Decide Instantly: Take Action Immediately
At the Point of Insight

Rodolfo Campero | January 29, 2013
Agenda

- Introduction to Mobile and Web Transactions
- MicroStrategy Transaction Services
- Transaction Reports
- Transaction Documents
- Demo
- What’s New in MicroStrategy 9.3
- Summary
- Q & A
Agenda

- Introduction to Mobile and Web Transactions
- MicroStrategy Transaction Services
- Transaction Reports
- Transaction Documents
- Demo
- What’s New in MicroStrategy 9.3
- Summary
- Q & A
These Mobile Intelligence Apps **Must** Support **Mobile Transactions**
MicroStrategy Transaction Services
Deploy a Large Variety of Mobile and Web Transaction Applications

MAKE BI APPLICATIONS ACTIONABLE

- Mobilize web applications to make common business operations anytime/anywhere
  - Interface Vendor Portals
  - Expenses Reporting
  - Timesheet Entry
  - Corporate Surveys
  - Benefits Enrollment
  - IT Helpdesk Requests

MOBILIZE EXISTING OPERATIONAL APPS

- Mobilize web applications to make common business operations anytime/anywhere
  - Interface Vendor Portals
  - Expenses Reporting
  - Timesheet Entry
  - Corporate Surveys
  - Benefits Enrollment
  - IT Helpdesk Requests

CREATE NEW CONSUMER APPS

- Create Mobile Transaction Apps to engage customers and garner feedback
  - Customer Feedback
  - Product Reviews
  - Consumer Surveys/Polls
  - Product Inquiries
  - Event Registrations
  - Professional Certification Exams

Extend Business Intelligence Apps to allow real-time decision making

- Marketing Campaigns
- Promotions Management
- Lead Tracking
- Forecasting
- Order Management
- Inventory Changes
MicroStrategy Transaction Services
Turn Insight Into Action With MicroStrategy Transaction Services

Receive Information on your mobile device or browser

Take Immediate and Insightful Action

1. Modify Inventory
2. Update forecast
3. Increase Order Quantity
4. Trigger Purchase Order
5. Email stakeholders
6. Approve purchase order

Perform your entire business process from your Mobile and Web transaction applications without using any traditional format

No Desktop Applications

No Paper
Agenda

- Introduction to Mobile and Web Transactions
- MicroStrategy Transaction Services
- Transaction Reports
- Transaction Documents
- Demo
- What’s New in MicroStrategy 9.3
- Summary
- Q & A
MicroStrategy Transaction Services
MicroStrategy Technical Architecture

- Desktop / Laptop
  - Microsoft Office
  - Browsers and Portals
  - Apple
  - Android
  - Blackberry

- Mobile
  - Email

- Full Spectrum of Developer Tools
  - Architect
  - Desktop Designer
  - Web Professional
  - SDK
  - Cube Advisor

- MicroStrategy Office
- MicroStrategy Web
- MicroStrategy Mobile
- MicroStrategy Intelligence Server
  - Report Services
  - Distribution Services
  - OLAP Services
  - Transaction Services
    - Universal
    - Multi-Source

- Metadata
  - Files
  - Web Services

- Full Spectrum of Administration Tools
  - Enterprise Manager
  - Command Manager
  - Object Manager
  - Integrity Manager
  - System Manager
MicroStrategy Transaction Services
Every Transaction is Comprised of Two Types of Metadata Objects

1. Transaction Report
   - **NEW** MicroStrategy FreeForm report
   - Defines write-back query

   ![Data Source]
<table>
<thead>
<tr>
<th>Date</th>
<th>Expense</th>
<th>Expense Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   “Writes” to the Data-source

2. Transaction Document
   - MicroStrategy Report Service Document or Dashboard
   - Defines input controls

![Corporate Request Center]

The Information Contained In This Presentation Is Confidential And Proprietary To MicroStrategy. The Recipient Of This Document Agrees That They Will Not Disclose Its Contents To Any Third Party Or Otherwise Use This Presentation For Any Purpose Other Than An Evaluation Of MicroStrategy's Business Or Its Offerings. Reproduction or Distribution Is Prohibited.
Agenda

- Introduction to Mobile and Web Transactions
- MicroStrategy Transaction Services
- Transaction Reports
- Transaction Documents
- Demo
- What’s New in MicroStrategy 9.3
- Summary
- Q & A
A Transaction Report Supports Two Types of Transactions

**Data write-back using SQL Statements**

```
update CRC_EXPENSE_TX
set review_flag=[REVIEW FLAG],
    comments=[COMMENTS]
where requestor_id=[REQUESTOR]
and expense_id=[EXPENSE]
and review_flag != 3
```

**Data write-back using X-Query Statements**

```
for $prod in
doc('catalog.xml')/catalog/product
let $name := $prod/name
    where $prod/@dept = "ACC"
order by $name
return $name
```

ROLAP DB

Web Service
MicroStrategy Transaction Services
A Transaction Report is Created in Three Simple Steps

Step 1:
REPORT EDITOR in Desktop:
Freeform Transaction Report

Freeform Report Types

Freeform SQL Report
Freeform X-Query Report
NEW Transaction Report

Step 2:
INSERT TRANSACTION TAGS
Write freeform query

BEGIN TAG
TRANSACTION CODE
END TAG

<Begin Transaction>
update CRC_EXPENSE_TX
set review_flag=[REVIEW FLAG],
comments= [COMMENTS]
where requestor_id=[REQUESTOR]
and expense_id=[EXPENSE]
and review_flag != 3

<End Transaction>
MicroStrategy Transaction Services
A Transaction Report is Created in Three Simple Steps

**Step 3:**
MAP INPUT TO QUERY
Transaction Code to Input objects

```<Begin Transaction>
INSERT INTO Order_Payments,
VALUES Day@ID,
Country@DESC,
Profit,
Revenue
<End Transaction>```

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>📈</td>
<td>Day</td>
<td>ID</td>
</tr>
<tr>
<td>📈</td>
<td>Country</td>
<td>DESC</td>
</tr>
<tr>
<td>📈</td>
<td>Profit</td>
<td></td>
</tr>
<tr>
<td>📈</td>
<td>Revenue</td>
<td></td>
</tr>
</tbody>
</table>
Agenda

- Introduction to Mobile and Web Transactions
- MicroStrategy Transaction Services
- Transaction Reports
- Transaction Documents
- Demo
- What’s New in MicroStrategy 9.3
- Summary
- Q & A
MicroStrategy Transaction Services
Enable Transaction Services in a Report Services Document

**Query Dataset**

<table>
<thead>
<tr>
<th>Date</th>
<th>Expense</th>
<th>Expense Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Transaction Report**

<table>
<thead>
<tr>
<th>Date@ID</th>
<th>Expense@ID</th>
<th>Expense Amount@ID</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Configure transaction input controls and data submission buttons**

**Report Services Document**

- **a) Select the Dataset, if needed**
- **b) Link the grid or text field to a Transaction Report**
MicroStrategy Transaction Services
A Variety of Control Support Different Formats of Data Input

Text Inputs
Number Inputs
Calendar
Camera
GPS
Switches
Sliders
Steppers
MicroStrategy Transaction Services
New Action Selectors Initiate or Discard the Transaction

- **Action Selector button or link targets grids and panel stacks**

- **Three action types are available:**
  - **Submit**
    - Submits changes to and runs the transaction report
    - Include a confirmation message
    - Subsequent actions once input has been submitted
      - Do nothing
      - Refresh Current Document
      - Run a new report or document
  - **Recalculate**
    - Recalculate subtotals, derived metrics, sorting
  - **Discard changes**
    - Discards all changes that are not yet submitted
MicroStrategy Transaction Services
Define Transaction Input on a Grid or Field from MicroStrategy Web

1. Select grid or field in Report Services document
2. Select the Transaction Report
3. Map grid objects to transaction inputs
4. Define editable inputs
5. Choose Control Style
6. Configure Control Settings

Once all inputs have been defined, add the Action Selectors to the Document
MicroStrategy Transaction Services

Transaction Query Flow

Mobile/Web Client:
Report Services
Document Editable Grid/Field Group

Transaction Data

Intelligence Server:
SQL or XQuery
Transaction Report

Web Services / Database

```
update OPPORTUNITY_TX
set opp_amt = [OPPAMOUNT],
close_date = [OPPCLOSEDATE],
opp_desc = [OPPDESCRIPTION],
where account_id = [ACCOUNT]
and opportunity_id = [OPPORTUNITY]
and stage_id = [STAGE]
```
MicroStrategy Transaction Services
Some Notes on Using Transaction Services

- One Transaction Report can only be tied to one grid or to fields contained in one panel stack
- All Input Objects in the transaction report must be contained on the grid or panel stack
- Caching must be disabled when using a Query Report as dataset
- Transactions can only be submitted through Mobile and Express Mode in Web
Agenda

- Introduction to Mobile and Web Transactions
- MicroStrategy Transaction Services
- Transaction Reports
- Transaction Documents
- Demo
- What’s New in MicroStrategy 9.3
- Summary
- Q & A
ENHANCED DATA VALIDATION

- New set of data validation capabilities when business users write data back to the source.
  - Phone Number
  - US Zip Code
  - E-mail address
  - SSN

- Support of regular expressions
  - Ex: the string has to be 8-12 characters long with a number in positions 3 and 7 and a capital letter in either position 1 or 10

- Set fields as required
PASS PROMPT ANSWERS BETWEEN DASHBOARDS

- Additional link drilling functionality
- Users will be able to pass prompt answers from one dashboard to another.
- This feature will greatly enhance the end-user interaction
- Allow a smoother workflow when writing back to the data source.

**Answer 1**
Category = Electronics

**Answer 2**
Category = Electronics
Upgrade to MicroStrategy 9.3!
Agenda

- Introduction to Mobile and Web Transactions
- MicroStrategy Transaction Services
- Transaction Reports
- Transaction Documents
- Demo
- What’s New in MicroStrategy 9.3
- Summary
- Q & A
MicroStrategy Transaction Services
Provides Information Capture & Data Entry from Mobile Devices

Perform Any Type of Transaction from Your **Mobile Device** and **Web**

- Enter sales leads
- Update churn probabilities
- Modify inventories
- Cancel orders
- Approve expense, time-off requests
- Submit employee reviews
- Complete surveys
- And many more…
Agenda

- Introduction to Mobile and Web Transactions
- MicroStrategy Transaction Services
- Transaction Reports
- Transaction Documents
- Demo
- What’s New in MicroStrategy 9.3
- Summary
- Q & A
Thanks!