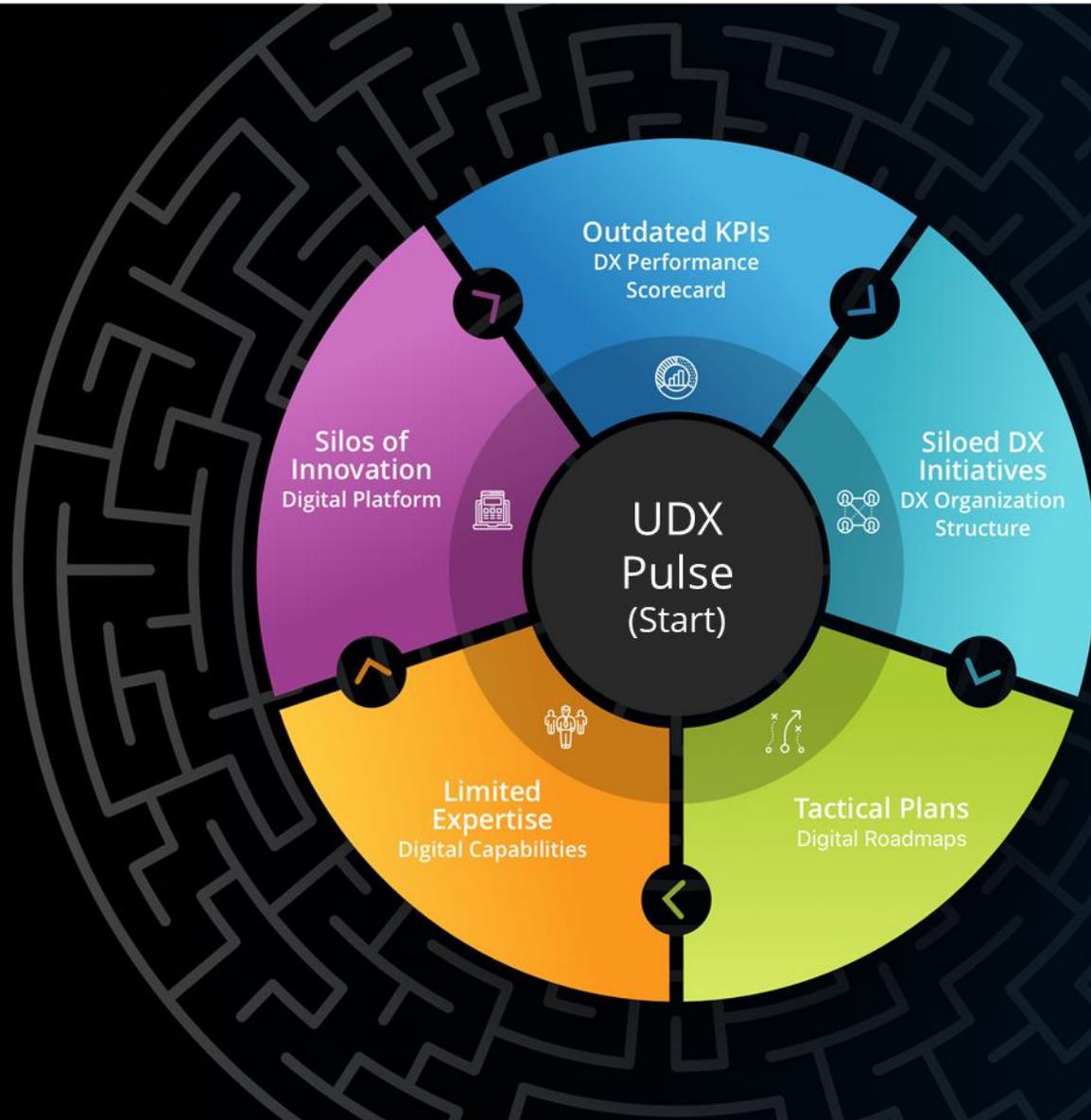


By 2024, leaders in 50% of A2000 organizations will have mastered "future of culture" traits such as empathy, empowerment, innovation and customer-and data-centricity to achieve leadership at scale.



IDC's vision for how firms must organize and invest to participate in **increasingly digitally-centric** markets. The future enterprise essentially comprises of five distinctive and interrelated dimensions. Mastering these dimensions require skillful execution of strategy, people, process, technology, governance and data. These dimensions include **future of culture**, **future of customers**, **future of intelligence**, **future of operations** and **future of work**.

Source: IDC DX Practice, 2019; IDC DX FutureScape 2020 Prediction #1 Future of Culture



Are you digitally stuck?

Stop **READING** about Digital Transformation (DX) and start **DOING**

Almost 62% of organizations globally are “digitally stuck” in their evolutionary journey. While they are running digital projects, and making progress, they are not digitally transforming adequately to move the DX needle organization-wide. Don’t let “digital deadlocks” like lack of digital mindset, ineffective KPIs, or silos of innovation stop you on your journey.



Capabilities

- Develop into an intelligent organization
- Deliver innovative services and experiences at scale
- Create a dynamic work model

Customers

- Create empathy with customers at scale
- Pivot our operations from throughput and efficiency to market-driven
- Engender trust with our customers

Critical infrastructure

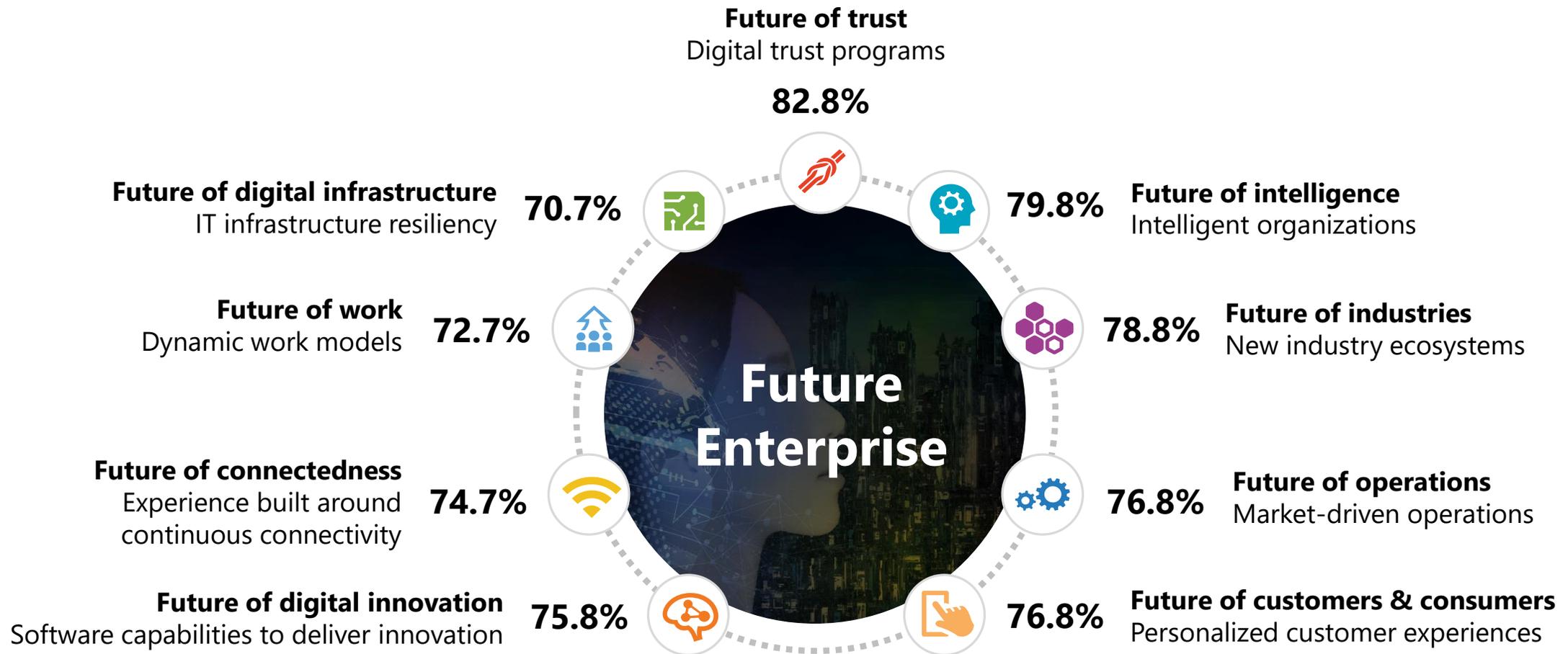
- Ensure reliable digital services and experiences
- Create pervasive experiences

Industry ecosystems

- Define the new value in the digital economy, our role, and partners

Source: IDC CEO Survey, 2019 (N=100 of major brands and unicorns around the world)

CEO's new agenda for the future enterprise



Source: IDC CEO Survey, 2019 (N=100 of major brands and unicorns around the world)



By 2022, with proactive, hyper-speed operational changes and market reactions, AI-powered organizations will respond to customers, competitors, regulators, and partners at least 1/3 faster than their peers.



**Future of
intelligence**

Impact on tech buyers

- Leverage a **CoE approach to bring all LoBs together**, encourage collaboration, and facilitate holistic, enterprise-wide approach to AI solutions. Data must be managed holistically and efficiently across the enterprise and its ecosystems.
- **Infuse IT operations and environment with intelligence** to both learn and benefit from AI at the same time. CIOs must therefore accelerate IT delivery of solutions and services, create data excellence and AI capabilities and automate both IT and business processes.
- **Build security, compliance, and resilience** with every initiative **from the ground up**.

AI at scale

Automate your legal work with authorAI.

authorAI

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IDC DIGITAL TRANSFORMATION AWARDS

Source: IDC DXa 2019; CxO conversations

Ecosystem force multipliers



By 2024, 70% of digital leaders devise and differentiate end-customer value measures from their platform ecosystem participation, including an estimate of the ecosystem multiplier effects.



Future of Industries

Impact on tech buyers

- **Understand how ecosystem information is both value-added** for all constituents and participants (consumers, providers, connectors) and that **measurable benefits are monetized**. CIOs must understand the need to establish both strong and weak ties within the ecosystem network design as required by the business case.
- **Your ecosystem relevance is a function of the strength of information flows and number of connections across the ecosystem**; like a biologic system where information is an analog to energy created and consumed.
- **Development of the digital platform** is a core strategic imperative to **enable ecosystem participation and leadership**.

Source: IDC DX FutureScape 2020; Prediction #7

The passenger economy

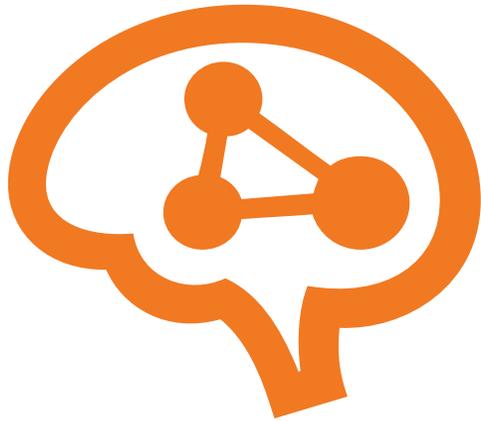
2025: US\$250B in APeJ and US\$340B including Japan in economic value



Source: IDC Digital Economy, 2019



By 2025, more than half of A2000 enterprises will be prolific software producers with code deployed daily, over 90% of new apps cloud native, 50% of code externally sourced and 1.5 times more developers.



Future of digital innovation

Impact on tech buyers

- IT development process shifts from "written here" to a heavy mix of written here and not written here but integrated here. Developers' roles transition from that of creators to creators and integrators.
- Prepare for cultural change. DevOps has great potential to help organizations improve their agility and ship code faster, but the hardest part of creating effective DevOps teams is overcoming the existing cultural inertia. Foster a real culture of collaboration between development, operations, product management, and business stakeholders will be able to drive more velocity from their DevOps teams.
- Invest in automation and orchestration systems that can deal with container, microservices, and functions-based applications. Understand and embrace automation and orchestration systems that use machine learning sooner than later.

Source: IDC IT Industry FutureScape 2020; Prediction #4

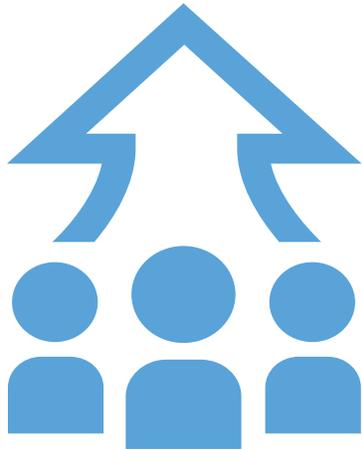
Digital co-innovation and innovation factories



Source: IDC DXa 2019; CxO conversations



By 2021, new Future of Work practices expand the functionality and effectiveness of the digital workforce by 30%, fueling an acceleration of productivity and innovation at practicing organizations.



Future of work

Impact on tech buyers

- **Automation vs. Augmentation.** Are you pushing for automation to drive short-term gain in cost out? Are you pushing for automation to achieve longer-term gain in efficiency and effectiveness? Is it about augmentation of talent/resource? Is it about creating new possibilities (i.e. new organizational value) with augmentation that is otherwise not possible with human capabilities only?
- **Cultural challenge to human-machine collaboration.** What needs to be addressed – labor laws and regulations, workers' mindset, process flows? What new values can be derived with this change and how will they benefit the workers (as opposed to just the organization)?
- **Key performance and behavioral indicators.** With augmentation comes new sets of challenges and expectations. Old habits will need to change. Success metrics that encourage this new operating model will be needed to drive up employee NPS and talent retention.

FoW MaturityScape across Asia/Pacific

28%



ADHOC

FoW Laggard

Little or low realization for FoW initiatives; no overarching strategy, funding, or support

35%



OPPORTUNISTIC

FoW Apprentice

Some recognition of FoW but enterprise-wide strategy still lacking; initiatives are siloed and limited

23%



REPEATABLE

FoW Practitioner

Pan-enterprise FoW strategy supported at senior levels but internally-focused; some silos still exist

12%



MANAGED

FoW Transformer

FoW supported by enterprise technology platform; initiatives extend beyond corporate boundaries

2%



OPTIMIZED

FoW Disrupter

FoW initiatives agile, adaptive, learning, transformational and deliver competitive advantage



FoW laggard

"We mandate our employees to provide a report on their work from home schedule and a WFH activity report."

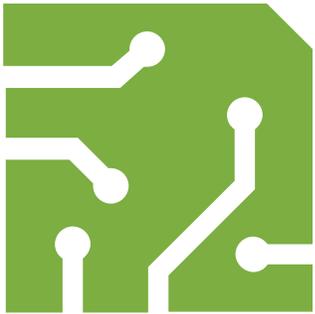


FoW disruptor

"We encourage our employees to come up with ideas to automate their jobs. Those with the most creative and impactful solutions get promoted!"



Driven both by escalating cyber threats and needed new functionality, 65% of organizations will aggressively modernize legacy systems with extensive new technology platform investments through 2023.

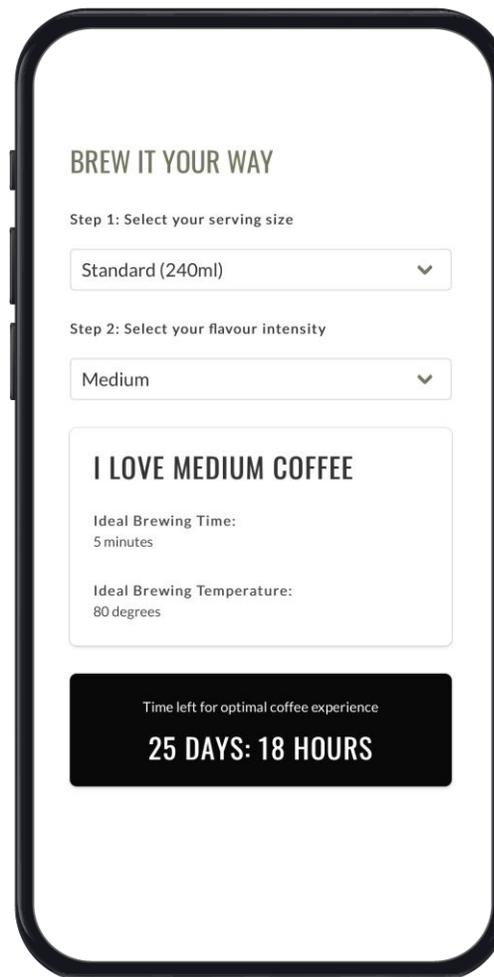


Future of digital infrastructure

Impact on tech buyers

- Organizations need to deliver a **use case journey across a digital roadmap** with different levels of innovation broken up into horizons (incremental, disruptive and business model)
- **Clear deadlines need to be set for the modernization of all elements of the enterprise IT environment.** Decision options (re-hosting, retiring, re-architecture) need to be taken by the entire digital dream team.
- **The security teams need to be brought into digital innovation projects.** DevOps needs to become DevSecOps and the CISO and CIO need to work with digital leaders to educate all stakeholders on the threats associated with launching new apps, services or products without the necessary governance structure.

Source: IDC DX FutureScape 2020; Prediction #9



Source: IDC DXa 2019; CxO conversations

The key elements to enable hyper-X



By 2024, over 60% of all IT spending will be directly for digital transformation and innovation (up from 40% in 2018), growing at a CAGR of 20% (versus 3% for the rest of IT).

Multiplied innovation



Development

App explosion

- Everyone is a developer
- Platforms and ecosystems power code reuse
- Increased verticalization/specialization

Data and insights

Super-powered everything

- Data goes "hyperscale" (100s to 1000s of exabytes)
- AI-based automation ramps
- AI as an ingredient in apps and specialized hardware
- Edge intelligence multiplies

Reach and scale

Borderless clouds to edge

- Seamless cloud-to-cloud and simple cloud-to-edge experiences
- A radio revolution brings always-on connectivity
- Everything as a service accelerates

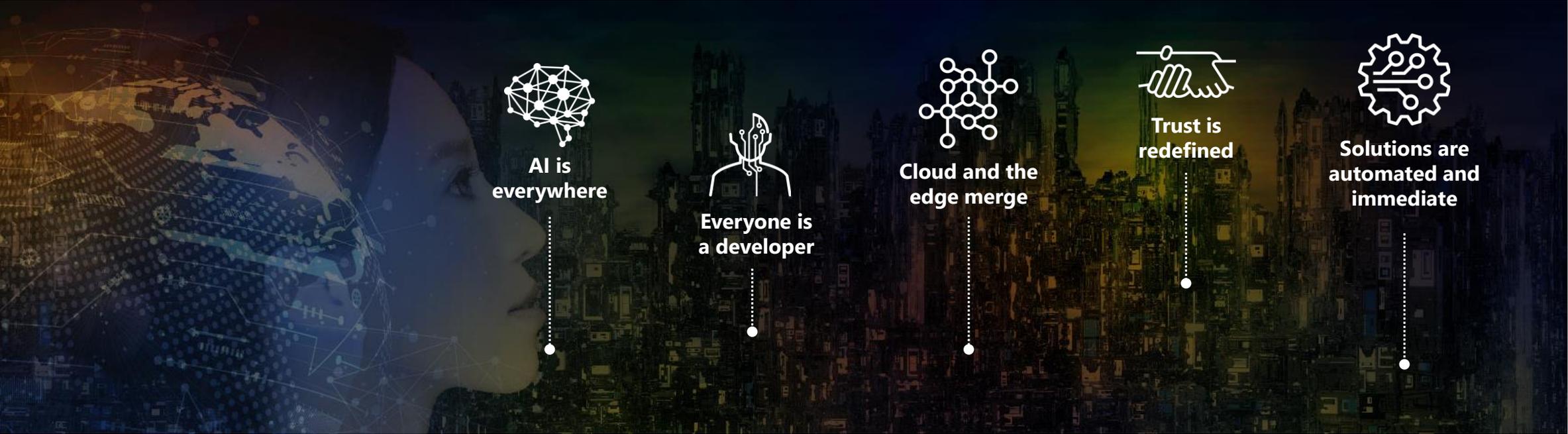
Trust

Proactive integrity

- Roots of trust; Risk in context
- Persistent authentication and authorization
- Aggressive governance
- Security wakes up to CX

Source: IDC 3rd Platform – Multiplied Innovation Chapter, 2019

Technology fundamentals of the Future Enterprise



Source: IDC 3rd Platform – Multiplied Innovation Chapter, 2019