The 2020 Vision: The Next Decade for Enterprise Analytics

The Imperative for Every Organization Is to Act Now

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By 2021, two-thirds of analytics processes will no longer simply discover what happened and why; instead, they will also prescribe what should be done.

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The use of analytics has exploded across business, and the value it already has delivered has heightened executives’ expectations. Now data can be processed in real time to meet a constantly widening range of analytic needs. How your organization utilizes them in the next decade will be essential to your success.

These developments come at an opportune time. Organizations are being overwhelmed by the rivers of data generated by applications and systems on-premises or flowing in via the cloud. At the same time, the cost of computational power has declined dramatically, making it practical to apply analytics to and generate information on just about anything.

But no advance comes without challenges. While the widespread availability of analytics has created seemingly valuable insights, executives and managers are finding that those insights are not easily linked to steps that will improve business outcomes or optimize actions. Furthermore, analytics are not always easy for line of business users to understand. So the challenge is to make analytics impactful in every role and task across the organization.

**Takeaway:** Ensure that analytics are accurate, well understood and usable across the organization.
Achieve Full Potential from Analytics

Analytics can be everywhere there is data; they can be generating insights that improve the intelligence of every aspect of a business. But we find that they too seldom do, because organizations often deploy analytics in ways that fall short of providing intelligence, let alone insight. In these instances analytics are not used to their full potential because they require of business users more time and skill than those users can invest. To gain the full benefit of the insights analytics can deliver, organizations need to embrace a new approach, one that will make the analytics not only useful but meaningful to each individual whose work can benefit from them.

As organizations become accustomed to having analytics everywhere, one issue they must address is making them personalized and relevant to particular needs. A second is ensuring that analytics are available in ways that enable decision-makers to use them collaboratively to guide what actions to take. And yet another is ensuring the availability of a reliable platform that can unify analytics and provide a common source of trusted information.

Takeaway: Ensure that analytics are delivered in forms relevant to the individual and that can be used collaboratively.
The Analytics Technology of the Future Must be Simple

In the decades that analytics have been available for business, we have witnessed an onslaught of dashboards, analytic visualizations, charts and reports. But few are optimally effective in guiding individuals to make the best decisions. What’s needed isn’t more incomprehensible or difficult-to-apply visualizations but personalized information that is relevant and actionable.

What’s needed is a dramatically simpler approach to accessing information and making it useful to support taking action. Analytics should be intelligent, of course, but also presented in a way that’s relevant to the individual and easy to comprehend. Dashboards and fancy visualizations alone don’t help an organization be more effective.

**Takeaway:** Assess your analytics to determine if they are relevant and usable, but most importantly if they are immediate and insightful.
Trend #1: Embrace the Power of Mobile Computing

Mobile analytics should be part of every organization’s strategy. Access on mobile devices provides immediate information. In our research, more than half of organizations (57%) indicated they view it as important to be able to access analytics from mobile devices.

But access on mobile devices alone is insufficient. Business users expect experiences similar to those delivered by consumer applications. They expect to be able to get insights that are relevant to and personalized for them and then use those mobile platforms to collaborate on analytics-informed decision-making.

Technology enables this: The voice and proximity capabilities of mobile devices, for example, are able to provide context to information that then can lead to more refined insights. Mobile computing capabilities such as IoT and eXtended Reality (XR), which provide augmented and virtual environments to address business needs, enable more intelligent interactions with information.

Ventana Research believes that by 2021, one-third of organizations will insist that the applications they use have functional voice and chat interfaces. Already now, and certainly into the next decade, analytics access increasingly will be via mobile devices, likely using conversational computing.

**Takeaway:** Save valuable time by using the power of mobile devices to enable conversational experiences with information and analytics.
Trend #2: Embed Analytics Everywhere

Analytics have power when they are ready at hand and provide immediate access to information, addressing issues that are important to the individual to whom they’re presented. Today, technology makes this far more possible than ever before: Embedded in business processes and applications, analytics processes are easier to perform and more readily accessible to line-of-business personnel. Since the context is predefined, application and data are matched so the analytics that generate information are streamlined and ready to use without the need to switch context or click on anything.

Ventana Research asserts that by 2021, more than half of all analytics will be generated from within prebuilt applications rather than through the use of separate tools. Going forward into the next decade, embedded analytics will be effective because it can more easily provide information and make it possible to initiate action within the application.

**Takeaway:** Embed analytics everywhere individuals work to deliver a seamless work experience and improve effectiveness.
Trend #3: Ensure Intelligence in Analytics

We have heard much of late about “intelligence” in analytics; recent discussions of AI have made it seem like machines are making business decisions today. Despite the hype, though, it is clear that analytics and machine learning increasingly will generate intelligent insights that are personalized and presented in a manner that business professionals understand and can act on. As a starting point today, anyone should be able to get dynamically generated insights that are personalized to his or her role and responsibility.

Going forward, analytics and machine learning will lead to more automated actions. We have already begun to see routine decisions automated using robotic process automation, freeing up professionals to focus on more important decisions. Over time an increasing number of processes will be instrumented using sensors and other IoT devices, as steps toward automating real-time decision-making in areas such as manufacturing and logistics activities.

Ventana Research asserts by 2022, one-third of those organizations that were early AI adopters will conclude that integrating data science and knowledge management is essential. Look to embrace analytics that support a range of computational methods and programmatic approaches that can use semantic frameworks. Ensure that the information generated is insightful; this will enable individuals to have a clear sense of the positive impacts of actions and will make it possible for automated actions to be taken where appropriate.

Takeaway: Look for analytics that have AI-enabled intelligence, can generate relevant information and are able to yield actionable insights.
Best Practices to Find Value in Analytics

Understanding the opportunities analytics offers can be challenging. But the bottom line should be clear: to enable every worker to reach his or her full potential. Consider these **five best practices** when defining your path for 2020 and beyond in analytics:

1. Examine how the benefits of next-generation analytics can increase efficiency and outcomes in everyday use cases.
2. Seek out analytics technology that uses cutting-edge technological advancements and that adapts to individual personalized needs.
3. Evaluate if existing or planned investments from your existing software providers could hold you back.
4. In choosing analytics, opt for those that will improve the experience of using them anywhere in the organization.
5. Embrace modern-day analytics that are designed to be accessed in a conversational manner and personalized to the individual.

**Takeaway:** Embrace best practices that will ensure the best possible value from analytics investments – for your entire organization, not just the tech-savvy or analytically astute.
Navigate the Journey to Effective Insights

Our research finds that organizations continue to invest in analytics systems that are designed for analysts and those who are mathematically or data-science astute. For example, many organizations deploy dashboards designed to display scatter and bubble charts with no explanation or descriptive commentary, assuming that everyone understands how to interpret them and take action. This limits their utility and can result in a bad experience with analytics.

We advise instead assessing the analytics experience for the majority of the workforce to establish a baseline for what needs improvement. Examine what is possible today with analytics that are personalized, relevant and informative. Seek out styles of analytics that deliver insights that will lead to action and collaboration across the organization. Evaluate the technologies’ usability and manageability to address this new generation of needs.

**Takeaway:** Identify and then seek out effective analytics that make it possible to focus on insights by presenting information personalized for the individual using them.
Take Decisive Steps for Analytics in 2020 and Beyond

Seek out the smartest and fastest analytics you can find for your next decade of success. Prioritize personalization and the direct and effective presentation of information. Now is the time to move beyond the charts and dashboards of the past. Those organizations that have done this have gained a competitive advantage and increased worker confidence and effectiveness.

We advise taking these steps forward to realize the most value from analytics:

1. Commit to a full examination of the potential value intelligent and personalized analytics can deliver.
2. Identify the platform that best enables the assembly and delivery of analytics.
3. Examine methods that can dramatically simplify how individuals access information that is insightful and actionable.

By understanding the digital innovations that are now available for your analytics journey you will be able to build a path to success and satisfaction for your entire organization.

The Ventana Research Data and Analytics in the Cloud Benchmark Research can be found at www.ventanaresearch.com.

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