A Forrester Consulting
Thought Leadership Spotlight
Commissioned By Microsoft

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The Invaluable Role Of Analytics And AI In Digital Transformation

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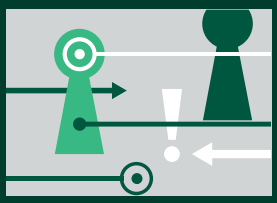

Introduction

Companies today are facing increasing pressure to modernize their business to remain agile and provide customers with the high-value experiences they increasingly demand and expect. Most companies are prioritizing improvements for customer experience (CX) and agility but will fall short on their efforts without the right analytics and AI capabilities to guide their decisions.

Microsoft recently commissioned Forrester to complete a study entitled, "Customer Experience And Analytics Modernization: Critical Foundations For Your Digital Business Future," which profiles two critical areas that every organization must focus on to achieve desired business outcomes for growth and better CX: **modernizing customer-facing business apps and improving analytics capabilities** — both of which can be improved and extended with a commitment to artificial intelligence (AI) for insights and actions. This Spotlight document takes a deeper look specifically at the analytics and AI components of that study to highlight what organizations can do to make these powerful tools a more meaningful part of their business modernization efforts now and in the future.

This Spotlight was commissioned by Microsoft and is based on a survey of 302 US-based business decision-makers from a mix of roles including marketing, sales, operations, analytics, and customer service. The survey was completed in December 2020.

KEY FINDINGS

- Over 90% of decision-makers agree that data and insights play an indispensable role in their day-to-day work activities.
- Fewer than a third of business leaders, on average, actually analyze the customer data they collect.
- There is an equal need for analytics and insights on customer data and noncustomer data (e.g., process/workflow, supply chain, financial, etc.).
- AI plays an important role in modernization efforts by expanding the breadth and depth of insights.

Analytics Are Essential To Business Growth, But Business Leaders Are Just Scratching The Surface

Effective analytics and application of analytical insights provide a range of potential benefits for organizations, from direct customer benefits (i.e., CX) to better informing strategic business decisions and investments. Eighty-five percent of business leaders see analytics as central to driving business growth. More than 90% agree that data and insights play an indispensable role in their day-to-day work activities, and 86% say that analytics are key to driving business innovation.

Despite this recognition of analytics' value, less than 50% of business leaders are highly satisfied with their current access to data and insights. Not only is access to insights limited, but firms are collecting significant amounts of data, specifically customer data, but leaving it unanalyzed (see Figure 1). On average across all the data types we asked about, fewer than a third of business leaders analyze the data they collect.

Figure 1

Much of the data organizations collect goes unanalyzed

Base: 302 US based decision-makers for business application planning, investment, and ongoing improvement decisions
*Base: Variable US based decision-makers for business application planning, investment and ongoing improvement decisions who collect this type of data
Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, December 2020

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However, this is changing. Seventy-eight percent have seen an increase is data usage in the past two years, and 83% expect continued usage growth over the next two years, with one-third expecting a significant uptick in usage (over 10% increase). When asked what type of customer data business leaders did not currently have or use but would like to have access to, respondents most commonly mentioned location, demographic, purchase, mobile, and lifestyle data. These and other data types would enable leaders to have a razor-sharp focus on improving customer segmentation to fine-tune and optimize marketing campaigns and drive innovation around customer needs. This improved segmentation could reduce customer churn, improve customer satisfaction, and ultimately result in increased revenues via cross-sell and upsell opportunities.

THERE IS AN EQUAL NEED FOR CUSTOMER AND NONCUSTOMER INSIGHTS

Analytics is not solely about finding insights to better serve customers. Business leaders also have an opportunity to use analytics to uncover insights about business processes optimization and innovation opportunities. In fact, these use cases for analytics on noncustomer data are of nearly equal importance to customer insights (see Figure 2).

Figure 2

"What data and insights use cases are most important to you in your role and regular work?"

Base: 302 US based decision-makers for business application planning, investment, and ongoing improvement decisions
Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, December 2020

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Modernizing Analytics Practices Will Improve Data And Insights Usage

Historically, IT or data professionals have handled data and analytics requests and then passed along key insights to various business decision-makers through reports. However, most companies today are moving away from that approach by implementing more modern, self-service analytics tools that are broadly accessible to business users. This new approach leverages data analysis and reporting tools for employees that don't require advanced data science skills, thus making it easier for business users to uncover insights without relying on IT or data teams to support them.

This self-service approach does not diminish the role of IT and data pros in supporting analytics, however. There is tremendous work that must be done on the back end to make self-service data tools easy to operate for users. When asked where they'd like to see improvements, business decision makers highlighted the following areas:

- **Improved visibility of the data available.** For inexperienced data users, knowing what data is available and how to find it can be daunting — but these are key capabilities to improve data literacy — especially given the rapidly increasing volumes of data that companies collect. That is why over 43% want better cataloging and searchability of data to find data more easily. An integrated data catalog that is searchable will enable decision-makers to make more holistic, strategic planning decisions based on data available and more readily identify data gaps.
- **Better tools/user interface (UI) for an easier user experience.** Improving UI of analytics tools is an important objective for 44% of business leaders. They are looking for data and analytics tools that do not require them to be a data professional to use; instead, the tools should guide users through the process. Business users need analytical apps with conversational UI — natural language to query (NLQ) and natural language generation (NLG) — to interact with data in a more natural (more cognitive) way. Conversational (cognitive) UI democratizes analytics to a much broader audience. The right UI will empower business decision-makers to quickly find, search, analyze, and report on key data and insights to guide everyday decisions, rather than having to rely on data teams to go through the process for them.
- **Application of AI to find insights with less effort.** Low-code analytics solutions are helping to streamline AI development efforts, reducing the time and effort needed for every iteration of the machine learning (ML) model development lifecycle. This enables data scientists to create more and better models faster.[1] This results in greater value for business leaders and does not put additional burden on data science teams. The idea of having data insights generated automatically (through ML and predictive analytics) is an important improvement that over 41% of business leaders are interested in; more 50% say their organizations are already using AI to some extent.

69% believe that AI will have a strong positive impact on their org over the next two years.

AI Plays An Important Role In Modernization Efforts

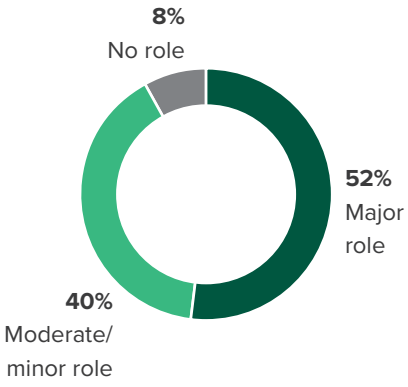
Over two-thirds of business leaders believe that AI will have a strong positive impact on their organizations over the next two years. When asked how important AI capabilities are for their current digital transformation efforts and growth plans, 52% said that AI has, or will have, a major role in their transformation efforts (see Figure 3).

Implementing AI is not just a simple turning of a switch though, and many organizations face several barriers that prevent them from fully taking advantage of what AI can offer. The two most common challenges were high costs/lack of budget and poor data quality. The creation of any sort of AI functionality has two necessary components: 1) large pool of quality data to build and test AI models with and 2) skilled data professionals who can build and test the data models. Each of these prerequisites for AI requires time and resources, but many organizations do not have these resources in high availability. For data specifically, it is not just about having high volumes of data to work with; it's more about the quality of the data being used. The adage "garbage in, garbage out" aptly captures the importance of having high-quality data to power AI; in fact, 38% of business decision-makers see data quality as a top barrier to their more fully adopting AI capabilities.

To address some of these challenges, 80% of business leaders have increased their investments to deploy analytics in the cloud over the past two years. Cloud-based analytics improve business agility by allowing IT teams to concentrate more on building business apps (including analytics) versus maintaining infrastructure, which in turn can lead to better solutions for business users. As well, cloud-native business apps (including analytics) do not have legacy baggage; they are built natively on modern technology platforms infused with AI capabilities, which help business users do two things: 1) expand the breadth of data usage by making data easier to search, analyze, and report on and 2) increase the depth of insights users can achieve by automatically embedding AI and ML directly into analytics applications and workflows.

Figure 3

Most companies expect AI to play a major role in digital transformation efforts



Base: 302 US based decision-makers for business application planning, investment, and ongoing improvement decisions
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ANALYTICS AND AI PLATFORMS BOTH DRIVE INTERNAL AND EXTERNAL BUSINESS BENEFITS

Organizations are investing in analytics and AI with the purpose of driving business value. When asked which potential outcomes of implementing AI were most valuable to business decision-makers, decision-makers indicated the following key benefit categories (see Figure 4):

- **Improved employee productivity and efficiency.** Employees can greatly benefit from an effective analytics platform that enables AI. With an easy-to-use interface, templates for key use cases, and built-in guardrails to prevent making obvious mistakes, such tools can have an immediate impact in enabling business users to quickly integrate analytics into their daily work without requiring a huge time commitment.[2] AI helps business users discover the drivers of important patterns in their data (like sales, Net Promoter Score, or customer attrition) and proactively alerts them to data anomalies on which they should act.[3] This helps users discover valuable business insights faster than with traditional analytics approaches.

- **Improved customer experience.** As business users are able to use analytics tools and AI to better understand customer needs and behaviors, they will be much better equipped to build meaningful experiences for customer, including potentially new and innovative ones. This deeper customer understanding will enable greater personalization efforts that will in turn yield better customer experiences if executed properly.
- **Improved top and bottom line.** Top-line improvements that can stem from improving analytics capabilities include increased revenue from current customers (via cross-sell/upsell); new revenue streams by better attracting new customers (through better targeted, personalized campaigns); and new revenue streams via new innovative products. Business leaders will see impact on their bottom line as well as analytics and AI improvements drive efficiency/productivity gains, less reliance on IT pros, better utilization of IT resources by moving to cloud, and streamlined operations.

Figure 4

The value of AI extends to customers and employees, as well as to organizations as a whole

"Which outcomes of implementing AI does your organization place the most value on?"

Base: 302 US based decision-makers for business application planning, investment, and ongoing improvement decisions
Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, December 2020

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Key Recommendations

Analytics that equip business leaders and employees with key insights are vital to improving customer experience and driving business success. Business leaders, not just IT professionals, see the value the of analytics modernization, which includes better employee self-service capabilities, AI, and the cloud. To put their organizations on the right path to achieve these goals, business leaders should:

Elevate analytics to business relevance by empowering non-IT business users to find and analyze the data they need. Analytics and insights will empower better decisions and action when a company brings its unique data-driven perspective into the light of day. This requires organizations to work across business units and systems boundaries to blend data safely and securely at scale, then put the dashboards and analytics into the hands of the people who need the insights most (with the help of AI). This "coming together" is easier when a shared target is set: improving customer and employee experiences and driving a successful business growth and innovation.

Organize with business, analytics, and software skills on the same team to apply AI to business outcomes. The analytics, and especially the artificial intelligence, will have the most buy-in and impact if they directly solve a business problem. Look for ways to embed AI and analytics directly into business workflows so that users encounter insights as part of their daily workflows rather than having to go out of their way to find them. This will drive greater use of insights and increase productivity. A good starting point is to create an "insights team" composed of experts from business, marketing, or products working with data engineers, data scientists, and software developers to determine where analytics capabilities will be most useful. Colocating business users and data/analytics pros on the same team removes the need for business users to fill out forms or wait in queues — their data/analytics pro colleagues are right next to them.

Enable embedded analytics functions to integrate insights into everyday work. Embedded analytics fuel efficiency by putting insights directly into everyday business workflows and eliminating the need for users to go out of their way to find insights they need relevant to their task at hand. This enables users to have insights right at their fingertips no matter what application they are in or what business process they are running.

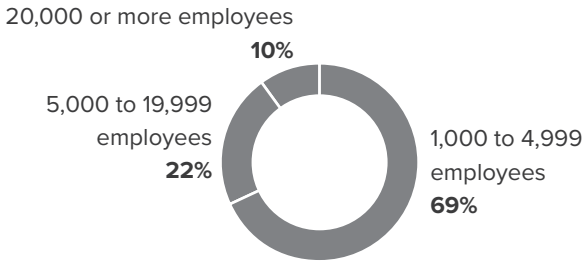
Establish skills and partnerships for cloud resources that can accelerate innovation and free up resources. The cloud is a powerful asset to achieve the goals of modernizing customer-facing applications and elevating analytics into action and innovation. The time is now to identify where your data will live and how you will make it actionable. Using the cloud frees up IT resources to focus on building new solutions for business users (versus maintaining infrastructure). As well, most modern cloud platforms already leverage the power of AI, which will enable users to achieve insights faster and with greater breadth and depth than they had before.

Appendix A: Methodology

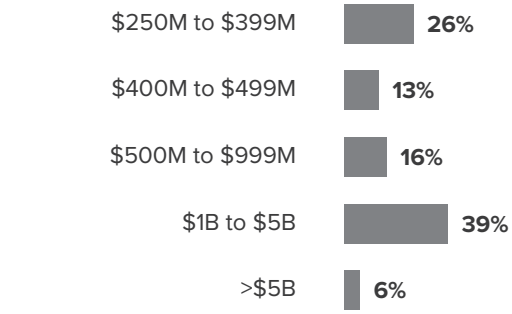
In this study, Forrester fielded a survey of 302 US-based business decision-makers from a mix of business roles including marketing, sales, operations, analytics, and customer service. Respondents were primarily at the director level or higher and were decision-makers or influencers for planning, investment, and ongoing improvement decisions for their customer-facing applications and analytics. Respondents were offered a small incentive as a thank you for time spent on the survey. The survey was completed in December 2020.

Appendix B: Demographics

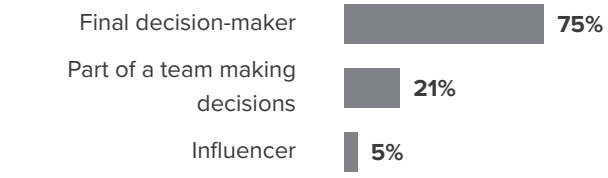
COMPANY SIZE



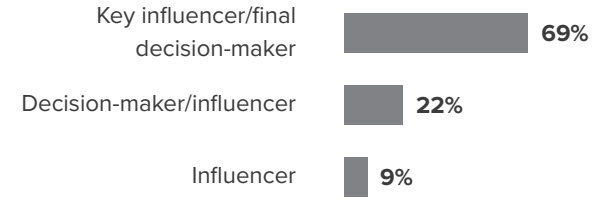
COMPANY REVENUE



CUSTOMER-FACING APPLICATION STRATEGY AND INNOVATION

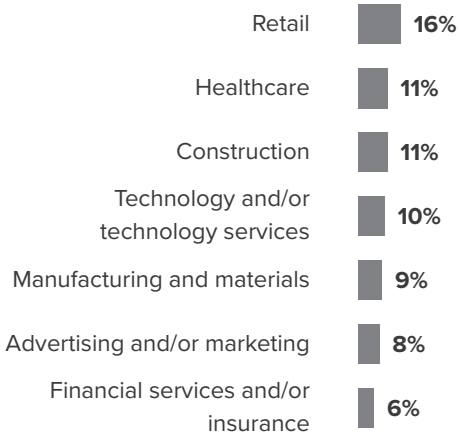


ORGANIZATION'S USE OF DATA AND ANALYTICS TO SUPPORT BUSINESS PROCESSES AND DECISIONS

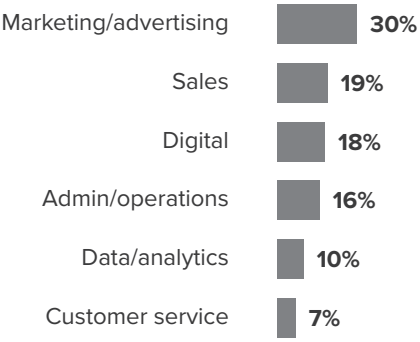


100% of respondents are based in the United States.

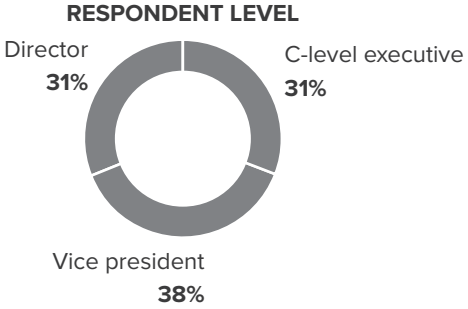
INDUSTRY



DEPARTMENT



RESPONDENT LEVEL



Base: 302 US-based decision-makers for business application planning, investment, and ongoing improvement decisions
Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, December 2020

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Appendix C: Endnotes

[1] Source: "Q&A: Scale AI With Automated Machine Learning," Forrester Research, Inc., March 18, 2020.

[2] Ibid.

[3] Net Promoter and NPS are registered service marks, and Net Promoter Score is a service mark, of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld.

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