Publication date:
December 2021
Author:
Cassandra Mooshian

How intelligent automation improves the customer experience

A look into the drivers behind and benefits of bringing the two technologies together followed by real-world examples







Contents

Background	2
Introduction	3
Enterprise market dynamics point towards digitization and automation to meet custom for a personalized experience	er demand 4
Real-world examples: NICE elevating core customer experience competencies with inte automation	lligent 9
Conclusion and recommendations	13
Appendix	14



Background

NICE partnered with the technology research and consulting firm Omdia to highlight the intersection of artificial intelligence and customer experience technologies and platforms. This intersection point is emerging rapidly and garnering more mindshare among the vendor and enterprise communities alike.

Figure 1: The intersection point between two modern enterprise technology platforms and the resulting benefits to the enterprise and its customers



Customer Engagement Platforms

Includes those that enable an enterprise to capture and unify customer data from multiple sources and view the customer journeys holistically, such as a customer experience (CX) platform. They interpret, as well as intelligently and proactively orchestrate personalized and relevant content, offers, or responses, regardless of channel or device. A CEP also allows an enterprise to continuously analyze, learn and amend how it engages to continually enhance the customer's experience.



Intelligent Automation

Incorporates AI technologies such as machine learning (ML), natural language processing (NLP), computer vision (CV), image recognition, and more, alongside robotic process automation (RPA) technology to process semi-structured and unstructured data, provide prescriptive analytics, and automate tasks and processes that involve contextual awareness, decision making, or judgement. Many IA processes take on a human-in-the-loop or human-over-the-loop approach, often referred to as attended automation whereas unattended automation does not require any human involvement or oversight.

Source: Omdia

This whitepaper discusses the drivers behind and benefits of bringing these technologies together for both the enterprise and its customers, providing examples of customer success stories and ending with key takeaways.



Introduction

Digitization and process improvements have been on the minds of many across the enterprise landscape for years, but the past two years amid the ongoing global COVID-19 pandemic have underscored the importance of digitization for business resiliency and agility. Remote and/or hybrid working and the explosion of digital and distanced customer interactions amid the pandemic has fanned the flames for many companies that had been considering digital strategies but had not yet prioritized them. More companies than ever before are reconsidering their physical footprints, both in terms of brick-and-mortar stores as well as in-office working as these businesses have realized that employee collaboration and customer engagement can live and thrive beyond physical locations, due in no small part to modern technology platforms.

Enterprises that embrace digital platforms infused with artificial intelligence (AI) and automation can maintain and ultimately exceed customer expectations as they adapt to the new normal and innovate beyond the old ways of working and doing business. Many digitization projects are leapfrogging their way up the list of enterprise investment priorities as funds are reallocated to tackle these needs, making enterprises more resilient to disruption and agile for the future.

"Enterprises that embrace digital platforms infused with artificial intelligence (AI) and automation can maintain and ultimately exceed customer expectations as they adapt to the new normal and innovate beyond the old ways of working and doing business."

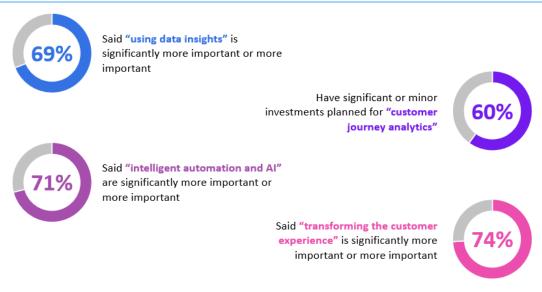
The intersection of customer experience (CX) and AI is garnering increased mindshare, from vendors and enterprises alike as companies adapt and evolve their operations amid unprecedented global disruption coupled with the ongoing shift towards digital. Moreover, a growing number of companies are supplementing their customer experience investments and strategies with intelligent automation (IA) as utilizing attended automation in the contact center can significantly improve the employee and customer experiences and business performance.



Enterprise market dynamics point towards digitization and automation to meet customer demand for a personalized experience

Companies face a multitude of challenges, both large and small, many of which have been exacerbated by the pandemic. In a study published in October 2021, Omdia asked nearly 5,000 enterprises how the importance of different technologies and platforms has changed within their organizations because of the pandemic. Just shy of three-quarters of all respondents said that transforming the customer experience is either significantly more important or more important to their organizations now than prior to the pandemic.

Figure 2. Many enterprises view customer experience and enabling technologies as significant post-COVID-19



Notes: Results reflect responses from a survey of nearly 5,000 IT professionals when asked about the impact of COVID-19. Source: Omdia, IT Enterprise Insights 2022



Unprecedented challenges and resource constraints persist for many companies. Balancing optimization and investing for the future can often be at odds while at the same time, company leaders are pressuring for strong top and bottom-line performance. Moreover, the labor market is highly competitive and there is a substantial shortage of key talent in some technological areas such as data science and development. These and many other factors have led enterprises to look to technology platforms to help solve some of these challenges and have found that the return on these investments is significant. This underscores the importance and business impact of shuffling IT investment priorities towards digitization and automation as these can then free resources to address and focus on other key challenge and/or strategic growth areas within the business.

Ongoing advancements in both technologies, CX and AI, as well as in the specific intersection of the two, are being driven by technological advancements and innovation driven in no small part by enterprise demands that evolve alongside the dynamic enterprise and consumer landscapes. The complementary technologies together are allowing enterprises to more effectively and efficiently:

- Conduct repetitive tasks to value creation, orchestrating not only people, but relevant content and offers
- Analyze speech, text, and customer behaviors to deliver proactive care or engagement
- Provide guided, compliant, and intelligent responses and interactions from employees to customers

While digitizing both employee and customer experiences is a critical step in any company's customer experience improvements, digitization itself is becoming a foregone conclusion. Many consumers and end customers consider digital options as an expectation of doing business with companies. Because of this, companies that have yet to digitize are at risk of losing out on prospective customer opportunities to competitors that provide an omnichannel customer experience.

"Digitizing the CX is no longer a nice to have, rather an expectation by many customers, therefore it is becoming table stakes."

The landscape is ever-more competitive within every industry and now more than one year into a global pandemic, digitizing the CX is no longer a nice to have, rather an expectation by many customers, therefore it is becoming table stakes. As a result, their decision points between competitors are pointing towards personalization as a differentiator.

This underscores the importance of using AI, automation, and analytics to discover and quickly act upon data-driven insights to improve, speed, and personalize the CX as an increasingly important aspect of doing business in today's digital world. To illustrate this point, a June 2021 Omdia study, Enterprise RPA & Intelligent Automation Study, found that 21% of respondents listed "improving the customer experience" as one of their top three long-term goals of RPA and intelligent automation adoption.



Digitizing the customer experience is now an expectation of businesses; to differentiate, they must now also personalize

In this highly digital age, customers now expect companies to go further, investing in ways to personalize their experience and make doing business with the company truly an experience. This is one reason Netflix is so wildly popular, as it constantly updates its highly personalized, curated lists of recommended and relevant content based on previous viewing history, tailoring recommendations to each user's personality.

"AI software spending, including intelligent automation, specifically for customer experience use cases is on the rise."

Omdia's AI Software Market Forecasts – 2Q21 details the use cases for which enterprises are utilizing AI for their CX initiatives. Many of the top 10 use cases that companies are spending on relate to curating and personalizing the CX down to the individual customer/consumer level and doing so more efficiently and effectively. While this trend was already emerging prior to the pandemic, the pandemic certainly solidified it.

Personalized tutoring & adaptive learning
Content curation
Customer experience management/service delivery
Ad insertions into images & video
Human emotion analysis
Intelligent CRM systems
Ad targeting & media buying
Autonomous stores
Personalized health, fitness, & wellness improvement
Personalized customer journeys
Other

\$0 \$100 \$200 \$300 \$400 \$500 \$600 \$700 \$800 \$900\$1,000

Customer experience spend by use case (\$m)

Figure 3. Al software spending – Customer experience top 10 use cases

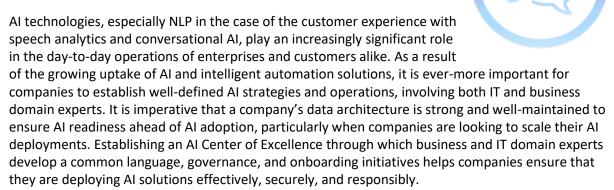
Note: 'Other' includes 17 additional use cases Source: Omdia, Al Software Market Forecasts – 2021

There was a collective grace period of sorts where customer spend dipped and businesses pivoted towards digital, and customers understood that it would take some time and adaptation when



working with many businesses. Now, however, that grace period is over and customer demand is driving organizations to further invest in their customer-facing operations and channels to stay competitive now and long-term. Many of the changes that resulted from the pandemic are here to stay as none of us as consumers or as businesses will entirely revert to the way we operated before the pandemic.

Organizational and technological readiness are crucial to the success of a long-term AI for CX strategy



In today's increasingly customer-centric world where consumers/customers have higher expectations of speed and accuracy, it is important for cross-functional teams to connect regularly to ensure the CX remains elevated across the organization. With remote and/or hybrid working structures many companies are operating within, it becomes imperative for companies to maintain engagement and collaboration across teams. Contact center agents are not the only employees that have an impact on the customer experience, underscoring the importance of cross-functional collaboration such that the company can present a highly effective and unified approach to customer engagement.

Even more so than cost and time savings, engagement is paramount for those using AI for CX, which, in turn, positively impacts revenue

As Al initiatives continue to move from proofs of concept and pilots to commercialized, enterprise-grade elements of business operations, those overseeing Al are building foundational structures and operational frameworks to ensure success. To operationalize Al, leaders are revamping business cases to account for the Al lifecycle, restructuring organizations and culture, making hard decisions about investments in expertise, support, and data management, and navigating new governance, ethical, and liability issues. A critical element of these foundational structures is identifying and deploying the best performance metrics.



Accuracy Revenue Productivity Other Time Engagement Cost 35% 12% Customer experience 10% Chatbots & virtual 12% 5% assistants Process optimization 11% 6% 19% 19% 17% **Predictive analytics** 11% Visual analytics 35% 12% **Quality monitoring** 36% 5% Anomaly detection 21% 11% 11% **Grand Total** 20% 16% 10%

Figure 4. Al business performance metrics by horizontal application, 2Q21

Note: Bubble size reflects record count. Pink bubbles reflect share higher than the market average. Source: Omdia, AI Business Performance Metrics Database -2Q21 Analysis

With so much investment at stake and the early-stage nature of AI market adoption, key performance indicators, or KPIs, for AI are the most important guardrail for senior management to use to guide their AI strategies. AI KPIs vary widely and choosing them can pose a challenge, as we are still in the early stages of AI market adoption. AI readiness, knowledge, experience, and expertise across enterprises is low. However, for more mature AI use cases and applications, such as customer service, best practices in KPIs have begun to emerge. The top three KPIs across Omdia's AI Business Performance Metrics Database, 2Q21 relate to cost and time savings, accuracy, and engagement. Regarding AI for CX, additional KPIs include engagement, net promoter score (NPS), customer satisfaction, lifetime value, and customer effort score (CES).

While cost savings and ROI are not as paramount in measuring the success of AI-powered CX deployments, they remain above average per Omdia's AI Business Performance Metrics Database – 2Q21 Analysis. AI and its ability to infer and make decisions for and alongside a human employee help inherently automate or speed time to decision-making. This has helped propel intelligent automation to the top of enterprise investment priorities. Enterprise spending on intelligent automation is increasing and has a strong outlook as many look to automation to optimize processes, save time and cost, and improve both the employee and customer experiences.



Real-world examples: NICE elevating core customer experience competencies with intelligent automation

NICE helps companies transform their customer experience strategies and capabilities to positively impact business performance and customer engagement. NICE continues to expand its customer engagement and experience arsenal with AI and automation. For example, NICE CXone brings together



analytics, RPA, AI, and intelligent automation capabilities with NICE's core workforce management (WFM) and optimization (WFO), customer experience management (CEM), and omnichannel customer service capabilities.

AI, particularly intelligent automation, extends the reach of NICE's CX solutions to address more enterprise challenges in a larger swath of increasingly complex enterprise processes. Coupling NICE's analytics capabilities with the machine learning inherent in NICE's intelligent automation platform NEVA (NICE Employee Virtual Attendant) can help companies further generate meaningful and tailored outcomes as the solutions learn and become more intelligent as they are utilized within an organization.

NICE has a unique approach to RPA/IA in comparison to other notable RPA/IA providers due to its core customer experience, contact center, and workforce intelligence competencies, according to Omdia in its latest vendor benchmarking report, *Omdia Universe: Selecting an RPA & Intelligent Automation Solution, 2021-22.* NICE's roots and experience in the CX space present extensive knowledge and insight as to what enterprises are looking for and care most about regarding their customer experience solutions and metrics. NICE knows the KPIs against which enterprises measure, and it can continue to develop its portfolios, including NICE RPA and NEVA, to meet and exceed those KPIs with growing usability, scalability, and AI capabilities of its RPA/IA offerings.

NEVA analyzes sentiment as other intelligent automation platforms do, but it can also trigger bots and next-best actions based on voice analysis in real-time through the integration between NEVA and NICE's Enlighten speech analytics solution. NEVA helps guide users in real-time through a customer call by issuing prompts to ensure compliance, showing next-best actions, helping gather relevant customer data, and summarizing the customer interaction, as one example.



NICE RPA and NEVA prove value-added to customers especially when paired with contact center and workforce management capabilities

Blue Cross of Idaho

Healthcare, including health insurance, has always been critically important, but over the past two years, has also come to the forefront of our everyday lives amid this public health crisis. The industry, not long ago considered a laggard in the realm of enterprise IT adoption amid its regulations and complex security and privacy concerns, is embracing digital platforms to improve many facets of both the employee and patient experience. Modernizing in a secure and compliant way is entirely possible with the right tools and the return on investment is noteworthy.



Blue Cross of Idaho, a local branch of the large US health insurance provider, provides health insurance to one-quarter of all Idaho residents. The insurer has a contact center staffed by 230 agents. With an annual call volume of 1.4 million calls, Blue Cross of Idaho sought to upgrade its systems and enhance its processes to provide better agent and customer experiences.

"Blue Cross of Idaho saved \$250,000 in annual costs upon investing in NICE workflow management and analytics capabilities."

The health insurer chose NICE's comprehensive portfolio to address these challenges and changes. Initially, NICE Attended Automation, Workforce Management (WFM), and Interaction Analytics were implemented such that agents could more easily and effectively bring customer data together from disparate systems to provide faster and more effective customer service. Attended Automation and Interaction Analytics together provide agents with next-best action guidance, further helping to streamline yet personalize the customer interaction.

Moreover, predefined automations can bet set within Attended Automation in effort to further streamline processes such that if a customer asks about one specific item. For example, if a customer calls with a billing question, the agent is then presented with a predefined guidance based on similar inquiries from other customers, leveraging the company's data and learning from the growing number of calls handled.

Working with NICE has led to improved operational efficiency within Blue Cross of Idaho's contact center while also, importantly, helped to improve the customer experience. Blue Cross of Idaho noted a 17% reduction in average handling time, though in some cases it was as high as 87%, resulting in estimated annual cost savings within the contact center of over \$250,000.



Swinton Group

The UK-based insurance company has a contact center with 450 agents that handle an annual call volume of over 2.4 million. Swinton Group set out on a digital transformation and consolidation strategy to move away from its highly customized proprietary platforms utilized in its contact center to a comprehensive WFM platform. The company quickly realized, however, that to effectively utilize a WFM platform, it would need to undergo business process transformation as well with the help of RPA.



Initially, Swinton Group realized cost savings and process improvement benefits from their RPA investment, but were running into infrastructure challenges and not yet meeting their goals. When Swinton moved to NICE Attended Automation, developers and contact center agents worked together to determine process automation opportunities, involving the agents along the way which promoted learning, important feedback cycles, and employee buy-in while also empowering the agents to advocate the benefits of automation in the call center to their peers.

"Swinton Group grew contact centre capacity by 7,781 calls per month - more than 90,000 per year – because of its investment in NICE attended automation."

Swinton Group touts improvements in both the employee and customer experiences because of its investment in NICE attended automation, providing both intrinsic and measurable improvements to the business' top and bottom lines. Utilizing attended automation, contact center agents were able to reduce average call time by 50 seconds and brought new business sales calls down to three minutes, with aggregate savings equating to 40 full time agents. Moreover, with agents more focused on the conversation while the attended automation handled tasks and provided next-best action guidance, Swinton Group's customer satisfaction notably improved as well.



Telia Finland Oyi

Telia Finland Oyj (Telia) is a subsidiary of the telecommunications provider Telia Company. Telia has 4.3 million subscribers to its services in Finland and sought to improve its contact center and customer service operations to expedite yet personalize the customer experience. The company looked to NICE for RPA, AI, and analytics capabilities to help solve its challenges in the contact center.

NEVA became a core component of Telia's automation strategy to assist and empower the contact center agents. Agents can automate interactions between systems, with NEVA bringing all applicable data to the agent's screen while talking with the customer and providing guidance around next-best actions, compliance, and best practices. The analytics and machine learning capabilities within NEVA help agents personalize the customer experience which Omdia has found is increasingly paramount in setting companies apart from one another in this age of customer expectations of speed and simplicity as table stakes.

"A 30-50% reduction in AHT presents significant time and cost saving potential for a company with more than 4 million subscribers."

Telia made a conscious effort to include agents in the development and design of its automation solutions such that they would be built from the ground up optimally for their day-to-day needs. As a result, the telecommunications provider can reduce average handling time by 30-50%, resulting in cost savings and satisfied customers.



Conclusion and recommendations

Enterprises that embrace digitization and automation are improving the customer experience, differentiating from peers while doing so. More and more companies are moving beyond the proof-of-concept phase to piloting and implementing productized digital platforms. This is increasingly proving impactful to enterprise business outcomes, both in internal and customerfacing operations and results. And as more companies have done so, a growing number of use cases, success stories, and best practices continue to emerge, further helping inform those that are interested and/or ready to begin their own journeys.



For those of you considering making lasting changes and improvements to your customer engagement platforms, Omdia recommends the following practices to ensure a smooth transition and success both early-on and over the long-term.

- Carefully and purposefully choose customer-focused key performance indicators (KPIs) against which to measure successes.
- As more employees interact with customers in this digital age, it is imperative to maintain a single, unified experience for the customer and employees across channels.
- Personalization is key; a strong data architecture and high-quality data are imperative.
- Establish a common language in which IT and business domain experts can collaborate and optimize AI for customer experience outcomes.
- Equip your customer service team with AI-powered solutions, including intelligent automation, agent assist, and intelligent call routing, to enable them to perform their jobs faster and with better accuracy.
- Look to vendors with Al-powered customer experience and engagement platforms; ensure IT department involvement in purchasing decisions to meet security and governance policies.

Establishing a strong foundation of data, processes, and technologies will lay the groundwork for all upcoming endeavors as the business grows and evolves alongside customer and market demands. Working with a provider such as NICE that understands nuances around a successful omnichannel customer engagement approach and strategy with modern tools that help you move quickly while maintaining data security and privacy is highly impactful for your customers' experiences. In this age of unprecedented speed regarding word of mouth thanks to the internet, it is imperative to keep customer satisfaction high and continue to innovate and find ways for ongoing improvements.



Appendix

About Omdia

Omdia is a global technology research powerhouse, established following the merger of the research division of Informa Tech (Ovum, Heavy Reading, and Tractica) and the acquired IHS Markit technology research portfolio.

We combine the expertise of more than 400 analysts across the entire technology spectrum, covering 150 markets. We publish over 3,000 research reports annually, reaching more than 14,000 subscribers, and cover thousands of technology, media, and telecommunications companies.

Our exhaustive intelligence and deep technology expertise enable us to uncover actionable insights that help our customers connect the dots in today's constantly evolving technology environment and empower them to improve their businesses – today and tomorrow.

Author

Cassandra Mooshian

Senior Analyst, AI & Intelligent Automation cassandra.mooshian@omdia.com



About NICE

NICE is the worldwide leader in Attended Automation and has been setting industry-wide standards in Robotic Process Automation for over 20 years. NICE's intelligent automation suite enables process optimization while unleashing employees' potential to ensure exceptional customer experience.

- Attended Automation, via NEVA (NICE Employee Virtual Attendant)
- Automation Finder, Al-infused process discovery tool
- Leading Robotic Process Automation, with an embedded OCR engine

We develop and manage our RPA portfolio from a single platform, hold the largest scale automation projects in the market, and are known for driving digital transformation across the enterprise.

Further reading

Omdia:

- Omdia Universe: Selecting an RPA & Intelligent Automation Solution, 2021-22
- Fundamentals of RPA & Intelligent Automation 2021
- Al Business Performance Metrics Database, 2Q21
- Artificial Intelligence Software Market Forecasts, 2Q21
- Best Practices: Al Governance and Ethics Report 2021

NICE:

- Ethics in RPA Blog
- RPA in the banking industry Blog
- RPA for CX in the public sector Blog
- RPA relieving the burden of repetitive manual work Blog
- The power of analytics and task mining within the attended automation solution Whitepaper



Get in touch

www.omdia.com askananalyst@omdia.com

Omdia consulting

Omdia is a market-leading data, research, and consulting business focused on helping digital service providers, technology companies, and enterprise decision-makers thrive in the connected digital economy. Through our global base of analysts, we offer expert analysis and strategic insight across the IT, telecoms, and media industries.

We create business advantage for our customers by providing actionable insight to support business planning, product development, and go-to-market initiatives.

Our unique combination of authoritative data, market analysis, and vertical industry expertise is designed to empower decision-making, helping our clients profit from new technologies and capitalize on evolving business models.

Omdia is part of Informa Tech, a B2B information services business serving the technology, media, and telecoms sector. The Informa group is listed on the London Stock Exchange.

We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Omdia's consulting team may be able to help your company identify future trends and opportunities.



Copyright notice and disclaimer

The Omdia research, data and information referenced herein (the "Omdia Materials") are the copyrighted property of Informa Tech and its subsidiaries or affiliates (together "Informa Tech") or its third party data providers and represent data, research, opinions, or viewpoints published by Informa Tech, and are not representations of fact.

The Omdia Materials reflect information and opinions from the original publication date and not from the date of this document. The information and opinions expressed in the Omdia Materials are subject to change without notice and Informa Tech does not have any duty or responsibility to update the Omdia Materials or this publication as a result.

Omdia Materials are delivered on an "as-is" and "as-available" basis. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness, or correctness of the information, opinions, and conclusions contained in Omdia Materials.

To the maximum extent permitted by law, Informa Tech and its affiliates, officers, directors, employees, agents, and third party data providers disclaim any liability (including, without limitation, any liability arising from fault or negligence) as to the accuracy or completeness or use of the Omdia Materials. Informa Tech will not, under any circumstance whatsoever, be liable for any trading, investment, commercial, or other decisions based on or made in reliance of the Omdia Materials.