



NEXT DECADE OF TECH

ENVISIONING THE 2020S

METHODOLOGY

Global survey featuring insights from **5,000+ tech professionals** who are ISACA members or certification-holders

Respondents represent **139 countries**

+/- 2% margin of error

THE TECH LANDSCAPE OF THE 2020S

A SUNNIER OUTLOOK AT WORK THAN AT HOME

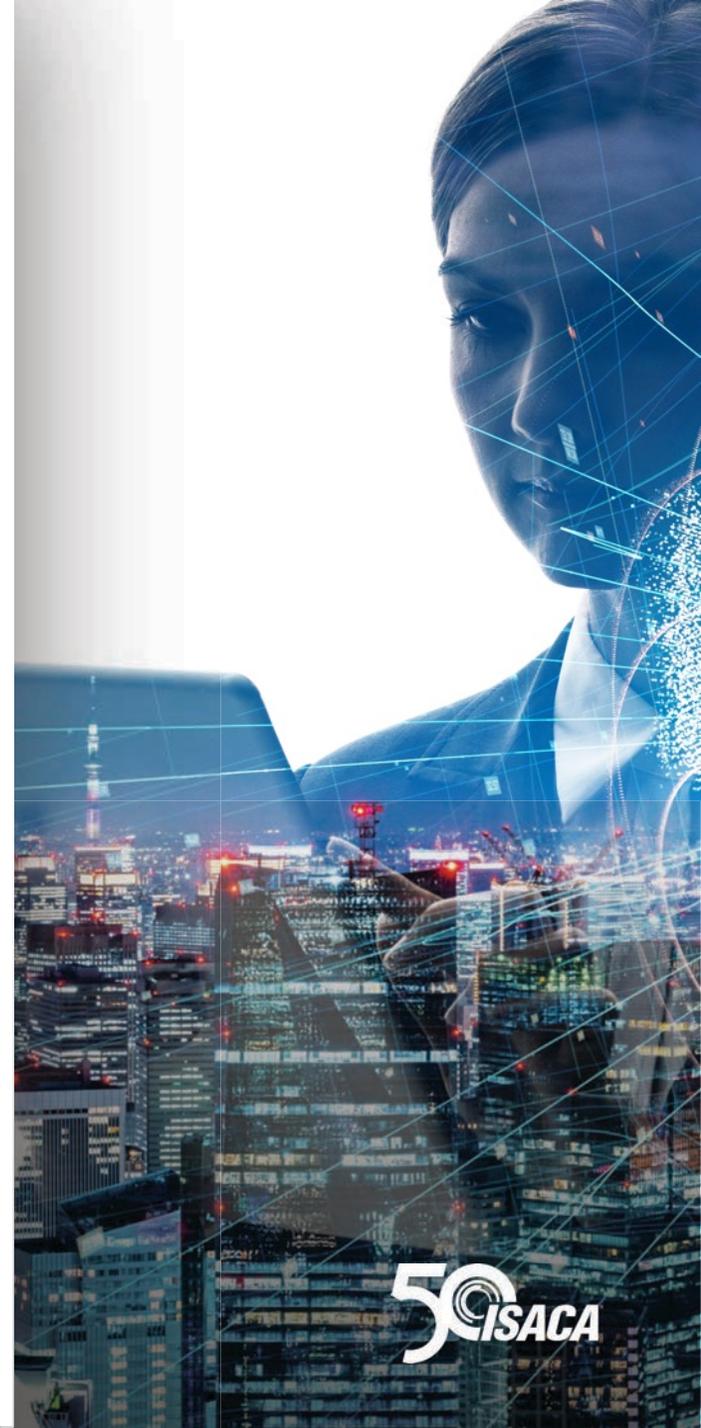
Respondents are more optimistic about how technology advancements in the new decade will impact their careers than how they will impact society as a whole

59%

are optimistic about how **tech advancements** will affect their **career**, compared to only

40%

who are optimistic about how the evolving **tech landscape** will affect the **general public**



ENTERPRISES NOT ADEQUATELY PREPARED FOR WHAT'S TO COME

The vast majority of respondents think enterprises are not ready for what's to come

81%

say enterprises are not investing enough in the people skills needed to successfully navigate the changing landscape of the next decade

70%

say enterprises are not investing enough in the needed technology

THE EVOLVING RELATIONSHIP BETWEEN AI, AUTOMATION AND HUMANS

93%

of respondents say the augmented workforce – people, robots and AI working closely together – **will reshape how some or most jobs are performed**

THE IMPACT OF AUTOMATION ON THE WORKFORCE

A SPLIT DECISION

Automation and the augmented workforce figures to have a major impact on employment in the new decade, but will the impact be more helpful or harmful?

The survey results suggest it could be a split decision:

58%

expect pay levels in the IT industry to increase

AND

66%

say more contract work will become available

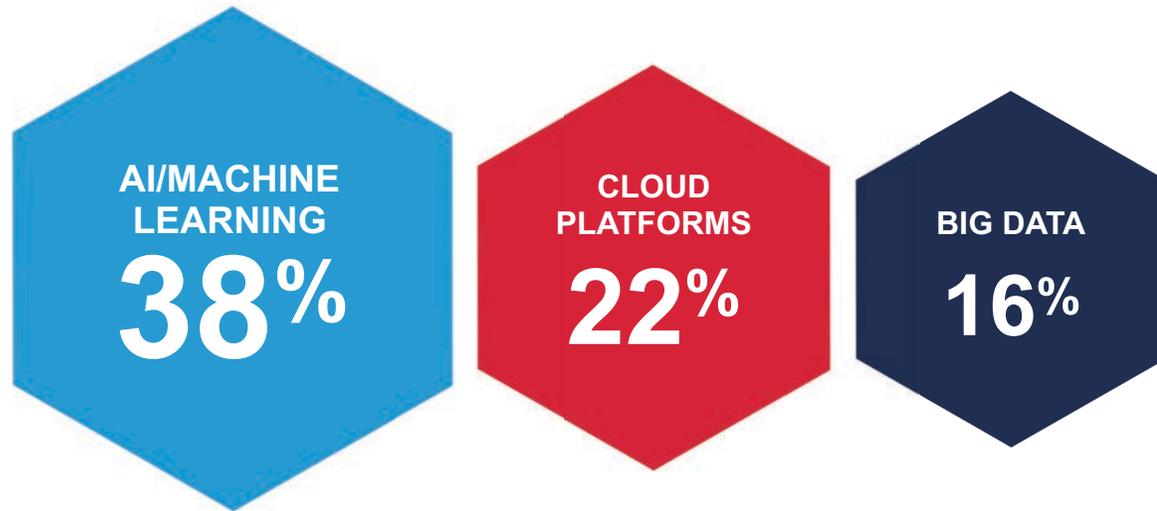
BUT

65%

anticipate job stability to decrease

AI: THE SIGNATURE TECHNOLOGY OF THE NEXT DECADE

When it comes to overall impact, artificial intelligence tops the list of **technologies expected to leave their mark on the 2020s:**



AI/machine learning was rated as **the most important enterprise technology of the next decade** (38% of respondents), followed by cloud platforms (22%) and big data (16%).

And 87% of respondents expect that **AI will have a major or moderate impact on the profitability of most enterprises.**

BUT WILL AI BE DEPLOYED RESPONSIBLY?

Respondents are split, 50-50, about **whether enterprises are likely to give ethical considerations around AI and machine learning sufficient attention** to prevent potentially serious unintended consequences in AI deployments.

TOP FIVE POTENTIALLY MALICIOUS OR ERRANT USES OF AI THAT CONCERN RESPONDENTS:



Attacks on critical infrastructure



Social engineering



Autonomous weapons



Attacks targeting healthcare sector



Data poisoning

RISE OF THE DIGITAL NATIVES

In the 2020s, increasingly, **digital natives** (those who grew up during the age of mainstream digital technology) **will ascend into leadership roles within their enterprise**

WHAT ARE THE MAJOR WAYS THOSE DIGITALLY FLUENT LEADERS WILL CHANGE THE ENTERPRISE LANDSCAPE?

72%

Cybersecurity will become a higher priority

56%

Enterprises will become more proactive about deploying emerging technologies

54%

Boards of directors will become more technology-savvy

53%

Security by Design and Privacy by Design will be ingrained in most technology builds

51%

Employees will use mobile devices more than laptops or desktop computers

CYBERSECURITY: FAMILIAR CHALLENGES... BUT A NEW SOLUTION?



Cybersecurity threats and attacks are expected to continue, especially given the well-documented cybersecurity skills gap.

Only **18% of respondents expect the global shortage of cybersecurity practitioners** to be mostly or entirely filled in the new decade.



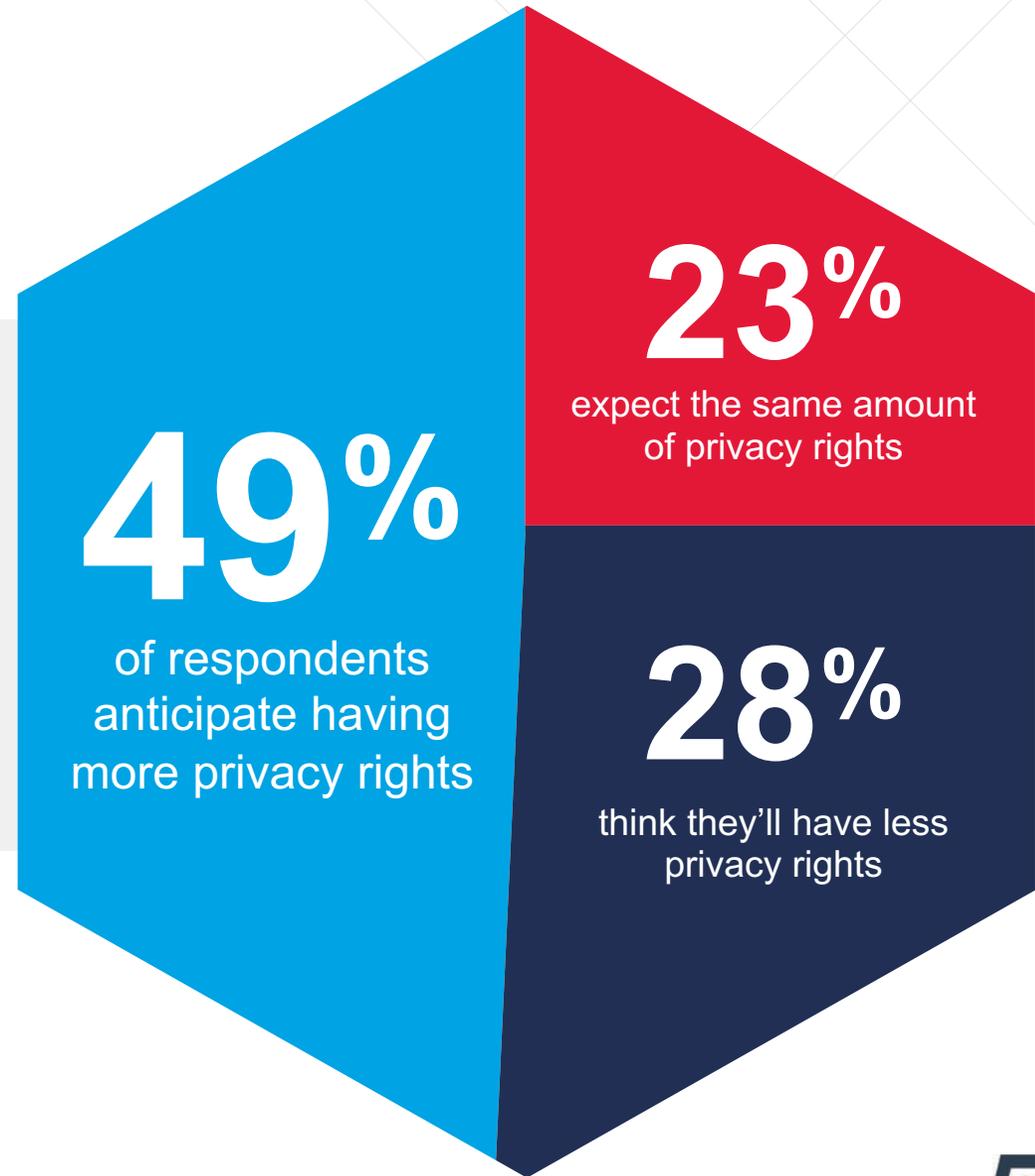
But will internet users have a safer path to protecting themselves online?

73% of respondents think it is likely or very likely that an “internet of internets” becomes mainstream, in which users have the option to pay for a safer place within the internet.

HOW WILL PRIVACY FACTOR IN?



Given the evolving regulatory landscape and the impact of emerging technologies in the 2020s,
what will be the impact on people's privacy rights?



BIG CHANGES COMING TO OUR DAY-TO-DAY LIVES

Technological innovations could **phase-out several routine activities and lifestyle necessities** to which many people have become accustomed. **What are some common activities that will become less necessary in the new decade?**



75%

Using cash,
even occasionally



60%

Using physical keys



58%

Using physical
IDs/boarding passes



58%

Going to a physical
office location

AND WHAT ABOUT THE REALLY BIG CHANGES?

48%

say it is likely or very likely that **driver-less cars** will become mainstream in their countries

37%

say **human augmentation** (implants and other technologies added to the human body to enhance capability and efficiency) will occur frequently or always

46%

say **quantum computers** will **carry out tasks** that today's digital computers cannot within five years

50%

say it will become increasingly common for individual countries to **attempt to “disconnect”** from the **global internet**



Learn More

about ISACA's Next Decade of Tech survey at www.isaca.org/next-decade-of-tech

Questions?

contact communicationsteam@isaca.org



THANK YOU!