



The Business Value of Google Cloud ML/AI/Data Analytics Training and Certification

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BUSINESS VALUE HIGHLIGHTS



Click on highlights below to navigate to related content within this PDF.

31% greater
data accuracy in products
developed

29% greater
overall employee productivity

69% improvement
in staff competency levels

1.4-year
average increase in
employee tenure

8% more likely
to receive a promotion

33% of new hires
had a certification at time of hiring

25% faster
onboarding speed

23% faster
hiring speed

Executive Summary

Artificial intelligence (AI) and machine learning (ML) are becoming essential in helping organizations improve customer satisfaction, buyer journeys, production quality, and business operations efficiency. To be successful, these initiatives require high-quality tools and infrastructure, but also well-trained analysts and engineers to build, test, run, and manage the AI/ML/Data Analytics solutions.

IDC research has found that increased training for IT professionals consistently increases both individual capabilities and the ultimate business value of the supported technology. This research is intended to describe how much improvement organizations get when training their staff in emerging and essential technology areas.

Google Cloud AI/ML/Data Analytics Training and Certifications are learning tools for implementing and using AI and machine learning technologies. The training includes technology areas such as BigQuery, TensorFlow, Cloud Vision, Natural Language, and API. IDC conducted research that explored the value and benefits for organizations using Google Cloud AI/ML/Data Analytics Training and Certifications to foster an intelligent and innovative work environment.

Through a series of in-depth customer interviews and a methodology for determining business value, IDC's analysis found that these companies realized significant value from Google Cloud AI/ML/Data Analytics Training by:

- ▶ Significantly increasing the knowledge levels of IT staff and data professionals, thereby enabling them to work with greater competency and confidence
- ▶ Empowering IT and data professionals to work with greater efficiency and creativity to solve complex problems in support of business operations
- ▶ Enabling IT professionals to create and maintain value-rich resources
- ▶ Improving staff qualifications for hiring and promotion, bolstering recruitment and onboarding, and providing better career advancement for IT and data professionals

Situation Overview

Artificial intelligence and machine learning are becoming essential in helping organizations improve customer satisfaction, improve buyer journeys, improve production quality, and improve business operations efficiency. Google Cloud has many client examples that illustrate the range and positive impact of AI/ML/Data Analytics on business operations, including the following:

- ▶ The Home Depot uses Google’s Contact Center AI (CCAI) to reduce customer resolution time by 91 million minutes.*
- ▶ IKEA Retail uses Google’s Recommendations AI to increase ecommerce click-through rates by 30% and increase order value by 2%.*
- ▶ FIH Mobile, a Foxconn company, used Google’s Visual Inspection to identify defects 10 times more accurately.*
- ▶ Mr. Cooper, a leading mortgage services provider, uses Google’s Document AI to process mortgage documents 400% more efficiently.*

These businesses not only leveraged high-quality tools and infrastructure, but also relied on well-skilled analysts and engineers to build, test, run, and manage the AI/ML/Data Analytics solutions.

People are the make-or-break element in every part of a high-performing IT organization. There is simply no replacement for people with the right skills, attitudes, and traits. Because CIOs do not have the luxury of hiring a totally new roster of people to fill current skills gaps, they combine the hiring of new staff with the training of existing staff to create the needed capabilities.

Other IDC research has found that increased training for impacted IT professionals consistently increases both individual capabilities and the ultimate business value of the supported technology. We have found that increasing the share of a typical digital transformation (DX) budget allocated to training from 5% to 7% can increase the chance of a project meeting its business objectives from 50% to more than 80%¹.

In research related to enterprise application deployments, we also found² that:

- ▶ Well-trained cloud migration teams meet nearly 90% of their business and project milestones, compared with cloud migration teams at an “average” skill level that meet less than 50% of their business and project milestones.
- ▶ Well-trained teams are 9x more likely to be satisfied or very satisfied with their ability to monitor, forecast, and optimize server, storage, and network resources than average.

All of those findings prepared us to investigate the impact that training and certifications have on teams of AI/ML/Data Analytics–related professionals, including business analysts, data analysts, data engineers, data scientists, and ML engineers/software engineers. Our intention was to describe how much improvement organizations get when training their staff in these emerging and essential technology areas.

¹ Source: IDC’s *Training Impact on Project Success*, May 2012

² Source: IDC’s *Changing Skills in Cloud Environments*, September 2017. We asked teams to self-rate their level of skill and their performance on KPIs relevant to their responsibilities. We then compared the performance of those teams that rated themselves better-than-average skilled (we called them “well-skilled”) with those that were average or lower-skilled. Whether the teams were well-skilled due to training or experience was not part of the analysis.

*Source: IDC’s *Google Cloud Next ’21: AI/ML at the Heart of Product Innovations, Customer Wins, and Partnerships*, November 2021

Overview of Google Cloud Training and Certifications

Google Cloud Learning has customized, accessible, and engaging content that allows individuals to get real-world, hands-on experience. Technological innovations are emerging at a faster rate than ever, so Google Cloud Learning provides the most up-to-date content to ensure your company has the latest in-demand skills that can make the greatest impact.

With Google Cloud Learning, you can:

▶ Empower Employees

To help provide the workforce development your organization needs, Google Cloud Learning has made it easy to engage with their learning team, or your preferred partner, to assess your organization's learning needs. By working together with Google Cloud Learning, you can create a learning plan that identifies the learning roles and paths that your organization needs to be successful. Google Cloud Learning's comprehensive curriculum caters to all learning styles and is delivered in various formats—on-demand training, hands-on learning, gamified competitions, or virtual and in-person training. The content is developed by a dedicated team of curriculum developers who work closely with the Google Cloud product and engineering teams to stay abreast of upcoming roadmap and technology. Curriculum developers also work with field teams to ensure that best practices are embedded into the business and technical learning offerings.

▶ Provide Practical Application

Google Cloud Learning offers experience through hands-on learning—this can be in sandbox environments, labs, quests, real-world use cases, data sets, gamified learning challenges, skill badges, etc. Hands-on learning allows learners to build their confidence by practicing in a controlled environment and more effectively retain knowledge by using real cloud technology. Google Cloud Learning also offers immersive learning experiences led by Google Cloud machine learning experts in person at their campuses or virtually.

▶ Bridge Organizational Skills Gaps

Google Cloud Learning prepares your organization with the skills needed to be successful and impactful in cloud-based roles. They have created role-based learning paths—curated collections of content that combine traditional courses with hands-on learning—that not only align to the job functions in your organization today but also define the jobs of the future. Google Cloud Learning prepares individuals within organizations to take on new job roles so that they can build impactful cloud solutions.

▶ Incentivize Employees with Digital Credentials

Google Cloud Learning provides different types of digital credentials, which are awarded incrementally to individuals within your organization as they progress through their learning journeys. Google Cloud Skill Badges are awarded in recognition of an individual's cloud proficiency with Google Cloud products and services and tests their ability to apply that knowledge in an interactive hands-on environment. Google Cloud Certification badges are awarded upon passing a proctored exam, which validates an individual's expertise in a particular cloud role and tests the full set of skills that employers expect job candidates/employees to have to successfully build, deploy, and manage

Google Cloud solutions. Google Cloud Certification exams are available for various cloud roles and range in difficulty level—Fundamental, Associate, Professional, and Fellow.

▶ **Future Proof your Organization**

Google Cloud Learning is committed to helping your organization adopt the latest cutting-edge technology. Google Cloud Learning studies skills and job profiles, both from within their organization and externally, to continuously evaluate and innovate their learning programs. Google Cloud Learning updates their entire curriculum as technology continues to evolve. A catalog of 700+ courses (on-demand and in-person) and hands-on labs are available, which undergo frequent refreshes to reflect the latest technology and product updates, use cases seen in the field, and feedback from customers.

Contact Google Cloud Learning today to begin upskilling your team and transforming your business. Learn more at cloud.google.com/training/forteams.

The Business Value of Google Cloud AI/ML/Data Analytics Training and Certifications

Study Demographics

IDC conducted research that explored the value and benefits of organizations using Google Cloud AI/ML/Data Analytics Training and Certifications. The research included interviews with five organizations that were using Google Cloud AI/ML/Data Analytics Training and Certifications for six-plus months. IDC interviewed senior decision makers familiar with the impact that Google Cloud's training and certification has had on their organization's IT operations and business. They were asked a variety of quantitative and qualitative questions about its impacts on their IT staff's performance, competency levels, and professional career experiences.

Table 1 (next page) presents study demographics. The organizations IDC interviewed had an average base of 181,845 employees and \$37.3 billion in annual revenue, indicating the inclusion of several large companies. This workforce was supported by a staff of 11,556 data professionals with 20% of whom were using ML applications in their daily work. In terms of geographical distribution, two companies were based in India, with the remainder in Bangladesh, the United Kingdom, and the United States. A variety of vertical markets were represented, including the technology services (2), manufacturing, professional services, and financial services sectors.

TABLE 1
Firmographics of Interviewed Organizations

Firmographics	Average	Median
Number of employees	181,845	169,000
Number of data professionals	11,556	7,500
Percentage of employees using ML in their roles	20%	20%
Number of data analytics and ML applications	1,060	100
Number of ML models deployed in production	526	50
Revenue per year	\$37.3B	\$11.0B
Countries	India (2), Bangladesh, United Kingdom, and United States	
Industries	Technology services (2), manufacturing, professional services, financial services	

Source: IDC, January 2022

Selection and Use of Google Cloud AI/ML/Data Analytics Training and Certifications

The organizations that IDC interviewed were asked to describe their use of Google Cloud AI/ML/Data Analytics Training and Certifications and discuss the rationale for choosing training to improve the skills and professional competencies of current and future IT professionals. Interviewed organizations described Google Cloud's systematic approach as a key consideration for organizations looking to enhance the skills and competency levels of their staff.

Study participants called out these features and benefits of working with Google Cloud's AI/ML/Data Analytics Training and Certifications:

- ▶ **Continued skill enhancement:**
"Everyone needs to do skill enhancements."
- ▶ **Highly regarded training method:**
"Google certifications are highly regarded internally. It is part of our strategy to make sure people have this training available to them."
- ▶ **Intelligent, systematic approach to training:**
"My organization needs people to develop more intelligently and more systematically on the Google platform. There are people who already have cloud knowledge with AWS, Azure, even Open Source."

► **Multi-year commitment to training in emerging technologies:**

“We believe it is critical to have data professionals trained on new and emerging technologies and have non-data professionals at least trained on these technologies that are becoming more critical to our business. We have recently partnered with Google, a multi-year commitment. We have engaged with several different trainings with Google. We have probably passed 150 people through the training and certification, including non-data professional people such as DevOps.”

Table 2 provides a snapshot of Google Cloud AI/ML/Data Analytics Training and Certifications recipients by professional roles. The largest distinct groupings of professionals were represented by ML engineers (88% trained, 60% certified) and data scientists (85% trained, 72% certified).

TABLE 2

Google Cloud AI/ML/Data Analytics Training and Certifications Participation

Google AI/ML Training Profiles	Number in Google Cloud AI/ML/Data Analytics Environment	Percent Completed Google Cloud Training	Percent Certified
Business analysts	97	23%	5%
Data analysts	96	52%	52%
Data engineers	277	53%	33%
Data scientists	126	85%	72%
ML engineers	130	88%	60%
ML software engineers	142	40%	20%
Other	383	70%	36%
Total	1,252	766	482
Total (%)		61%	38%

Source: IDC, January 2022

Business Value and Quantified Benefits

IDC's Business Value methodology evaluated and quantified the benefits for interviewed companies that have adopted Google Cloud AI/ML/Data Analytics Training and Certifications as the core of their professional staff training efforts. These companies found that the training and certification significantly increased the knowledge levels of their IT and data professional staff, thereby enabling them to work with greater competence and confidence in their day-to-day tasks. Training and Certifications also empowered IT teams to work with greater efficiency and creativity, thereby helping them solve complex problems related to business operations and enabling the provision of value-rich resources and applications. Finally, interviewed companies agreed that training and certification improved staff qualifications for hiring and promotion, bolstered recruitment, and enabled new hires to onboard with greater efficiency.

Better IT Training Leads to Advanced Skill Sets

Digital transformation has ushered in a new era of digitally enabled customer-facing products, services, and experiences in an environment of rapid change and uncertainty. Moreover, traditional businesses and their IT organizations now face competition and disruption from untraditional digital-native enterprises and start-ups. The current business climate underscores the value of using IT training to advance the business value of digital transformation. Enterprises increasingly expect training programs to support their employees' professional growth, job performance, and job satisfaction while also contributing to business results.

Study participants identified specific benefits offered by Google Cloud AI/ML/Data Analytics Training and Certifications, including better IT support and gaining a more holistic view of their customers' needs. They also commented on significant increases in their staff's confidence after the completion of training and certifications, and the value that training and certifications have had on their staff, customers, and business initiatives.

Study participants commented in detail on these benefits:

▶ **Better trained employees support customer needs better:**

"Google training has helped ramp up our skill sets and sign up more highly skilled people. This has benefits for our clients. Also, if one person is well skilled, they can informally train others on the team so even for people not yet trained it can be beneficial."

▶ **Staff training drives value for customers:**

"Training and certification is a critical component to the customer relationship. Before staff get to work for a customer, they have to get certification. We are looking to develop measurements that go beyond the initial contract for work and focus on the ongoing relationship and continuing to add value for our customers. Training and certification contribute to that measurement and is part of a holistic view of the customer relationship."

▶ **Fine-tuning employee skill sets drives investment:**

"My organization's objectives and key results are usually tied to business cases and capital investment. These are approved by finance and include hard ROI attributed to the business cases. Training allows us to fine-tune skill sets and deliver on the promises and outcomes of each business case."

▶ **Increase in staff confidence:**

“The biggest improvement for our staff relates to confidence. They will need more experience to get more definitive results. ... For now, I would estimate 10–15% improvement in skills and performance, but that will grow to 20–25% with more experience.”

▶ **Continued learning increases skills:**

“We have mandated training/retraining and certification annually. The focus is on making sure the talent is “hands on.” We have dedicated global Google labs, where we develop skills and challenge individuals to continue learning and be able to develop IP.”

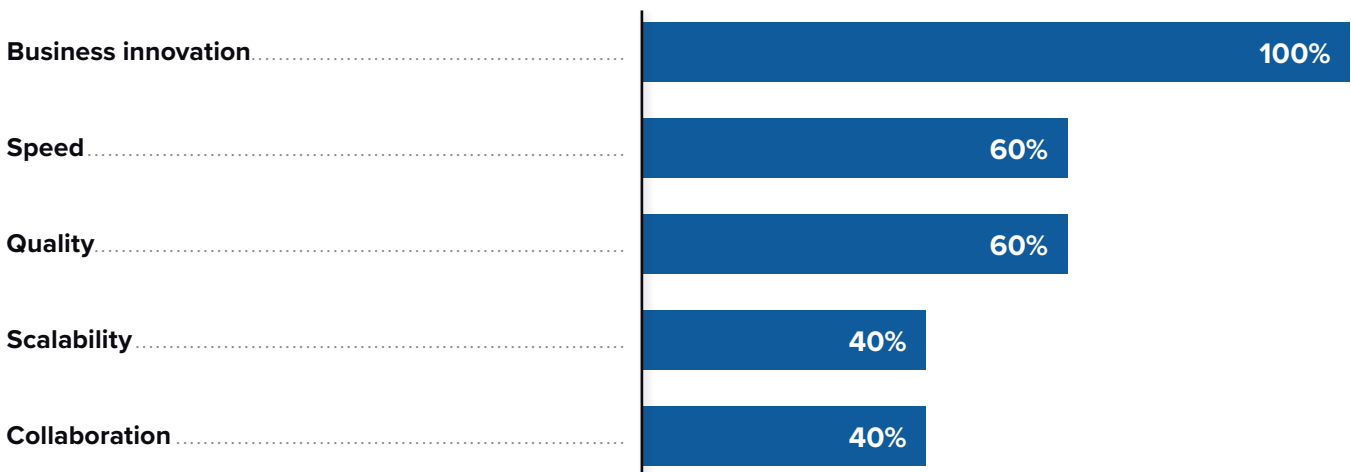
▶ **Training allows organizations to keep up with tech advances:**

“We believe in the need and benefit of employee training, and we will continue to invest in those types of programs. Training is a mandatory step to keep up with the rapidly evolving technology, especially in the cloud.”

Interviewed organizations reported that Google Cloud AI/ML/Data Analytics Training and Certifications inspired their employees to work with efficiency and creativity and solve complex business problems, which has helped drive their businesses forward with better staff competency and confidence. As one study participant noted: *“My organization is focusing on building competency and scale on Google Cloud products and services. We provide a range of services on Google Cloud for our customers and grow our business globally. With training and certification, we can create solutions faster and better, and support customers on their digital transformation journey. We nurture development internally for all our associates. As an organization we are looking to make sure our employees are highly skilled and up to date because the technology changes so rapidly.”*

IDC quantified these benefits using several key performance indicators (KPIs) as shown in **Figure 1**. The broadest levels of improvement across all companies were seen in business innovation, speed (i.e., the ability to execute business transactions more quickly), and quality.

FIGURE 1
Top Training and Certification Benefits
 (% of organizations)



Source: IDC, January 2022

Impact of Training and Certification on Staff Competency

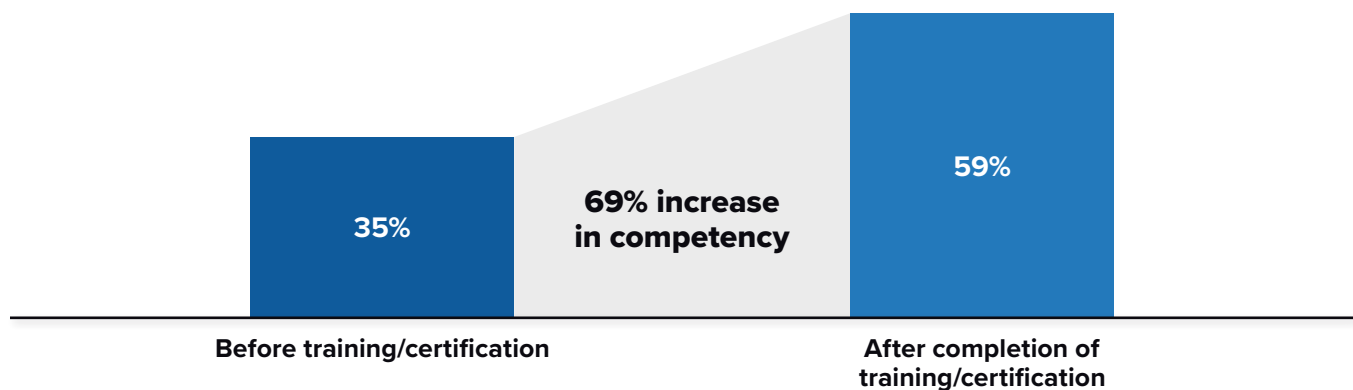
Interviewed organizations reported that Google Cloud AI/ML/Data Analytics Training and Certifications increased the knowledge level of employees significantly, enabling them to work more productively. As one study participant noted: *“We have a three-year business strategy. Training and certification play a role in the overall KPIs the business is measured against. Employees at all levels want to do training and certification. They see the value and the increased confidence level gained.”*

As shown in **Figure 2**, after the completion of Google Cloud AI/ML/Data Analytics Training and Certifications, interviewed organizations experienced a 69% improvement in staff competency levels.

FIGURE 2

Increased Competency with Google Cloud AI/ML/Data Analytics Training and Certifications

(% of improvement)



Source: IDC, January 2022

Impact on Operational KPIs

Several interviewed organizations also noted that after completing training and certifications, employees were able to create, maintain, and manage data assets with greater effectiveness. To elaborate further, one study participant noted: *“In the past, we would have a certain monolithic toolset that people used for data and machine learning. Now everything seems to be purpose-built. There are 50 ways of doing the same thing. Our senior staff especially needs to be involved in driving how we stitch solutions together to help our customers do better with our products and generate more value.”*

In addition, after being trained and certified, interviewed companies experienced a 31% boost in data accuracy. Furthermore, they were able to reduce prototyping time by 23% to deliver value associated with smart analytics and ML solutions (see **Figure 3**, next page).

FIGURE 3

Training and Certifications Operational KPIs

(% of improvement)



Source: IDC, January 2022

Training and Certification Increase Staff Productivity

IDC then looked at post-training and certifications impacts associated with staff productivity. Survey data showed that when IT teams were trained and certified, they gained confidence from new skill sets and were able to apply that knowledge to significantly improve on-the-job productivity levels.

As shown in **Table 3**, after completing training and certification, an organization’s staff saw a 29% productivity gain (the productivity equivalent of an additional 222 employees). With IDC’s operating margin of 15% applied, this equated to a value of \$2.3 million in staff time per year for each participating organization.

TABLE 3

Staff Productivity Gains Upon Course Completion: Training or Certifications

	Before Training/ Certification	After Completion of Training/ Certification	Difference	Change (%)
Equivalent productivity level, FTEs	766	988	222	29
Value of staff time per year	\$53.6M	\$69.2M	\$15.6M	29

Source: IDC, January 2022

Ongoing Employment and Professional Development Benefits

The companies that IDC interviewed reported that improvements in both on-the-job performance and career advancement were enabled by Google Cloud AI/ML/Data Analytics Training and Certifications. Beyond the direct and obvious benefits to IT and data professionals, training benefits also extended to HR departments with respect to core tasks such as hiring and onboarding.

Study participants noted that Google Cloud AI/ML/Data Analytics certifications led to better reviews, higher salaries and promotions, and helped create capable and confident IT teams. They also reported that certifications occupied a central role in their hiring processes because it made employees more valuable to the organization over time.

▶ **Certified candidates are preferred:**

“I estimate that 50% of hires have some Google training and 30–35% of those are certified. When we look for certified staff, we are looking for specialists with experience and knowledge.”

▶ **Certified candidates earn higher salaries:**

“We would expect to pay certified candidates 5–6% more for sure. We give special attention to someone with the training and in particular certification. We are willing to pay more to get the talent.”

▶ **New hires with certification are looked upon favorably:**

“If we are hiring for Google, we would look favorably on someone who had training or certification in line with the position. We would do the same for AWS or any other technology position.”

▶ **Certification leads to better reviews, higher salaries, and promotions:**

“Studying and taking certification exams translates into better reviews, higher salary, and promotions. So, there is a benefit to the employee as well as to the organization.”

▶ **Training creates capable and confident employees:**

“The training has been fruitful and has increased the skills of our employees, making them more valuable to the organization. The negative side of that is that because it makes them more capable and confident, they are more attractive to other companies. We have lost a couple of people. We are willing to take that chance as the majority do stay with us.”

Professional Development Benefits

Interviewed organizations also noted that staff tenure increased after AI/ML/Data Analytics training. They found that employees valued the investment that organizations were making to increase their skill sets and knowledge, and that training tended to lead to more rewarding and interesting projects.

One study participant commented: *“We need to train regardless of who leaves. If we make the work interesting and rewarding, people will stay. If we continue our commitment to training, they will stay. Some will leave, that’s inevitable. But we have to train to provide them an opportunity to grow and thrive in their careers. If we invest in them, they tend to stay.”*

Another noted: *“We project that trained employees will stay 10–15% longer. I can’t really say for sure as this market is positioned for explosive growth. But at the senior level, if we are as successful as we think we will be on Google, most will stay. The risk of losing people will involve younger up-and-coming data specialists who will be attractive to other companies, particularly start-ups.”*

Voluntary turnover or attrition severely impacts organizational performance: Projects are delayed, institutional knowledge is lost, and it takes time to find suitable replacements. According to study participants, Google AI/ML/Data Analytics Training and Certifications helped contribute to an average overall employee tenure increase of 13%, or about 1.4 years’ greater tenure.

So, in addition to helping employees grow in their roles, effective professional development helps the organization meet its objectives too.

Employment Benefits

IDC then looked at the impact on the hiring process when organizations considered Google Cloud AI/ML/Data Analytics Training and Certifications. Interviewed companies reported that 33% of their new hires had certifications. As one study participant noted: *“Google Training and Certifications are now an important factor when selecting new hires, in addition to their experience. Certification doesn’t replace experience as a factor, but it adds to the strength of a candidate.”*

Google Cloud AI/ML/Data Analytics Training and Certifications also helped new hires onboard with greater efficiency and speed. As one study participant commented: *“Training is now mandated and expected. When people undergo evaluations and reviews, the entire package of qualifications and professional development is reviewed.”*

The increased focus on training and skills helps IT professional candidates and new hires in four ways:

▶ **Certified candidates:**

- Set themselves apart in the hiring process
- Get selected faster
- Reach full productivity faster

▶ **Certified new hires:**

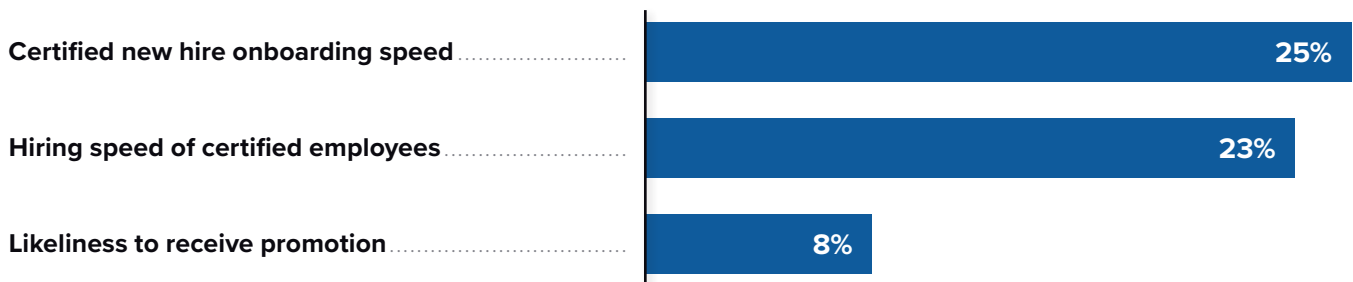
- Are 8% more likely to be promoted in their first year

Figure 4 quantifies these impacts using relevant KPIs.

FIGURE 4

Training or Certification Employment KPIs

(% of improvement)



Source: IDC, January 2022

Challenges/Opportunities

Attending the World Economic Forum in Davos in February 2018, Justin Trudeau was quoted as saying, *“You are rightly anxious about how quickly our existing business models are being disrupted. Still, if you’re anxious, imagine how the folks who aren’t in this room are feeling.”*

Cloud and digital transformation are driving disruption and are fundamentally changing business operations and the culture within the IT organization. Specifically, artificial intelligence, machine learning, and data analytics are becoming essential to helping organizations improve customer satisfaction, buyer journeys, production quality, and business operations efficiency. But without the right skills, employees will be unable to identify and execute the changes that are essential to business success.

Organizations are sometimes reluctant to comprehensively train their staff to take full advantage of new technologies and tools. Learning and Development (L&D) organizations may worry that training won’t be helpful; technical training groups may feel that with so many training options, it is difficult to choose the best training provider or training path; and IT managers might wonder if they can afford to “prepare for the future” when there is so much to do right now.

However, to ensure that organizations can meet the rapidly changing business requirements and adopt technologies like AI/ML to improve business outcomes, companies need to create comprehensive skill development programs that help employees achieve the skills that will drive their IT organizations forward.

These programs can help:

- ▶ IT managers prepare IT professionals for critical projects, increase staff productivity, and improve data accuracy
- ▶ IT supervisors ramp up new hires to reach full productivity as fast as possible
- ▶ Hiring managers identify candidates and internal employees who have skills to make them successful in their current and future roles

While this can seem daunting, training vendors are leveraging the tools and content that can help make these programs predictably successful. This is the essence of employee transformation: an employee improvement initiative creating continuous skill and performance improvements at every level of an organization.

This results in programs that help employees at all stages of their professional life cycle, including identifying and onboarding new employees to rapidly reach effective productivity, upskilling to prepare for enhanced responsibilities, “deep skilling” to gain expert knowledge in an area, and even reskilling to support internal mobility and organizational flexibility. All of these can help create a culture that embraces change, growth, and innovation and even increases employee satisfaction and employee tenure.

Organizations that can leverage the dynamic and expansive capabilities of their employees are in the best position to transform and thrive in a rapidly changing world.

“Still, if you’re anxious, imagine how the folks who aren’t in this room are feeling.”

JUSTIN TRUDEAU

Conclusion

Digital transformation is often driving business strategy. Artificial intelligence, machine learning, and data analytics are essential to improving customer satisfaction, buyer journeys, production quality, and business operations. But to take advantage of these complex solutions, organizations must have the skills to effectively design, build, and run them.

Organizations that invest in the AI/ML skills of their staff will see:

- ▶ 30% greater data accuracy
- ▶ 29% improved employee productivity

They will also improve their overall employee experience. By leveraging certifications as a hiring criterion, organizations will see faster identification and selection of candidates, more rapid onboarding, and faster time to the full productivity of new hires.

Google Cloud Learning has the content and supporting programs necessary to contribute to a successful training program. Generally, the more comprehensive the training program, the greater the organizational benefits—organizations that deeply and thoroughly train their AI/ML/Data Analytics staff will see greater operational improvement from those initiatives, accelerate the deployment of their AI/ML/Data Analytics solutions, reduce business risk, and enjoy greater employee retention.

This research has shown that Google Cloud AI/ML/Data Analytics Training and Certifications have:

- ▶ Enabled IT staff to work with greater competence and confidence in their day-to-day tasks
- ▶ Empowered IT teams to work with greater efficiency and creativity, thereby helping them solve complex problems
- ▶ Improved staff qualifications to accelerate promotion, bolster recruitment, and enable new hires to onboard with greater efficiency

Overall, implementing a strong employee development program to help achieve the most important business goals is essential to success, and Google Cloud Learning can support these objectives by:

- ▶ Empowering employees to take control of their own learning journeys
- ▶ Leveraging hands-on experiences to build learner confidence
- ▶ Focusing training on critical roles to overcome urgent skills gaps
- ▶ Incentivizing employees to continue their learning journey through the recognition of meaningful milestones
- ▶ Future proofing the organization by preparing IT professionals to leverage the most cutting-edge tools and technologies

This research has shown that training and/or certifying AI/ML/Data Analytics staff will have a meaningful impact on organizational performance.

Appendix

IDC's standard Business Value methodology was utilized for this project. This methodology is based on gathering data from companies using Google Cloud AI/ML/Data Analytics Training and Certifications as the foundation for the model. IDC collected quantitative benefit information during the interviews using a before-and-after assessment of the impact of using Google Cloud AI/ML/Data Analytics Training and Certifications.

Note: All numbers in this document may not be exact due to rounding.

About the Analyst



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Megan Szurley is a Consulting Manager within IDC's Custom Solutions Division, delivering consultative support across every stage of the business life cycle: business planning and budgeting, sales and marketing, and performance measurement. In her position, Megan partners with IDC analyst teams to support deliverables that focus on thought leadership, business value, custom analytics, buyer behavior and content marketing. These customized deliverables are often derived from primary research and yield content marketing, market models, and customer insights.

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