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Predictions 2017: Artificial Intelligence Will Drive The Insights Revolution

Advanced Insights Will Spark Digital Transformation In The Year Ahead

by James McCormick
November 2, 2016

Why Read This Brief

For too long, customer insights (CI) professionals have been in the shadows of functional silos, unable to scale their expertise beyond specific marketing and commerce use cases. But insights-driven firms that truly gain strategic competitive advantage from insights are showing us how CI practices can rise up to become strategically relevant across all parts of the business. This report makes predictions on how artificial intelligence (AI) and big data technology, customer context, and the strategic prioritization of insights will make 2017 the year of the insights revolution.

Key Takeaways

CI Will Be Liberated By Artificial Intelligence
2017 will be the year when businesses gain direct access to powerful customer insight via new cognitive interfaces and other AI-related tech.

Customer Context Will Become A CI Norm
Deriving insights from contextual customer data from mobile and other internet-of-things (IoT) devices will become mainstream in 2017.

CI Will Drive Change Across The Enterprise
The appointment of data and insights executives and the investment in enterprise customer data projects will place CI pros at the center of business transformation.

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by James McCormick
with Carlton A. Doty, Srividya Sridharan, Rowan Curran, Boris Evelson, Brian Hopkins, Cinny Little, Gene Leganza, Brandon Purcell, and Emily Miller
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2017: The True Insights Revolution Begins

For the first time, the majority of firms assign executive responsibilities and large corporate budgets to make data and insights a coordinated and strategic enterprise initiative. To what end, you ask? To liberate customer insights from the typical silos of data scientists and other analytics specialists. Artificial intelligence (AKA cognitive computing) technologies will be rapidly assimilated into analytics practices, giving business users unprecedented access to powerful insights that drive action. The big data floodgates will open in 2017, driven by the business' voracious appetite for deeper contextual insights that drive customer engagement via mobile and the IoT. These trends and events represent the beginning of an insights revolution that will kick-start a strategic move among many firms to become insights-driven businesses.[1] Bad news for many firms claiming to be insights-driven — the term is overused. While many are fooling themselves, those that are truly insights-driven businesses will steal $1.2 trillion per annum from their less-informed peers by 2020 (see Figure 1).[2]

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FIGURE 1 Insights-Driven Businesses Will Steal $1.2 Trillion Annually By 2020

Revenue forecast of insights-driven businesses
($ billions)
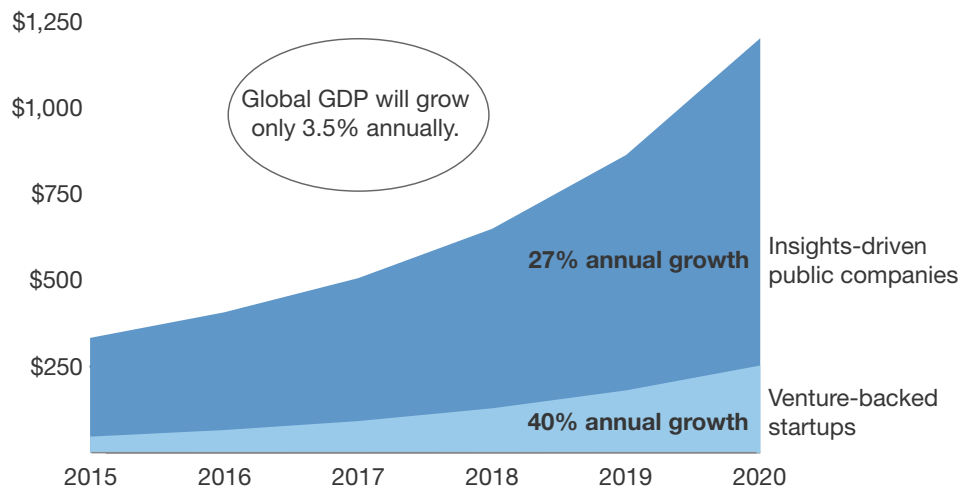
Note: The data point for public companies in 2015 is actual revenue; all other data points shown are estimates or projected figures.
Source: Economic Intelligence Unit, Morningstar, and PitchBook Data

Artificial Intelligence Will Liberate Insights From Big Data

The democratization of insights is driven by the desire of businesses to be more informed in their decision-making and the response by insights technology vendors in making their solutions more business-friendly. Half (51%) of data and analytics decision-makers in 2015 had unencumbered access to insights. This increased to 56% in 2016.[3] Forrester expects this trend to accelerate in 2017 to around two-thirds. The stimulus for this accelerated democratization will be embedding AI, big data, and IoT into their analytics processes. In 2017, these technologies will increase businesses' access to data, broaden the types of data that can be analyzed, and raise the level of sophistication of the resulting insight. In the year ahead, we expect that:

> **Investment in AI will triple.**[4] AI will provide business users with access to powerful insights before they are available to them. How? Through the use of cognitive interfaces in complex systems, advanced analytics, and machine learning technology. Vendors such as Adobe, Google, IBM, Persado, Salesforce, and Squirro are already embedding components of cognitive computing capabilities into their solutions. This isn't just technology for technology's sake. AI will drive faster business decisions in marketing, eCommerce, product management, and other areas of the business by helping close the gap from insights to action.

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› **Big data will become the big friend of CI pros.** Most CIO organizations are currently chasing big data systems that hold unstructured data types. To date, these efforts have had limited impact for CI pros, since these data repositories are typically isolated from traditional customer databases. However, customer and digital analytics vendors such as Mixpanel, SAS, Teradata, and Webtrends are starting to integrate their traditional analytics platforms with more contemporary "big data" systems, and we'll see more businesses take advantage in 2017. This bodes well for organizations that are trying to build systems of insight that move toward a single architecture for big data convergence with agile and actionable insights.[5] In 2017, expect to see a proliferation of CI use cases that leverage big data to generate powerful insights that were never before easily attainable by business users.

› **Digital analytics vendors will aggressively build out IoT capabilities.** Two-thirds of telecommunications decision-makers surveyed by Forrester in 2016 are considering or prioritizing developing IoT or machine-to-machine (M2M) initiatives in the year ahead.[6] Digital analytics vendors have been slow to react to this trend, with only 19% currently offering some form of IoT analytics in support. Cloudera, Google, MapR Technologies, and SAP lead the way.[7] But the pressure placed on their customers and competitors will push others to play catch-up. Expect the number of digital analytics vendors offering IoT insights capabilities to double in 2017.

Digital Proliferation Creates New Contextual Customer Insight

Since the early '90s, online touchpoints have expanded way beyond owned web properties and email to include mobile apps, connected devices, and non-owned properties like social media. These various digital touchpoints are fueling firms' efforts to digitally transform their business and "digitize" customer engagements in various ways. For example, traditional touchpoints such as point of sale, customer support, and cash machines are now instrumented for digital customer data collection. Simultaneously, firms will increasingly experiment with new IoT touchpoints including wearables, connected devices (e.g., cars and houses), and remote sensors (e.g., in-store device triangulation and cameras). All of this creates new forms of contextual data that can yield a detailed understanding of what it takes to win in those customer moments. Opportunities abound in this space, but where should your focus be? When it comes to contextual insights in 2017, Forrester expects to see CI pros focus most on:

› **Mobile customer measurement.** In 2016, nearly 80% of telecommunications decision-makers said that creating a comprehensive multichannel strategy to serve their customers was important in the year ahead.[8] Almost as many respondents (77%) said that improving mobile analytics was important.[9] Yet only 46% and 44% collect data on mobile web and mobile app users, respectively.[10] 2017 will be the year when CI pros close the gap between their desire to understand the mobile customer and the reality of their current lackluster mobile measurement practices.

› **Customer location.** Many devices, such as mobile phones, cars, and wearables, constantly monitor their user's location, flooding the market with inbound, spatially related customer data. So far, much of that data goes unused, as immature data and analytics practices cause most

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firms to squander these insights opportunities. This is about to change. Less than half of data and analytics decision-makers have adopted locations analytics; however, nearly a quarter responded that they planned to implement this technology within the next 12 months. Based on this survey finding and evidence from our own client inquiries, we expect that over two-thirds of businesses will adopt location analytics by the end of 2017.[11] As CI practices mature their locational analytics capabilities, the resulting insights will enable firms to optimize experiences and business outcomes as customers engage in the physical world with products, services, and support — and, of course, within branches and stores.

CI Leaps From Specialty Function To An Enterprisewide Priority

The vast majority of firms believe that having an organizational model that supports analytics is critical to breaking down the silos of customer knowledge that exist throughout the enterprise.[12] The bad news is that despite years of talk, progress toward organizational structures that can coordinate and drive insights throughout the entire enterprise has been limited to a few truly insights-driven businesses. The good news? Enterprises are starting to show signs of elevating the priority of, and investment in, initiatives to get rid of existing silos. In 2017, we expect these efforts to become major initiatives:

› **Chief data officers (CDOs) will come of age.** 2017 will be the year that organizations with CDOs become the majority. Forrester's data and analytics surveys over the last two years have seen steady growth in CDO appointments — the global average was 45% in 2015 and 47% in 2016.[13] However, assigning executive data management to a CDO is a short-term response to support the mass movement toward digital transformation. Ultimately, to become insights-driven, firms must eventually assign data responsibilities to CIOs, CMOs, and even CEOs. Only then can they drive swift business action based on data-driven insights.

› **Customer data management projects will increase by 75%.** The need to support cross-channel tracking and attribution, customer journey analytics, and better segmentation has overwhelmed many firms. What's new is that in 2016 they did something about it, when for the first time a large number (39%) had a big data integration initiative to make this happen. While less than half of data and analytics decision-makers currently report a big data integration, nearly one-third indicate plans to adopt big data technologies and solutions in the next 12 months.[14] Technology will not be a blocker to this continued growth, as vendors have foreseen the need to support these large customer data initiatives; those such as BlueConic, Celebrus, Cloudera, iJento, NGData, and NICE/Causata have already built supporting customer profile management platforms.

› **Leading CI practices will be the poster child for business transformation.** As firms digitally transform and seek competitive advantage, they are looking for ways to embed insights into their organizational structures and processes. Organizations such as Alaska Airlines, the European football (soccer) club FC Midtjylland, and UK online retailer Shop Direct show that real and substantial ongoing executive support for insights brings success. Others, such as group-based discount firm Groupon, online style retailer Stitch Fix, and Earnest (a financial technology startup

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specializing in student loans) deeply integrate analytics and insights capabilities across the enterprise in critical business and operations teams. Forrester expects to see a marked increase in the adoption rate of these leadership strategies and enterprisewide insights-driven practices as firms digitally transform their business in 2017.

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Supplemental Material

Survey Methodology

Forrester's Global Business Technographics® Data And Analytics Survey, 2016, is an online survey fielded in March 2016 of 3,343 business and technology decision-makers located in Australia, Brazil, Canada, China, France, Germany, India, New Zealand, the UK, and the US from companies with 100 or more employees.

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Forrester's Global Business Technographics Mobility Survey, 2016, was fielded from March to May 2016. This online survey included 3,631 respondents in Australia, Brazil, Canada, China, France, Germany, India, New Zealand, the UK, and the US from companies with two or more employees.

Forrester's Business Technographics ensures that the final survey population contains only those with significant involvement in the planning, funding, and purchasing of business and technology products and services. Research Now fielded this survey on behalf of Forrester. Survey respondent incentives include points redeemable for gift certificates.

Forrester's Q2 2016 Global State Of Artificial Intelligence Online Survey was fielded in May, June, and July 2016. This online survey included 612 respondents globally. For quality assurance, we screened respondents to ensure that they met certain standards in terms of job responsibilities and the size of their organization. Artificial intelligence was defined to respondents as a self-learning system that is able to interact with humans naturally, understand the environment, solve problems, and perform tasks that normally require human intelligence, qualities, and abilities without the need to code instructions and rules.

Forrester's Q3 2016 Global Digital Intelligence Vendor Landscape Online Survey was fielded in July and August 2016. This online survey included 114 respondents globally. Digital intelligence was defined to respondents as the practice that seeks to optimize customer digital interactions at every opportunity using customer data and analytics. This data is not guaranteed to be representative of the population, and, unless otherwise noted, statistical data is intended to be used for descriptive and inferential purposes. While nonrandom, the survey is still a valuable tool for understanding where vendors are today and where the industry is headed.

Endnotes

[1] An insights-driven business harnesses and applies data and analytics at every opportunity to differentiate its products and customer experiences. See the "The Insights-Driven Business" Forrester report.

[2] An insights-driven business systematically harnesses data and applies analytically derived insight to create differentiated experiences and competitive advantage. We forecast that 40 insights-driven public companies and a horde of insights-driven startups are on track to grow from $333 billion in revenue in 2015 to $1.2 trillion in 2020. See the "The Insights-Driven Business" Forrester report.

[3] Forrester's Global Business Technographics Data And Analytics Survey, 2016, showed that 56% of data and analytics decision-makers agreed that they were able to easily obtain data and analyze it without the help of technologist. In 2015, this figure was 51%. Source: Forrester's Global Business Technographics Data And Analytics Survey, 2015 and 2016.

[4] According to survey respondents, there will be a greater than 300% increase in investment in cognitive computing in 2017 compared with 2016. Source: Forrester's Q2 2016 Global State Of Artificial Intelligence Online Survey.

[5] Forrester defines systems of insight as the business discipline and technologies needed to harness insights at scale and consistently turn data into action. The convergence of agile analytics applications and big data with these systems of insights is helping democratize data and insights. See the "It's Time To Upgrade Business Intelligence To Systems Of Insight" Forrester report.

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6   When we asked telecommunications decision-makers how important implementing a strategy for IoT/M2M technologies would be over the next 12 months, 43% considered it a high priority and 24% a moderate priority. Source: Forrester's Global Business Technographics Mobility Survey, 2016.

7   Nineteen percent of vendors are offering IoT technologies. Source: Forrester's Q3 2016 Global Digital Intelligence Vendor Landscape Online Survey.

8   Source: Forrester's Global Business Technographics Mobility Survey, 2016.

9   Source: Forrester's Global Business Technographics Mobility Survey, 2016.

10 Forrester asked respondents, "Which of the following are true of your firm's mobile analytics program?" Forty-six percent of respondents answered "We collect data on mobile web users" and 44% answered "We collect data on mobile app users." Source: Forrester's Global Business Technographics Mobility Survey, 2016.

11 Forrester asked respondents, "What are your firm's plans to use the following analytics technologies?" For location analytics technologies, 49% answered "Currently implemented/expanding implementation" and 23% responded "Planning to implement within 12 months." Source: Forrester's Global Business Technographics Data And Analytics Survey, 2016.

12 Analytics teams that operate in separate channel silos fail to maximize the value of customer insights to win, serve, and retain customers. To enable their firms to compete, insights analytics teams must coordinate and move away from channel and functional insights to shared customer-centric insights. See the "Organize For Digital Intelligence With These Three Models" Forrester report.

13 According to our 2016 survey, 47% of respondents have implemented or are implementing a CDO — up from 45% in 2015. Source: Forrester's Global Business Technographics Data And Analytics Survey, 2015 and 2016.

14 When asked about their firm's current usage/plans to adopt big data technologies and solutions, 30% of respondents said they were planning to implement in the next 12 months, 24% were implementing or had implemented, and 15% were expanding or upgrading their implementations. Source: Forrester's Global Business Technographics Data And Analytics Survey, 2016.

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