

# Working Towards the Future

AI optimism and the  
future of how we work



## Overview

This report has been prepared by TCS futurists and is based on a survey of prominent futurists, executives, and foresight professionals around the world. Participants answered quantitative and qualitative questions to inform a vision for AI and the future of how we will work across industries and job functions in the coming years.

**The findings demonstrate overall optimism around AI's impact in the workplace.** Continued adoption of Generative AI and other forms of AI in the enterprise in 2024 will lead to positive, incremental changes in work, with tremendous transformation of the work experience in the years to come. In general, participants viewed the future of working in nearly all industries as safer and more satisfying, empowering workers of all types to focus on what makes them passionate and find meaning in what they do.

[**Note:** Generative AI was used throughout the development of this report to help analyze responses, identify trends, and draft copy, with close supervision and collaboration with TCS futurists.]

## Findings for the future: Overall optimism

**90%**

of our surveyed futurists  
**are optimistic about the  
changes AI will bring** with  
nearly half (40%) being  
very optimistic.

**72%**

of participants see AI  
**making significant,  
positive contributions**  
to employee health and  
wellness.

**70%**

of respondents anticipate  
the potential for **jobs  
previously onsite to go  
hybrid/remote** due to AI  
adoption.

**Most futurists are optimistic about the changes AI will bring to the way we work.** The survey found an overall consensus that AI will significantly improve work experience with possible outcomes such as shorter work weeks, fluid careers, the advent of AI therapists, hybrid/remote work in roles that were not possible before, and other novel benefits.

- **Optimism for the future of working:** 90% of our surveyed futurists are optimistic about the changes AI will bring with nearly half (40%) being very optimistic.
- **AI's contribution to worker health and wellness:** 72% of participants see AI making significant, positive contributions to employee health and wellness.
- **Autonomy and new ways of working:** 70% of respondents anticipate the potential for jobs previously onsite to go hybrid/remote due to AI adoption.

**Ambient AI is already having an impact in the enterprise, and continued 2024 adoption will demonstrate the potential to transform many job roles.** Survey respondents anticipate that AI will ultimately introduce new types of entry level jobs, transform how companies upskill and reskill, and make jobs that are traditionally physically demanding or dangerous much safer.

- **Entry level job transformation:** 90% of surveyed futurists anticipate that entry level jobs will look much different in the future.
- **Empowered employee upskilling and reskilling:** Ambient AI could play a crucial role in facilitating rapid skill acquisition, making it easier for employees to adapt to new roles and technologies.
- **Physically demanding or dangerous jobs:** In the near term, an AI connected to sensors, cameras, etc. could serve as a warning system for early indications of risk to human workers.

**75%**

of respondents anticipate that **AI adoption will enable small businesses to expand** into new markets and reach a broader customer base.

**60%**

of futurists surveyed foresee companies **providing AIs** to employees.



**Dr. Harrick Vin**  
CTO, TCS

Generative AI isn't just about productivity and scaling the amount of work done. Instead, it demonstrates the power of AI to transform knowledge across a business for every worker, ultimately increasing the quality of work done, irrespective of experience and skill level.

**AI will provide all types of workers—from entry level to CEOs to small business founders—with equal access to information and capabilities.**

As we move forward, strategic and creative work will be democratized for organizations of every size and employees of every skill level, ultimately transforming the work experience to center on collaboration with AI assistants, and one day, AI co-workers.

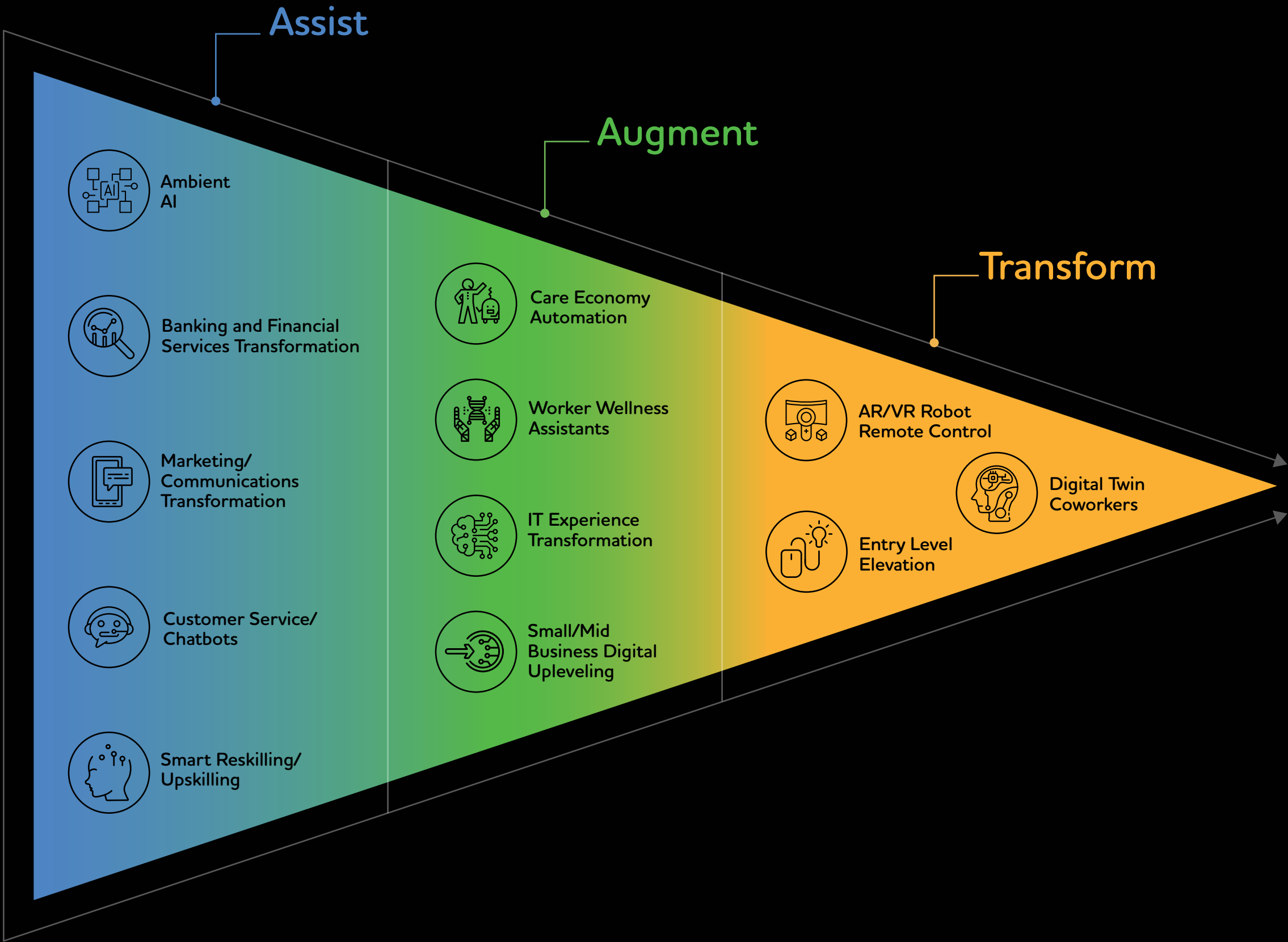
- **Small business impact:** 75% of respondents anticipate that AI adoption will enable small businesses to expand into new markets and reach a broader customer base.
- **AI in the daily work experience:** 60% of futurists surveyed foresee companies providing AIs to employees, while 40% anticipate a "Bring Your Own AI" (BYOAI) model.
- **AI assistant vs. co-worker:** AI will level the playing field by providing all levels of workers from entry level to CEOs with equal access to information and capabilities, leading to higher levels of employee engagement, ideation, and innovation across all levels.

**From an industry perspective, futurists see marketing and communications fields experiencing the earliest AI-led transformation, followed by healthcare and education, banking and financial services, and IT and software development.** While how soon each industry will be transformed will be dependent on a number of factors, the industries that will benefit most will embrace the ability of AI to help workers focus on work that is more human, creative, and strategic.

- **Marketing, communications, and digital content:** Ranked by 43% of respondents as most likely to see the first positive transformation.
- **Banking and financial services:** Ranked highly based on transformation of customer service and reliance on data-intensive applications.
- **Healthcare and education:** Ranked highly based on transformation of customer experiences and potential for employees to focus on essential care-giving activities.
- **IT and software development:** Ranked highly based on potential for technical employees to broaden skillsets and leadership capabilities.

# Working Towards the Future

AI optimism and the future of how we work





**Frank Diana**  
Principal Futurist, TCS

## Working towards techno-optimism

- 90% of surveyed futurists are optimistic about the changes AI will bring and nearly half of those are very optimistic.
- 72% of participants see AI making significant, positive contributions to employee health and wellness.
- 70% of respondents anticipate the potential for jobs previously onsite to go hybrid/remote due to AI adoption.

The role of a futurist in the enterprise is to envision possible futures and help companies prepare for what may come next. In today's world, technology trends often lead this conversation, and it's no surprise that the potential of AI and the early impact we're seeing with Generative AI generates both celebration and concern. Overall, the survey and our analysis of the results show a tendency towards optimism about what will happen next regarding AI and how we work.



**Gray Scott**  
Futurist

If AI is used properly it should enlighten humanity... It will enable us to work much faster and more efficiently, [and] shorten the workload and the time it takes to complete tasks. I see a three-day workweek in the next 15 years if this pace of AI development continues.

It's worth noting that optimism is not always the norm for futurists. Our work often balances *techno-optimism*, the belief that technology can continually be improved and can improve the lives of people, making the world a better place, with *techno-pessimism*, the belief that new technologies create as many, if not more, problems than they solve.

This is a question I have asked audiences online and at events year over year: When it comes to technology as the answer for broad societal problems, are you positive, negative, or both? Answers tend to be positive, which has increased over time. For example, in informal polling in 2016 about 43% of those in audiences had a positive outlook, 38% both, 15% negative. Since then, the percentage of those with a positive outlook has gone up by 10%.



**David Smith**  
CEO, Global Futures & Foresight

[AI will enhance the work experience through]... less boring work, more challenging, but satisfying work.

### Optimism for the future of working

In this context, a techno-optimist would believe that AI and other technologies are the answer to improving current workplace woes: a lack of engagement, poor work/life balance, inequality, etc. It is compelling, then, to compare my polling with the results of this survey specifically focused on AI and work: **90% of our surveyed futurists are optimistic about the changes AI will bring and nearly half of those are very optimistic.** In this context, futurists are significantly more optimistic about tech's impact on the way we work in comparison to tech's larger implications for the future.





**David Espindola**

Futurist, Founder, and  
Principal, Brainyus

Ultimately, AI may be able to do all the tedious, dangerous, or physically demanding jobs, eliminating most of the undesirable work so that humans can focus on doing work that is rewarding and pleasurable.



**Robert Caldera**

Managing Principal  
(Owner), Future | Shift

...every employee will essentially have a therapist at their fingertips to help get through difficult times at work.



**Anthony Scriffignano**

PhD, Distinguished Fellow,  
The Stimson Center

My hope is that we do not use AI to work less, but to focus on problems that do not get the right attention due to resource constraints.

This optimism seems to largely come from a belief in the ability of AI to transform work for a world where workers work on what makes them happy, interested, and passionate. The consensus is that work will certainly transform, some jobs will be created, and some jobs will go away. There are areas of concern, but a historical perspective suggests that these will be overcome. Periods of great invention go in two directions: constructive and destructive. It is incumbent upon society to mitigate risk while enabling those innovations that advance human development, to allow for opportunity while limiting the disruptors.

Examining the most positive ways that work will transform for humans going forward, participating futurists highlighted a few key areas, including AI as an enhancer for workers' physical and mental health.

#### AI's contribution to worker health and wellness

**Approximately 72% of participants see AI making significant positive contributions to employee health and wellness.** As participants pointed out, enterprise apps already exist to help employees self-monitor and manage stress and mindset. As these apps grow in functionality and popularity, they will be increasingly adopted by businesses as a form of employee benefit. An AI assistant dedicated to work wellness will offer guidance on health maintenance, hydration, and breaks during work hours, for instance. Looking further to the future, an AI assistant could monitor the tone of your voice during a conference call, identify stress, and recommend a 15-minute walk afterward.

#### Autonomy and new ways of working

Beyond these novel benefits, when it comes to AI, there is a clear expectation that we will start working in different ways, for different reasons. **Nearly 90% of respondents express optimism about employees achieving greater autonomy and flexibility in how they work through AI benefits.**

Of course, the world has already experienced a transformation via hybrid and remote work in the post-pandemic world. However, **70% of respondents see this trend continuing as AI enables jobs that could only be done onsite previously to be hybrid/remote in the future.** This will dovetail with ongoing AI advancements to further shift managerial focus to performance-over-time indicators for certain types of businesses.



**Puruesh Chaudhary**

Founding CEO, Foresight Lab

Mundane/repetitive/analytical tasks would be made redundant at an organizational level... hence [the] workforce would be required to perform higher order tasks, which includes creativity and the capacity to imagine to better strategize and plan. The concept of 9–5 will change; work from anywhere would be an acceptable norm.



**Sharad Agarwal**

Chief Metaverse Officer,  
Cyber Gear

We will all get more quality time to spend with family... and focus on things that make people happy.



**Gray Scott**

Futurist

The amalgamation of vast amounts of information will change how we use AI in the future. What was impossible only five years ago is now possible. As quantum AI takes hold, we may no longer need to worry about searching the web anymore. Just as libraries became an old way of researching information, so too will search engines in the future.

These findings seem to support the possibility of a four-day work week, a conversation that has been gaining mainstream attention in recent years. However, on this topic the experts are divided. While, as shown above, most futurists anticipate that AI could reduce work time, many disagreed about the likelihood of companies officially instituting it. As with the original creation of the five-day work week, it may take substantial societal and governmental pressure for this to happen.

There are a number of reasons to feel optimistic about where technology is taking us, especially as it relates to AI and work. In the first decades of the 1900s we experienced a similar transformation as new technologies like steam power, and work philosophies like assembly lines challenged the status quo, resulting in greater productivity but also new workers' rights and higher quality of life for many. Based on the consensus of the prominent futurists featured in this report, AI will have a similar disruptive but net positive impact.







**Bill Quinn**  
Futurist, TCS

## Ambient AI in the enterprise



**Joe Carson**  
CEO, Spend Strategies

Soon subject matter experts may be able to ‘program in’ entry level job process steps and practices. AI will be able to leverage past activities and their outcomes so as to capture lessons that turned out well and mistakes to avoid for next time.



**Deepak Seth**  
Adviser, AI-led Transformation

We will become increasingly dependent on [AI]... like how people don’t know how to read a paper map, it will become so ubiquitous that we will take it for table stakes... like how life was without piped water or automobiles or planes or electricity. We take them for granted. So will it be for AI.

- 90% of surveyed futurists anticipate that entry level jobs will look much different in the future.
- Ambient AI could play a crucial role in facilitating rapid skill acquisition, making it easier for employees to adapt to new roles and technologies.
- In the near term, an AI connected to sensors, cameras, etc. could serve as a warning system for early indications of danger or to help workers escape danger.

The integration of AI in the workplace is undergoing a transformative shift towards “Ambient AI.” In the context of work, this concept revolves around the idea of AI being an omnipresent, seamlessly integrated capability in daily work activities.

Ambient AI is already making its way into our workplaces via typical tools like email, calendars, and chat software. Ambient AI, by its very nature, is unobtrusive yet omnipresent, learning and evolving in the background. Its potential to transform the workplace spans various dimensions—from redefining the nature of entry level jobs, to enhancing the productivity of existing roles, to creating safer work environments for hazardous jobs. The question then arises, how will workers experience the benefits of this evolution and how will it affect their roles across entry level jobs, reskilling, and physically demanding or dangerous jobs?

### Entry level job transformation

All futurists surveyed anticipate that AI will result in significant changes to entry level jobs. **90% view entry level jobs looking much different in the future.** This change, however, is not necessarily about job elimination but about transformation towards more sophisticated, efficient, and intellectually engaging roles. The entry level employee’s Ambient AI will monitor their output for quality and errors to help them produce work at a higher level than today’s workers, shortening the learning curve and more rapidly improving skills to advance their careers. In effect, a new employee’s AI will serve as a “force multiplier” to overcome their lack of experience.



**David Smith**

CEO, Global Futures & Foresight

Low quality repetitive tasks will disappear... [work] shifts from lower quality to more senior roles, plus all the jobs to teach and integrate AI into workflow.



**Gayemarie Brown**

Managing Director and Founder, Wintam Place Consulting

AI will replace most entry level jobs. We will need to completely overhaul our education systems and work place assumptions so that we begin internships at a much younger age and think about how we accelerate learning. I think the current generation of college students should be encouraged and supported to be advanced thinkers, risk takers, and leverage as much AI capability into their roles.



**Gray Scott**

Futurist

AI will run in the background, learn new skills, and update the user knowledge base in real-time.

However, one respondent envisioned the advantage AI will give entry level workers as possibly creating conflict with middle managers who didn't have the benefit of an AI at their side during the early stages of their careers. Middle managers may feel resentful as younger workers quickly rise through the ranks and overtake them on the organizational ladder. This possibility highlights the need for ongoing upskilling and reskilling, leveraging AI so that all employees see the benefit.

### Empowered employee upskilling and reskilling

In his book *Future Shock*, the futurist Alvin Toffler famously wrote, "The illiterate of the twenty-first century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn." This quote has never been more relevant than where we find ourselves today at the dawn of a new era in AI.

As the nature of work evolves, so too must the skills of the workforce. Ambient AI could play a crucial role in facilitating rapid skills acquisition, making it easier for employees to adapt to new roles and technologies. This aspect of AI could be particularly transformative in industries where the pace of change is rapid, or in industries where AI enables automation where manual labor was previously required.

One of the futurists surveyed envisions a world where companies will create custom Generative AI solutions using data sets and text specific to their business and the roles and responsibilities of their employees. This will enable employees to ask questions on complex topics related to their jobs and learn very quickly. For example, if their job requires them to learn a new system or an in-house methodology, they will be able to submit queries on the topic that generate the specific information they need, when they need it, in a very understandable form. Ambient upskilling technology will be built into everyday tasks, instead of requiring dedicated training time.

### Physically demanding or dangerous jobs

Regarding physically demanding or hazardous jobs, the role of AI is seen as one of augmentation and safety enhancement. While AI might not replace these jobs entirely, it can be used to make them safer and more efficient. For example, AI systems could monitor work environments for potential hazards, provide real-time safety guidance, and even automate some of the more dangerous tasks, thereby reducing the risk to human workers.



**Suhas Uliyar**

SVP Product Management,  
Oracle

AI-driven systems can enable remote control or operation of machinery in dangerous environments, reducing the need for direct human presence in hazardous locations. AR and wearable AI devices can guide workers through complex tasks, providing real-time data and instructions, enhancing safety in dangerous situations.



**Jamais Cascio**

Futurist

...ideally AI could, when connected to sensors/cameras, serve as a warning system for early indications of danger or if conditions aren't as safe/ready as they appear. Think of it as a 'Spider-Sense' for workplace hazards.



**Puruesh Chaudhary**

Founding CEO, Foresight Lab

[AI will assist upskilling for workers to] improve their capability by providing them assisted learning opportunities to gain professional advantage.

Every futurist in our survey envisions that eventually, most demanding and dangerous jobs will be done by AI-powered robots. However, that scenario is likely years away because those tasks require complex problem-solving and robotic dexterity. In the near term, an AI connected to sensors, cameras, etc. could serve as a warning system for early indications of danger or to help workers escape danger. Imagine a scenario where a firefighter becomes lost in the smoke of a building fire. An AI-enabled heads-up display in their mask could display a digital twin of the building to help guide them to safety.

Ambient AI represents a significant paradigm shift in the workplace. Its potential extends beyond mere automation, offering opportunities for enhanced efficiency, safety, and job satisfaction. As we move towards an AI-enhanced future, the challenge for organizations will be to harness this technology in a way that not only improves operational efficiency and productivity, but also empowers employees, fostering an environment of continuous learning, creativity, and innovation. The integration of Ambient AI into the workplace is not just a technological revolution but a catalyst for a broader evolution in how work is understood, organized, and valued.





**Kevin Benedict**  
Futurist, TCS

## Your AI co-worker

- 75% of respondents anticipate that AI adoption will enable small businesses to expand into new markets and reach a broader customer base.
- 60% of futurists surveyed foresee companies providing AIs to employees, while 40% anticipate a “Bring Your Own AI” model.
- AI will level the playing field by providing all levels of workers from entry level to CEOs with equal access to information and capabilities, leading to higher levels of employee engagement, ideation, and innovation across all levels.



**Robert Caldera**  
Managing Principal  
(Owner), Future | Shift

Every employee will be supported by an AI assistant, making it like you’ve doubled or even tripled your workforce without adding any extra headcount.

Today, we live in a time where AI has emerged as a transformative force reshaping our workplaces. Our recent survey findings from futurists and business leaders reveal an expectation that AI will rapidly transition from a novelty tool to an autonomous collaborator akin to a co-worker.

### Small business impact

The integration of AI into the workplace is moving quickly from a vision to a current reality. AI, capable of understanding context and executing a wide range of tasks, is already shaping our workplaces, and will soon be capable of supporting autonomous operations through GPTs and third-party software platforms.



**David Espindola**  
Futurist, Founder, and  
Principal, Brainyus

AI will provide leverage to small businesses, eliminating barriers that would otherwise prevent them from competing with larger companies. The entire definition of a small business may change, as effective companies with very few employees will be able to have just as much impact or generate as much revenue as companies that today require a large number of employees.

This evolution is anticipated to level the playing field in business by democratizing business operations, enabling even small- and medium-sized teams and organizations to operate with the efficiency and creativity previously reserved exclusively for larger organizations with more resources. In fact, **75% of respondents anticipate that AI adoption will enable small businesses to expand into new markets and reach a broader customer base.**

### AI in the daily work experience

I am a frontline witness to this workplace transformation. I use generative AI daily in my work as a futurist at TCS. I use it to scan the globe for emerging trends, developments, risks, innovations, and emerging technologies. I look for new use cases and development timelines, and then research each of their interdependencies and how they will converge



**Dr. Paul J. Bailo**  
CEO, PIP Consulting Group

AI will be like a laptop or mobile phone... equal if not greater than the impact of the mobile phone. [AI will] eliminate the simple, entry level jobs... AI will be your co-worker, only no heartbeat.



**David Espindola**  
Futurist, Founder, and  
Principal, Brainyus

AI assistants will be available on demand to help the employee gain new knowledge, prepare for a meeting or presentation, and consider possible alternatives to address a particular problem.



**Jamais Cascio**  
Futurist

As many/most entry level jobs require rote repetition as a primary task, AI-based systems could likely take over most of these jobs. However, as long as people prefer to interact with a human, some/many of those jobs will still be done by people, at least until society grows more comfortable with casual interaction with AI.

with other developments and trends likely to shape our future. I ask AI to format content, to organize lists, to make judgments, and to prioritize based upon my needs. I ask AI to find historic patterns that might inform future impacts. After bringing this research together, AI helps create illustrations, photos, charts, and designs that help with my presentations. It is truly my AI assistant.

In addition to the utility mentioned above, when it comes to ideation and brainstorming, our emergent human-AI collaboration is effective at generating sparks of creativity and imagination. Today, I am thinking new thoughts because of this collaboration. I am discovering new patterns and trends. I am pursuing new ideas. This human-AI collaboration enables me to discover new paths to be explored and provides me with the resources to follow it.

As discussed already, futurists overwhelmingly believe that AI assistants will be adopted by both companies and individual workers. Yet there was no consensus on exactly how it might be organized. **Will individual workers select and customize their assistants in a “Bring Your Own AI” (BYOAI) model? Or will companies be primarily responsible for training and maintaining each AI? In our survey results, 60% of futurists anticipate the companies would take responsibility, while 40% anticipate the BYOAI model.**

It is reported that OpenAI is already working on agent software, a form of AI assistant. I anticipate we will see both evolve—personal digital agents that we individually control and use in our personal lives, and employer supplied digital assistants that provide secure access to restricted company data, platforms, and applications, while also protecting confidential company data and competitive secrets.

#### AI assistant vs. co-worker

Today, human-AI collaboration seems to be more about humans directing AI to complete defined tasks. As we humans continue to learn and adapt, we will be able to capture more value and utility from these AI assistants. However, it will not be long before AI itself will advance from a passive tool to an active co-worker that knows us, knows our routines, and knows our jobs. Soon these AI assistants will be transformed into autonomous co-workers fully engaged and working alongside us.





**Jamais Cascio**

Futurist

[AI assistants will most benefit] mid-level executives across industries that could use a personal assistant but don't yet have the professional weight or position to qualify for a human assistant. Any profession or job that requires detailed information about a particular client or issue, especially when the job repeatedly interacts with the subject [will benefit from AI.] Think here of a therapist. The AI assistant serves as adjunct memory, holding together and making available all of the relevant information about the client/subject. The AI does not interact with the client or subject, but may observe and record.



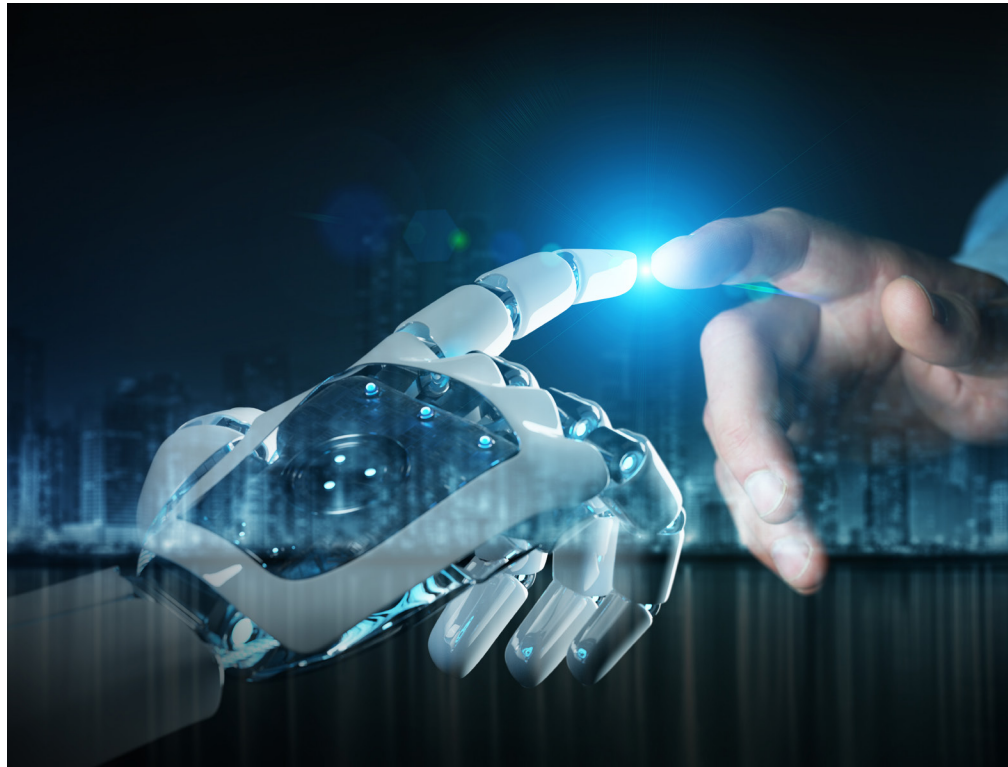
**Liselotte Lyngsø**

Futurist, Founder, and CEO,  
Future Navigator

[AI will make possible] better hybrid working with AI capture, new flat group formation with AI thought reading improving teamwork and innovation, decentralized access to information via personal AI. You will always have a coach/co-worker in your pocket. Either a replica of your boss or someone else that can lift and help you.

As AI assistants evolve to true autonomous co-workers, we will see further transformation of the work experience as well as organizational structures. The consensus from the survey is that full-fledged AI will democratize the workplace, leveling the playing field by providing all levels of workers from entry level to CEOs with equal access to public information and capabilities, leading to higher levels of employee engagement, ideation, and innovation across all levels.

If this happens, there is an implication that traditional hierarchical structures may need to change to accommodate the enhanced autonomy that AI could introduce. This could lead to a less command-and-control-oriented work environments, and more collaboration.





**Alexandra Whittington**  
Futurist, TCS

## AI across industries

- Futurists were most likely (43%) to select that marketing and communications fields will see the earliest AI-led transformation, followed by healthcare and education, banking and financial services, and IT and software development.
- AI will enable marketing and communications professionals to focus more on creativity and strategy, factors which likely attracted individuals to such roles in the first place.
- Given the critical labor shortages in healthcare and education, it's likely AI will help fill the gaps so that the caring workforce can do what they do best: unleash human potential through helping others.



**Graham Norris**  
Founder, Foresight Psychology

Finance, healthcare, and education stand out for me, but certain elements of all industries can expect sudden transformative developments... There's a fine line between being supported by automation and overtaken by it, and those who are able to quickly redefine their roles will benefit the most. Healthcare professionals, for example, should be able to define territory that is best handled by AI and that which requires a human role.

As a topic, AI is loaded with both anticipation and controversy. The exponential interest Generative AI created turned quickly into enterprise adoption. The question is, what's next? What will the impact of new forms and widespread adoption of Generative AI be, and which industries will see transformation first?

The traditional argument for AI adoption is all about productivity gains. Throughout the past, technology-based productivity has promised speed and efficiency. But what if the impact this time is more human-centric? Throughout this report, surveyed futurists and TCS experts have highlighted an evolution that benefits the worker, making work more efficient, safer, and fulfilling. This will not happen all at once, however. Industries that are data-rich and tech-savvy will see the earliest positive outcomes.

**When asked to rank industries by how soon their workforce will be positively transformed by AI, 43% of futurists answered that marketing and communications fields will see the earliest transformation, followed by healthcare and education, banking and financial services, and it and software development. AI will transform each of these industries in unique but connected ways.**



**Suhas Uliyar**  
SVP Product Management,  
Oracle

[AI will] make [small businesses] more competitive with the big business with being able to automate without requiring human capital.

### Marketing, communications, and digital content

Experts highlighted broad marketing and communications functions as the first areas to see positive transformation of the work experience, based on AI's ability to automate content creation, improve personalization, and verify information.



**Deepak Seth**

Adviser, AI-led Transformation

Industries with a high work component of leveraging information [internal or external] for customer/client interactions will be most transformed by AI in 2024.



**Robert Caldera**

Managing Principal  
(Owner), Future | Shift

As rapid as AI is advancing and embedding itself within companies, true transformation will still take a while and 2024 is very early in that journey. That said, in terms of where signs of transformation will begin to be seen [in 2024], I see the healthcare, pharmaceutical/life sciences, and banking/finance industries as those which will make the biggest news in terms of AI adoption and use.



**Anthony Scriffignano**

PhD, Distinguished Fellow,  
The Stimson Center

Education, health care, manufacturing, insurance, digital marketing, and many government applications, especially defense related [will be most transformed by AI in 2024.]

While the automation of administrative work is relevant for all professions, survey responses highlighted the creative nature of marketing and communications roles and suggested that AI will enable them to focus more on creativity and strategy, factors which likely attracted individuals to such roles initially. A marketer, for instance, can move from brainstorming a creative approach to a campaign to rapidly deploying it, measuring impact, and optimizing on the fly.

However, AI-generated content is also capable of contaminating public discourse with false claims and imagery. Therefore, one of the most critical roles AI can play is in the verification of information, an essential function in an era marked by misinformation. Here, AI will augment the media's role as a guardian of truth, helping journalists validate facts against trusted data sources to maintain the integrity of research and media.

In broader media and entertainment, copyright and intellectual property issues pose obstacles to generative AI. These issues will need to be solved for to scale the value of AI in the publishing world, but there is potential to move into a new era at light speed.

#### Banking and financial services

Banking and financial services stand out as an industry on the cusp of creative transformation from AI. In particular, our experts see improvements led by AI bringing about more positive customer experiences.

In the realm of customer service, AI will empower consumers with self-service options, simultaneously freeing customer service representatives to engage in more meaningful interactions. These changes will likely redefine customer relationships, with AI serving as the first point of contact, guiding consumers to human agents when a deeper connection is needed.

Beyond customer service, financial businesses that rely on decision-making and analytics based on real-time data processing and predictive capabilities will see AI contribute to faster operations and foresight capabilities.

#### Healthcare and education

Healthcare and education ranked highly for industry transformation, and it is notable that these specific industries cater to basic human needs. They also fall into the category of the Care Economy, which is a fast-growing segment of job growth. The Care Economy serves diverse human ecosystems across a range of life experiences, so it has a huge reach.



**David Espindola**

Futurist, Founder, and  
Principal, Brainyus

Education will continue to be transformed as we focus on helping students develop the ability to work in collaboration with AI and other humans.



**Suhas Uliyar**

SVP Product Management,  
Oracle

Clinicians, doctors, nurses, care teams [will see the most value from personal AI assistants within the next five years.]



**Ashok Krish**

Global Head, AI.Cloud  
Advisory & Consulting, TCS

Technology careers in the future will focus on cross-discipline knowledge and integration—professionals will need to look across a set of technologies holistically and understand how to stitch it all together—like a mechanic who is not an expert at one individual function of a car but knows how everything fits together to make it work and perform optimally.

Given the critical labor shortages in healthcare and education, it's likely AI will help fill the gaps so that the caring workforce can do what they do best: unleash human potential through helping others. Healthcare stands on the threshold of similar developments, with AI poised to enhance patient care by distilling vast datasets into actionable insights and helping reduce administrative load.

This shift promises more than just operational efficiency; it invites a move towards a healthcare system where personalized care is enhanced, and clinicians have the bandwidth to focus on the humans. This could be a crucial differentiator for healthcare businesses, with potential to simplify digital transformations that focus on customer experiences.

#### IT and software development

AI has already impacted IT via AIOps, which leads to more automated data centers, quicker resolution of issues, and better experiences for the user and IT worker. When considering the implementation of Generative AI and other AI/ML applications, AI will ultimately drive technology professionals to speak the language of business, and vice versa.

Workers that were previously only skilled in technical matters will feel a greater need to develop a baseline understanding of other business functions, from HR to legal, in order to be effective in the future. In short, experts see AI being adopted by employees throughout an organization to democratize access to technology, with the need for human oversight and strategic implementation remaining.

These “mechanics of the future” will specialize in the ability to see and understand how the underlying technology is supporting the entirety of the business—how different platforms and systems stitch together.

Ultimately, AI will have the greatest impact in industries in which it enables humans to accomplish things they couldn't do previously, removing barriers of scale and complexity. Industries that embrace this potential and focus on enhancing human talent will see their workers flourish with personal fulfillment and job satisfaction.

## Methodology



**Gayemarie Brown**

Managing Director and  
Founder, Wintam Place  
Consulting

AI will improve [physically demanding or dangerous] jobs... when they are integrated with other technologies like sensors, IoT, cloud and/or smart fabrics, smart devices; for example, vitals monitoring in toxic environments.



**Graham Norris**

Founder, Foresight  
Psychology

I see great potential for those entering the job market to benefit from AI by learning how AI itself can benefit companies. They will likely be able to move more nimbly and accept new realities more quickly than those who have become accustomed to established modes of working. In the medium term, I think role definitions will change substantially as AI becomes another set of tools people need to employ.

TCS futurists are responsible for engaging with C-suite executives, especially Chief Innovation Officers, and business unit leads to help them understand and prepare for future risks and opportunities. With Generative AI as the major technology trend over the past year, TCS is helping customers navigate the potential and challenges of AI transformation in the workplace.

The Working Towards the Future Report is based on a survey of prominent futurists, including those below and others who elected to remain anonymous:

- Anthony Scriffignano, PhD, Distinguished Fellow, The Stimson Center
- David Espindola, Futurist, Founder, and Principal, Brainyus
- David Smith, CEO, Global Futures & Foresight
- Deepak Seth, Adviser, AI-led Transformation
- Dr. Paul J. Bailo, CEO, PIP Consulting Group
- Gayemarie Brown, Managing Director and Founder, Wintam Place Consulting
- Graham Norris, Founder, Foresight Psychology
- Gray Scott, Futurist
- Jamais Cascio, Futurist
- Joe Carson, CEO, Spend Strategies
- Liselotte Lyngsø, Futurist, Founder, and CEO, Future Navigator
- Puruesh Chaudhary, Founding CEO, Foresight Lab
- Robert Caldera, Managing Principal (Owner), Future|Shift Consulting LLC
- Sharad Agarwal, Chief Metaverse Officer, Cyber Gear
- Suhas Uliyar, SVP Product Management, Oracle



## More information on [Working Towards the Future](#):

### **About Tata Consultancy Services (TCS)**

Tata Consultancy Services is an IT services, consulting, and business solutions organization that has been partnering with many of the world's largest businesses in their transformation journeys for more than 55 years. Its consulting-led, cognitive powered, portfolio of business, technology, and engineering services and solutions is delivered through its unique Location Independent Agile™ delivery model, recognized as a benchmark of excellence in software development.

A part of the Tata group, India's largest multinational business group, TCS has more than 608,000 of the world's best-trained consultants in 55 countries. The company generated consolidated revenues of US \$27.9 billion in the fiscal year ended March 31, 2023, and is listed on the BSE and the NSE in India. TCS' proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the MSCI Global Sustainability Index and the FTSE4Good Emerging Index. For more information, visit [www.tcs.com](http://www.tcs.com).