CLOUD COMPUTING AND M4D

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Software as a Service Cloud

A SERVICE MODEL BASED VARIANT
Software as a Service (SaaS)

• NIST* definition describes it as:
  – “The capability provided to the consumer is to use the provider’s applications running on a cloud infrastructure. The applications are accessible from various client devices through a thin client interface such as a web browser (e.g., web-based email)”

*NIST = National Institute of Standards and Technology
SaaS Examples

• Google Sites
  – Customizable websites, e.g. can add gadgets
  – Integrated with Google services

• rSmart Sakai Learning Management System
  – A feature rich LMS
  – Online class interactions or projects collaborations

• Youtube video streaming
  – Create and manage video channels
  – Edit/enhance videos
  – Analytics
SaaS Architecture

- Core business functionality
- Reporting/Dashboard
- User management
- Billing

Integration

Data
SaaS Cloud Characteristics

• No control of underlying infrastructure
  – Network, servers, operating systems, storage, or individual application capabilities
• Allows control of a limited set of user-specific application configuration settings
• Typically no programming is needed
• User generated data can be exploited by cloud provider
  – Privacy is often an issue
IaaS/PaaS/SaaS Side-by-Side

- IaaS
  - Application
  - Data
  - Runtime
  - Middleware
  - Operating System
  - Virtualization
  - Storage
  - Server Hardware
  - Networking

- PaaS
  - Application
  - Data
  - Runtime
  - Middleware
  - Operating System
  - Virtualization
  - Storage
  - Server Hardware
  - Networking

- SaaS
  - Application
  - Data
  - Runtime
  - Middleware
  - Operating System
  - Virtualization
  - Storage
  - Server Hardware
  - Networking

You manage  Vendor manages
Dependency View for XaaS
THANK YOU