



The deep cloud alternative

*Getting to the heart
of business performance*

How IBM can help

The deep cloud strategy proposed in this paper requires a partner with a broad and deep mix of technologies and services. That mix includes large-enterprise business strategy and advisory services, design thinking and collaborative facilitation services, global industry expertise, and in-depth hybrid cloud technical consulting and implementation services. It requires a lead integrator that can coordinate an ecosystem of technology vendors and service providers and keep them all working in the client's best interests. IBM is that partner. To learn more, please visit: ibm.com/cloud-computing and ibm.com/it-infrastructure/solutions/hybrid-cloud



If you want to catch bigger fish, go fishing in the deeper waters where big fish live.

Executive summary

■ Deep cloud targets the core of the business.

Deep cloud focuses on the way the enterprise delivers its fundamental value propositions to customers. In banking, that might be trade finance services. In pharmaceuticals, it might be drug discovery. In energy, it might be designing and operating charging stations for electric vehicles. Wherever an enterprise must excel to prosper in its industry, deep cloud focuses there.

■ Deep cloud seeks material improvements in enterprise performance.

The deep cloud strategy opens a huge pool of untapped business value. It's designed to create step-changes in business performance with cloud, data, software, and AI, and to help mature, incumbent enterprises bring innovative, high-velocity business models within reach.

■ Deep cloud mitigates risk by focusing on value stream delivery.

Focusing on the enterprise's most business-critical value streams creates direct links between the introduction of new technologies today and the value those technologies can deliver tomorrow. Value streams make the links in this stronger, shorter chain visible, and visibility permits small, safe, rapid cycles of experimentation.

Introducing the deep cloud alternative

When it comes to technology-driven performance improvement, business leaders should heed the wisdom of commercial fishing: If you want to catch bigger fish, go fishing in the deeper waters where big fish live.

Consider the menhaden, a fish no bigger than your hand that schools together in shallow estuaries and near-shore ocean waters. Although you won't see menhaden on the menu of your favorite seafood restaurant—they're too oily and bony to eat—they have value as a baitfish, can be processed to yield the fish oil that goes into omega-3 nutritional supplements, and are a staple ingredient in some brands of cat food. People who fish commercially catch them in nets pulled by trawlers and sell them by the barrel.

Now think of a giant bluefin tuna, a deep-sea fish that can grow to over 8 feet in length and over 1,000 pounds in weight. A highly prized source of premium sushi, a bluefin tuna can fetch over \$1,000 per pound at fish markets around the world. Single fish have been sold at auction for as much as \$3 million.¹ Fishing for bluefin tuna requires large boats for navigating deep offshore waters; advanced fish-finding technologies; and expensive rods, reels, and bait for hooking and landing one of the biggest fish in the sea.

Like those expecting big-fish returns from small-fish strategies, if your organization has been investing in technology with expectations of meaningful business value—but it hasn't yet realized that value—it could be because you're fishing in the wrong places, in the wrong way, and for the wrong kinds of fish.

Indeed, conventional adoption of cloud, data, software, and AI (CDSAI) technologies and practices is like fishing for menhaden in shallow water. There's nothing wrong with these small fish. Adopting cloud to make enterprise IT more efficient is a good thing, and adopting software as a service (SaaS) to reduce the cost of HR, finance, CRM, and systems of record can be a very productive investment. But those standardized functions don't generate revenue and can't differentiate the enterprise's core value propositions. If your business is still dragging nets through the shallow, near-shore waters of back-office cost optimization, it's not going to catch a more lucrative bluefin tuna. Ever.

Consider some insights from the IBM Institute for Business Value. In our research, we've discovered that:

- Among stakeholders at large global enterprises, 37% say they're "almost done" with their planned cloud adoption. Another 31% report being "stuck" midway after getting started.²
- Most stakeholders say the digital "plays" they most want their cloud capabilities to strengthen are tactical—digitizing existing offline services, for example—instead of strategic: for instance, launching new business models or improving business agility.³
- The failure rate of digital transformation programs—and now cloud adoption programs—remains stubbornly high.⁴

Because business-critical operations consume the largest chunks of the enterprise cost structure and deliver most of the enterprise's income, even modest improvements to performance generate needle-moving levels of new business value.

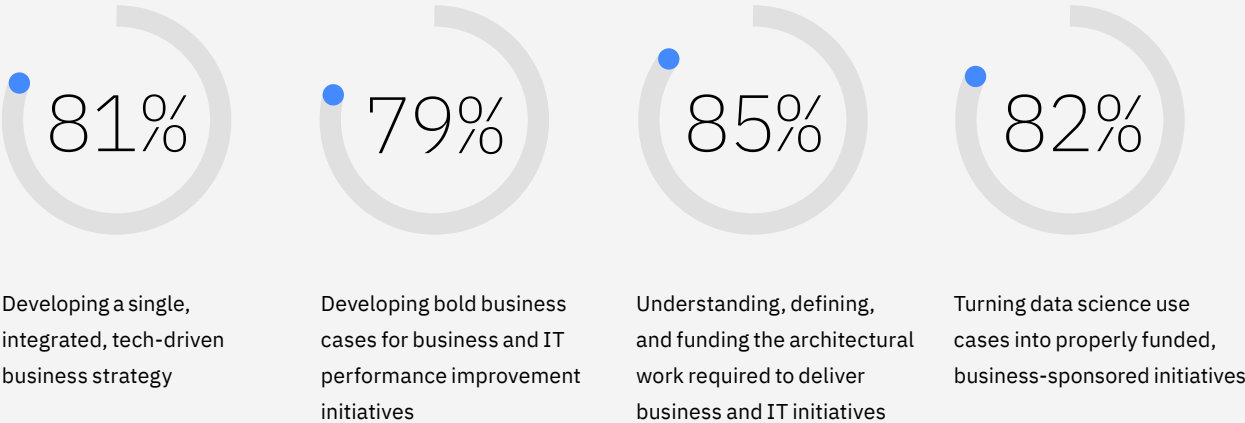


A recent IBV survey asked respondents to report the level of difficulty they experience trying to generate new business value from technology adoption. The results were troubling (see Figure 1).

Figure 1

Converting IT capabilities to business performance improvements

Enterprises report a high degree of difficulty trying to convert IT capabilities into new business value.



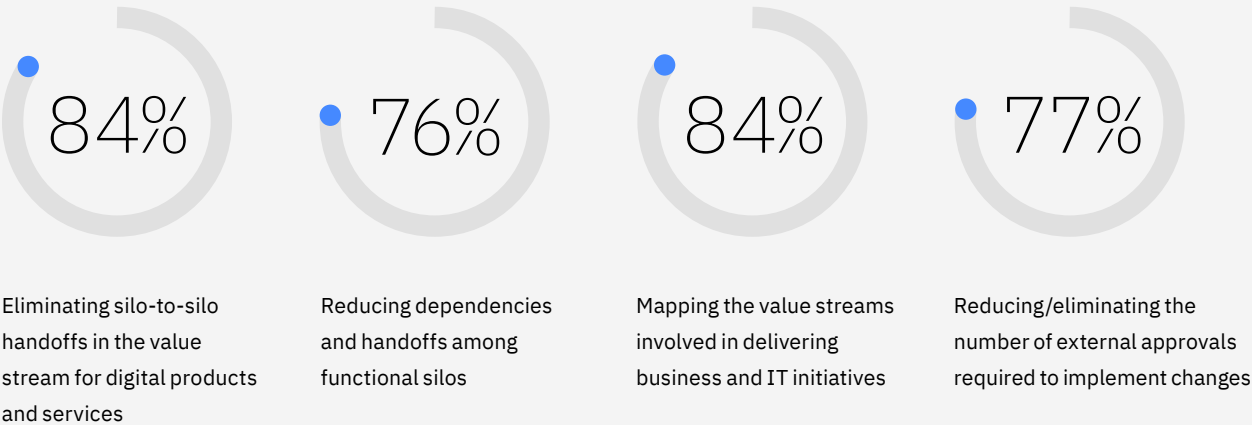
Percentage of respondents ranking the difficulty of tasks as "high" or "very high"
Source: IBM Institute for Business Value Cloud and Data Operating Model Survey of 4,348 adults, April 2022

The same survey asked about the specific challenges enterprises face with regard to modeling and improving current value stream performance—making the work of delivering business-critical products and services visible. Respondents reported similarly bracing data (see Figure 2).

Figure 2

Designing better value streams

Enterprises report a high degree of difficulty trying to improve value stream performance.



Percentage of respondents ranking the difficulty of tasks as “high” or “very high”
Source: IBM Institute for Business Value Cloud and Data Operating Model Survey of 4,348 adults, April 2022

These data paint a picture of diminishing returns from current and conventional technology adoption programs. Doubling down with more programs, working the staff nights and weekends, blaming failures on overhyped technologies or on the people doing the work—these are classic signs that the existing system for converting digital technology into business value is flawed. As the saying goes, “Every system is perfectly designed to get the results it gets.”⁵ Conventional, cost-optimizing CDSAI adoption delivers incremental improvements because it’s designed to do so. If you want material improvements, you need to redesign the system.

We believe there’s a better approach. A better system. We call it “deep cloud.”

Deep cloud proposes that if you want to catch bigger fish—to make material improvements in how your core business performs—you must go fishing in the deeper waters where those big fish swim by taking on the most business-critical value streams in your enterprise (see Figure 3).

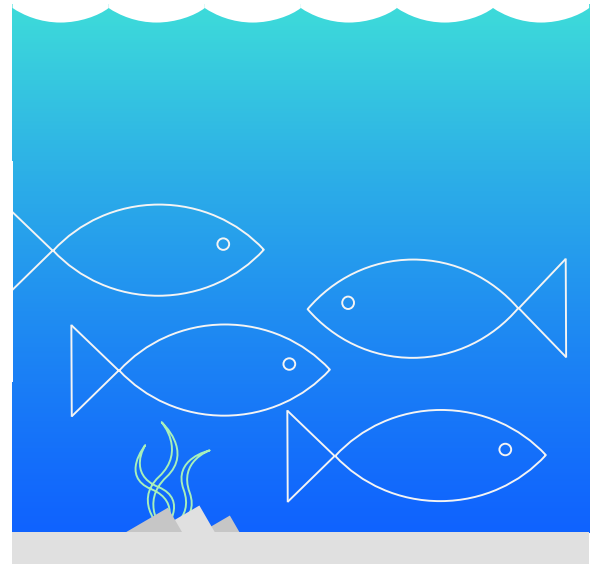
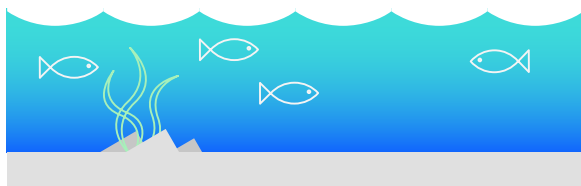
Figure 3

Choosing to fish for bigger fish

The deep cloud premise is simple: to realize large returns from cloud, enterprises must catch bigger fish in deeper waters.

Conventional technology adoption is like fishing in shallow waters for small fish; it delivers incremental improvements in business performance.

Deep cloud is like fishing in deep waters for big fish; it delivers material improvements in business value.



Case study

Large pharmaceuticals company: Setting the stage for business-led technology adoption⁶

A large pharmaceuticals company furthered its commitment to cloud adoption by beginning a brief strategy project. The project's first phase was a facilitated visioning session that convened the company's few most progressive business unit leaders—the leaders most ready to invest in material performance improvement. The CIO and enterprise IT stakeholders joined them.

The visioning session defined a shared objective for the cloud program: to build new platforms for high-profit, high-margin business growth at scale, contributing 35% of operating income within three years.

The participants also agreed to a few critical operating patterns:

- Shift IT resources toward business units that are ready and willing to co-create cloud-powered growth initiatives
- Stop spreading IT resources across the enterprise IT project portfolio
- Filter and prioritize business and IT investments based on their contribution to lifetime customer value
- Continue architectural modernization and capability building, but constrain all investments to those that directly enable business growth initiatives
- Maintain a “whole solution” approach to cloud adoption—not just cloud, but also software, data, automation, security, and so on
- Over-invest in improving the talent density required to staff and sustain service delivery teams.

Together, the cloud objective and operating patterns signaled a clear break from the past: instead of focusing on cloud adoption as a means of optimizing IT operations costs, as it had done previously, the company would embrace cloud as a powerful means by which to drive strategic business growth.

Deep cloud ingredients

Two key principles are at the core of the deep cloud proposal. The first is that organizations must focus CDSAI investments directly on improving the performance of their most business-critical operations—that is, the way they go about creating and keeping customers; the way they deliver fundamental value propositions; the way they orchestrate the front, middle, and back office; and the way they respond to changes in the global business environment.

When it's channeled in that way, CDSAI adoption becomes a system for rapid, safe experimentation that delivers more value to customers and generates better business outcomes. And because business-critical operations consume the largest chunks of the enterprise cost structure and deliver most of the enterprise's income, even modest improvements to performance generate needle-moving levels of new business value.

Deep cloud's second key principle is that businesses must visualize, design, and operate their business-critical operations as value streams. By doing so, they can model the current performance of those value streams in terms of velocity, flow, quality, cost, contribution to income, and so on. Then, with that current state as a baseline, they can establish a performance improvement target and begin to redesign the value stream using elements of the deep cloud toolkit, including CDSAI and related methods and practices.

To better understand the deep cloud proposal, let's break down five of its most important ingredients: business-critical operations, value streams, material business value, the deep cloud toolkit, and value activation.

Business-critical operations

To generate material improvements in business performance, enterprises must improve how they deliver their value propositions to customers. A bank, for example, has to get better at delivering banking services.⁷ A motorcycle manufacturer has to get better at designing motorcycles.⁸ And a consumer products company has to get better at product innovation. Industry leaders get there and stay there not by optimizing the cost of support functions, but by being very good at their core activities.⁹

What we're seeing in the field and in research data, however, shows that the scope of most cloud adoption programs is limited to reducing the cost of enterprise IT: specifically, the cost of IT infrastructure and operations. Some enterprises expand the scope of their cloud adoption to include SaaS subscriptions that automate and optimize processes in areas like HR, finance, and customer relationship management. But few go further.

As we've said, reducing overhead expenses is worth doing. In a large business where sales, general, and administrative costs (SG&A) consume 10%-15% of the enterprise cost structure, the value of cost optimization can be hundreds of millions of dollars over time.¹⁰ And it can free up cash that organizations can reinvest in ongoing optimization projects.

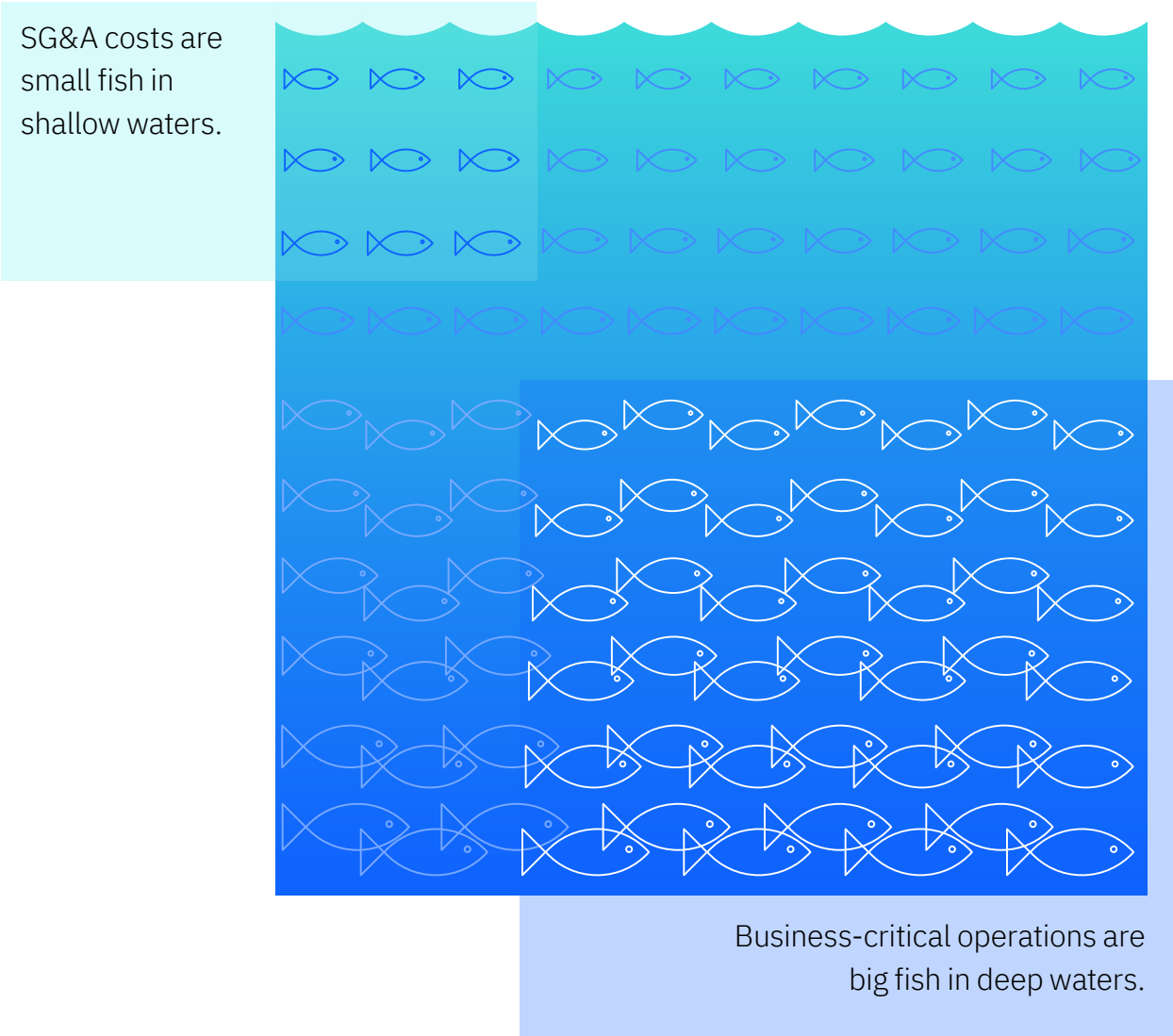
But there's a problem, and that problem is leverage. If we can agree that all enterprises are working to convert costs to income—if we see every 1% unit of the enterprise cost structure as an investment in creating profits—then it's clear: the only way to move the needle on an enterprise's cost/income ratio is to

improve the value generated by large chunks of the cost structure (see Figure 4). It's simple math. Would you prefer a 50% ROI on an investment that improves 5% of your cost structure, or a 25% ROI on an investment that improves 20% of your cost structure?

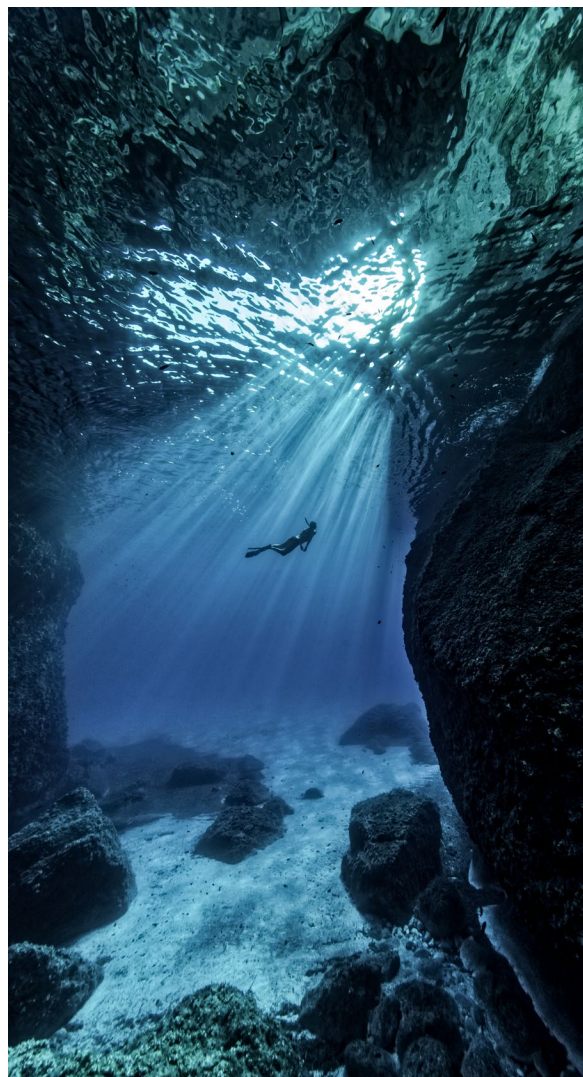
FIGURE 4

Getting leverage over the enterprise cost-to-income ratio

Instead of SG&A costs that consume a relatively small portion of the enterprise cost structure, deep cloud focuses on business-critical operations that consume a much larger portion and contribute most enterprise income.



Let's consider this even further. When we look at an enterprise's complete cost structure, SG&A and IT represent relatively small investments that, as a consequence, have limited leverage over the business's performance.¹¹ Within the 10%-15% of the cost structure consumed by SG&A, enterprise IT accounts for a third of those costs, or an amount that's typically equal to 4%-5% of enterprise revenues.¹² What's more, most of the enterprise IT budget is consumed by daily operations and "keeping the lights on." At best, that leaves maybe 1% of the enterprise cost structure available for investments in IT-driven business performance improvements.



Let that sink in.

From this point of view, many very large digital transformation programs have been asking CDSA I investments equal to 1% of the enterprise cost structure to transform how the other 99% of the business performs. It's reasonable to ask 1% of the enterprise cost structure to return 1% of enterprise income. If every unit of cost "pulled its own weight" in that manner, you'd have a profitable business with a cost/income ratio of 50. But many parts of the cost structure are expected to continue to—at best—cover their costs. SG&A functions don't generate income. To make a dent in the enterprise cost/income ratio, today's typical IT "grow and transform" investments would have to consistently generate returns of 500%-1,000%.¹³

It's fine to be bullish on the power of technology, but that's magical thinking. Even when we account for some shadow IT spending, and even when enterprise transformation initiatives provide funding that wasn't in the IT budget, the math shows a similar lack of leverage. Put another way: if we've found a way to turn a \$1 investment into \$5 of income, why aren't we doubling or tripling those investments? Where else in the enterprise can we expect consistent five-fold returns?

This uncomfortable back-of-the-envelope analysis helps to explain the consistently high failure rate of IT-driven transformations. Only about one-third deliver the outcomes they promised, and successes are sometimes incremental improvements masquerading as transformational change.¹⁴ While failures in digital transformation may be attributed to many factors—for example, poor leadership, dysfunctional cultures, poor relationships between IT and the business, and skills gaps—from the deep cloud point of view, many of these failures are an outcome of simply seeking the wrong fish in the wrong way and in the wrong place.

Any time you can make an existing business-critical value stream better, faster, easier to change, or less expensive to deliver, you unlock huge levels of new business value.

Case study

Latin American bank: Understanding the value of work that flows¹⁵

When its customers reported poor experiences with its new mobile applications, a large bank in Latin America began a project to determine the root causes of customer dissatisfaction. The project included a small scope of work to model the bank's current "concept to cash" value stream: the sequence of activities the bank followed to design, develop, deploy, and operate digital products and services.

The bank discovered that its current value stream suffered from a minimum of 18 handoffs among business silos. While most of these handoffs were among different IT departments, others involved lines of business, marketing, finance, and others.

Further analysis showed that even if handoffs were perfect—and they weren't—having so many of them was detrimental: if the bank ran its "concept to cash" value stream 100 times, it would deliver what the customer wanted only three times.

By making the value stream visible, the bank could understand its 3% success rate and take action to improve it, resulting in a better customer experience and, therefore, improved customer acquisition performance.



Value stream design

Deep cloud heavily emphasizes value stream design as a method for business performance improvement. Value stream design is how material, CDSAI-driven improvements become possible. Any time you can make an existing business-critical value stream better, faster, easier to change, or less expensive to deliver, you unlock huge levels of new business value.

The same principle applies if you're launching a new line of business, building an ecosystem, or growing via mergers and acquisitions: better performance starts with better value stream design. This is a critical difference between the deep cloud strategy and conventional technology adoption.

The idea of using value stream design to improve business performance comes from the world of lean manufacturing and production, as pioneered by Japanese automaker Toyota and its Toyota Production System (TPS).¹⁶ Lean manufacturing philosophy is about understanding how the customer defines value, and then reducing waste to deliver that value better and faster. Lean production migrated from the factory floor to the IT department in the form of modern software development practices. The Agile Manifesto—written in 2001 by 17 software practitioners seeking a better way to develop software—simply adapted lean production principles to the business of software production.¹⁷

Value streams have a simple structure that begins when a customer makes a request for a service or product. This could be a revenue-generating external customer or an internal customer seeking support from elsewhere in the organization. From there, the value stream specifies the sequence of activities required to deliver that service or product, as well as the data and IT services those activities consume.

Value streams end when the customer's request has been fulfilled, which means the customer received the value they expected at the price they expected to pay. As a consumer, you already have experienced value streams. Any time you use your smartphone to book a ticket, buy a book, or hail a ride, you're closing a digital value stream for a digital services provider.

Value streams define “waste” as anything that happens between the request and its fulfillment that the customer is not willing to pay for. Deep cloud value stream design is the work of redesigning the current value stream, using CDSAI and related methods and practices to deliver more customer value, faster, and at a lower cost. Reducing waste frees cash with which to design better products and services and with which to repeat the cycle faster and faster.

Many large, incumbent businesses do not currently practice value stream design in the way they manage their business-critical operations, or they do so only in pockets of their operations. That might be because they confuse value streams with business processes. They're not the same thing, and the differences are critical to the deep cloud proposal. Value stream design visualizes the entire sequence of activities—from request to fulfillment—whereas business process design is typically concerned with the specific tasks within each of those activities. The latter is more tactical in nature and the former more strategic.

As enterprises become more driven by software, data, and online operations in everything they do, it's critical to make visible the invisible work of delivering business-critical products and services. Doing so is central to the deep cloud approach.

Let's explore why.

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When you make a physical product or deliver an in-person service, the work is visible. You see the car being built. You see the beverages being bottled. You see the food being prepared. When the operation comes to a halt, you see the work stop. When the product is flawed, you see it break or malfunction.

With digital products and services, all you really see is people looking at screens and typing. They may sometimes talk to each other, or look at a big board full of sticky notes, but who knows what they're doing or how the work is going?

This lack of visibility means you can't see the actual condition of a digitally enabled product or service. You can measure some aspects of how some parts of it are working, but the end-to-end workflow remains obscured. As a result, you can't see how much complexity has crept into the work, how frequently the workflow stalls in queues while moving among organizational silos, how often the right data fails to reach the right place at the right time, or the extent to which applications create unintegrated dependencies. And because you can't see the snarled mess your workflows have become, you can't see the improvements that are possible if only you could untangle them (see Figure 5).

By material business value, we mean business value that's substantial enough to change the enterprise cost/income ratio—the cost of running an enterprise relative to its revenues—by at least 1 point.



Figure 5

Making digital operations visible

Deep cloud uses value streams as X-rays that help us see the real condition of digitally enabled product and service delivery, as well as opportunities for performance improvement.

Value streams can help us see flaws and opportunities in ...

Ownership and accountability

Who is responsible for end-to-end performance?

Workflows

Is work repeatedly handed off from one silo to another, spending more time in queues than in execution?

IT configuration

Are data, applications, and infrastructure fragmented across multiple clouds and conventional data centers?

Data access

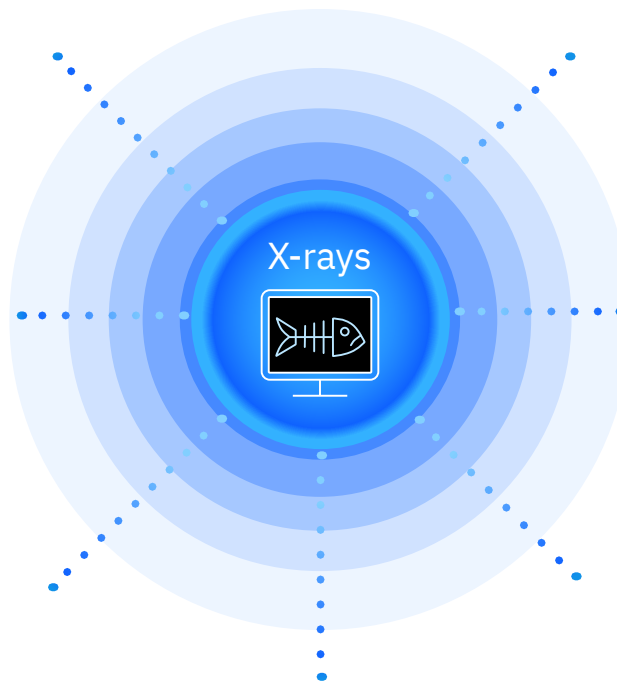
Is the right data available to the right place at the right time?

Outcome delivery

Are outcomes dependent on a thicket of unintegrated, siloed applications?

Productivity

Are people burdened with highly repetitive work that could easily be automated?



Value creation

Are there clear provisions for activating and capturing new business value?

Perspective

Cost/income ratio: the deep cloud 'superpower' metric

There are many ways to measure business performance improvement. Different enterprises in different industries in different parts of the world emphasize the metrics they find most useful. Deep cloud focuses on the enterprise cost/income ratio because it provides a simple and effective way to distinguish between small fish and big fish. Your organization may express its purpose and measure its success in other, non-financial ways, but all missions fare better when margins are higher. No matter the business, being able to drive revenues up and costs down will always be a superpower.

An example: a \$20 billion enterprise has a simple cost/income ratio of 75, which means its costs consume 75% of its revenues. Reducing its cost/income ratio by a single point, from 75 to 74, is worth about \$250 million in unlocked value. By comparison, the typical "grow/transform" IT budget for a \$20 billion enterprise is approximately \$200 million. If conventional strategies for adopting IT can deliver a 1-point nudge to the cost/income ratio, that's a good start—a \$200 million investment yields a \$250 million return.

But then what? How do you go deeper in search of bigger fish? You pivot to a deep cloud strategy that has much more leverage over much bigger chunks of the enterprise cost structure.

Material business value

Deep cloud is not concerned with incremental improvements or with small, one-off IT projects that barely recoup their costs. Rather, it's concerned with generating material business value—which in every industry is driven by a small set of business-critical value streams that consume a fraction of the enterprise cost structure but generate the majority of profits and economic value.

By material business value, we mean business value that's substantial enough to change the enterprise cost/income ratio—the cost of running an enterprise relative to its revenues—by at least 1 point. For example, reducing a cost/income ratio of 60 to a cost/income ratio of 59.

The deep cloud toolkit

The deep cloud toolkit provides the raw materials necessary to improve value stream design, execution, management, and activation. Hybrid cloud is the primary tool in the kit. It provides the architectural foundations that make deep cloud possible. But be aware: there's a big difference between *adopting* hybrid cloud—nominally and sometimes accidentally—and *mastering* hybrid cloud.¹⁸ Moreover, the deep cloud strategy requires a full complement of technologies, methods, and practices.

The toolkit includes cloud-native methods and practices such as containerization, microservices, composable applications, application modernization, and mainframe modernization, as well as design thinking, agile, DevOps and DevSecOps, site reliability engineering (SRE), and financial operations (FinOps). The technical components of the toolkit include software (including SaaS and industry-specific applications), data-related technologies (including AI, machine learning, and automation), security, and networks (including 5G and edge).

Most of these methods, practices, and tools already are present in pockets of the enterprise but have not yet been adopted for use beyond SG&A optimization. They've more often been applied as single-threaded, one-off projects—for example, the AI pilot, the business unit-level agile program, or the microservices center of excellence. Deep cloud favors deploying these IT capabilities in coactive combinations, where the toolkit's technologies,

methods, and practices work in concert, contributing to the design of the value stream and to the realization of the performance target.¹⁹ Rather than pushing individual tools to the limits of what they were designed to do—and past the limits of what the enterprise can successfully implement—deep cloud favors a pattern where each tool makes a contribution to the target that's well within the tool's "comfort zone" of performance.



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Value activation

Deep cloud introduces methods for activation—negotiating the “last few yards” of value stream delivery, where the potentially transformational capabilities in the toolkit are converted into fully realized and fully captured business value. Because IT capabilities have zero value until and unless they’re activated—that is, converted into lower costs and/or higher revenue—this idea of last-few-yards delivery is critical to the deep cloud proposal.

Here’s an example of what we mean by “the last few yards”: The telecommunications industry has spent billions of dollars installing fiber-optic cable into residential neighborhoods so it can provide very-high-bandwidth cable TV and internet services. But those investments in infrastructure have zero value until cable companies connect the cable terminus in the cul-de-sac to the internet routers and TV boxes inside their customers’ homes.

Because it’s so important, cable providers devote large chunks of their cost structure to making that last-few-yards connection. But when we shift our attention back to the world of enterprise IT, what do we see? First, as we’ve discussed, a very small portion of enterprise cost structure—1%, maybe 2%—is occupied by the “grow and transform” IT investments that enterprises expect to generate new customer value. Second, even when enterprise IT is funded to invest hundreds of millions of dollars in CDSAI capabilities, no one is fully accountable for activating those investments—for converting latent, if potentially very powerful, capabilities into material levels of new business value.

There are many reasons for this disconnect. First, enterprise IT can’t own the last few yards. It is neither accountable for changing how the business operates nor empowered to do so. Lines of business increasingly have people with the technical acumen required to design the last few yards, but lack someone who owns the value stream from nose to tail.

A value stream for delivering business-critical products and services engages many parts of the organization—for example, lines of business, IT departments and functions, marketing channels, finance, and geographies—which forces value stream delivery to fight its way horizontally across a picket fence of vertical silos. Typically, no one owns the performance of a value stream from start to finish. Few business leaders are willing to be accountable for the performance of a highly visible, business-critical value stream that is dependent on silos they don’t control.

Ideally, the entire value stream belongs to teams of people who are wholly focused on owning and operating that value stream. This is how start-ups are organized, and is a big reason why they are nimbler than their incumbent elders.²⁰ So instead of organizing value stream delivery around functional specialties, business units, channels, and geographies, deep cloud asks business leaders to consider organizing delivery around the customer.

Because it inevitably changes the power dynamics embedded in pyramid-shaped organizational structures, this shift from an internal focus to an external focus is very difficult. But the executive sponsors of a deep cloud initiative can experiment by organizing a single value stream around the customer and seeing if it makes a difference. When it does, they can replicate the experiment with another value stream, repeating the process again and again to generate powerful cycles of material business performance improvement.

At a minimum, the executive sponsor of a deep cloud initiative must demand that key stakeholders—business units, IT leaders, and lead integrators—co-design the last few yards of the value stream at the outset of every deep cloud initiative. Then, even if responsibilities for value stream delivery shift from silo to silo, handoffs become easier to manage and less likely to destroy value along the way.

IT capabilities have zero value until and unless they’re activated—that is, converted into lower costs and/or higher revenue.

Case study

US-based airline:
Organizing business
performance
improvement
around the customer
experience²¹

A US-based airline had begun to organize its operations around the customer experience—the process of planning travel, shopping for flights, then flying to, arriving at, and staying at one’s travel destination. Meanwhile, its enterprise IT organization was planning to fund a large-scale shift to cloud and cloud platforms.

The timing of the two programs turned out to be auspicious. Rather than pursuing a multiyear program for improving infrastructure, architecture, and software development capabilities—and leaving the work of activating those investments for later—business operations and IT leaders agreed to focus exclusively on improving the “day of the flight” segment of the literal and figurative customer journey.

Merging the two programs at the beginning delivered a huge dividend in the form of better program execution and better time-to-value.

Destination: reinvention

No matter your industry, keeping your business strong, healthy, and resilient requires continuous reinvention. Likewise, reinvention requires a strong core of high-performing lines of business. With few exceptions, reinvention is not available to businesses that have allowed themselves to fall too far behind their peers.

The deep cloud approach keeps the core of the business strong. And when its core is strong, the business can more easily experiment with new products, services, and business models; attract, grow, and retain the talent it needs; and change its fortunes so that the threat of disruption declines and the potential to be a disrupter grows.

But material business performance improvement from deep cloud won't happen by accident, or by maintaining the status quo. Achieving it requires understanding that bigger fish swim in deeper waters. If you want to catch them, that's where you need to start fishing.

The deep cloud approach keeps the core of the business strong enough and healthy enough for continuous reinvention to be a viable operational strategy.



Action guide

Business leaders willing to consider deep cloud as an alternative to conventional technology adoption can get started now. The first step is convening key stakeholders for candid conversations about the path you've been on and your organization's readiness to pursue material improvements in business value. Here, we outline a few initial questions you can ask—ideally, with the help of an external facilitator who can structure and support meaningful discussion.

01

Does my business need deep cloud?

You already know the performance changes you're seeking and the portions of your business that most need improvement. Now, take a hard look at your current business/IT project portfolio and the full scope of capabilities therein. If the portfolio is delivering capabilities your business can readily activate to generate needed levels of new business value, and if it can do so fast enough to make a difference, you're on the right path. If it isn't, it's time to relocate to deeper waters.

Action guide

02

Where should we start with deep cloud?

Follow the “rule of one.” Pick a single value stream, apply the deep cloud approach, then measure the outcomes. If the returns are promising, spin the wheel again. But which value stream? Let your business intuition be your guide, but prioritize customer-facing value streams and speed to value. Given how your enterprise technology adoption has unfolded thus far, some value streams will be riper for improvement than others. Start with a value stream where you can validate the deep cloud approach by realizing performance improvements within three to six months.

03

How clearly are we seeing opportunities for business performance improvement?

Assuming your business is not already managing by value stream, it will be very difficult to see the scope and depth of potential performance improvements. Building a current-state value stream map is the best way to make visible the way you’re delivering your most business-critical products and services.

You may already have value stream mapping talent on hand. If not, hire an external expert and begin the process of collecting needed data. Done right, the value stream map will let your business see—maybe for the first time—the whole picture of what happens between a customer’s request and how that request gets fulfilled. You’ll see the value stream’s dependencies on data, applications, and IT infrastructure. And you’ll see the silo-to-silo handoffs, data disconnects, and thicket of applications that are driving costs up and value down.

Action guide

04

How strong is the potential deep cloud business case?

Now do some back-of-the-envelope business-case analysis. First, with your current value stream in hand, look for obvious opportunities to improve value stream performance. Although some of these opportunities will be well suited to technological solutions, others won't—for example, a profusion of silo-to-silo handoffs, which is a problem with organizational design. Either way, value streams that must fight their way horizontally across vertical silos will likely encounter lots of technology, the intended benefits of which often are diluted by complexity. Even without designing a target-state value stream, the opportunities to fix disconnects and close gaps in capabilities will be apparent.

Now, based on your direct knowledge of how you're delivering core products and/or services today, ask yourself: How much value could you unlock by improving value stream velocity? How valuable would it be if you could accelerate positive changes to the value stream, or to the customer experience? Is it possible that value stream improvements could deliver a 1-point reduction to the enterprise cost/income ratio? If so, how much could you invest in those improvements and still deliver a higher ROI than any other investment in your portfolio?

Action guide

05

Can I get the right people on the boat with me?

Although they're business-led, deep cloud initiatives require a supportive coalition of stakeholders, including the CIO/CTO and the CFO. They also demand an executive sponsor who's senior enough to play above the many silos that the value stream in question currently spans. You must ask yourself what's in it for them, beyond the general health and prosperity of the enterprise. After all, funding a deep cloud initiative may require diverting resources from other business units, not to mention from enterprise IT. And yet, initial deep cloud forays won't require major program-level funding. And as the saying goes, success has many parents.

06

How will deep cloud benefit the people doing the work?

Deep cloud requires a different way of working and offers a better way of working. It requires very high levels of engagement from the people designing, implementing, and activating changes to the delivery of business-critical products and services. Those people need to see that the new way of working provides more autonomy, more opportunities for expertise, and a greater sense of purpose.

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