Rethinking Enterprise BI to Fit a Self-Service World

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Guest Speakers

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AGENDA

• Background: Self-service and the enterprise
• Seven Points and Recommendations
• Roundtable Discussions
• Polling Question
• Audience Q&A
Self-Service BI & Analytics: Trending Strong

• **Supporting agility**: BI/analytics “renaissance” in users’ hands
  – Data exploration and discovery

• **Context aware**: Business leaders know data insights are critical to success – and they want to be in control, not IT

• **Users are not uniform**: Not all are power users, but not all are novices
What About Enterprise Concerns?

• **Hard-won successes:** Enterprise BI and data warehousing establish standards

• **Curated data:** Confidence in data quality and consistency

• **IT Accountability:** Performance, governance, other concerns

• **No going back:** Self-service genie is out of the bottle
Rethinking Enterprise BI to Fit a Self-Service World

TDWI Checklist:

– Improving user productivity and solving enterprise governance and quality challenges

Next: Seven best practices and roundtable discussions
Step One: Calibrate the role of IT to fit varied self-service requirements
Self-Service: Nothing if Not Varied

- **Business-driven spectrum**: From tech-savvy power users who create queries and visualizations to data consumers
  - “Fast prototyping”: users explore data, collect requirements, and build prototypes for developers
  - Fits with agile methods

- **Enterprise BI**: Traditionally too confining
- **Can’t have a Wild West**: Otherwise no better than “spreadsheet hell”
IT: Learning to Be an Enabler

• **Enable**: Help guide users to where they want to go (rather than tell them)
  – Understand the business context; What are the users’ goals? Constraints?
  – Help them understand the data they are working with

• **Center of Excellence (CoE) or BI Competency Center (BICC)**
  – Business and IT leaders meet to set priorities, project goals, funding, governance, and more

• **Difficulties**: Tough to sustain business-side involvement
Step Two: Update governance and stewardship to embrace self-service BI and analytics
Protecting the Organization and Guiding Users to Success

• **Concern**: Inexperienced users do not know enough about the data; problems grow out of control
  – Sensitive data that is not secure
  – Little ability to track lineage

• **Users are impatient**: They need their data now; seeking out new sources
  – Big data lakes and cloud-based sources on the rise
“Unobtrusive” Governance; Stewardship to Improve Productivity

• **Governance**: Communicate policies clearly; learn about users’ new data sources
  – What needs to be monitored?
  – Work unobtrusively, in the background
  – Review role-based access

• **Stewardship**: Focus on quality, productivity, and satisfaction
  – Data quality, and also quality of content (e.g., shared visualizations, analytic models)
  – Evaluating what content to promote
Step Three: Revise the semantic layer to support self-service interactive reporting
BI Reporting Advances: Visual, Diverse

- **Beyond tabular reports**: Users make greater use of visualizations and blending of data sources (e.g., maps plus data)
- **Web-based**, for access from multiple platforms; easier to administer centrally
- **Interactivity**: Serving data consumers and creators
Semantic Layer Across Sources

• Preparing for diverse data: Data warehousing is only part of the modern data platform

• Semantic layer: Aligning higher-level business terms with the data
  – Key to gaining a complete and consistent view
  – Flexible, not rigid

• Saving users time: Reducing the confusion about the data and lineage

• Automating metadata gathering: Technologies are advancing to enable it
  – Thin layer option
Discussion #1 with Guest Speakers: IT’s Role, Governance, and Reporting

- What recommendations do you have for updating IT’s role to fit the self-service world of BI and analytics?

- How can organizations effectively balance governance with user freedom? How should organizations govern and steward self-service?

- What should organizations do to modernize reporting for a self-service age? How should they address metadata and semantic layers to help users gain complete data views of diverse data?
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Step Four: Balance standardization and consolidation with user agility
Consolidation at the Cost of Agility?

- Too many silos, too many data models: Organizations start to think consolidation
- Self-service has brought users greater agility: They can personalize their discovery and visual interaction
- Business agility is prized: Data agility makes it happen
  - Traditional systems leave users “stuck in cement”
  - Users will avoid enterprise standards and set up rogue systems
More Guidance, Fewer Commands

- Provide managed self-service with guidance
- Consider invoking standardization through self-service applications
- Aim for less obtrusive IT management and governance
Step Five: Introduce self-service data preparation carefully
Data Prep: Room for Improvement

- Generally slow, tedious, and time consuming – for both users and IT. “Time loss” the biggest complaint
- Inconsistent across organizations; governance issues
- Poor quality data and data definitions = poor BI/analytics
Self-Service: Hot Trend for Data Prep

• Self-service functionality enables nontechnical users to explore data and choose and integrate data sets
• 44% of TDWI research participants said increasing the ability of users to do their own data preparation is very important and 33% said it is somewhat important
• Letting users meet diverse data needs for BI and analytics themselves
Govern and Guide Self-Service Data Prep; Incorporate Advantages

• Govern, to avoid increase in inconsistencies
  – Integrate data prep with governance
• Get on top of metadata proliferation
  – Develop a shared metadata resource

• Aim for higher levels of repeatability
  – Productivity suffers if users duplicate effort and do repetitive steps
Step Six: Develop an open architecture to match workloads with the right technologies
Self-Service Meets Big Data

• Big data and self-service are maturing at the same time
• Cloud computing enables organizations to grow and be elastic

• Unified or hybrid architectures
• Logical data warehouses
Developing a Strategy for Openness

- Aim for an open but cohesive platform
- Seek ability to aim workloads at appropriate technologies
- Unify access to cloud and on-premises data
- Logical or virtual layer can be beneficial for some workloads
- Address interest in big data access
Step Seven: Refresh training to fit diverse self-service user needs
“Self-Service” Does Not Mean Leave Users Alone

• Self-service technologies often mean that users need new types of training
  – Many are inexperienced in analyzing data and understanding the quality of diverse sources
• Encourage BI teams to mentor users
• Make training contextual to users’ roles and experience
• Encourage sharing of tips and success stories
Discussion #2 with Guest Speakers: Standardization, Preparation, and Architecture

- How do you balance standardization with user (and business) needs for agility and flexibility?

- What is your perspective on data preparation trends? Is self-service data preparation a manageable direction? What advice do you have?

- How should organizations strategize for the future of data architecture? What steps do they need to take toward a unified or hybrid architecture?
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Polling Question

What is your biggest challenge in fitting enterprise BI with self-service technology use?

- Governance and stewardship
- Fear of losing the single view of the truth
- Data quality, integrity, and consistency
- Performance and availability
- Training users so they can do more on their own
- None of the above (tell us in a message)
Q&A with the Audience
Contact Information

• If you have further questions or comments:

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Thank You to Our Sponsors and Panel Participants

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