Ventana Research
Analytics Research in 2017

Setting the annual expertise and topic agenda

David Menninger
SVP Research
Getting insights on technology
See how our education can help your business

START
LEARN MORE

Education  Assessment  Advisory
## Services for Users and Providers

### Technology Users
- Advice and Guidance
- Benchmark Assessment
- Educational Workshops
- Research Reports
- Speaking Services
- Technology Assessments
- Vendor Selection Guidance

### Technology Suppliers
- Advice and Guidance
- Benchmark Services
- Content Services
- Education on/to Market
- Speaking Services
- Strategic Consulting
- Technology Insight Services
Expertise is Cross Functional, Not Pigeon-Holed

Background:
Ventana Research analysts work as a team across lines of business, processes, functions and technologies to provide perspectives that analyst firms with narrow, technology defined coverage areas are not able to match.

Examples:
• Analytics with Finance, Marketing and Sales in Data Science.
• Analytics with Customer Experience, Sales and Marketing in Mobile.
• Analytics with Customer Experience, Marketing and Sales in Collaboration.
David is responsible for the overall research direction of data, information and analytics technologies at Ventana Research covering major areas including Analytics, Big Data, Business Intelligence and Information Management along with the additional specific research categories including Information Applications, IT Performance Management, Location Intelligence, Operational Intelligence and IoT, and Data Science. David is also responsible for examining the role of cloud computing, collaboration and mobile technologies as they affect these areas. David brings to Ventana Research over twenty-five years of experience, through which he has marketed and brought to market some of the leading edge technologies for helping organizations analyze data to support a range of action-taking and decision-making processes. Prior to joining Ventana Research, David was the Head of Business Development & Strategy at Pivotal a division of EMC, VP of Marketing and Product Management at Vertica Systems, Oracle, Applix, InforSense and IRI Software. David earned his MS in Business from Bentley University and a BS in Economics from University of Pennsylvania.
Analytics Overview

Expertise Overview

- Ventana Research offers guidance on analytics to help organizations apply data science and technology to help derive its optimal value. Going beyond earlier methods of business intelligence, dashboards and reports is essential to ensure that everyone is able to not only access analytics, but act on them to optimize their business.

Focus Areas

- Business Intelligence
- Cloud Computing
- Collaboration
- Data Science
- Internet of Things
- Mobile
Research for Analytics

Business Intelligence
• Focus on end users makes analytics accessible to a wider audience.
• Visual discovery and natural language evolve as search and presentation methods.
• Support users in their functional roles with relevant and accessible analytics.

Cloud Computing
• Organizations expand cloud usage and acceptance for a wider variety of workloads.
• Cloud enabled analytics and integration become a new information highway.
• Embrace cloud computing to shorten analytic time-to-value.

Collaboration
• Social media has condition the market to expect and embrace collaboration.
• Mobile technology enables constant communication and collaboration.
• Deploy collaboration technologies to put analytics into action throughout the organization.
Research for Analytics

Data Science
- Data science continue to rise in importance with big data, but remain a limited resource.
- Machine learning optimizes actions, decisions and processes with fewer resources.
- Exploit machine learning and predictive analytics on big data for business optimization.

Internet of Things
- An increasing number of devices are instrumented and connected generating big data.
- Big data and streaming technologies with data science enable continuous analytics.
- Utilize machine data and IoT data to enable operational intelligence.

Mobile
- Simplification of mobile technologies provide access point to analytics and collaboration.
- Cloud deployments coupled with HTML5 provide centralized and multiple delivery methods.
- Use mobile technology for easy, continuous access to, and distribution of analytics.
Business Intelligence Research

Overview
• Business intelligence produces insights from data to guide decision-making with integration, discovery, planning, forecasting, collaboration and performance mgmt..

Agenda
• Focus on end users makes analytics accessible to a wider audience.
• Visual discovery and natural language evolve as search and presentation methods.
• Support users in their functional roles with relevant and accessible analytics.

Insights - Examples
• Key Insight: Analysts spend the bulk of their time on manual tasks such as preparing data for analysis (47%) and checking quality and consistency (45%) in the data rather than analysis.
• Best Practices: To maximize your ROI in visual discovery software, organizations must choose tools that fit particular roles and analytic skills of the individual business users and analysts.

Market Research
• Dynamic Insights: Natural Language Generation (2017)
• Value Index: Mobile Analytics and BI & Business Analytics (2017)
Cloud Computing Research

Overview

- Cloud computing provides an alternative to installing and maintaining systems on an organization’s premises. Analytics systems in the cloud address the need for access to data sources beyond the firewall to incorporate into its business processes and decision-making.

Agenda

- Organizations expand cloud usage and acceptance for a wider variety of workloads.
- Cloud enabled analytics and integration become a new information highway.
- Embrace cloud computing to shorten analytic time-to-value.

Insights - Examples

- Key Insight: Virtually all organizations currently use or intend to use cloud-based analytics. Nearly half (48%) already use it and another 19 percent plan to begin using it within 12 months.
- Best Practices: Consider how cloud-based analytics empower business users and save resources.

Market Research

- Benchmark: Data and Analytics in the Cloud & Business Analytics (2017)
- Value Index: Business Analytics (2017)
Collaboration Research

Overview
• Collaboration provides the methods for people to interact digitally in any communication approach on any device for whatever purpose.

Agenda
• Social media has condition the market to expect and embrace collaboration.
• Mobile technology enables constant communication and collaboration.
• Deploy collaboration technologies to put analytics into action throughout the organization.

Insights - Examples
• Key Insight: More than half of organizations said their company has open social and networking policy.
• Best Practices: When evaluating collaboration tools, be sure to include discussion forum, broadcast, app sharing, wall posting, and videoconferencing in the evaluation criteria

Market Research
• Benchmark: Business Analytics (2017)
• Dynamic Insights: Analytic Collaboration (2017)
• Value Index: Business Analytics (2017)
Data Science Research

Overview
• Data Science applies advanced analytical techniques, including statistics, predictive analytics and machine learning to extract insights from large volumes of data.

Agenda
• Data science continue to rise in importance with big data, but remain a limited resource.
• Machine learning optimizes actions, decisions and processes with fewer resources.
• Exploit machine learning and predictive analytics on big data for business optimization.

Insights - Examples
• Key Insight: 52% of organizations lack resources to implement changes to predictive analytics.
• Best Practices: Include training in plans for adopting predictive analytics tools.

Market Research
• Benchmark: Next Generation Predictive Analytics & Data preparation (2017)
• Dynamic Insights: Machine Learning (2017)
• Value Index: Business Analytics (2017)
Internet of Things Research

Overview

• The Internet of Things (IoT) extends digital connectivity to devices and sensors on assets and resources anywhere across homes and businesses enabling devices to transmit data and apply analytics for operational improvement.

Agenda

• An increasing number of devices are instrumented and connected generating big data.
• Big data and streaming technologies with data science enable continuous analytics.
• Utilize machine data and IoT data to enable operational intelligence.

Insights - Examples

• Key Insight: Most organizations (43%) uses BI tools rather than specialized IoT tools.
• Best Practices: Use of using advanced tools has higher satisfaction than use of traditional tools.

Market Research

• Benchmark: IoT and Operational Intelligence, Next Generation Predictive Analytics
Mobile Technology Research

Overview

• Mobile analytics and BI provides the ability to access tools through mobile devices at any location and optimize information availability at any time and place.

Agenda

• Simplification of mobile technologies provide access point to analytics and collaboration.
• Cloud deployments coupled with HTML5 provide centralized and multiple delivery methods.
• Use mobile technology for easy, continuous access to, and distribution of analytics.

Insights - Examples

• Key Insight: Efforts to improve BI are being driven by the need to provide information for the LOB, which 2/3 of organizations said is their most important reason.
• Best Practices: Identify all mobile data you need before searching for a mobile BI tool.

Market Research

• Benchmark: Data and Analytics in the Cloud
• Value Index: Mobile Analytics and BI
Analytics for LOB

Analytics for Customer Experience
• Extreme analytics allows full use of all customer data, including interactions.
• Analytics allows production of detailed customer and employee profiles, and journey maps.
• Assess how the outputs from analytics can drive information driven customer engagement.

Analytics for Finance
• Utilizing large volumes of transactions data well adds competitive capabilities.
• Predictive analytics, PRO, deeper visibility all enable differentiated strategy and operations.
• Companies must develop internal expertise to utilize big data analytical capabilities.

Analytics for Human Capital Management
• Insight to workers and workforce requires analytics to determine state of operations.
• Analytics used effectively across HCM will ensure effective process improvement.
• Apply analytics across unified set of workforce data and HCM guides improvements.
Analytics for LOB

Analytics for Marketing
- Use of data science on sales data enables ability to guide future actions and decisions.
- Applying machine learning and predictive analytics to generate most effective insights.
- Assess the effectiveness of analytics to help lead the decisions needed to optimize sales.

Analytics for Operations and Supply Chain
- Use of data science on supply chain enables ability to guide future actions and decisions.
- Applying machine learning and predictive analytics to generate most effective insights.
- Assess the effectiveness of analytics to help lead the decisions needed to optimize sales.

Analytics for Sales
- Use of data science on sales data enables ability to guide future actions and decisions.
- Applying machine learning and predictive analytics to generate most effective insights.
- Assess the effectiveness of analytics to help lead the decisions needed to optimize sales.
Technology Areas of Focus for Analytics

Analytic Discovery
• Event Discovery
• Information Discovery
• Visual Discovery
• Data discovery

Big Data Analytics
• Advanced analytics
• Discovery and exploratory
• Data science and machine learning
• Visualization and presentation

Business Analytics
• Mobile, Social, Location
• Business Intelligence
• Natural Language
• Governance and quality

IOT/Operational Intelligence
• Machine Data
• Analytic Applications
• Embedded Analytics
• Cloud Analytics
Market Research for Analytics

Benchmark Research
• Data Preparation (2017)
• Big Data for Business (2017)
• Business Analytics (2017)
• Internet of Things
• Data and Analytics in Cloud
• Next Generation Business Planning
• Next Generation Predictive Analytics

Value Index Research
• Data Preparation (2017)
• Analytics and BI (2017)
• Mobile Analytics and BI
• Business Planning

Dynamic Insights Research
• Machine Learning (2017)
• Analytic Collaboration (2017)
• Natural Language Generation (2017)
Questions?

**Twitter**
@ventanaresearch @dmenningerVR

**LinkedIn**
http://www.linkedin.com/company/ventana-research
https://www.linkedin.com/in/davidmenninger

**Analyst Perspectives**
http://blog.ventanaresearch.com
http://davidmenninger.ventanareserach.com
Ventana Research
Analytics Research in 2017

Setting the annual expertise and topic agenda