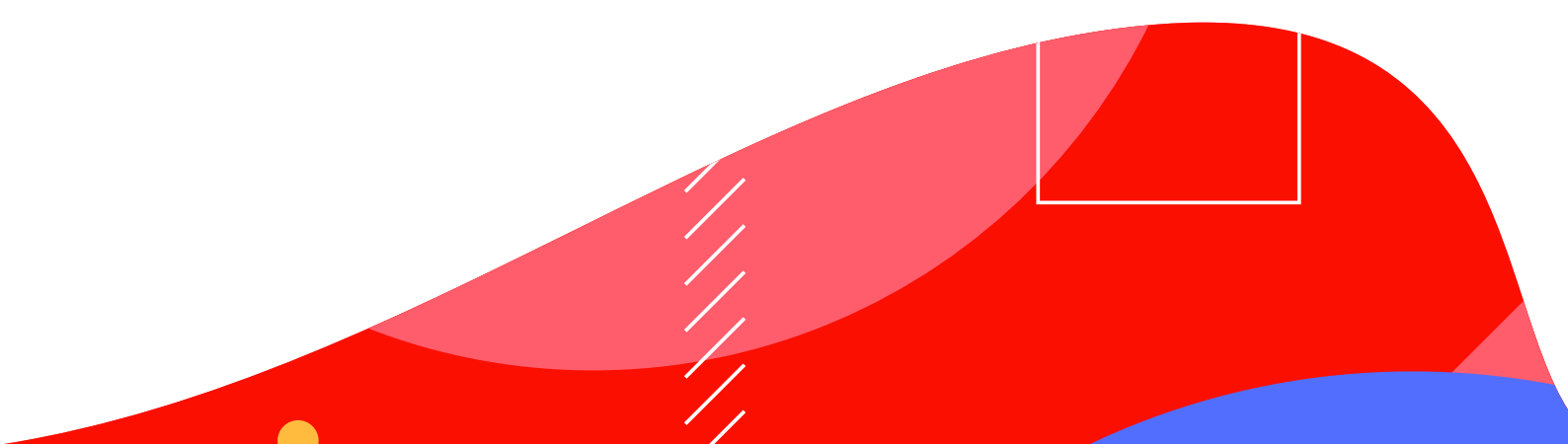


Ten predictions for the next decade of analytics.

Contents

Driving incredible innovation.	03
Prediction 1: AI will be everywhere.	04
Prediction 2: Personalization will become the norm.	05
Prediction 3: Prescriptive analytics will fulfil the promise of truly personalised experiences.	06
Prediction 4: Natural language processing will enable easy data insights.	07
Prediction 5: AI will enable employees to refocus on business priorities.	08
Prediction 6: Consumers will demand data privacy rights.	09
Prediction 7: Blockchain will become more prevalent and drive more transparency.	10
Prediction 8: Data standards will empower brands to create true, unified profiles.	11
Prediction 9: Sentiment analytics will allow brands to better estimate end-user happiness.	12
Prediction 10: Wearables will advance the "digitization of the person."	13
Cheers to the next decade.	14

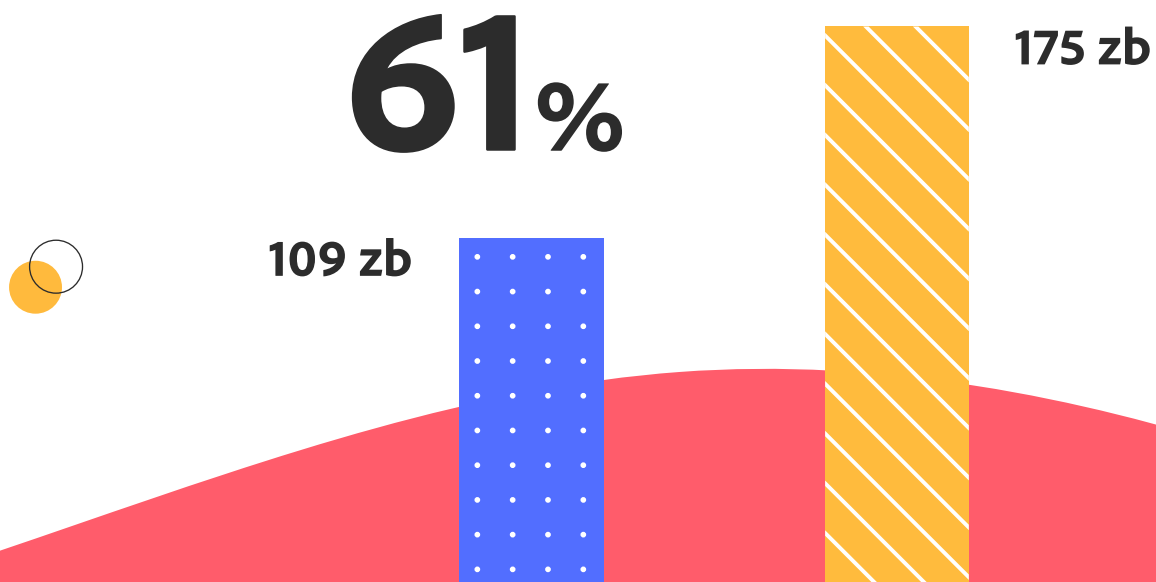




Driving incredible innovation.

AI and other analytics technologies are driving incredible innovations and advancements that are making it possible to do things with data that business leaders only dreamed of a short time ago.

It's been 10 years since Adobe acquired Omniture and entered the analytics arena. Since then, the industry has seen phenomenal changes in the world of data-driven marketing and the customer experience. To celebrate a decade of [Adobe Analytics](#), here are 10 predictions from experts and analysts about how artificial intelligence and analytics will continue to evolve and shape over the next 10 years.



**Worldwide data will grow
61% to 175 zettabytes by 2025.**

Source: IDC



Prediction 1 AI will be everywhere.

AI will become ubiquitous—permeating how consumers engage with brands, technologies, their homes, and their friends. It will also be infused in all enterprise platforms and tools, helping businesses gain insights to better understand their customers and provide more personalized experiences.

[Gartner predicts that by 2021, 80 percent](#) of emerging technologies will have AI foundations. And by 2023, artificial intelligence and deep learning techniques will replace traditional machine learning as the most common approach for new applications of data science. This means machine intelligence will have far more AI capabilities than it had with standard machine learning. Brands that take advantage of these capabilities better than their competitors will gain the competitive edge.

At the same time, [Gartner predicts that through 2020](#), AI-driven creation of “counterfeit reality” or “fake content” will outpace AI’s ability to detect it, creating digital distrust. To combat this, AI governance, including standards and ethical oversight, will gain momentum.

Worldwide spending on AI



Worldwide spending on AI will reach \$35.8 billion in 2019, then more than double to \$79.2 billion in 2022.

Source: [The Wall Street Journal](#)



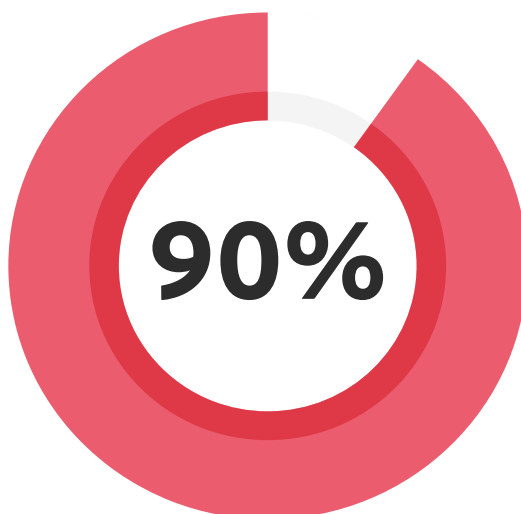
Prediction 2

Personalization will become the norm.

Customer expectations for deeply personalised, omnichannel experiences have hit an all-time high. In fact, many experts predict it will be table stakes in the long term. And as more ways to interact with consumers are added those expectations will only increase.

Heidi Besik, group product marketing manager at Adobe, predicts the next level of personalization will go beyond omnichannel experiences to relationship management – where brands forge deep connections by approaching experiences from the customer point of view. In fact, there's already a trend for new positions like chief experience officer. To grow and retain customer loyalty, brands will have to pivot their thinking to view personalization and attribution through what each customer wants, not through a channel perspective. It's about understanding how customers want to interact with them—including where and when and then delivering on that at scale.

“The biggest bottleneck will be content velocity,” Besik told CMO.com. “Brands will have to create enough content to satisfy their customers’ desire for new and relevant experiences. AI, machine learning, and prescriptive analytics will be the differentiators for those who do it well.”



Gartner predicts 90% of brands will practice at least one form of marketing personalization by 2020, but content, not data, will be the bottleneck and primary cause of failure.



Prediction 3

Prescriptive analytics will fulfil the promise of truly personalised experiences.

AI has helped brands prescribe the right offer, and in some cases, the right channel or device. But it hasn't done as good a job of prescribing the right time to maximize the chances of consumer success. Companies that embrace prescriptive automation will leap ahead of those that don't.

Think of it as prescribing the orchestration of experiences, not just automating them. By determining "if this, then that," it prescribes the next best action and then automatically implements it at the moments that matter to drive increased engagement and conversions.

Furthermore, prescriptive analytics will become more aware of what has traditionally been "non-analytics" type information in context. This includes information that can impact the demand for products, like macroeconomic indicators, or weather. If it's pouring outside, people may be more inclined to stay in and rent a movie—driving up demand. With prescriptive analytics, companies could deliver offers in exactly the right moments.





Prediction 4

Natural language processing will enable easy data insights.

As we see more and more voice-enabled devices, and more people asking Siri, Alexa, and Google Home for information, natural language processing (NLP) will become the norm for getting information. And analytics is no exception.

NLP will serve as the bridge for non-analytical people to get the “headlines” out of their data—something that has, up until now, been reserved for the data analysts. Imagine being able to ask a natural question such as, “What was our revenue for the July launch?” Natural language processing will not only surface insights in new ways but simplify our interaction with analytics technology and democratize analysis and insights across enterprises. More people will gain the data insights they need to create more compelling and relevant experiences.

“When used with machine learning and AI, natural language processing is one of the most promising applications improving insights derived from analytics for all users.”

Source: [Gartner](#)

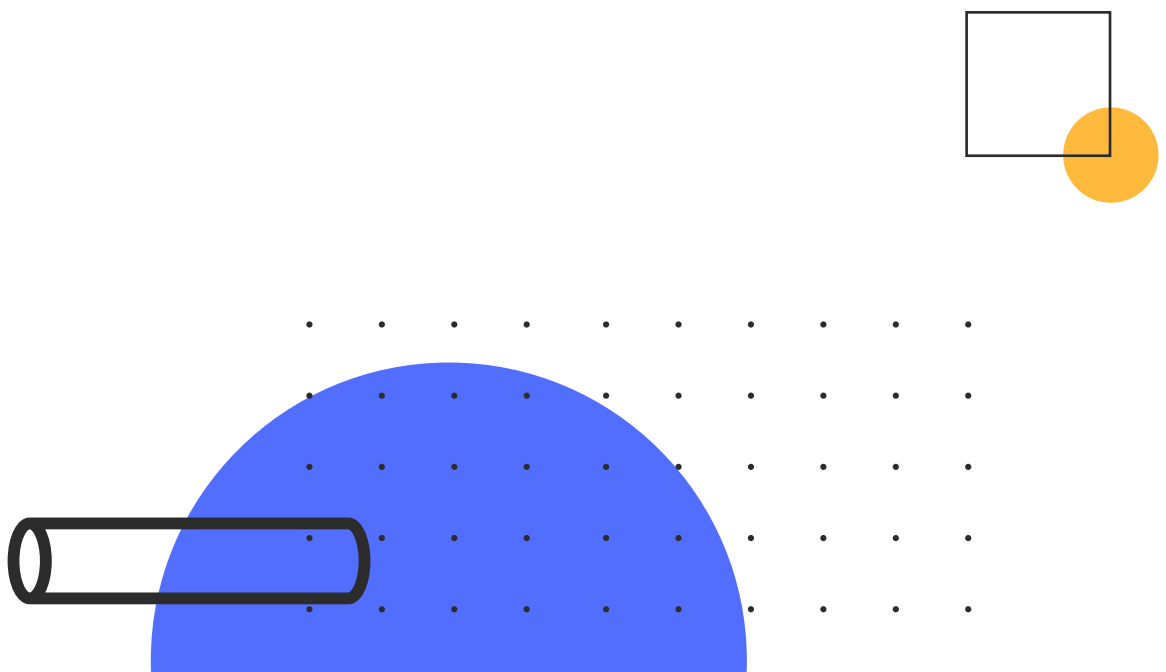


Prediction 5

AI will enable employees to refocus on business priorities.

The trend toward citizen analytics is why [Gartner predicts AI embedded](#) in analytics and other marketing software will free up more than a third of data analysts in marketing organizations by 2022, enabling them to focus their time on business priorities instead of spending time on manual processes like personalization, lead scoring, anomaly detection, marketing performance management, and reporting.

Consider Netflix, which delivers personalized recommendations based on consumer patterns. The algorithms don't just look at the one user, but at all consumers with similar behaviors. [The algorithms then find differences and create recommendations](#) and offers with a high likelihood of interest that the brand otherwise wouldn't have known about. This same idea is being applied to marketing and analytics software. There will be an army of marketers and less-mature stakeholders of data who can surface accurate, real-time insights that help them make decisions and deliver personalized experiences much faster. Without an analyst.





Prediction 6

Consumers will demand data privacy rights.

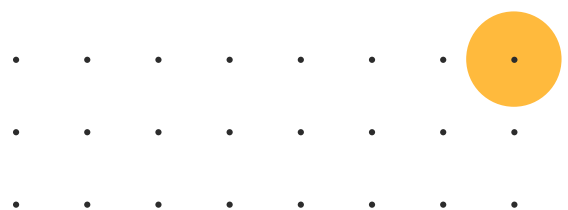
Is it a coincidence or a sign of the times that the Bank of England chose Turing as the new face of their 50-pound note? We've entered a world where personal data powers commerce. As a result, data rights have become top of mind for both enterprises and consumers.

Trust in how enterprises use customer data is eroding and there is a growing movement for consumers to own and control their own data. Experts believe more countries and states will join Brazil and California, which are following in the footsteps of Europe's GDPR compliance laws, by enacting their own laws.

As consumer concern—and even outrage—over data privacy grows, brands that give their customers the ability to choose what data is being collected and used will gain the competitive edge.

[Disney is a brand that's doing this well.](#) They collect huge amounts of data, which is used to deliver deeply personalized experiences. Consider one example: their magic wristbands, which use AI to inform in-park offers and to let guests know which rides have shorter lines. But they also have a portal where customers can choose exactly how their data can be used and even request that it be deleted.

[Microsoft is also leading the way for privacy.](#) They too have a data portal and are setting the standard for empowering consumers to have the highest level of transparency, ownership, and control over the data that's being collected about them.





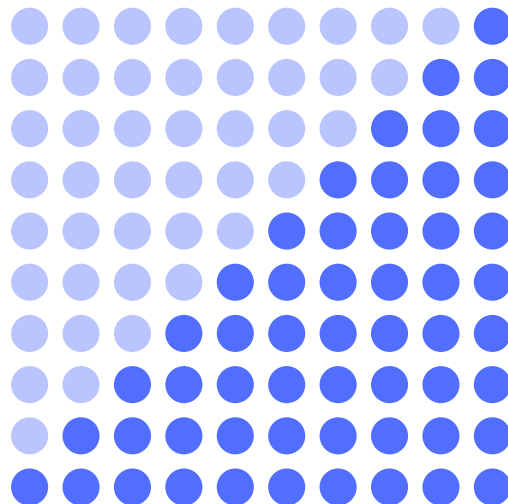
Prediction 7

Blockchain will become more prevalent and drive more transparency.

According to John Bates, product manager for Adobe Analytics, “Blockchain is ushering in the Trust Age. It will introduce the possibility of making certainty available to anyone with an internet-enabled device.”

Distributed ledger technologies offer the possibility of embedding transparency and trust with every transaction. These technologies can usher in a world where businesses transact, consumers purchase, and data and digital assets are shared—without intermediaries and without concerns of fraud or safety. You’ll also be able to see who owns what, with proof of origination, which is especially important for ensuring images and assets are not being modified without permission.

Blockchain will also further the concept of identity ownership—exchanging data that a customer has shared with greater transparency and enforcement.



By the end of 2019, more than 50% of the top 100 advertisers will use blockchain for supply chain transparency and enforcement.

Source: [Forrester](#)



Prediction 8

Data standards will empower brands to create true, unified profiles.

As we move closer to the holy grail of unified customer profiles, the need for true data standards and governance will become even more urgent. The ability to understand a customer's needs, wants, and value will depend on having access to all data, and have it all in a standardized form.

Currently, a video view can be measured in numerous ways, from watching for two-seconds to whether or not audio is played. And visits are calculated differently as well. We'll see a move toward standards that are portable across all data, removing the friction and second-guessing that is prevalent today. This will help solve the silo problem and create higher levels of efficiency for organizations that use several different technologies and have relationships with multiple vendors.

[The Open Data Initiative by Adobe, Microsoft, and SAP](#) is a step in the right direction and it's expected to gain momentum. This collaboration by industry leaders is open to all organizations and creates an open framework for weaving customer data together.



Prediction 9

Sentiment analytics will allow brands to better estimate end-user happiness.

The fact that SAP recently acquired Qualtrics validates the prediction that sentiment analytics will get significantly bigger. Customer experience (CX) analytics is a growing trend, where behavioural data is collected with attitudinal and other kinds of data, such as call centre interactions, to gain a holistic understanding of a customer's mood, satisfaction, and loyalty. Experts predict more use of machine learning and AI to get a sense of people's attitudes or emotional experiences with brands at a much higher scale.

"Except a trend toward scaled, augmented consumer profiles using customer experience estimates and engagement scoring that goes beyond the traditional public social data, surveys, and call-center data", said Adobe's Bates. "Instead, brands will harness the power their owned data, including behavioural interactions with their website and other channels to determine a positive or negative sentiment."

Another trend for sentiment analytics is facial recognition. While still in the early stages, Bates predicts it will continue to grow, with analytics measuring facial expressions such as smiles and frowns to determine if an experience is accomplishing the right mood or response.




Prediction 10

Wearables will advance the “digitization of the person.”

A research report by [Global Market Insights](#) predicts the wearable artificial intelligence market will reach \$180 billion by 2025. From earwear devices with biosensors that track heartbeats to customize the user experience, to fitness trackers that can detect heart abnormalities, our bodies are creating a whole new kind of data stream.

Under Armour, which owns Fitbit, [is already using this kind of data](#). The company is mining shared customer data to recommend new products based on an individual's exercise habits. Expect more brands to follow in their footsteps.

The biggest issues here will be portability of the data and privacy. The idea of data lockers may not be far off, where data subjects can choose which bio data they choose to share, and to whom—from their doctors to their favorite brands. As data privacy advances, users will be more trusting and willing to let brands collect their data because they set the conditions.



“By 2022, your personal device will know more about your emotional state than your own family.”

Source: [Gartner](#)



Cheers to the next decade.

Analytics has revolutionized the customer experience. And exciting new possibilities continue to emerge as AI unlocks its true potential – enabling phenomenal technologies we could only imagine a few years ago. Brands that capitalize on this innovation and invest in AI and analytics will become insights-driven business that capture the attention, dollars, and loyalty of their customers.

Turing summarized it well when he said, “We can only see a short distance ahead, but we can see plenty there that needs to be done.”

Adobe has been a key player in the innovations and rapid advancement of analytics over the last decade. But as Adobe CEO Shantanu Narayen said, “You can never rest on your laurels.” We’re continuing to support the growth and future development of personal and meaningful customer experiences by helping everyone from global brands to individuals glean insights from their customer data.

Learn more about becoming an insights-driven business with the help of Adobe Analytics.

[Learn more](#)

[Request a free demo](#)

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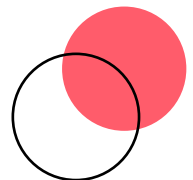
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