



SAP Mobile Business Intelligence

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Who is Analytics8?

- Business Intelligence Enablement and Optimization Consulting Group
 - Full-service Data Warehouse Strategy thru Implementation
 - Strong focus on Dashboard Analytics
 - Established in 2002: Sydney * Melbourne * Chicago IL * Raleigh NC * Dallas TX
-

— **Data Warehousing**

- Strategy & Assessments
- Design & Implementation
- ETL Design & Optimization
- Data/Report Migration

— **Business Intelligence**

- Strategy & Assessments
 - Dashboards
 - Centers of Excellence
 - Quickstarts
 - Help Desk
 - Training and Support
 - Operational Reporting
-

Vertical Areas of Expertise



Finance

- Australian Securities Exchange (ASX)
- Bank of America
- Chicago Mercantile Exchange (CME)
- Guggenheim Partners
- JP Morgan Chase
- Mesirow Financial
- National Australia Bank (NAB)

Healthcare

- GlaxoSmithKline
- Advocate HealthCare
- American Imaging Management
- Catholic Health East
- Naval Medical Center San Diego
- Spectrum Health
- Trinity Health
- Trizetto

Insurance

- BCBS – North Carolina
- Accident Fund
- Blue Care Network
- CNA
- IAG
- ING
- Zurich

Manufacturing

- Honda R&D Americas
 - Honda Jet Aircraft
 - New Era Optical
 - Pernod Ricard Pacific
 - Re:Think Recycling
 - RG Barry
 - Volkswagen Group of America
-

- What Is Mobile Business Intelligence (BI)?
- Transformation of Technology Is Driving Further Adoption
- The Market Is Changing Very Rapidly
- Why You Should Still Invest in Mobile BI
- Unique Challenges of BI on Mobile Devices
- Mobile BI Methodology to Improve Chances of Success
- 6 Things You Need To Be Doing To Get Started
- Technical Deep Dive in configuring Mobile BI

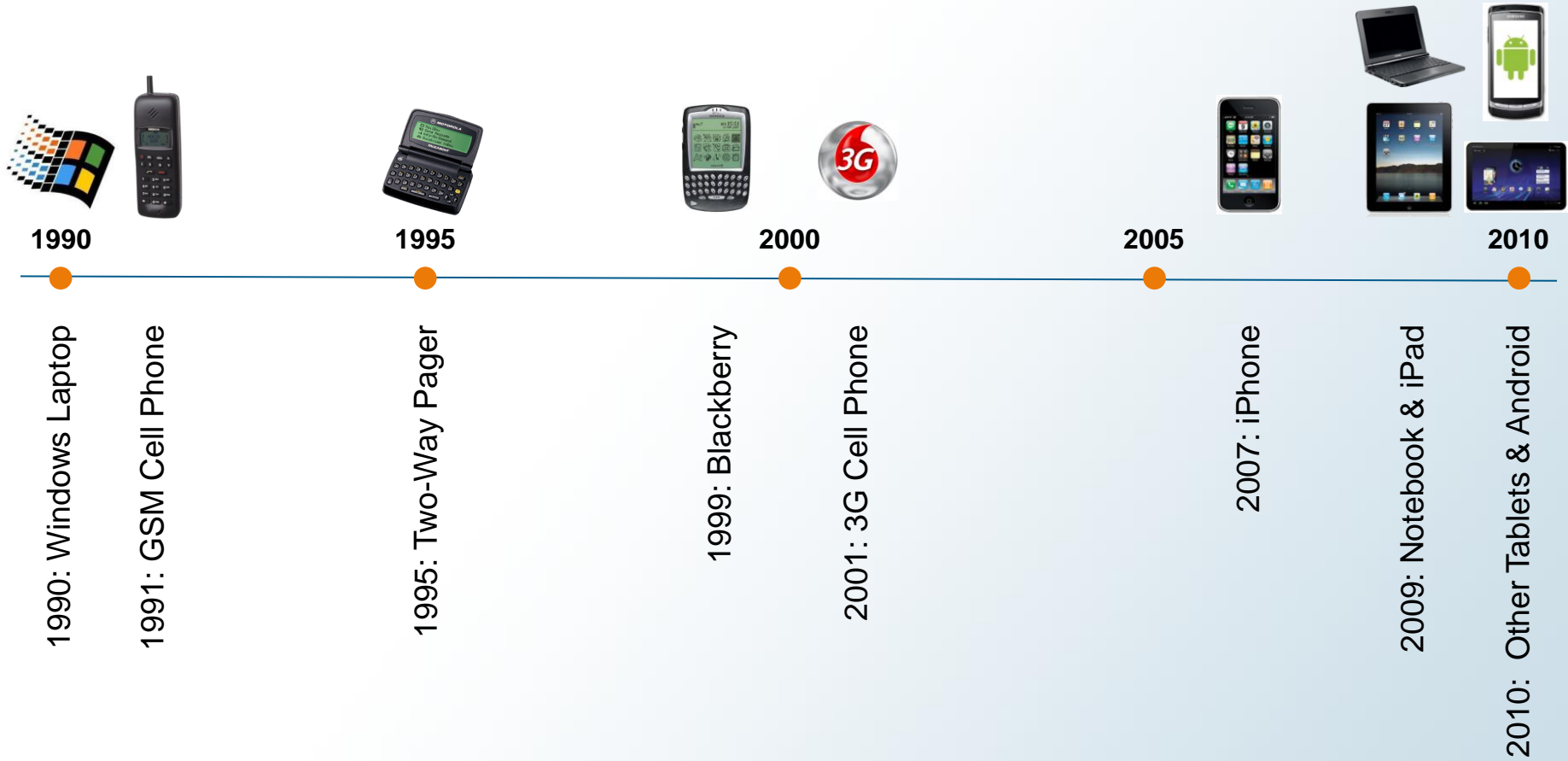
What Is Mobile Business Intelligence?

– Wikipedia

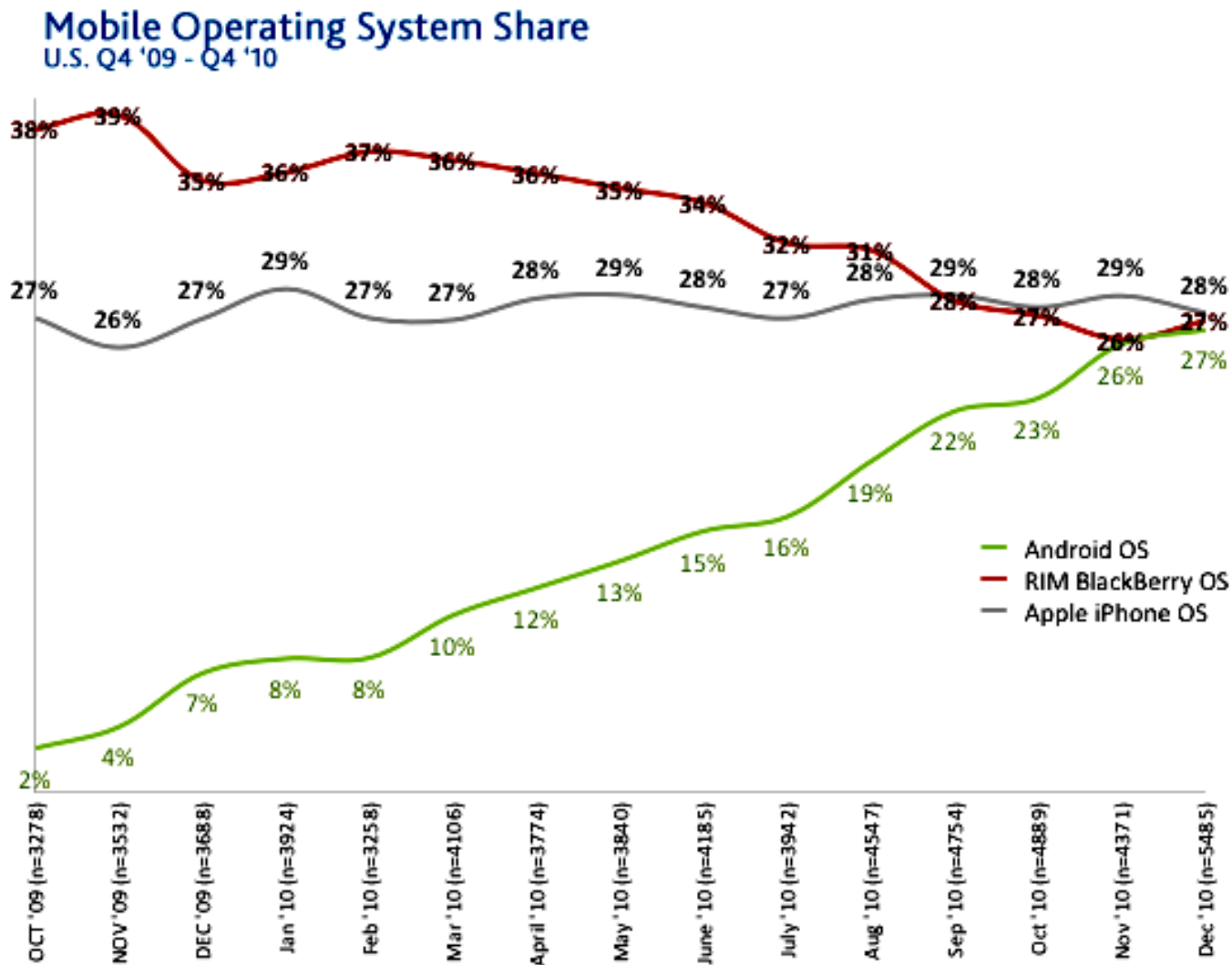
- “**Mobile Business Intelligence** (Mobile BI or Mobile Intelligence) refers to the distribution of business data to mobile devices such as smartphones and tablet computers.”
 - “**Business intelligence (BI)** mainly refers to computer-based techniques used in identifying, extracting, and analyzing business data, such as sales revenue by products and/or departments, or by associated costs and incomes. BI technologies provide historical, current and predictive views of business operations. Common functions of business intelligence technologies are reporting, online analytical processing, analytics, data mining, process mining, business performance management, benchmarking, text mining and predictive analytics.”
- For today’s purpose we are focusing on ***interactive*** SAP content on mobile devices!



Transformation of Mobile Devices

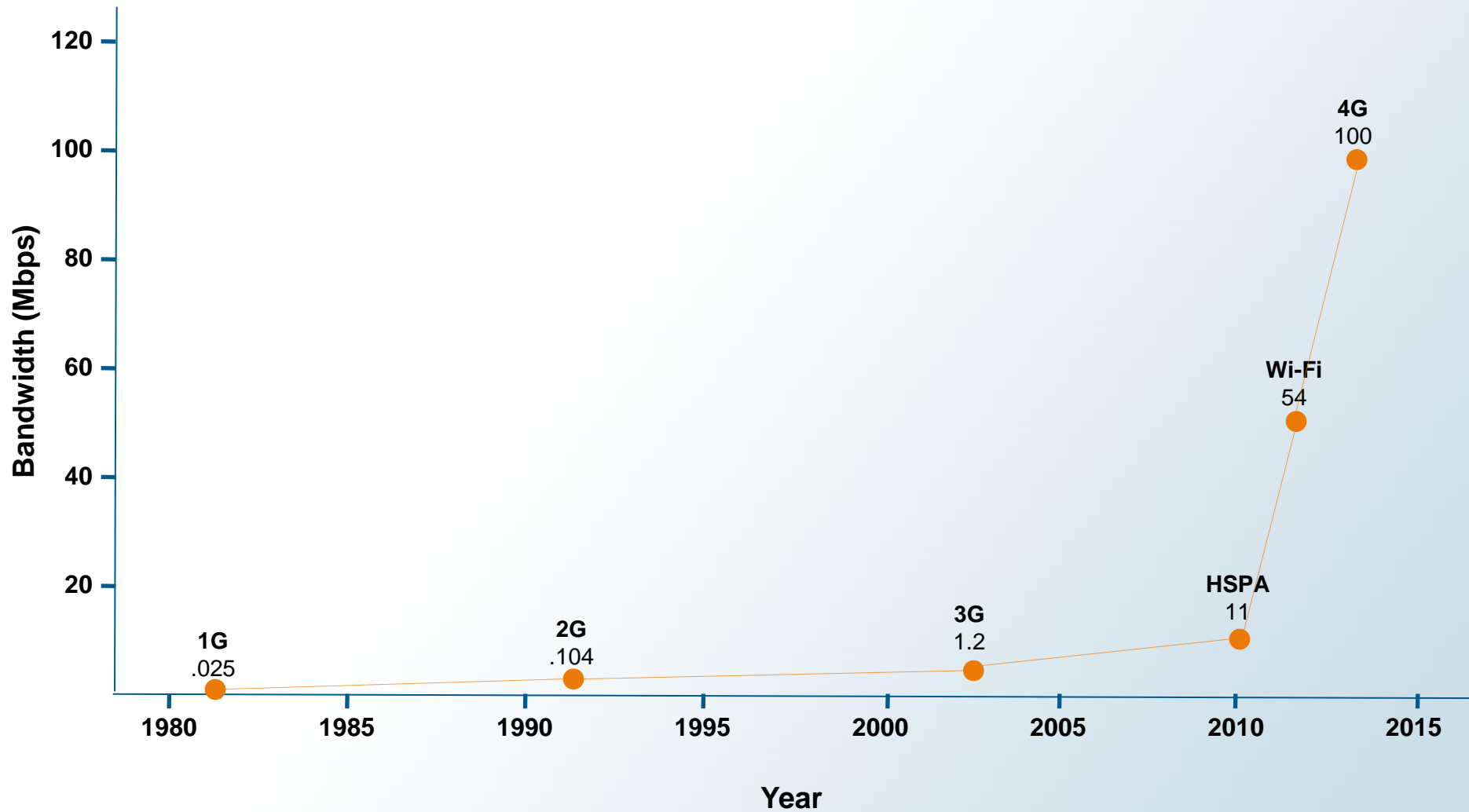


Mobile Platform Shares Change Rapidly



Source: The Nielsen Company

Bandwidth Availability



Thus the market for mobile BI is heating up

Forrester expects U.S. tablet sales will **total 195 million** between 2010 and 2015, grow from 10.3 million in 2010 to 44 million in 2015, and **eclipse laptop sales** by roughly 5 million units in 2015.

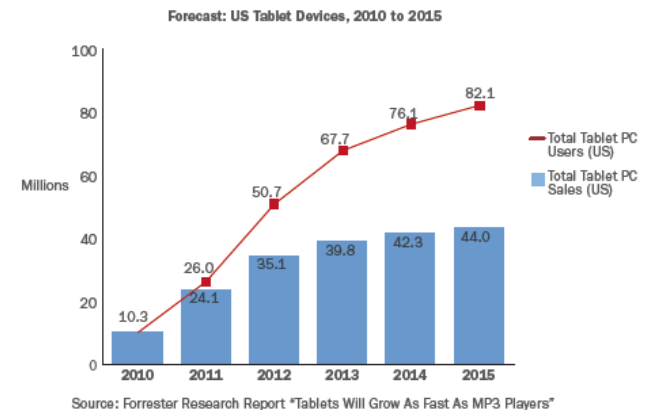
“Tablets Will Grow As Fast As MP3 Players”, Forrester Research, January 11th, 2011

“**Thirty percent** of IT shops are piloting or planning tablet apps. And a further 43% of firms in North America and Europe are interested in tablets. **Only one in four** firms have no tablet plans.”

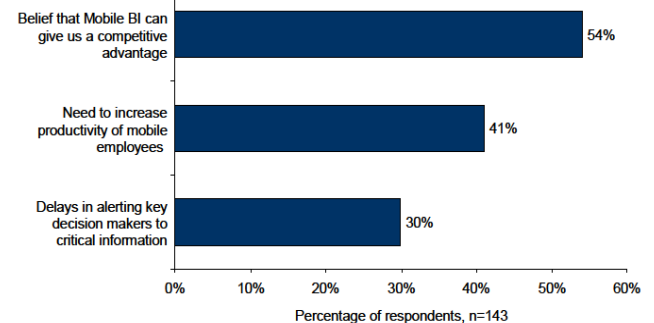
“How iPads Enter The Workforce”, Forrester Research, October 26th, 2010

“Mobile BI will significantly expand the population of BI users to include a **more mainstream audience**, and this opportunity will **attract significant investment**.”

“Predicts 2011: New Relationships Will Change BI and Analytics”, Gartner Research, November 25th, 2010



Pressures Driving Mobile BI Adoption



Source: Aberdeen Group, December 2010

Why Should You Make Mobile BI a Priority?

IDC Research Survey:

- As early as 2008, about 72 percent of U.S. workers worked at least part of the time on a mobile basis.
- The percentage of mobile workers will grow to about 76 percent by 2013, representing about 120 million workers.



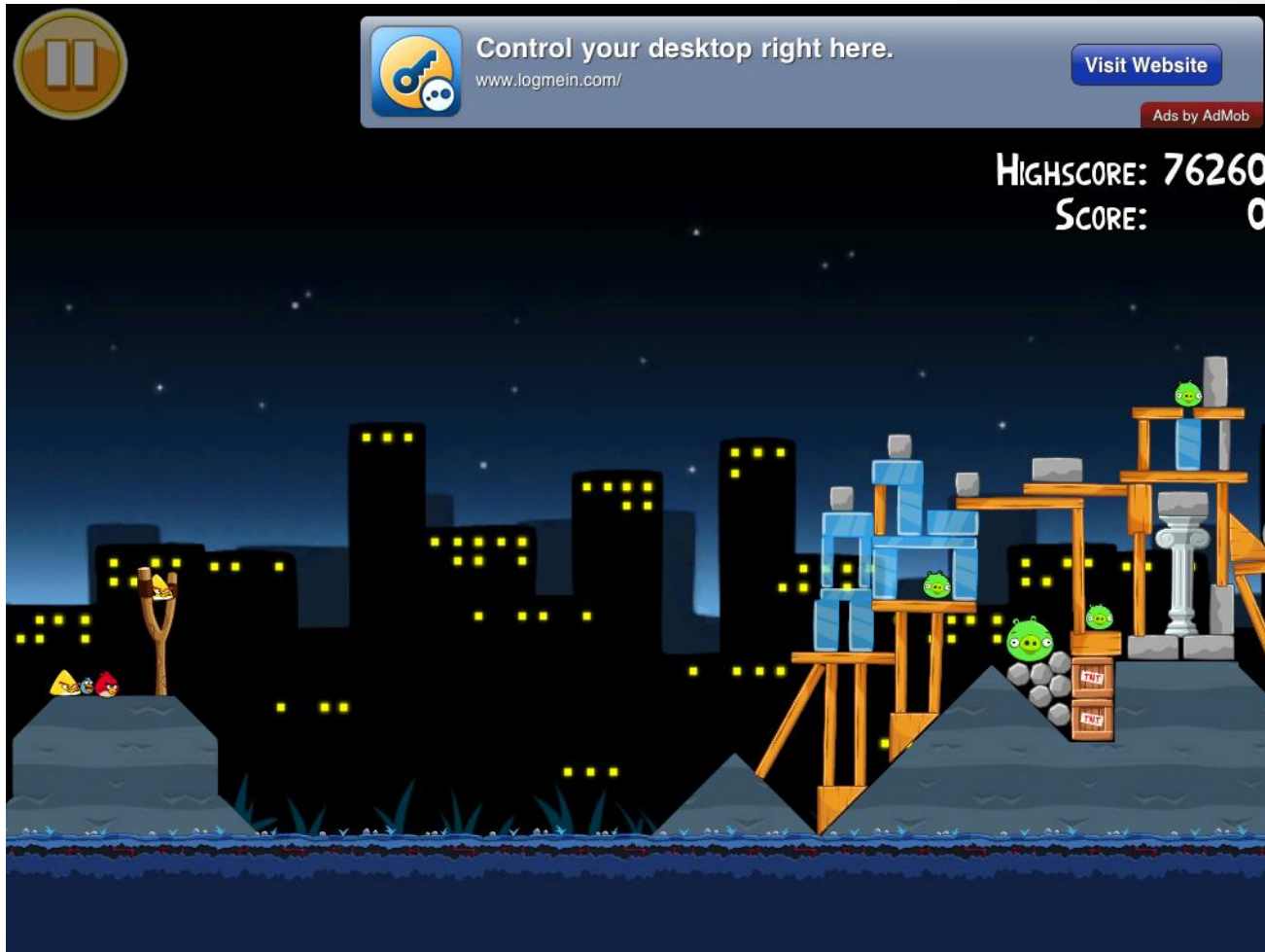
IDG.net Survey:

- Over 66% of respondents achieve or expect to achieve increased productivity from their mobile devices.
- In addition:
 - 64% see faster access to real-time business-critical information
 - 37% see improved customer service
 - 30% see higher employee morale
 - 16% see reduced costs

Why Should You Make Mobile BI a Priority?

- And the REAL reason...

- So your boss can get his reports delivered to the same device he plays Angry Birds on!



— **Form Factor**

- No mouse pointer
- Limited screen real estate
- Limitations on projector connections and printing
- Rapidly changing

— **Duplicative Device?**

- Does it un-clutter or is it another device that has to be carried in your bag? If it doesn't replicate other essential functions such as email, calendar, etc then it adds a burden rather than relieving one

- Treat it as a separate project or at least its own phase
- Perform device selection and testing
- Assess the different user groups and their objectives
- Address security/access issues
- Pilot. Test. Test. Test.
- Start very small

6 Things You Need To Do Now

1. Implement usage tracking on your existing BI system
2. Identify your pilot team
3. Refine your requirements for mobile
4. Get devices in the hands of pilot users
5. Try sample/demo apps such as Explorer on Demand
6. Do a Proof of Concept with your SAP BI vendor

- MOBI for iPad and iPhone (same config for Android etc when they are available) vs MOBI for Legacy Devices (Windows, Symbian, Blackberry)
- Implementation Varies with BI 4.0 and XI 3.1
- Explorer Configuration for iPad and iPhone

- MOBI for iPad and iPhone vs MOBI for Legacy Devices
- Mobile BI now has two mobile architectures:
 - One is for Legacy BlackBerry, Symbian, and Windows Mobile devices.
 - One is for modern devices, e.g. iOS (Currently only iPad. Same architecture will support Android)
- Both are supported on XI 3.1 and BI 4.0, and both are completely independent of each other.

- MOBI for iPad and iPhone vs MOBI for Legacy Devices

- The “**Mobile for BlackBerry (etc)**” architecture
 - Relies on Windows services, often called “Mobile Server”, to communicate directly between BOE and the Mobile BI application on the device.

 - In XI 3.1, these services had to be installed via an add-on install, whereas in BI 4.0, these services are included in the main BOE platform install. You can see them in the CCM as VMS and VAS.

 - Also part of this offering is a web application that enables distribution of the mobile app to devices. This MobileOTA (Over The Air) WAR file contains the client files for BlackBerry, Symbian and Windows.

- MOBI for iPad and iPhone vs MOBI for Legacy Devices
- The “**Mobile for iOS**” architecture
 - Completely redesigned. All communication between the app on the device and the BOE backend runs via new web app, the MobileBIService (MobileBIService.WAR).
 - Neither the Mobile Server, nor the MobileOTA.WAR file used in “Mobile for Blackberry etc” are used.
 - The client app is available for download on the Apple iTunes store.
 - The required MobileBIService.WAR file is available for BOE XI 3.1 with SP4, and will be available for BI 4.0 with SP02. The 3.1 version of the .WAR file does not work on BI 4.0 deployments.

Configuration Deep Dive

Implementation Varies with BI 4.0 and XI 3.1

Steps for XI 3.1 deployments	iOS only	Blackberry (etc) only	Mixed
Patch BOE to SP4	Yes	No	Yes
Confirm Mobile Server (add-on install) is installed	Yes ⁺	Yes	Yes
Patch Mobile Server (add-on install) to SP4 (separate patch)	Yes	No*	Yes
Copy MobileBIService.war from install directory and deploy on webapp server	Yes	No	Yes
Configure Mobile Server services (VMS/VAS) via config files	No	Yes	Yes
Deploy MobileOTA.war file for BBerry (etc) client install	No	Yes	Yes
Download Mobile iOS client from Apple itunes store	Yes	No	Yes

⁺ Mobile Server is only needed so that the Mobile Server patch can drop the WAR file into the install directory.

* However, the Mobile Server needs to be patched to the same level as BOE

The image shows three overlapping screenshots of configuration files. The top-left window is 'server.config - WordPad' showing configuration for VMS. The top-right window is 'server.config - WordPad' showing configuration for Authentication. The bottom window is 'mobi.properties - Notepad' showing mobile device categories and request sources.

```

server.config - WordPad
# $Id: server.config 28982 2008-01-03 21:52:21Z hmak $
#
# config for VMS
VERSION = 6.0
[server]
SERVER_ID=VMS_
[comm]
BINDTO_PORT=11
MANAGEMENT_PORT=
EXTERNAL_HOSTNAME=
# common across all
INCLUDE_CONFIG_FILES=
# vim:noet

server.config - WordPad
# $Id: server.config 27498 2007-10-01 19:12:19Z hmak $
#
# config for Authentication
VERSION = 6.0
[server]
SERVER_ID=AUTH_SERVER
[comm]
BINDTO_PORT = 1101
MANAGEMENT_PORT =
EXTERNAL_HOSTNAME=
# common across all
INCLUDE_CONFIG_FILES=
# vim:noet

mobi.properties - Notepad
# This is a configuration file for Mobi. This file should be
# carefully edited.
#
# Definition of 'Mobile-ready' documents for different request
# sources
#
# <requestSrc>.corporateCategory=cat1,cat2
# <requestSrc>.personalCategory=personalCat1,personalCat2
#
# Only documents that belong to the specified categories will be
# returned for a particular requestSrc.
# If the entries for a particular requestSrc is missing, then the
# values mentioned for "default" requestSrc will be used.
#
# Valid values for requestSrc are:
# default, iphone, ipad, bbphone, bbtablet,
# androidphone, androidtablet
#
#default
default.corporateCategory=Mobile
default.personalCategory=Mobile
#ipad
ipad.corporateCategory=Mobile
ipad.personalCategory=Mobile
#iphone
iphone.corporateCategory=Mobile
iphone.personalCategory=Mobile
  
```

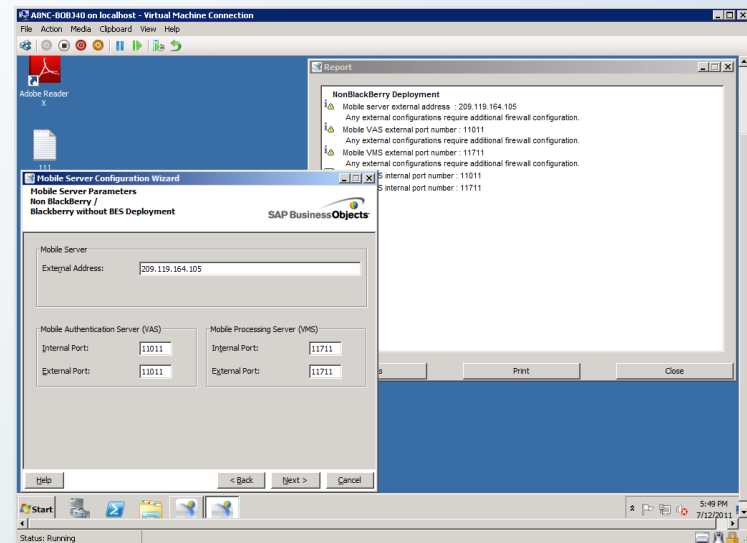
For SAP BusinessObjects Enterprise 3.1 SP04,
MobileBIService.war is located:
[Install directory]\BusinessObjects Enterprise
12.0\java\applications

Implementation Varies with BI 4.0 and XI 3.1

Steps for BI 4.0 deployments	iOS only	Blackberry (etc) only	Mixed
Patch BOE to SP02	Yes	yes	yes
Copy MobileBIService.war from install directory and deploy on webapp server	Yes	No	Yes
Configure Mobile Server services (VMS/VAS) via wizard	No	Yes	Yes
Deploy MobileOTA.war file for BBerry (etc) client install	No	Yes	Yes
Download Mobile iOS client from Apple itunes store	Yes	No	yes

```
mobi.properties - Notepad
File Edit Format View Help
# This is a configuration file for Mobi. This file should be
# carefully edited.
#
# Definition of 'Mobile-ready' documents for different request
# sources
#
# <requestSrc>.corporateCategory=cat1,cat2
# <requestSrc>.personalCategory=personalCat1,personalCat2
#
# Only documents that belong to the specified categories will be
# returned for a particular requestSrc.
# If the entries for a particular requestSrc is missing, then the
# values mentioned for "default" requestSrc will be used.
#
# Valid values for requestSrc are:
#   default, iphone, ipad, bbphone, bbttablet,
#   androidphone, androidtablet
#
#
#default
#default.corporateCategory=Mobile
#default.personalCategory=Mobile
#
#ipad
#ipad.corporateCategory=Mobile
#ipad.personalCategory=Mobile
#
#iphone
#iphone.corporateCategory=Mobile
#iphone.personalCategory=Mobile
```

For SAP BusinessObjects Enterprise 4.0 SP02,
MobileBIService.war is located:
[Install directory]\Mobile 14\Client



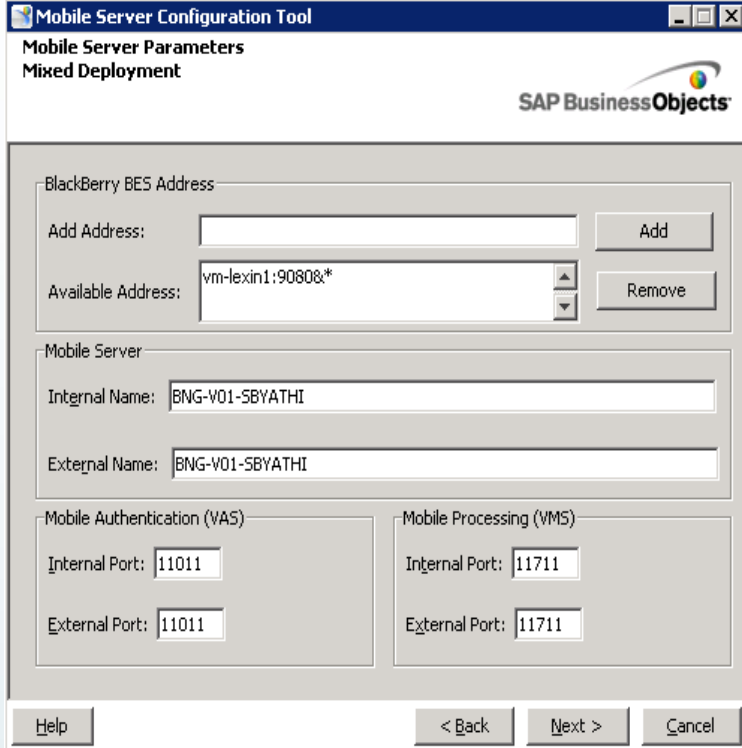
BI 4.0 Improvements...

Simplified Configuration & Setup

- Wizard-based server configuration
- Central management across device types
- Auto installation with pre-configured Setup

Improved SAP BOE platform Integration

- Users & services managed centrally
- Mobile setup with BOE Platform install
- Internationalization and globalization
- Platform support and auditing



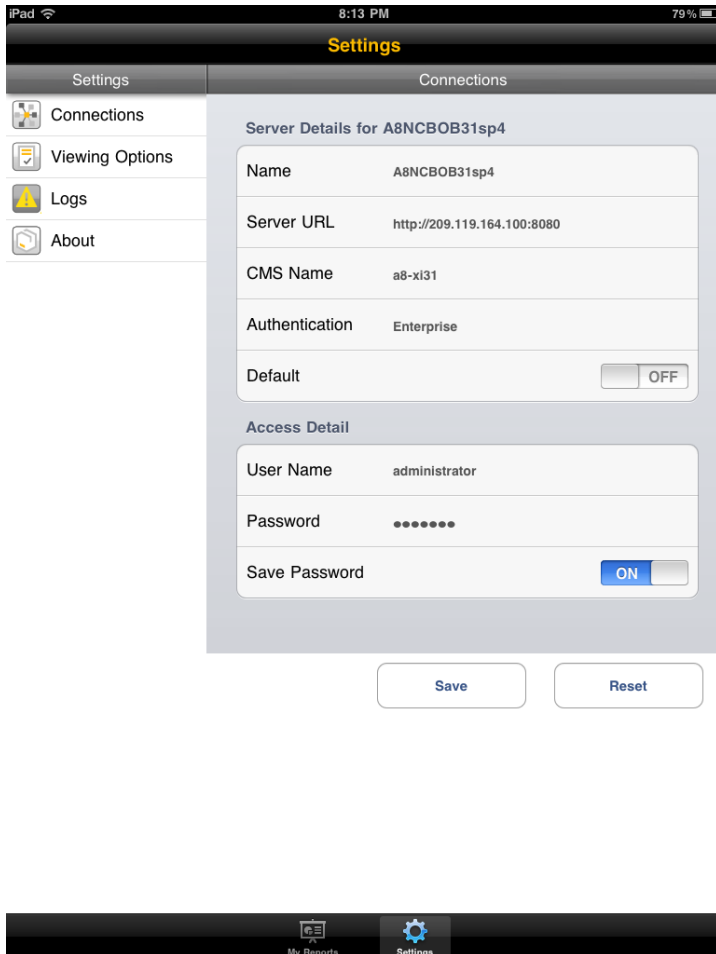
The screenshot shows the 'Mobile Server Configuration Tool' window, titled 'Mobile Server Parameters Mixed Deployment'. It features the SAP BusinessObjects logo in the top right corner. The configuration is organized into several sections:

- BlackBerry BES Address:** Includes an 'Add Address' field with an 'Add' button, and an 'Available Address' field showing 'vm-lexin1:9080&*' with an up/down arrow and a 'Remove' button.
- Mobile Server:** Contains 'Internal Name' and 'External Name' fields, both populated with 'BNG-V01-SBYATHI'.
- Mobile Authentication (VAS):** Contains 'Internal Port' and 'External Port' fields, both set to '11011'.
- Mobile Processing (VMS):** Contains 'Internal Port' and 'External Port' fields, both set to '11711'.

At the bottom, there are navigation buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

Configuration Deep Dive

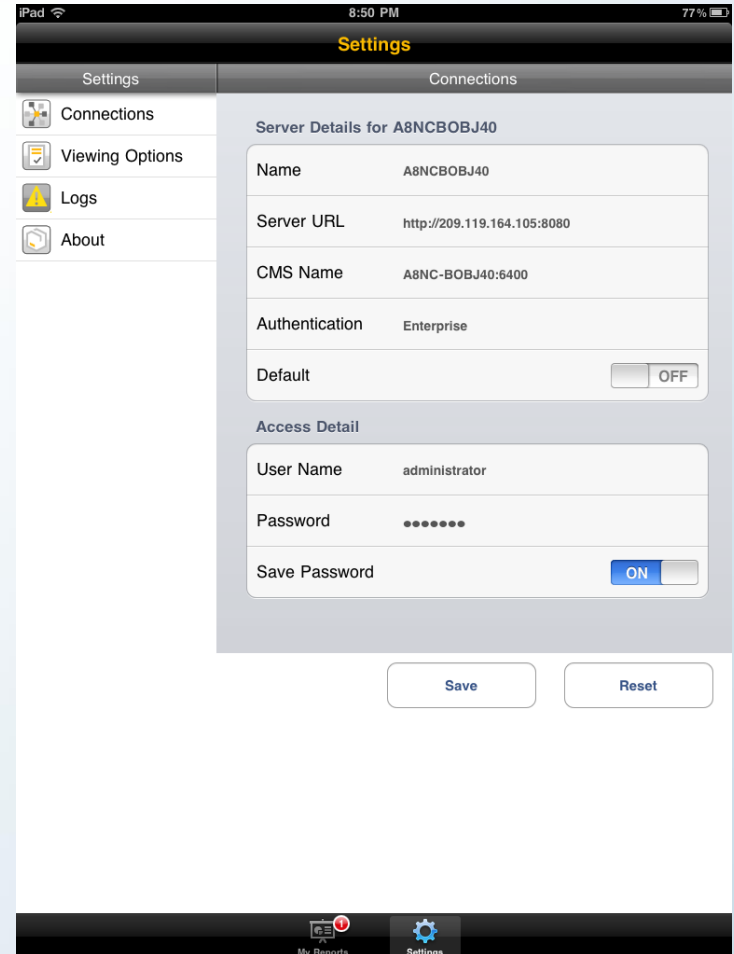
- Implementation Varies with BI 4.0 and XI 3.1 (except in client config!)



The screenshot shows the 'Settings' app on an iPad. The 'Connections' tab is selected. The left sidebar contains 'Connections', 'Viewing Options', 'Logs', and 'About'. The main area displays 'Server Details for A8NCBOB31sp4'. The fields are: Name (A8NCBOB31sp4), Server URL (http://209.119.164.100:8080), CMS Name (a8-xi31), Authentication (Enterprise), and Default (OFF). Below this is the 'Access Detail' section with User Name (administrator), Password (masked with dots), and Save Password (ON). At the bottom are 'Save' and 'Reset' buttons.

Server Details for A8NCBOB31sp4	
Name	A8NCBOB31sp4
Server URL	http://209.119.164.100:8080
CMS Name	a8-xi31
Authentication	Enterprise
Default	<input type="checkbox"/> OFF

Access Detail	
User Name	administrator
Password	••••••••
Save Password	<input checked="" type="checkbox"/> ON



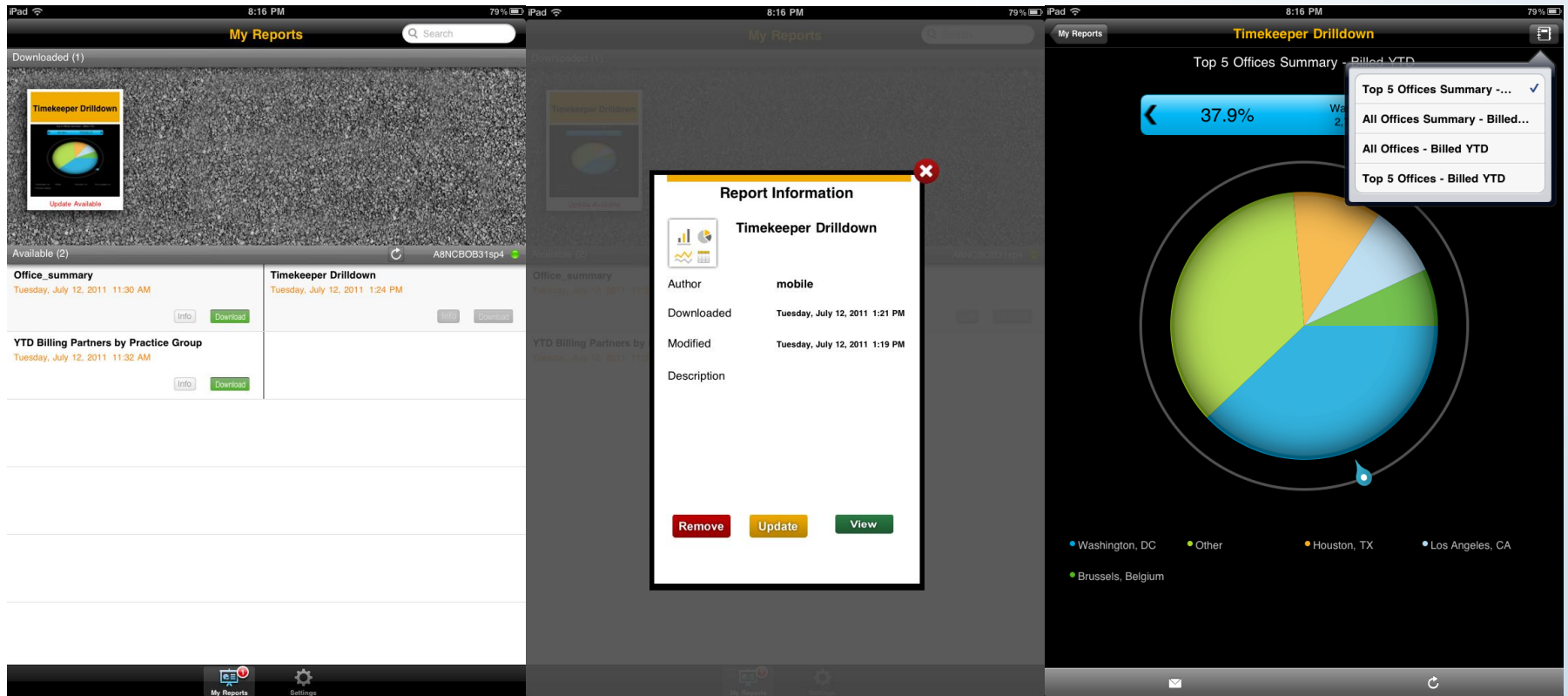
The screenshot shows the 'Settings' app on an iPad. The 'Connections' tab is selected. The left sidebar contains 'Connections', 'Viewing Options', 'Logs', and 'About'. The main area displays 'Server Details for A8NCBOBJ40'. The fields are: Name (A8NCBOBJ40), Server URL (http://209.119.164.105:8080), CMS Name (A8NC-BOBJ40:6400), Authentication (Enterprise), and Default (OFF). Below this is the 'Access Detail' section with User Name (administrator), Password (masked with dots), and Save Password (ON). At the bottom are 'Save' and 'Reset' buttons.

Server Details for A8NCBOBJ40	
Name	A8NCBOBJ40
Server URL	http://209.119.164.105:8080
CMS Name	A8NC-BOBJ40:6400
Authentication	Enterprise
Default	<input type="checkbox"/> OFF

Access Detail	
User Name	administrator
Password	••••••••
Save Password	<input checked="" type="checkbox"/> ON

Configuration Deep Dive

— MOBI Sample Screen Shots...

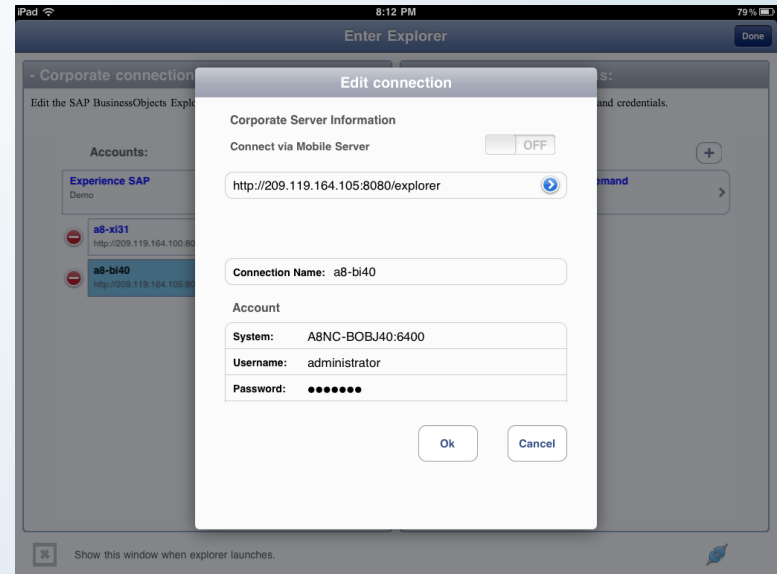
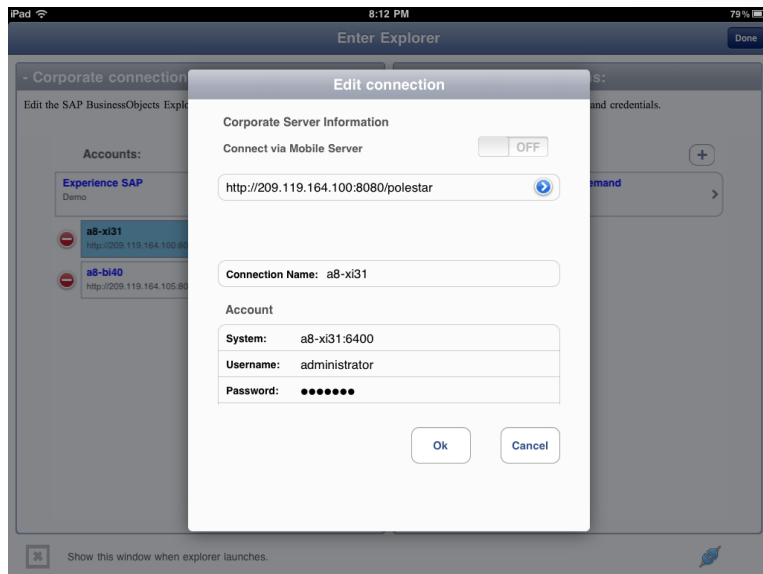


Configuration Deep Dive

— Explorer Configuration for iPad and iPhone

— NONE!

- Simply download the app from iTunes and enter the same URL as you would in your browser.
 - [http://xxx.xxx.xxx.xxx\[:8080\]/polestar](http://xxx.xxx.xxx.xxx[:8080]/polestar) - For XI 3.1
 - [http://xxx.xxx.xxx.xxx\[:8080\]/explorer](http://xxx.xxx.xxx.xxx[:8080]/explorer) - For BI 4.0
- Of course if you don't have Explorer installed in your BOBJ environment yet you'll need to download SBOP Explorer installation for XI 3.1 or BI 4.0



Thank you!

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