



White Paper

SharePoint and the Consumerization of IT: Considerations for BYOD Success

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The Evolution of IT Consumerization & BYOD



BYOD refers to the policy of permitting employees to bring personally-owned technology devices (laptops, tablets, smart phones, etc.) to their workplace, and use these devices to access privileged company information and applications.



Consumerization of IT did not happen overnight, but evolved over time due to the following technological advancements:



- Choice of technology – a more diverse selection of devices and operating systems
- Cloud – more services are becoming cloud-enabled
- Connectivity – cheaper, faster and more readily available connectivity
- SaaS – Software as a Service, device independent development



Key Benefits

- Lower cost of ownership for the organization.
- Technology familiarity with the devices reduces the learning curve for users.
- Flexibility in terms of choices available for using the devices.
- Easy connectivity and data sharing & exchange between the multiple devices.

Challenges

- Presents the need to apply specific security measures to prevent data loss on personal devices.
- May introduce an additional need to create and manage policies for personal devices.

- The possibility of non-corporate software being used for company business.
- Policies must be implemented to protect company, should the device not get cleared after the employee leaves the organization or if device gets lost.
- Device spoofing issues.
- Device disparities.
- May be discouraged by human resources departments, who believe more tablet/smartphone use could negatively affect work-life balance.



Top five considerations when implementing BYOD

Employee Comfort: Employees feel more comfortable using their own devices with their own personal settings. It not only increases productivity, but also adaptability by allowing greater freedom to choose which device can help them to better perform tasks.

Agreements: The employee and employer must adhere to an extensive agreement in regard to data sensitivity and security.

Legalities: What happens when the device is lost? What happens to the data on the device if stolen? Who takes care of insurance? Those are just a few of the key legal issues that need to be defined before an organization implements BYOD.

IT Policies: Licensed software usage policies, Internet usage policies on personal devices, etc. should be carefully reviewed



and monitored. Implementing BYOD is a substantial increase in work for the IT department for any company.

Information Security: How does an organization secure company and proprietary data on an employee's device? Proper policies must be drafted for security purposes. A 2013 study by Lumension and LinkedIn indicated that loss of data was the number one security-related concern surrounding BYOD.

What are your main security concerns related to BYOD?

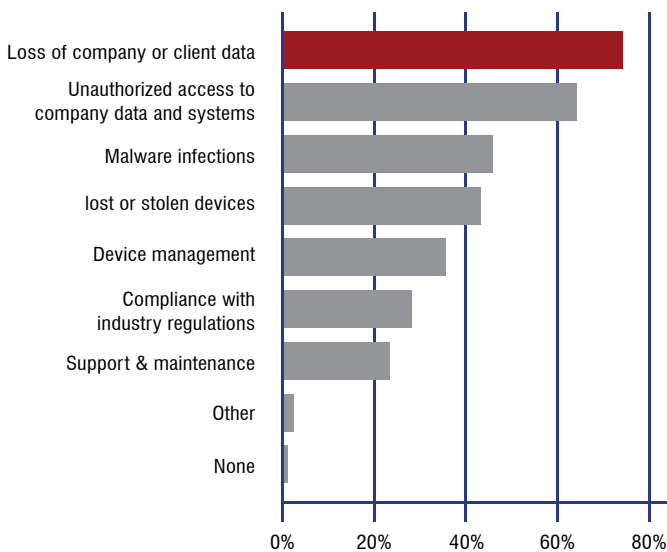


Figure 1 Image via Lumension.

Leveraging SharePoint 2013 to support BYOD

Business Intelligence

Dashboards and scorecards are important ways to present your business intelligence (BI) reports and data; and with SharePoint, you can configure your BI content to be optimized for viewing on mobile devices.

Advantage:

- ✔ On-field sales force can easily access various data points and build compelling cases for prospective clients.

Drawbacks:

- ⊗ Limited dashboard content.

Office Web Apps

When used with SharePoint 2013 on-premises, Office Web Apps provide updated versions of Word Web App, Excel Web App, PowerPoint Web App and OneNote Web App. Users can view and optionally edit Office documents by using a supported web browser on different mobile devices, such as Windows Phones, iPhones and iPads.

Advantages:

- ✔ SharePoint provides a great level of integration with Office 2013.
- ✔ Seamless user experience when working within the SharePoint environment and the Office web apps.

Sky Drive

SharePoint 2013 creates the OneDrive for Business document library in the personal site collection of a user's My Site when the user requests creation of the My Site. The OneDrive for Business document library is a special document library built by using the standard document library template.

Advantages:

- ✔ Unified user interface and user experience for all devices.
- ✔ Security compliances are an issue for enterprises.

Drawbacks:

- ⊗ Only L2 support is available. No L3 support from Microsoft.

Sharepoint Notifications

By using Microsoft Push Notification Service (MPNS), Windows Phone apps can receive notifications through Internet events triggered on Microsoft SharePoint Server without having to poll the server for changes. The app can be registered to receive notifications from the server, and an event receiver can initiate a notification and send it to the receiving app for handling.

Advantages:

- ✔ Users can subscribe to lists/items using SMS or push notifications.

Drawbacks:

- ⊗ No iOS support for push notifications yet.
- ⊗ Email depends on active email client on device.



Security Management

Mobile devices can contain sensitive data or documents. Because mobile devices can be lost or stolen, Microsoft provides different ways to set policies around mobile devices to help protect sensitive data and documents.

Advantages:

- ✔ Windows Intune compatibility.
 - Remote data wiping
 - Remote device locking
 - Apply configuration remotely
 - Password protected access
 - Encryption of data and communication
- ✔ Policy enforcement on devices.
- ✔ Control authentication remotely.

Drawbacks:

- ❌ Need to enforce firewall / antivirus / VPN.

For Developers

Views

In SharePoint 2013, there are new, optimized mobile browser experiences available for viewing a SharePoint site. SharePoint provides the flexibility to use a modern out-of-the-box solution, such as the HTML5-based contemporary view, or you can design a mobile view based on your organization's unique usability requirements. There are four browser-based experiences that are available in SharePoint 2013.

Advantages:

- ✔ SharePoint 2013 extends full HTML5 support, giving a nice mobile compatible view.
- ✔ Offers a full-screen view for all the compatible pages, giving an easy-to-read view to the users.

Device Channels - Rendering of Pages based on Device

There are three distinct mobile browser experiences that are available by default, as well as a feature known as device channels that allows you to create a customized mobile browser

view for a SharePoint publishing site.

Advantages:

- ✔ Render single site in multiple ways.
- ✔ Single page multiple master pages.
- ✔ Ten device channels per site collection.

Platforms Supported

SharePoint Server 2013 provides browser support for multiple mobile devices.

Advantages:

- ✔ Windows Phone 7.5 & above.
- ✔ iOS 5 & above.
- ✔ Android 4.0 & above.

Client-Side Rendering (JS Link)

It provides a mechanism to define an output render for a set of controls that are hosted in a SharePoint page (list views, display, add and edit forms). It enables you to use well-known technologies—such as HTML and JavaScript—to define the rendering logic of custom and predefined field types.

Advantage:

- ✔ Quick and easy way to change default rendering of default forms

Conclusion

The BYOD movement continues to permeate organizations of all sizes – affecting how IT is managed, delivered and protected. Existing SharePoint 2013 environments can make the transition to BYOD seamless and efficient for end-users and developers. While it has many advantages and disadvantages for both the organization as well as the employee, BYOD support in SharePoint 2013 still has a long way to go. There are many powerful features being introduced in SharePoint; demonstrating a strong step in the right direction. Organization leaders should keep tabs on new developments in SharePoint's BYOD capabilities.



About the Authors

Aseem Pandit, Practice Manager and Solutions Architect at AgreeYa Solutions: Aseem has over 15 years of experience in the software world and is passionate about helping organizations design and build solutions to address their business needs. He has worked with numerous customers across the globe, and has experience with multiple technologies and frameworks around Open Source, J2EE, Oracle and Microsoft, most recently focusing on Microsoft technologies with SharePoint, BI and BPM. Aseem loves to talk about technology and is always eager to learn more and share his knowledge with others.

Prateek Bhargava, Senior Consultant at AgreeYa Solutions: Prateek brings more than nine years of experience in product development for clients spread across the globe. He has been part of the full product life cycle starting from conceptualization to release for multiple Microsoft based products, specifically SharePoint. At AgreeYa, he puts his hands-on technology development experience to work helping clients build better, more practical technology solutions for their companies.

About AgreeYa Solutions

AgreeYa Solutions is a global provider of software, solutions, and services focused on deploying business-driven, technology-enabled solutions that create next-generation competitive advantages for customers. Headquartered in Folsom, California, AgreeYa is a growing and dynamic organization with 15 offices in 8 countries employing more than 1,300 professionals. Over the last 15 years, AgreeYa has worked with 200+ companies ranging from Fortune 100 firms to small and large businesses, delivering solutions for variety of industries including telecommunications, BFSI, healthcare, high-tech, manufacturing, utility and government. AgreeYa's software portfolio includes SocialXtend (intranet and enterprise social collaboration), VDIXtend (Desktop-on-Cloud), and Onvelop (enterprise mobility productivity suite). As part of its solutions and services offerings, AgreeYa provides intranet and enterprise collaboration on SharePoint, cloud and infrastructure, enterprise mobility, product engineering, application development and management, independent software testing, and staffing (IT and risk/compliance) solutions.

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