MicroStrategy 10: Successfully convert your Business-Object (BO) Environment

Robb Rogers – Senior MicroStrategy Consultant
Monte Stewart – MicroStrategy Professional Services Manager
MicroStrategy Professional Services at a Glance

Accelerate our customers’ ability to get the most from MicroStrategy products from strategy, conversion and execution. Professional Services has developed, applied and refined methods for delivering leading-edge technology solutions with a track record of success.

- The largest staff of MicroStrategy Certified Engineers
- Dedicated to Business Intelligence Success and Conversions.
- Over 2,000 projects completed per year
- Over 1,000 unique customers served per year
- Offices across North America, Latin America, Europe, Africa, and Asia
- We have completed hundreds of conversions
MicroStrategy Professional Services

About Us

Robb Rogers

Over 15 years in Business Intelligence. Have worked in many industries including health, retail, manufacturing and government.

Six years as MicroStrategy Consultant based in Texas. Have led 30+ MicroStrategy projects.

Monte Stewart

Over 10 years of experience in Business Intelligence, Visualizing Data and Reporting.

Over 5 years of experience with MicroStrategy leading complex integrations, conversions and solutions.

Passionate about customer engagements, successful solutions and unearthing “hidden” answers in big data.
It’s *time to vote*
Poll the Audience
Tell us which industry you belong to

- Retail: 17%
- Financial Services: 25%
- Logistics and Supply chain: 0%
- Healthcare: 8%
- Manufacturing: 8%
- Consulting: 42%

Votes: 24
What is your role in your Organization pertaining to BI

- Business User: 9%
- IT: 39%
- Management: 35%
- Partner/Consultant: 17%

Votes: 23
Audience Poll

What version of MicroStrategy are you using today

Votes: 26
Audience Poll

Where are you in the process of conversion

- Just considering it: 50%
- Already have established timelines: 13%
- Already in progress: 38%
- Tried, failed, starting over: 0%

Votes: 24
What are your Top reasons to convert to MicroStrategy?
What is likely to be your biggest obstacle during conversion?

- Testing
- Complex
- Many universes
- Convert universe
- Drivers
- Validation
- Universe
- ROI
- Unknown
- Test
- Political
- User adoption
- Report redesign
- Cost
- Scheduling budget
- Storage
- Data
- Time
- Development
- Users
- Completely new technology
- Migration Cost
- Training
- Warehouse

 Votes: 22
Session Overview

Topics Covered

- “Real-Life” Case Study for Business-Object migration
- Why Organizations Upgrade from Business Objects to MicroStrategy
- Types of Conversions
- How to decide “What works” for your organization
- Conversion Acceleration program, tools and options
- Demo
- Summary
  - Q&A
Real Life Scenario

Welcome to MicroStrategy

- Congratulations! Your organization just purchased the Best BI Enterprise platform on the planet which is MicroStrategy 10.2
- You have been asked to lead the effort
  - What now?
  - Where do you start?
  - How do we transition?
  - When?
  - Why?
- The task migrate 200+ Business-Objects to MicroStrategy with a hard very tight timeline.
  - Seriously
Why MicroStrategy 10.2? - Industry Analyst

Get unbiased perspective from one of the top industry analysts – BiScorecard

“BI Scorecard is the only analyst firm that tests BI suites hands-on, based on over 300 detailed criteria, and with the customer perspective in mind.”

The Gartner report outlines the following strategic planning assumptions:

"By 2018, data discovery and data management evolution will drive most organizations to augment centralized analytic architectures with decentralized approaches. By 2017, 75% of IT organizations will have a bimodal capability; half will not handle this well, by either remaining overcontrolling or outright ignoring the risks of more agile approaches.

By 2018, smart, governed, Hadoop-based, search-based and visual-based data discovery will converge into a single set of next-generation data discovery capabilities, as components of a modern BI and analytics platform."

"MicroStrategy's innovative capabilities strike the right balance between agile data discovery and enterprise scalability, giving the market both data discovery and enterprise BI in a single analytics platform," said Michael J. Saylor, Chairman, President and CEO, MicroStrategy Incorporated. "We welcome Gartner's assessment of MicroStrategy 10's capabilities and our overall company strategy, and look forward to sharing version 10.2 with our customers and partners at MicroStrategy World 2016 next week in Miami."

Enhancements in Version 10.2 Accelerate Analytics

With the latest quarterly release of MicroStrategy 10™, MicroStrategy continues to reiterate its commitment to drive business user adoption within enterprises by furthering agile self-service capabilities on MicroStrategy Desktop™, MicroStrategy Web™ and MicroStrategy Mobile™. The powerful, new enhancements accelerate application development, streamline workflows, and improve the user experience. To learn more about these new features, visit: www.microstrategy.com/analytics.

The “Modern BI and Analytics Platform Architecture”

BI = business intelligence; OLAP = online analytical processing

Source: Gartner (October 2015)
Why Organizations Upgrade from Business Objects to MicroStrategy
Typical Issues Reported by Business Objects Customers

- Poor Performance & Scalability
- Inadequate Mobile BI
- Multiple Interfaces and Loosely Integrated
- Difficult to Upgrade

Not a Modern BI Platform
Fully Integrated Architecture Ensures Full Object Reuse and Easy Upgrade

**Business Objects Upgrade Path**
- Multiple product architectures and metadatas
- Many technology acquisitions
- Multiple migrations

**MicroStrategy Upgrade Path**
- Single Metadata
- Organic Architecture
- Single Admin architecture
- Single Security Architecture
- No Acquisitions
- No Integrations
- In-line product upgrades
MicroStrategy is a Modern BI Platform
Overview of features that simplify conversions
# What MicroStrategy has to offer

MicroStrategy features that simplify conversions

<table>
<thead>
<tr>
<th>Security</th>
<th>Tools</th>
<th>Performance</th>
<th>Developer Aids</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Import / Provision User IDs &lt;br&gt; o Easy Integration with IAM system &lt;br&gt; o Flexible Mobile Device Management Integration</td>
<td>o Command Manager &lt;br&gt; o Integrity Manager &lt;br&gt; o Systems Manager &lt;br&gt; o Object Manager</td>
<td>o Flexible Architecture &lt;br&gt; o Parallel Processing &lt;br&gt; o Auto Partitoning of cubes</td>
<td>o Reusable document themes &lt;br&gt; o Shared Metadata &lt;br&gt; o Auto Hierarchy (Time, Geography) &lt;br&gt; o Dynamic Prompting</td>
</tr>
<tr>
<td>Governance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Track and Monitor usage &lt;br&gt; o Access to Sensitive Data &lt;br&gt; o Operations Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What MicroStrategy has to offer

Feature that increase ROI and Adoption

- **Mobile Features**
  - Native Mobile Features
  - Easy to deploy
  - Insights in the hands of your executives.
  - It’s the future of Analytics

- **Self Service BI**
  - Easy to use
  - Drag – n - drop
  - Rapid Prototyping
  - Extensible D3 library
  - Replace datasets seamlessly
  - Data Wrangling
  - Ad-hoc Capabilities

- **Better Applications**
  - Rapid Application Development
  - Dashboard
  - Workflow based (Actionable)
  - Reusability
Welcome to the community.
Keep up with us in Miami through our live broadcast. Experience World along with us on the community.

Discussion forums
Ask questions, find solutions, and share insights about your MicroStrategy implementation.

Knowledge base
Discover thousands of technical documents, latest release notes, and product manuals.

Idea exchange
Make an impact: browse, vote on, and share your feature requests with our product team.

Developer zone
Access the developer library and API documentation, as well as discussions and tech notes.
The Right Approach to Success
Converting Techniques / Methodologies
Typical Conversion / Migration Approaches

“Board Room Chatter” Typical Approaches to MicroStrategy Conversions

1. Convert as is (one to one)
   1. Convert existing reporting environment as it exists today

2. Mulligan (Do over) and do it right “this time” approach
   1. Completely re-design / re-architect existing reporting system

3. Optimized Conversion
   1. Convert and enhance

4. Coexistence with other BI products (On-Top of…)
   1. Hook into existing BI platforms… Mobilize
There are Two Basic Conversion Approaches

MicroStrategy uses two basic conversion approaches:

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**Approach 1: As Is Conversion**

**Work:**
- Re-create BusinessObjects Universes or Framework Manager models
- Re-create the BusinessObjects and Cognos reports
- Used mainly for Proof-of-Concept purposes

**Result:**
- Faster conversion of small environments
- Utilization of existing work

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**Approach 2: Optimized Conversion**

**Work:**
- Detailed report analysis to eliminate report redundancies
- Re-create the BusinessObjects and Cognos reports
- Revise data model for higher performance

**Result:**
- More efficient environment that fits requirements
- Makes better use of MicroStrategy strengths
The conversion process

How will your conversion be done?
How easy will it be?

Business Objects

MicroStrategy
Step by Step Conversion Overview

**Phase 1: Plan**
- Review existing implementation and identify and establish scope
- Identify Data sources requirements
- Closely involve key stakeholders (Define a Roadmap for Success)
- Determine level of Effort by running small POCs to verify assumptions and plans

**Phase 2: Implement**
- Deploy development, test, and production environments
- Train developers and end users (Adoption is key to success)
- Continuous communication with key stakeholders

**Phase 3: Optimize**
- Track usage and Monitor environment after production implementation
- Plan for long-term optimizations and governance
- Optimization is an on-going process as usage evolves
A Majority of Prior Investments Can Be Reused

In most circumstances, reuse of prior investment can be as high as 80%.

Estimated Cumulative Effort to Establish the BI Environment

- Create Business Objects and /or Cognos reports - 15%
- Establish Report/ Dashboard Specs - 10%
- Design / Refine Data Model - 15%
- Identify Sources of Data - 10%
- Set Up ETL and Data Cleansing - 35%
- Tuning Warehouse - 10%

Convert Reports

- Convert Universes/Models - 5%

Re-create Reports & Dashboards - 15%

Estimated Incremental Effort to Convert to MicroStrategy

- Re-create Schema - 5%
- Convert Universes/Models - 5%
- Convert Reports
- Establish Report/ Dashboard Specs - 10%

Identify Sources of Data - 10%
Design / Refine Data Model - 15%
Set Up ETL and Data Cleaning - 35%
Tuning Warehouse - 10%

In most circumstances, reuse of prior investment can be as high as 80%.
Business Object Conversion Case Study
Robb Rogers
Large Transportation Company migrated from BusinessObjects to MicroStrategy

Why MicroStrategy?
- Incorporate Operational BO reports into Enterprise Standard BI Environment
- Client Version of BO was security risk. Cost of upgrading
- Departmental BO knowledge retained by one-two business users
- Cross-functional reporting via Excel

Implementation Highlights
- Joint effort with IOLAP Consulting
- 18 BO Universes
- Incorporated disparate BO universes into integrated data warehouse
- Mix of ‘as is’ and ‘convert and enhance’ migration approaches
- Extensive support from specialized GDC resources

Benefits
- Cost Savings
  Eliminate administration of Business Objects
- Improved administration
  Single schematic definition to maintain
- Stable/ Supported platform
  BI infrastructure supported by IT
- Greater ease-of-use
  Powerful ad-hoc tools available to nontechnical users
- Increased usage
  Due to cross-functional reporting
Overall Approach

- Assessment Study
  - Scope
  - Priorities
  - Establish Migration Approach
  - Develop Migration Roadmap
- Design & Implement
  - Project Team
  - Architect from reporting silos to governed data warehouse
- Change Management
  - Impact to MSTR Environment
  - Training
  - End Users Expectations
Conversion Assessment

- **Scope**
  - Client met with BO users
  - Identified 18 Universes, initial population of 400 Reports
  - Developed BO Report Matrix
Typical report reduction ratio is 7:1 to 10:1 depending on complexity of your environment.
Client Conversion Assessment

- Scope cont.
  - Determine reports to develop
  - Candidates for combining

<table>
<thead>
<tr>
<th>All Reports</th>
<th>1400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unused / Inoperative</td>
<td>(1000)</td>
</tr>
<tr>
<td>Duplicates and User Copies</td>
<td>(80)</td>
</tr>
<tr>
<td>Combining (prompts / drills)</td>
<td>(70)</td>
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<tr>
<td>Total to be Built</td>
<td>250</td>
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</table>
Conversion Assessment

- Scope cont.
  - Migration approach - Options
  - ‘As is’ Free-form SQL or ‘convert and enhance’ data warehouse
    - Need for real-time / objects not shared among other reports = FFSQL
    - Performance / reuse of objects = data warehouse
Conversion Assessment

- Develop Migration Roadmap
  - Establish order of implementation
  - (Interdependencies of objects, availability of end users for review, project resources…)
  - MicroStrategy functionality (Mobile, OLAP cubes, drilling, …)

<table>
<thead>
<tr>
<th>BO Universe Name</th>
<th>Full Name</th>
<th>ETL or FSSQL?</th>
<th>Current Status</th>
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<tbody>
<tr>
<td>PCD</td>
<td>P-Card</td>
<td>ETL</td>
<td>Data model done and source-to-target complete</td>
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<tr>
<td>Inventory</td>
<td>Oracle Inventory</td>
<td>ETL</td>
<td>First piece of the data model done 4/17 and source-to-target done 4/22</td>
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<tr>
<td>Projects</td>
<td>Oracle Project Accounting</td>
<td>ETL</td>
<td>Data model will be complete before 5/15</td>
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<tr>
<td>Kronos</td>
<td>Kronos</td>
<td>ETL</td>
<td>Will be meeting with Kronos developers shortly to determine what we can report – will have data model by 6/5</td>
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<tr>
<td>Noetix</td>
<td>Noetix</td>
<td>ETL</td>
<td>Largest and most diverse Universe—GL, AP, AR, Procurement, Inventory, and Purchasing data are here—once we get Inventory and Purchasing data we should be able to rewrite these reports</td>
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<tr>
<td>Purchasing</td>
<td>Oracle Purchasing</td>
<td>ETL</td>
<td>We have some of this data in EDR, but not all</td>
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</table>
Design / Implement

- Blended Project Team
  - On-Shore MicroStrategy & iOLAP
    - 4 Dedicated Consultants
    - 3 Dedicated Client Resources
    - 3 Part-Time Client Resources
  - Off-Shore MicroStrategy GDC
    - 12 Dedicated MSTR Consultants
      - ETL Developers & MSTR Developers
Design / Implement

- Develop Standard Project Plan for FFSQL and data warehouse conversions
- Document development / ETL standards
Design / Implement

Project Flow – Concurrent Conversions

- 1. On-shore Team
  - BO Report Analysis
  - Data Models for Staging / Data Warehouse Databases
  - ETL Source to Target Documentation

- 2. GDC Team
  - Build DDL Scripts
  - Build ETL (Informatica) for Staging / Data Warehouse
  - Build MSTR Schema

- 3. On-shore Team
  - Verify Schema

- 4. GDC Team
  - Build MSTR Reports (Map schema objects / metrics to new reports)
  - Incorporate new prompts / drills

- 5. On-shore team
  - Migrate to Test
  - User Review Reports / Sign-off

- 6. GDC / On-shore Teams
  - Migrate to Production
Change Management

- Impact to MSTR Environment
  - One additional large i-cube, most other reports interactive

- Training
  - PEPs & Client provided classes for each departmental group
  - Included training to perform ad-hoc reports and new integration of E-Business Suite areas

- Project Status – Daily Worldwide Meeting
  - Important to keep all stakeholders apprised

<table>
<thead>
<tr>
<th>BO Universe Name</th>
<th>% Done</th>
<th>Total number of reports built or to be built</th>
<th>In progress</th>
<th>Number of Reports Complete - Development</th>
<th>Number of Reports Complete - Test</th>
<th>Number of Reports Complete - Production</th>
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<tr>
<td>1</td>
<td>83.0%</td>
<td>35</td>
<td>1</td>
<td>34</td>
<td>34</td>
<td>34</td>
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<tr>
<td>2</td>
<td>100.0%</td>
<td>1</td>
<td>all built</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>100.0%</td>
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<td>2</td>
<td>3</td>
<td>3</td>
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<tr>
<td>5</td>
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<td>3</td>
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<tr>
<td>6</td>
<td>91.0%</td>
<td>15</td>
<td>all built</td>
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<td>9</td>
<td>65.0%</td>
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<td>39</td>
<td>62</td>
<td>60</td>
<td>20</td>
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<tr>
<td>10</td>
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<td>2</td>
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<td>11</td>
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<td>36</td>
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<td>79.0%</td>
<td>25</td>
<td>all built</td>
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<td>25</td>
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<td>Total</td>
<td>77.4%</td>
<td>266</td>
<td>78</td>
<td>247</td>
<td>245</td>
<td>227</td>
</tr>
</tbody>
</table>

MicroStrategy
Challenges

- BO Outer Joins
  - Architecture Options
    - Design fact tables at lowest level (more Architecture / ETL work) or dimensions (possibly limiting add-hoc reporting)
  - VLDB Settings / Report Settings / Metric Settings
- Underestimated Architecture Effort
  - Building conforming dimensions
- End User Availability – Find Users
- Managing Project Scope
  - After building Integrated data warehouse, users wanted additional reports outside original scope
Client Benefits

➤ Functional Benefits
/ All important reports available on the Company’s Enterprise Standard BI platform
/ Information will be available via web interface
/ Substantial performance improvement
/ All core reports based on Integrated, Governed Data Warehouse ‘Single-Version-of-the-Truth’

➤ Advanced End User Benefits
/ Access to full functionality of the MicroStrategy interface (for development / ad-hoc)
/ Substantial performance improvement
/ Enjoy the benefits of reusable metadata: faster development for new reports
/ Should enjoy fast time-to-market for new information requirements

➤ ITS Benefits
/ Key reports on modern platform maintained by IT
/ Control of strategic asset: data
/ No legacy reporting system
Access Other BI Environments

Demo of using Web Services to Programmatically Import Business Objects Data
A History of Success
Convert/Migrate any environment
MicroStrategy

“Success Stories”

- McDonald’s
- eBay
- Yahoo!
- Google
- 99¢ Only
- PepsiCo
- Barclays
- ABN AMRO
- Fannie Mae
- Wachovia
- Liberty Mutual
- Dana-Farber Cancer Institute
- Fidelity Investments
- GEICO
- Mercury Insurance Group
- Sterling Jewelers
- Honda
- Guess
- Franklin Templeton Investments
- Applebee’s
- ESPN
- NEC
- Family Dollar
- Novartis
- Daimler
- Belgacom
- Diageo
- Boston University
- ArrowStream
- Nokia
- Payless
- LG
- Toshiba
MicroStrategy 10.2 makes converting a success

Successfully Convert - Start Today


- It is possible to substantially reduce the total time and effort for the transition by a) leveraging the new capabilities of the MicroStrategy platform and b) intelligent development.

- We can accelerate a significant part of the total transition; increasing time to benefit & ROI.

- Most of the business knowledge that was created and embedded in your can be reused and will be structured, anchored and documented in the new platform.
Recommendations

GENERAL

- Don’t opt for a migration but aim for a smart transition
- Aim for a ‘disruptive’ approach to get the most impactful results. Based on advanced technology (in-memory, mobile, self-service data visualization, Usher, Big Data, … ), a new governance model, a new development methodology
- Low hanging fruit: while transitioning, enrich and enhance your existing assets:
  - Add a new ([Client]) User Experience across all your internal applications (web and mobile): rethink the GUI-design, add workflows, add graphical data visualizations, include multi-language, …
  - Enable new functionality in the user interface (out-of-the-box) : drilling, slicing and dicing, communication and collaboration, drop-down analytics, …
  - Improve the performance of your reports and dashboards (PRIME)
  - CDS (conformed dimensions like actor, event, contract, products etc.’: build once, reuse everywhere
Overview Summary

Conversion Accelerator Program

Conversion Cost Calculator/Tools
Conversion Artifacts – Help speed up the conversion process and reduce human errors

Conversion Methodologies
After doing numerous conversions, we have established a set of optimal processes

Dedicated Personnel
Consultants who are dedicated to conversions
Next Steps

Discuss How MicroStrategy Can Meet Your Evolving BI Needs

Try a Demonstration of our Conversion Capabilities

Let us Assess Your BI Environment and Determine Best Approach for Migration

email: info@microstrategy.com