Agenda

- Introductions
- SAP BusinessObjects – The new BI 4.0 release
- SAP Mobility Strategy – What is SAP mobility strategy
- In Memory Computing – The future of business computing
- Q/A
How Facebook and Twitter spurred Egypt's revolution

Published: Saturday, February 12, 2011

By Joey Kulkin; Journal Register News Service

Egypt's revolution was televised, sure, but Facebook updates, 140-character tweets and YouTube videos turned the land of pharos and pyramids upside-down.

“All of it. You couldn't have gotten enough people together by word of mouth,” Stephen Tobia of North Brunswick said today as starving, tech-driven Egyptians shed slave shackles and celebrated freedom for the world to see. “Only in the 21st century.”

Tobia is a 28-year-old American and Union County College
What is The Future of IT:

Evolution or Revolution?
# Implications for IT Organizations

<table>
<thead>
<tr>
<th>Systems of Record</th>
<th>Systems of Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Transaction-oriented</td>
<td>- Collaborative</td>
</tr>
<tr>
<td>- Command &amp; Control</td>
<td>- Interaction-oriented</td>
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<tr>
<td>- Data-centric</td>
<td>- User-experience-centric</td>
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<tr>
<td>- User learns system</td>
<td>- System learns user</td>
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<tr>
<td>- Safe &amp; secure</td>
<td>- Smart devices (iPhone/iPad)</td>
</tr>
</tbody>
</table>
The Future of IT: Evolution or Revolution?

Evolution in Infrastructure
- Focuses on **Systems of Record**
- Continuation of current trends
- Not fundamentally disruptive

Revolution in Applications
- Focuses on **Systems of engagement**
- Totally new end user experience
- Radical changes to how users want data display

IT Landscape of Tomorrow
- Systems of Record: *Our interstate highway system*
- Systems of Engagement: *The next frontier*

The Consumerization of Enterprise IT
- *Evolution* at the systems layer
- *Revolution* at the applications layer
Safe Harbor Statement

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What’s New in 4.0

- Event Insight
- BI Workspace
- Text Analysis Integration
- Mobile BI
- Information Steward
- Data Quality Visibility
- Multi-source Universes
- Modern Styling
- New Charts
- Cross-client Interoperability
- Common Menus
- Visualizations
- Query Panel
- BI in Business Suite
- API Web Services
- Analytic Applications
- BI and EIM Integration
- BI and NetWeaver
- BICS Integration
- 64-bit
- Virtualization
- More Supported Environments
- System Monitoring, Audit, and Diagnosis
- Lifecycle Management
- IQ
- Data Migration
- Analysis OLAP
- BI Launch Pad
- Information Design Tool
- HANA
SAP BusinessObjects BI 4.0

- **EASY**

- **OPTIMIZED**

- **REAL-TIME READY**
EASY

- End users
- Analysts
- Administrators

INTERACTIVE

UNIFIED

VISUAL
**The Best BI Suite for SAP Customers**

- **Leverage all of your investments** – BW cubes and BEx query design
- **Transition BEx analyzer users to the next generation of SAP BI**
- **Adopt SAP BusinessObjects BI platform at your own pace**

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**Innovation without Disruption**
- Increase business user autonomy and self-service usage
- Boost BI adoption for more informed decision making across the enterprise
- Minimize user training, support and customization costs

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**Simpler and More Intuitive**
- Tighter integration with the SAP NetWeaver technology platform
- BI standardization from the board room to the shop floor
- Increased speed and agility with cost effective in-memory computing

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**SAP Landscape Simplification**
Modern and familiar Microsoft Office user experience

Few simple clicks to fast business insights

Simplified drag-&-drop to filter, and slice-&-dice
Innovate without Disruption for Immediate Benefits

Run with existing cubes and queries
- No need to migrate BEx queries
- No need to change BW data models
- Support BW 7.x and BEx queries 3.5/7.x

Transition BEx analyzer users now
- Improve significantly user satisfaction
- Extend the reach of BW deployment
- Full support for key BEx analyzer features*

Adopt new BI platform at your own pace
- Direct connection to BEx queries (BICS)
- Deploy new BI platform only when needed

*: planned availability for write-back in Q1 2011
Transforming the Way Business Users Gain Insights

Embedded analytics within the SAP Business Suite

- Actionable insights like never before
- Best-practice business content
- Deep and unique integration
## Embedded Analytics Content in SAP ERP Financials 6.0 EhP5

40 SAP Crystal Reports / 10 SAP BusinessObjects Dashboards

### FI-GL
- Balance Sheet
- Income Statement
- Cash Flow Statement
- Financial Statement Actual
- Account Balances
- Account Line Items
- Document Journal

### FI-AR
- Customer DSO Analysis
- Customer Due Date Analysis

### FI-AP
- Vendor Due Date Analysis

### FI-AA
- Asset History Sheet
- Planned Depreciation

### FI-CO
- Cost Centers: Actual/Plan/Variance
- Orders: Actual/Plan/Variance
- Orders: Cumulative Actual/Plan/Variance
- Profitability Analysis: Operating Profit

### FSCM
- Dispute Management
- Credit Management
- Collection Management

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Customers Drive Value with Embedded Analytics
Early Customer Feedback

"Embedded analytics are clearly our path to SAP BusinessObjects."

BI Director
Large Industrial Supply Company

"Embedded analytics are great. Our business users will see on Day 1, the usability improvements from deploying CRM 7.0 EhP1."

IT Manager implementing CRM
Large Utility Company

"When we started 20 years ago, we built reports off quarterly and then monthly data. That’s now moved up to weekly. I see the progression towards real-time data. Will be the way it’s done in 5 years."

BI Director
Large Manufacturer
All Information Under One BI Umbrella

- Consistent business user experience
- Trusted access to information
- Heterogeneous access over all sources
- Common Semantic Layer or Universe
Engaging New User Experience
Web Intelligence

Refined User Experience and Interactivity

- Refined user experience with new charting options and toolbar
- Expanded interactivity for ad hoc and guided analysis workflows
- On-the-fly data browsing and query result validation
Engaging New User Experience

Dashboards

Simpler Authoring Experience

- Common design experience across all data sources with support for new semantic layer
- Improved authoring via query integration and direct access to semantic layer
- Alert consumption via BI platform services
Insight at the Point of Decision
Improved Scalability for Dashboards

Increased Enterprise Readiness

- Increased enterprise readiness
- Fully leverages Universes
- Caching provides better performance
- Connectivity to event-based data sources
OPTIMIZED

- 64 bit | Virtual | Cloud
- Event Insight
- Monitor | Diagnose | Audit
- Best for SAP
Right Scale Deployment

Global Readiness and Scalability

- Multilingual BI delivery across geographic locations
- Enhanced scalability with virtualization and 64-bit support
- Continued heterogeneous platform and database support
Right Scale Deployment

Comprehensive System Monitoring and Diagnosis

- Automatic diagnosis for performance optimization
- Health dashboard, watches, and alerts for tailored system insight
- Complete auditing tracking for compliance and usage analysis
BI Launch Pad

Easier Content Navigation for All Users

- New self-service BI access making it easier to find all available content
- Enhanced filtering and search options reducing page scrolling
- Enhanced navigation for working with multiple documents at the same time
What is Event Insight?

SAP® BusinessObjects™ Event Insight is an information management solution that helps organizations continuously discover and understand business impact by aggregating mounds of **real time events**. By adding contextual insight to what has happened, Event Insight connects people in the business ecosystem for immediate action.
Event Insight – SAP BusinessObjects 4.0

Visualize
Deliver
(BI Consumers)

Model
Query
(Power Users)

Collect
Process
Manage
(IT)

Dashboard
Business User Alerts

Event SL

Business Event Streams
SAP BusinessObjects CSL

CEP and Event Network

Event Sources
I need to see the latest budget figures

My device is not compatible

What did we purchase last month?

What is the public opinion about our services?
SAP Business Objects Mobile BI Roadmap

Stunning new Interactive Visualizations with SAP BusinessObjects Visual Frameworks
SAP BusinessObjects Mobile BI 4.x available in early 2011

Advanced Visualization

- Stunning new interactive visualizations with SAP BusinessObjects Visual Frameworks

Interactive Content

- Reports and dashboards
- Instant access to all information helps you pinpoint exactly what you are looking for
- Leverage existing BI investments & skills to quickly reach mobile users
“With Explorer, executives could get answers in milliseconds ... brand profitability, customer buying patterns ... this could change the way decisions are made”

Sara Lee Corporation
SAP BusinessObjects Explorer Mobile

- Search across all data sources
- Contextual exploration
- Automated relevancy and chart generation
- High performance and scalability
- Share your results instantly
Explorer Best Mobile Ad-Hoc Analysis & Exploration

Over 140k downloads!
SAP Enterprise Mobile Solution
Mobility 2.0: Transform Your Enterprise

- Execs
- Line of Business Managers
- Task and Business Users
- Consumers and Ecosystem

- Mobile E-Commerce
- Mobile Marketing
- Self-Service
Mobilizing the Enterprise Is Complex

Multiple Platforms, Multiple Systems = Unmanageable Complexity!
SAP and Sybase’s Vision of the Unwired Enterprise

Business Information

Any SaaS Service
Any Application
Any Server Platform
Any Data

Integration

Unwired Platform

Information Mobility

Any Device
Any Person
Always Available

Collaboration

Manage
Analyze
Mobilize
Bringing Order to Chaos with SAP Sybase Unwired Platform

Create

Connect

Eclipse

Sybase Unwired Platform

SAP and Partner Applications

Custom Applications

Databases

J2EE Connector Architecture

Web Services

Software Applications

Files

SAP Applications

ORACLE

Microsoft

IBM

Example

Connect

Control

Management Console

Afaria

Consume

Example

Afaria

SAP Applications

Example

Microsoft

Example

ORACLE

Adobe PDF

Web2
Mobile Applications on Sybase Unwired Platform

Applications from SAP and Partners Expanding over Time

1. Sybase Mobile Sales
2. Sybase Mobile Workflow
3. Partner Applications
4. Custom Applications

Sybase Unwired Platform

SAP Business Suite

Third Party Apps
Manage Mobility with Full Confidence
Sybase Afaria
Manage Mobility with Complete Confidence

**Powerful**
- Highly customizable
- Remote distribution
- Process automation
- Proactive management

**Flexible**
- Hosted or on-premise
- Wide variety of devices
- Any network
- Any size deployment

**Secure**
- Industry-leading security
- Trusted compliance

**Full Lifecycle Device Management**
Provisioning, Production, Decommission
Managing and Securing the Device Lifecycle

**Manage**
- Assign membership/policies
- Configure devices
- OTA client delivery
- Application deployment

**Secure**
- Establish policies
- Initialize power-on password
- Install and encrypt data
- Install and configure AV, firewall, controls

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**Manage**
- Track asset
- Update/repair software
- Maintain/modify configuration
- Distribute/update files
- Software license tracking
- Schedule/automate activities
- Device remote control

**Secure**
- Back-up data
- Apply patch/security updates
- Enforce security policies
- Monitor/track security violations/threats
- Compliance activity logging

---

**Secure**
- Disable lost/stolen device
- Remote kill/lock
- Access violation lock
- “Data fading”
- Disable device, network, application access

**Manage**
- Reprovision/reimage device
- Replacement device-same user
- Repurposed device
- Redeploy software assets
- Restore data (after device kill)
Sybase takes the guesswork out of planning for the future by supporting the wide range of mobile operating systems available today, and staying ahead of the curve on the devices of tomorrow.
Afaria
Achieve Positive ROI Today

- Cox Communications saves approximately $500,000 per year by reducing downtime and IT man hours required to manage remote devices.

- BNSF Railway Company saves $7,500 per day on data entry labor costs with a mobile work order management system.

- Delta Air Lines is saving each of their field engineers 30-60 minutes each day with a mobility solution powered by Sybase iAnywhere.

- Pepsi Bottling Group saves $7 million per year using wireless field service application.

- Otis Elevator enjoys a more than 200% ROI, a decrease in non-productive travel time and an improvement in field efficiency.

- Tennant improves field service technician productivity, increases first time fixed rate, and reduces billing cycles from
## SAP and Sybase Together: # 1 in Mobile Enterprise Platform

### Industry Analysts

- **Gartner**
  - **Sybase Unwired Platform:** Positioned in the Leaders Quadrant for the 2008 Mobile Enterprise Application Platforms Magic Quadrant

- **IDC**
  - **Afaria:** Leader in mobile device management for the 8th year; Leader in mobile middleware for the 7th year

- **Forrester**
  - **Afaria:** Top ranked in Forrester Wave™ Mobile Device Management Solutions report

### Industry Awards

- **Sybase Unwired Platform:** 2009 Award for Mobile Enterprise Platforms

- **Afaria:** 2009 Global Product Excellence award for Wireless/Mobile Security Solution Customer Trust

- **Afaria:** Four 2008 Mobile Star Awards from MobileVillage®
REAL-TIME

- In-Memory Computing
Big Data.
Real-time.
In-Memory Computing

Technology that allows the processing of massive quantities of real time data in the main memory of the server to provide immediate results from analyses and transactions.
**Vision: In-Memory Computing**

**Technology Constrained Business Outcome**

- **Current Scenario**

  - Increasing Data Volumes
  - Calculation Speed
  - Type and # of Data Sources

  **Information Latency**

  - **Sub-optimal execution speed**
    - Lack of responsiveness due to data latency and deployment bottlenecks
    - Inability to update demand plan with greater than monthly frequency

  - **Lack of business transparency**
    - Sales & Operations Planning based on subsets of highly aggregated information, being several days or weeks outdated.

  - **Reactive business model**
    - Missed opportunities and competitive disadvantage due to lack of speed and agility
    - Utilities: daily- or hour-based billing and consumption analysis/simulation.
Vision: In-Memory Computing
Leapfrogging Current Technology Constraints

Future State

TeraBytes of Data In-Memory

Flexible Real Time Analytics
- Real-time customer profitability
- Effective marketing campaign spend based on large-volume data analysis

100 GB/s data throughput

Improve Business Performance
- IT rapidly delivering flexible solutions enabling business
- Speed up billing and reconciliation cycles for complex goods manufacturers
- Planning and simulation on the fly based on actual non-aggregated data

Freedom from the data source

Competitive Advantage
E.g. Utilities Industry:
- Sales growth and market advantage from demand/cost driven pricing that optimizes multiple variables – consumption data, hourly energy price, weather forecast, etc.
The Inflection Point
In-Memory Computing

Today

- Memory
- Cache
- Disk

Tomorrow

- In-Memory

Hardware

- Multi-core architecture
- Massive parallel scaling
- 64-bit address space
- Upto 2TB main memory
- 100GB/s data throughput
- 10X compression
- Massively parallel processing
- Virtually unlimited size
- Fast prefetch
- Volatile and/or persistent

Software

- Partitioning
- No Aggregate Tables
- Insert Only on Delta
- Compression
- Row and Column Store

Discrete

Integrated
What is SAP HANA?

SAP HANA is a **preconfigured out of the box Appliance**

- In-Memory software bundled with hardware delivered from the hardware partner (HP, IBM, CISCO, Fujitsu)
- **In-Memory Computing Engine**
  - Tools for data modeling, data and life cycle management, security, operations, etc.
- **Real-time Data replication** via Sybase Replication Server
- Support for multiple interfaces
- **Content packages** (Extractors and Data Models) introduced over time

Capabilities Enabled

- Analyze information in real-time at unprecedented speeds on large volumes of non-aggregated data.
- Create flexible analytic models based on real-time and historic business data
- Foundation for new category of applications (e.g., planning, simulation) to significantly outperform current applications in category
- Minimizes data duplication
Large CPG company wants to analyze all their POS of data to predict demand

Target - stock shelves with 48 hour turn-around

Data Set is 460 Billion records (40 Terabytes)

Unable to analyze data using current database platform

120 TB in traditional system = 40TB HANA

20x Faster Analysis with 200x Better Price/Performance

Moved from 5 days down to 2 days for shelf turnaround

Eliminates out of stock scenarios during promotions
# In Memory Roadmap

<table>
<thead>
<tr>
<th></th>
<th>Today – Explorer Accelerated</th>
<th>HANA 1.0</th>
<th>HANA 1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOTE: HANA requires SAP BusinessObjects BI 4.0 or better</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Query API</strong></td>
<td>N/A</td>
<td>SQL MDX BICS</td>
<td>SQL MDX BICS</td>
</tr>
<tr>
<td><strong>Data Loading</strong></td>
<td>Data Services</td>
<td>Data Services Sybase Replication Server SQL Insert</td>
<td>Data Services Sybase Replication Server SQL Insert</td>
</tr>
<tr>
<td><strong>Modeling Tool</strong></td>
<td>Index Designer (Data Services)</td>
<td>SAP In-Memory Modeling Studio</td>
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</tr>
<tr>
<td><strong>SAP Connectivity</strong></td>
<td>SAP BW</td>
<td>SAP ERP 4.6c+ SAP BusinessSuite 6.0+</td>
<td>SAP ERP 4.6c+ SAP BusinessSuite 6.0+ SAP BW</td>
</tr>
<tr>
<td><strong>3rd Party Data Support</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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SAP - The Future is now

- EASY
- OPTIMIZED
- REAL-TIME READY
Questions??
Thank you!