Realizing value from cloud continues to be a challenge for companies, even as more are adopting it than ever before.
Why are most companies not getting their money’s worth from cloud investments? There’s a frustratingly simple answer: They are not putting their people first. For access, training, or collaboration. Companies need to up their game on all three fronts.

We know this because we’ve been researching the value of cloud for the past several years. We’ve looked at the big picture, the macro environment of cloud, deployment strategies and change management practices. MIT and Accenture recently got together to drill down on the results of an early 2023 survey that showed only 42% of companies achieved their expected outcomes from cloud such as resilience or innovation speed for new products and services. Perhaps the most frustrating finding was the tepid cost savings, an early selling point for cloud, with only 39% of firms fully realizing their expectations.

Our research indicates companies that successfully democratize cloud in their organizations, making it accessible and usable for everyone, see far better results from their cloud investments.

The study

While some prior work has explored the correlation between value and intensity of cloud adoption or length of cloud journey, there is still limited understanding of why value is not rising at pace despite so many companies dialing up their cloud efforts. To get a better sense, Accenture teamed up with researchers at MIT to build on extant cloud research with a multi-regional survey of 274 respondents at Fortune 500 companies. We looked at their cloud adoption and use through the lens of five critical business areas:

1. Level of integration of business and IT objectives
2. Alignment within business and IT leadership
3. IT operating model, i.e., how much of the budget comes from IT department vs. Line of Business (LOB)
4. Expertise in measuring and managing change
5. Cloud (data/digital/analytics) talent strategy

Employing econometric models and matching methods, we supplemented this survey with information from company financial reports, and insights from analysis using millions of job postings. We categorized the respondents into two groups based on their cloud ROI. The “High Performers” group achieved 66% revenue growth, on average, over their cloud adoption period, while the “Low Performers” group saw a 15% decline. What surprised us was that it wasn’t the integration of IT and business goals, leadership style, operating model or even the change management approach that differentiated the two groups.

Cloud without borders

Both the research and our experience confirm that firms’ cloud skills and talent strategy largely determine the value extracted from this technology. The high-performing group adopted a decentralized scheme that prioritized the distribution of cloud expertise throughout the organization (Figure 1).

Figure 1: Decentralization of Cloud Talent and Firm Performance
While the battle for top cloud talent gets the most attention, the practice of creating non-siloed cloud experts is particularly important. This holds true for firms’ frontline workforce – especially in administrative or field operations - for whom the technology talent gap is most prevalent.¹

Innovation is akin to a team sport. It requires collaboration and creativity at speed. Cloud democratization delivers on these through easier collaboration across teams and business units, instantaneous and firm-wide data and knowledge sharing, as well as the enablement of remote work from anywhere.

Nestle, for instance, accelerated the speed of its new product launches by 60% since 2016.² This isn’t just the result of software developers compressing the development cycle on cloud, but rather it is the outcome of a self-serve technology model. It ensures each product team is equipped with the latest, cloud-based technology to experiment, then validate, their products through R&D accelerators.
Takeaways for companies

The answer to why cloud ROI isn’t robust for many companies is simple: with greater complexity comes greater challenges. For many companies, the low-hanging fruit—avoiding upfront costs and paying as you go—has been picked, and they are moving more to complex and business-critical applications and systems where ROI bumps take time and effort to materialize. That said, a few talent strategies can provide an immediate boost.

Commit to democratize cloud

Two important points here. First, cloud reduces the barriers to entry for companies by enabling access to cutting edge technologies, on demand. Second, it can be easily accessed by all employees — both IT and non-IT, in office and remote, full time or seasonal. This further ensures its value can be accrued throughout the organization.

Remote Work Accessibility: Cloud computing enables employees, especially those traveling or in remote locations, to access their work environment and applications remotely. Virtual desktop infrastructure (VDI) and Desktop as a Service (DaaS) solutions allow employees to securely access their desktops and applications from any device with an internet connection.

Scalability for Peak Demands: Cloud services provide scalability, allowing companies to scale up or down based on their computing needs. For businesses with fluctuating workloads, cloud enables them to provide employees (full time or seasonal) with adequate computing resources during peak times and scale down during quieter periods.

Mastercard, a High Performer according to our research, illustrates how a democratic approach to cloud works. As Tomas Thiré, Head of Technology Strategy and Transformation said, “To get the maximum benefit from our cloud investments, we have to center our teams on three priorities simultaneously: 1) ensure developers dedicate a significant portion of their time on building software that creates business value, 2) provide a strong centralized framework for all teams to work within and 3) develop and rotate internal talent throughout the organization to increase employee capabilities.”
Emphasize cloud skills for all

Cloud is a general-purpose technology. Its promise is innovation—in products, services or processes—across the organization. To realize this promise, employees, all of whom are likely using cloud applications in their roles and responsibilities, must be given the training they need.

Recognizing the dynamic nature of cloud technologies is essential here. Rapid technological evolution demands a continuous learning culture and adaptability. To ensure a current and relevant workforce, firms must invest in ongoing training programs and cultivate a culture that encourages employees to stay abreast of industry trends. The keys to a nuanced and successful implementation of cloud talent practices lie in these less obvious dimensions. While prioritizing specific cloud skills is essential, overreliance on niche skills may impede adaptability. It is critical to strike a delicate balance between specialization and generalization, something that’s often overlooked.

Common types of cloud training include:

*Vendor-specific training*: Companies often provide training programs specific to the cloud platform they use, such as Amazon Web Services (AWS), Microsoft Azure or Google Cloud. These programs cover the features, tools and best practices of the respective cloud platform. Certification programs: Many cloud providers offer certification programs that validate an individual’s expertise in using their cloud services. Companies can encourage or sponsor employees to pursue these certifications to enhance their skills and credibility.

*In-person workshops and seminars*: Companies can organize workshops or seminars conducted by cloud experts or trainers. These sessions provide hands-on experience, practical demonstrations, and opportunities for employees to ask questions and interact with industry professionals. Amazon offers practical AWS Cloud knowhow to its people through training and certification programs. Employees in fulfillment centers, for example, can apply new knowledge on Amazon Aurora and other data analytics tools to improve inbound and outbound shipments, sorting and packaging, resulting in more efficient inventory management and order fulfillment processes. In turn, these reduce delivery times and improve overall customer satisfaction. Similarly, in customer services,
AWS training allows employees to navigate and use advanced cloud-based customer relationship management (CRM) systems more effectively. This results in quicker and more personalized assistance and enhances the customer support experience.

**Embed cloud in daily work**

It is important to recognize that with cloud, creativity can flourish across global teams, as they don’t have to be in the same location or within the same function. Darmstadt, Germany-based Merck KGaA uses a cloud-based AI model to match capabilities with needs across the 60,000-person organization. As CEO Belén Garijo noted at the World Economic Forum in Davos in January, such human + machine teams have not meant fewer jobs at Merck KGaA, but different jobs. Fostering cross-departmental collaboration, while crucial, also introduces challenges in measuring overall impact on business outcomes. Organizations will need to devise new metrics to gauge the effectiveness of collaboration, encompassing project success rates, innovation metrics and feedback from participating employees.

Cloud-based collaboration tools include:

*Office Productivity Suites:* Companies can use cloud-based office productivity suites, such as Google Workspace or Microsoft 365, to provide employees with access to collaborative tools like document editing, spreadsheets and presentation software. These tools enable real-time collaboration, allowing multiple employees to work on the same document simultaneously, irrespective of their physical location.

*File Storage and Sharing:* Cloud storage services, such as Google Drive, Dropbox or OneDrive, allow employees to store, access and share files from anywhere with an internet connection. This not only enhances collaboration but also ensures that employees have the most up-to-date files, reducing version control issues.

*Communication Platforms:* Cloud-based communication tools such as Slack, Microsoft Teams or Zoom facilitate seamless communication among employees. These platforms enable instant messaging, video conferencing and file sharing, fostering efficient communication and collaboration regardless of employees’ geographical locations.
Using cloud-based collaborations tools, data scientists, for instance, concerned about correlations and feature selections can work across the globe with designers for the best user experience since everyone can look at the same data visualizations. They can work live and act on machine learning algorithm predictions to decide on the next set of features to deploy.

Today, cloud is integral to a business’s fundamental competitiveness and cannot be siloed or relegated to certain parts of the organization. Those who make cloud open and accessible to their employees will see substantial payoffs on their cloud investments.

**Acknowledgements**

This research is a collaboration between Accenture and the MIT Initiative on the Digital Economy (IDE) and was performed under the MIT and Accenture Convergence Initiative for Industry and Technology.

The authors would like to thank Gargi Chakrabarty, Senior Editor, Thought Leadership, Accenture Research, for her help with this article.

**References**

1. Google Cloud
2. Nestlé’s innovation strategy: “We are faster now than many of the startups”.

Kenneth Munie leads Accenture’s Products Strategy practice globally and is personally focused on the value of digital transformation and helping clients navigate the intersection of business strategy and technology. Kenneth holds an M.B.A. from The Wharton School of the University of Pennsylvania and a B.S. in Electrical Engineering from the University of Michigan.
Wang Jin's research focuses on the impact of emerging technologies (e.g., cloud) and organizational practices on firms' productivity, employment, and innovation. His work has been published in Management Science, Harvard Business Review and Business Economics.

Sebastian Steffen is an assistant professor of business analytics at Boston College and a digital fellow with the Stanford Digital Economy Lab and the MIT Initiative on the Digital Economy (IDE). His research focuses on how information and automation technologies transform businesses and society and their impact on the value of human capital and the future of work.

Prashant P. Shukla is a Principal Director of Technology Research at Accenture. He oversees research for programs such as Accenture’s collaboration with the MIT Initiative on the Digital Economy (IDE) and Accenture’s flagship Technology Vision to develop insights that are leveraged by our practice and clients. His work has been published in Harvard Business Review, MIT’s Sloan Management Review and Ivey Business Journal.