



# AI 2020:

## THE FUTURE OF CUSTOMER EXPERIENCE

An in-depth look into the intelligent enterprise investments, trends and challenges that will reshape the CX landscape over the next two years

In association with:



# Contents

• About the contributors	2
• About the author	
• Introduction	3
• Key takeaways	4
• About the research	5
• AI 2020: The journey	6
• AI 2020: The trends	7
• AI 2020: The challenges	8
• AI 2020: The investments	9
• How to derive the most value from your AI strategy by 2020	11
• Defining the new normal with AI:	12
How the Nordics are transforming CX	
• About CX Network	14
• 2017 report calendar	
• About AIIA	15

## Contributors



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Zarina de Ruiter graduated with a BA in Journalism in the Netherlands, before embarking on a global journey, working in offices from North America to Australia, and landing in the United Kingdom in 2010.

She worked for a magazine publisher and TV producer in London for four years, growing the digital presence and brand awareness of business and consumer titles, in addition to ad hoc work on print publications. She is the Editor of CX Network, where she produces a range of premium-level content for senior customer experience, service, insight, digital and marketing leaders.

For any questions about this report or the opportunity to collaborate on future CX Network content, you can email her on:

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# Introduction

The year 2020 is laden with portents. The planned launch of NASA's Mars 2020 mission to study habitability on the red planet. The world's last chance to pull back from the brink of climate change, according to the UN. The fictional setting of Tom Cruise sci-fi shoot 'em up *Edge of Tomorrow*.

In reality, the year 2020 is just over two years away. Mankind's starry-eyed visions of the future has leant on robots and artificial intelligence (AI) for decades. But with the swift uptake of chatbots, predictive analytics and machine learning across a range of industries – particularly affecting the rapidly-developing field of customer experience – they are now no longer the preserve of distant sci-fi predictions.

The age of AI has arrived and it is on the verge of up-ending and re-making your industry; and everyone operating in the customer experience sphere needs a plan for how they are going to adapt – or face getting left behind by their competitors.

Moreover, the speed of these technological changes is rapidly gathering pace. Our deep-dive research into the customer experience industry found that 36 per cent of businesses are already at the beginning/planning phase of their AI journey. But in just over two years – by 2020 – more than half (53 per cent) of organisations anticipate their AI operations will be “established”.

It's obvious AI will be a primary focus in the next few

- 36 per cent of businesses are at the beginning/planning phase of their AI journey. But by 2020 more than half (53 per cent) anticipate their AI operations will be “established”.
- A whopping 82 per cent of CX leaders say they are “excited” about the impact of AI on the industry & only 8 per cent say they feel “worried” about the impending changes.

years. There is a general sense of optimism about the impact it will have. A whopping 82 per cent of CX leaders say they are “excited” about the impact of AI on the industry and tellingly – given the ominous drumbeat of foreboding in the mass media – only 8 per cent do feel “worried” about the impending changes.

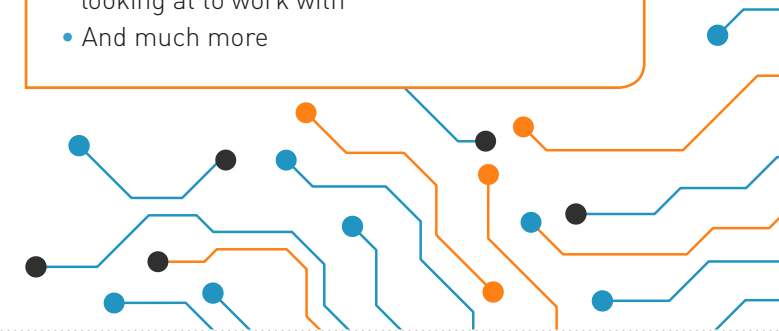
This report looks to gage this optimism and understand these concerns by probing the challenges, opportunities and potential impact that intelligent enterprise technologies – including AI – will have on the industry.

We use the term intelligent enterprise (IE) to refer to the suite of new technologies that are revolutionising how companies operate, both internally and externally, such as:

- Artificial intelligence (AI)
- The internet of things (IoT)
- Robotic process automation (RPA)
- Machine learning
- Data analysis procedures (such as predictive analytics and cognitive computing)

Almost 200 customer experience practitioners from around the globe – including experts from leading companies such as Microsoft and Hermes – took part in our in-depth research which looked at:

- The IE applications that will have the most impact on businesses by 2020
- What stage businesses are on their AI journey and where they want to be by 2020
- The biggest challenges for organisations to implementing IE in their business and what can be done to overcome them
- Business readiness for investment in AI
- Solution providers organisations are currently looking at to work with
- And much more



# Key takeaways

## Journey



Let there be no doubt: intelligent enterprise – specifically **artificial intelligence** and the **application of chatbots** – has been a hot topic within the customer experience industry in 2017. However, despite the thrum of interest, the majority of practitioners say their AI plans are still in the early stages; case studies and fleshed-out success stories remain few and far between. Our starting point was finding out exactly where organisations are on their AI journey today. **More than a third of businesses are in the beginning/planning phase of their AI rollout.** But by 2020 a majority (53 per cent) of organisations anticipate their AI operations will be “established”.



## Trends



It is worth noting that AI is second in the list of intelligent enterprise applications predicted to have the biggest in the customer experience industry by 2020. We attribute the clear majority citing predictive analytics as the top trend instead as a marker that this is already more established. Organisations therefore feel more comfortable applying it within their own businesses. The top three is rounded off by smart devices, highlighting the rapid impact that relatively new technologies – such as **Amazon’s Alexa and Google Home** – have already had on the industry. The intimate personalised experience these smart devices provide fits with the **increasingly high expectations from consumers** who want a tailored individualised experience.

## Challenges



The biggest barriers to AI progression are **building an accommodating internal culture**, competing for attention with other priorities and upgrading/ working with legacy systems. To help overcome these challenges, **practitioners cite the need for more case studies, industry research, training**, a clearer view of the vendor market and budget. While we can help with the industry research and case studies, there are some barriers that require a more extensive commitment; both internally and externally. From an internal perspective it’s important to utilise research and case studies to gain senior management buy-in. Externally, responsibility lies with the vendor market as there is a notable need for a clearer view of who the key players are.

## Investments



Integration with existing infrastructure and legacy systems is a barrier to investment in intelligent enterprise applications such as AI for more than a third of organisations at the present time; followed by the challenge of how quickly it can demonstrate ROI; and a lack of clarity on which solution area to focus on. These concerns help explain that while **42 per cent of CX practitioners are interested in stepping up AI investment other priorities still take precedence.** However, with 18 per cent of organisations starting their investment research and 7 per cent actively seeking relevant vendors, the appetite for ramped up investment in IE technologies is certainly there.



# About the research

Almost 200 customer experience practitioners from around the globe took part in our in-depth research into the intelligent enterprise landscape and the impact of AI as the next driver of change within the CX industry. Here is a brief breakdown of the participants.

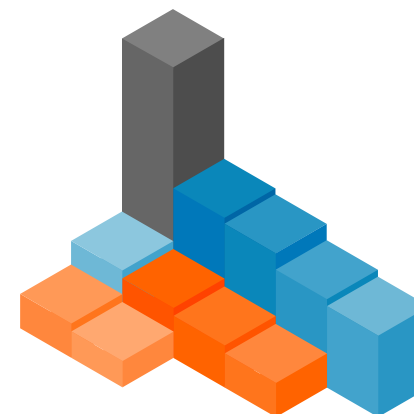
## Which title best describes your current role?

● C-level	12%
● SVP/VP	13%
● Director	22%
● Head	27%
● Other	26%

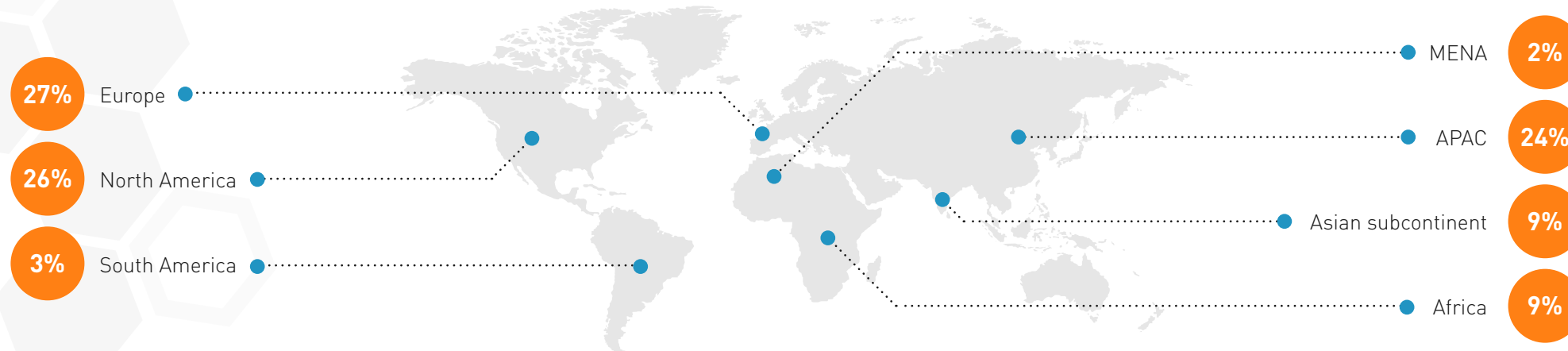


## Which industry do you operate in?

● Financial services	14%
● Telecoms	13%
● High tech	11%
● Manufacturing	10%
● Education	7%
● Media/entertainment	6%
● Travel/hospitality	5%
● Retail	4%
● Consumer goods	4%
● Healthcare	3%
● Other	23%



## Which region are you based in?

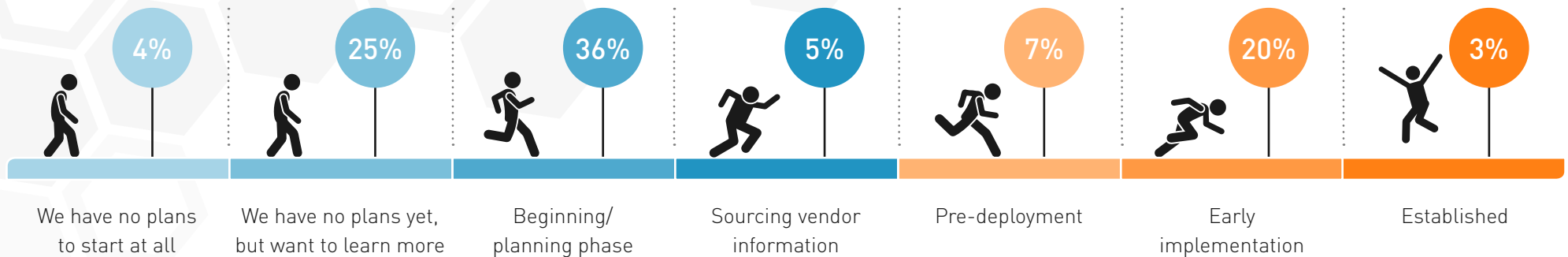


# AI 2020: The journey

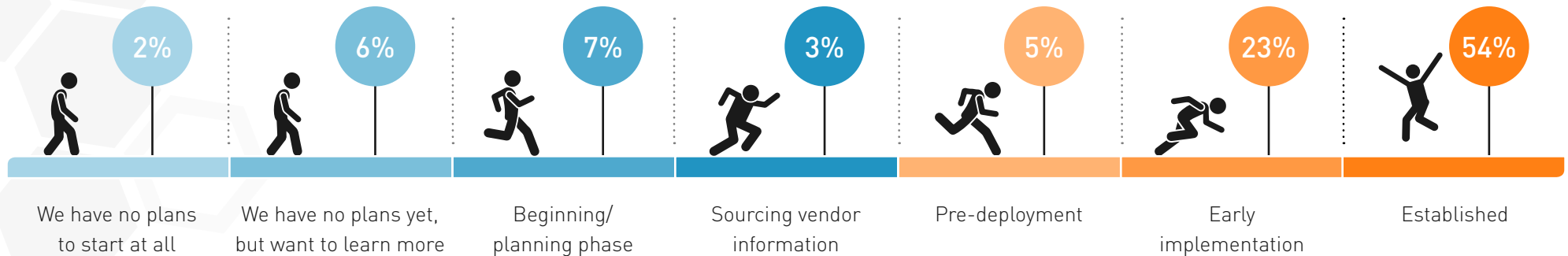
Let there be no doubt: intelligent enterprise – specifically artificial intelligence and the application of chatbots – has been a hot topic within the customer experience industry in 2017. However, despite the thrum of interest, the majority of practitioners say their AI plans are still in the early stages; case studies and fleshed-out success stories remain few and far between. Our starting point was finding out exactly where organisations are on their AI journey today.

More than a third of businesses are in the beginning/planning phase of their AI rollout. But by 2020 a majority (53 per cent) of organisations anticipate their AI operations will be “established”.

At what stage are you in your AI journey?



At what stage do you want to be by 2020?

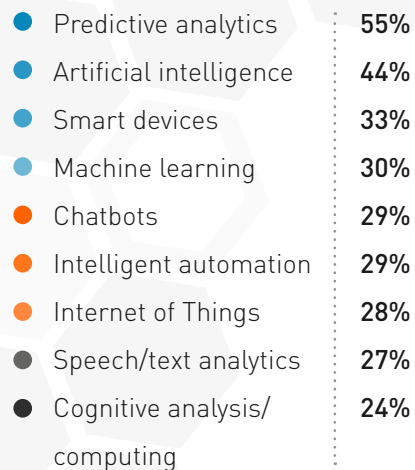


# AI 2020: The trends

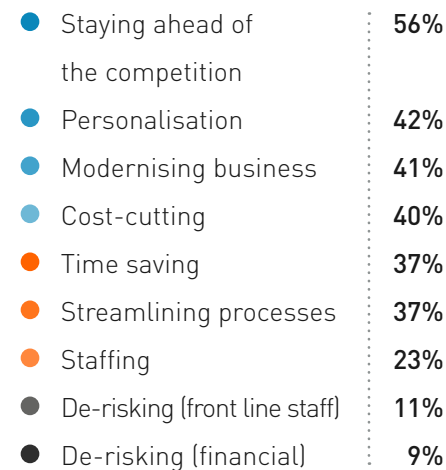
The intelligent enterprise spans a range of technologies that is upending how companies operate internally and externally. But which of these fast-developing technologies will have the most significant impact on the CX industry in the next few years? Which one will cause the most change and disruption to the way organisations operate? We asked our community for their predictions.

Predictive analytics, artificial intelligence and smart devices are the IE applications that will have the biggest impact on organisations by 2020.

What intelligent enterprise areas do you think will have the most significant impact on your business?



Where do you think it could have the most significant impact on your business?



It is worth noting that AI is second in the list of intelligent enterprise applications predicted to have the biggest in the customer experience industry by 2020. We attribute the clear majority citing predictive analytics as the top trend instead as a marker that this is already more established. Organisations therefore feel more comfortable applying it within their own businesses.

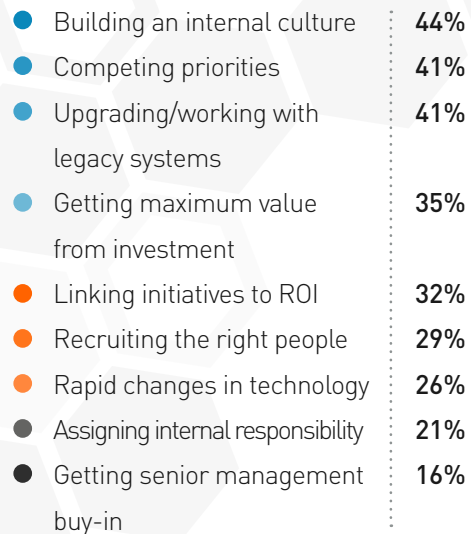
The top three is rounded off by smart devices, highlighting the rapid impact that relatively new technologies – such as Amazon's Alexa and Google Home – have already had on the industry. The intimate personalised experience these smart devices provide fits with the increasingly high expectations from consumers who want – nay, demand – a tailored individualised experience.



# AI 2020: The challenges

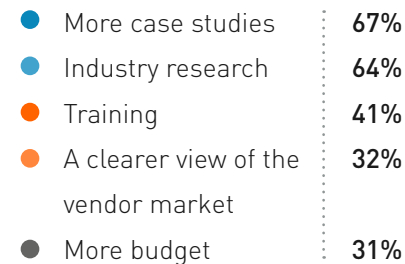
While it is encouraging to see the ambition and focus of organisations moving on from the beginning/planning phase of AI implementation to become established by 2020, there remain some barriers that can prevent them from achieving their goals. Our research delves into the biggest obstacles – and how to overcome them.

## What are the biggest challenges in implementing AI in your organisation?



The biggest barriers to AI progression are building an accommodating internal culture, competing for attention with other priorities and upgrading/working with legacy systems.

## What could help you to overcome these challenges?



While we at CX Network can help to provide the industry research and case studies practitioners are looking for, there are some barriers to AI investment that require a more extensive commitment – both internally and externally.

From an internal perspective it's important to utilise research and case studies to gain senior management buy-in, which in turn can help make a case for being assigned more budget and resources for training and to upgrade those legacy

systems to become compatible with newer technologies. And this focus will help drive that company-wide culture change as well.

Though a large responsibility lies with the vendor market as well as there is a notable need for a clearer view of what solution providers are key AI players and what benefits they can provide organisations looking to move onto the next stage on their AI journey.



# AI 2020: The investments

We have looked at the top trends across IE and AI ahead of 2020 as practitioners predict the biggest changes that will impact their organisations and the wider industry. But what is their *actual* business readiness when it comes to staying ahead of their competitors and industry disrupters? And what barriers to investment are hampering their efforts to moving onto the next stage on their journey?

## How would you define your business readiness for investing in AI/IE?

- Not interested at this time
- Interested but other priorities taking precedence
- Aware of the main themes and starting to research
- Aware and actively seeking relevant vendors
- Already investing and looking to invest further

11%  
42%  
18%  
7%  
22%

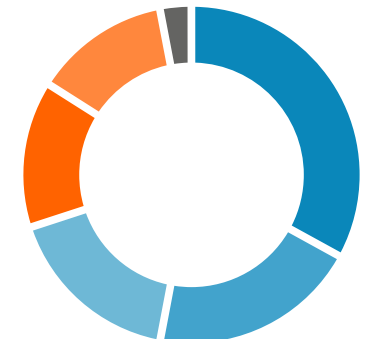


Integration with existing infrastructure and legacy systems is the biggest barrier to investment for a third of organisations.

## What do you see as the biggest barrier to investment in AI/IE?

- Integration with existing infrastructure/legacy systems
- How quickly it can demonstrate ROI
- Lack of understanding of which solution area to focus on
- Price
- Stakeholder buy-in
- Other

35%  
20%  
17%  
14%  
13%  
1%



### Nigel Willson, Global Strategist at Microsoft, provides his advice for overcoming the top investment challenges:

1. Integration with existing infrastructure/legacy systems – The true power from AI of any type comes from three factors in combination: big data, cloud computing and powerful algorithms, therefore legacy systems will always be a barrier. However, legacy systems can be as good a source of data to feed an AI solution, or could be fed by information processed in the cloud and fed back to an on premise solution. I would look for solutions that can or could exist outside of legacy systems for a quick win.

2. How quickly it can demonstrate ROI – Most projects are challenged when it comes to demonstrating ROI, and AI projects are no different. Start small, prove the benefit before looking to larger scale deployment. Being cloud-based, AI projects have the advantage of being able to start very small, often initially using some kind of trial or free credit and then scaling up and out (and back down again) as needed.

3. Lack of understanding of which solution area to focus on – Always do your research as to what your competitors are looking at, ask cloud vendors for their ideas and some will invest in hackathons / prototyping, and look at areas that will add value and are proven and available. Don't look at something that looks cool and may not actually yet be achievable.

# AI 2020: The investments

What solution providers are you currently looking at to help you on your journey?



VUE.AI



CustomerGauge



Integration with existing infrastructure and legacy systems is a barrier to investment in intelligent enterprise applications such as AI for more than a third of organisations at the present time; followed by the challenge of how quickly it can demonstrate ROI; and a lack of clarity on which solution area to focus on.

These concerns help explain that while 42 per cent of CX practitioners are interested in stepping up AI investment, other priorities still take precedence – after all, ‘competing priorities’ was also cited earlier on in this report as the second biggest challenge for companies to progressing on their AI journeys.

However, with 18 per cent of organisations starting their investment research and 7 per cent actively seeking relevant vendors, the appetite for ramped up investment in IE technologies is certainly there.

Dr Michael Housman, co-founder of RapportBoost – a start-up that uses AI to optimise live chat conversations between live chat agents and website visitors – says that companies need to identify clear business priorities and areas where AI can have an impact in order to overcome these internal barriers.

He says: “Start with a matrix, list all the departments/initiatives of the organisation and then rate them based on:

- (1) how important they are to the business; and
- (2) how much of an impact AI can make.

From there, you need to identify a solution – probably through a vendor. I’d be very wary of anyone who says such solutions require massive integrations or will take a long time to realise ROI.”

# How to derive the most value from your AI strategy by 2020

During our research we asked respondents and contributors what advice they can give CX practitioners to extract maximum value from an AI-focused strategy over the next few years. To help you along on your ongoing journey you can find some of their key pieces of advice below.

Look for commodity services that are already available or are in general availability testing. Don't try to build everything on your own unless you have lots of in-house resources and time. Most cloud vendors offer application programming interfaces (APIs) into their services, so an AI service such as image recognition can be called from two or three lines of code. Commodity services will enable you to rapidly build and deploy applications that will always be up-to-date.

Nigel Willson, Global Strategist, Microsoft

Build a small-scale AI project to prove the value of investment to executives and learn from the results, then implement it fully in phases. AI requires investment in time and manpower to meet an organisation's goals

Review your current data set up and working backwards from an customer-centred AI implementation point of view to work out which data tables need the focus now

Identify the 20 per cent of work that takes up 80 per cent of either time or risk and use AI to automate the process

Choose a partner, not a vendor; make sure they have the professional services team to not only implement but also help with ongoing optimisation

Get in early, learn and iterate. Find a vendor that will enable fast time-to-market and can customise the technology for your business

Don't try to eat the elephant and don't turn to massive AI solutions that purport to solve all your problems. Start small, be focused and look for problems where a very specific application of AI can potentially achieve a lot of good. Once you've gotten a few successful projects under your belt, you'll realise that that momentum can continue to build to larger and larger projects.

Michael Housman, Chief Data Science Officer, RapportBoost

# Defining the new normal with AI: How the Nordics are transforming CX

## What can global organisations learn from the AI-road being paved by Nordea and Nordic Choice Hotels?

Every now and then, I find myself discussing with acquaintances a phenomenon I usually describe as “The Nordic Innovation Paradox”.

Ask anyone in the streets, at the office or at home, what is the first thing that comes to their mind when they think about one of the Nordic countries? The majority will provide answers such as “IKEA, their flat packs and meatballs”, “LEGO was my whole childhood” or “I had a Nokia 3310, it used to last forever”.

The paradox is that these five countries – Denmark, Finland, Iceland, Norway and Sweden – gave us so many innovations that are now embedded in our lives and yet public opinion tends to only remember three brands.

To name just a few of the most important inventions: we have the Finnish-born heart rate monitor (yes, the feature that allowed you to rationalise buying your fitness tracker or smartwatch), the Norwegian paperclip (yes, they are behind the feeling that you can organise a sprawl of paperwork) and the Swedish seatbelt (something you use every time you hit the road... or so you should).

Fortunately for us, although they don't always get the credit and recognition they deserve, our Nordic

friends did not give up on innovating for everyone's benefit.

Artificial intelligence is near the top of everyone's mind at the moment and it isn't surprising that Nordic companies are involved in it. We have two examples of how these unsung heroes could enhance customer experience in the near future.

### Nordea: Putting customers' time first

Stockholm-based Nordic megabank Nordea has been on something of a crusade to fit with customers' schedules; operating around the clock all year round. They have decided to take this a step further by engaging in artificial intelligence.

It started in March, when they announced the introduction of Liv – a virtual colleague that can perform repetitive tasks faster and more efficiently than human colleagues; freeing them up to focus on value-add tasks and therefore providing enhanced experiences to their customers. Liv is not only a fast learner – she is also empowered to make the right decisions through rule-based robotics initiatives.

Then in July, Nordea announced a partnership with a start-up called Feelingstream. The tie-up is intended to improve response times. AI-based text-analytics solution interpret inbound customer communications (reportedly hundreds a second) and intelligently forward

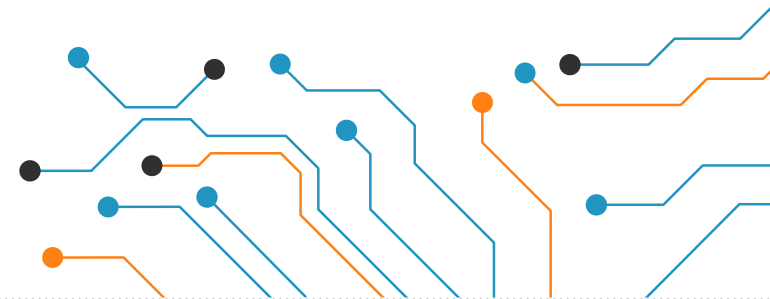
## About the Author



**Gustavo Imhof is a CX professional with a background in customer experience measurement and CX strategy design and implementation. He has held customer insight roles at KMPG Nunwood and Carlson Wagonlit Travel, and is currently part of the CX team at consumer delivery specialists Hermes.**

Imhof is passionate about spreading the word about customer experience, making it right by the customer, making customer-led change in businesses and witnessing (and ultimately shaping) what he likes to coin as ‘next practice in the making’. You can read his insights on his website CX Ahead.

CX Ahead



# Defining the new normal with AI: How the Nordics are transforming CX

them to the right recipients within the business, cutting away the agent-based sorting (or excess of handoffs) that has long frustrated and held up customers around the world.

The solution is being trialed in Finland now and is expected to provide much shorter wait times before a customer can be put in touch with an agent.

## Nordic Choice Hotels: A digital-first hotel strategy

The hospitality sector can generate extreme emotional responses. One hotel room might contain a blissed-up couple enjoying their honeymoon; next door might be a stressed businessman far away from his family. How the business better understand their individual needs to keep them both happy?

Nordic Choice Hotels – whose hotel brands include Clarion, Comfort and Quality hotels – has invested \$29 million in its digital strategy to develop personalised customer service blending physical and digital experiences. The transformation architect making this strategy is Nordic Choice's Chief Digital Officer Lisa Farrar.

In August 2016, the Clarion Hotel Amaranten in Stockholm became the first hotel in the world to offer rooms with a smart assistant. The Amazon Echo devices have been enhanced with additional hospitality functions.

As part of the Nordic Choice's digital strategy, customers will be able to use their phones as room keys (a prototype already available in Starwood and Hilton hotels) and provide a reception-free experience (such as the Hotel Buddy in Germany) and have voice-controlled room environment and room service.

Farrar says the plan is that technology should facilitate an even more personalised experience; with personal pictures in your room and clothes in your size hanging in the wardrobe.



**As part of the Nordic Choice's digital strategy, customers will be able to use their phones as room keys and have voice-controlled room environment and room service.**



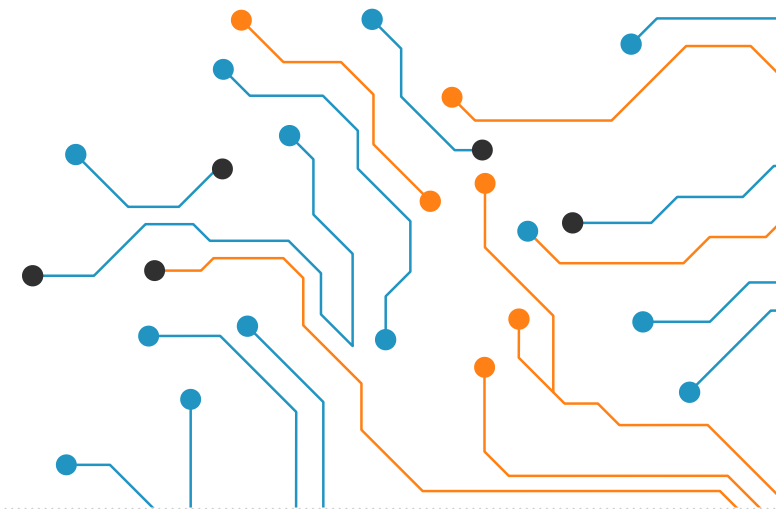
Such a personalised experience is already made possible through services such as Cachet World (a platform offering, among other features, the ability for guest to personalise their hotel rooms by purchasing add-ons such as designer bedding or beauty essentials) in high-end hotels, but the customer is still required to contribute and tell the hotel what they want.

There is little doubt that the latest AI technologies have the potential to deliver all the above in a smooth and deeply personal way and that is what Nordic Choice is investing in and aiming towards.

Nordic Choice only launched its Farrar-led digital strategy last year but it has the potential to inspire customer experience professionals across a raft of industries.

## The verdict?

Nordic Choice Hotels and Nordea blaze a trail in how AI can be harnessed to facilitate a differentiated and enhanced customer experience. The prototypes the two Nordic companies are trailing could herald important new developments in the science of customer experience and inspire legions of similar services.



# About CX Network

## Join CX Network

CX Network is an online resource for customer experience professionals providing value-rich content such as industry reports, customer trends, best practice, latest industry news, interviews with CX leaders and so much more!

Our focus on the content that matters to customer experience leaders most, allows us to cut through the white noise that surrounds this ever-changing subject, and makes us the primary resource for CX executives to turn to.

By joining our network you will receive expert commentary, reports, and resources developed by and for experienced customer experience professionals and industry insiders.

With a growing membership and global portfolio of events, CX Network ensures you keep your finger on the pulse by delivering practical and strategic advice to help you achieve your business goals.

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## 2017 report calendar

Each month CX Network's editorial team produces an exclusive report in-house. The monthly market reports are topic specific, and the quarterly research reports (highlighted with asterisks below) are more in-depth insights into the global market.

How to tackle the biggest customer loyalty challenges in telecoms



The biggest CX challenges in retail



**\* The customer experience buyer's guide 2017**



How travel and hospitality companies can thrive through CX



Digital marketing trends 2017



**\* The global state of customer experience 2017**



AI 2020: The next driver for an empowered CX

**\* The big book of customer insight, data and analytics 2017**

Customer experience predictions for 2018

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INTELLIGENT  
ENTERPRISE**

