Business Challenges

- Companies have historically focused on checking individual data points using data edit checks, line listing reports, and—to a lesser extent—their data visualization approaches. These methods are qualitative on instinct and experience.
- The volume of studies, data, and the need for rapid interim analyses in support of adaptive programming makes the manual approaches to visualization and analysis unsustainable.
- A variety of data visualization tools including Excel, Spotfire, Tableau, and JReview are already in use, but without a clear strategy and supporting business case, these tools are selected and applied inconsistently.

Current State Assessment

- Engage with cross-functional teams to align to data visualization definition and how visualization will be used within the organization
- Analyze gaps and opportunities mapped to pain points in current data visualization strategy

Strategic Roadmap

- Develop direction-setting roadmap reflective of business priorities and work needed to achieve vision

Future State Vision and Strategy Development

- Reach consensus on future state vision, describing how the organization will operate in the future—culturally, operationally, and technically
- Develop an Agile approach to define and align to future state use cases that describes how technology will support the business

Tools and Technology Assessment

- Define the technology capabilities and architecture needed to support the use cases
- Investigate viable commercial technology solutions and approaches

Breakthrough Thinking Transforms Data Quality Strategy to Leverage Advanced Predictive Analytical Techniques

- Agile approach to use case development aids implementation of solutions in response to evolving business needs
- Tools and technology assessment supports the strategy for supporting business needs
- Teams operate with analytical curiosity, using tools to help derive insights from what the data is telling them
- Using advanced tools and improved business processes, decision making becomes proactive, timely, and data-driven

Leverage approaches that are risk-based and favor error prevention over remediation and tools ensure the right people are looking at the right data at the right time

Use Case and User Story Development Provides the Foundation for the Future State

- Integrate intelligent agents that analyze data, monitor processes, and highlight key information that may otherwise be overlooked
- On-demand visualizations clearly communicate insights to teams

Data Visualization and Analytics Strategy Roadmap

- Cross-cutting elements are identified and prioritized for rollout
- Business value solutions align to data quality elements
- Business value solutions align to value drivers

Conclusions

- Teams are focused on the operational, transactional activities, rather than data-driven decision making
- Need to evolve from incremental approach to radically transformative change
- There are many tools available; some tools are better than others for certain situations
- Organizations need to think strategically about how to use the data they have and to select tools for automating analyses and decision making
- Layering transformative vision with cross-cutting elements and business value solutions on a strategic roadmap enables projects areas to be prioritized and sequenced

Look beyond basic charts and graphs to more sophisticated analysis techniques with prescriptive decision making and machine learning