

How to mobilize your SharePoint and BI



Why mobile device

- By the end of 2013, the number of mobile-connected devices will exceed the number of people on earth
(source: Cisco VNI Mobile 2012)
- 33% of BI will be consumed on Mobile Devices by the end of 2013 (Source: Gartner)
- Enterprise tablet adoption is estimated to grow by almost 50% per year (source: Forbes)
- By 2015 mobile app development projects will outnumber native PC projects by a ratio of 4-to-1
(source: Forbes)

Trends impacting the way we work

Devices



1 billion

smartphones by 2016,
350M of those being used
at work

People



82%

of the world's online
population engages in
social networking

Cloud



50%

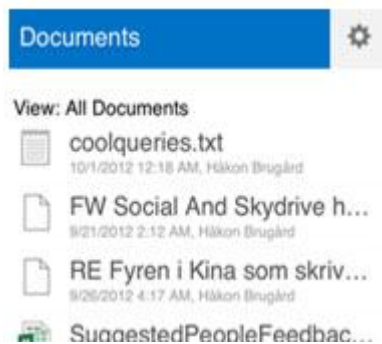
of enterprise customers are
“on the road”
to cloud

SharePoint Server 2013 offers new, optimized viewing experiences across different mobile platform

- Optimized mobile browser experience
- Device channels
- Push notifications
- Location
- Business intelligence content
- Office Web Apps

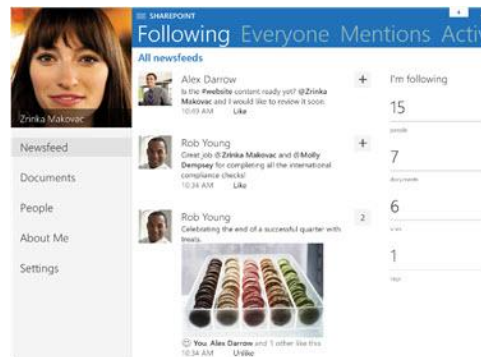


Mobile Browser



Support across different mobile devices, including touch for tablets and phone

Native Apps



Rich native apps experience to business social interactions and collaboration

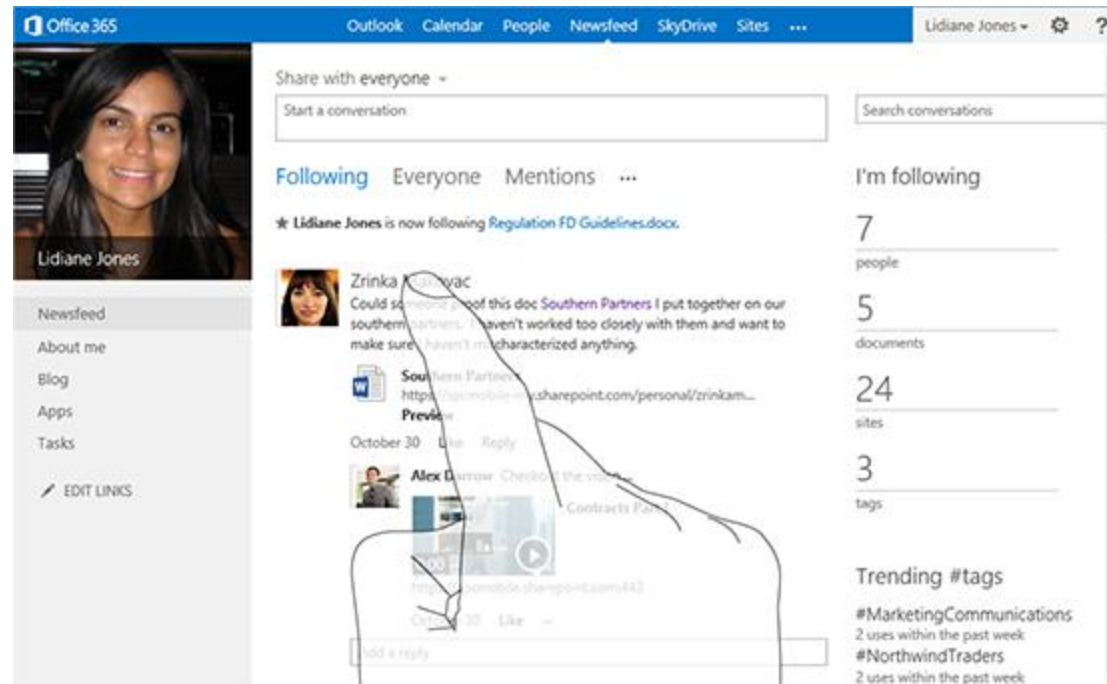
Office Hub



A hub to all your doc storage services and Office rich editing experience

Tablet Touch Experience

- Clean User Interface
- Large touch targets
- Filtering and navigation
- HTML 5 app like experience



View on a smartphone browser



A bike that will leave you saying 'go Adventure Works or go home.' It doesn't matter if biking is your profession, your passion or just a great pastime,

World Bike Expo @ Copenha...

9/27/2011 8:15 PM

After party for Off-Road series

9/27/2011 8:17 PM

Alivio 8 Speed Launch Campa...

9/27/2011 8:09 PM

AdvWorks

Shared Documents

- Pictures

1-6

Documents



View: All Documents



coolqueries.txt

10/1/2012 12:18 AM, Håkon Brugård

Site Contents



Lists, Libraries, and other Apps

Calendar

New Item

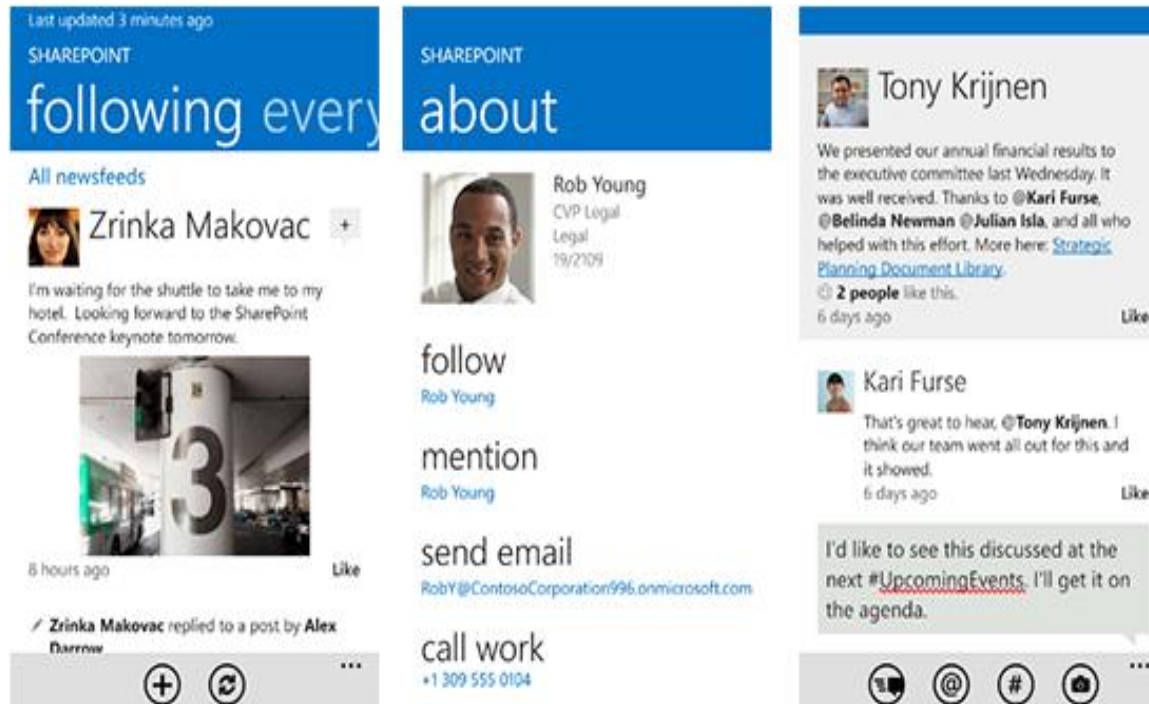


Task Name*

Start Date

SharePoint Newsfeed App

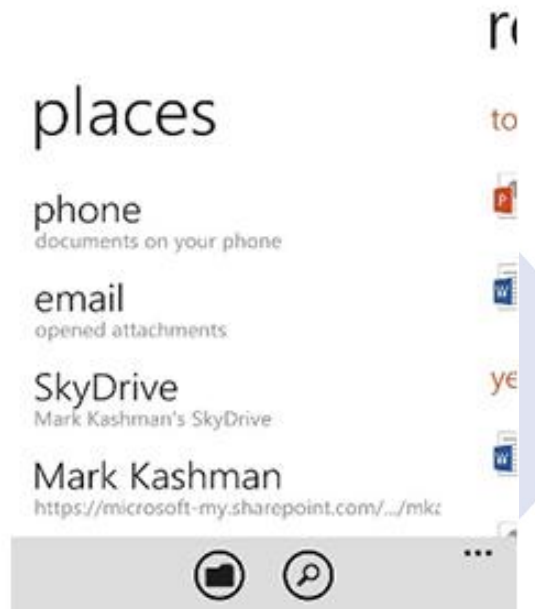
- Helps you keep up with important updates
- Create new status posts, use #hashtags, @mention direct to a colleague
- Add comments to ongoing discussions, read and "like" your colleagues' posts
- Easily get to everything you are following



The screenshot displays the SharePoint Newsfeed App interface. At the top, a blue header reads "SHAREPOINT following every" and "SHAREPOINT about". Below this, the "All newsfeeds" section shows a post by Zrinka Makovac: "I'm waiting for the shuttle to take me to my hotel. Looking forward to the SharePoint Conference keynote tomorrow." The post includes a photo of a hallway with a large number '3' and a "Like" button. Below the post, it says "Zrinka Makovac replied to a post by Alex Darrow". To the right, a profile for Rob Young (CVP Legal, 19/2/09) is shown with options to "follow", "mention", "send email" (with email address RobY@ContosoCorporation996.onmicrosoft.com), and "call work" (+1 309 555 0104). On the far right, a post by Tony Krijnen is visible, mentioning Kari Furse and a link to a "Strategic Planning Document Library". A comment from Kari Furse is also shown: "I'd like to see this discussed at the next #UpcomingEvents. I'll get it on the agenda." The bottom of the app features a navigation bar with icons for adding content, refreshing, and more options.

Integration with Windows Phone Office Hub

- Find documents, open them, make last-minute changes to them, or even start new documents
- Quickly find and open documents you've recently used
- Access to your documents wherever you are using SkyDrive Pro technology



Comparing Device Channel with Responsive Web Design

DEVICE CHANNEL

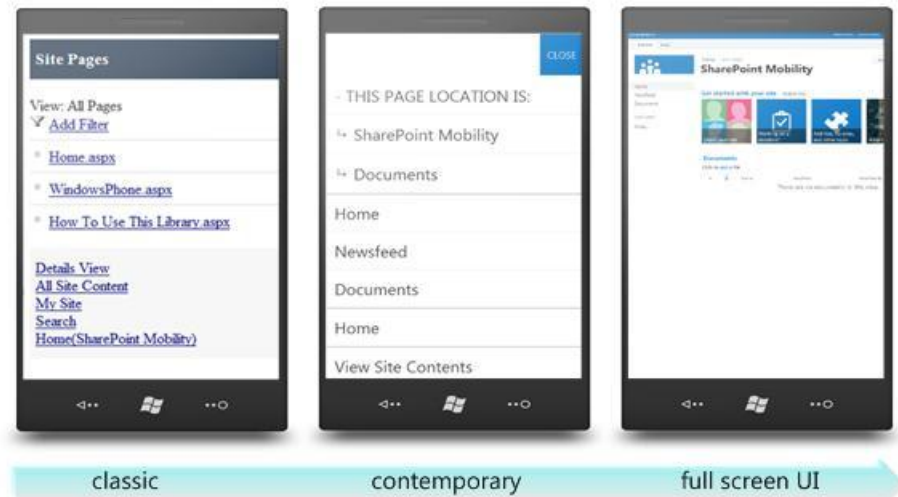
- Device management
- Different HTML content for each device
- More management to support new devices and different browsers
- More flexibility
- Vary-By User Agent response header for SEO

RESPONSIVE WEB DESIGN

- Property management
- Same HTML content for all devices
- Less management to support different browsers
- Supported by CSS
- Preferred by Internet Search engines

SharePoint with Mobile Device Channels

- Default Mobile options
 - Enabled by the “Mobile Browser View” Feature
- Preview
 - Emulator
 - IE Dev tools
 - SharePoint ribbon
 - URL parameters



SharePoint with Mobile Device Channels

- Configuring devices channels you need to activate/deactivate the following site features:
 - Publishing - Activate
 - Mobile Browser View - Deactivate
 - Wiki Page Home Page – Deactivate
- Target different devices based on their user agent string
- User agents are wildcard include

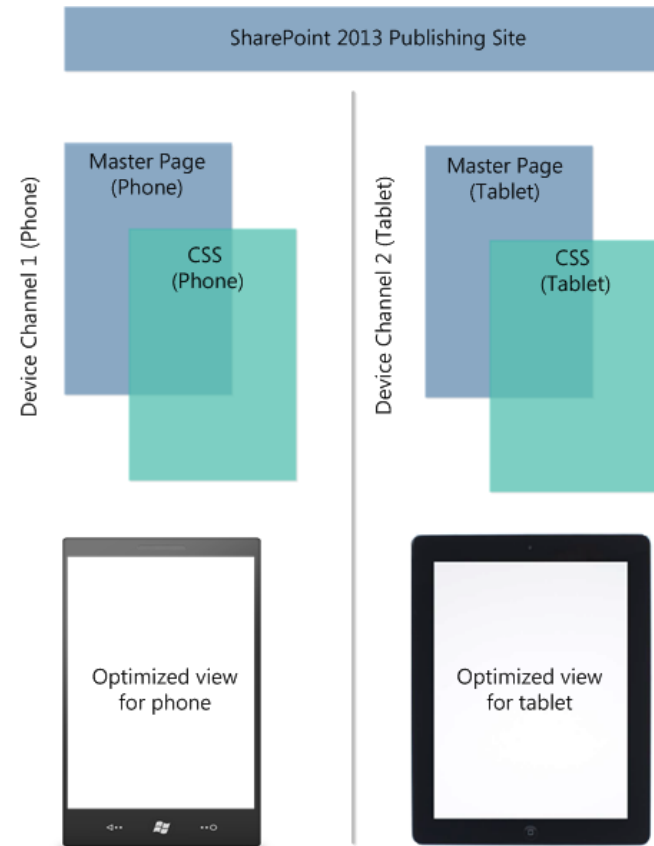
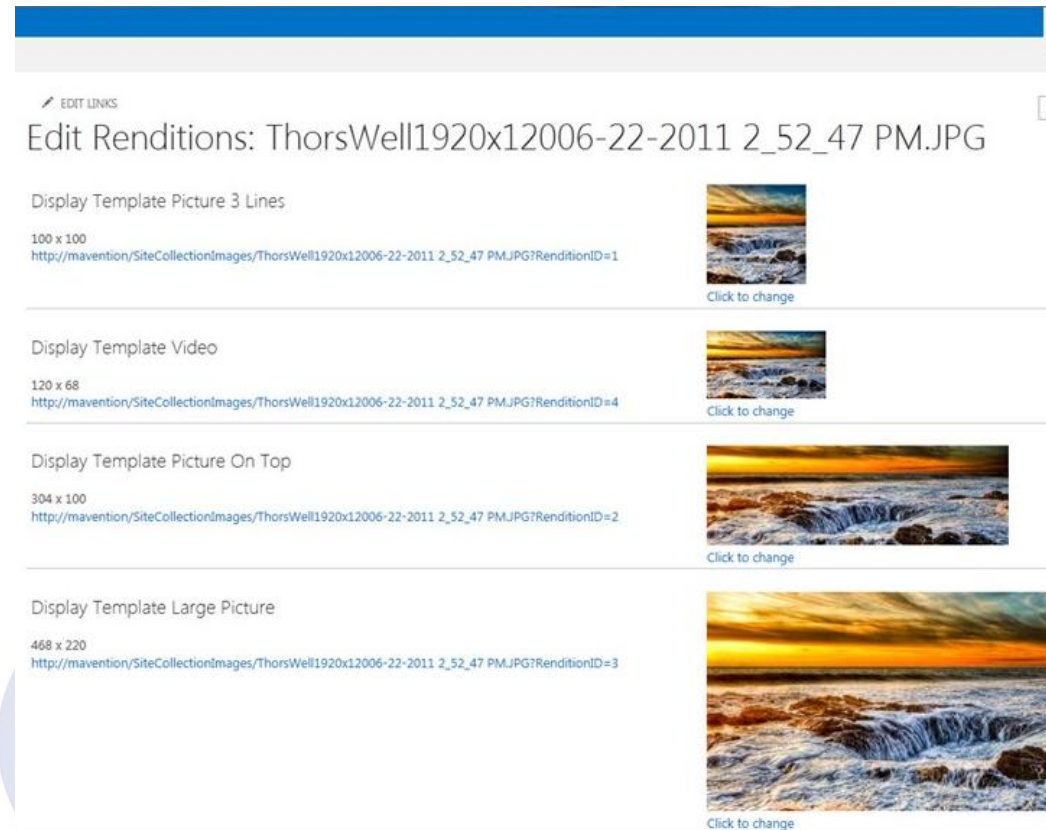


Image Renditions in SharePoint 2013

- Optimized user experience for mobile devices
- Mobile users download the smaller version of image
- To work, enable BLOB cache for your Web Application
- Image Renditions can be used with videos as well



The screenshot shows the 'Edit Renditions' interface for a file named 'ThorsWell1920x12006-22-2011 2_52_47 PM.JPG'. It lists four display templates with their respective dimensions and URLs:

- Display Template Picture 3 Lines**: 100 x 100. URL: http://mavention/SiteCollectionImages/ThorsWell1920x12006-22-2011 2_52_47 PM.JPG?RenditionID=1. Includes a 'Click to change' link.
- Display Template Video**: 120 x 68. URL: http://mavention/SiteCollectionImages/ThorsWell1920x12006-22-2011 2_52_47 PM.JPG?RenditionID=4. Includes a 'Click to change' link.
- Display Template Picture On Top**: 304 x 100. URL: http://mavention/SiteCollectionImages/ThorsWell1920x12006-22-2011 2_52_47 PM.JPG?RenditionID=2. Includes a 'Click to change' link.
- Display Template Large Picture**: 468 x 220. URL: http://mavention/SiteCollectionImages/ThorsWell1920x12006-22-2011 2_52_47 PM.JPG?RenditionID=3. Includes a 'Click to change' link.

Each option is accompanied by a small thumbnail image of a sunset over a rocky coastline.

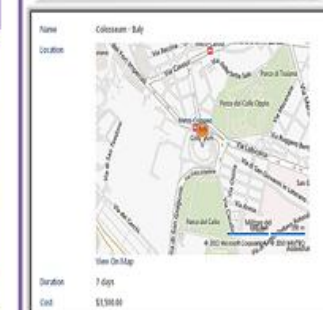
- For mobile devices to receive notifications, device applications must register with a SharePoint site
- Event handler code to interact with MPNS or notification services of other mobile device platforms
- Limitations:
 - 2,000 device registrations for push notifications per website
 - Windows Phone only (at the moment)

Subscribe to mobile alerts

- Users can subscribe to alerts that are sent by using Short Message Service (SMS)
- Configure one mobile account for all web applications in a server farm, or for a specific web application
- Checks for configuring mobile alerts:
 - The server farm account has permission to access the Internet for sending alerts
 - Obtain the root certificate for the service provider's HTTPS web address

Location Field Type

- Geolocation field type that can be used in a list
- Display latitude and longitude coordinates through Bing Maps (typically seen as a pushpin on the map view)
- Cannot make a custom list and add it as a column – must be done programmatically
- To display map views in the list, you must use the Bing Maps service
- Bing Maps service can be enabled using Windows PowerShell for SharePoint Server 2013 cmdlets



MOBILE BI

- Options for Mobile BI
 - Web Browser
 - Native Apps
- New Challenges
 - Ergonomics
 - User Experience
- What makes good Mobile BI?



Target Audience

- Who are the target audience?
 - Executives
 - Managers
 - Mobile Workers
- Which mobile BI functionality do they need?
 - Dashboards
 - Reports
 - Alerts
- What do they desire of the system?
 - Speed
 - Simplicity
 - Consistency

Mobile BI Architecture Considerations

- Which architecture to choose?
 - Native
 - Browser based
 - Hybrid
- What are the pros and cons of each choice?
 - Scalability
 - Security
 - Manageability
- How will the system evolve to address business need?
 - Today
 - Future

Mobile BI Architecture Considerations

MOBILE WEB BROWSER

- Pros
 - Easier Cross-Platform Development and Testing
 - Low Cost - fast implementation
 - Support for Authentication in IE, Firefox, and Safari
- Cons
 - Limited Navigation capabilities
 - Browser HTML/CSS rendering differences
 - No cached data unless HTML5

NATIVE APPS

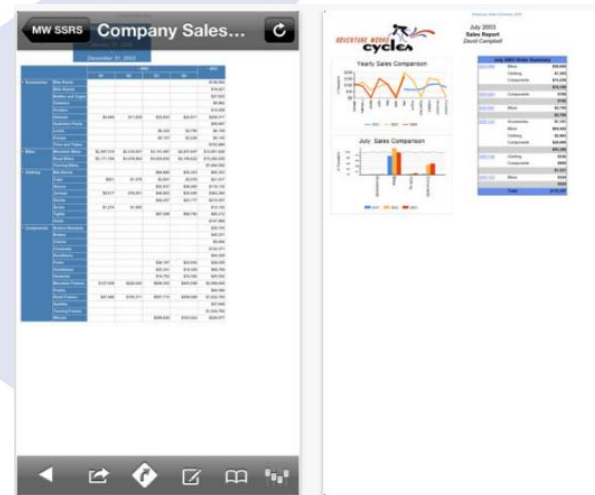
- Pros
 - Multi-gesture controls
 - Caching
 - Pop-Up menus, Better Real-Estate utilization
 - Communicate with other apps
- Cons
 - Higher Cost - Slow implementation
 - Cross-Platform app developers needed
 - Hardware updates

MOBILE WEB BROWSER

- SharePoint 2010
 - Performance Point Services
 - Excel Services
- SSRS Report Manager
- 3rd Party
 - Mobile Entree
 - DevExpress
 - Strategy Companion

NATIVE APPS

- Mobile Reports Pro
- Build your own
- 3rd Party
 - Tableau
 - MicroStrategy



Mobile BI Development Considerations

SQL Server Reporting Services 2012

- Pros
 - Interactive data visualization with Power View
 - Pixel Perfect professional reports
 - Advanced Visualizations (Maps, Sparklines, Data Bars)
- Cons
 - Postbacks refresh report all at once
 - Browser CSS rendering differences

Performance Point Services

- Pros
 - Consistent Look and Feel
 - Pre-built Functionality
 - Callbacks refresh dashboards
- Cons
 - Requires an OLAP cube
 - Customization requires changes to master pages

Challenges in Mobile BI

- Security
- Performance
- Real Estate
- Design
- Cross platform



Challenges in Mobile BI – Security

- Security
 - VPN
 - SSL (HTTPS, SQL Server Encryption)
 - Mobile Device Management (Airwatch, MobileIron, Zenprise, Symantec)
 - Remote Control over Apps & Settings

Mobile Device Management (MDM)

- Keep track of all mobile devices, lines, users
- Manage devices, models and device assignments
- Manage phone numbers and line assignments.
- Distribution of applications, data and configuration settings
- Secure authentication with intranet resources

Mobile Application Management (MAM)

- Focuses on application management, but stop short of managing the entire device
- Uses:
 - App delivery (Enterprise App Store)
 - App configuration management
 - User authentication
 - User & group access control
 - Push services
 - Crash log reporting
 - Reporting and tracking

Challenges in Mobile BI – Performance

- Show only what is needed
- SSRS Report Caching and Snapshots
- Minimize SharePoint Customization reducing roundtrips
- Data Warehousing (Columnstore and Compression)
- Data Model and Self-Service BI (PowerPivot)
- Use of EdgeCache/Caching service providers
- Use of SSD Drives

Challenges in Mobile BI – Design

- User Experience
 - Filter where, when, whom appropriate
 - Drill-Down/Drill-Through
 - Pop-up Menus
- Ergonomics
 - Portrait/Landscape Modes
 - Keyboard in Landscape mode
- Features that can help
 - Callbacks instead of Postbacks
 - Lists instead of Tables

QUESTIONS?

