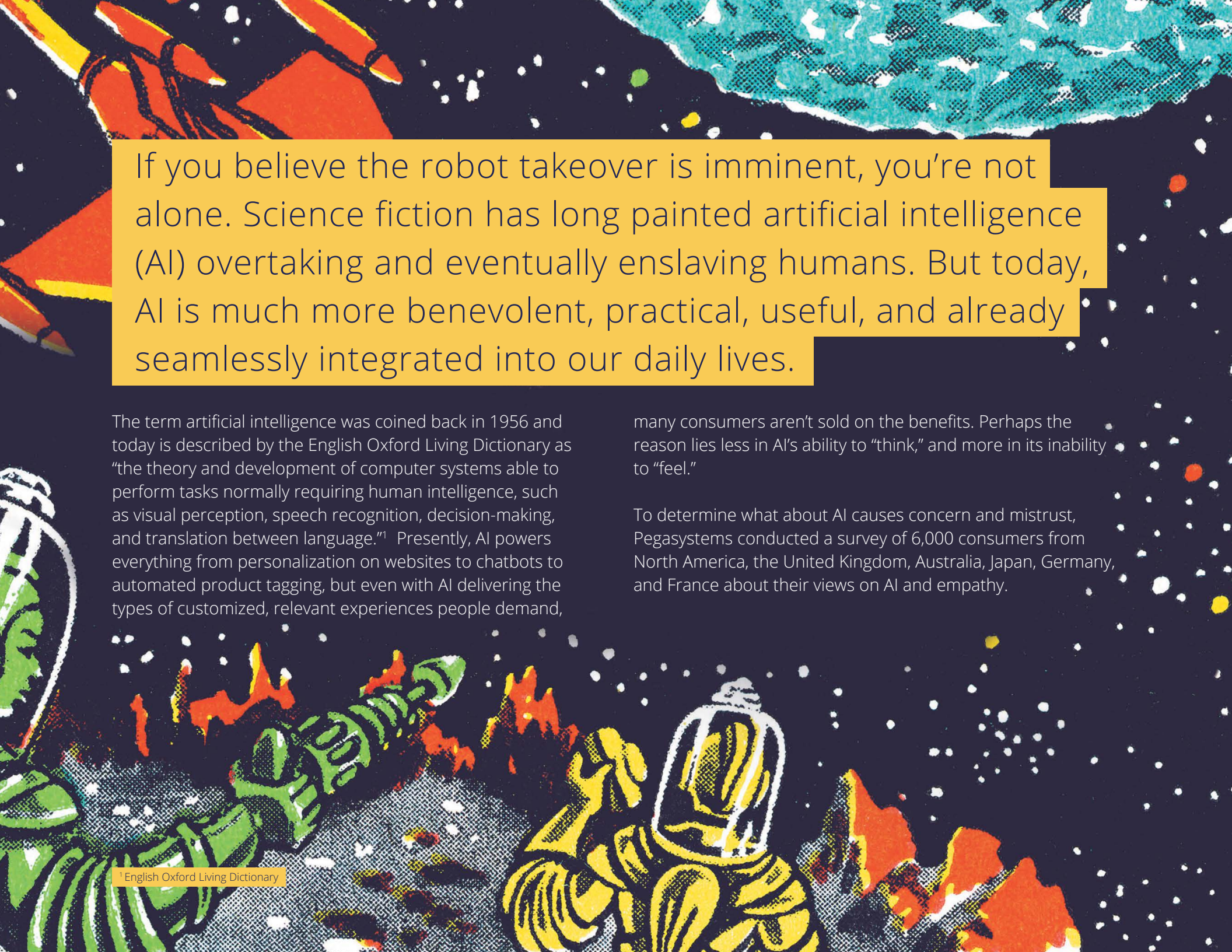


AI and Empathy:

Combining artificial intelligence with human ethics for better engagement

A study by Pega - updated July 2019



If you believe the robot takeover is imminent, you're not alone. Science fiction has long painted artificial intelligence (AI) overtaking and eventually enslaving humans. But today, AI is much more benevolent, practical, useful, and already seamlessly integrated into our daily lives.

The term artificial intelligence was coined back in 1956 and today is described by the English Oxford Living Dictionary as “the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between language.”¹ Presently, AI powers everything from personalization on websites to chatbots to automated product tagging, but even with AI delivering the types of customized, relevant experiences people demand,

many consumers aren't sold on the benefits. Perhaps the reason lies less in AI's ability to “think,” and more in its inability to “feel.”

To determine what about AI causes concern and mistrust, Pegasystems conducted a survey of 6,000 consumers from North America, the United Kingdom, Australia, Japan, Germany, and France about their views on AI and empathy.

¹ English Oxford Living Dictionary

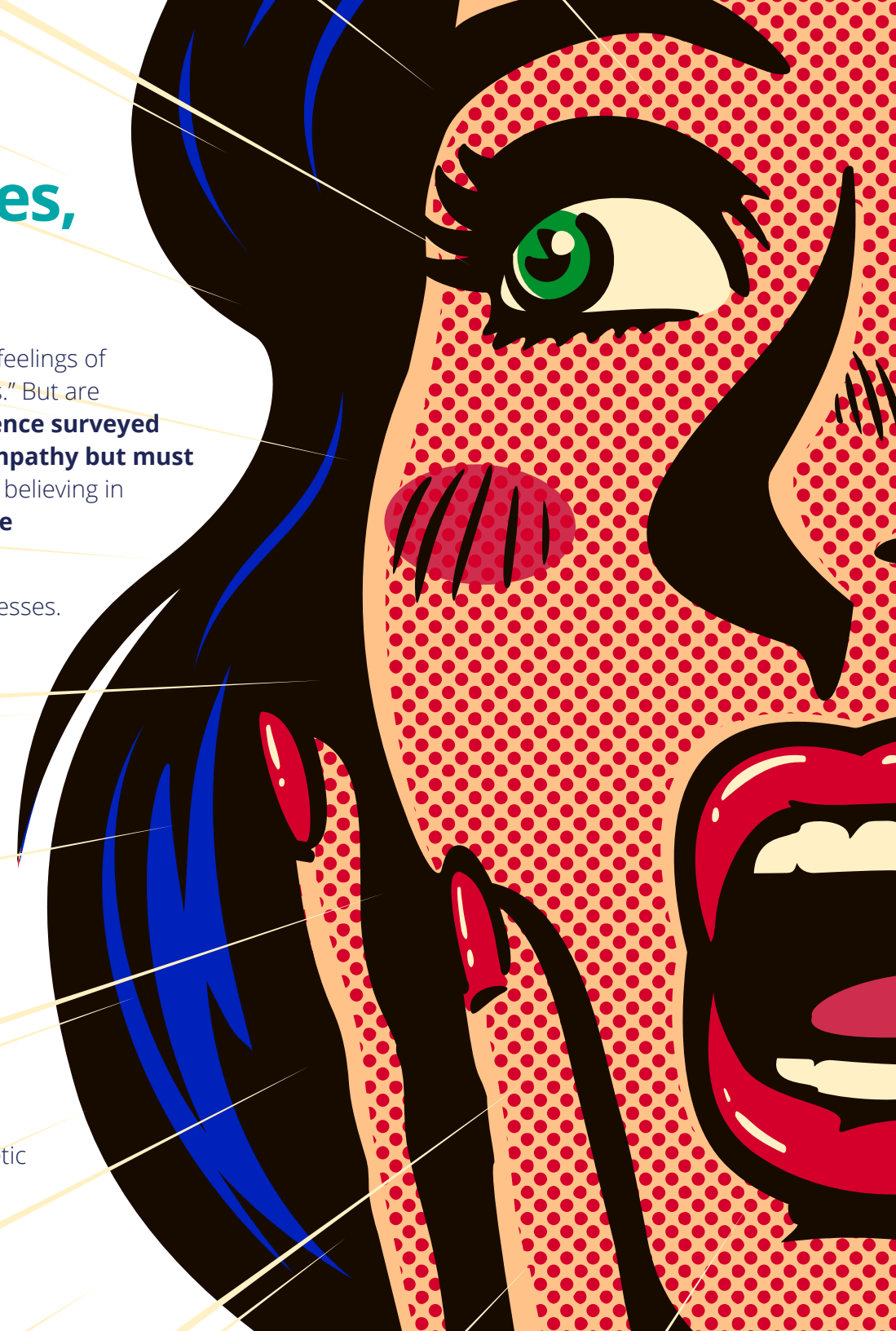
Cynicism for companies, strong distrust of AI

Empathy is defined as the ability to understand and share the feelings of another, or simply as “putting yourself in someone else’s shoes.” But are humans born with empathy or is it learned? **Half of the audience surveyed believes human beings are born with the capacity for empathy but must learn or be taught it.** That said, even with most respondents believing in our capacity for empathy, **38% don’t believe humans are the gold standard.**

This lack of faith extends to how respondents feel about businesses.

Two-thirds (65%) of respondents don’t believe companies have customers’ best interest at heart, but 69% think organizations have a moral obligation to do what’s right for the customer (beyond what’s legally required).

These numbers aren’t surprising. In a supposed “customer-centric” world, empathy is not a common corporate trait. If you have an email address, you’ve probably been on the receiving end of companies mercilessly spamming you in an attempt to sell to you or sell you more. Often, those communications have little to do with what customers need or what they are interested in. Even companies investing in more personalized experiences can still view their customers as segments instead of individuals, which is hardly an empathetic approach to customer engagement.



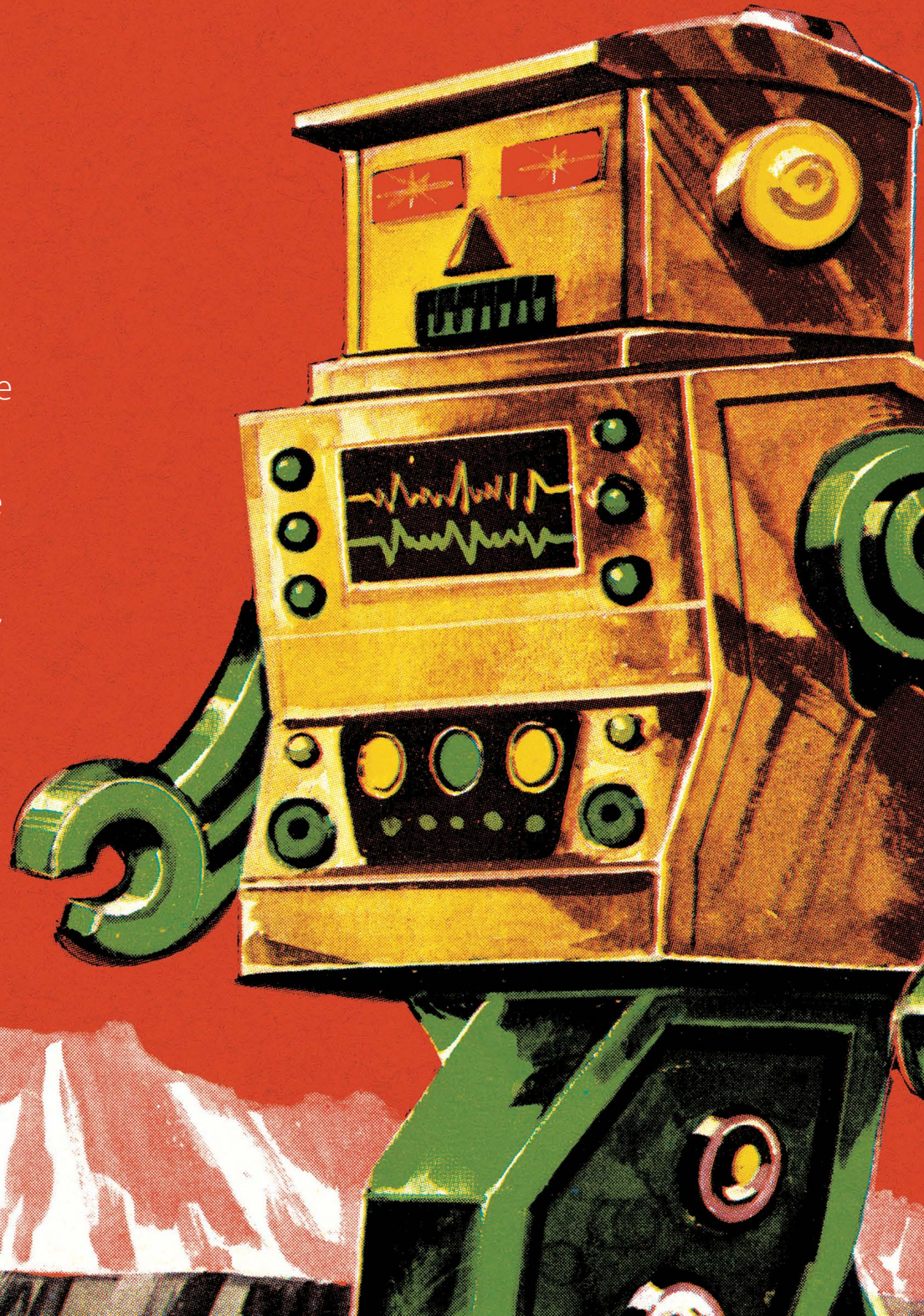
If people believe a business doesn't have their best interest at heart, why would they trust their technology? Even with little faith that organizations will put their needs first, the majority of respondents had an even greater distrust of AI:

68% trust a human more than AI to decide on bank loan approvals

69% say they would be more inclined to tell the truth to a person rather than AI

40% agree that AI has the potential to improve customer service and interactions

Perhaps some of this mistrust comes from customers not fully understanding how AI makes decisions. It seems logical to assume you could reason with a human regarding a decision on a bank loan, hoping to tap into their sense of empathy, versus a machine that has none. AI offers many opportunities for businesses to be more understanding and empathetic toward customers, but it's up to these organizations to take control of AI, guide it, and address their customers' concerns.



Concerns around “man vs. machine”

Maybe science fiction’s portrayal of AI has influenced some of the respondents, as **27% cited the rise of robots and enslavement of humanity as a concern.** But aside from the fears of an impending robot uprising, AI is still a topic that generates legitimate concern.

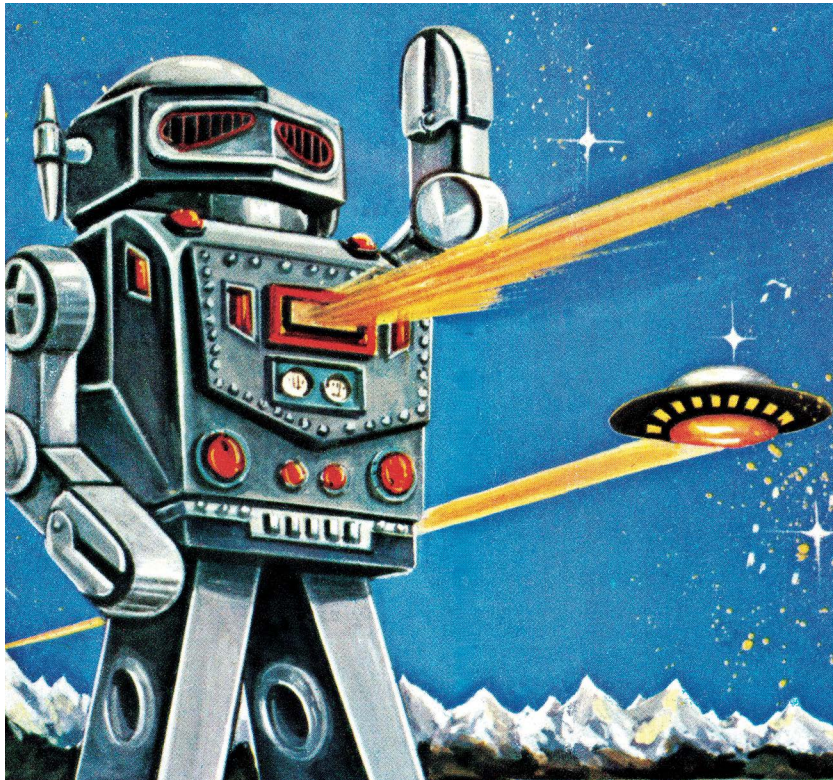
One of the most common fears is that AI will replace our human workforce, and this was true for the respondents as well.

In fact, 35% said they were concerned about machines taking their jobs.

It’s not without merit, as AI was designed to perform intelligent tasks like a human – only more efficiently. While AI is commonly used to orchestrate processes that could be done by a person, these sorts of tasks are generally extremely time-consuming and tedious for employees to perform. For example, Google Translate and Netflix recommendations are both driven by AI. Can you imagine how many people it would take to translate every language request that comes in through Google or to analyze each Netflix user’s viewing habits and make relevant recommendations?



Another concern around AI is bias. **54% of respondents believe it's possible for AI to show bias in the way it makes decisions.** The same percentage felt that AI will always make decisions based on the biases of the person who created it. **And 54% of respondents were skeptical about machines' ability to learn and adapt, despite science that has demonstrated this.** On the other hand, it's true that AI often does have bias, from the data it collects and from bias that exists in the modern world. AI has the ability to learn, but it needs guardrails to eliminate things like bias. Businesses using AI should work to pinpoint bias and adjust and improve AI systems using additional testing, guidelines, and controls. Perhaps the biggest concern was around AI's inability to truly



replicate human interaction. **About one-third (38%) of respondents don't believe AI could ever understand their preferences as well as a human being.**

Only 30% of respondents said they're comfortable with a business using AI to interact with them.

But as AI technology becomes more sophisticated, it might not always be clear if the "person" you're interacting with is an actual human or machine.

How to take control of AI with empathy and transparency

Empathy is not about humans versus AI; it's about using the best of what both have to offer. The future of AI-based decisioning is a combination of AI insights with human supplied ethical considerations. When many channels don't feature human agents, AI is the key to powering customer engagement and optimization across all channels. While **only 9% of respondents said they were very comfortable with businesses using AI to interact with them**, there's no doubt people love self-service options when they're accurate and efficient.

AI can do the heavy lifting in terms decisioning. Decisioning combines machine learning, mostly to predict customer behavior and rules, which are supplied by humans. Both human and machine insights determine the next best action for a customer by embedding the AI-based decisioning engine inside an ethical framework.

Transparency is also key to helping customers better understand how AI works. Organizations must employ transparent AI where appropriate, which means their machines can explain exactly why a decision was made. For example, when someone applies for credit card and is denied, the exact reasons are readily available.

Empathy means nothing without action.

At Pega, we use our real-time, omni-channel AI capabilities to provide the largest global brands with the ability to control their own AI for impact and empathy. We give organizations the technology to switch between opaque AI and transparent AI, depending on what is required, and the tools to build and enable more empathetic actions.



For now, empathetic AI isn't about teaching machines to feel but rather, using AI and rules about ethics and empathy to determine the next best action to take for a customer. AI can either make the decision on its own, based on the data it collects and the rules that are in place, or it can recommend a course of action to a human. Empathy is more than just delivering the right content or offer; **67% of the audience doesn't believe relevant and valuable offers are examples of AI demonstrating empathy.** The next best action might be to make an offer, or it might be to just say thanks. It might be to pause and listen to the customer first. And it could even be to put all actions on hold, if that is what's best for the customer.

At Pega, we aren't claiming AI is sophisticated enough to understand complex human emotions; it won't cry when it watches the end of "Titanic." But our guidelines – guidelines we're opinionated about in our software – put ethical considerations on top of machine learning that would most likely be viewed as empathetic decisions if a human made them.

Only humans can control how empathetic business systems are.

Humans need to take responsibility for AI, building on its strengths and recognizing and compensating for its weaknesses. The only way for businesses to change the conversation and comfort level with AI is to take control of it, prove its value through responsible applications, and direct its power toward improving outcomes. At least until an AI passes the Turing test for real.





About Pegasystems

We are Pegasystems, the leader in software for customer engagement and operational excellence. Our adaptive, cloud-architected software – built on the unified Pega Platform™ – empowers people to rapidly deploy and easily change applications to meet strategic business needs. Over our 35-year history, we've delivered award-winning capabilities in CRM and digital process automation (DPA), powered by advanced artificial intelligence and robotic automation, to help the world's leading brands achieve breakthrough business results.

For more information, please visit us at [pega.com](https://www.pega.com)

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