

Is the workplace ready for Voice Assistants?

A closer look at how Artificial Intelligence (AI) voice assistants might fit into the workplace, and whether we're ready for them to do so.



Contents.

Introduction	3
01 The history of voice recognition	4
02 Why is AI female?	10
03 The ethical consequences of AI	15
04 Global growth of voice assistants	19
05 What are people using voice assistants for?	21
06 Are we ready for AI assistants in the workplace?	26
07 Best practice for introducing voice assistants to the workplace	31
08 Summary	36
Endnotes	44

Introduction.

Technology is becoming more cognitive, more reactive and most importantly, more human. As tech evolves to meet our every need, we need it to learn and grow on its own; to work with us to create a more effective outcome.

So, how exactly is technology changing? And how is it helping us in the workplace?

Some specific types of technology have come to help, or even replace, traditional human roles. Virtual or AI assistants (Artificial Intelligence Assistants), for example, can aid us in our everyday working lives, and are often taking on a more human presence by cracking jokes or reacting in a more colloquial way.

Voice recognition technology has become a part of our everyday lives, and with the increasing popularity of AI assistant devices, it is more familiar than ever. Predictions indicate that voice technology could soon be commonplace in our workspaces, too.

“

By 2020, robotics and AI will begin to take over repeatable, transactional tasks. ”

Chris Box, speaking at a WORKTECH Financial Workplace conference in London¹

01

The history of voice recognition.



“

You either evolve, or you get left behind. We used to have a tea lady, and now we have digital vending machines. ”

Richard Priestly, Sodexo³

Voice recognition has a long history of human development; according to records, voice recognition tools date back as far as 1,000 AD, when Pope Sylvester II invented the machine which could answer yes or no to simple questions² (similar to the Crazy 8 Ball, a popular 90s toy).

Of course, voice recognition technology is nothing new, but there have been key developments throughout the decades, as it has evolved to today's recognizable iteration, and now plays an important part in the AI assistants many of us use daily.

History of voice recognition technology.

1784

Wolfgang von Kempelen creates the [Acoustic-Mechanical](#) speech machine in Vienna.

Thomas Edison invents the [tin foil phonograph](#).

1877**1939**

[The Voder is demonstrated at the World Fair in New York City](#). The Voder (Voice Operating Demonstrator) invented by Homer Dudley was developed to synthesize human speech by imitating the effects of the human vocal cords, it was operated by selecting one of the two basic sounds via the pedal bar.

[Student Victor Scheinman invents Emvi](#), a voice recognition system at the New York Science Fair.

1950**1952**

[Saw the team at Bell Labs design the Audrey](#), which was capable of understanding a small selection of spoken digits, distinguishing between "0" - "9". Despite the small vocabulary available, The Audrey was considered a revolution in technology.

IBM demonstrated the [Shoebbox at the Seattle World Fair](#), which was invented by William C. Dersch. The Shoebbox could understand up to 16 spoken words in English including 'plus', 'minus' and 'total' and ten digits from "0" through "9". This technology was operated by speaking into a microphone, which then converted sounds into electrical impulses.

1962

IBM invented the Automatic Call Identification system, enabling engineers to talk to and receive spoken answers from a device.

1971**1976**

After five years of research by DARPA, [the Harpy](#) was developed by [Carnegie Mellon](#), this technology was able to understand 1,011 words.

A technique called [Hidden Markov Model](#) was used, this allowed voice recognition machines to more accurately identify speech.

early

1980s**Mid
1980s**

IBM began work on Tangora, this technology was able to identify 20,000 spoken words. Named after Albert Tangora, then the world's fastest typist could adjust to the speaker's voice.

Voice recognition was now in children's toys, with [Teddy Ruxpin \(1985\)](#), [Pamela the Living Doll \(1986\)](#), [The Talking Micky Mouse \(1986\)](#), World of Wonder's Julie Doll and many more children's toys brought speech recognition into our homes.

late

1980s**1993**

Apple then launched "Speakable Items", which were the first built-in speech recognition and voice-controlled software for computers. Also, 1993 saw the introduction of Sphinx-II, CMU Sphinx which the first large-vocabulary continuous speech recognition system, which was invented by Xuedong Huang.

IBM launched MedSpeak, the first commercial product capable of recognizing continuous speech.

1996

2002

Microsoft integrated speech recognition technology into their office products, and 2006 saw The NSA start using speech recognition to isolate keywords when analyzing recorded conversations. A year later, Windows Vista was released, the first version of Windows to incorporate speech recognition.

2007

Google launched GOOG-411, a telephoned directory service, which paved the way for the company's other voice recognition products.

2008

Google launched the Voice Search app for the iPhone - bringing speech recognition technology to our personal mobile devices.

2011

Siri was introduced to the world, giving consumers their very own digital personal assistant.

2014

Microsoft introduced Cortana, a rival to Siri, and Amazon gave us the Echo, a voice-controlled speaker powered by Alexa.

2018

Condeco demonstrated at the Workplace Innovation Forum Alexa integrating with Condeco Meeting Room Booking technology to bring voice recognition to the workplace.

Definition of a voice assistant.

Also known as an AI assistant, virtual assistant or digital assistant, a voice assistant is an application program which has an understanding of verbal voice commands and can complete requested tasks for its user. Some of the most popular AI voice assistants are Siri (Apple), Cortana (Microsoft), Alexa (Amazon) and Google Assistant (Google).

“

50% of all searches will be voice searches by 2020. ”

Comscore ⁴

02

Why is AI female?



As voice assistants fast become both a home and workplace staple, understanding how they developed is important. Siri, Cortana, Google, and Alexa all have one thing in common – they may be faceless, genderless and sexless lines of code, but their personas are obviously female.

Naming conventions

Microsoft's Cortana is named after a female character in a computer game. 'Siri' in Norse means "a beautiful woman who leads you to victory", and Alexa, according to David Limp, Senior Vice President at Amazon, was created to "replicate the Star Trek computer", and named in homage to the Library of Alexandria.

But why are these names, and the female images they conjure, being chosen for our everyday AI voice assistants?

“

She's eager to learn and can be downright funny, peppering her answers with banter or a comeback. She seeks familiarity, but her job is to be a personal assistant. ”

Susan Hendrich, Project Manager in charge of overseeing Cortana's personality⁵

“

The company put considerable focus on ensuring that Siri's personality remained friendly and humble — but also with an edge. ”

Apple⁷

An industry bias

According to Hanna Wallach, an AI researcher and co-founder of the Women in Machine Learning Conference, only thirteen point five percent of those working in machine learning are female⁶. Perhaps this disparity has led to AI assistants heavily skewing female in persona?

Some suggest there may be an unconscious bias surrounding the stereotyping of a female assistant. Tracey Groves, Founder and Director of Intelligent Ethics, shares her insight:

“The default female voice of the digital assistant reinforces the norm, and our bias, that women are assistants and men are bosses. Try changing the setting on your AI personal assistant to a male voice and watch people's reactions when they hear it. It challenges their unconscious bias that assigns the female role to administrative positions and the male role as the boss. What is that telling us? It's telling us that technology is progressing, but their programmers are not.

Ultimately the default female voice of the digital personal assistant cements our societal norm that it is the role of the woman to serve the man, and that leadership is the sole preserve of the male. It's time to wake up and challenge this inherent bias as we move into a new age of automation – before it's too late.”

Welcoming and understanding

Others believe the default female AI persona simply comes down to consumer research. Per experts, a female voice is used because they are considered easier to understand, and more comforting.

The Wall Street Journal challenged this assertion, investigating allegations of sexism in AI. Two separate studies found that both men and women considered a female voice to be more 'welcoming' and 'understanding'. Is this further proof of our global unconscious bias towards the roles of women in the workplace?

“

We believe Alexa exudes characteristics you'd see in a strong female colleague, family member or friend – she is highly intelligent, funny, well-read, empowering, supportive and kind. This is intentional. ”

Amazon⁸

Your choice

In 2013, Siri was made available to consumers in both male and female voices. Google Assistant also has the option of a male voice. Interestingly, Leila Takayama, a research scientist at robotics firm Willow Garage, suggests that “having a choice of voices may lead users to see Siri as more of a technology than a personality.”

So, is personality more important than equality to us, as users of voice assistants?

Emma Coats joined Google in January 2016 to write dialogue for Google Assistant. She says: “I wanted to create this completely well-rounded character, be able to handle questions from any direction and come across as a consistent persona. Humour is also important as well as witty quips”.

Whether the use of female voice assistants is an innate preference, or a product of long-standing patriarchal motives in society, one thing remains clear: the increase in use of AI-based software and virtual assistants will likely continue to fuel this important debate for years to come.

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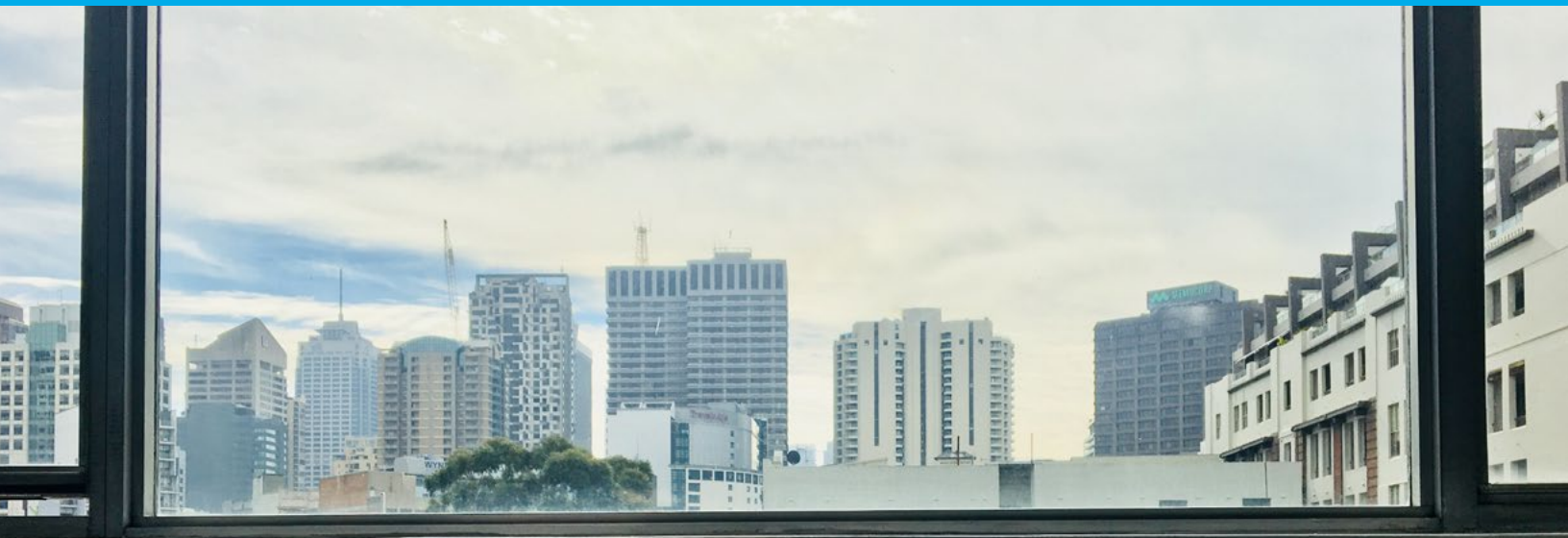
The accuracy of speech recognition systems has improved significantly, with Google and others passing the 95% accuracy mark.

”

ComputerWorld⁹

03

The ethical consequences of AI.



Data has a better idea

Tracey Groves, Founder and Director of Intelligent Ethics:

What are the ethical impacts of voice assistants and the use of AI? How can this affect the workplace?

There are potentially significant positive outcomes of AI and machine learning for all of us to embrace. However, many of us have doubts and fears about this type of technology, and those thoughts should not be dismissed without being properly addressed.

Making it personal

In the workplace, AI can help release individuals from routine, repetitive tasks at work, freeing them up for more value-adding and enriching activities. AI is also helping consumers to save money and budget more effectively via applications designed to gather data from users (such as how much money they make and what they're currently spending on wants and needs), making recommendations for how to allocate their money more effectively. And, for those of us who can't remember what a road atlas or map looks like, AI helps us get from A to B without getting lost with an algorithm in our cars' GPS.

AI is omnipresent in our lives already

The ability of AI systems to transform vast amounts of complex, ambiguous information into insight has the potential to help solve some of the world's most enduring problems. However, like all powerful technologies, great care must be taken in its development and deployment.

To reap the societal benefits of AI systems, we will first need to trust them and make sure that they follow the same ethical principles, moral values, professional codes, and social norms that we, as humans, would follow in the same scenario. And that's where it gets tricky.

Ethical risks of AI

There are two specific ethical risks associated with AI that spring to mind. Firstly, the risk that AI is created with harmful biases built into its core, and secondly, the risk that AI does not reflect the diversity of the users it serves.

Arguably, by not addressing the issues of bias and diversity upfront in the design, development and deployment of AI, the opportunity for it to disable humanity, instead of enabling us, can become very real. It's not about whether the AI itself is ethical per se, but more about the behaviors and governance of those that design, develop and implement the AI system to deliver outcomes that are aligned with intention and purpose.

The good news is that AI gives us an opportunity to build technology with less human bias and built-in inequality that has been the case in previous innovations. It promises extraordinary benefits and the difficulties it poses are not unprecedented. We know so much more today about the unintended consequences of unconscious bias and how we make decisions. But the benefits will only happen if we expand AI talent pools and explicitly test AI-driven technologies for bias.

It has been proven that applying machine learning to ordinary human language can result in striking gender and racial bias. Some say that this is showing us that AI and machine learning is inherently prejudiced. What it's showing us is that we're the ones that are prejudiced, and the machines are learning it. The choice should not be between prejudiced algorithms and fair-minded humans, but between biased humans and the biased machines, they create. For example, a racist human judge may go uncorrected for years. An algorithm that advises judges might be applied to thousands of cases each year. That will throw off so much data that biases can rapidly be spotted and addressed.

Hardwiring ethics and diversity into the heart of AI

To combat this, the industry must ensure there are different voices at the decision-making table that can be heard right from the start of designing ethical and responsible AI; from coding through to development, testing, implementation, and ongoing monitoring. We must hardwire ethical values and diversity into the very heart of AI, which means valuing the voice of difference, whether that is of gender, age, sexual orientation, culture or ethnicity.

04

Global growth of voice assistants.

Gartner estimates that approximately 3.3% of households worldwide will be using AI speakers by 2020¹⁰.



Edison Research and Triton have released a report showing that **8%** of Canadians aged eighteen and older have access to a smart speaker.¹⁶

Smart speaker ownership is growing rapidly in the UK – **8%** of adults now own one, up three percent in 2018 so far.¹³

39% of the Indian population is projected to own a digital voice assistant by the end of 2018.¹⁴

5% of Australians twelve years or older have access to smart speakers after only nine months since launch, per Edison Research.¹¹

There are now over **50mil** smart speaker users in the US, the adoption rate of twenty-one point six percent of the US adult population.¹²

By the end of 2018, **34%** of the Brazilian population are expected to own a stand-online digital voice assistant.¹⁵

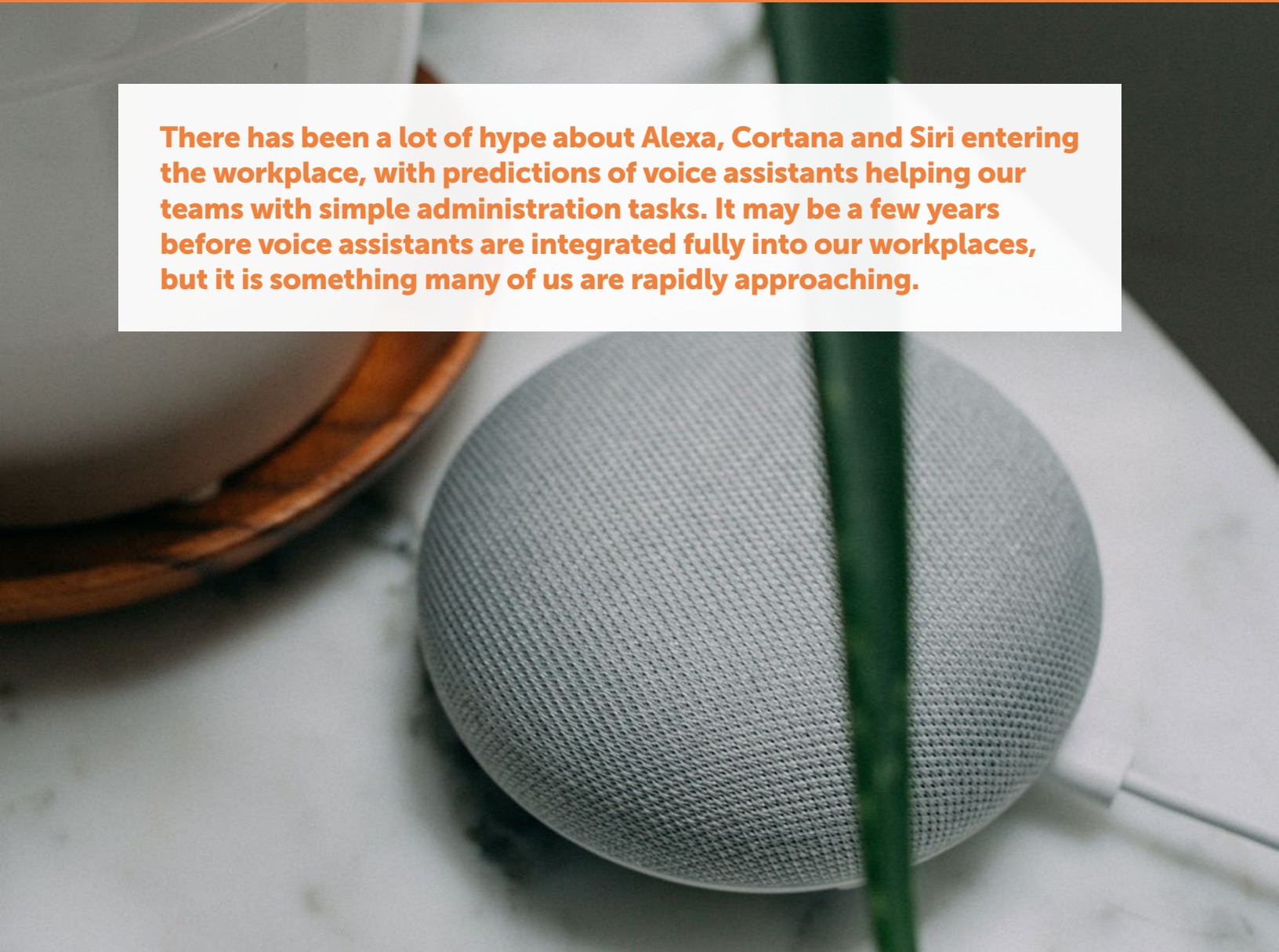
49% of Germans use voice technology on their smartphone, whereas only twenty-two percent of voice users did so on a smart speaker.

The Chinese smart home market will reach nearly **\$23bill** in 2018, according to Juniper Research.¹⁷

05

What are people using voice assistants for?

There has been a lot of hype about Alexa, Cortana and Siri entering the workplace, with predictions of voice assistants helping our teams with simple administration tasks. It may be a few years before voice assistants are integrated fully into our workplaces, but it is something many of us are rapidly approaching.



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70% of voice assistant owners feel the assistant has understood the request correctly “most of the time”.¹⁸”

Today, most of us have some sort of voice assistant technology to hand, whether it’s on our mobile devices or in our homes. But how are we actually using it?

Music, weather and searching for answers

According to a recent report ‘The State of Voice Search 2018’, listening to music¹⁹ is the preferred choice for users of AI assistants, with the next three spots going to ‘alarms’, ‘checking the weather’ and ‘searching for answers’, all of which reach somewhere between sixty percent and sixty-five percent²⁰ in usage.

It’s unsurprising to see playing music being the most popular use of AI assistants and voice recognition technology. However, it appears as though voice assistants are being primarily used for assisting us. This is good news for the workplace, especially those with fears that AI assistants could eventually replace them in the office.

The report also states that seventy percent of voice assistant owners feel the assistant has understood the request correctly “most of the time”²¹. Clearly, there is still a long way to go in perfecting the use of voice assistants, and perhaps the popularity of usage in the workplace will increase as their accuracy does.

Research shows that we’re mostly using our voice assistants at home (more specifically, in the kitchen, which is the hub of the home at thirty-nine percent). Thirty-eight percent of us also use them in the car²², which makes sense as the technology is handily hands-free. Utilization of voice assistants in the workplace is low at only eight percent²³, but statistics show that this is likely to grow over the next few years; a report by Tractica (a marketing intelligence business who specialize in human interactions with technology) suggests “Voice Assistant growth in the business world is expected to increase from 155 million users in 2015 to 843 million by 2021”.

“

Voice assistant growth in the business world is expected to increase from 155 million users in 2015 to 843 million by 2021.²⁷

”

User adoption

The rates of user adoption of new technology can sometimes be a challenge. To drive user adoption, your workforce needs to be engaged, and a Gallup study found that only thirty-two percent of employees in the United States are engaged with their work²⁴. Worldwide, this falls to just thirteen percent. However, as we are already familiar with voice assistants in our personal lives, will future user adoption and employee engagement be higher for Alexa, Cortana, Siri, Google and the rest of the gang?

Disabilities in the workplace

The World Health Organization states that more than a billion people, or about fifteen percent of the global population, have some form of disability. With the introduction of AI voice assistants, there are discussions happening around how this technology can reduce barriers for individuals with physical or intellectual disabilities²⁵, vision and hearing loss, which could also have a hugely positive impact within our workplaces.

“

Voice technology can be a game changer for people living with disabilities.

”

Theo Lau, FinTech innovation expert and Founder, Unconventional Ventures.²⁶

Workplace technology trend adoption chart

Technology trends move fast, and in order to keep up with emerging tech, you need to be an early adopter. This hype chart reviews a selection of workplace technology trends and how AI assistants fit into the current technology landscape.



06

Are we ready for AI assistants in the workplace?



According to Gartner, up to 25% of businesses could be using virtual assistants in customer service within the next few years.²⁸

Are you ready for Alexa and her counterparts in your workplace?

With over 500 million devices already sold²⁹, and clear popularity at home, the office seems like the obvious next step. According to Gartner, up to twenty-five percent of businesses could be using virtual assistants in customer service within the next few years³⁰, while Google recently demonstrated a virtual assistant that can make phone calls or book appointments³¹.

In the 2013 film 'Her', Joaquin Phoenix has a relationship with his personal AI assistant. The assistant is capable of human behavior, offering advice and conversation. Think this is just the stuff of Hollywood? Think again! AI Assistant Amy Ingram is so personable, she's been mistaken for human: "She has received flowers, chocolate, and whiskey at the office. She's been asked if she'll also be attending the meeting, pick up people in the lobby – and she just might have been flirted with a few times" – Dennis Mortensen, CEO and founder, X.ai.³²

So, what will Alexa and other voice assistants do? Where will they sit, and what will their functioning roles entail within a business? Here are the current abilities of the four market-leading AI assistants:

Alexa³³

As well as playing music, Alexa can perform 40,000 tasks. Alexa for Business can help you manage your working day by:

- Streamlining simple tasks and help control your working environment, such as turning on and off the lights, starting a meeting or reporting issues to IT.
- Alexa can also be used as a personal assistant, enabling users to check their calendars, manage to-do lists and set reminders. Anyone with administration rights can link corporate calendars to Alexa for Business, integrating with Office 365, Microsoft Exchange, and Google G-Suite calendars.

Cortana³⁴

Cortana can integrate with business data into Microsoft Dynamics 365, Microsoft Azure, transcribing meeting notes from multiple languages and delegate tasks to individual team members with deadlines. Cortana can review your emails from specific senders giving the user the ability to dictate a response.

Cortana's other features allow for list creation, data which can also be pulled from LinkedIn, giving users professional backgrounds and company details for participants in an any upcoming meetings. Cortana can solve simple equations and will even send an email for you to an existing person in your contacts list.

Google Assistant³⁵

With a simple "Hey Google", this voice assist can easily control your devices. Google Assistant can access information from your calendars and other personal information, find information online, including restaurant bookings, directions, travel updates, weather and news.

Google can play content on your Chromecast (or any other compatible device), create appointments and send messages for you. It can also open apps on your phone, and can read your notifications.

Siri³⁶

Siri will create calendar appointments, answer your queries and questions, set alarms, call anyone in your contacts list, or FaceTime if you're feeling so inclined.

Siri can make lunch or dinner reservations, launch apps, as well as find and read those all-important emails and take notes. Siri is also now available on your MacBook, giving you more freedom and choice in your usage.

Would you want your AI assistant in the boardroom?

Sure, she could be helpful in providing information during your meeting, perhaps even taking minutes, but ultimately Alexa and similar are always listening, which could result in your sensitive discussions being recorded. After all, data is a currency!

“Though businesses seem to be welcoming voice technology with open arms, there are also high levels of concern (eighty percent) regarding the ability for businesses to keep the data acquired through voice-based technology safe.” – survey by Pindrop, 500 IT and business decision-makers in the US, France, Germany and the UK.³⁷

Examples of AI assistants in the workplace

Alexa for Hospitality has already been placed in Marriot Hotels, allowing guests to order room service, request housekeeping, book spa treatments, play music and adjust the lighting and temperature in their rooms.

“We recognized that voice-first experiences have become an increasingly important channel for our guests.”

- Tracey Schroeder, Marriott’s Vice President of Global Consumer Public Relations.³⁸

In the US, Amazon Echo technology is installed in Safeco Field, home to the Seattle Mariners Major League Baseball team. The Echo devices allow patrons to ask for scores or order food³⁹.

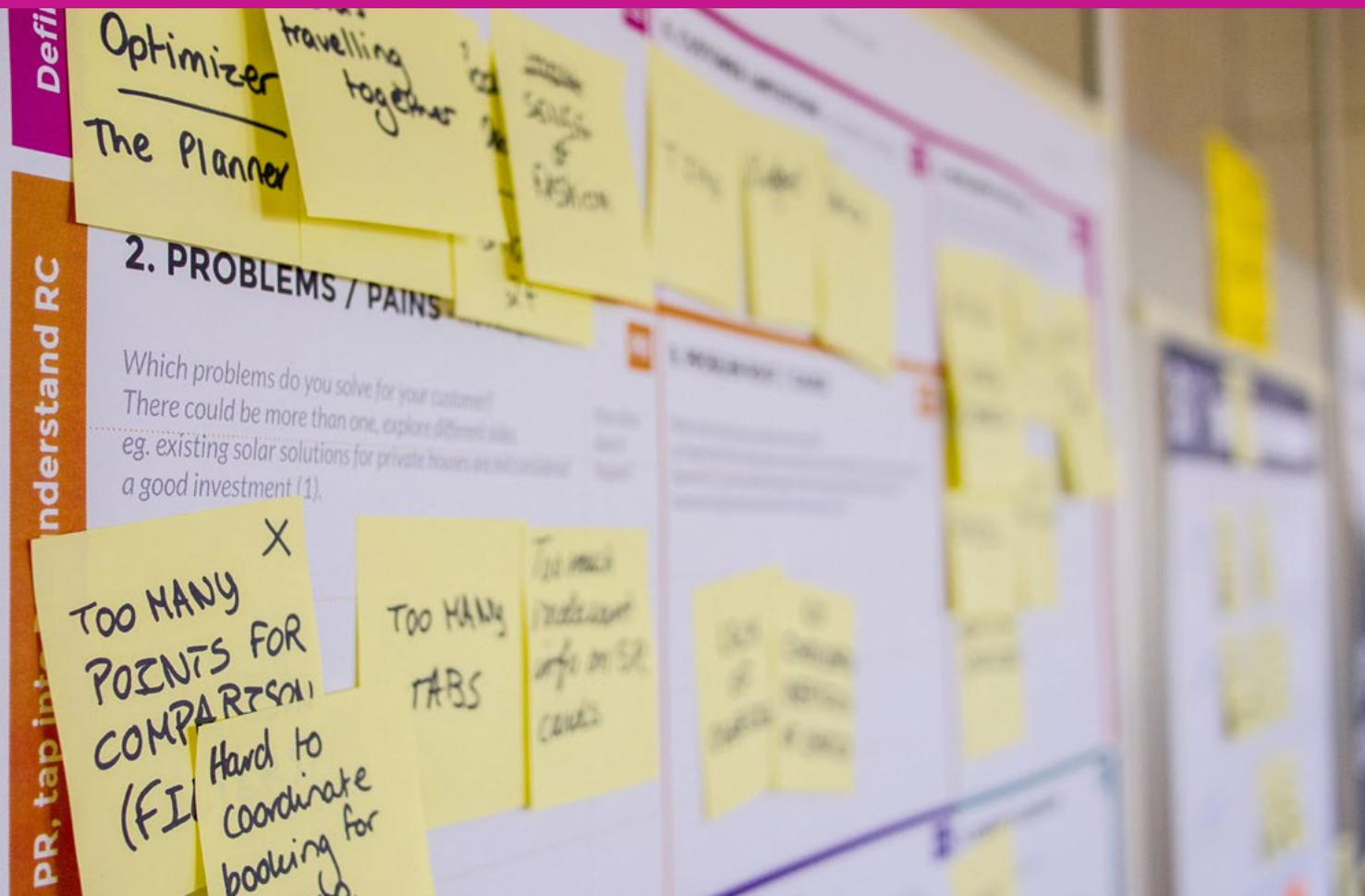
In the UK, Hampshire County Council are trialing fifty Amazon Echo devices to help elderly and disable people across the country. Struggling with budget constraints and demand for carer’s time and availability, the council are hoping this technology will take on a small part of their work⁴⁰.

Peter Otto, Director of Product Strategy & Design at Condeco, has been toying with the idea of Amazon’s Alexa in the workplace, recently showcasing a prototype Alexa integrating with our own meeting room booking systems. Clearly, all manner of businesses see the benefit of AI assistants in the workplace – but only time will tell just how useful we’ll find them.

61% of workers say they’d feel more comfortable if their employer was more transparent about what the future may hold in terms of working with AI and potentially being “replaced by technology”.⁴¹

07

Best practice for introducing voice assistants to the workplace.



58% of organizations have yet to discuss this potential impact of AI on their workforce with employees.⁴²

Best practice

Rolling out a voice assistant within your organization isn't just as simple as plugging it in. Just like you would introduce any new technology into the workplace, understanding the core value and impact this will bring to your business is vital; once this has been established, your team can begin to evaluate the other factors at play.

Implementing new business software, such as AI voice assistants, can be quite challenging. Businesses need to consider the impact new technology is going to have on their workforce. Depending on how large the project is, they may have to create project teams, timeframes, design new processes, factor in new integrations, and ultimately find a way to ensure everything runs smoothly.

Technology evaluation

Research the technology, determine a pros and cons list and find out as much as you can about the system, device or app. Utilizing this information you'll be able to effectively determine:

1. Cost versus productivity
2. Infrastructure and integration into existing systems
3. Disaster recovery policy
4. Security and data storage
5. Maintenance and ongoing upkeep
6. Implementation strategy
7. Deployment plan
8. Training for end users
9. End user adoption

Voice assistants, such as Alexa, Cortana and Siri often require the same level of expertise, care and attention.

Many businesses, including Condeco, are pioneering the use of this technology within the workplace. As our team has been trialing the use of Alexa, we can recommend a few best practice guidelines which have helped us on our journey:

Fad or requirement?

Does your business need this technology? We researched the need within our own business, and as we are an innovative team eager to learn more, we were curious to see how a voice assistant would complement our own existing software and hardware.

Include employees from the very beginning

The best way to ensure adoption of the solution is to have input from the very beginning. Include end-users in defining the overall need, as well as evaluating the best solutions.

Function

What duties will your voice assistant perform? Within our business, Alexa assists by booking meeting rooms and desk spaces using our own booking system. We also gave our voice assistant a 'mini job description' to help keep things clear.

Location

Where will your voice assistant sit within the workplace? This can also be determined by the job function the assistant takes, but it's still important to decide the physical location within your workspace. Our voice assistant takes pride of place in a dedicated meeting room, where all members of the team can use the system to test, trial and carry out varying tasks.

Technology implementation

Which department will be responsible for managing the installation and up keep of the system? We decided our product team were best suited for this role, but within your business this may lay within the IT department or similar.

Communication and roll out

There can be fears about AI and robots taking away some of the functions employees perform – to reduce this concern, we communicated the implementation of a trial voice assistant. We let the team know we are introducing this device, and that it's here to assist rather than replace.

Don't underestimate the power of marketing

A good internal promotional campaign can go a long way. Make sure extensive training is available. Consider using multiple platforms and avenues to share tips, tricks, and training. Train 'super users' who can act as first-line support for the rest of the workforce.

Be present and accessible

Ensure you have key stakeholders and advocates spread throughout departments and locations that can drive the adoption home. Host a launch event that gets everyone together talking about the impending change in a positive, fun environment.

User Adoption

So far, so good: the team is curious and willing to learn and understand new technology, and how this impacts them as individuals within the business, as well as wanting to understand the function and how voice assistant technology integrates with Condeco booking services.

08

Summary.



“

Global intelligent virtual assistant market size is estimated to grow at an annual growth rate of 34.9% over the coming seven years.⁴³”

Voice assistants: what to do next?

As the market for voice and AI assistants continues to grow, the few among us who are not already au fait with the technology will no doubt become so. Presumably, as innovation increases, our voice assistants will expand their abilities, and that could result in surprising new ways of using them. While many of us still aren't quite sure where an AI assistant fits into the workplace, with time, and perhaps some new functionality and integration capabilities, we'll see a shift, and the technology will naturally find its place in our offices.

The unquestionable popularity of this accessible and useful technology speaks for itself, as the stats show:

Voice assistants are playing a part in our consumer buying decisions, with

50%


of people now using voice search when researching products.⁴⁴

46%

of voice search users looking for a local business via voice search on a daily basis.⁴⁵

28%

of consumers call the business after making a local voice search.⁴⁶



It seems we are finding the technology invaluable.

65% of people who own an Amazon Echo or Google Home are unable to imagine going back to the days before they had a voice assistant.⁴⁷

Voice assistants are becoming embedded into our lives

72% of voice-activated speaker owners say their devices are often used as part of their daily routine.⁴⁸

While a whopping

47% expect their voice technology usage to increase.⁴⁹

It's therefore unsurprising that

45% of smart speaker owners plan to purchase another.⁵⁰

Wellbeing.

Voice assistants are seemingly good for our wellbeing too

41%

of respondents saying that using their voice-activated speaker is like talking to a friend or another person.⁵²

42%

of owners say that their smart speakers are essential to their daily lives.⁵³

40%

of adults now use voice search once per day.⁵⁴

Gender.

So, who are the most frequent users of this technology?



46%



26%

Nearly twice as many men use smart speakers on a monthly basis than women.⁵¹

Generation.

And it appears it doesn't matter what generation you are from - we are all finding voice assistants useful;

By 2019

39% of millennials will use voice-enabled digital assistants.⁵⁵



37% over fifty-five's have used voice search for local business.⁵⁶



Predictions.

Gartner predicts consumer demand for voice devices such as Amazon Echo and Google Home will generate

\$3.5 billion
by 2021.⁵⁷

“

Voice is a natural way for us to interact with each other. It reduces friction and increases engagement. ”

Bill Rogers, CEO, Orbita ⁵⁸

How are voice assistants relevant for business?

We've already found a use for voice assistants in our homes, making our lives easier and simplifying functionality. We may be reluctant to realize it, but much of the existing usage of voice assistants is helpful in the office – requesting simple tasks, such as ordering stationery, booking Ubers, receiving updates on travel information or similar, are just the tip of the iceberg.

There are also more specific capabilities within each separate voice assistant currently on the market; as we've pointed out already, technology like Cortana can integrate with your existing Microsoft software, and complete helpful tasks, such as transcribing. We recommend business leaders explore their options, and look into ways that workplace solution companies, such as Condeco, are adding to the mix with their own invaluable integrations.

The Future... (it's almost here)

Voice assistants are on the rise: we predict over the next five years that there will be a slow but steady increase of this technology in a variety of sectors, including automotive, healthcare, banking, financial services and insurance, IT & telecoms, education, and retail. These industries are already finding many uses for speech recognition technology.

Automotive⁵⁹ According to WinterGreen Research, 90.87 million autonomous-capable consumer vehicles, cars, and light trucks are expected to be on the road worldwide in 2023.

Banking/insurance⁶⁰ Banks launched voice-activated consumer banking as early as 2014, which has slowly taken off around the world.

Healthcare⁶¹ To keep pace with all the new ideas for using technology and machine learning in health care, the Food and Drug Administration had to create a new team of digital health experts.

It & telecoms⁶² According to the latest worldwide market study by ABI Research, virtual assistants will enable telecom service providers to save \$1.2 billion on customer care management by 2022.

Education⁶³ Children were invited to the MIT Media Lab to study using a Google Home device. The researchers hope to eventually design such digital agents so that kids will be able to tinker with them.

Retail⁶⁴ Twenty-four percent of consumers would rather use a voice assistant than a website to shop online, and almost a third state that they would rather use voice interaction than visit a physical shop or bank branch.

Other sectors are perhaps not quite ready to introduce voice assistants to their workplace, but it appears that a wide variety of businesses are welcoming change with advancements of other types of workplace technology, which could be a good sign for the future of voice assistants in the workplace.

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Taking advantage of new technology to drive productivity is one of the top three priorities for global businesses in the coming years.

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The Modern Workplace Report 2018, Condeco⁶⁵

09 Endnotes.

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