

an independent research by the Brand Humanizing Institute.

# Abstract

Technologies have always - and will continue to - disrupt our lives in almost any way possible. The increasing usage of AI and breakthroughs within AI research leaves many of us questioning if there is still a place for humans in this continuously robotizing world.

That is why we decided to survey decision-makers within organizations and (technology) experts on what their organizations are currently doing and what they expect to happen in the future, in an effort to gain an understanding of their ideas and beliefs on the future role of humans.

According to the results of our study, our respondents agree that organizations and our everyday work life will be affected. However, they do believe that there will continue to be a space for human labor in the future.

Nevertheless, we should acknowledge that the type of human labor might make a shift. New jobs may arise, as they have always done due to technological innovation, and people might have to train themselves to better fit future needs.

For instance, some might move into more tech-oriented jobs to become data engineers, developers or data scientists. Others might take advantage of their human traits and soft skills, which may be in increasing demand in the near future. According to the results of our study, experts and decision-makers believe that more and more humans will make a shift towards roles that require more creative and social competences, which are traits that are more associated with humans rather than with machines.

The findings in this report suggest a flourishing future for humans within organizations, especially since it seems like the organizations that learn how to synergize humans and machines may outperform those that do not. One thing is for sure, however, technology will continue to have an impact on the way we work. Yet instead of replacing us, it will actually help us to create new and more human-centered jobs.

By respecting AI's strong suits, yet still understanding its shortcomings, humans and machines can make a huge difference by working together. All in all, and without ignoring the many threats AI may pose, it has the potential to be a force for good and improve our lives.

### The future seems bright.

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### Why we made this report Why we made this report

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# "Today, humanity is on the verge of the Fourth Industrial Revolution."



# Why we made this report

### It is the year 2020 and technology has nestled itself more and more into our daily lives.

The first thing we do when we wake up is to check our phone. If we want to go out for a run, we check an app to see whether it is going to rain and if we want to switch off the lights, we tell Siri or Alexa to do it for us.

We know that we are stating the obvious here. However, it is important to realize how much technology is embedded into our everyday life.

Technology has improved our lives in numerous ways, making every step we take more convenient, more efficient and, if you ask us, more fun too.

### "Today, humanity is on the verge of the Fourth Industrial Revolution."

Today, humanity is on the verge of the Fourth Industrial Revolution. This new era of technological evolution is described by the World Economic Forum (2016) "as the advent of "cyber-physical systems" involving entirely new capabilities for people and machines".

Proof of this can be found in technologies such as CRISPR (gene editing) and the first steps in biohacking. Additionally, it can be found in the Artificial Intelligence applications that we create and use today, which already impact life as it is on a large scale.

Aside from that we also deal with increasing automation. In a recent study published by Oxford Economics (2019), they estimated that by 2030 about 20 million manufacturing jobs may be displaced by robotization.

That is the manufacturing industry alone. Let that sink in.

So with technology changing the world so much, it leaves us with a very important question: What about us?

## What about us?

What about all the 7.8 billion people in the world (according to recent United Nations estimates)? Will robots take over all of our jobs, or is there still some value that we humans have to offer the world of the future?

# In short: What is the State of Human in 2020?

In order to gain some insight into our future, we decided to survey leading professionals about their opinions on the future. They, after all, stand at the front of technological evolution and adoption. Every day, they are the ones making decisions on what to automate and what not. They decide what value we humans have to offer to the business world and what type of technology gets created.

This report is obviously not giving the ultimate answer to the question posed. You must see the results of this report as if you were to dip your toes into the water in order to figure out what the temperature is. We do not aim to be conclusive or to make any big statements. We simply want to offer you, the reader, a glance into the minds of these decision-makers so you can get an idea of how they see the future and how it might impact your life and work.

Since we at the Brand Humanizing Institute have been performing research on the intersection of technology and humanity since 2017, we will also shed some light on the findings from our own experience. Our recommendations for the future might help you change policies within your organization or may help you in some of the decision making you yourself are doing.

"Our recommendations for the future might help you change policies within your organization or may help you in some of the decisionmaking you yourself are doing."

The State of Human 2020 Why we made this report State of Human 2020 is our first attempt at getting an idea about the current ideas floating around in the minds of decisionmakers and their respective organizations. We plan on performing this research every year from now on, so we can keep track of how opinions and trends change.

For now, we simply want to thank you for taking the time out of your precious day to read a little bit about what we found out. And we hope that we inspire you so you can make positive changes within your organization and life in general.

With warm regards,

The people of the **Brand Humanizing Institute** 





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# About the data

# "We always say that transparency is crucial in data handling and algorithms."



# About the data

We always say that transparency is crucial in data handling and algorithms. That's why we want to expand on this belief in our own research as well. In this section, we describe how we collected the data behind this study, why we chose to collect it like that and what its limitations are.

### **Data collection**

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The data used for State of Human 2020 was collected by us between the beginning of November 2019 and the end of December 2019. For the data collection, an online questionnaire was set up consisting of twelve statements and two open questions.

The statements were measured on a five-point Likert scale, ranging from strongly disagree to strongly agree. For the open questions, no restrictions were given. The respondents could freely express as much or as little about the question presented to them.

Because the goal of this research was to get a grip on decision-makers' ideas and beliefs on the future role of humans, access to this survey was strictly invite-only. This helped us in being able to reach out to professionals that met one or both of these criteria:

Leading position within their organization Ranging from lower-level managers all up to the C-level.

# A certain level of seniority within their respective market and/or profession

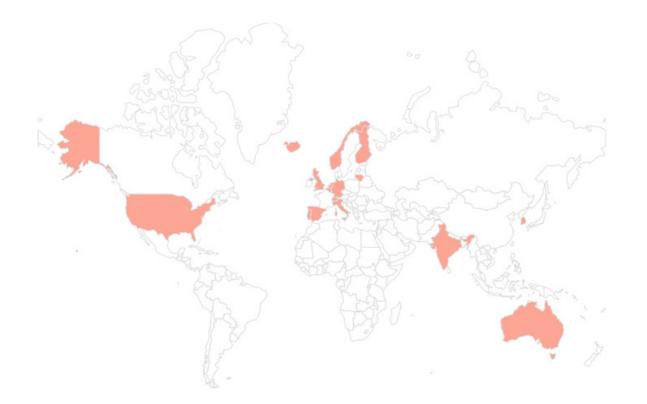
Ranging from lower-level managers all up to the C-level.



We personally reached out to these individuals through direct messages on LinkedIn and sometimes directly if we gained their contact information through a mutual friend or connection from our network.

### **Description of the dataset gathered**

The dataset consists of 104 respondents, located all around the world. However, it should be mentioned that most of these respondents were living in Europe at that moment in time. The figure below shows the parts of the world where our respondents reported to be working and living during the data collection process.



Europe	84,6%
United States	6,7%
United Kingdom	4,8%
Asia	2,9%
Australia	1,0%

Figure 1: World Map of Participating Countries.

Those international respondents were for 67% of the male gender and 33% of the female gender. They were mainly within the age range of 26 years old to 45 years old (59%), covering a vast amount of different age groups. The largest part of the respondents had an academic educational background (74%), meaning bachelor, master and Ph.D. graduates.

The occupation of those respondents ranged from C-level to academic researchers, and they were mainly active in the Information Technology & Services industry (40%). This made them an appropriate and suitable target audience for this study.

### Limitations

The largest limitation of this study is the lack of global representativeness. Since most of our respondents were living and working in Europe at the time of data collection, the results described in this report represent a mostly "European" view and should thus only be considered as such.

Another limitation that is worth expressing is that we had a lack of gender diversity in our dataset since 67% of the respondents reported to be of male gender and only 33% reported to be of the female gender. We already noticed this disbalance during the data collection process and tried to correct it, especially because we believe diversity is of extreme importance for the future of this world. Unfortunately, our efforts did not make a huge difference as we had no control over who actually took up our invitation for the survey.

Lastly, we must mention that we worked with limited resources. We are a self-funded research organization, powered by passionate volunteers who share our view and vision. This impacted the speed at which we could perform this research, both in data collection as well as data processing.

Do you have any questions about the data? Contact Iman@brandhumanizing.com.

"We are a self-funded research organization, powered by passionate volunteers who share our view and vision."

# Chapter 1 The Threat of AI & Automation

# "Is it correct to fear that robots will take over all jobs?"

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# **1 The Threat of AI & Automation**

It is an understatement that the fear of technology and automation is real. In a 2017 study by the European Union, 72% of Europeans claim to fear robots are here to "steal" their jobs in the foreseeable future (European Union, 2017).

It is perfectly understandable that people feel this way, especially because of the big doomsday scenarios we sometimes hear about, and the image that Hollywood has portrayed about technology in movies such as The Terminator (1984) or Marvel's Avengers: Age of Ultron (2015), to name a more recent example.

Although the fear is real and understandable on a human level, it may be driven by a lack of knowledge of these technologies. The same 2017 EU study namely noted that the more respondents knew about technology, the less they feared it. That is why we wanted to tackle this question from an organization's perspective. Is it correct to fear that robots will take over all jobs? Or do decisionmakers within organizations think differently about this? And if so, how do they look at the possible threat of AI & automation on the role that humans play within these organizations?

A great way to start exploring this question is by zooming in how likely organizations are to increase the use of automation. The results of our study shows that 76,9% of our respondents deemed it either likely or very likely that this will be the case.

"The results of our study shows that 76,9% of our respondents deemed it either likely or very likely that this will be the case."



Elaborating a bit more on this idea, we also included a more extreme question into the survey, asking our respondents whether they believed that businesses in the future will almost be completely run by AI rather than humans. Here, the results were not so one-sided. To be more concrete, about 50% of the participants did not agree with this belief, 30% did agree, leaving another 20% with an undetermined point of view.

Given the dispersed results regarding the future of technologies and humans, we decided to view the data through the lens of three distinct groups: humanists, believers and fence-sitters.

"Humanists" are individuals who do not businesses believe that will be completely run by AI rather than humans whereas "Believers" are the individuals who do believe that businesses will be completely run by AI rather than humans. "Fence-sitters" are the individuals who are undecided about whether businesses will be completely run by AI rather than humans. A more detailed description can be found in Figure 2.

It is interesting to see that Humanists feel like technology in their field is mediocre in terms of level of advancement. On the contrary, Believers feel like technology is very advanced in their field. This may indicate that Believers might have more experience with advanced information technologies, providing them with a better understanding about how technologies could affect their work field, and possibly businesses in the future. Humanists, on the other hand, might be less exposed to the potential of advanced information technologies, which could result in them being less aware of the impact these technologies could have in their workfield. This is inline with the results presented in the 2017 EU Study mentioned earlier in this chapter.

#### Figure 2: Three Distinct Groups



**HUMANISTS** 52 out of 104 people disagreed or strongly disagreed with the statement "I believe businesses in the future will almost completely run by Al rather than

**BELIEVERS** 31 out of 104 people agreed

agreed or strongly with the statement "I believe businesses in the future will almost completely run by AI rather than humans".

#### **FENCE-SITTERS**

22 out of 104 people are undecided about the statement "I believe businesses in the future will almost completely run by AI rather than humans".

The State of Human 2020 1 The Threat of AI & Automation As mentioned earlier, most of our participants do believe automation will increase at their organizations and 30% even go as far as to say most organizations will almost be completely run by Al. However, when we asked the same participants whether their specific job would be heavily affected by this, the large majority of those individuals did not agree. Now, it is true that our respondents have leading positions within their organizations, so this may be one explanation for this phenomenon.

However, it also matches the concept of the "optimism bias". When this occurs, people understand that there are "risks" associated with doing a certain action or being exposed to new (technological) developments, but do not feel like these risks would affect them personally. For example, as stated in scientific research (Costa-Font & Mossialos. 2009), individuals are well aware of the risks related to smoking cigarettes, however, they perceive the risks to be smaller for themselves than for others. We believe that this classical "it won't happen to me" phenomenon is also applicable in the scenario related to the "threat" of technologies,

such as Artificial Intelligence (AI). We experience this at the Brand Humanizing Institute too. When we talk and help organizations with these types of challenges, people often display similar signs in which they perfectly describe potential (negative) effects of AI on the job field but don't feel these will apply to them personally.

Following technological trends since the first industrial revolution, it is safe to say that it is inevitable that technologies will disrupt our (work)life. Also, what technology has done since its very coming is taking over labor that was previously performed by humans. From light bulbs that replaced the need for human lamplighters to 3D printers that

"Following technological trends since the first industrial revolution, it is safe to say that it is inevitable that technologies will disrupt our (work)life." can even construct entire buildings now. AI may put our relationship with technology even more to the test. It has the potential to "steal" more and more of our jobs, such as the European respondents feared (2017). It is the classical story of (Wo)man vs. Machine all over again, and that is exactly what our next chapter is about.



Chapter 2 (Wo)man vs. Machine

# "What awaits us in the future? And is there even a future to speak of for us humans?"



# 2 (Wo)man vs. Machine

Technology is sometimes criminalized as a robber who is here with the sole purpose of making our presence redundant, while others are amazed by its power and even go as far as to say we humans are inferior to it. Both camps are wrong, but it is understandable where they come from.

### Let us explain:

#### In 2018, Google CEO Sundar Pichai introduced the world to Google Duplex,

an AI-powered voicebot assistant that can make phone calls for you. Pichai played some recordings of the AI convincingly booking a haircut and reserving a table at a restaurant, leaving all the people in the audience at awe. The AI even inserted "hmm-hmm" in between sentences, which made it sound extra uncanney. It was a great display of how a robot could potentially take over tasks currently performed by humans. The goal here was not to showcase the technology's superiority over humans in a specific task, but to at least prove that it could be indistinguishable from human beings.

#### Or what about AlphaGo?

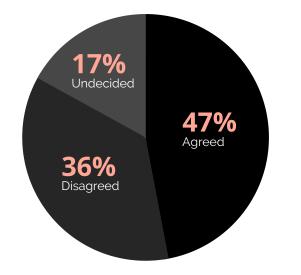
AlphaGo is an AI developed by Google's Deepmind, a research organization specialized in the advancement of AI, with the sole purpose of showcasing that technology can beat humans in a game that was considered very creative and out of technology's league. Go is an extremely complicated ancient board game that traces back to the Zhou Dynasty (more than 2500 years ago). The total amount of possible board positions a player can take exceeds the amount of atoms present in our visible universe, and this is exactly why it is so hard for an AI to play this game (as opposed to chess for example). But you can already guess where this is going. AlphaGo easily beat the 18-time world champion Go player, Lee Sedol, in a heavily broadcasted game of Man vs. Machine, winning 4 out of a total of 5 matches. The world beheld this severe loss with the same sheer disbelief Lee Sedol himself displayed through his facial expressions during all of the matches. Lee Sedol said: "I thought AlphaGo was based on probability calculation and it was merely a machine. But when I saw this move (the now famous "move 37") I changed my mind. Surely AlphaGo is creative."

And if you think this is crazy, hold on for a moment. AlphaGo was an AI trained on watching humans play the game of Go. DeepMind actually released a new version of the program, named AlphaGo Zero that had 0 (zero) human-training. In fact, the software completely trained itself in only 40 days. It completely crushed the AlphaGo that faced Lee Sedol, by winning 100 out of a 100 games! And even later, AlphaZero (a newer AI that was superhuman in the games of chess and shogi, aside of Go) won 61% of the games it played against AlphaGo Zero, with only 34 hours(!) of training.

These examples are a perfect illustration of what we see happening in the workfield too. Technology is not only seen as a mere threat to humans, it is also used to compete with humans for the same tasks / jobs. Technology has a clear advantage in being very cost-friendly, not needing any breaks, vacations or other forms of care. It is the "perfect" employee that devotes 100% of its time and effort to produce value for an organization.

#### Statement:

Customer contact (e.g., customer service) would be more efficient through technologies such as AI Chatbots and Voicebots.



### How far do leaders and experts believe this will go? What awaits us in the future? And is there even a future to speak of for us humans?

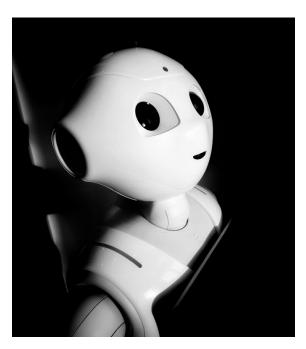
To answer these questions, let's take a deepdive in the results of our study. We asked the participants a set of questions related to customer contact that could be performed by either human operators or by machines. The results showed that there were two extreme camps present, one supporting the machine-side and the other one supporting the human-side.

To be more precise, 47% of the participants agreed with the proposed statement that customer contact (e.g., customer service) would be more efficient through technologies such as AI Chatbots and Voicebots. 37% of the participants disagreed with this statement, and the remaining part of the participants were left undecided.

Figure 3: Feedback on proposed statement

The State of Human 2020 2 (Wo)man vs. Machine The most interesting part of this finding is that although there was a dispersion in the results related to the AI bot question, the majority of the participants (68%) did also mention that they themselves do prefer human interaction above automated interaction. On top of that, once again the majority (72%) would not want to automate their customer care in order to cut costs when there is a chance that it could decrease their levels of customer service.

So, how is it that the majority considers human interaction to be more valuable than automated interaction, but also feel like AI bots would be more suitable for customer contact-related activities than humans?



**The State of Human 2020** 2 (Wo)man vs. Machine

According to Følstad and Brandtzaeg (2017), peoples' main motivation for using chatbots is productivity, as they believe that the use of these bots would provide users with timely and efficient assistance or information. But is motivation justified? "So, how is it that the majority considers human interaction to be more valuable than automated interaction, but also feel like AI bots would be more suitable for customer contact-related activities than humans?"

In a study comparing human-to-human interactions versus human-to-chatbot interactions, Hill et al. (2015) found that human-to-chatbot interactions tend to last longer than humanto-human interactions between strangers.

Moreover, the human-to-chatbot interactions were also found to consist of shorter messages, less complicated vocabulary, and more profanity. This might be due to the fact that the users felt a lack of emotional connection with the bot as they would with an actual human being. For instance, the study of Corti and Gillespie (2016) shows that users made more effort repairing misunderstandings when talking to a chatbot that they perceived as human than with chatbots they perceived as automated.

Apparently, it was the human trait to be able to have genuine emotional connection which was of great value for the users within those studies. This is an important thing to understand, since it was found in a study on customer service chatbots that about 40% of user requests to customer service were rather emotional than information seeking (Xu et al., 2017).

#### Statement:

"I'd like to automate my customer care in order to cut costs, even if it decreases my levels of customer service"





Having said that, we would like to go back and highlight a statement we discussed earlier in this chapter. It concerns the following statement: "I'd like to automate my customer care in order to cut costs, even if it decreases my levels of customer service". When we formulated the question, we basically assumed that everybody would completely disagree with it. And although 72% fully disagreed to the statement, to our surprise 12% actually did agree. We found it absurd that people actually would not mind that their level of customer service decreases if it allows them to cut some costs.

These types of requests require a different approach and provide opportunity for organizations to strengthen their relationships with their customers.

### "Why would one jeopardize its customer service level in favor of simple cost-cutting? What about the money they might actually lose because of poor service?"

Why would one jeopardize its customer service level in favor of simple cost-cutting? What about the money they might actually lose because of poor service? A 2018 report (Forbes), for example, found that poor customer service is costing organizations \$75 billion a year, pointing out that companies "are failing to create the positive, emotional experiences that drive customer loyalty." On top of that, in another study it was found that "excellence in customer service" may actually lead to a better competitive advantage and more profits (Bazan, 1998).

Perhaps this is a classic consequence of time discounting, a psychological phenomenon that occurs when making judgements on the valuation of rewards (money for example) relative to the time you receive it (Frederick et al., 2002). In other words, people tend to perceive future monetary gains as less valuable than receiving that same amount right now. This psychological phenomenon may lead managers to decide on gaining less money now, rather than waiting out for a larger pay-out that may occur somewhere in the future.

**The State of Human 2020** 2 (Wo)man vs. Machine

A decision that is especially encouraged under circumstances of uncertainty. Cutting costs right now offer the manager the opportunity to save a fixed sure amount, whereas future potential gains are more uncertain and vague. With the loss aversion bias working at all times (Kahneman & Tversky, 1979), humans would be much more inclined to go for the certain reward, even if that means that it concerns a much lower amount than a potential yet uncertain future reward.

Let us illustrate how this phenomenon is occurring in real life by telling you about a conversation we had with a high-profile company. Last year, we spoke with a high-positioned director of a Dutch insurance company. They mentioned that they were going to eliminate about 1.000 jobs due to the rise of AI.

The largest part of these jobs concerned customer service employees who would be replaced by more and more bots. These would help them "smoothen" customer contact, as they would say. And by smoothen they meant bots would help them to automate customer service (including customer contact) and increase efficiency (read: cut customer service costs).

The problem they were struggling with, however, was the human part. They asked how they could perform this process as humanely as possible. How could they tell these 1.000 employees, as humanly as possible, that they were considered redundant and that they would be replaced by robots?

We countered that question by asking them what withheld them from repositioning these employees to different tasks within the customer service department. With the help of AI, we told them, their customer service employees could start focussing more on relationship building and creating meaningful interactions with their customers. While AI takes over repetitive tasks and processes so error margins can be reduced, they free up the humans in question so they can focus on increasing Customer Lifetime Value (CLV), as these types of interactions require more human-specific skills such as EQ, ethics, and context-awareness. "They mentioned that they were going to eliminate about 1.000 jobs due to the rise of AI."



They did not react positively to our suggestion, unfortunately. They simply pointed out that they were dealing with "stakeholders" (read: shareholders that were pushing for short-term cash) so this was the only way forward.

This is a great example of how humans and machines are sometimes pushed to compete with each other for the same job. For judging who "wins", some organizations tend to rely too heavily on variables such as cutting costs and neglect other (important) variables during their judgment. It is a trap for the human in question since technology will win 10 out of 10 times if these are the rules set up for "winning".

"That does not make technology bad, however. Technology has no ambition or some obscure goal of wanting to thrive over humans and take over the world."



That does not make technology bad, however. Technology has no ambition or some obscure goal of wanting to thrive over humans and take over the world.

What goes wrong here, is that organizations are sometimes forced to focus too much on the short-term such as in the example above. With the world of tomorrow being a huge question mark, it is logical and understandable that leaders take short-term decisions that bring back sure returns. That is why the next chapter of this report is so vital. What if this organization took our counterargument seriously? What if AI doesn't compete with humans, but actually creates opportunities for humans and organizations? What if the perceived risk of the unsure future becomes less foggy? What if we had an understanding of what tomorrow looks like, how would that influence our decision making with respect to humans and AI?

# Chapter 3 Does Al create opportunities for humans?

"Respecting both strong suits sets up the possibility for cooperation rather than competition."



# 3 Does Al create opportunities for Humans?

At the end of our survey we asked our participants if they had anything to add. And one response really stood out to us: "You insist that there is something a machine cannot do. If you tell me precisely what it is a machine cannot do, then I can always make a machine which will do just that."

the previous chapter, we described to great lengths what capabilities robots already possess right now, let alone what they will be able to do in the future. However, it is not so much a question of what a machine can do precisely. For example, we pointed out that chatbots and voicebots are indeed able to converse with humans, but they sometimes miss the mark completely and may lead to lower levels of customer service. Even the much celebrated Google Duplex that could convincingly mimic a human while booking you a haircut or restaurant reservation doesn't live up to the hype. In fact, an article in the New York Times (2019) pointed out that Duplex in most times even needed human intervention to place successful calls.

What is important to understand is that Google is one of the world's superpowers when it comes to AI. If even they cannot nail this, how will most organizations do this? Aside from that, from a philosophical perspective, can machines even outhuman humans? Yes, they can certainly mimic and simulate some of our behaviors, but saying you have been in a space simulation does not mean you have actually been to space.

The same goes for empathy. Even if we eventually are able to program a machine to behave and sound perfectly empathetic with you, is it really empathetic? Let's say your car broke down and you have to call roadside assistance. A voicebot automatically picks up the phone within a second, and after listening to your story it tells you how sorry it feels for you and that it understands you. But how can it truly understand you? The machine doesn't own a car, let alone has experienced it breaking down while driving. The machine doesn't profoundly know and understand what it truly is like to live a human life. The machine isn't human.

"You insist that there is something a machine cannot do. If you tell me precisely what it is a machine cannot do, then I can always make a machine which will do just that." So why do we so desperately look for building machines that outhuman humans, while we can also respect them for what they are? For the skills they possess that are superhuman.

### "So why do we so desperately look for building machines that outhuman humans, while we can also respect them for what they are?"

For the type of things they can do for us that surpass our own capabilities. While also respecting who we ourselves are, for the skills that make us uniquely human.

Respecting both strong suits sets up the possibility for cooperation rather than competition. By understanding what we both are really good at, we can actually combine forces and potentially realize results that neither machine nor human would be able to achieve if it were alone.

This mindset is also something that our participants support, as the vast majority (87,5%) stated that they do believe that there will always be space for human labor in this continuously digitizing (business) world. And according to Garner (2017), AI is actually expected to generate two million new jobs in 2025. Besides that, it is very likely that new lines of business will emerge that we cannot even imagine now (Wired, 2018). This will subsequently change the position and needed skill set of humans.

We also presented our participants with an open question revolving around their vision of the position of humans within



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this increasingly digital business world. This allowed them to unrestrictedly express their thoughts on this matter. Their responses were processed into a word cloud, which is displayed below in Figure 4.

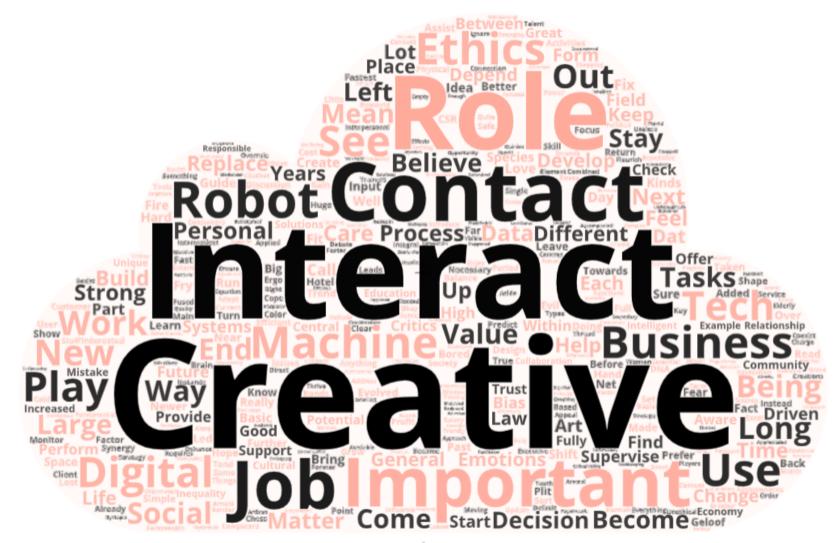


Figure 4: Wordcloud

#### The State of Human 2020

3 Does AI create opportunities for Humans?

As you can see in the figure above, the words "creative, interact, contact" have been mentioned quite a few times. To give you a good understanding of the vision that these leaders and experts carry, we listed a few of their quotes below:

"Humans will play an essential role within the digital business world - not only in designing, shaping and maintaining the automated systems, but within creative positions and interpersonal positions for the foreseeable future." "Almost all repetitive tasks will be automated in the end, but there will always be a need for capabilities which are very hard for AI to take over in the field of communication and decision making." "There will always be humans needed for ideas, customer relationships and people development (coaching/mentoring)."

"Creativity and critical thinking will become increasingly important. It will matter how you can supplement technology and learn how to use it in your advantage. It will help us do what we are great at: be creative, imagining, envisioning."



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Leaving aside these quotes for a second, it is undeniable that technologies such as AI will disrupt our current way of working. And that's ok. In our history, technology and innovation have always disrupted our lives. From the invention of fire to the invention of electricity. Now from initial digitalization to artificial intelligence. The key thing will always be to use technology (and innovation in general) to improve our lives. Just as you can use the historic invention of fire to warm yourself up or cook a delicious meal, you can also use it to set a house on fire. As with all great things, they can both be used for good and bad.

Looking at the results of this study, a good way to use the rise of AI seems to look for synergy between humans and technology. It is to our belief that the organizations (whether they are commercially active, non-profit or public) that look for this synergy and learn how to combine digital forces with their human forces, will be the ones who will blossom the most.

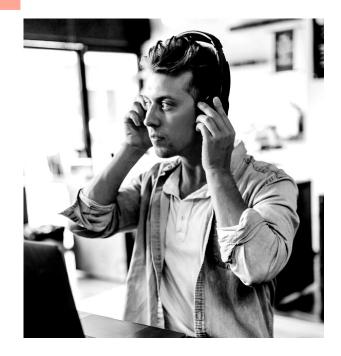
These organizations will adopt a model where machines will be used to execute repetitive processes, and to spot opportunities and connections which are beyond human capability. This means that machines will take over partial or perhaps even complete job profiles. On the human end, however, this model will free up costly time that can now be spent by human workers to focus more on the creative aspects, personal interaction and data-driven decision making. This is in alignment with statements that our surveyed leaders and experts claim to be relevant for positions that humans will probably shift towards.

Our research and the respondents' insights show us that the majority of people feel that Artificial Intelligence in the workforce will change and create jobs, rather than simply take them all away. The word cloud also suggests that people are aware of the fact that creativity, interpersonal contact and interaction are traits humans excel at.

With this in mind, answering the question of this chapter becomes easy.



"It is to our belief that the organizations that look for this synergy and learn how to combine digital forces with their human forces, will be the ones who will blossom the most."



# **Does AI create opportunities for humans?**

The short answer is yes. By embracing Artificial Intelligence and respecting its many strong suits, we can have it run repetitive and low-emotion processes and assist us in decision-making. This then allows human workers to shift their focus and innovate their jobs to work on things that require human-specific strong suits.

Although the topics of AI ethics and AI governance are out of scope for this specific report, some of our participants did mention their importance in the open-ended questions. We strongly want to emphasize that we agree with them that these are vital components for successful AI implementation. With each and every policy change or updates in work processes that regard the usage of automation or AI, they should be taken into account. Through that way we minimize the risk-side of this new wave of technology and increase its potential to be a force for good and for organizational growth.

In essence; Artificial Intelligence will help us shape new, human-centered, jobs and tasks, while taking over and outperforming us on the tasks we mostly did not like anyway.

#### Making our lives better, each and every day.

**Conclusion & Recommendations** 

# "What is the current State of Human?"



# **Conclusion & Recommendations**

The question we wanted to answer in this report is: "what is the current State of Human?". Our goal was to gain some understanding of what decision-makers and experts think about the effects of Artificial Intelligence on humans within organizations.

# Basically: is there still a place for us in the future?

When looking at the suggested role of Artificial Intelligence in organizations, half of the people we surveyed do not feel that Artificial Intelligence will completely run our businesses in the future. On the other hand, a minority (29.81%) feels it probably will. The group that is left is still sitting on the fence about it, but they see it as something that might run many of the jobs we humans do today, but also feel like humans have a specific value and that we can adapt to new situations and create new jobs. This is a recurring pattern we observed during the survey and within the open questions we posed our participants.

### So should we fear the impact these technologies could have on our jobs and organizations?

If you hate change, the answer is yes. Because Artificial Intelligence will undoubtedly change the way we do things. This is backed by the research we cited in this report, as well as by our respondents. But if we leave the fact that change will occur out of the equation, then we opt to say no.

"In essence, we feel that the organizations that best know how to create this human & machine synergy will outperform those that don't." In fact, the findings in this report suggest that we should actually accept and embrace these developments because it seems like AI's optimal usage is not obtained by simply replacing humans with AI and removing them from organizations completely (one of the largest societal fears), but is obtained by letting humans and AI work side by side. Al will be very helpful by taking over repetitive/predictable or low-emotion tasks that are currently performed by humans, and in turn allows human workers to shift their focus and perform tasks that were previously hardly done because of a lack of time. This helps to increase the quality of work within organizations and may lead to better results when performed well. In essence, we feel that the organizations that best know how to create this human & machine synergy will outperform those that don't.

As with every technological advancement, it needs to find the right place in our ecosystem. And with the many doom-scenarios that have been written about Artificial Intelligence, ethics and governance are crucial components to guide the process of finding that spot for Artificial Intelligence within our ecosystem.

So to end this report we can state that the State of Human in 2020 is more than great. Our state will change, as our jobs and organizations will be impacted by Artificial Intelligence, but our findings suggest that there is still much to do for us in the future. Not alone, but together with Artificial Intelligence.

### Recommendations

#### To people individually

we recommend that you gain a better understanding of what Artificial Intelligence is at its core (not too advanced. а basic understanding is more than enough) so you can envision what effect it may have on your life and within role on vour vour organization. Look for ways in which it can help you and try to think about what you could do with the extra time it creates for you. By identifying these things, you gain clarity in which ways to develop yourself so you are ready to change the specifics of your role when your organization requires it.

#### To organizations

we recommend that you start building an infrastructure for human & machine synergy. Whether you are active within the commercial, non-profit or public sector; try to identify where machines would be a great addition to take over tasks, and where there is an opportunity for new or hardly-executed tasks that require more human-based skills. This will facilitate the transition to this new way of working and ease the effect of the change that is coming to your organization.

#### And lastly to both

try to look at Artificial Intelligence as a friend rather than a foe. It will enable us to blossom in our reformed roles, new-found jobs and maybe our newly created businesses. And will help increase the impact we have on the world.

By working together, the future is bright. About the Brand Humanizing Institute

"Through continuous and cutting-edge research we hope to help leaders make better decisions."

# **About the Brand Humanizing Institute**

We are a growing team of researchers, networkers, tech enthusiasts and behavioral experts on a search for a more technological world, that at the same time is also more ethical and humanfriendly.

#### No concessions.

Technology has changed our world forever and will continue to do so. This continuous change is what keeps life interesting. Yet at the speed at which we innovate, it is hard for organizations and governments to keep up with the pace and keep making the right choices all at the same time.

Because of the pressure on today's leaders, the position of the human is threatened. This is where we come in. We have made it our mission to look ahead and study the problems of tomorrow, so we can help the leaders of today. All in a mission to help shape a better tomorrow for everybody on this planet.

Through continuous and cutting-edge research we hope to help leaders make better decisions on AI creations and implementations, whether they are active within the corporate, public or political landscape.

State of Human 2020 is just one of the studies we performed. Looking ahead, our research agenda currently consists of the following larger topics:

- What are the **opportunities and threats** of AI on the world (both economically as well as societal);
- **\*** How can we intervene in current trends in order to **change the future**;
- 🔆 What skills do the **workers of the future** need;
- K How should education adapt to cater to these new needs;
- What **human-specific skills** will remain exclusively human (what skills are outside of AI's capabilities);
- **\*** and more.

If you are curious about what we find out during these studies, you can keep an eye on us through our website www.brandhumanizing.com. Alternatively, you can also contact one of our team members personally, may you prefer a more human connection with us.

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# References

Bazan, S. (1998). Customer Service and Satisfaction: Competitive Advantage and Beyond. *New England Journal of Entrepreneurship*, 1(1), 23–29.

Brandtzaeg P.B., & Følstad A. (2017). Why People Use Chatbots. *Proceedings of the 4th International Conference of Internet Science*, 377-392.

Corti, K., & Gillespie, A. (2016). Co-Constructing Intersubjectivity with Artificial Conversational Agents: People are More Likely to Initiate Repairs of Misunderstandings with Agents Represented as Human. *Computers Human Behavior*, 58, 431–442.

Costa-Font, J., Mossialos, E., & Rudisill, E. (2009). Optimism and the perceptions of new risks. *Journal of Risk Research*, 12(1), 27-41.

European Union. (2017). *Attitudes towards the impact of digitisation and automation on daily life.* Available at:https://ec.europa.eu/digital-single-market/en/news/attitudes-towards-impact-digitisation-and-automation-daily-life [Accessed 10 Mar. 2020].

Forbes (2018). *Businesses Lose \$75 Billion Due To Poor Customer Service*. Available at: https://www.forbes.com/sites/shephyken/2018/05/17/businesses-lose-75-billion-due-to-poor-customer-service/#2104c32116f9 [Accessed 2 Apr. 2020].

Frederick, S., Loewenstein, G., & O'Donoghue, T. (2002). Time Discounting and Time Preference: A Critical Review. *Journal of Economic Literature*, 40(2), 351-401.

Gartner (2017). *Gartner Says By 2020, Artificial Intelligence Will Create More Jobs Than It Eliminates*. Available at: https://www.gartner.com/en/newsroom/press-releases/2017-12-13-gartner-says-by-2020-artificial-intelligence-will-create-more-jobs-than-it-eliminates [Accessed 29 Apr. 2020].

Hill, J., Ford, W.R., & Farreras, I.G. (2015). Real Conversations with Artificial Intelligence: A Comparison Between Human–Human Online Conversations and Human–Chatbot Conversations. *Computers in Human Behavior*, 49, 245–250.

Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. Econometrica, 47(2), 263-291.

Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263-291.

New York Times (2019). *Google's Duplex Uses A.I. to Mimic Humans (Sometimes)*. Available at: https://www.nytimes.com/2019/05/22/technology/personaltech/ai-google-duplex.html [Accessed 17 Apr. 2020].

Oxford Economics. (2019, June). *How robots change the world: What automation really means for jobs and productivity.* Available at: http://resources.oxfordeconomics.com/how-robots-change-the-world [Accessed 5 Feb. 2020].

Wired (2018). Al and the Future of Work. Available at: https://www.wired.com/wiredinsider/2018/04/ai-future-work/ [Accessed 29 Apr. 2020].

World Economic Forum. (2016, January 19). *What is the fourth industrial revolution?* Available at: https://www.weforum.org/agenda/2016/01/what-is-the-fourth-industrial-revolution/ [Accessed 5 Feb. 2020].

Xu, A., Liu, Z., Guo, Y., & Sinha, V., Akkiraju, R. (2017). A New Chatbot for Customer Service on Social Media. *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, 3506-3510.