



Transforming the **Customer Experience with AI**

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Customer Experience Trends and Challenges

When it comes to customer experience, whether in the private or public sector, what used to be a nice-to-have has become necessary, as it becomes more difficult for a brand to differentiate based on a product or service. Customers want and expect at least a positive experience, and for brands to remain competitive, it must be a differentiated experience. Similarly, for governmental agencies to build trust and engagement, the experience they provide citizens must be differentiated.

Why are differentiated experiences important? How do businesses benefit? How do customers determine what a differentiated experience is?

Simply put, the differentiation comes in that the current experience is better than what the customer expected, is better than experiences with competing products and brands, and is at least equal to or better than the last best experience that customer had.

Additionally, it has become more difficult to engage with customers. Customers have been quick to adopt and use technologies like mobile devices, brand-specific applications, and social media channels. But with this adoption has come the expectation that brands are able to interact and provide a full range of services across all these channels.

To determine what a customer would consider a differentiated experience requires data — data about what the customer is talking about, data about behavior, data about other actual and potential experiences the customer can have, and data about the capabilities of the brand to provide an experience. Data, when matched with analytics and artificial intelligence, is the foundation for understanding and better engaging with customers.



According to IDC's Customer Experience Benchmark study, **30%** of customers will leave a brand and never come back because of a bad experience.

Impacts of AI-Based Analytics and Automation on Customer and Citizen Engagement

Data about the customer, the market, and the capabilities of the brand, when combined with AI and analytics, is creating a customer experience that is more personalized and more tailored to the specific customer than ever before. It is the transformation of data into information, information into knowledge, knowledge into wisdom, and wisdom into empathy.

Consolidating customer sentiment and then understanding the data you have about the customer is foundational for providing a unique customer experience. To do that organizations must:

- 1 Build a foundation of learning and understanding about the customer from both internal and external sources of data.
- 2 Engage with the customer at critical points before and during the customer journey, on the channel the customer prefers to use, and in the way that the customer prefers.
- 3 Act in ways that establish trust between the customer and the brand and support building a long-term trusting relationship that generates value for both the customer and the brand.

Data about the customer, the brand's or agency's public perception, the capabilities of the brand, and analysis of that data provide the foundation for accomplishing and improving customer engagement and experience leading to revenue growth and customer retention.

Beyond the data and simple analysis, AI has the potential to provide a deeper and contextual understanding of customers in their interactions with the brand and in other market situations.

Together, between the data and the technology, this provides a platform for knowledge- and data-based responses to the signals and information about what customers want and need.

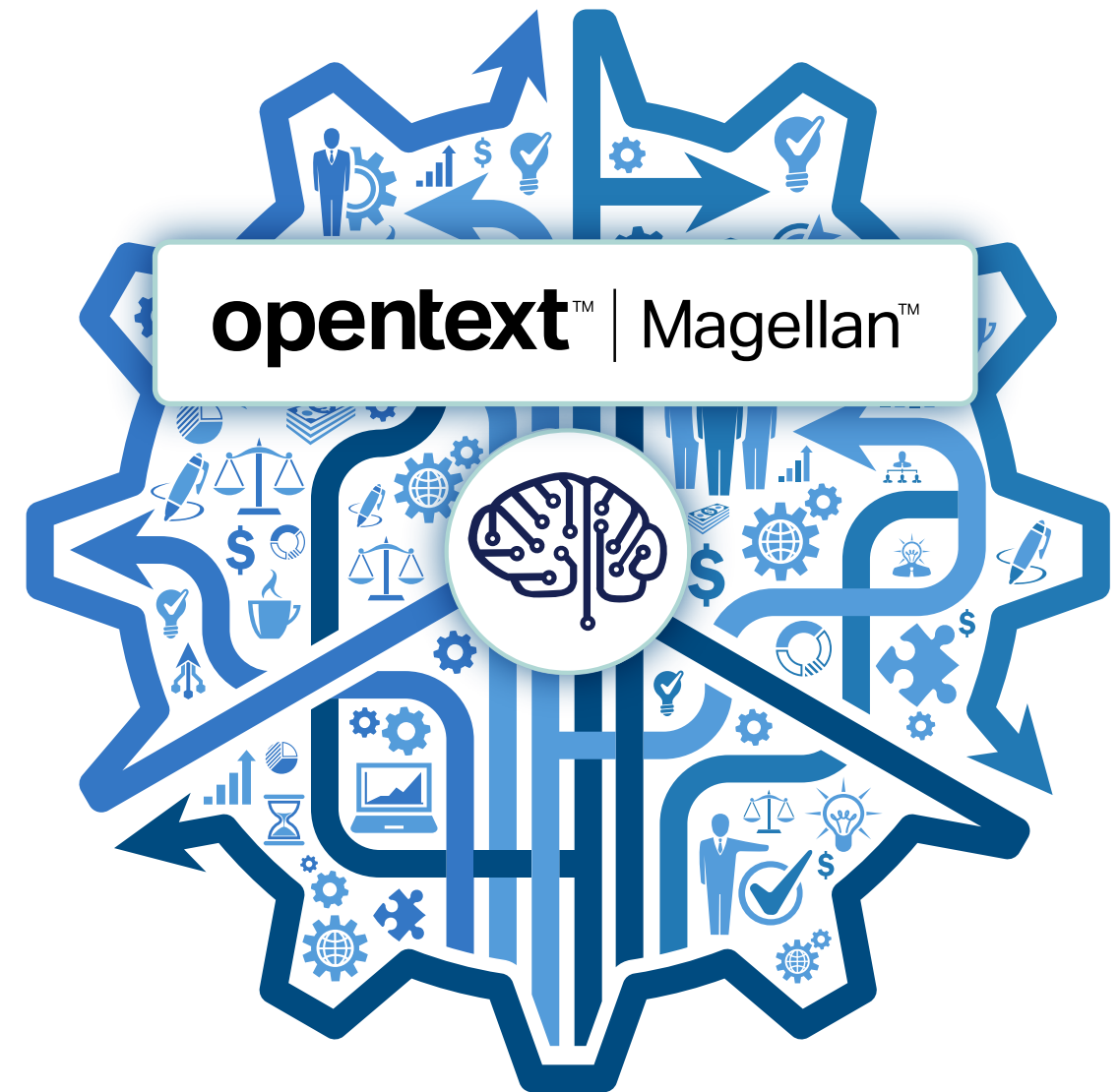
Brands employing these business processes and technologies can expect improved results, including increased revenue for the company, higher levels of customer satisfaction, better customer engagement, and longer, higher-value relationships with the customer.

IDC Profile of OpenText Magellan

While the use of AI and machine learning with structured data is well-established, there is a significant need for an open AI and analytics platform that deals with semi-structured and unstructured information. In order to operate effectively, this platform would need to perform state-of-the-art text analytics and natural language processing. Entities such as people, places, things, and dates would automatically be identified and extracted and linked to relationships and actions such as "initiation," "completion," "bought," "sold," etc.

The OpenText Magellan platform combines structured analytics and unstructured text analytics and extraction as well as natural language processing with popular open source components including Hadoop, Spark, Spark ML, and Jupyter. The integration of all these technologies makes it easy for developers to create, modify, and run machine learning models using unstructured information. It also enables organizations to take full advantage of the innovation in open source machine learning.

Magellan integrates visualization, text analytics, natural language processing, and semantic and numeric engines together for organizations that want to add AI to their document processing. Magellan leverages Apache Spark for open algorithms, and machine learning to help customers harness the value of their information. It is an open platform built on open standards like HTML5, Java, SQL, and Hadoop. The Magellan development environment provides tools and approaches for improving traditional content management and automating workflows.



Driving Improved Customer Experience with AI-powered Voice of the Customer from OpenText Magellan

AI-powered Voice of the Customer (VoC) from OpenText Magellan is the combination of AI services and an enterprise application to create a solution that provides AI and machine learning-based insights about sentiment, products, customers, and citizens, leveraging natural language processing and advanced text analytics, as well as machine learning.

According to the IDC Customer Experience Benchmark,
27% of companies say improving their customer intelligence and data efforts is their highest priority when it comes to customer experience.

AI-powered VoC increases revenue and improves the customer experience using AI-powered insights on customer voice:

- Better insights and understanding of public opinions and brand perceptions.
- By collecting disparate sets of data, AI-powered VoC can use machine learning to produce insights that build better personalized experiences for customers.
- Organizations can feel comfortable that Magellan is handling personally identifiable information (PII) in a responsible and verifiable manner.
- Better understanding of product perception and how it matches customer wants and needs.
- Results in better revenue for the company and better relationships with customers.

1

AI-powered VoC uses concept extraction, sentiment analysis, and other advanced natural language processing techniques to really understand what customer reviews, social media, and surveys are really saying. These rich insights can be used to provide information on sentiments along the customer journeys and, with the support of professional AI services, optimized segmenting.

2

AI-powered VoC positions all this rich information into digestible business intelligence dashboards and reports for immediate action.

3

AI-powered VoC machine learning capabilities enable the application to continuously improve its ability to identify key concepts and sentiments, and produce better profiling and targeting.

Use Case 1

Improving Customer Engagement and Retention

One of the largest issues facing brands and organizations is a lack of contextual understanding of the customer and sentiments along the customer journey. Brands often understand the steps a customer must progress through but fail to recognize the significance of those steps to the customer and the context in which the customer engages.

Too often, the causes or context behind why a customer chooses to engage with a brand are difficult to gauge, as a big portion of the data and understanding is trapped in textual-based data or is siloed within the organization, resulting in an incomplete or even distorted view of the customer.

Brands can use AI and machine learning to better understand the context around why the customer's engagement with the brand is considered positive or negative and what their specific needs or wants are. This would include:



A deeper understanding of engagement and conversion drivers across each stage of the customer journey, which **enables more targeted and personalized experiences and improves CLV and advocacy.**



When complemented with internal customer operational data, machine learning can also provide targeting recommendations for **more personalized offers based on a constructed market and customer profile.**

Use Case 2

Increasing Product Adoption

Beyond the lack of contextual understanding around the customer, brands often lack insight into what customers want or need in their products and services. Too often this has resulted in a “build it and they will come” approach instead of gathering the necessary information to provide a differentiated product and experience for the customer.

More and more products have become increasingly commoditized, making it increasingly difficult to differentiate products other than some slight differences that border on being indistinguishable to the customer. This is often a result of a lack of understanding about what the customer needs and issues with the product, along with how the product compares to other similar products.

For brands to understand the context around the customer and the product, they need to:



Employ **text analytics, NLP, AI, and machine learning to get deeper visibility** into customers’ key decision criteria and what drives negative customer sentiments toward products and services and their key features.



This can then be used to **understand if there are addressable issues and assess their pervasiveness** in the market among the target customer.



Used correctly, this results in a **deeper understanding of customer nuances** around products and what they want or need, opening up new potential paths to product differentiation, experience differentiation, and long-term value creation for both the brand/organization and the customer.

Use Case 3

Improving Civic Engagement

Specifically, with governmental organizations and the organizations that support them, due to the unique nature of the relationship between government and citizen, there is a lack of clear understanding of the citizen goals and citizen desires that drive satisfaction.



Currently, **surveys are employed as the primary tool to understand civic attitudes and engagement levels**, though some leading-edge government organizations are employing social media monitoring tools and similar technologies to add some additional context to their understanding. The problem is that **surveys provide an incomplete picture of the citizen and their wants and needs, which results in fragmented understanding and a disengaged citizenry. Even worse, often the only way citizenry is engaged is in periodic election cycles.**



Organizations can employ **machine learning and text analytics to understand the key drivers** behind civic engagement and civic sentiment — which issues are critical to citizens and which aren't — and use this data and intelligence to improve government response in real time, not waiting for election cycles.



Employed appropriately, this **results in better citizen engagement and correspondingly a better policy-making process** that considers both the unique needs of citizens and the ability of government agencies to respond to them.

Challenges and Opportunities

Large Suite of Solutions

OpenText offers a large suite of solutions, both overall and in the Magellan platform. The nature of these offerings can make it challenging for customers or prospective customers to assess which solutions like AI-powered VoC from Magellan are warranted, depending on what existing products customers may be using.

Training

Training of AI and machine learning (ML) models on an organization's data requires specialized resources, time, and large sample data files. The use of pre-trained models and industry-specific taxonomies helps to alleviate this concern. Furthermore, it is important that models be trainable in an easy self-service fashion for jargon that is important to your company. Organizations should expect that improving their ML model's accuracy will require multiple iterations of training the models.

Trust

Trust is also a potential issue for organizations. How can organizations trust the automatic algorithms of an AI-driven VoC solution? For many organizations, the best way to build trust is to use a product like AI-powered VoC from Magellan and verify that it is acquiring, aggregating, and analyzing data in a way that makes sense and adheres to company policies.

Build or Buy

There are other AI-powered VoC solutions on the market that customers may consider. Another option for organizations that have development resources is to build their own internal AI-powered VoC solution based on the various open source libraries and tools that exist. While this may be a time-consuming exercise, some organizations may undertake this to save on licensing costs.

Explainability

The ability to explain why AI-infused services and products assign certain classifications can be a challenge given the complexity of the models. This may not be as much of an issue for internal processes, but customer-facing operations may need this. The potential for bias is becoming a larger issue with both organizations and the public, and developers using AI-based processes must be aware of this as an issue that they need to be able to address.

Support for Multiple Languages

Support for multiple languages may be key for multinational organizations. Also, AI-powered VoC from Magellan doesn't currently support video, voice, or images. If organizations have large amounts of asset images and video, or need voice support for asset management, other types of solutions may need to be acquired to handle these data types.

Guidance/Recommendations

According to the IDC Customer Experience Spending Guide 1H19, brands will invest:

\$13.9B in **CX-focused AI** | **\$42.7B** in **CX-focused Big Data and analytics** in 2019 | This will grow to a combined **\$90B+** in 2022

When it comes to understanding the customer, whether it is the technology platform that the customer uses to interact, the channel the customer prefers, or even what the customer wants or needs, brands are almost always playing catch-up with the customer.

To understand the customer in a way that enables a differentiated experience, organizations need to:

1 Focus on the customer:

- Ensure the customer is the primary focus. Too often, organizations will say the customer is the primary focus but the actions and investments by the organization do not match that commitment.
- Establish and build trust between the brand and the customer by making and keeping process, product, and experience commitments, which becomes foundational to engagement.
- Employ customer, contextual, and organizational data in a long-term architecture built on an established foundation of trust between the brand and the customer.

2 Identify a strategic direction that considers the direction and changes to the customer:

- Establish an organizational vision and a joint customer/brand vision — what is the outcome that would satisfy what both the organization and the customer want, and focus on the shared outcomes at the intersection.
- Strategic direction requires leadership within the organization and clarity about who is responsible for what when it comes to customer engagement and the customer experience.
- Clearly identify the role that data and technology will play in achieving that strategic direction.

3 Recognize what is necessary to put that vision of data and technology in service to the strategic direction into place:

- In a period of consent-based interactions, be clear in the necessity and methodology for the collection and use of customer data.
- Be clear that the collection of data and insights about the customer is directly tied to what is necessary, rather than what is nice-to-have.
- Evaluate customer-facing technologies that improve and do not hinder any more than absolutely necessary customer engagement.
- Ensure that engagement efforts and the corresponding experiences are channel agnostic.

LEARN MORE about OpenText™ Magellan™

[Discover what OpenText Magellan can do for you](#)

[Watch the AI-powered VoC from Magellan video](#) and [how companies can enhance customer engagement with voice of the customer insights](#)

Explore more about how companies and government agencies can improve customer experience by reading the [Solution Overview](#)

Find out how [AI helps enterprises hear their customers' voice in this blog](#)

Click here for a complimentary demo of
AI-powered Voice of the Customer

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