The Impact of Cloud Computing to Technology-Based Companies

Case Study: "Microsoft 365 for Enhancing Engineering Design Collaboration and Service Productivity - A SaaS Example"

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Outline

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Problem Statement

- Staff is currently facing collaboration challenges with international teams.
- Sharing information in real time has been a challenge especially when they are working with a lot of individuals in different locations.
- Inability for staff to work on the same material at the same time.
- It takes quite a while for files to be sent back and forth during collaboration.

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Objectives

This project aims at providing a management system where:

- Staff can share file more effectively in real time

- Staff would have a space in the web where they can post their work for people they are working with to view or edit

- Instant messaging, presence, and conferencing

- Calendar sharing for better scheduling

- Easier access to information from different locations

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Project Proposal/Plan

Our team is proposing the use of **Software as a Service (SaaS)** as a collaboration tool. The team will have to integrate the existing system with the newly proposed system. In the newly proposed system, documents would be stored in the cloud and users would have access to access it from different locations, edit it and collaborate more efficiently.

Through our research we have been able to identify suppliers that offer similar products, these include **(SaaS)**;

- **EtherPad** – Base Plain Text Document collaboration tool, includes instant messaging capabilities
- **Google Docs** – offers Word, PowerPoint and Excel,
- **Zoho** – Similar features as Google Docs
- ✓ **MS Office 365** – Web collaboration tool

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Feasibility Study

Image 1 Conceptual Phase Basic Overview: Client Types and Supporting Functionalities

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Preliminary Planning - Scope

### Table 1. Office 365 Small Business vs. Small Business Premium

Small Business	Hosted Email	Office 365 Small Business	Office 365 Small Business Premium
	$4.00 user/month	$5.00 user/month	$12.50 user/month
	Unlimited	25 Users	25 Users
Office Applications	N/A	N/A	Word, Excel, Powerpoint, Outlook, OneNote, Access, Publisher, Lync
Office Web Apps	N/A	Yes	Yes
Office Mobile Apps	N/A	N/A	Yes
Hosted Email	Yes	Yes	Yes
Simple File Sharing (7GB)	N/A	Yes	Yes
Web Conferencing	N/A	Yes	Yes
Public Website	N/A	Yes	Yes
Spam & Malware Protection	Yes	Yes	Yes
Community & Phone Support	Yes	Yes	Yes
Service Level Agreement 99.9	Yes	Yes	Yes

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Preliminary Planning – Office 365 Infrastructure

- Information Rights Management (IRM) features of Office 365
  - AD RMS (Active Directory Rights Management)
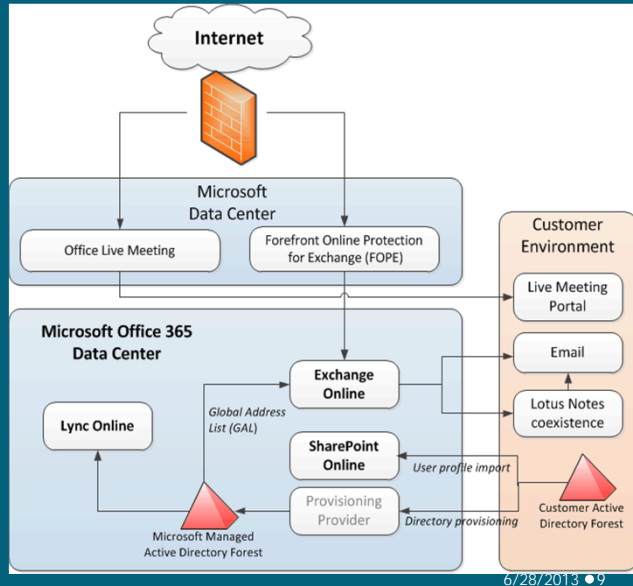
Source: technet.microsoft.com
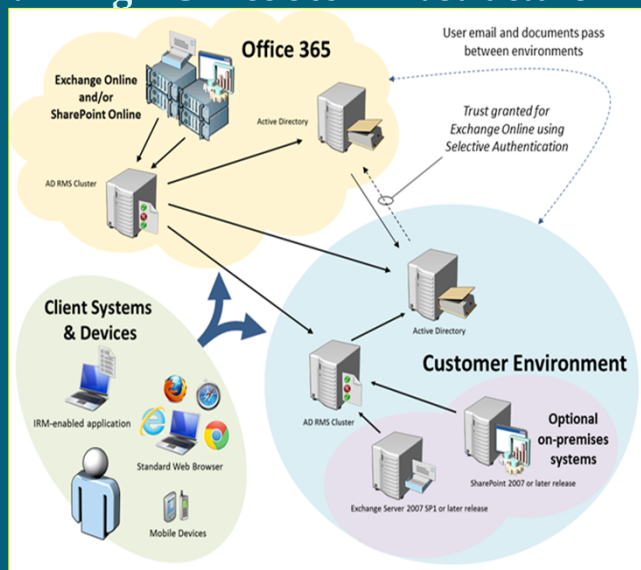
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Preliminary Planning – Office 365 Infrastructure

- Service Offerings Include:
  - Exchange Online
  - SharePoint Online
  - Lync Online
- May Also include:
  - MS Forefront Online Protection
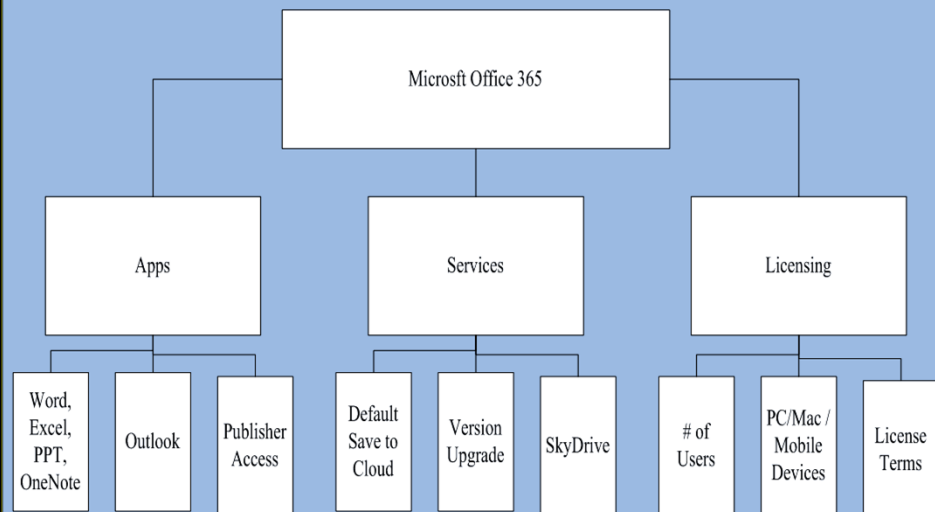 - MS Live Meeting Web Conferencing

Source: technet.microsoft.com

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Work Breakdown Structure

Windows 7

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Project plan

Project Administration and Organization Plan

- o Stephen Obioma – Office 365 Test and Implementation Lead
- o Luis D. Morales – Site Implementation Coordinator/Test PC #1

Logistic Support Plan

- 3rd Party IT Consulting Firm – Infrastructure/Building Maintenance
- Luis D. Morales – Data Backup, System Upgrades, Connectivity Support

Monitoring and Control Plan

- Each Training/Implementation Session will be monitored by the team
- Basic cloud based systems already in place permit low level monitoring

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Project plan

Contracts and Procurement Plan

- Project will serve as a platform for a corporate implementation of Office 365
- Excellent fit due to low implementation costs, scalability and SNTech Inc.'s initial business model

Continuous Improvement Plans

- Current usage includes:
  - o Hosted Exchange based Email, MS Lync, 3rd Party Hosted Web page
  - o Consolidate to include video conferencing, File Sharing Web Page Hosting, and Additional Security
  - o Reduce Cost through Incorporation

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Execution Phase

Administrator Views

Execution Phase

Office 365 Main Views

Office 365 SkyDrive View   Office 365 Team Site Member Invitation

Office 365 Team Site View

Testing and Commissioning Phase

- Office 365 Five Step Instruction Sheet was created to guide the team through an Uploading/Sharing/Modification and Saving Exercise

- Multiple documents were uploaded to the team site

- Team Opened a document on several machines, modified and saved the document

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Testing and Commissioning Phase - Feedback
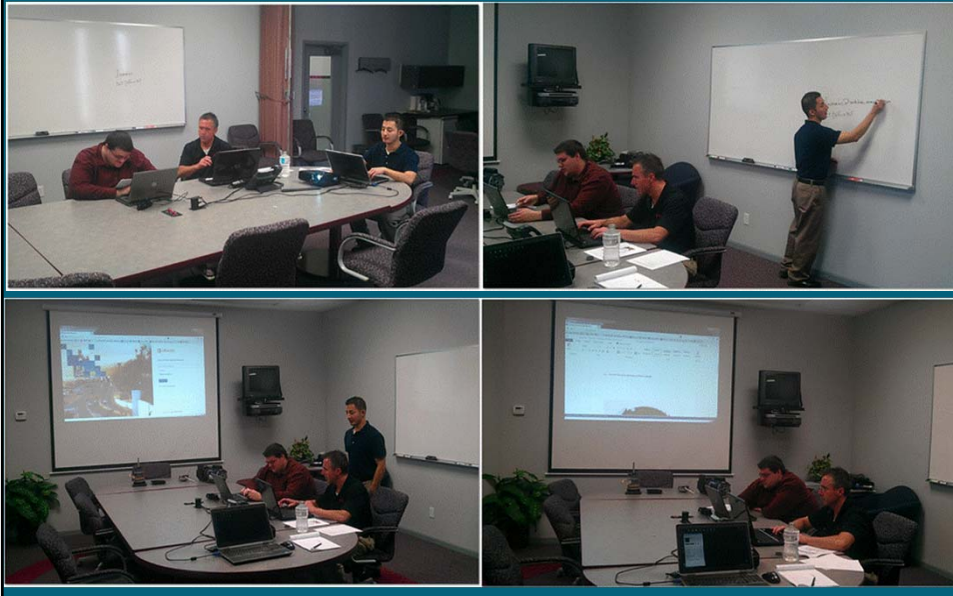
Risk Management Planning

- The team has ensured that critical business documents are not affected by this activity

- SNTech Inc. is adamant about security and that unauthorized access is not provided

- SNTech Inc. must ensure that redundant back-ups must be established in the event of lock-in's

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Risk Response Planning, Monitoring and Control

- Types of risks that may be encountered during this project

Item	Experience and Knowledge risk	Item	Technology
E1	Lack of experience	T1	Technology being obsolete
E2	Consequences due to issues resolution by trial and error	T2	System Failure
		T3	Outdated Hardware
		T4	Security Breach
Item	Budget	Item	Team factor
B1	Unexpected increased cost of R&D	TF1	Conflicts
B2	Underassessment of service demands from customers	TF2	Health Issues
B3	Downturn in the economy		

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Risk Response Planning, Monitoring and Control

- Risk Matrix for the Pre-Execution Phase

Severity of Consequences	F Impossible	E Improbable	D Remote	C Occasional	B Probable	A Frequent
1.Catastrophic		B3, T4				
2.Critical		T2, E1, E2	B2, T1	B1	T3	
3.Marginal		TF1, TF2	E1,T3	K2		
4.Negligible						

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Conclusion

- Office 365 provides a comprehensive service offering

- Perfect Fit for a small, growing business such as SNTech Inc.

- Offerings include:
  - MS Office Suite, Email Exchange, IM, Video Conferencing, Cloud based Storage (7GB), and a corporate Web Site implementation

  - 20 users * $15.00/month = $3600 per year (Current Spending)
  - 20 users * $12.50/month = $3000 per year (Proposed Spending)
    - ✓$600 Automatic Savings
    - ✓Not to Mention Web-Page management, conference and cloud storage savings

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