XANT

THE STATE OF ARTIFICIAL INTELLIGENCE 2017

PUBLIC PERCEPTION OF THE MOST DISRUPTIVE TECHNOLOGY

EXECUTIVE SUMMARY

In 2016, there were 40 acquisitions of companies working to advance artificial intelligence[1] and the AI market was worth $644 million[2]. In 2017, the market value of AI is expected to double and then grow exponentially until it reaches $38.6 billion less than ten years from now[3]. Inc. Magazine called 2017[4] the "year of AI" and most every major brand has begun fighting to enter the space. Consumer-driven companies like Google have led the charge with over 11 acquisitions in the AI category to date while business-driven companies like Salesforce, who joined the race late, have quickly begun catching up by acquiring two AI based companies in the last year[5]. AI is here to stay and it's not just changing the market, it's shaping the way we live and work.

To better understand the public perception of today's most disruptive technology, XANT asked 1,985 people from a variety of backgrounds and locations in the US what their attitude, understanding, and expectation of this emerging technology are.

[1] https://www.cbinsights.com/blog/top-acquirers-ai-startups-ma-timeline/
[2] https://www.tractica.com/newsroom/press-releases/artificial-intelligence-revenue-to-reach-36-8-billion-worldwide-by-2025/
[3] https://www.tractica.com/newsroom/press-releases/artificial-intelligence-revenue-to-reach-36-8-billion-worldwide-by-2025/
[4] http://www.inc.com/molly-reynolds/2017-is-the-year-of-artificial-intelligence.html
[5] https://www.cbinsights.com/blog/top-acquirers-ai-startups-ma-timeline/

CONSUMERS AND AI: IT'S ONLY THE BEGINNING

When it comes to AI adoption, most survey respondents are just getting their feet wet. In both their personal and work lives, people are split in their AI use. Out of the office, more than half (54.7 percent) report that they have used AI before. Of the total respondents, about 10.5 percent can be considered early adopters, using AI on a regular basis.

The data suggests that regular use of AI may have a relationship with income level. In the survey, 54.6 percent of consumers say they use AI, however, it is clear that AI usage correlates with income levels with the lowest point of usage at $125,000 - $150,000. When it comes to the percentage of consumers using AI all the time, 23.3 percent make less than $25,000 per year. This was the largest percentage in all income brackets, with this demographic consistently showcasing a familiarity with AI.

Consumers today mostly interact with AI through services geared towards travel or entertainment, such as navigation apps (60.3 percent), video streaming (55.2 percent) and music streaming (47.4 percent). These technologies are familiar to consumers, having been in use for a decade or more. It's the new technology utilizing AI that has yet to hit critical mass. Only 12.0 percent of consumers surveyed reported finding AI-enhanced assistants like Amazon Alexa useful. Two other areas where AI hasn't yet gained significant traction are home automation and bots in the workplace, with only 5.5 percent and 1.0 percent of respondents respectively reporting regular use in their day-to-day lives.

IT COMES DOWN TO TRUST: TREPIDATION AROUND AI

Even as apps and services that rely on AI continue to become more widespread, the results of the survey indicate that consumers still report trepidation around AI. In fact, when presented with a list of popular AI services, 41.5 percent of respondents could not cite one example of AI that they trust. However, that number increased to almost half (49.2 percent) with consumers in the Middle Atlantic region (NY, PA, NJ). Interestingly, that sentiment is not shared throughout the East Coast. In New England, only 36.6 percent of consumers said they did not trust AI, demonstrating mistrust levels on par with the West Coast respondents (38.0 percent).

Respondents reported being especially wary of AI working in industries that have historically required a human touch. Only nine percent of respondents trust AI with their financials, and only four percent trust AI in the HR hiring process.

Consumers also know the companies they trust to lead the AI transformation and deliver AI technology that really works. When asked to select their top three choices, consumers ranked Google first with 54.3 percent, Apple second with 46.3 percent, and Microsoft with 40.1 percent very narrowly edging out Amazon with 39.6 percent for the number three spot.

OUR AI FUTURE: PEERING INTO THE CRYSTAL BALL

Despite their hesitations, consumers agree that AI will have a significant impact on the future. Among those surveyed, 48.9 percent believe AI will lead to medical advancements. The very industries in which consumers trust AI the least are those that they think will be most impacted by the technology. Today, AI may be all about entertainment and GPS navigation, but in the future, people see it playing a significant role in improving healthcare, reducing the need for people to do dangerous jobs, and transforming transportation and travel.

READY FOR A ROBOT BOSS? AI AND THE FUTURE OF WORK

Today, 62.6 percent of respondents have no strong opinion about the use of AI in the workplace, and an additional 64.3 percent claim they have never used AI at work. This group is the greenfield target audience for AI to win over. Having already accepted AI's future benefits, 69.7 percent believe that AI will further streamline their day-to-day operations at work.

Consumers are locking in on the ways AI will change the world of business. Consumers currently believe a company's engineering department will benefit the most from AI.

Despite fairly positive perceptions of the impact of AI on their lives, more than a third of consumers (35 percent) surveyed reported concerns about job security as AI adoption increases. The number rises to 41 with Millennials and Generation Z (respondents ages 18-36).

For companies pushing AI adoption in the office, it may become a point of concern that youngest members of the workforce – technologically savvy and with the longest careers ahead – are the most worried about job security from AI.

Perhaps because Millennials and Generation Z constitute the youngest and newest members of the workforce, these views persist when income is considered. Consumers in the three lowest income brackets showed the greatest amount of fear that AI would decrease job opportunities while the top three income brackets showed the least amount of fear.

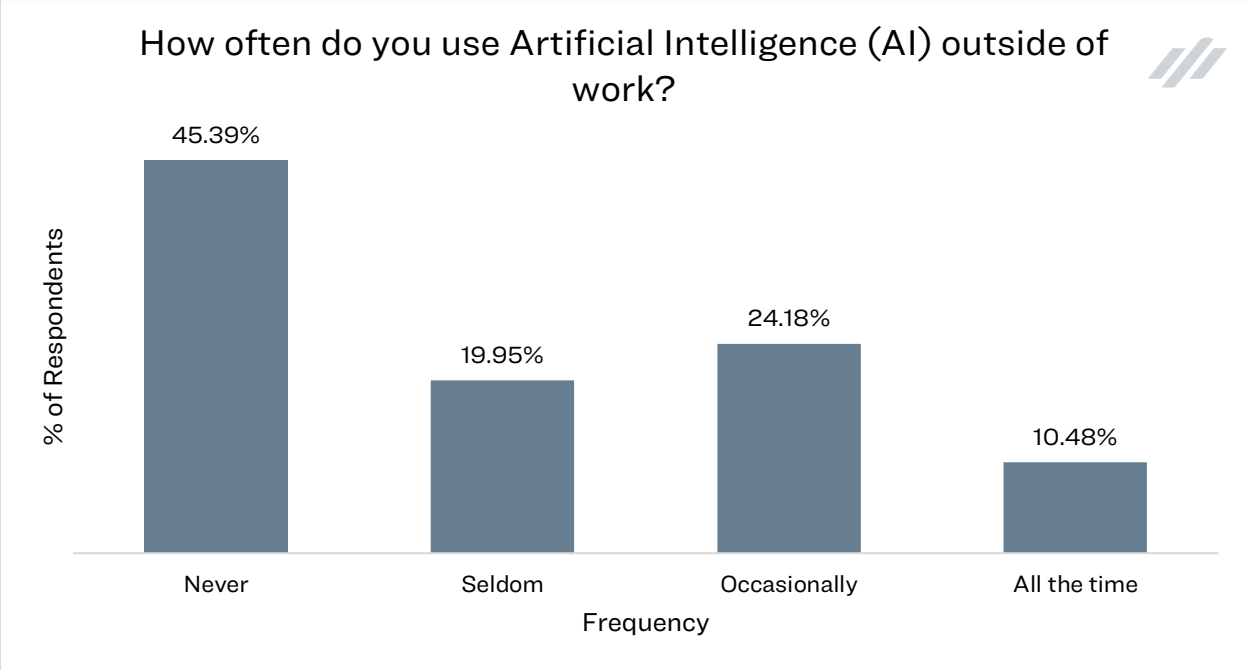
Fears aside, Generation Z and Millennials remain the most prolific users of AI. 18% of Generation Z and a 13% of Millennials use AI frequently. Twenty-five percent of Generation Z believes that they will one day have a “robot boss”, leading the way for Generation Z to be our AI accelerants.

In work and in their daily lives, consumers are at the cusp of AI readiness. They have begun to envision the next ten years of life with AI and are developing concrete opinions on its impact. As companies seek to successfully engage consumers in this new age of artificial intelligence, it will be central to bring consumers up the AI learning curve, carefully balancing AI education and promotion to forge trust.

CONSUMERS AND AI: IT'S ONLY THE BEGINNING

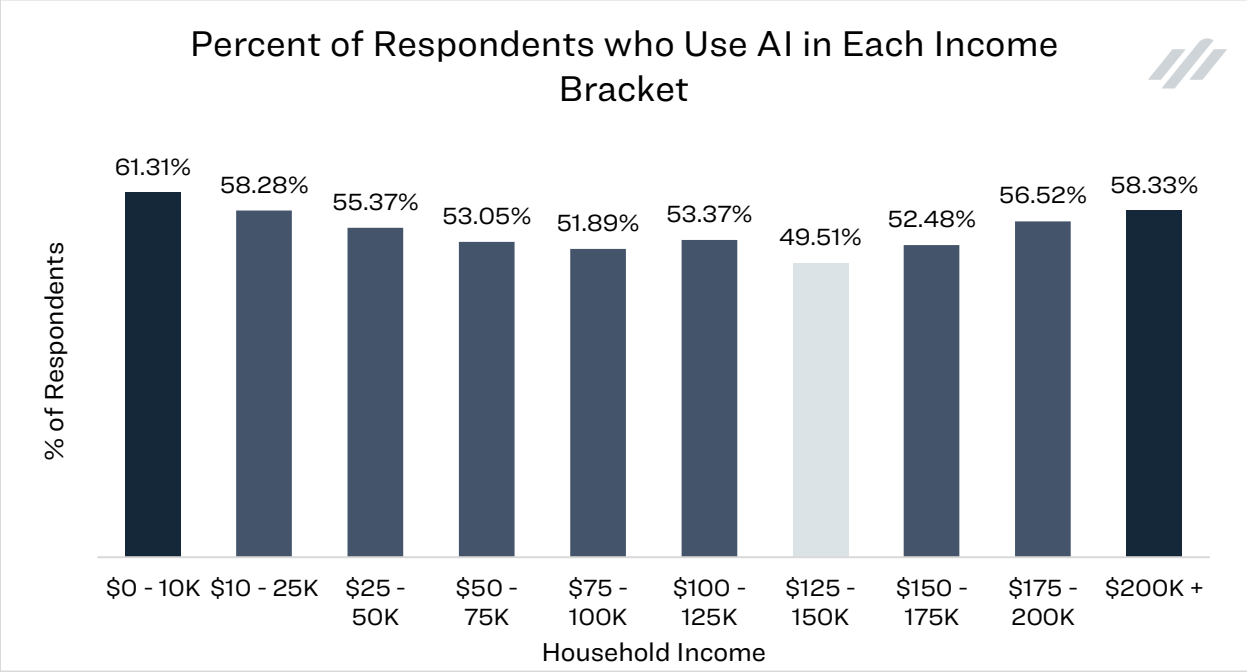
54.61 percent of people have used AI before

Surprisingly, 45.39 percent of people said they do not use AI outside of work, which implies that 54.61 percent have used it at some point. Over ten percent of consumers report using AI all the time indicating a small group of early adopters.



Analysis suggests that regular use of AI may correlate with specific income levels

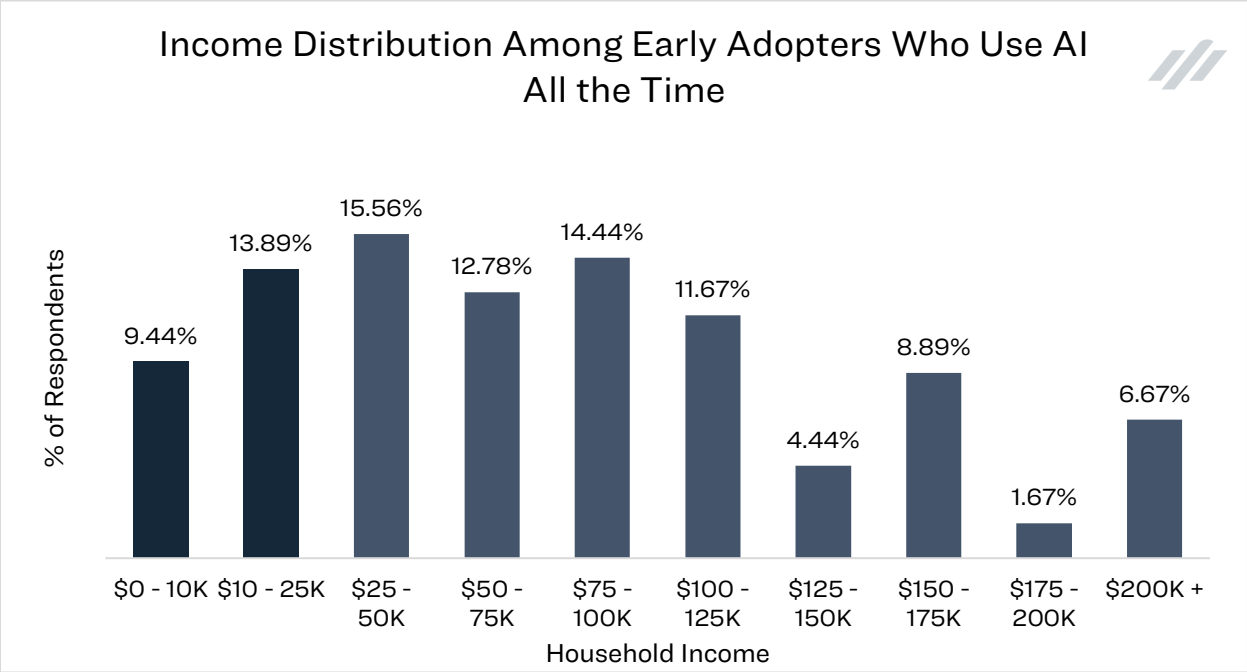
In the survey, 54.61 percent of respondents indicated they use AI outside of work. When this same analysis is performed by income breakdowns it's clear that AI usage decreases with income with the lowest point at $125,000 - $150,000. The two income levels that report the highest usage of AI are the two extremes of $0-10,000 and above $200,000.



23.33 percent of consumers using AI all the time make under $25,000

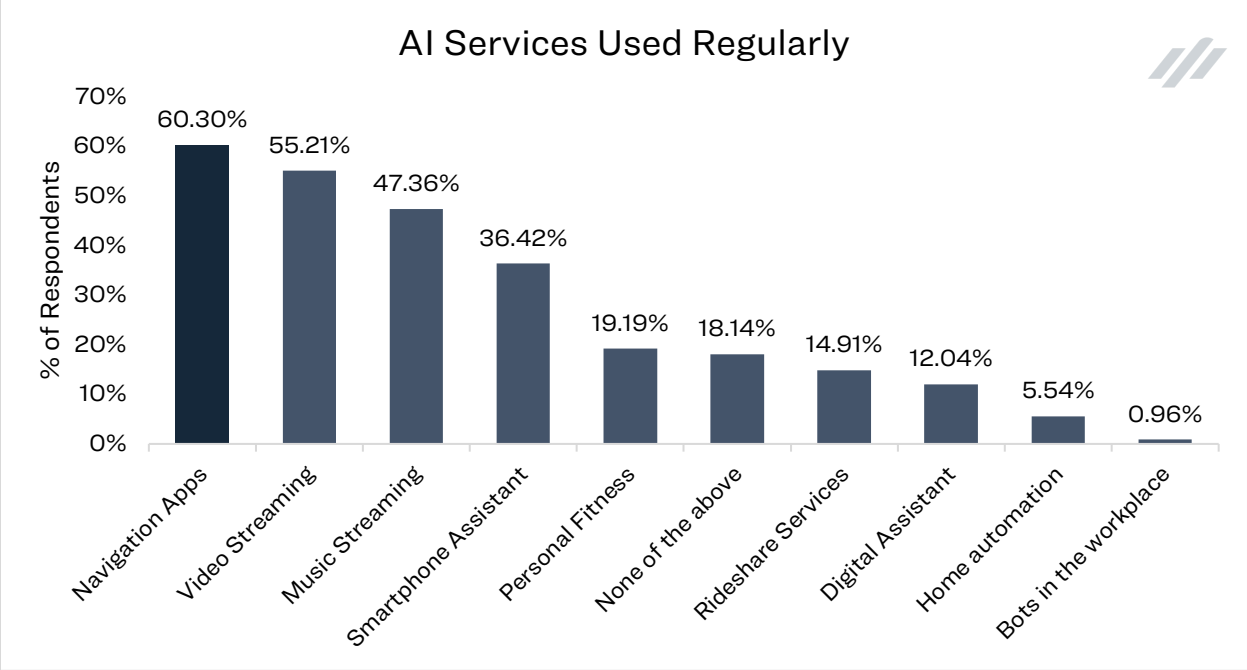
Analyzing consumers who use AI all the time, we discovered the largest percentage makes under $25,000 a year. The second largest percentage of consumers makes under $50,000 a year. The difference between the two income brackets is 47.14 percent.

This could be related to age as well as student status. Young people just entering the workplace maybe have lower incomes, but be in a position to use emerging technologies.



Navigation apps dominate AI services used by consumers (60.30%)

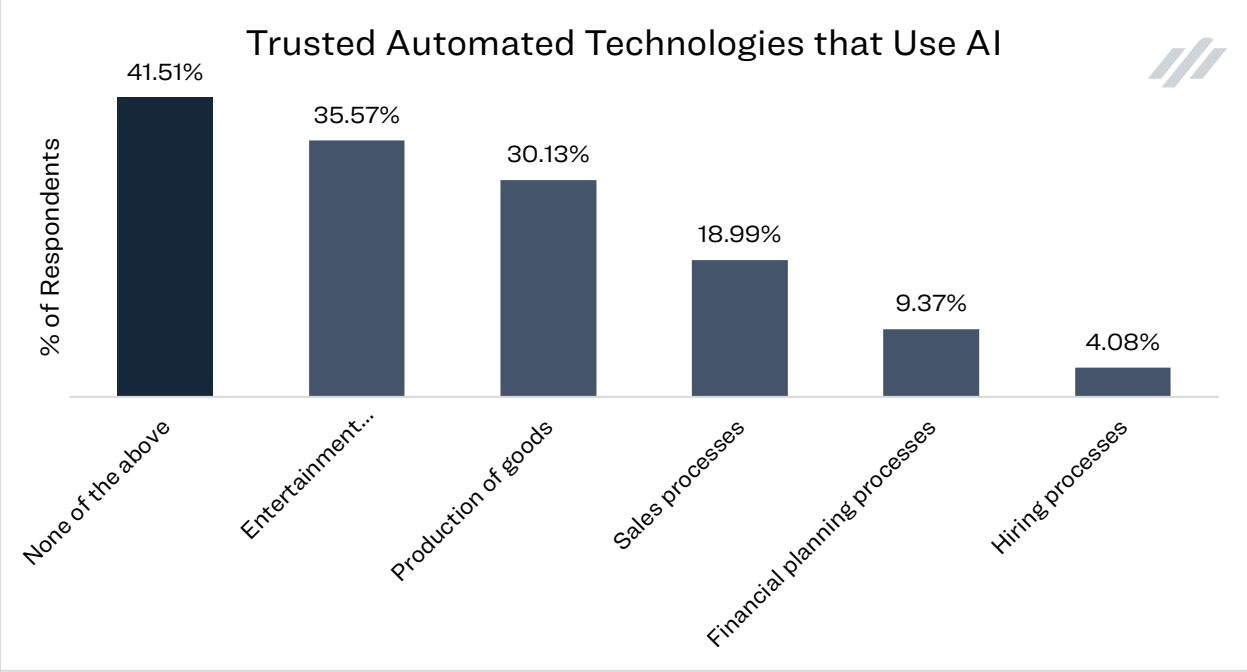
Consumers are most comfortable using AI services around travel and entertainment. Respondents reported that 60.30 percent use navigation apps regularly followed closely by video streaming (55.21 percent), and music streaming (47.36 percent). Many of these technologies have become well established whereas technologies such as AI powered digital assistants (12.04 percent), home automation (5.54 percent), and bots in the workplace (0.96 percent) are still rarely utilized by consumers at large.



IT COMES DOWN TO TRUST: TREPIDATION AROUND AI

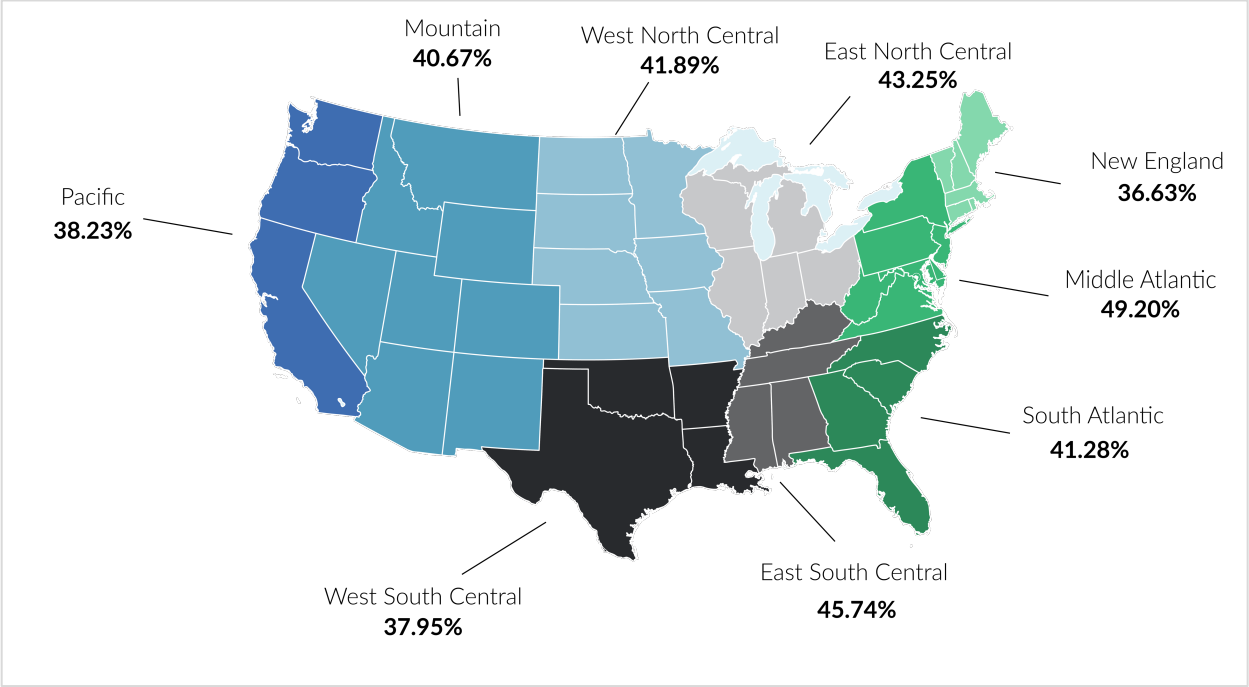
41.51 percent of consumers do not trust AI technologies

Consumers are still wary of AI technologies as 41.51 percent said they do not trust any AI powered technologies. Of those that did trust AI technologies, 35.57 percent chose recommendations for personal entertainment as their technology of choice. Consumers were most untrusting of industries that previously required more human involvement as only 4.08 percent said they AI in the hiring process and only 9.37 percent said they trusted AI in the financial planning.



The middle Atlantic region is the most untrusting of AI technologies

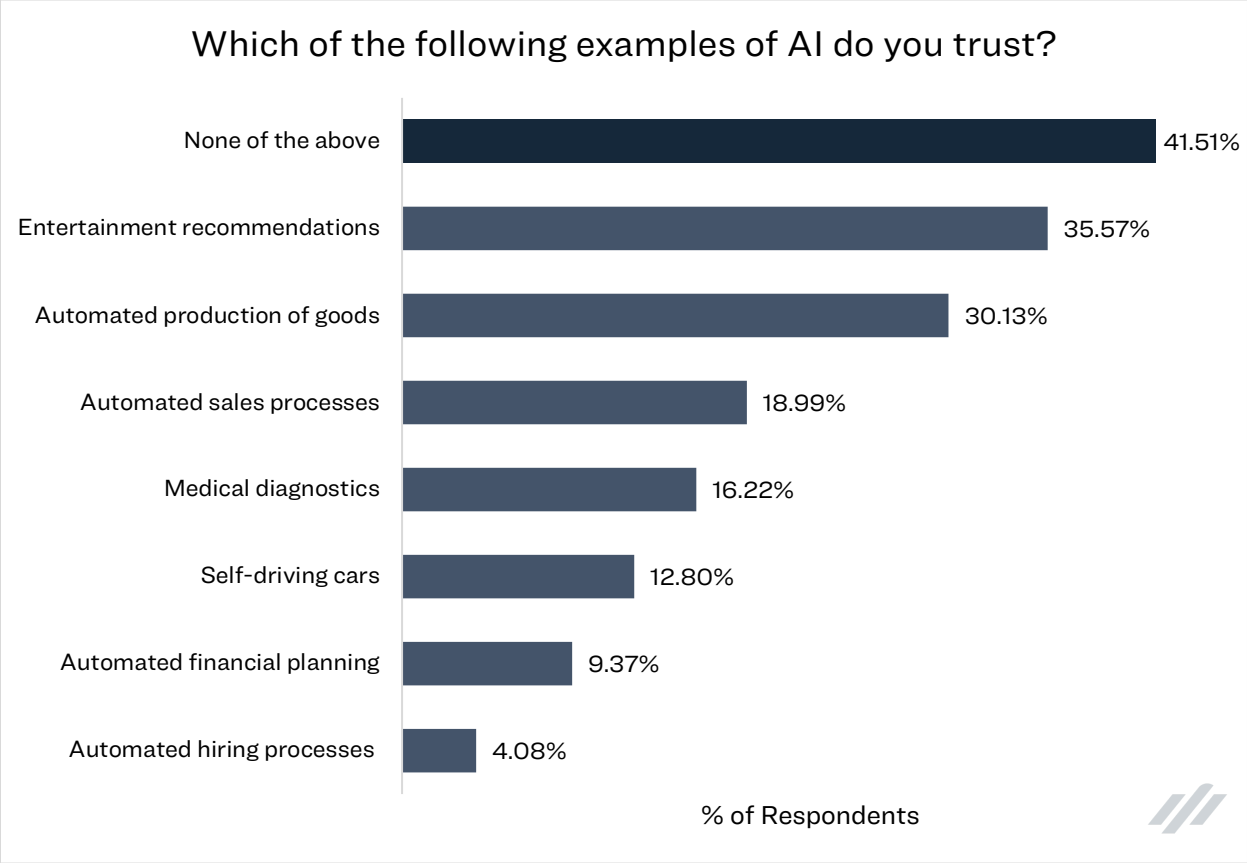
Looking at trust and AI technologies revealed interesting trends. Almost one-half or 49.20 percent of consumers in the Mid-Atlantic reported they did not trust AI. This is a large difference from the perception of the neighboring New England region, which only had 36.63 percent of respondents say they did not trust AI. This difference accounts for a 34.32 percent difference in perception between the two regions.



People are less likely to trust AI to do tasks that have historically required a human touch

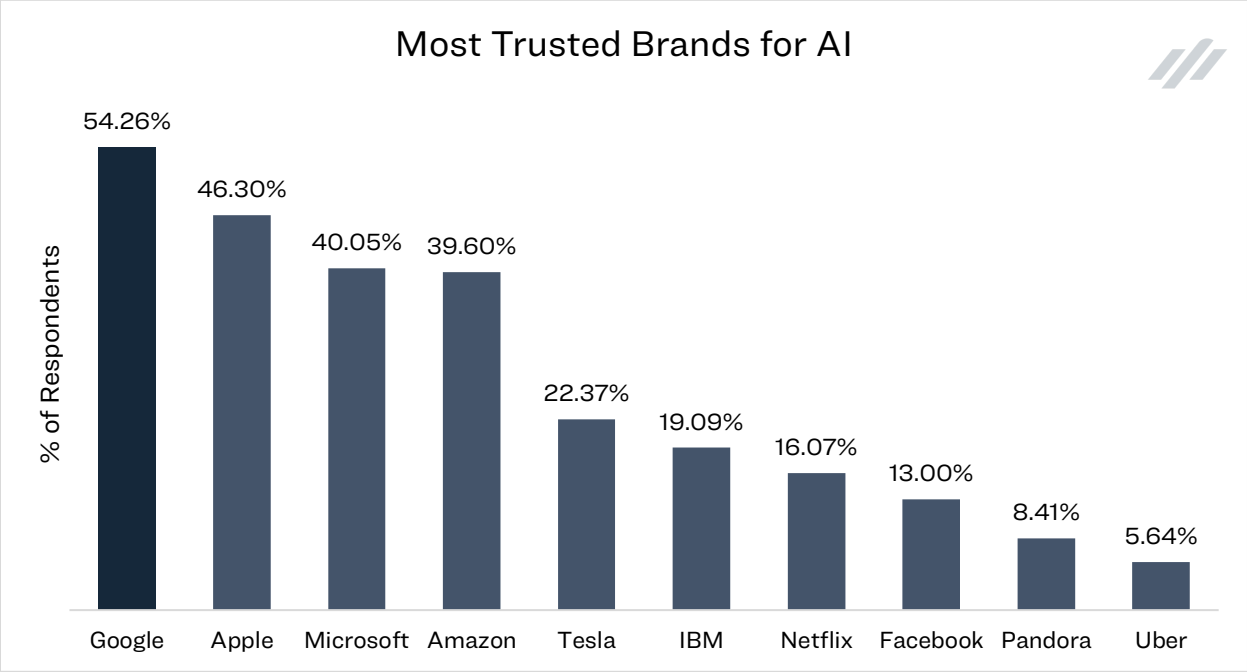
41.51 percent of respondents didn't trust any of the AI examples given in the survey. Recommendations for personal entertainment was the easiest for people to trust, perhaps because the stakes of failure were lower than in the case of medical diagnostics and self-driving cars where health and safety are at risk.

Only 9.37 percent trust AI for financial planning and only 4.08 percent trust it for hiring.



54.26 percent of respondents said Google is the most trusted AI brand

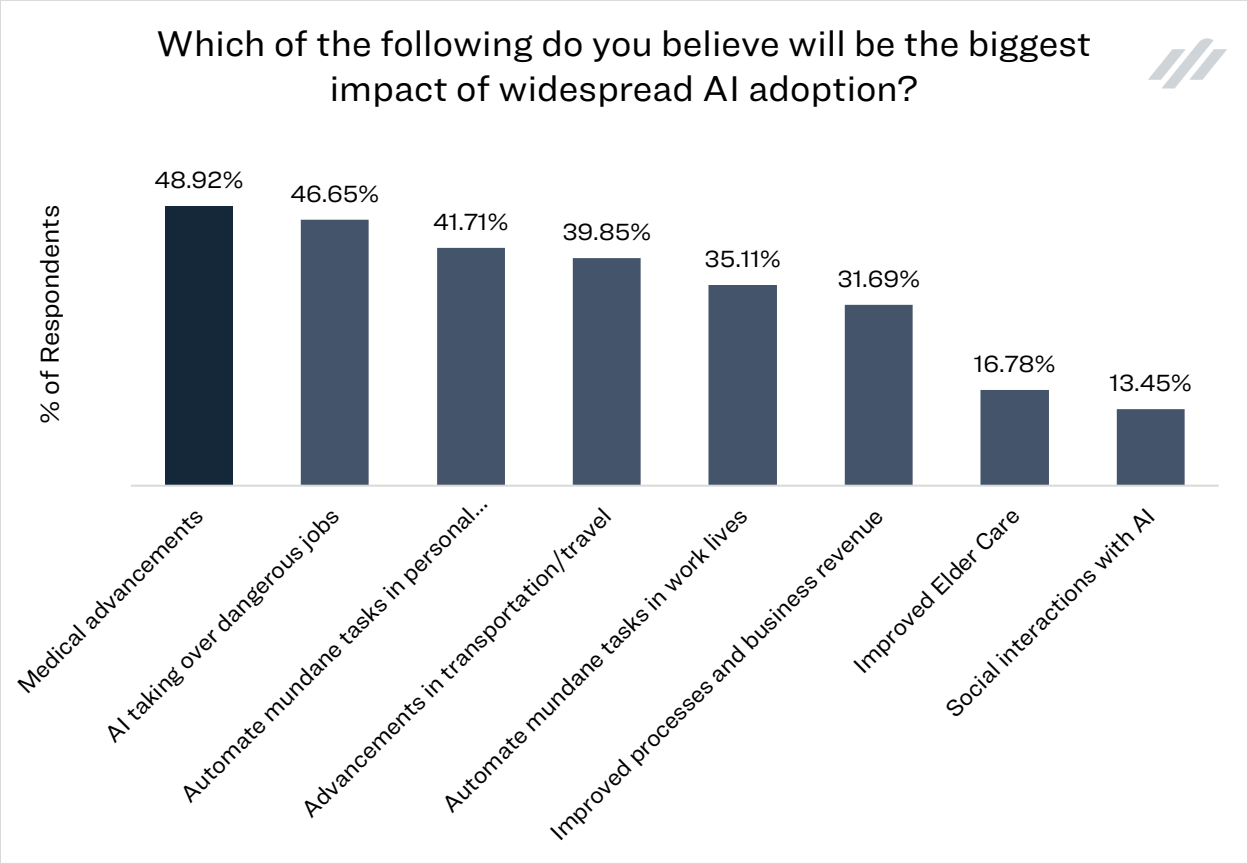
Google dominated the public's perception of trusted AI brands, which is not surprising due to the number of acquisitions Google has made in this space. Apple (46.30 percent) was the closest challenger followed by Microsoft (40.05 percent) and Amazon (39.60 percent). After the top four there is a significant drop-off in the level of trust but brands like Tesla (22.37 percent) with its introduction of the self-driving car and IBM (19.09 percent) with its focus on building a business unit around Watson are making strong progress.



OUR AI FUTURE: PEERING INTO THE CRYSTAL BALL

48.92 percent of consumers believe that AI will impact medical advancements more than any other area

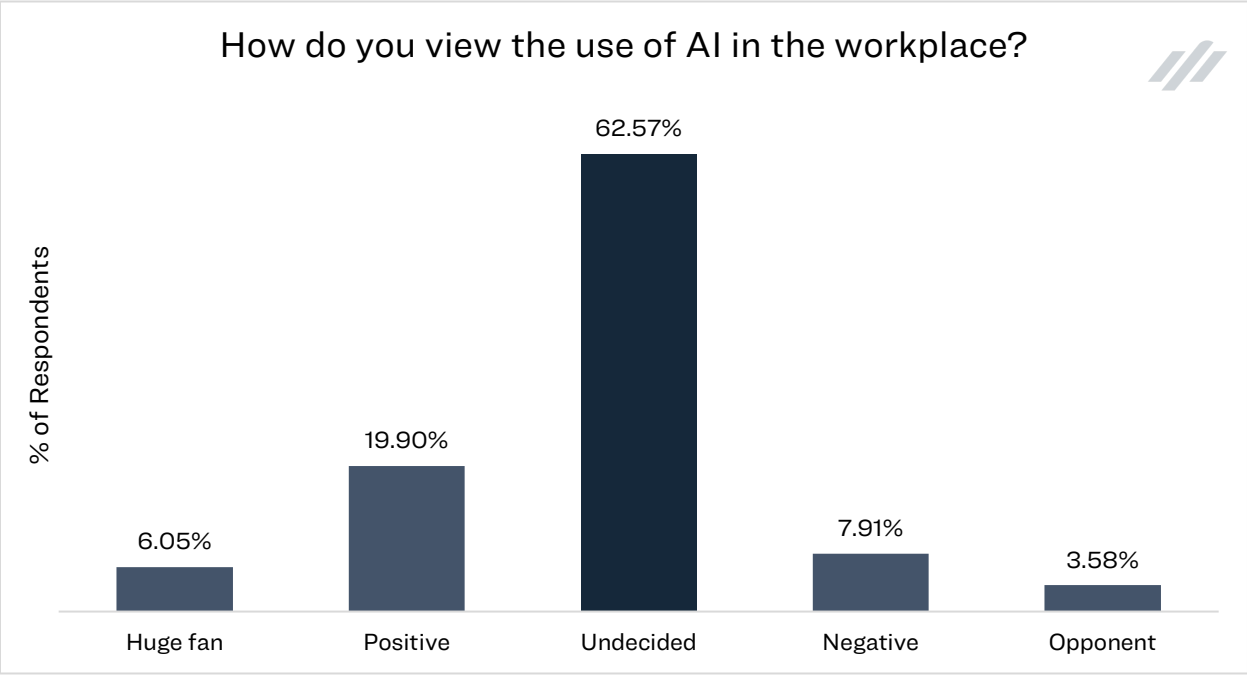
Many experts believe AI will penetrate every market and vertical. When we surveyed consumers to understand where they believe the biggest impact of AI will be, 48.92 percent said medical advancements followed closely by AI taking over dangerous jobs (46.65 percent). This differs significantly from the current role AI is playing for consumers in personal entertainment and travel.



READY FOR A ROBOT BOSS? AI AND THE FUTURE OF WORK

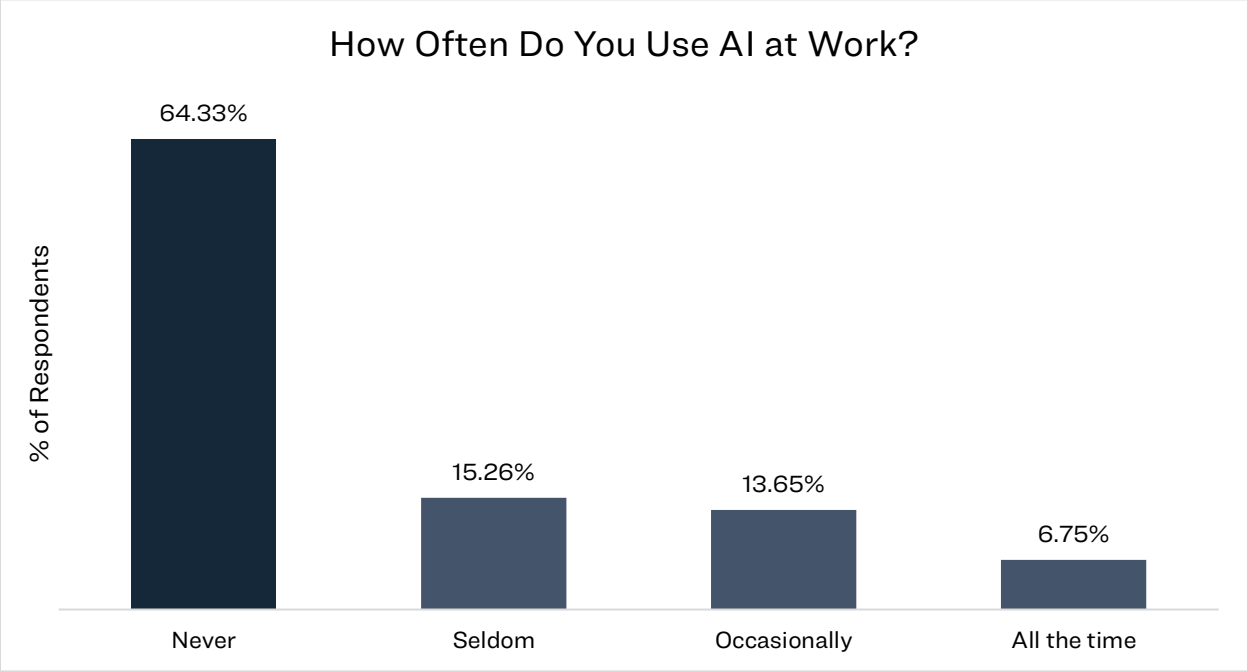
62.57 percent of consumers are undecided about AI in the workplace

Although 62.57 percent are undecided about AI, 88.52 percent are either undecided or positive about AI in the workplace. This is a clear indication of the significant opportunity for AI in the workplace.



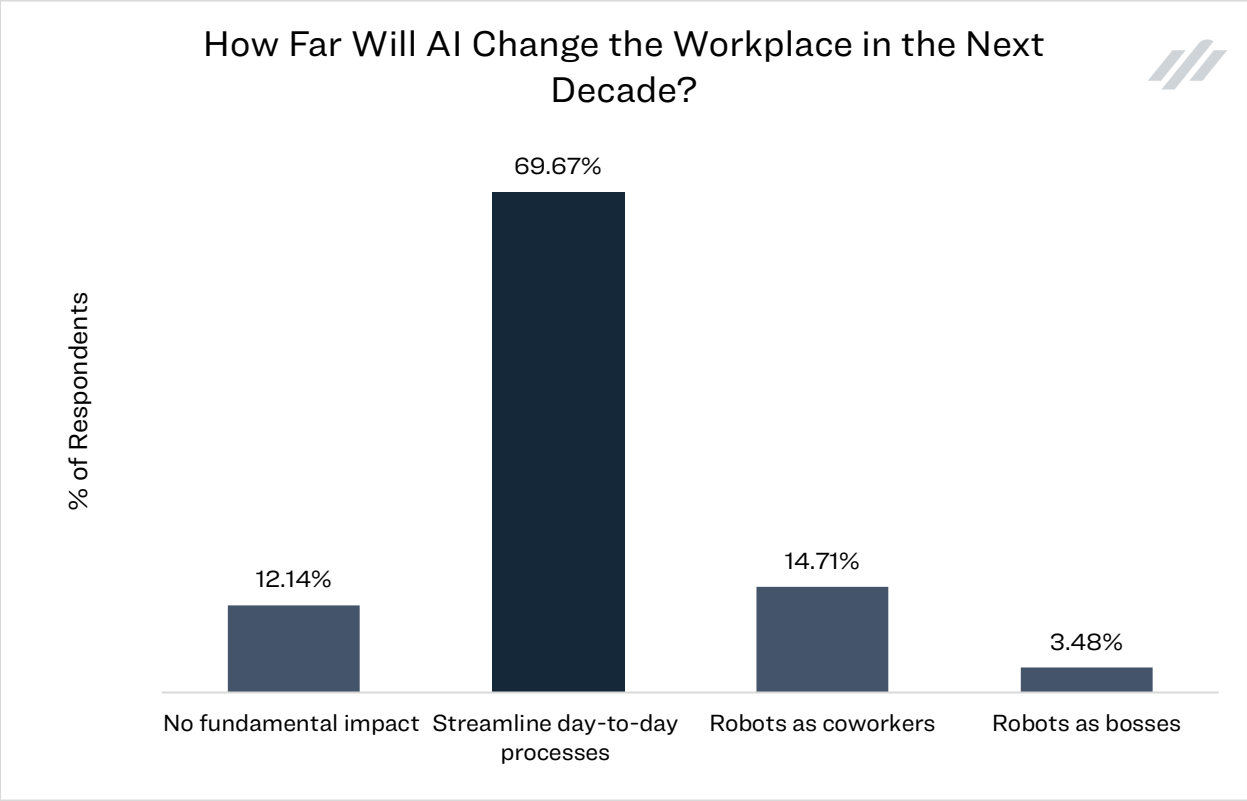
64.33 percent of respondents never use AI at work

The majority of workers in the U.S. do not use AI at work (64.33 percent). With such large numbers of respondents being undecided about AI (62.57 percent) and the majority not using AI at work, this represents a large opportunity for AI to win them over.



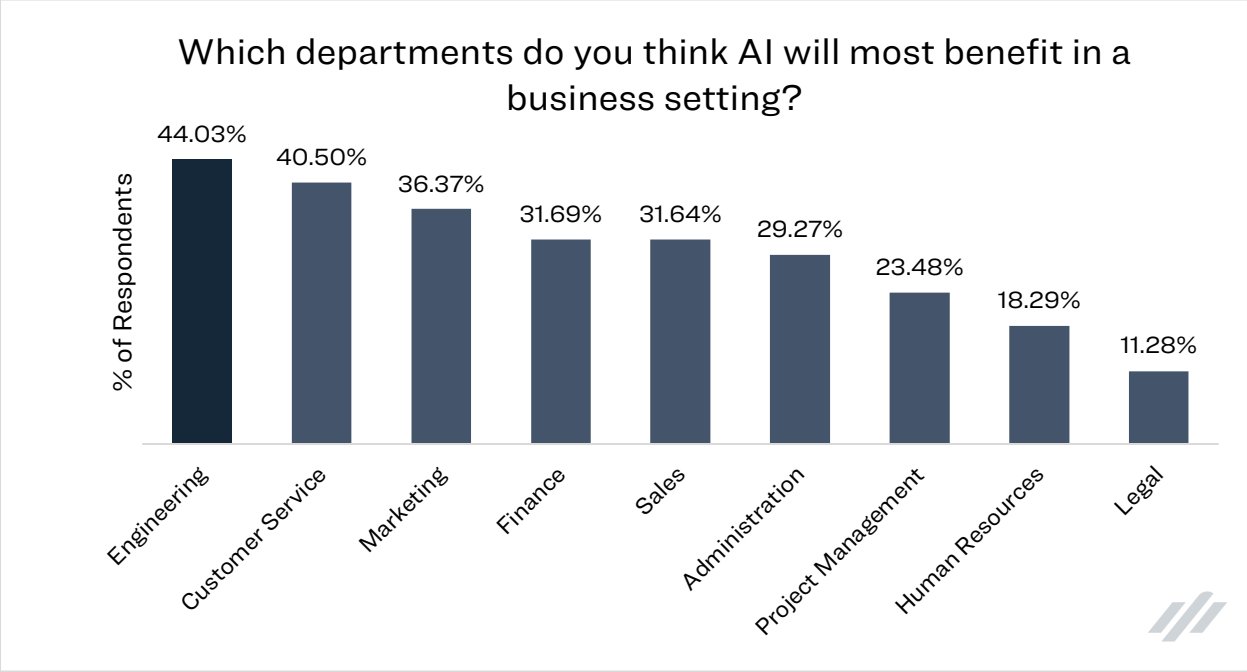
Respondents who don't use AI at work believe in ten years its primary benefit will be streamlining day-to-day processes (69.67 percent)

Many people believe humans should fear AI because it will take jobs or become their future bosses but at the moment consumers do not believe this. In fact, only 3.48 percent of respondents believe that in ten years, humans will have AI bosses. More than two-thirds of people (69.67 percent) believe that, in ten years, the biggest impact AI will have is streamlining basic processes.



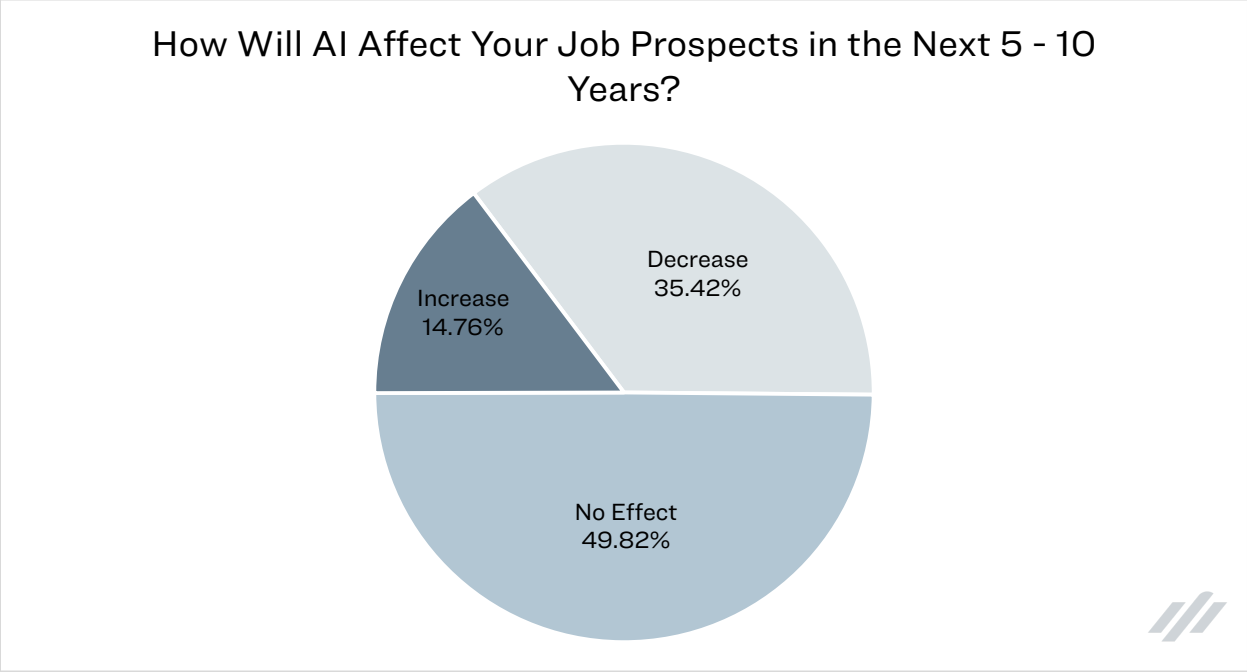
44.03 percent of respondents believe engineering is the department that will benefit the most from AI

Engineering (44.03 percent), customer service (40.50 percent), and marketing (36.37 percent) are the three departments consumers believe will benefit the most from AI.



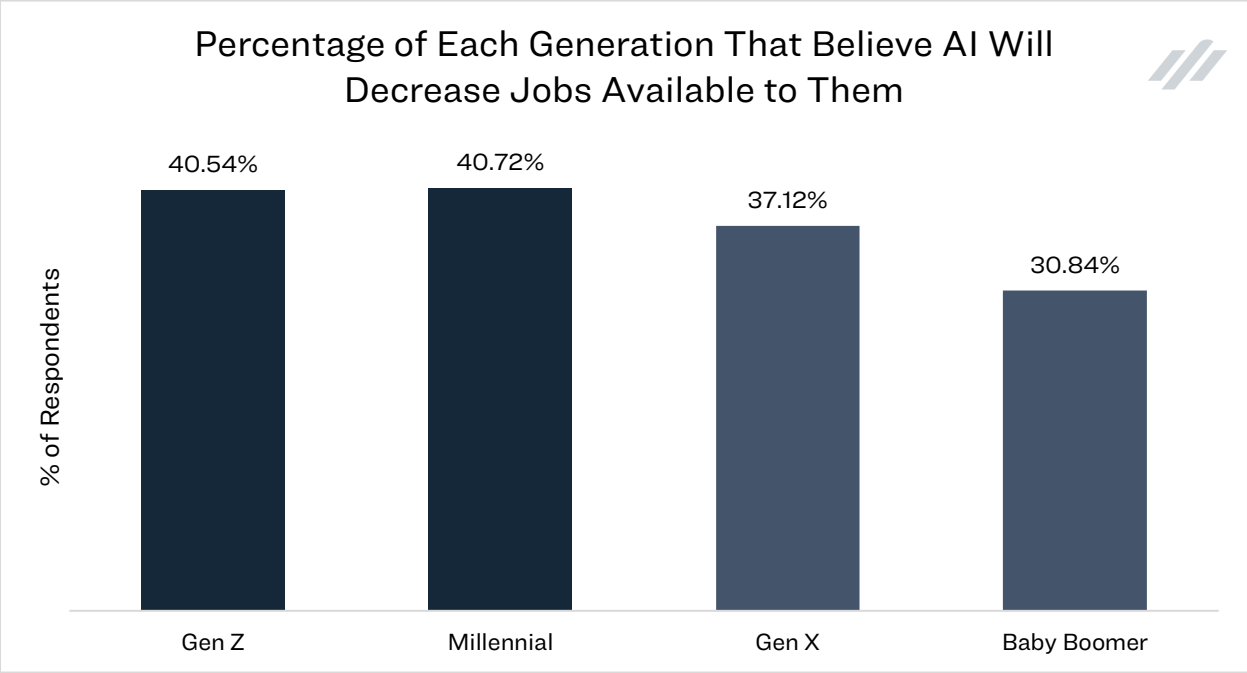
35.42 percent of consumers believe AI will decrease their job prospects in the next 5-10 years

Although respondents had a fairly positive perception of AI, 35.42 percent believe that AI will negatively affect their job security in five to ten years. Nearly half of respondents (49.82 percent) believe AI will have no effect on their jobs.



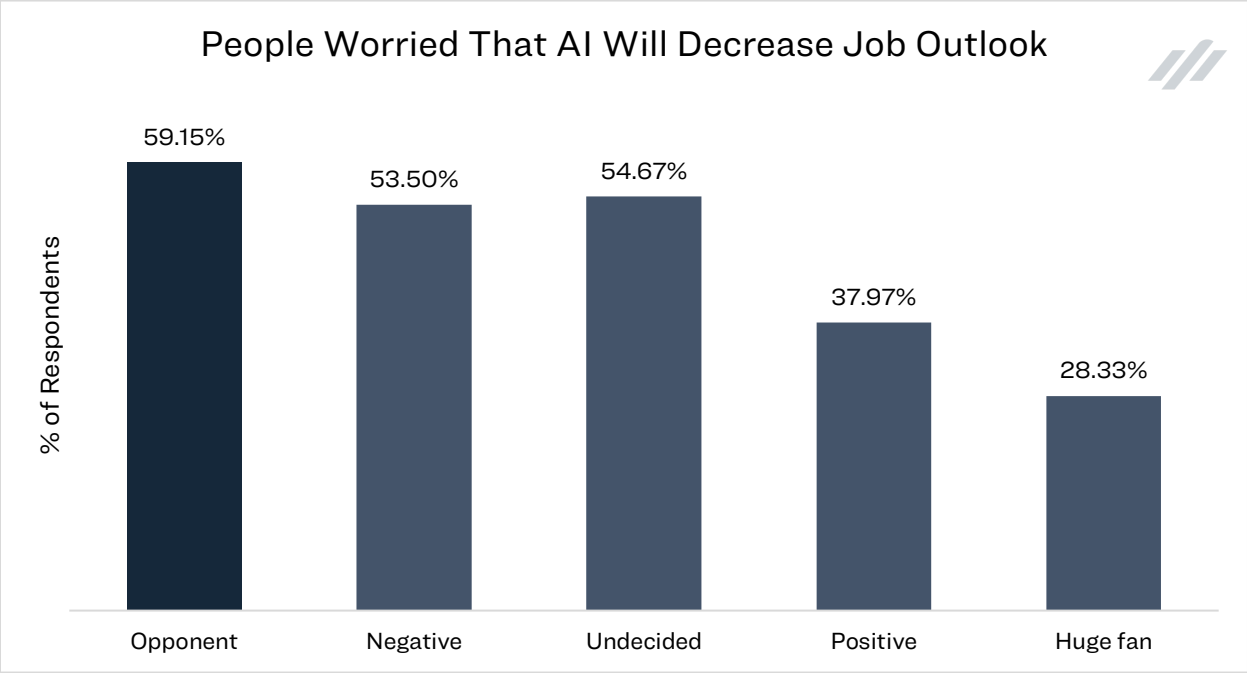
Gen Z and Millennials believe AI will decrease their job prospects in the next five to ten years

Gen Z and Millennials worry more about job security because of AI in the next five to ten years than do Gen X and Baby Boomers. 40.54 percent of Gen Z and 40.72 percent of Millennials believe AI will have a negative effect while 37.12 percent of Gen X and 30.84 percent of Baby Boomers believe AI will have a negative effect on their job prospects.



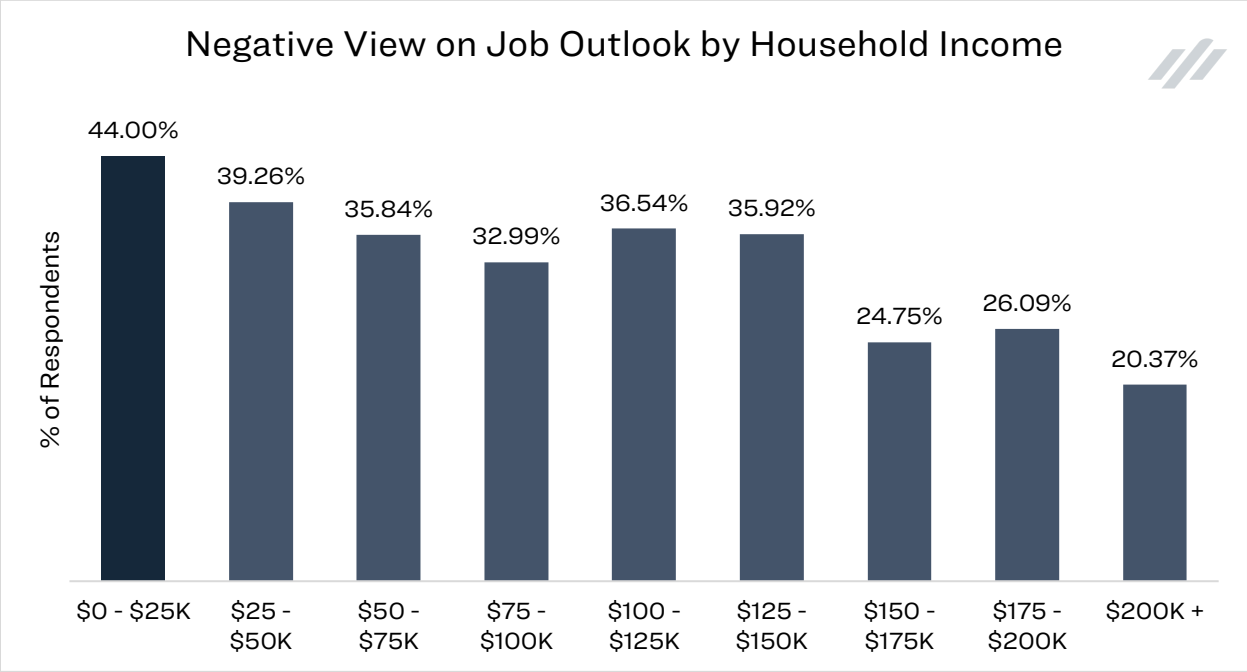
People opposed to the use of AI in the workplace are more likely to believe AI will put their own jobs at risk

The consumers who feel more positive about the potential impact of AI are less likely to feel threatened by the emergence of AI to take jobs from them in the future. Over half of respondents with a negative view of AI said that they were concerned that AI would negatively affect their job outlook.



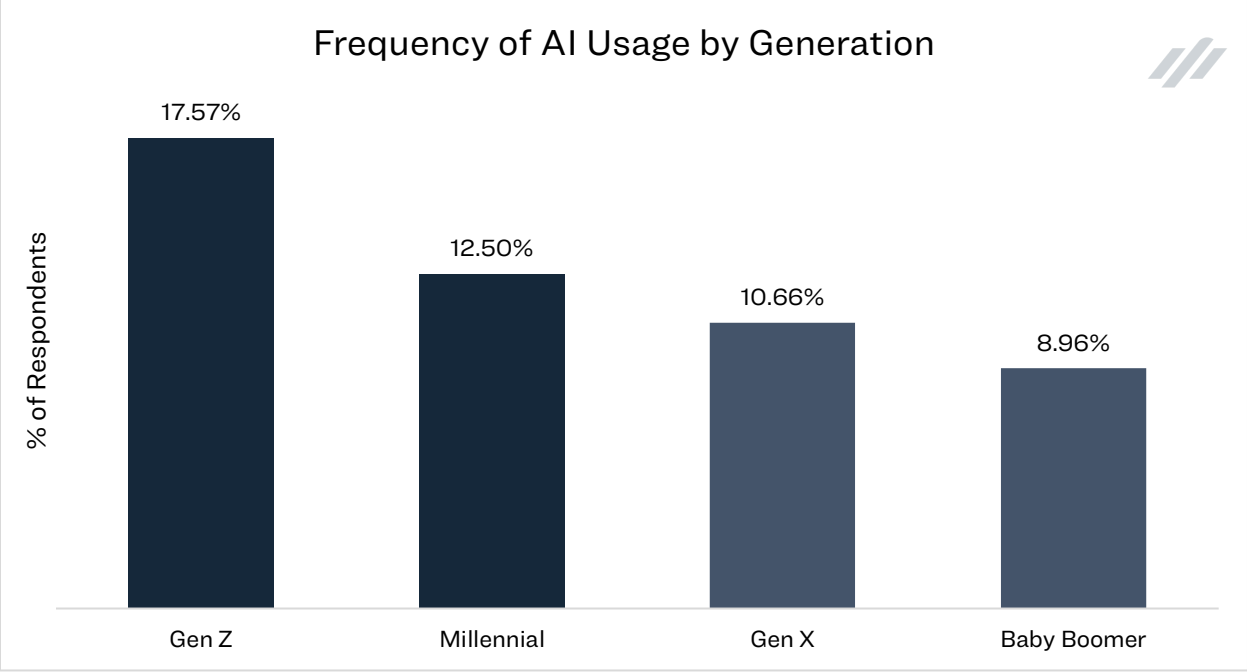
Lower income brackets show the most fear about losing jobs because of AI

44.00 percent of consumers making below $25,000 a year believe AI will decrease the number of job opportunities while less than a quarter of consumers making over $175,000 a year believe that AI will decrease the number of job opportunities.



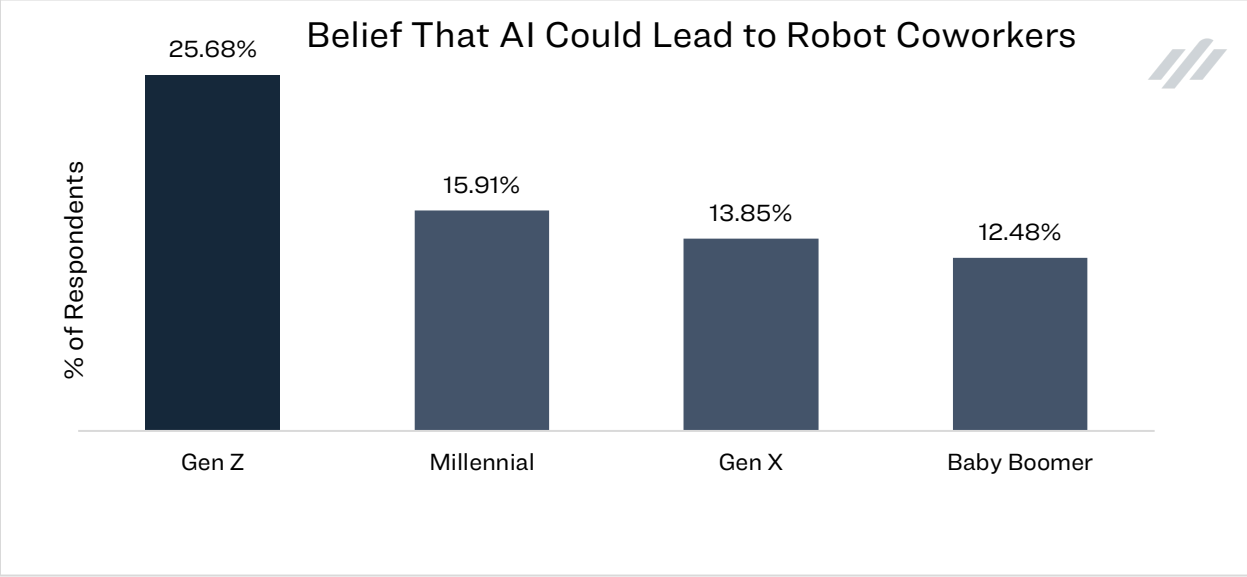
Generation Z and Millennials are the most frequent users of AI

Generation Z and Millennials remain the most frequent users of AI. 17.57 percent of Generation Z uses AI all the time while 12.50 percent of Millennials use AI all the time. Interestingly, the difference in frequent usage between Generation Z and Baby Boomers is 96.09 percent—nearly double.



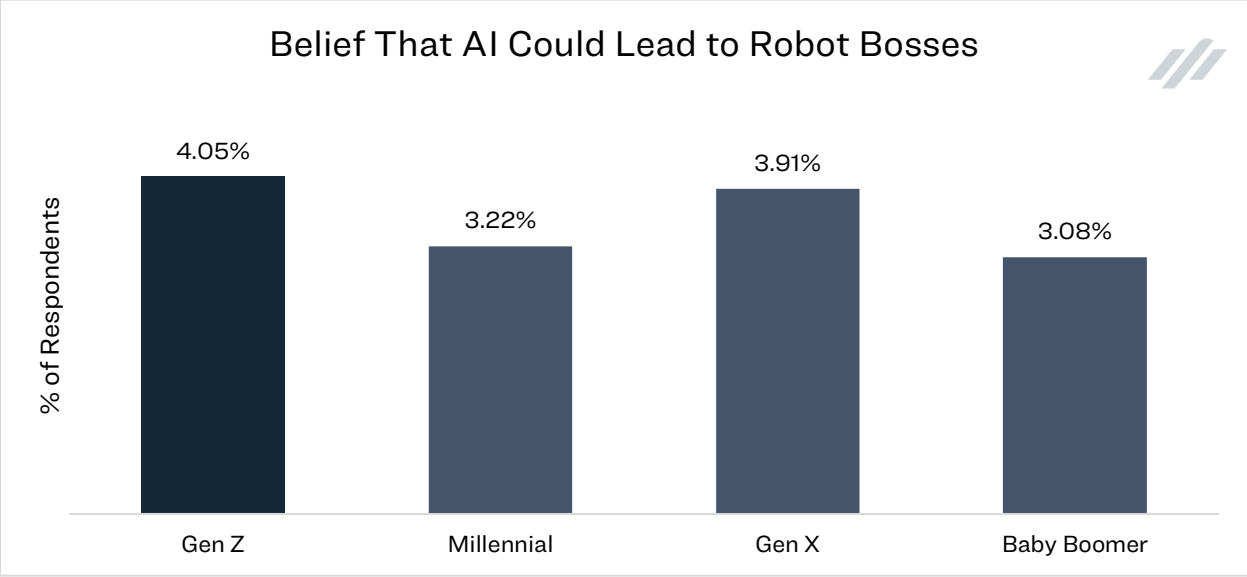
25.68 percent of Generation Z respondents believe they will have robot as co workers

Generation Z is the most open to and the most frequent user of AI at work. Over twenty-five percent of Generation Z consumers believe they will have robots as coworkers in the next decade. This is significantly different from Baby Boomers. Only 12.48 percent of Baby Boomers believe robots will someday be coworkers. This represents a 105.8 percent difference in attitudes.



Consumers do not believe robot bosses will be part of the future workforce, including Gen Z

So are we ready for robot bosses? Not yet. Across the board, no generation has significant belief that robot bosses will be managing anytime soon. Every generation was under five-percent in its belief of on this concept. Generation Z was slightly more open to the idea at 4.05% of respondents believing they could have a robot boss in the next decade, but while people don't believe AI will progress to that point, it seems unlikely.



ABOUT THE RESEARCH TEAM

Ken Krogue

Ken Krogue was the Founder and President of InsideSales.com (now XANT). Ken has been intimately involved in the research performed by XANT since the first landmark speed-to-response study done with Dr. James Oldroyd while he was at MIT in 2007 and again with Harvard Business Review in 2011. Ken is a prominent thought leader in the inside sales space and second ranking person nationally in social selling strategies. Ken has been out of the research role for over a year with health concerns due to an automobile accident, but prior to that was a weekly columnist for Forbes.com and an international speaker. Ken has two new books due out.

Gabe Larsen

Gabe joined XANT with over 15 years of experience in revenue generation, from helping financial clients price and trade complex derivatives at Goldman Sachs to helping multinational organizations penetrate new markets at Accenture and Gallup. Gabe co-hosts the award-winning Sales Acceleration podcast and acts as VP of Marketing & Sales Development, where his expertise and research have helped more than 200 clients solve their biggest problems in the sales acceleration space.

Bryan Parry

Bryan Parry joined XANT (formerly InsideSales.com) in January 2016 as a Research Analyst. In this role, he is responsible for performing analysis to discover insights related to sales acceleration and the sales industry in general in order to support XANT's position of innovation. Bryan earned a bachelor of science in statistics from Brigham Young University.