

# SAS<sup>®</sup> CAN HELP YOU REINVENT YOUR CUSTOMER INTERACTIONS.

See six ways AI can help you evolve your customer experience.



# AI FOR CX

## GREAT EXPECTATIONS.

Today's customers have great expectations: they want a consistent and personalized experience from you, every time and across all the channels they use. It's why digital customer experience is the new battleground for organizations looking to attract and engage customers.

As a result, organizations are increasingly leveraging artificial intelligence (AI) to orchestrate more personalized and timely customer experiences, made possible by the learning and automation capabilities of AI. It's no secret that those improvements result in more integrated customer journeys that add up to improved business results.

### Are you making the most of the AI possibilities?

Find out in this guide. We bring together six of the most popular uses of AI that show how it could be helping your teams to deliver an industry leading customer experience. First, let's familiarize ourselves with AI and its various capabilities.

### YOU WANT TO...

#### READ THE EXECUTIVE AI OVERVIEW

- 1 DELIVER A CONSISTENT EXPERIENCE  
ACROSS ALL CHANNELS
- 2 INCREASE THE VALUE  
OF YOUR CUSTOMERS
- 3 DELIVER TRULY PERSONALIZED  
RECOMMENDATIONS
- 4 OPTIMIZE CUSTOMER  
JOURNEYS FOR PROFIT
- 5 IMPROVE OFFER DISTRIBUTION
- 6 PREDICT NEXT BEST  
CUSTOMER ACTIONS

# EXECUTIVE AI OVERVIEW.

Artificial intelligence comprises a range of capabilities including machine learning, natural language processing, and cognitive computing, enabled by techniques such as optimization and decision management.



**Machine learning:** is a system that can learn from data, via either supervised or unsupervised methods, to identify patterns and predict future results with minimal human intervention. Historical data with known outcomes is used to train the algorithms, and the output is used against test data to evaluate how good the model is. Machine learning is often used in marketing to analyze a customer's propensity to churn.

**Natural language processing (NLP):** this branch of AI helps computers to understand, interpret and manipulate human language. Specifically, NLP enables computers to read text, hear speech, interpret it, measure sentiment and determine which parts are important. Today, NLP is often used in text and social media analytics tools to analyze issues and opinions. According to research by Futurum, **62%** of brands are adapting their customer engagement strategies and investing in its use as a customer support asset, while **58%** are investing in voice-based AI as an internal marketing and sales asset.<sup>1</sup>

**Cognitive computing:** This involves learning systems that use data mining, pattern recognition, and natural language processing to interact with humans.

**Computer vision:** allows computers to see, identify and process images, including video, in largely the same way as human vision. It's an increasingly popular application for things like visual product discovery, frictionless store experiences and emotional analytics.

**Optimization:** Optimization involves deciding how to best use limited resources to find the best option for a given set of constraints through maximizing desired factors and minimizing undesired ones. Airlines use optimization to sift through millions of flight itineraries to find the optimal price at any point in time to maximize their profits.

**Decision management:** These systems automate and optimize repeatable and operational business decisions. Typical examples include credit card or car loan approvals, or recommendations to customers. Decision management technology usually employs some sort of rules engine in conjunction with predictive models.

**THESE APPLICATIONS OF AI  
CAN BE COMBINED TO HELP  
IMPROVE THE EFFECTIVENESS.  
OF MARKETING ANALYTICS.**

1. Experience 2030: The future of customer experience is now, Futurum, 2020.



1


## DELIVER A CONSISTENT EXPERIENCE ACROSS ALL CHANNELS.

Studies show what we already suspected: that using multiple channels to interact with customers has become table stakes. In fact, **51%** of businesses use at least eight channels such as web, email, social media and phone – driving customers to expect more consistent and personalized experiences from their interactions.<sup>2</sup>

Not having a consistent experience or information across these channels can waste customers' time and leave them frustrated. It's also bad news for your organization – you'll have to spend more time managing multiple channels and combatting churn.

### HOW AI CAN HELP YOU

AI integrates learning into your customer intelligence platform and enables speed by automating the learning. Research shows that **82%** of organizations surveyed using an AI-driven customer intelligence platform engage customers across multiple channels with consistent messages, versus just **54%** for those that do not.<sup>3</sup>



# 82%

**OF BRANDS  
RECOGNIZE THAT  
THE ABILITY TO  
PROACTIVELY  
MEET AND EXCEED  
CONSUMER  
EXPECTATIONS IS  
TIED TO THE ABILITY  
TO CAPTURE AND  
ANALYZE REAL-TIME  
DATA.<sup>4</sup>**

2. Customer Experience Executives Agenda, Aberdeen, 2018.

3. AI in Customer Experience: How AI Influences Results, Aberdeen, 2018.

4. Experience 2030: The future of customer experience is now, Futurum, 2020.



## 2

## INCREASE THE VALUE OF YOUR CUSTOMERS.

Meeting your customers' changing expectations, and delivering the customer experience they expect is critical to company performance. And many of the clearest measures of success are performance statistics. It's why you need the right digital solution – so you can quickly and easily improve customer experience, see the impact of the decisions you make, and optimize your marketing programs in near real-time. But this can be challenging in organizations with a complicated technology ecosystem and silos of data.

### HOW AI CAN HELP YOU

Embedding AI throughout your marketing programs can shorten the cycle time to satisfy customer needs in ways that deliver long-term value. For example, analytical optimization enables organizations to understand how to best direct marketing efforts given certain constraints, with the goal of reducing inefficiency and maximizing customer value. Analytics and optimization together enable organizations to factor in variables, run “what-if” scenarios and testing, and apply optimization formulas to balance goals and constraints. Analytics can also assess program

performance so that marketers know whether their optimization decisions were effective across channels and how they could be improved.

At a customer level, machine learning helps you to find patterns in past customer interactions, channel preference, market segmentation and customer journey phase can help to maximize revenue per customer. These insights will help you to understand how everyone will respond to an offer – from small customer segments down to a segment of one.

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**A SHORTER PATH TO MORE  
VALUABLE CUSTOMER  
RELATIONSHIPS, WITH**

**YEAR-ON-YEAR**

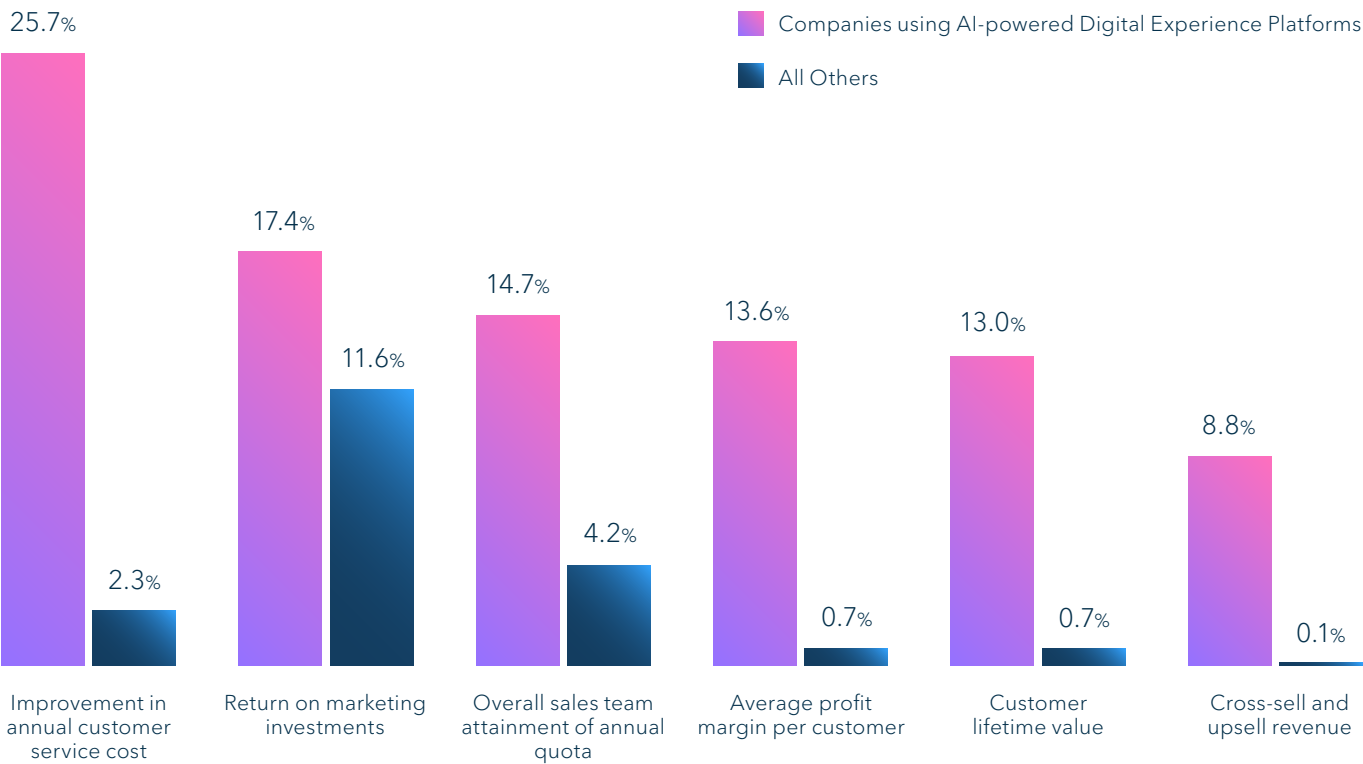
**PERFORMANCE IMPROVEMENTS  
THAT BOOST YOUR  
COMPETITIVE EDGE.**

# INCREASE THE VALUE OF YOUR CUSTOMERS.

From there you can go on to predict the net profit attributed to your relationship with a given customer. This in-turn enables you to right-size your investments in productive relationships. Customers get what they need faster, which is a great foundation for creating value for both your customers and your organization. So what tangible benefits does adding AI to your marketing bring? A shorter path to more valuable customer relationships, with year-on-year performance improvements that boost your competitive edge.



Figure 1: Companies enabled by AI achieve greater year-over-year increase in financial results



Source: Aberdeen Group, February 2018



## 3

## DELIVER TRULY PERSONALIZED RECOMMENDATIONS.

Almost nothing is as efficient as recommending products and services in the right context, at the right time. Yet many organizations can't, because they're relying on simpler, less effective tools, such as what a customer has previously bought.

With personalized recommendations based on a wide variety of data sources, you'll significantly improve results. You'll not only increase satisfaction and brand loyalty, you'll also increase spend of your existing customers and stimulate further brand awareness through the recommendations of happy customers.

### HOW AI CAN HELP YOU

In addition to helping you be timely with your customer engagements, AI can help you improve their accuracy and value. With AI, you get closer to the goal of delivering truly personalized recommendations thanks to the learning that's integrated into your process, and the scale you can achieve through automation. Harness all available data – from customer interactions to external contextual data – to create more variant-rich views of customers that will allow personalization at

micro levels not previously possible. By rapidly learning from high volume, detailed data, you can dynamically target all your identified customers, even anonymous visitors to your website.

You'll be able to:



Make recommendations based on interests of similar visitors.



Show offers based on customer preferences and previously viewed.



Build your own predictive models.



Generate instant recommendations based on content explored.



Create relevant customer experiences through personalized messages.

With AI at work in these areas you will be able to achieve better decisions, executing many in real-time, which allows you to make the most of every moment of interaction.



48%

OF SURVEYED CONSUMERS SAID "UNSUBSCRIBE"

14%

SAID "STOP DOING BUSINESS" WITH THAT BRAND IF A COMPANY SENDS THEM EMAILS THAT ARE IRRELEVANT AND ANNOYING.<sup>5</sup>

5. Executive Guidance: Maximize the Impact of Personalization, Gartner, 2018



## 4

## OPTIMIZE CUSTOMER JOURNEYS FOR PROFIT.

We might like to think that customers use pre-meditated or marketer-defined journeys across channels. The truth is, they don't. As a marketer, your goal is to create consistent cross-channel journeys that maximize the value of each customer or visitor – helping them to get to conversion and not to arrive at a dead-end. However, each customer – potentially of millions – arrives at each touchpoint on their journey with a unique history and context. So how can you deliver the right nudge to move them to the next point in their journey?

AI-based intelligence can evaluate which steps or interventions had the biggest impacts, identifying optimal sequences that can deliver short- and long-term objectives. They'll help the customer achieve their end goal faster, while reducing cost or time to value for your business. What's more, using AI techniques, such as reinforcement learning (RL), AI systems can automate decisions in real-time and learn from them, while testing random journeys to keep things fresh.



**COMPANIES CHOOSE SOLUTIONS THAT USE**

## THE POWER OF AI

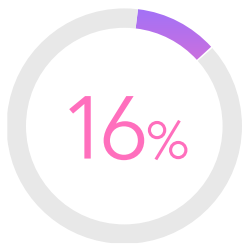
**TO AUTOMATE CUSTOMER JOURNEY MAPPING.**



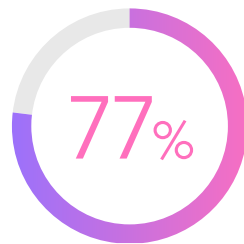
## OPTIMIZE CUSTOMER JOURNEYS FOR PROFIT.

### HOW AI CAN HELP YOU

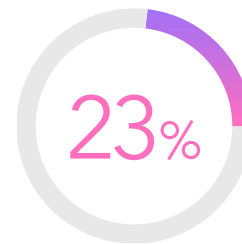
AI-infused insights help you deliver seamless interactions across all phases of the customer journey.



**of firms** say they are very effective at delivering real-time customer interactions across touch points and devices.<sup>6</sup>



**of companies using AI in CX** optimize customer interactions through historical and real-time insights.<sup>6</sup>



**of other companies** optimize customer interactions through historical and real-time insights.<sup>7</sup>

Journey mapping isn't a one-off task, though. Customer expectations, journeys and channels are continually evolving, which is why companies choose solutions that use the power of AI to automate customer journey mapping. Whether your customer is visiting you or you are contacting them, AI makes it simple to tailor the experience to their needs. They'll take fewer steps and get to relevant offers faster.

6. Real-time analytics: the key to unlocking customer insights & driving the customer experience, Harvard Business Review, 2018.

7. AI in Customer Experience: How AI Influences Results, Aberdeen, 2018.

8. Customer Experience Executives Agenda, Aberdeen, 2018.



“When using machine learning to build dynamic journey maps, consider the training needed to program the software for doing the right analysis early on, to minimize the need for retraining later on. This in turn shortens the time it takes to benefit from AI-powered marketing activities.”<sup>8</sup>

## 5

## IMPROVE OFFER DISTRIBUTION.

Offers cannot be limitless, so marketers need a customer intelligence capability that allows them to:

1. Decide which customers qualify.
2. Find the most appropriate time and place on each customer's journey to present the offer.



### HOW AI CAN HELP YOU

Use the power of AI to reduce or even eliminate time and energy spent by humans in labor-intensive activities like analyzing previous campaign results, and designing and executing new campaigns.



**Test and learn** to make sure every campaign, and every offer, is performing to its full potential. Embedded AI capabilities suggest new segments and optimize A/B testing, while omnichannel capabilities allow you to A/B test combinations of personalized offers, messages and channels throughout the whole customer journey to discover what improves your conversion rate the most.



**Guided analytics** can add greater depth to your customer personas – automatically and dynamically collecting data about everything they see and do, without any privacy or security implications.





6

## PREDICT NEXT BEST CUSTOMER ACTIONS.

It's a tough challenge knowing how to make the most of every opportunity from every customer touchpoint. Not only do people's needs change, but there are increasing demands on a customer's attention. Today's reality is that, as consumers, we're seeing an increase in irrelevant offers and we're rejecting more recommendations.

It's disappointing for companies, who as a result see lower up - and cross-sell, an increase in lost opportunities, and lower levels of customer retention. How do you keep people on track with you?

COMPANIES USING AI-POWERED MARKETING ALSO ENJOY

9.1x

GREATER ANNUAL INCREASE IN CUSTOMER LIFETIME VALUE.<sup>9</sup>

### HOW AI CAN HELP YOU

The customer data at your disposal is invaluable - but only if you can analyze it and translate it into actionable insights. And when you factor in the scale of unstructured data, such as text from your contact center, social media and partners, the goal of predicting next best customer actions and trying to achieve that in real-time can quickly become overwhelming. Fortunately, AI has the capability of turning that dual challenge of scale and speed into real opportunity by also delivering the predictive capabilities of analytics to anticipate next best customer actions. It also gives you the power to deliver the best possible customer experience every time across whatever channel your customers choose.



Promotional  
info



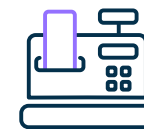
Demographics



Call center



CRM



Point of sale



Actual  
customer  
needs

<sup>9</sup>. Executive Guidance: Maximize the Impact of Personalization, Gartner, 2018



# NOW YOU CAN MAKE BETTER DECISIONS EVERY STEP OF THE WAY.

What sounds complex can be simplified and accelerated with AI. And with SAS AI-driven customer experience solutions, you won't need any special knowledge: the right tool can seamlessly integrate advanced analytics capabilities into clear workflows that rapidly start to generate insights you can work with.

## SAS can help

Whether you're unlocking insights on prospects and customers to create engagement through relevant, unique experiences and offers, or mapping out journeys that will satisfy customers and your metrics, customer intelligence requires the rapid learning and automation capabilities of AI.

At SAS, we've been applying analytics to the toughest business problems for years. And we believe there are exponential possibilities in how organizations understand and service customers when you bring together analytics, AI and human interactions.

## See who's working smarter

### GET IN TOUCH

If you're interested to learn more about how AI and CX solutions from SAS could work for your business, take a look at the article [SAS Customer Intelligence 360: Marketing AI vision](#).

[Or contact us](#)

### What value could you unlock?

- Improve acquisition rates
- Reduce churn
- Lower marketing costs
- Increase brand loyalty
- Increase customer lifetime value
- Improve marketing ROI
- Improve customer satisfaction scores
- Better operational efficiencies
- Greater marketing agility



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