

With a dispersed frontline workforce, manufacturers are accelerating investments to democratize employee access to key technology resources. The result translates to strong employee experience and productivity, which in turn drives better customer experience.

# *New Perspectives on Intelligent Workforce Management for the Manufacturing Industry*

June 2023

**Written by:** Anu Mehta, Senior Research Analyst, Future of Work, and Amy Loomis, Ph.D., Research Vice President, Future of Work

## **Introduction**

The shifting business, health, and economic conditions of the past few years have forced organizations across all industries to reimagine the ways in which work gets done. The key issues affecting the manufacturing sector – both business and IT – are different to those of other sectors as a whole – but workforce staffing and skills are top of mind for all sectors. Around 45% of organizations globally are facing a general skills shortage – and in North America, that figure is over 50%.

Today, frontline employees not only occupy a higher percentage of the global workforce but they are also in high demand. In the manufacturing industry, businesses are seeing huge skills shortages for their frontline operations, aggravated by aging workforces, poor job experiences, and increased demand for workers to cope with a large backlog of physical operations.

Many organizations are rethinking their approach to frontline investments by hiring more deskless shift workers, retaining current employees, and creating new opportunities for frontline operations. People in these fields need ready access to resources and information that is delivered on demand and in an intelligent way. The frontline employee experience is also gaining prominence, with organizations increasing their investments in enhancing workforce experience and productivity.

## **AT A GLANCE**

### **KEY STATS**

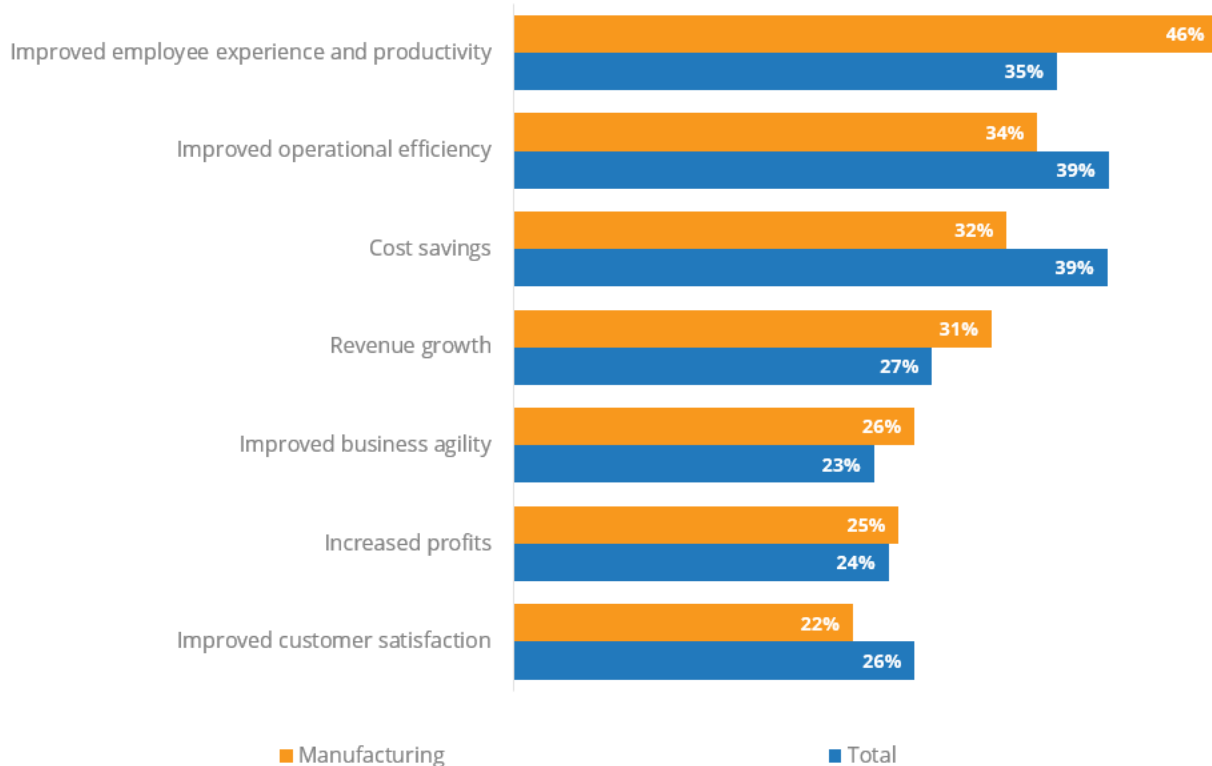
In an April 2023 survey (see Figure 1), IDC asked IT and business executives about the most important business outcomes they are trying to achieve from their work transformation initiatives. Leaders in the manufacturing sector shared the following:

- » 46% believe that improved employee experience and productivity as a driver of business growth will remain a top priority.
- » 34% ranked operational efficiency as an important outcome.
- » Another 32% ranked cost savings and 31% highlighted revenue growth as the most important drivers for their work transformation initiatives.

### **KEY TAKEAWAY**

As per the IDC FutureScape prediction, by 2024, companies offering frontline workers democratized access to digital collaboration, process automation, and similar tools will see a 20% increase in revenue due to improved productivity.

FIGURE 1: **Most Important Business Outcomes Manufacturers Seek from Current or Planned Work Transformation Initiatives**



*n* = 1,197, manufacturing = 160

Source: IDC's Future of Work Global Survey, April 2023

## Key Trends

### Democratization of Technology for Frontline Workers

Frontline workers, also known as deskless, mobile, task, and shift workers, make up around 80% of the global workforce. Organizations are increasingly focusing on addressing the issues faced by these workers in performing their day-to-day work. The most significant challenges to this employee population have been understaffing, employee burnout, and poor employee experiences. In IDC's April 2023 *Future of Work Global Survey* (*n* = 1,197), respondents highlighted some major challenges in enabling frontline workers to be more innovative and productive. These include the following:

- » 41% cited employee churn – frontline employees don't stay long enough to invest in technology investments
- » 38% highlighted insufficient training resources and the lack of ability to upskill frontline workers
- » 37% indicated outdated technology resources and the lack of budget to invest in technology for frontlines
- » 20% indicated that they don't have the means to measure productivity effectively

Solutions to these challenges can only be developed if deskless workers' experiences and perceptions are understood. All workers, and especially those on the frontline, deserve and need mentorships, training, and career guidance at the time and place work happens. These workers require seamless, automated access to the right business tools and technologies to do their jobs effectively and collaborate with the larger organization. Investing in technology for frontline employees can help streamline processes and improve productivity. Some of the major technological advancements to engage frontline workers include dedicated communication hardware, collaboration platforms, automation technologies (task or workflow automation), upgraded shift or schedule management software, and mobile-first applications. Workers provided with these tools get enhanced experiences, while employers benefit from higher loyalty and lower churn.

### ***Security Is Critical in Enhancing Worker Experiences***

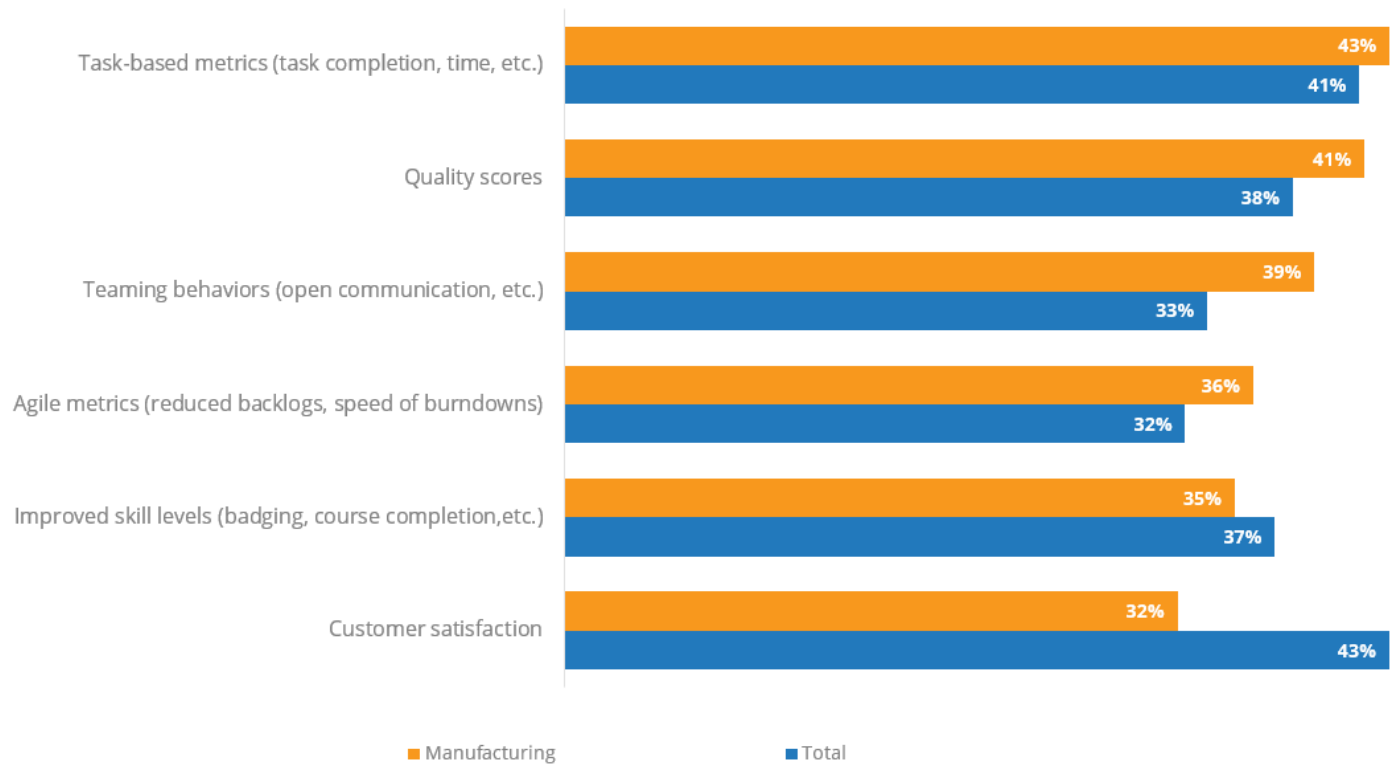
One of the other biggest technological challenges that continues to evolve in various sectors, including manufacturing, is security. Despite the critical nature of their work, frontline workers are often not equipped with the secure tools and resources they need for their jobs. In IDC's 2023 *Future of Work Global Survey*, IT leaders talked about the greatest security concerns in the manufacturing sector. Some of these include unsecure and unmanaged networks (e.g., public hotspots, home networks) (45%), work devices falling out of compliance (e.g., missing latest patches and software updates) (41%), compromised ability to monitor security posture of work devices (39%), and risky employee behavior (deliberate or inadvertent data exposure) (36%).

The difficulty and costs of securing onsite intranets have led many organizations to accelerate their migration of services onto the cloud, benefiting from increased security and decreased cost of implementation and maintenance. Frontline workers need frictionless access to the right applications and company resources to do the work. Furthermore, this access must be supported by built-in security protections that can safeguard not only the frontline workers but also sensitive customer data.

### ***Employee Productivity as a Top Driver of Work Transformation***

One of the most important business drivers of current work transformation initiatives is increased employee productivity. As per the IDC FutureScape results, by 2024, companies offering frontline workers democratized access to digital collaboration, process automation, and similar tools will see a 20% increase in revenue due to improved productivity.

Measuring productivity is shifting to a focus on outcomes and tasks, implying organizations are changing productivity metrics to focus on more holistic measures that go beyond task measurement to include customer satisfaction. Productivity measures are evolving to focus on experience levels for employees as agile practices become more broadly adopted. When IDC asked global manufacturing organizations how they measured employee productivity, around 43% of them rated that task-based metrics (e.g., task completion, throughput, time) are key in evaluating employee productivity, followed by 41% rated quality scores, 39% indicated teaming behaviors, 36% mentioned agile metrics (e.g., reduced backlogs, speeds of burndowns), and 35% pointed toward improved skills levels (see Figure 2).

FIGURE 2: **Metrics Used by Organizations to Measure Employee Productivity**

*n* = 1,197, manufacturing = 160

Source: IDC's Future of Work Global Survey, April 2023

### **Impact of Automation on Skills, Productivity, and Employee Experiences**

In an IDC survey, around 39% of frontline workers highlighted they would benefit from automation but lack the skills to use it. Key requirements for employees to automate their own work include easy-to-use tools, skills training, and a peer support community. Automation of processes and integrated workflows enable employees and managers alike to focus on higher-value tasks and drive greater process efficiency and employee engagement.

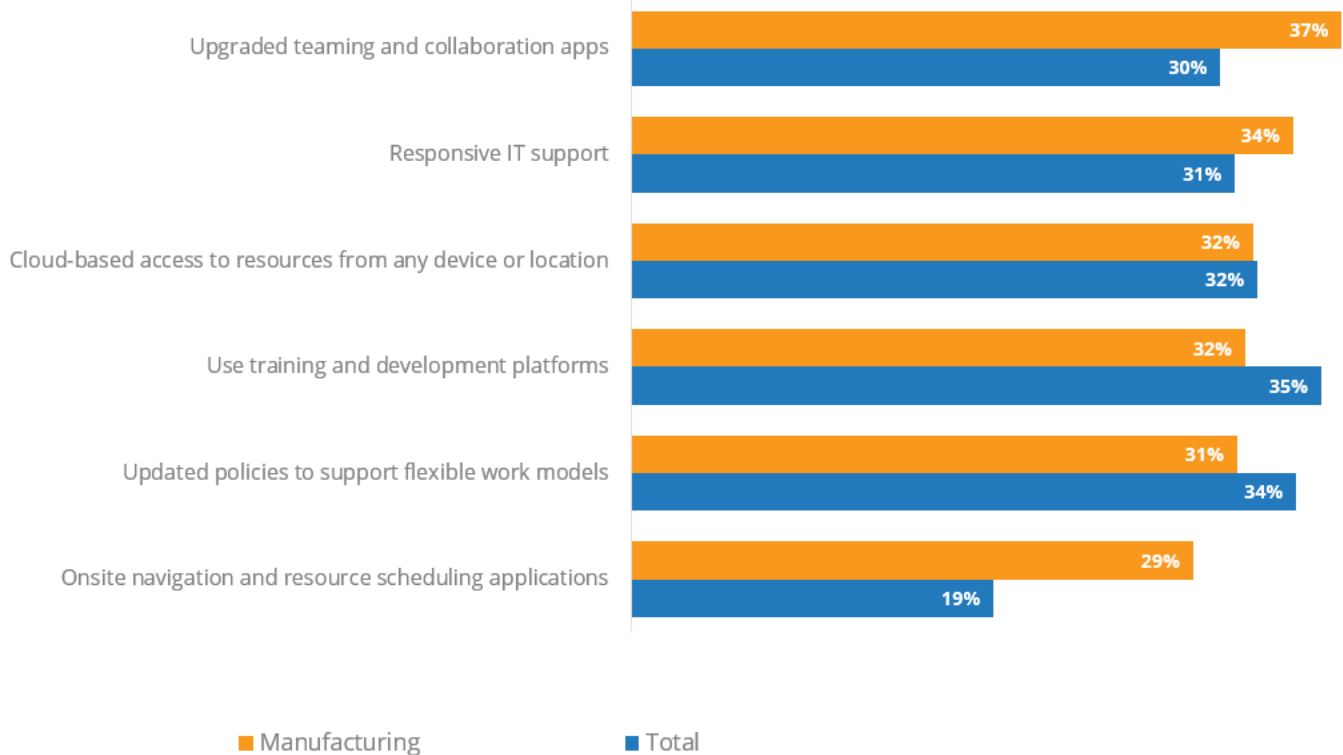
Major tasks being automated in the manufacturing sector include backing up data (55%), call center automation (42%), workflow automation (40%), task-focused apps on mobile devices (e.g., expense submission, store inspection, job assignment) (36%), screening potential employees (36%), and scheduling shifts and meetings (27%) (source: IDC's *Future of Work Global Survey*, April 2023; *n* = 1,197, manufacturing = 160).

Using automation, employers and employees get improved support, including automated onboarding, provisioning, and support for new and existing employees, increased insight, and decreased downtime via self-healing and other AI-enabled self-learning systems as well as greater productivity with workflow automation.

## Benefits of Investing in a Strong Workforce Experience

Today's workers want access to the right tools and technology, a sense of belongingness, and support from their peers and managers. Employees are drawn to organizations that not only prioritize work-life balance but also invest in improved connectivity, scheduling tools, and automation of daily tasks. Investing in technology for employee scheduling, time and attendance, forecasting, payroll, onboarding, communication, and skills management can help organizations streamline their processes and improve employee productivity. There are many initiatives and workforce programs that help executives see the potential return on investment from improving their frontline experiences (see Figure 3).

FIGURE 3: **Top Initiatives to Improve Employee Experiences**



*n* = 1,197, manufacturing = 160

Source: IDC's Future of Work Global Survey, April 2023

The benefits of investing in workforce experience and adopting an intelligent workforce management platform include:

- » Access to highly qualified talent pool and retention of top talent
- » Ability to offer continuous development guidance into the flow of work
- » Increased automation and greater productivity
- » Lower administrative costs and improved business results

Organizations are quickly recognizing the interconnected relationship between employee experience (EX) and customer experience (CX). In IDC's April 2023 *Future of Work Survey*, around 36% of manufacturing organizations highlighted that they have identified some positive impacts between EX and CX, while another 28% of manufacturers have proven that improved EX has positively impacted their CX.

## Definitions

- » **Employee experience (EX).** Refers to workers' perception about their journey in all their touch points within the organization from onboarding to exit. Optimizing EX refers to measuring, analyzing, modeling, prioritizing, and implementing actions to enhance employee productivity through employee wellness, trainings, and technological advancements to support a seamless experience across the employment life cycle. When it comes to EX optimization, some organizations are already on the maturity curve, while others may be at the beginning.
- » **Frontline workers.** Also known as deskless, front-line, non-desk, mobile, and task/shift workers, these are generally hourly workers, primarily individual contributors in industries such as customer service, manufacturing, retail, government, healthcare, hospitality, shipping, logistics, and transportation.
- » **Workforce optimization.** Represents ongoing management and optimization of an organization's workforce through intelligent labor forecasting, scheduling, time and attendance, tasks, and accommodations. Optimization calls for putting the right people in the right place at the right time, all while giving workers their own visibility and flexibility. This is in addition to communication, collaboration, feedback, and automation to connect data to action and provide better insights.
- » **Work transformation.** Refers to the process of improving workforce skills, tools, and abilities to keep up with the changes in an organization's business strategy. Work transformation is critical for effectively scaling an organization's digital transformation (DX) initiatives. For example, work transformation can be the rethinking of flexible work practices to accommodate different kinds of workers, requiring significant investments in technology, physical facilities as well as changes to policies and processes. Also, the impact of technology can be transformational for work (e.g., ChatGPT).

## Considering WorkForce Software

WorkForce Software is a global provider of workforce management solutions with integrated employee experience capabilities. The WorkForce Suite ties the employee experience process into the employee's normal flow of work, leveraging data about the employee to provide a seamless feedback approach. The WorkForce Suite adapts to each organization's needs, including pay rules, labor regulations, and schedules. It is delivered across desktop, smartphone, and tablet to make work easy, from the C-suite to frontline workers, providing authentic employee engagement at the time and place work happens.

The WorkForce Suite offers a modern workforce management platform with the following components:

- » **WorkForce Performance:** Forecasting, scheduling, time and attendance, tasks, and absence
- » **WorkForce Accelerators:** Absence compliance, fatigue management, phone entry, global templates, compliance portal, and clocks

- » **WorkForce Experience:** Communications, documents, training, and surveys
- » **WorkForce Intelligence:** Insights, analytics, chatbots, and assistant
- » **WorkForce Platform:** Intelligent decision architecture made up of compliance, automation, and integration, as well as personalization and employee authentication

Integrated with Oracle HCM, WorkForce Software delivers a solution designed to maximize customer ROI with productized integrations and enhanced user experiences. The WorkForce Suite helps frontline workers and managers with employee scheduling, time and attendance, employee engagement, labor analytics, employee apps, and automated labor compliance. Some of the benefits of WorkForce Management Suite include:

- » **Prevents employee burnout:** Workforce Software helps organizations forecast and schedule the right number of employees, with the right roles, at the right times, ensuring demand is met and teams are fully staffed.
- » **Enables effective communication:** WorkForce Software provides a platform for integrated real-time communications for engagement with every employee in the flow of work.
- » **Forecasts labor requirements:** Using the WorkForce Suite, revenue and shift data from previous weeks are used to accurately forecast upcoming demand and build the best schedule.
- » **Deploys optimized schedules:** Frontline operations teams get better insights into a day's work with improved scheduling that supports both flexibility for employees and optimized labor deployment for the business.
- » **Provides analytics capabilities:** C-suite executives have a bigger picture of ops, with real-time dashboards about employee metrics.

## Challenges

In the current economic state, busy frontline employees and managers need easier ways to schedule shift-based work and manage tasks. Businesses want to focus on improving profitability, but so much of their time is spent on manual administrative tasks. Without shared tools and clear workflows, managers are usually trying to figure out who is working when and what needs to get done. Many organizations managing deskless shift workers struggle to move beyond hierarchical leadership models that limit effective two-way communication. Managers need the right tools and resources that empower them to be empathetic leaders when employee well-being and business objectives are on the line.

Organizations need a platform that gives them all-in-one access to labor forecasting, scheduling, time and attendance, tasks, and accommodations and for each worker to have proportional access to real-time data about the manufacturing operations they are part of. For organizations willing to invest in workforce management technologies, this is a competitive market with solutions from both market leaders and agile start-ups looking to capitalize on current investments in employee experiences. WorkForce Software will need to educate customers on the value of its integrated component approach and how it addresses business challenges that enterprise buyers face because of the changing workplace and employee expectations.

## Conclusion

For manufacturers across the globe, attracting and retaining top talent remains a high priority. Many factors influence employee experience, including culture, environment, government regulations, and political shifts. To foster a workplace



where employees want to stay and thrive, employers must think locally and tune into their employees' specific needs and experiences. Enterprises with the best workforce management solutions will drive measurably better business results.

The value and rising need of comprehensive workforce management tools are becoming more and more evident. An effective workforce management software will encompass all the activities needed to maintain a productive and cost-effective workforce. To the extent that WorkForce Software can continue to evolve its workforce management offerings with enhanced cloud and analytics capabilities, the company will have a significant opportunity for success.

## About the Analysts



***Anu Mehta, Senior Research Analyst, Future of Work***

Anu Mehta is a Senior Research Analyst in IDC's worldwide Future of Work Agenda market research service. In this role, she is focused on expanding the research portfolio around frontline workers, industry comparative assessments, hybrid work maturity, and flexible work models, focused on supporting IDC's three Future of Work pillars: culture, space, and augmentation.



***Amy Loomis, Ph.D., Research Vice President, Future of Work***

Amy Loomis is Research Vice President for IDC's worldwide Future of Work market research service. In this role, Ms. Loomis covers the growing influence of technologies such as artificial intelligence, data analytics, robotics, augmented and virtual reality, and intelligent process automation in changing the nature of work. Her research looks at how these technologies influence workers' skills and behaviors, organizational culture, and worker experience and how the workspace itself is enabling the future enterprise.



## MESSAGE FROM THE SPONSORS

**More About WorkForce Software and Oracle**

The perfect complement to your Oracle HCM investment, the WorkForce Suite is a purpose-built workforce management solution with certified, pre-built integrations to HR and payroll to reduce implementation timelines, IT complexity, and risk. WorkForce Software is an Oracle Workforce Management Partner for employers with large hourly or shift-based employee teams, with high expertise in the retail and manufacturing industries. With a pre-built integration from the WorkForce Suite to Oracle HCM, Oracle customers can quickly gain the same benefits as 1,100+ WorkForce Software customers. Powered by Oracle Cloud Infrastructure, the WorkForce Suite is a best-of-breed cloud solution. [Learn more here](#)



The content in this paper was adapted from existing IDC research published on [www.idc.com](http://www.idc.com).

**IDC Research, Inc.**  
140 Kendrick Street  
Building B  
Needham, MA 02494, USA  
T 508.872.8200  
F 508.935.4015  
Twitter @IDC  
[idc-insights-community.com](http://idc-insights-community.com)  
[www.idc.com](http://www.idc.com)

**This publication was produced by IDC Custom Solutions.** The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2023 IDC. Reproduction without written permission is completely forbidden.