Incumbents Strike Back

Insights from the
Global C-suite Study

IBM Institute for
Business Value

Our latest study draws on input from 12,854 respondents across 6 C-suite roles, from 112 countries

Chief Executive Officer
2,148

Chief Financial Officer
2,102

Chief Human Resources Officer
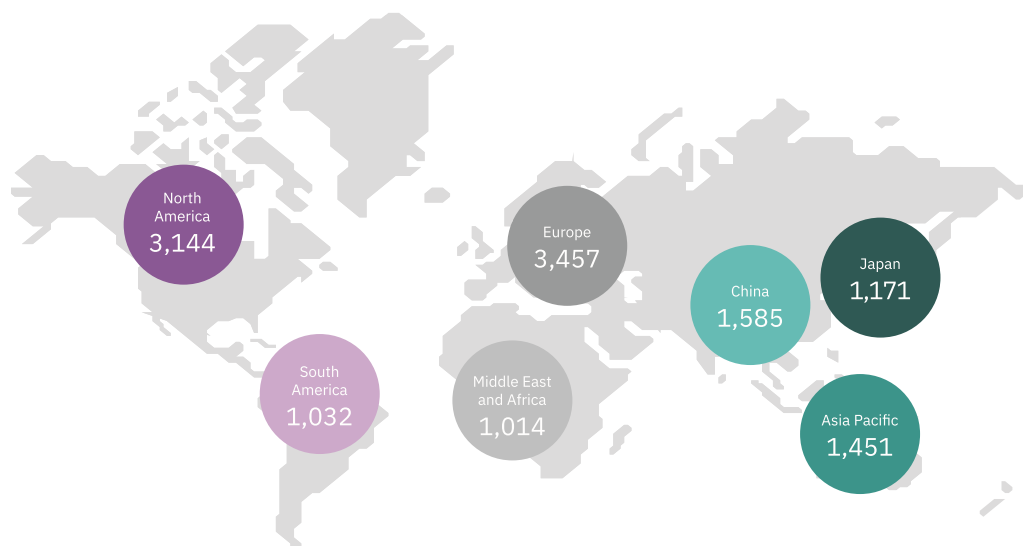**2,139**

Chief Information Officer
2,258

Chief Marketing Officer
2,091

Chief Operations Officer
2,116

North America
3,144

South America
1,032

Europe
3,457

Middle East and Africa
1,014

China
1,585

Japan
1,171

Asia Pacific
1,451

Global C-suite Study
19th edition

IBM Institute for
Business Value

This report is IBM's third cross-C-suite Study and the 19th edition in the ongoing series of CxO studies developed by the IBM Institute for Business Value (IBV). We now have collected data and insights from more than 40,000 interviews dating back to 2003. We reinvented the program to collect data and publish findings throughout the year. This report was authored in collaboration with leading academics. Here, we present the culmination of our key findings of CxO insights, experiences and sentiments.

Perpetual reinvention

Two decades after the Internet became a platform for transformation, we're still wondering how it all might turn out. The signals aren't always clear. Today, winner-take-all organizations are on the rise, but collaborative ecosystems are flourishing as well. Even in industries where competitive concentration is increasing, innovation hasn't – as would be expected – flatlined. Which way to the future? The organizations that are prospering aren't lying in wait to time the next inflection point – the moment when a new technology, business model or means of production really takes off. Remaking the enterprise, they recognize, isn't a matter of timing but of continuity. What's required, now more than ever, is the fortitude for perpetual reinvention. It's a matter of seeking and championing change even when the *status quo* happens to be working quite well.

Introduction

Economists and strategists are debating both the causes and consequences of markets that are growing less competitive. Some attribute the consolidation of power into the hands of a few to digital technologies; others point to structural factors. C-suite executives may be just as uncertain about the changes happening around them. Certainly, their expectations about how the business landscape will change in the next few years are mixed.

The C-suite is evenly divided on whether the focus in the future will shift from established markets to new ones. After years of predicting a move to open innovation – sourced externally – a growing number of C-suite executives are now predicting a retreat to proprietary innovation. And yet, a significant number also cite new capabilities – and intentions – for collaborative innovation.

In two areas, however, C-suite executives stand in close agreement: how they will change their value propositions and scale their value chains. Two-thirds, 68 percent, of C-suite executives expect organizations to emphasize customer experience over products. And 63 percent believe that most organizations will continue to expand their networks of business partners.
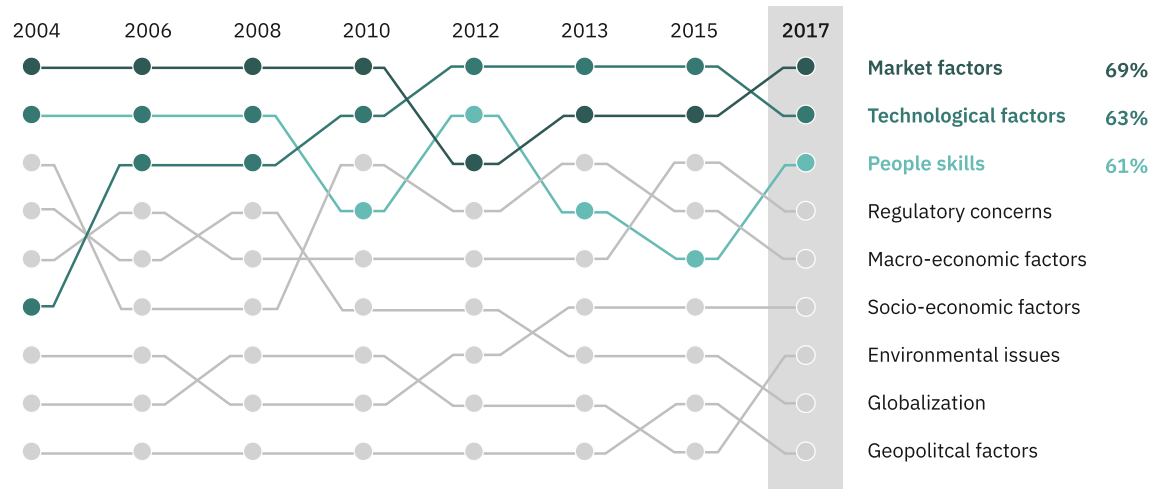
In the 14 years IBM has surveyed C-suite executives, we've asked them which external forces will impact them most in the next two to three years. This year, market factors, which includes things like increased competition and changing customer preferences, returned to the top position, while technology slipped to second place. People skills rose sharply to third place, recognition perhaps of the rise in value of intangible assets like talent and ideas (see Figure 1).

To better understand the forces at play, we applied cluster analysis to identify distinct segments of organizations among the more than 12,500 participants in this study. Three archetypes emerged, which we've named the Reinventors, the Practitioners and the Aspirationals. The organizations clustered in these archetypes are at different stages of Digital Reinvention™ and are eyeing the opportunities ahead from that vantage point.

Figure 1

Back to the future

Market factors and people skills are on the rise

2004	2006	2008	2010	2012	2013	2015	**2017**

Market factors 69%
Technological factors 63%
People skills 61%
Regulatory concerns
Macro-economic factors
Socio-economic factors
Environmental issues
Globalization
Geopolitcal factors

Q: What are the most important external forces that will impact your enterprise in 2–3 years? (select up to five).

The Reinventors, making up 27 percent of the total, are the standouts. They report that they outperformed their peers in both revenue growth and profitability over the past three years, and led as well in innovation. Their organizations are exceptionally well aligned. They say that their IT strategy is in sync with their business strategy and they've optimized their business processes to support their strategic intentions. Their organizations aren't locked in place. Having managed change successfully in the past, they're confident in their capacity to continuously adapt. Moreover, they have a well-defined strategy to manage disruption.

The Reinventors have redirected their resources to achieve new sources of scale – broad networks of partners – and extract new value from ecosystems. They pay close attention to people skills and have restructured their organizations, including their cultures, to encourage experimentation and bring new ideas to the fore. They're ahead of all others in co-creation and close collaboration with customers and partners. Moreover, they leverage the data and knowledge derived from close and continuous collaboration to orchestrate compelling customer experiences.

Cluster analysis of survey data revealed three archetypes with distinct characteristics reflecting their Digital Reinvention™ capability.

Organizations view opportunities based on the vantage point of their own cluster.

27% Reinventors

37% Practitioners

36% Aspirationals
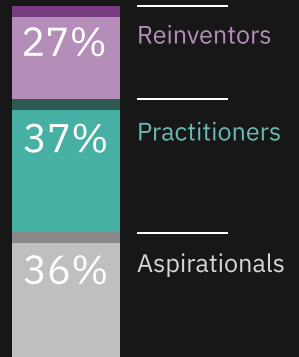
The distinguishing variables used to drive the analysis are:

– Disrupt a new market or industry by changing the rules of the game

– Digital technologies deployed to transform interactions with customers

– Data and analytic insights used to inform business strategy

– Rapid prototyping to test and refine business strategy

– IT strategy closely aligned to business strategy

– Insights from data analysis used to constantly innovate products and services

– Short feedback and adaptation cycles to accelerate project execution

Practitioners – 37 percent of the total – haven't yet developed the capabilities to match their ambitions. And they are ambitious. Over one-half of the Practitioners plan to launch new business models in the next few years. Some are ready to leap ahead by taking on more risk to "up their game" and disrupt their industry and others. More Practitioners than Reinventors are considering one of the most radical of the new business models – the platform business model.

The Aspirationals, as their name implies, have a ways to go in both their digital journey and their ability to move quickly to seize new opportunities. They make up 36 percent of the organizations surveyed. The biggest challenges for these organizations are to get the right vision, strategy, execution capabilities and resources in place, especially employee talent and partners.

Through their intentions and actions, the Reinventors offer insights into how an enterprise can develop new capabilities and structure its organization to continuously create new value. The Practitioners are a reminder that in the digital era, new come-from-behind strategies remain available for those ready to take on more risk and execute on a new vision with agility.

Drawing from the responses to this survey, IBM's engagement with clients and our work with academics, this 19th edition of the IBM Global C-suite Study covers four topics that stand out as important today:

Dancing with disruption
Incumbents hit their stride

We explore the forces at play in shaping the current competitive environment, the opportunities emerging, and how a balance between stability and dynamism favors the Reinventors.

Trust in the journey
The path to personalization

Here we show how the Reinventors as design thinkers are testing their assumptions and re-orienting their organizations to engage their customers and create bonds based on trust.

Orchestrating the future
The pull of platform business models

This section reveals the step change in capability that occurs as organizations scale their partner networks in new ways. We chart how organizations will need to reconsider their value propositions and allocation of resources to own or participate in platforms.

Innovation in motion
Agility for the enterprise

We delineate how leaders are liberating their employees to experiment and innovate, get up close to customers and thrive in an ever-evolving ecosystem of dynamic teams and partnerships.

Dancing with disruption
Incumbents hit their stride

Rita Gunther McGrath
Professor, Strategy, Innovation and Growth,
Columbia Business School

Philip Dalzell-Payne
Partner, IBM Digital Strategy,
IBM Services

Despite the headline-grabbing upheavals caused by major industry disruptions, executives surveyed for this study seem remarkably sanguine. For the most part, they report little concern about disruption having an immediate impact on their businesses. Moreover, it's not the fearsome digital giants they're most worried about, but the once lumbering, now innovative, industry incumbents. As innovative incumbents have become smarter about competing in a disruptive digital age, executives now say they represent more of a competitive threat than new entrants.

Over one-third, 36 percent, of C-suite executives report little or no impact from disruption in their industries. Even more, 44 percent, say they don't see any urgency to transform their enterprises in response to disruption. In all, just 27 percent say they're experiencing significant disruption, an unexpected finding given the deluge many predicted. What happened to the threats evoked by the "uberization of everything," the triumph of the sharing economy and industry boundaries blurred beyond recognition?

The surge of competition from other industries didn't happen at the anticipated scale. Just 23 percent of C-suite executives say that competitors from outside their industry are a significant source of disruption. Digital giants continue to concentrate their power in some industries, but according to the C-suite executives surveyed, they aren't leading disruption.

Startups were quiescent. Incumbents struck back.

Seventy-two percent of C-suite executives tell us that innovative industry incumbents lead the disruption in their industry (see Figure 2). Even in industries with higher than average turmoil, like financial services, where startups have a relatively larger presence, innovative incumbents are credited with the lion's share of change.

Disruption is dead! Long live disruption!

What changed? One wave of disruption may be abating. Ubiquitous mobility and digital media have already shaken up the most susceptible industries. The Uber and Airbnb phenomena rolled through markets with excess capacity and eroded profits for many.

Some would-be disruptors never got past the gate. The digital giants' dominance daunted entrepreneurial startups and the venture capital (VC) firms that fund them.[1] The number of business startups in the United States recently reached a 40-year low.[2] Angel and seed funding fell along with first-time financings; investment shifted to existing unicorns and late-stage deals.[3]
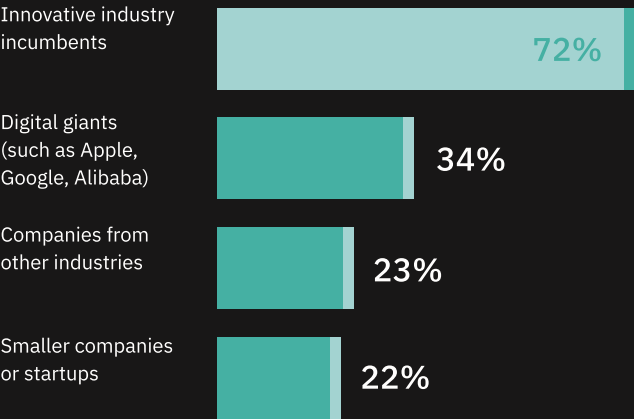
Incumbents honed their skills to acquire nascent disruptors, along with their digital skills and innovator talent. Financial services firms have been snapping up fintech, insuretech and regtech companies at record pace. In other industries, Walmart acquired platform retailer jet.com, among other startups, while UPS bought Coyote Logistics, the "Uber of trucking."[4] Airbus – along with Virgin Group, Qualcomm and other companies – invested in OneWeb, an organization building 640-plus satellites to provide global broadband Internet access.[5]

Figure 2

All global participants

New wave

Innovative incumbents take the lead in disruption

Innovative industry incumbents — 72%

Digital giants (such as Apple, Google, Alibaba) — 34%

Companies from other industries — 23%

Smaller companies or startups — 22%

Q: What types of enterprises are leading disruption within your industry? (Select all that apply).

"The most important initiative our organization will undertake in the near future is creating new business models in partnership with other companies, and then replicating and scaling them."

Chief Financial Officer,
Electronics, Brazil

Is disruption dormant? Not likely. Even in relatively stable markets dominated by a few firms, circumstances can still change suddenly. One example: subscription services. Startups like Birchbox, Blue Apron and Dollar Shave grew quickly, creating volatility in many categories. Dollar Shave was later acquired by Unilever and now many incumbent retailers and consumer packaged goods companies offer subscription services.[6] Auto makers have even gotten into the act, creating subscription services for month-by-month "leasing," which includes insurance, and the cost of needed maintenance and services.

The organizations that weathered recent disruptions have likely grown stronger – and better ready to transform – as a result. Certainly, they've learned a thing or two in the 20 years since Clayton Christensen popularized the phenomenon of disruptive innovation.[7] Fortified by strong relationships and assets, industry incumbents continue to reinvent themselves. US-based healthcare giant Kaiser Permanente, for example, reports that 52 percent of its annual 110 million patient-physician interactions are now online or mobile.[8]

Strategic inflection points, those times when the fundamentals are about to change, are typically long in the making and mostly unseen. It's likely that any new wave of disruption ahead is just as invisible to organizations today as it has been in the past. What's more, there is a record level of VC funding – "dry powder" – waiting on the sidelines for those next audacious investment opportunities.

"In the wake of digital disruption, our enterprise has shifted its strategy to investing in digital startups as this will drive information sharing and innovation."

Takao Wada, President and
Representative Director,
PERSOL TEMPSTAFF CO., LTD., Japan

Disruption without startups

C-suite executives are responding to the changing nature of disruption – dominated by incumbents – by acquiring new skills. The Reinventors, who outperform their peers and lead in innovation, have become adept at ecosystem advantage, partnering with organizations in their value chain and even sharing physical assets and people skills with them. We also looked at a different segmentation of organizations in this study, those with a declared strategy to disrupt – the Disruptors – who also have ecosystem innovation in their sights.

The focus on the new value to be extracted from ecosystems may explain in part why C-suite executives report that in the next few years they expect more organizations will stay in their lanes. In our 2015 study, 54 percent of such leaders thought new competitors would flood their industry; in this study, that number dropped by half, to 26 percent.

The conviction that there will be fewer competitors crossing industry lines could blindside some. As US health giant CVS's announcement of its intention to acquire US health insurer Aetna demonstrates, incumbents can shift industries very quickly.[9] Moreover, one in five organizations that reported a strategy to disrupt say they will do so in an industry other than their own.
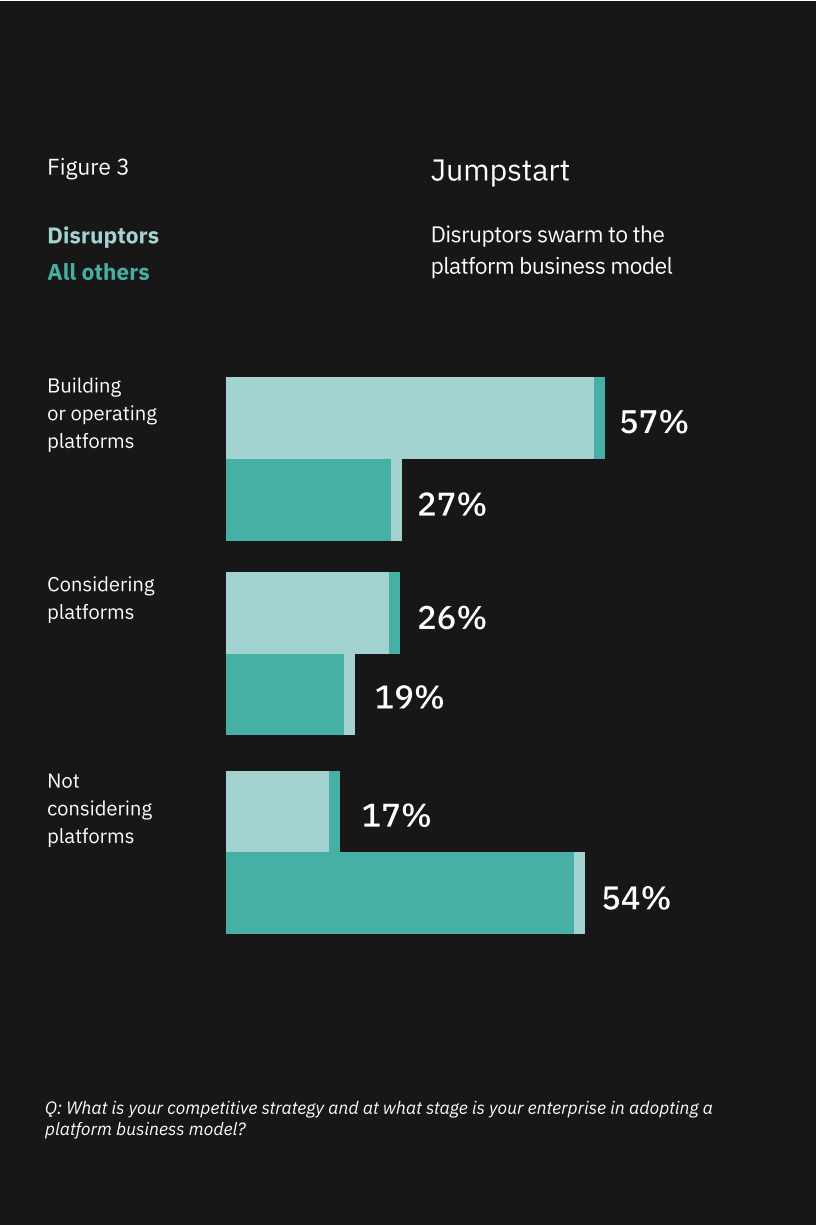
In many industries, competition has declined. Economic studies and literature have begun chronicling the increasing competitive concentration across most sectors, a shift that began in about 1998. The rise of "superstar" and "winner-take-most" firms that dominate their industries is well documented.

The digital giants marched to dominance by adopting the platform business model. Now, the disruptors are swarming to them.

Chasing the zero marginal cost advantage, 57 percent of the organizations with a strategy to disrupt are builders or owners of a platform business model. By orchestrating assets instead of owning them, they expect to take advantage of network effects to scale quickly (see Figure 3). Organizations of every kind and in every industry are investing in platforms. Based on our analysis of C-suite executives' responses, and publicly available financial and macroeconomic data, we conservatively estimate that capital reallocation toward this new winner-take-most business model could approach USD 1.2 trillion in the next two to three years, up 174 percent from the approximately USD 420 billion reportedly already invested.[10]

For some time now, disruptive strategies have discounted the value of physical assets. That could be changing. Both the Reinventors and the Disruptors are out-investing others in the technologies that facilitate the sharing of data across organizations in an ecosystem – such as the Internet of Things (IoT) and blockchain. As the IoT – the bridge between the digital and physical worlds – ignites the economy of things, value could shift to those that expertly orchestrate digital-physical ecosystems. Innovative incumbents can turn their ownership of infrastructure and assets, and their expertise at managing them, into new disruptive advantage.

BMW intends to "out-Uber" Uber by owning a fleet of cars that can – based on daily demand – be optimized for different services. It can dispatch a car in its fleet, with a professional driver, for ride

Figure 3

Disruptors
All others

Jumpstart

Disruptors swarm to the platform business model

Building or operating platforms

57%

27%

Considering platforms

26%

19%

Not considering platforms

17%

54%

Q: What is your competitive strategy and at what stage is your enterprise in adopting a platform business model?

hailing or make it available for short-term, by-the-hour rental.[11] Others are looking at optimizing revenue per car by deploying to either passenger transport or package delivery services, based on demand.

Disruption hasn't gone underground. Instead, it's emerging as a capability incumbents are ready to embrace. In The End of Competitive Advantage, analysis shows that companies that perform well in the long term successfully balance stability with dynamism.[12] They continuously reallocate resources to invest in promising new areas and experiment in the marketplace. They stay ahead of disruption by recognizing that any advantage is transient, and they are always exploring and committing capital to new opportunities.

Innovation is no longer the province of the hungry upstart. The most financially successful segment in this study, the Reinventors, also includes the leading innovators. Their leaders have a strong understanding of where their industries are heading. But they stand apart from others in their willingness to experiment and move fast. Rapid prototyping to develop and execute on strategy is one of seven distinguishing characteristics of Reinventors. Three-quarters of Reinventors report that their culture rewards both fast failure and successful innovation, acknowledging the value they place on experimentation.

These agile, experiment-embracing Reinventors don't need to be the first to detect a disruption that could change everything. They operate in something closer to a state of continuous change, ready to reinvent themselves before they're forced by a new competitor or a market disruption to reconsider their options.

"Our challenge is creating vast digital change on a short timescale; disrupting our sector without disrupting our current high service levels to our customers. We are investing in technology to become more agile and enable something closer to a state of continuous transformation."

Chief Marketing Officer,
Energy and Utilities,
United Kingdom

Trust in the journey
The path to personalization

Joerg Niessing
Affiliate Professor of Marketing,
INSEAD

Robert Schwartz
Global Leader, Agency Services,
IBM iX

Organizations of all kinds have scrambled to take up the art of the personalized customer experience. An astounding 86 percent of organizations now say they're at least somewhat effective at creating experiences that cater to the individual customer; 53 percent consider themselves quite effective.

A leap too far?

According to one recent report, leading organizations will gain an outsized share of profits and customers. In three sectors alone – retail, healthcare and financial services – personalization will drive a revenue shift of USD 800 billion to the 15 percent of companies that get it right.[13] Accordingly, the race is on to get there first. The question organizations should ask: Am I running in the right direction?

There are reasons to believe many may not be. First, the elegant design of irresistible personalized experiences is of daunting complexity – and not just because it must be orchestrated across channels. The design of the experience requires deep understanding of what makes individuals human – the motivations, desires, temperament and in-the-moment moods of customers.

Second, a previous IBM Institute for Business Value study, "The experience revolution," revealed a startling disconnect between what executives cite as important to customers and what consumers actually care about most.[14] And lastly, findings from the current C-suite Study suggest that the disconnect persists between what motivates customers and what executives understand.

Discriminant analysis of C-suite executives' responses to our questions reveals that one factor, more than any other, distinguishes the leaders – the Reinventors – from other organizations. It is the capacity to use data to identify unmet customer needs. Eight in ten Reinventors report they're very effective at uncovering new or unmet customer needs (see Figure 4). Moreover, three times more Reinventors than Practitioners say they've perfected the task.

Figure 4

Know now

Reinventors excel at using data to understand their customers' unmet needs

Reinventors
Practitioners
Aspirationals

Effective   Highly effective

43%	39%
49%	13%
25%	10%
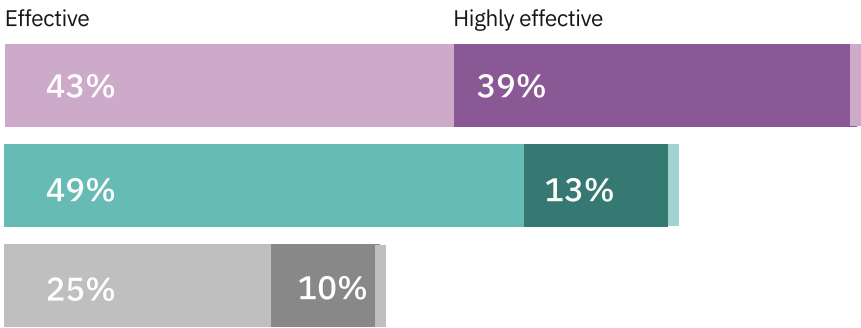
Q: How effective is your enterprise at using data to identify undefined and unmet customer needs?

Our conclusion? Many of the organizations reporting that they're satisfied with their personalization efforts may be missing the first step to truly doing it well: understanding their customers' needs. Moving too fast, they could be setting themselves up for a fall. It is, of course, the needs an organization doesn't know and, therefore, doesn't meet that can catch a company by surprise, derail the customer experience and create churn. A haphazard approach to personalization could be worse than doing nothing at all.

Questions first

To personalize an experience in the context of the moment – to understand what makes a customer human – Reinventors don't just plumb lots of data, though they do that well. They're design thinkers. They approach problems with a sense of empathy for their customers, which helps them explore and consider the right questions.

To find the next best questions, design thinkers scan and interrogate their environment. Reinventors do this exceptionally well. As may be expected, they're quite good at creating close connections with customers to garner direct feedback. But seven in ten also turn to their partners to better understand the customer experience; and seven in ten analyze their competitors' responses to customers, presumably to learn what their competitors might understand that they don't.

"To better understand customer needs, insurers would benefit from continuous customer feedback loops to quickly create new services."

Chief Marketing Officer,
Insurance, United States

As design thinkers, Reinventors are always on the hunt for new clues that reveal customer needs. Over one-quarter of Reinventors turn to artificial intelligence (AI) technologies and cognitive solutions to better understand customers and improve the customer experience. Over one-half plan to do so in the next two to three years. Standing in the customers' shoes – cultivating empathy in design thinking parlance – may be the most important capability required from those who hope to achieve on-target personalization. To get to what's human – motivations and behaviors – it helps to apply AI to the great quantities of unstructured data most organizations leave untouched. And because cognitive solutions are free of self-interest and bias, they may reveal patterns that people otherwise might not see.

Prove it before you lose it

Reinventors excel at the activities design thinkers typically use to great effect: customer collaboration and detailed journey maps. These activities generate empathetic understanding and insights in abundance and have equally important second-order effects. They propagate trust and accountability.

Reinventors understand the value of customer co-creation. Two-thirds of Reinventors say they're quite effective at collaborating with customers to co-create new products and services. Moreover, 68 percent of Reinventors integrate feedback from their customers into all of their planning and design processes (see Figure 5).

Figure 5

Reinventors
Practitioners
Aspirationals

Outside in

Reinventors integrate customer feedback into all their planning and design processes

68%
49%
32%
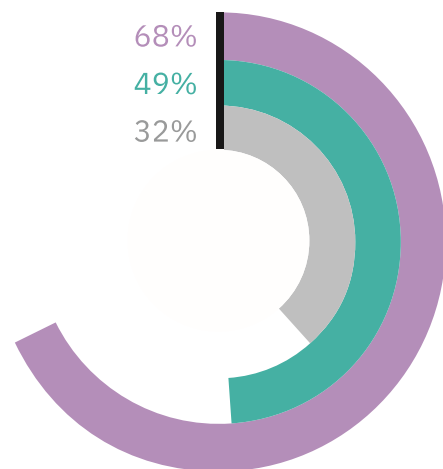
Q: To what extent does your enterprise integrate customer feedback into all of your planning and design processes?

Customer co-creation, a concept first popularized about ten years ago, is well on its way to becoming pervasive. You name it – breakfast cereals, soups, shoes, tractors, automobiles, rocket ships – and someone is likely co-creating it. A few are using it to full effect.

Japanese retailer MUJI is known for the minimalist design of the products it sells. As a lifestyle brand, MUJI has, since its inception, engaged customers on the basis of a shared passion for design. For decades, MUJI received – and acted upon – thousands of product ideas and improvements sent by its customers each month. Today, MUJI project teams regularly solicit and develop ideas for new products with the retailer's vast online community of customers. Data shows that these user-generated products do quite well. In a study of its furniture sales, user-generated products enjoyed first-year sales revenues three times higher, on average, than its designer-generated products. MUJI's close relationship with its customers is one reason it is now an iconic and global brand.[15]

DHL, the global market leader in logistics, has conducted more than 6,000 co-creation engagements with its customers to date. Innovations include Parcelcopter, a drone delivery service created through an R&D partnership that DHL is testing in Germany, and a service delivering packages to the trunks of Volvo owners' parked cars, a delivery experience created in collaboration with Volvo.[16]

"It is not an innovation if customers can imagine it. To impress, it is necessary to surprise people."

Michitaka Sawada, President and Chief Executive Officer, Kao Corporation, Japan

The objective isn't just a gadget that sells well. Robust co-creation communities empower people so that trust flourishes. Intimacy leads to a better understanding of human motivations; a key goal of design thinking is to gain customer empathy. Moreover, trust between peers in the community is transferred to trust in the institution. Cultivated by strong community, a cadre of influencers become brand advocates that extend trust to customers outside the community more effectively than most advertising can.

Co-creation communities are a rich source of customer insights, but to make sense from copious data, Reinventors also turn to customer journey maps. A full 65 percent of Reinventors report that they're very effective at creating detailed customer journey maps versus 45 percent of Practitioners – one of the largest customer capability gaps between the two groups (see Figure 6).

Journey maps have moved well beyond attractive murals or a wilderness of Post-it notes on the wall. They can draw from rich sources of data to decompose the customer journey, uncovering root issues and pain points in highly precise detail. Cross-functional teams can reach consensus and seamless alignment across channels and the end-to-end experience. Journey maps can reveal when and for whom the digitization of any touchpoint makes sense, or not. They can – and should – draw on social, psycholinguistic and other unstructured data to create personas. When the sessions include customers themselves, they take the trust engendered in co-creation to its logical conclusion.

Figure 6

Reinventors
Practitioners
Aspirationals

Walk in their shoes

Reinventors are very effective at detailing customer experience journey maps

65%
45%
26%
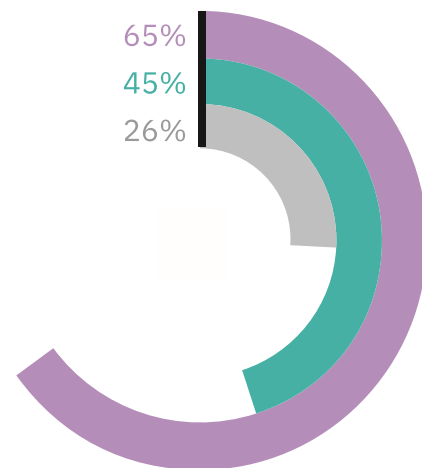
Q: How effective is your enterprise at creating thorough, detailed customer experience journey maps?

Journey maps let intrepid questioners explore. They seek out the moments that can trip up an experience or create delight. In one example, a Las Vegas hotel reckoned that the average guest had as many as 125 touch points. A common pain point – and one that, if fixed, could provide enormous impact – was the long lines at check-in. The hotel turned to check-in by mobile app, keyless entry and even an automated concierge for re-booking if the customer wasn't satisfied with the room.[17]

Understanding and responding to the whole human being that is your customer is not something that can simply be scripted or delegated to chatbots. It must be a genuine attribute and outcome of your corporate culture. When cross-functional teams undertake the journey mapping process together, it bakes accountability to the customer into the culture.

Having mastered the groundwork – insights about their customers' unmet needs – three in four Reinventors say they're very effective at creating personalized experiences. Almost one-third, 30 percent, of Reinventors report they've reached the pinnacle of personalization, compared to just 15 percent of Practitioners and 7 percent of Aspirationals.

Proving that the journey, not just the destination, matters, Reinventors dedicated to discovering their customers' unmet needs through customer co-creation and journey maps don't just ask for loyalty on the basis of personalization. They earn and prove reasons to trust.

"We orchestrate customer journeys that embrace the shift to digital, but recognize the importance of interaction with humans in critical moments of truth."

Chief Marketing Officer,
Banking and Financial Markets,
New Zealand

Orchestrating the future
The pull of platform business models

Yoram (Jerry) Wind
The Lauder Professor Emeritus and
Professor of Marketing and Academic Director
of the Wharton Fellows, The Wharton School

Shanker Ramamurthy
General Manager, Strategy and Market Development,
IBM Industry Platforms

Who wouldn't want to be an Amazon or Alibaba? Powered by platform business models, they dominate their market segments and scale with ease in new ones. By orchestrating direct interactions between consumers and producers, they can create dazzling network effects.

On average, platform orchestrators grow revenues faster and generate higher profits than other business models, earning market valuations as high as eight times revenue (see Figure 7).[18] In every industry, an intrepid few are venturing onto platforms and, as they do, pulling others fast in the same direction.

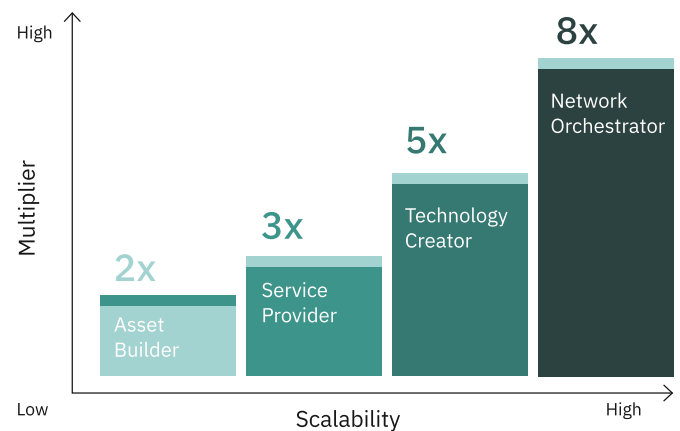Figure 7   Business models and multipliers

Figure used by permission of Harvard Business Review Press.

Attracted by the potential for outsized returns – and possibly winner-take-most dominance – 28 percent of the C-suite executives surveyed report their enterprise is reallocating some portion of its capital to build out platforms. Past and future reallocation could approach an estimated USD 1.2 trillion in the next few years.

Today, just under half, 46 percent of organizations, are either investing in or considering the new platform business model. The question: Do they have the ambition, the fortitude and the wherewithal to reinvent themselves? Once on a platform, the "rules" for success change considerably and not just for those who own the platform, but for all those who participate in it.

We analyzed responses to 56 variables to develop a clearer picture of the attributes, capabilities and commitments common to four stages of platform adoption: not considering, considering, building and, finally, operating a platform business model today. Notably, organizations that already have platforms established in the marketplace – the Platform Operators – are markedly different from those that are still experimenting with and implementing the new business model, the Platform Builders. Platform Operators do three things exceedingly well (see Figure 8):

Create value from reciprocity – Adopt a deeply collaborative approach that spans an ecosystem to create win-win propositions
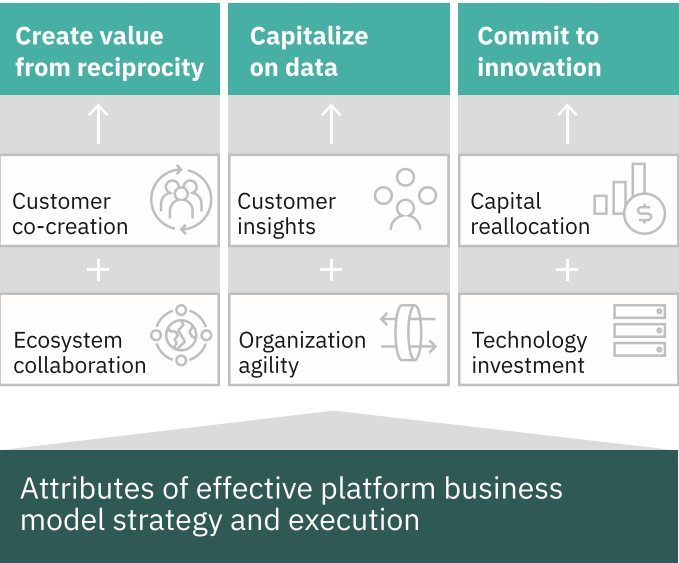
Capitalize on data – Cultivate and orchestrate data as their most important asset to hone performance and the capacity for continuous change

Commit to innovation – Reallocate capital and resources from defending markets to innovating in new ones.

Figure 8

Fast forward

The platform business model framework

Create value from reciprocity	Capitalize on data	Commit to innovation
↑	↑	↑
Customer co-creation	Customer insights	Capital reallocation
+	+	+
Ecosystem collaboration	Organization agility	Technology investment

Attributes of effective platform business model strategy and execution

Create value from reciprocity

On platforms, conventions break down. Prime among them is the value derived from proprietary advantage. Platform Operators cultivate reciprocity – mutual value created by and for the network of customers and organizations on their platforms.

For many, the most daunting change is the inclusion of their competitors in their value propositions. By far, the biggest step change between Platform Builders and the Platform Operators that already have platforms in place is their attitude toward competitors. Thirty-seven percent more Platform Operators than Platform Builders collaborate with their competitors.

Six of Canada's leading banks – the Bank of Montreal, Canadian Imperial Bank of Commerce, Desjardins Group, Royal Bank of Canada, Scotiabank and TD Bank – came together to establish a digital identity verification service on a blockchain platform. Each contributed identity attributes they're obliged to hold on customers to comply with know-your-customer regulations. Customers can verify their identities with service entities that are new to them, such as a utility or a landlord. The banks earn transaction fees from participating vendors; the vendors save time and money processing new customers; and the customers do it all with ease on a mobile app.[19] Like these banks, Platform Operators don't simply tolerate competitors participating on their platform; they become invested in each other's success.

"We transformed our business to establish an open platform based on cooperation with multiple partners so that we are all delivering parts of an ecosystem. By doing so, we're able to create new value propositions and services to generate new revenue streams, as well as share investments."

Chief Executive Officer,
Electronics, Netherlands

Most platform operators cede some level of control to their customers as well, soliciting their contributions to evaluate, rank or co-create new products and services. Thirty percent more Platform Operators than Platform Builders co-create new products and services with their customers, and 22 percent more Platform Operators integrate customer feedback into their design and planning processes. Giving customers a say in the goods and services produced motivates them to stay loyal to their platform.

Platform Operators don't go it alone. They leverage partners 20 percent more than Platform Builders to enhance the customer experience. GM's Maven Gig platform, for example, offers short-term, fully insured rentals of its electric vehicles to "gig" workers, people who occasionally drive for GM's ride-sharing and delivery partners like Grubhub or Lyft. The rentals also include free charging at EVgo electric charging stations. As GM adds its gig service to new markets, it coordinates with EVgo to provide enough supply to meet demand, helping EVgo build out its electrical charging infrastructure in optimal fashion.[20]

The reward for participating on a platform includes access to new customers and network effects. In exchange, however, participants must reorient their thinking to win-win propositions and live up to the high standards of Platform Operators. Platform Operators, for example, excel at creating personalized customer experiences. Participants can't compound a "pain point" or "disconnect" as that counteracts the goal of creating seamless experiences.

Capitalize on data

One rule is to be open to mutual advantage; the second maxim is to double down on data. Platforms generate heterogeneous data, lots of it. Platforms Operators turn that data into innovation and the continuous recalibration of their strategy and operations.

Once organizations cross the Rubicon from pilots to full in-the-market implementation, they're awash in new data – from customers and the organizations that participate on the platform. Compared to Platform Builders, 18 percent more Platform Operators turn to data to identify customers' unmet needs and use it to continuously innovate their products and services.

The customer data that flows on platforms is a boon to industries that typically don't have frequent or direct contact with customers. Often these organizations adopt a hybrid model, operating a platform for digital interactions with customers and partners while maintaining a business based on physical goods. Nike's NikePlus app, for example, provides health and training services to customers on a digital platform, and also serves as a rich vein of data to help innovate products.[21]

"By investing in digital assets to extract new value from our physical assets, we can leverage data and analytics to identify and create entirely new customer services and experiences not yet imagined."

Fernando A. Gonzalez,
Chief Executive Officer,
CEMEX, Mexico

Equipment giant Caterpillar's strategy includes remaking itself from a manufacturer to a service provider of IoT-connected machines. Caterpillar first invested in and then acquired Yard Club, a peer-to-peer rental platform to help the contractors that owned its equipment – and its competitors' equipment – maximize their investments and lower their costs of ownership. In addition to facilitating leasing, the platform provides sophisticated analytics to manage rental equipment and optimize fleets, as well as communicate in real time between job sites and offices.[22]

On platforms, the capacity for continuous learning from data grows in tandem with the propensity for rapid iteration of strategy and finely tuned optimization. Forty-eight percent more Platform Operators than Platform Builders say they excel at using data and analytics to inform their business strategy. Compared to Platform Builders, 27 percent more Platform Operators continuously iterate their strategy using rapid prototyping, and 38 percent more of them have business processes optimized to support their strategy.

Just as Platform Operators won't succeed if they try to capture all the value the platform creates, they can't afford to hoard the insights they extract from data. Instead, they integrate, analyze and feed data to the participants on their platform to advance continuous performance improvement. Participants that aren't as adept as Platform Operators in using this data and acting upon it quickly risk losing a place on the platform and the opportunity for their own outsized returns.

Commit to innovation

Year in, year out, most companies continue to allocate their capital to the same activities. Historically, few have had an investor mentality that includes the willingness to reallocate capital in order to invest in what's new – innovation.[23] That may be about to change. Those who've already established a platform model, the Platform Operators, are allocating on average 9.0 percent of their capital toward it. Platform Builders are close behind, averaging 6.4 percent.

Digital platforms aren't just data-generating networks; they're also data-hungry. Platform Operators are heavy consumers of the technologies that help them consume, share and make sense of data – particularly IoT devices, cloud, AI, cognitive solutions and blockchain.

Beam Technologies provides smart phone-connected tooth-brushes – and everything that goes with them – to its customers on a subscription basis. In this case, everything includes not just new brush heads, toothpaste and floss, but dental insurance. Beam Dental analyzes the data collected from users to create the insurance product, which it sells to dentists. Premiums are lowered for consumers who demonstrate good oral care by regular brushing.[24]

Because they don't just consume data but put it to immediate effect, Platform Operators leverage data in the moment – and at the moment – before the value of that data erodes. As the "half-life" of data continues to shorten, the convergence of new technologies becomes more important, particularly blockchain to share real-time data across organizations and AI and cognitive solutions to reason, learn and respond with immediacy. Compared to Platform Builders, 28 percent more Platform Operators report investing in blockchain and 10 percent more of them report investing in AI and cognitive technologies.

Finish first

For some, ecosystems exert a gravitational pull toward platforms. These organizations enter an ecosystem, establish strong collaborative relationships and emerge as orchestrators on a digital platform. They've built the capability to take the ecosystem approach to its natural conclusion: the platform business model.

To see who might finish first, we again looked at our three groups of organizations based on stages of Digital Reinvention: the leaders' segment, the Reinventors; the middle group, the Practitioners; and those at the earliest stage, the Aspirationals.

Already adept at intense ecosystem collaboration, Reinventors are currently leading the adoption of platform business models (see Figure 9). Thirteen percent of Reinventors are Platform Operators, compared to only 10 percent of Practitioners and 7 percent of Aspirationals. Much of the capital infusion to platforms is coming from the Reinventors, who are further ahead than others today.

The Practitioners, however, aren't just close behind; they report a greater degree of future activity and investment than Reinventors. Practitioners and Aspirationals have fewer platforms in operation today, however Practitioners report they may be catching up. More Practitioners than Reinventors are building platform business models today suggesting this group may have more platforms in "operation" in the future. However, in our deeper analysis, Practitioners still lag Reinventors in the capabilities required to extract the most value from reciprocity and to capitalize on data. But because the biggest step change in capability occurs *after* an organization has established its platform, Practitioners could leapfrog ahead. Certainly, for Practitioners with ambition, platforms are a singular opportunity to push ahead of their peers.

Whether organizations choose to operate or participate in new platform business models, they will likely be competing with them. As platforms proliferate, every industry seems likely to feel what's been called the Amazon effect: the endless evolution and disruption of its markets. The choice – whether to own or participate in a platform, or do both – is not something organizations should postpone.

Figure 9

Great expectations

More Practitioners than Reinventors plan to orchestrate platforms in the future

Reinventors
Practitioners
Aspirationals

Percent that are operating a platform

	13%
	10%
	7%

Percent that are building a platform

	32%
	41%
	32%
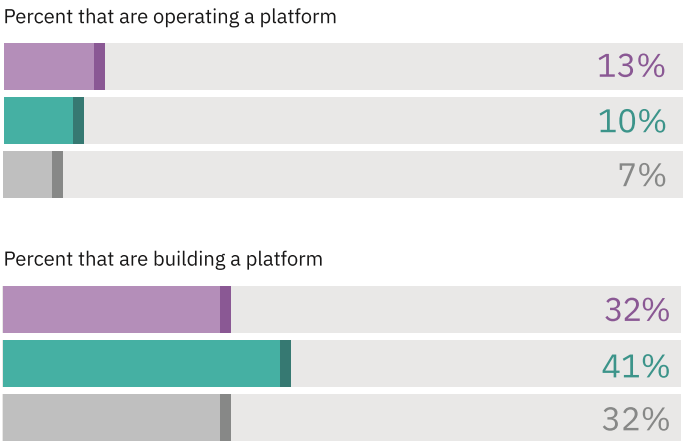
Q: In terms of adopting a platform business model, at what stage is your enterprise?

Innovation in motion
Agility for the enterprise

Amy C. Edmondson
Novartis Professor of Leadership and Management,
Harvard Business School

Christine Wyatt
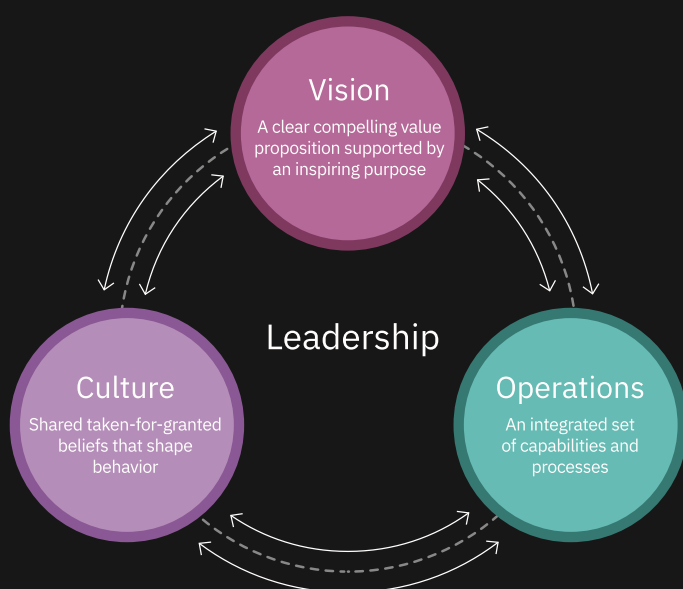Global Leader, Cognitive Process Services,
IBM Services

Management theorists have long focused on better ways to formulate the organization of work. In the Industrial Revolution, as people came together off the farms and into the factories, management science favored optimization. It treated workers as "cogs" in a wheel and perfected "the one best way" to perform almost any task. Long after employees began congregating in offices, they began to be recognized as knowledge workers, encouraged to share with each other what they learn and freed from wholly routinized tasks.

And now? Collaboration, the surest path to innovation, spans institutions and industries. Ecosystems are shifting the balance further away from top-down control and toward autonomy. Teams, once locked in place, now assemble on the fly and move in a flash from new insights to smart experimentation and consequent action.

Employees, liberated to become problem solvers, can be full partners in shaping the enterprise's strategic direction. Leaders with strong and singular vision are ever alert to change, positioning their organizations for the future by organizing teams that learn as they execute, cultivating "reflection in action." This idea, first explored in *The Reflective Practitioner* and extended to the organization level in "The Competitive Imperative of Learning," suggests a dynamic interplay across the vision, culture and operations of organizations (see Figure 10).[25]

Figure 10

The leader's triangle

Vision
A clear compelling value proposition supported by an inspiring purpose

Leadership

Culture
Shared taken-for-granted beliefs that shape behavior

Operations
An integrated set of capabilities and processes

Source: Amy C. Edmondson.

Asked to rank the capabilities most instrumental to their success, CEOs in our study cited two characteristics above all others: a new willingness to experiment and the support of empowered employees. Their responses did not vary significantly by region, a reminder that organizational structures have become "globalized" by organizations adopting each other's most successful practices.

CEOs of Reinventor organizations, however, stood out from others in one respect. Although they, too, prized experimentation and empowerment, more of them attributed their current success to learning to think in more agile and flexible ways compared to other surveyed C-suite executives. In turn, Reinventors have designed their operations and organizational cultures to embody this flexibility of vision. They make it clear that they value smart experimentation and rapid response to market changes. Their employees aren't lined up neatly behind them; they're encouraged to explore as scouts on the front lines.

Leading through liberation

The leaders guiding Reinventor organizations aren't daunted by the change happening around them. They're confident in their foresight: 81 percent of Reinventors report that their leadership has a strong understanding of the direction in which their industry is heading, compared to 66 percent of Practitioners and 43 percent of Aspirationals. For Reinventors, foresight isn't exceptional intuition; it's knowledge derived from their teams and the ways they operate.

"Experiment. Fail three out of five times. If that's not your ratio, you're not experimenting, but waiting for enough information to act. You can't escape the mediocre that way."

Temel Güzeloğlu, Chief Executive Officer,
QNB Finansbank, Turkey

Reinventors lead from a position of trust: 75 percent actively solicit ideas from employees in order to develop new approaches, compared to 54 percent of Practitioners and 38 percent of Aspirationals. Seven in ten Reinventors empower their teams to decide the best course of action. These leaders aren't afraid to let their teams see that their views evolve. Doing so models a new way forward.

Where once middle management might get in the way, thwarting the intentions of top executives, there's reason to believe this is less of a problem for Reinventors. Just 25 percent of CEOs leading Reinventor organizations report being burdened by bureaucratic layers of management. Moreover, 73 percent of Reinventors have established an operating structure that promotes exploration by rewarding fast failure.

Seven in ten Reinventors are rethinking the employee construct at its most elemental level: they're cultivating autonomy and continuous learning by implementing a more fluid work structure made up of cross-functional teams. For many, the initial inspiration to do so is to get closer – and become more responsive – to their customers. Often, these are organizations that need new customer intimacy and knowledge to build out services that extend the value of the goods they produce.

At China-based Haier, one of the fastest-growing appliance makers in the world, the CEO's ambition was to be so responsive to customers, and the ideas brought forward by its staff, that the
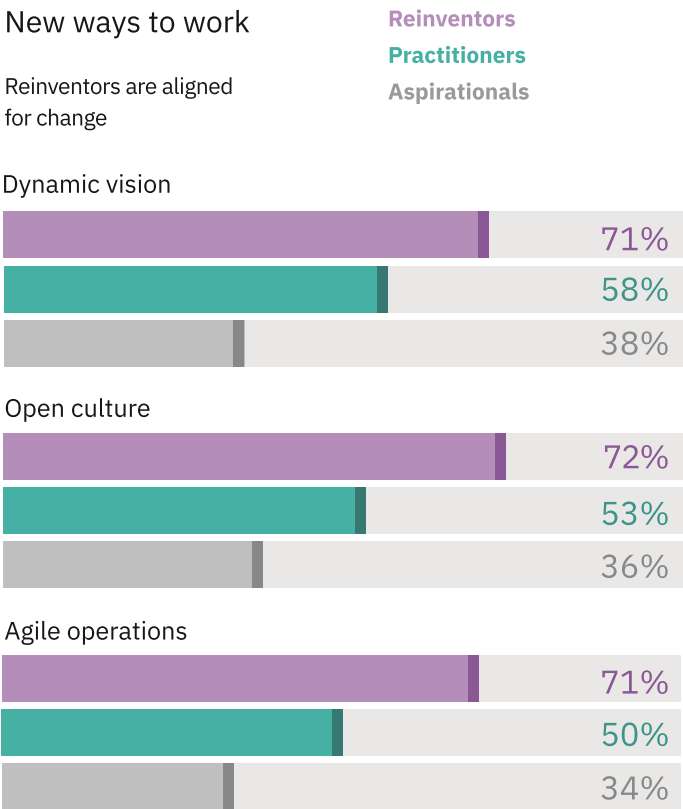
company wouldn't just become a leading innovator but would avoid technological disruption. Each of its teams, made up on average of ten to twenty employees that cross marketing, design and manufacturing, functions as a fully independent operating unit called a ZZJYT. Each ZZJYT works directly with its customers and is accountable to them. These units have profit and loss responsibility but also support from Haier's managers, whose role is to see that the units get the resources and guidance they need to succeed.

Employees aren't assigned to a team; they compete to form them. For example, when the company decided to create a new three-door refrigerator, employees were invited to submit business proposals to lead the ZZJYT. Once in place, leaders are responsible for hiring the members of their team, deciding how much they will be paid, and determining the rules for items like expenses and bonuses. In short, they make all the decisions necessary to manufacture and market their product or service. They don't, however, act as traditional hierarchical leaders. The manager who won the competition to lead the three-door refrigerator ZZJYT, now a USD 1.5 billion business, describes his role as leading a "community of interest." This includes employees as well as external partners, each committed to supporting the unit. That kind of commitment can only be created through trust.[26]

"As a leader, it is important to promote empowerment and co-creation among our employees, customers and partners."

Chief Executive Officer,
Electronics, China

Figure 11

New ways to work

Reinventors are aligned
for change

Reinventors
Practitioners
Aspirationals

Dynamic vision

	71%
	58%
	38%

Open culture

	72%
	53%
	36%

Agile operations

	71%
	50%
	34%

Composite scores of the attributes in Table 1 aligned to the leader's triangle framework.

How to move from insight to action

Our analysis of C-suite responses in this study reveals a blueprint for action across the vision, culture and operations of an organization. Reinventors lead by significant margins in all three areas (see Figure 11). However, culture, which many believe is the most difficult to change, likely contributes the most to their success. Interestingly, both Practitioners and Aspirationals are better at leading with a dynamic vision than creating an open culture or operations, which suggests that at least their ambitions and intentions are focused on the right targets. To execute their vision, both groups need to improve agile operations, especially how they experiment to innovate (see Table 1).

If Reinventors are fast approaching a new destination, the Practitioners and Aspirationals still have a ways to go. More Practitioners and Aspirationals than Reinventors report that organizational inertia and a culture not particularly conducive to change have held them back.

One IT industry organization has instituted a cross-functional team structure in one of its divisions to support an important customer. Its leader noted, "You can't force culture, but you can create the atmosphere for change." For some, like this organization, introducing agile methodologies and thinking in support of a single customer is a pragmatic way to kickstart change.

Longitudinal analysis over 13 years of C-suite Studies charts the rise and fall of "people skills" as a factor of importance to organizations (see Figure 1 in Introduction). This year, people skills rose sharply from fifth to third place as an area that would most impact organizations. In the past, a focus on people skills often centered on skills gaps, especially technology skills.

While reducing skills gaps remains important, comments by C-suite executives in this year's study suggest a broader focus. Investing in talent and developing the skills of management are recurrent themes. Many comments reflect an awareness of the relationship between their employees' experience and their customers' experience. Now more than ever, developing talent and skills by structuring work in new ways is top of mind.

Table 1

Blueprint for action

	Aspirationals	Practitioners	Reinventors
Dynamic vision			
Leadership has a strong understanding of where their industry is heading	43%	66%	81%
Leadership actively promotes transparency and continuous dialogue with employees	36%	53%	68%
People clearly understand leaderships' vision	37%	56%	67%
Open culture			
Leadership actively solicits input from employees to develop new ideas and approaches	38%	54%	75%
Teams are empowered to decide the best course of action	39%	53%	71%
Leadership promotes collaboration and knowledge sharing across the business	31%	51%	71%
Agile operations			
Invests in continuous employee skills improvement	38%	56%	75%
Has the right network of partners, suppliers and distributors	40%	53%	73%
Equally rewards fast failure and successful innovation	33%	46%	73%
Has the required people skills and resources to execute the business strategy	32%	53%	72%
Business processes are optimized to support the business strategy	27%	51%	68%
Has adopted a fluid work structure built on cross-functional teams	34%	48%	66%

Becoming agile

For organizations in search of a starting point, we used discriminant analysis to reveal the most important attributes Aspirationals and Practitioners should develop to elevate their organizations' performance to the next level. Together, they offer an action plan for moving forward (see Figure 12).

Kazuo Hirai, the President and CEO of Sony Corporation in Japan, told us that determination matters. "Change," he told us, "is not something we tackle but what we make happen." Ultimately, the direction any organization takes is shaped by the determination of its leaders. And sometimes that means letting go. As Evan Siddall, the CEO of Canada Mortgage and Housing Corporation, put it, "Let your employees amaze you; get out of their way!"

Figure 12

Step up

Key areas for improvement

	Aspirationals should:	Practitioners should:
Dynamic vision	Ensure that employees understand the vision	Ensure leadership has a strong understanding of where the industry is heading
Open culture	Actively solicit input from employees to develop new ideas and approaches	Equally reward fast failure and successful innovation
Agile operations	Have the required people skills and resources	Invest in continuous employee development

Strengthening advantage: Actions to take now

Reinvention never ends. As new opportunities – some of them disruptive – emerge, the organizations that remain open to change can orchestrate advantage.

In broad strokes, these include new trusted bonds with customers, new ventures to scale on platforms, and more nimble teams. To uncover your organization's next advantage, consider these actions:

Interrogate your environment

– *Remain on high alert and avoid complacency about past successes.* Actively scan the business landscape for disruptive change coming from industry incumbents, including those in adjacent industries. Be vigilant about new entrants attracting VC funding that might foreshadow threats.

– *Design and play a new offense.* Boldly evaluate, experiment and engage with new business models, industry-shaping platforms and ecosystem strategies that you could adopt to significant advantage.

– *Get ever closer.* Create opportunities for frequent and intense interactions with customers, partners and competitors. Test existing assumptions and drive totally new strategies.

Commit with frequency

– *Divest to invest.* Act quickly against the possibility of disruption by adopting a fluid capital reallocation mindset. Frequent capital reallocation from low to high potential opportunities should be an agile exercise.

– *Invest for new growth.* Create market-shaping and capability-building investments that inject innovation, new talent and technologies into your enterprise. Acquire these if necessary; grow them organically if your enterprise is agile enough.

– *Prioritize advocacy and co-creation over advertising.* Maximize investments that build customer trust and brand value. On digital platforms – which are inherently transparent – community-generated feedback, if heeded well, can boost brand value in unimaginable ways.

Experiment deliberately

– *Seek innovation over institutionalization.* Don't solidify a competitive advantage; it's likely fleeting. Expect it to be transitory and start working on the next audacious opportunity.

– *Write new rules.* To create a more open and collaborative culture, look for ways to challenge traditional norms. Put a body into orbit around new systems and try it out.

– *Find energy in motion.* Create new motion through continuous innovation but don't dismiss the potential to benefit from others' ideas. Find opportunities to co-create with customers, partners and even competitors.

Our research methodology

The IBM Institute for Business Value, in cooperation with Oxford Economics, interviewed 12,854 C-suite executives from 112 countries and across 20 industries. In 2,047 face-to-face meetings and 10,807 live phone interviews, both quantitative and qualitative responses were collected. The analytical basis for this report uses 12,315 valid responses from the total data sample collected.
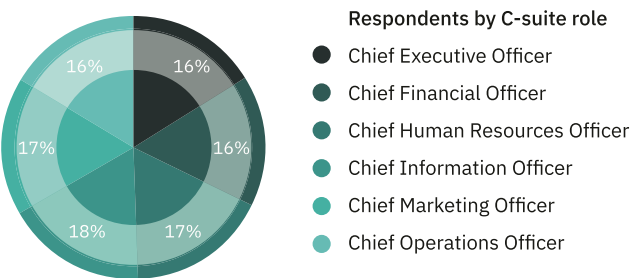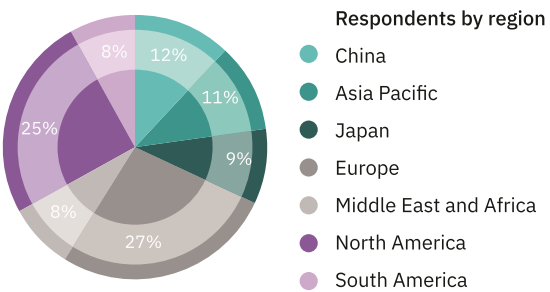
Over the course of a year, we analyzed participants' contextual responses using the IBM Watson Natural Language Classifier to obtain overarching themes and priorities. This service deploys the cognitive power of Watson by classifying submitted sets of unstructured text responses to a training routine through which a group of themes or "classifiers" are developed.

Various statistical methods were used to analyze millions of collected data points. Iterative k-means and hierarchical chaining cluster solutions were used to develop the Digital Reinvention archetypes used throughout this report. We deployed a specific set

of questions to obtain participants' strategic intentions and commitments to digitally reinventing their enterprises. From these analyses, three archetypes emerged: Reinventors, Practitioners and Aspirationals, each described in the report.

Segmentation and topic-specific factor structures were developed to organize responses into more serviceable thematic groupings. These structures focused on participant responses to questions associated with: a) their competitive strategy and marketplace responses to friction from disruption and innovation; b) attributes of product, service and experience related to customer interaction; c) propensity for capital reallocation, technology investment and innovation with platform business models; and d) attributes of leadership vision, a collaborative culture and agile operations.

Respondents in our study were a balanced mix of six C-suite roles: CEOs, CFOs, CHROs, CIOs, CMOs and COOs. We designed data collection by country in order to obtain participation that is proportional to that country's share of global GDP.

Respondents by region
- China
- Asia Pacific
- Japan
- Europe
- Middle East and Africa
- North America
- South America

Respondents by C-suite role
- Chief Executive Officer
- Chief Financial Officer
- Chief Human Resources Officer
- Chief Information Officer
- Chief Marketing Officer
- Chief Operations Officer

For more information

To learn more about this IBM Institute for Business Value study, please contact us at iibv@us.ibm.com. Follow @IBMIBV on Twitter, and for a full catalog of our research or to subscribe to our newsletter, visit: ibm.com/iibv.

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