

Embrace human-machine partnerships

How technology, talent and culture come together to drive innovation in the age of AI



People, the heart of progress

In today's world, organizations are faced with ever-changing landscapes and frequent disruptions. To navigate this sea of change unscathed, they must first revolutionize how they operate.

At Dell Technologies, we believe that organizations that harness the ingenuity and creativity of their people, powered by the right artificial intelligence (AI) and data will be better positioned for success and will reach new heights of productivity.

It's evident organizations have an insatiable demand for innovation – but to drive success in an ever-dynamic environment, organizations require people who are appropriately skilled and who feel empowered and equipped to effectively handle change, ambiguity and potential failure. This is only compounded by the emergence of generative AI (GenAI) where effective leverage, alongside responsible usage, will be key to complementing human ingenuity.

So, to help more organizations embrace their human-machine partnerships, we conducted a new study, **Innovation Catalysts**, based on responses from 6,600 business and IT decision-makers (BDMs and ITDMs) responsible for driving or influencing innovation in their organization from 40 countries. In a three-part series, we double-click into key areas innovation leaders thrive in and explore where organizations across the world struggle:

This executive brief focuses on the third topic: **Embracing human-machine partnerships**

1. Build your innovation muscle.

How to make innovation part of your organization's DNA to lead in the AI-enabled world.

(Access here)

2. Maximize your data insights.

How to design a smart, flexible and resilient infrastructure to act on your data wherever it resides.

(Access here)

3. Embrace human-machine partnerships.

How to build an innovation culture and productive work experience where everyone thrives.

A shortage of talent

Organizations are encountering a gap in the skills and knowledge essential for fostering innovation. In fact, this shortfall stands as the primary obstacle preventing employees from personally driving innovation efforts, with the fear of failure and its anticipated repercussions also being seen as a barrier. However, despite awareness around the issue, organizations placed bridging this skills gap among their least likely innovation goals for 2024.

It's clear organizations need to not only enhance their learning and development frameworks, but also establish environments where experimentation is not just allowed but actively encouraged. Artificial intelligence could provide some assistance – but its adoption is fraught with challenges, most notably the need for additional skills.

Encouragingly, decision makers are specific about the skills they deem to be the most valuable. The agility and desire to

learn – easily learning new things and working with new tools, is considered most important for driving innovation in the next five years. This includes AI fluency – the understanding of when, where and how to use AI tools safely and effectively. Alongside innate human qualities like creativity, expertise, and critical thinking, it is essential for navigating today's dynamic technological landscape and the uncertain future. This becomes even more prominent when you consider that almost two-thirds (65%) of decision makers agree that many of the jobs and skills needed in 2030 are yet to emerge.

Of course, we don't know what the future holds – but as the field of AI, especially GenAI, evolves and is featured more heavily in everyday life, developing these skills is key to creating a thriving and productive human-machine partnership.



The need for the right technology

In recent years the workplace has undergone a significant transformation. Technological advancements aid productivity and drive human performance, and even more so with the rise of AI. The right technology is critical as we rethink how we work today and tomorrow.

As organizations continue to adopt a hybrid working model, a mix between on-site and remote work, the need for tools that enable safe collaboration and productivity will be vital – and organizations know it. In fact, three quarters (75%) admit that they need to update their office and meeting spaces to improve each of these aspects.

Encouragingly, organizations are taking steps to facilitate collaboration, productivity and thereby innovation. The vast majority (81%) of decision makers agree that their organizations are providing the necessary technology to their entire workforce based on individual needs, workloads, and preferences. Yet, why is it then, that the third most cited personal challenge to innovation is not having the tools or technology needed to effectively work and innovate? It appears organizations may be trapped within a technology

paradox, whereby tools are being deployed but are not the 'right' fit for the task at hand.

Furthermore, the shift to hybrid working, compounded by evolving technology, has created a complex web of security challenges for organizations. Despite this, the vast majority (84%) organizations say they ensure secure access to all employees wherever they are while mitigating threats. But is this confidence misplaced?

Around two thirds (67%) believe some employees go around IT security guidelines or practices because they delay efficiency or productivity. Furthermore, concerns around security are preventing engagement with emerging technology. Specifically, data access and/or concerns about data/IP leakage or infringement is the top reason holding organizations back from adopting GenAI.

To redefine work environments, a modern workplace needs to bring intelligence, simplification, security and sustainability seamlessly together.

GenAI, the productivity accelerator

GenAI is set to revolutionize the way we work, live and do business. Yet, it's crucial to understand that we as humans are not being replaced. In fact, 79% of decision makers believe that machines will augment our capabilities, taking human productivity to new heights.

Of course, there are reservations around the technology, including concerns about security, data privacy and legal or copyright clarity. This underlines the essential need for its responsible use – but whose responsibility is it?

Over three quarters (77%) agree that the organization, rather than the machine, the user or the public, is responsible for any AI malfunction or undesired behavior. Organizations acknowledge the significance of this responsibility, but they'll also need to guarantee effective communication to employees regarding its implementation and any updates.

In the past, IT departments were slow to provide resources that aligned with business requirements, leading to the emergence of "Shadow IT". Now, with the emergence of GenAI, organizations face a similar juncture, where failing to provide adequate guidance and support could give rise to a new threat: Shadow AI. It's therefore critical that IT leaders are clear and consistent in their framework. After all, adopting a consistent and transparent approach is the most effective way to prevent issues.

If rolled out successfully, GenAI offers the potential to augment the employee work experience and the technology employees interact with. It's understandable then, why organizations have such high expectations. In fact, just over eight in ten (81%) believe that GenAI tools will help deploy more intuitive, personalized applications for their workforce.

Embracing human-machine partnerships

The move toward working everywhere has only fueled innovation. As more areas of work transform with emerging technologies, employees must be empowered and equipped with the right technology to unlock their ingenuity. They are the core of innovation and progress.

The essential skills and confidence to innovate is crucial, particularly with the emergence of GenAI, which necessitates clear guidelines and consistent communication. Such strategies will not only draw in talent but also open up new opportunities for enhanced efficiency, creativity and innovation.

Daunting as it might seem, you don't need to do it alone.

With Dell Technologies as your catalyst to accelerate from ideas to innovation, you'll seize the power of AI-ready solutions and empower everywhere work to accelerate new levels of productivity, simplify IT and advance sustainability.

Together, we will embrace human-machine partnerships to transform work and advance innovation faster.

To learn more, visit [Dell.com/InnovationCatalyst](https://www.dell.com/InnovationCatalyst).

Source: Innovation Catalysts study, Dell Technologies, February 2024.

Copyright © 2024 Dell Inc. or its subsidiaries. All Rights Reserved. Dell Technologies, Dell and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.