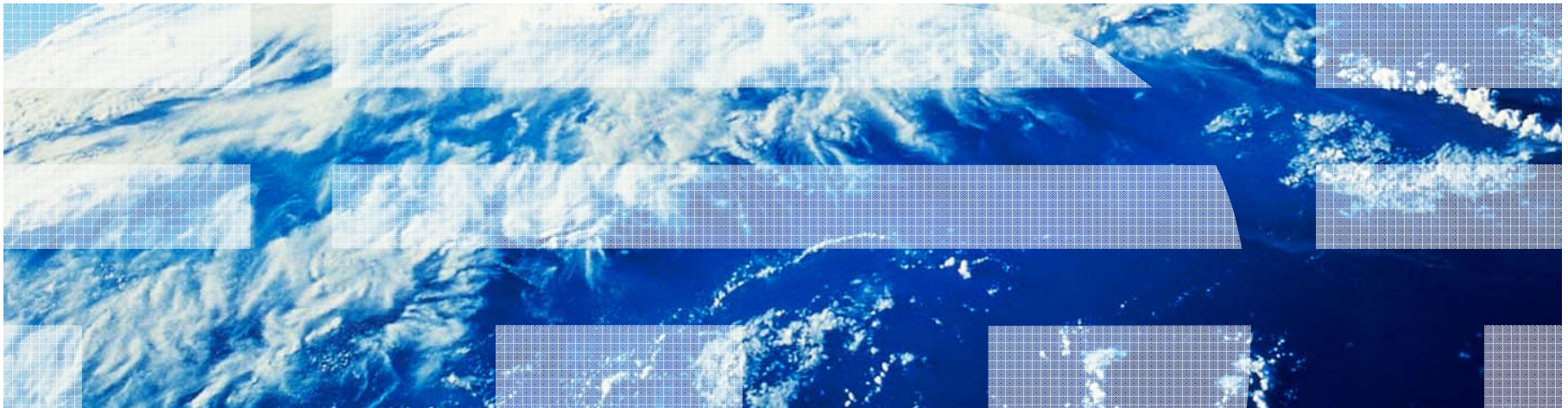# Win in the Cloud with IBM
Develop – Deliver – Go-to-Market

Today's Speakers

Leon Katsnelson

Program Director, Cloud Computing, Emerging Technologies
and Growth Markets, IBM Software Group

Robert Al-Jaar, PhD

Executive Vice President and CTO
Silanis Technology Inc.

Agenda

- **Benefits of the Software as a Service (SaaS) delivery model**

- Key Challenges & Considerations

- How IBM can help – IBM SaaS Partner Program

- SaaS technical challenges revealed

- Silanis Technology Inc.

- Next Steps

What is Software as a Service?

- Software as a Service (SaaS) is a **software delivery method** that provides access to software and its functions remotely as a **web-based service**.

- SaaS allows organizations to access business functionality at a cost typically **less than** paying for licensed application since
  - SaaS pricing is based on a monthly fee.
  - The software is hosted remotely, hence users don't need to invest in additional hardware

- SaaS **eliminates the need** for organizations to handle the **installation, set-up and often, daily upkeep and maintenance.**

Opportunity growing to $40.5B by 2014

**WW SaaS Revenue Forecast
2008-2014**

($B)
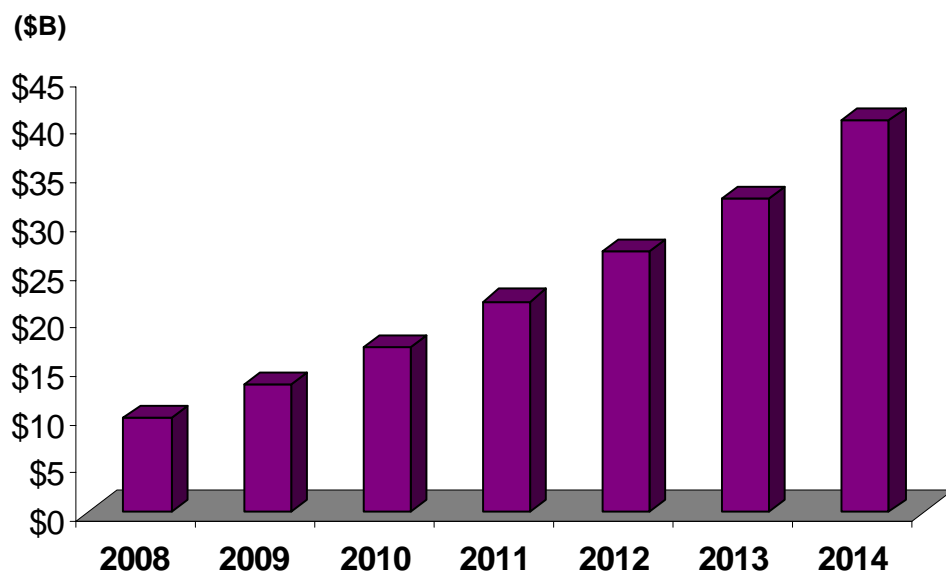
Source: IDC SaaS Forecast June, 2010

"The Cloud opportunity is potentially $95 billion, or roughly 12%, of the total worldwide software market, within five years."

- Merrill Lynch

"By 2012, 70 percent or more of businesses with greater than 100 employees will have deployed at least one SaaS application."

- Saugatuck Technology

"By 2012, more than 66% of independent software vendors (ISVs) will offer some of their applications optionally or exclusively as SaaS."
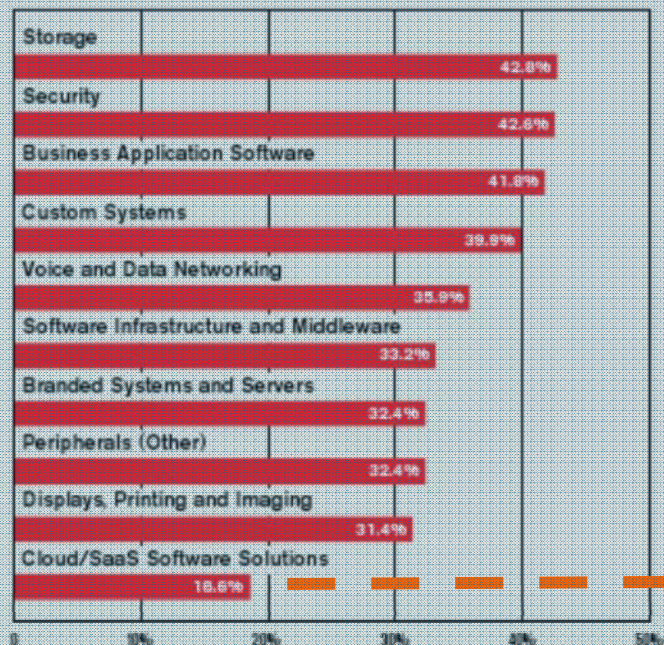
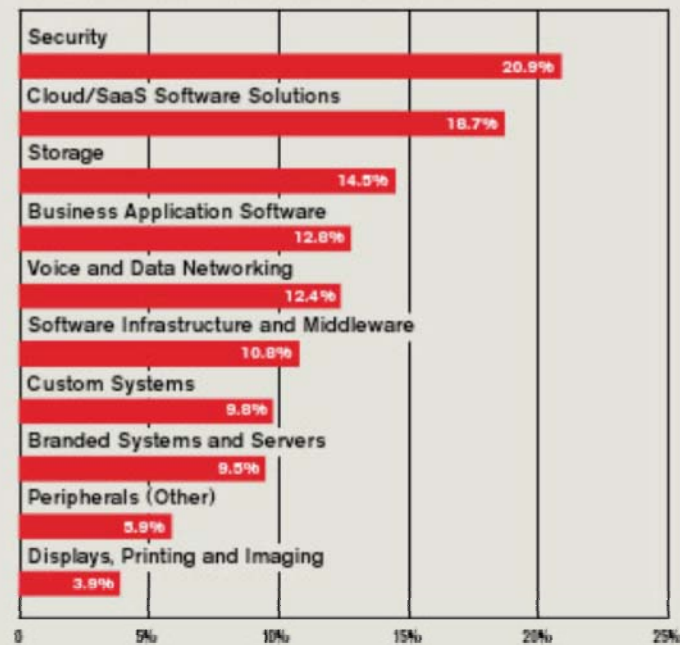- Gartner

Channel Web (CRN survey): Cloud ranked #2

2009

Where The Money Is
Technology areas in which you/your company currently has
product offerings and currently derives revenue

Storage	42.8%
Security	42.6%
Business Application Software	41.8%
Custom Systems	39.9%
Voice and Data Networking	35.9%
Software Infrastructure and Middleware	33.2%
Branded Systems and Servers	32.4%
Peripherals (Other)	32.4%
Displays, Printing and Imaging	31.4%
Cloud/SaaS Software Solutions	18.6%

0   10%   20%   30%   40%   50%

2010

Where The Money May Be
Technology areas in which you/your company currently is not
involved and plan to add in the next 12 months

Security	20.9%
Cloud/SaaS Software Solutions	18.7%
Storage	14.5%
Business Application Software	12.8%
Voice and Data Networking	12.4%
Software Infrastructure and Middleware	10.8%
Custom Systems	9.8%
Branded Systems and Servers	9.5%
Peripherals (Other)	5.9%
Displays, Printing and Imaging	3.9%

0   5%   10%   15%   20%   25%

Source: 2010 State Of The Market: 10 Things You Need To Know – Channel Web (CRN)

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It is not easy being an Independent Software Vendor…

As an ISV

- You build and sell software.

- Your customers purchase and operate.

- You charge a one time charge plus recurring maintenance and support.

- The CAPEX for the infrastructure leaves less money for your software.

- The market reach is limited by the capacity of direct sales and channels. Building a channel is very expensive.

- The sales cycles are long and the deployment timeframes even longer.

- Multiple versions of software in the field means multiple code bases and maintenance streams.

Software as a Service Can Help

SaaS Vendor

As an SaaS Vendor

✔ You build and and **RUN** your software; sell as service.

✔ **Predictable revenue stream**: recurring (e.g. monthly) charges .

✔ **Capture more of the customer spend**: no need for customers to spend on hardware/software/personnel

✔ **Shorter sales cycles**: dealing directly with line of business

✔ **Lower cost of delivery**:
  – Lower resource per client due to economies of scale
  – Pay only for what you use allows alignment of IT expense with revenue

✔ **Drastically reduce ongoing support costs**: single version of software in the field.

✔ **Rapidly deliver and have customer adopt new features**

✔ **Gain competitive advantage by rapidly evolving feature set:**
  – Single version of siftware to evolve
  – Better insight into actual use of feature/functions

Four things to remember when adopting the SaaS model

1

There is no single "Cloud," rather many "Clouds".
For maximum exposure and market reach, ISVs will benefit by selecting a cloud partner with an accepted platform that supports multiple public and private environments.

2

It's not just about the platform.
Management tools, go-to-market strategy, and pricing are all part of the overall SaaS package, and these crucial business processes can be facilitated or hampered by the choice of a cloud partner.

3

Cloud adoption is a long-term investment.
ISVs must develop a comprehensive cloud strategy that anticipates the future of software consumption and delivery.

4

Cloud adoption must contribute materially to business growth.
Cloud adoption should help ISVs achieve their business goals, by allowing them to enter new markets or attract more customers. The cloud should add value to software applications, by enabling greater functionality and integration with other software.

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ISVs are a core part of IBM's Cloud Strategy

Offers Smart Business services on the IBM Cloud including:

- LotusLive
- Development & Test
- Desktop Cloud
- Rational AppScan

Helps enterprise customers to build their own 'private' cloud environments

- **Smart Business Cloud:** Private cloud services, behind your firewall, built and/or run by IBM
- **Smart Business Systems:** Pre-integrated, workload optimized systems including IBM Cloudburst

Cloud Consulting Services

- Business Consulting Services
- Infrastructure Consulting Services
- Cloud Security Consulting and Implementation

**Helps ISVs develop, deliver and market Cloud Services**

- SaaS Enablement and Partner program
- More than 250 ISV Partners
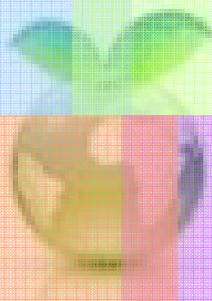
IBM helps our partners to develop, deliver and extend their Cloud Services. Here are the key components of the SaaS Partner Program

1. Develop

- **Business Strategy**
- **IBM Development & Test Cloud**
- **IBM software via Amazon Web Services**
- **IBM Innovation Centers**
- **SaaS Blueprints**
- **Ecosystem Partners**
- **developerWorks and Cloudspace**
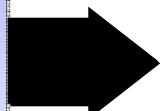
2. Deliver

- **Scalable software available in three pricing models:**
  - Hourly
  - Monthly
  - Perpetual

  Aligns expense with your revenue flow
- **Workload Optimized Systems**
- **Flexible hosting options**
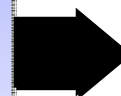
3. Extend

- **Go to Market Support**
- **Collaboration**
- **Integration**
- **Business Analytics**

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IBM Can Help in your success with SaaS

You have questions:

- Do I have to give up current business model as an ISV to become SaaS provider?

- Is my software designed for SaaS (e.g. multi-tenancy)?

- Do you I need data center infrastructure to run my software?

- Do I have expertise running my product and delivering on Service Level Agreements:
  - Capacity planning
  - Performance planning and management
  - Plan for resiliency
  - Manage operational efficiency
  - Ensure security

IBM and Partners can help!

> ## Do it with a partner with experience and proven technology for IT Operations. Think IBM!
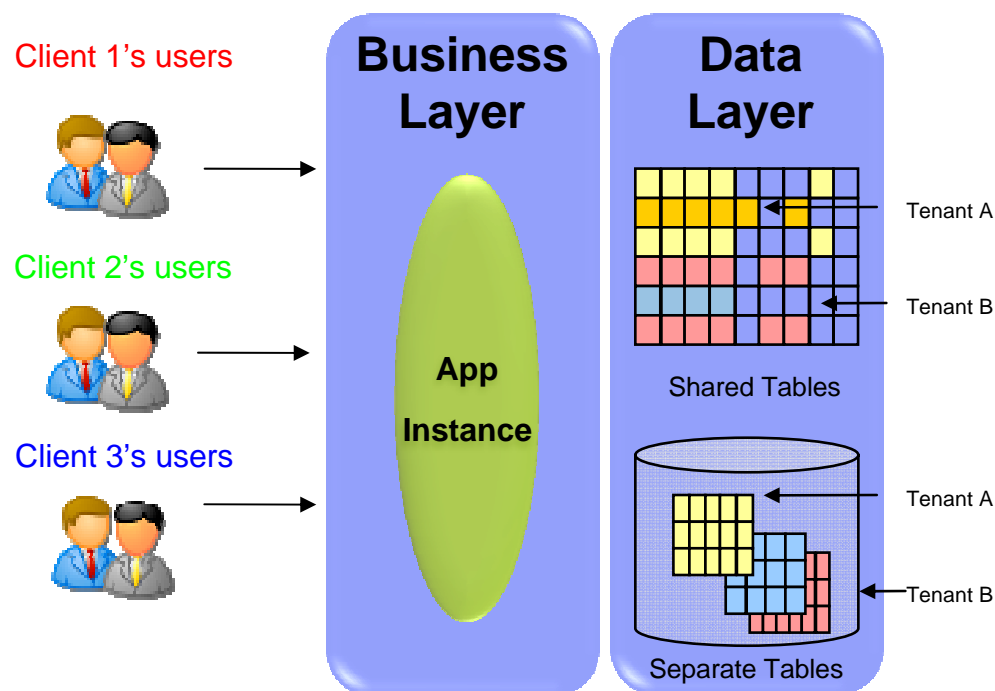
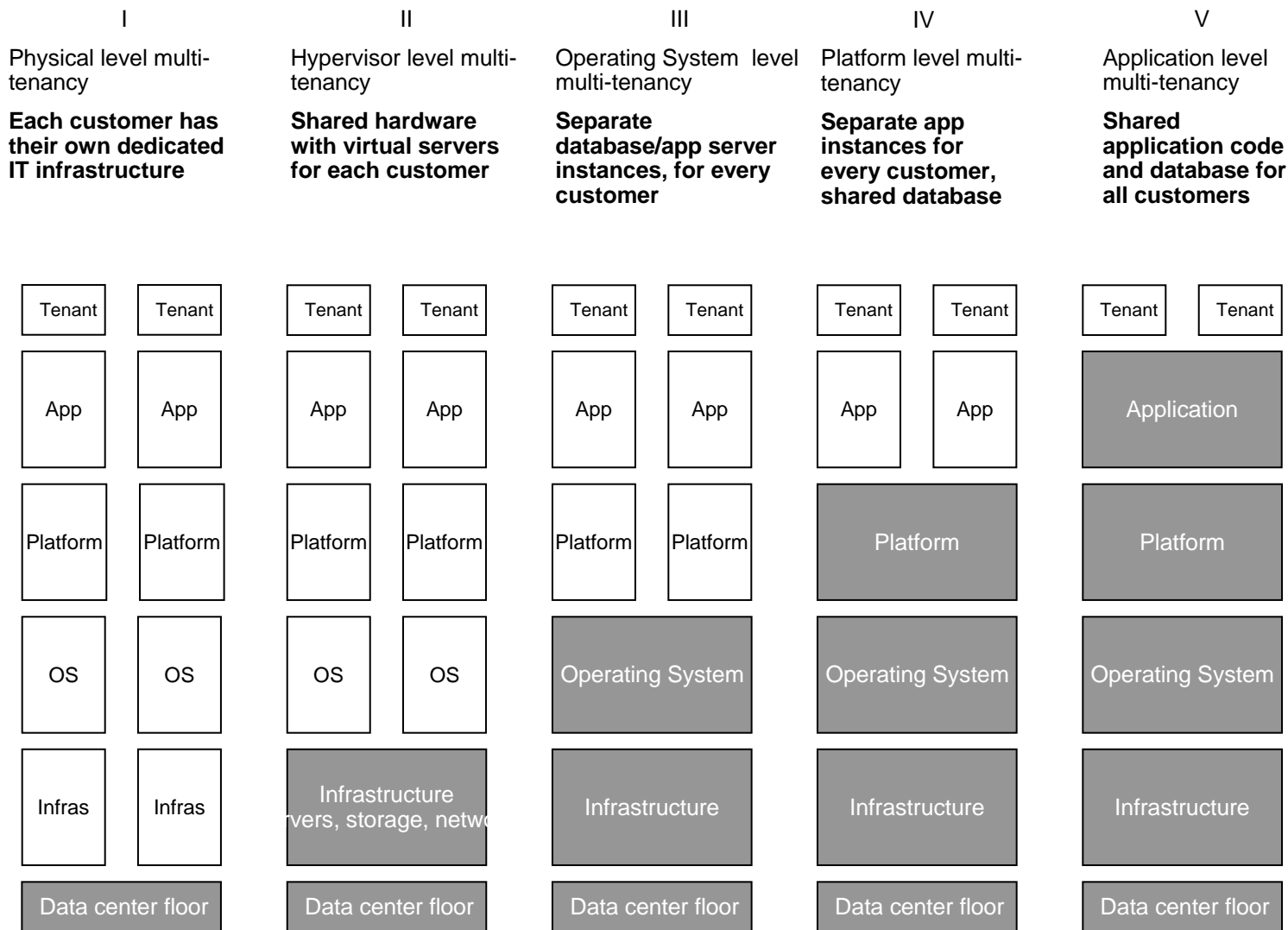# SaaS is a great addition to your current business model

- Most ISVs are looking to SaaS to supplement and not replace current business model

- Combined SaaS + Traditional on-premise approach:
  - Mitigates concern with recurring charges and higher customer churn
  - Still allows for high level of customization for high-end customers
  - Provides flexibility for different customer sets

What is multi-tenancy?

- The ability to deliver software to multiple client organizations (or tenants) from a single, shared instance of the software
  - Customizations made for one tenant are contained within metadata, e.g. Cascading Style Sheets for UI branding
  - Each tenant runs the same application code
- Consumer applications are usually excluded from discussions of multi-tenancy
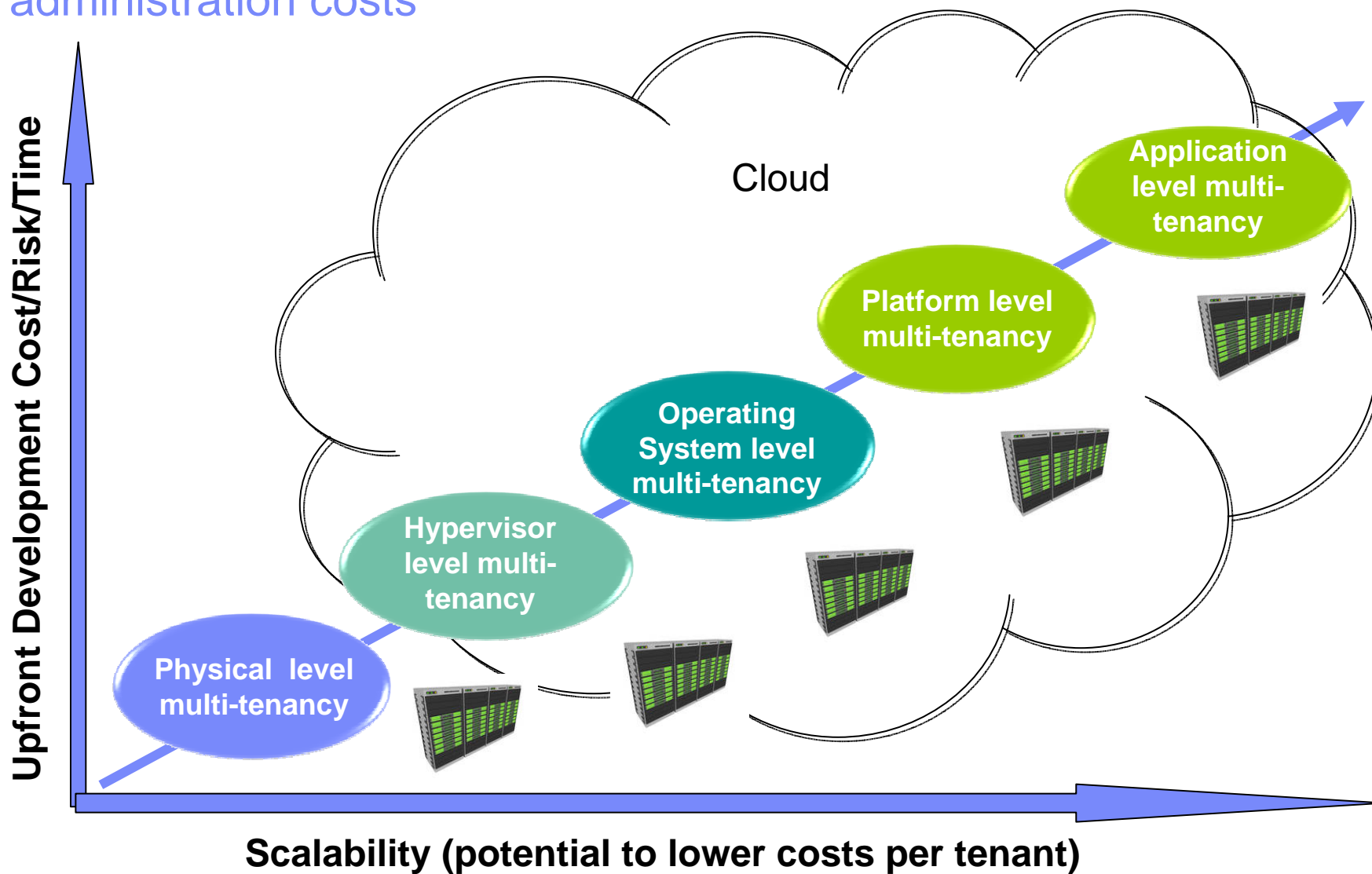
Client 1's users

Client 2's users

Client 3's users

Business Layer

App Instance

Data Layer

Tenant A

Tenant B

Shared Tables

Tenant A

Tenant B

Separate Tables

Types of multi-tenancy

	I	II	III	IV	V
	Physical level multi-tenancy	Hypervisor level multi-tenancy	Operating System level multi-tenancy	Platform level multi-tenancy	Application level multi-tenancy
	Each customer has their own dedicated IT infrastructure	**Shared hardware with virtual servers for each customer**	**Separate database/app server instances, for every customer**	**Separate app instances for every customer, shared database**	**Shared application code and database for all customers**

I		II		III		IV		V	
Tenant	Tenant	Tenant	Tenant	Tenant	Tenant	Tenant	Tenant	Tenant	Tenant
App	App	App	App	App	App	App	App	Application	
Platform	Platform	Platform	Platform	Platform	Platform	Platform		Platform	
OS	OS	OS	OS	Operating System		Operating System		Operating System	
Infras	Infras	Infrastructure rvers, storage, netwo		Infrastructure		Infrastructure		Infrastructure	
Data center floor		Data center floor		Data center floor		Data center floor		Data center floor	

Approach selection is a factor of up-front cost vs. scalability & administration costs

Upfront Development Cost/Risk/Time

Cloud

Application level multi-tenancy

Platform level multi-tenancy

Operating System level multi-tenancy

Hypervisor level multi-tenancy

Physical level multi-tenancy

Scalability (potential to lower costs per tenant)

Technical challenges of multi-tenancy

- **Customization**
  - User Interface
    - Look and feel changes via configuration only
    - Enable additional fields when displaying business objects
  - Business Logic
    - Different business rules for processes in the application (e.g. calculating discounts)
  - Data
    - Additional fields for Business object for each tenant (e.g. Purchase Order)

- **Access control, security, privacy**
  - Sharing application resources (e.g. database tables, web services, J2EE artifacts) so that users for one tenant only see data/services for that tenant

- **Operational Management and Administration**
    - A tenant can only configure, monitor and manage his own instance without interfering with other instances

Capacity planning and performance management

- SaaS requires instant response to workload spikes and release of resources at quiet times.

- Efficient operations with minimum people intervention through Self-tuning, self-diagnosing, and self-healing,

- IBM pre-built machine images optimized for enterprise class deployments on the cloud
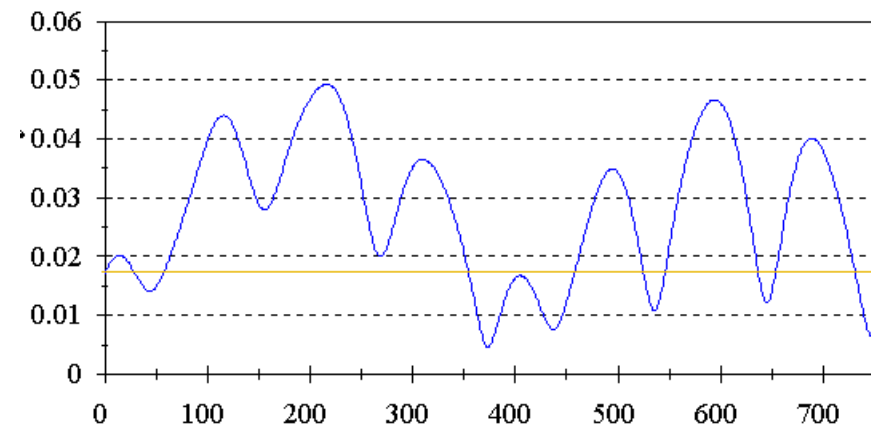
DB2 and WebSphere deliver on capacity and performance needs of SaaS

Business Continuity: IBM will help you meet your service SLA

- IBM middleware on the cloud is the same middleware used by worlds largest enterprises for their most critical systems

- WebSphere HA clustering provides continuous application availability. WAS clusters in the cloud can grow and shrink dynamically

- DB2 HADR (High Availability Disaster Recovery) feature ensures continuous database availability in the event of failures. Spread your data across multiple availability zones.

- WebSphere Applications are fully integrated with DB2 HADR capability to automatically route around failures

- DB2 on-line data backups do not interfere with the operation of your service. Data restore function that help you meet most stringent RTO (Recovery Time Objectives).

ALWAYS OPEN

CLOSED

Ensure security

- IBM approach to data security is a holistic one i.e. the security of the entire system is assured, not just individual components

- **WebSphere Application Server and WebSphere Portal Server**
  - Multiple security realms supported for an application
  - Multiple virtual hosts supported for an application server
    - For example www.tenant1.com www.tenant2.com
    - Same application can be deployed to different virtual hosts
    - Can create multiple virtual portals
  - Role based access control based on JEE security and WebSphere Member Manager

- **DB2**
  - Flexibility in separation of concerns. A must for SaaS.
  - Encryption for both data in motion (network) and data at rest (on disk, backup images etc.).
  - Mask critical data to prevent exposure in development/test
  - Label Based Access Control (LBAC) to enable sophisticated authorization schemes for multiple users within a customer account
  - DB2 Trusted Context to prevent spoofing and capture and replay attacks

- **Tivoli Directory Server**: Enterprise class LDAP server with support for multi-tenant directory trees

SC MAGAZINE AWARDS 2010 WINNER

Honored in the U.S.

Choose your partner wisely

Can your middle-ware partner do this?	IBM DB2 & WAS	Other
SaaS focused **resources and programs** to help you succeed	✓	?
Best in class **ecosystem**	✓	?
Flexible pricing to align expense with revenue	✓	?
Experience and proven technology for IT Operations	✓	?
Fast to market with minimal risk	✓	?
Multi-tenancy and customization: User Interface, Business logic, data model	✓	?
Scalability, capacity and performance management: instant response to workload spikes, self tuning, freeing up of resources during low activity periods	✓	?
Cloud-ready security: multiple security realms, multiple virtual hosts, label based access control, data encryption in motion and at rest, data masking, trusted context	✓	?
Business Continuity: HA clustering, automatic routing around failures,	✓	?
Reduced cost of operation: hardware, software, personnel	✓	?

IBM

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Experience
Shaping the industry since 1992

Long Standing Relationships
Leading Insurance, Banking, Financial Services, and Government Sectors

Industry Leader
Enterprise-class e-Signature Process Management Solutions

Product Innovation and Deployment
Excellent go-live track record

Strong IBM Partner
Key joint customers including US Army enterprise deployment (1.4M users)

Millions of users, thousands of companies!

Key Silanis Customers

Insurance

TOP INSURANCE COMPANY

TOP INSURANCE COMPANY

TOP INSURANCE COMPANY

MassMutual FINANCIAL GROUP®

Liberty Mutual.

TOP INSURANCE COMPANY

AMERICAN NATIONAL

COUNTRY Insurance & Financial Services

TOP INSURANCE COMPANY

Financial Services

TOP BANK

TOP FINANCIAL SERVICES COMPANY

CAT Financial

Principal Financial Group

stewart title guaranty company

ADP®

TG™

TOP AUTO LENDING COMPANY

HESAA HIGHER EDUCATION STUDENT ASSISTANCE AUTHORITY

williams Look great, feel good

E-Government

UNITED STATES POSTAL SERVICE®

AIR FORCE

Booz | Allen | Hamilton

KDNR

THE DEPARTMENT OF THE TREASURY 1789

DEPARTMENT OF TRANSPORTATION KANSAS

GSA

LOUISIANA'S ON THE MOVE DOTD BUILDS THE WAY

THE PENTAGON WASHINGTON

U.S. ARMY

Partners

IBM®

THUNDERHEAD®

geneva partners

EIM

ciber

Business Challenge

- Expand into new markets and reach a broader customer-base beyond on-premise enterprise customers

Strategy 1

- Implement "ANY-Premise" strategy by adding a <u>dedicated on-cloud</u> e-signature solution offering

Solution 1

- Deploy the Silanis industry-leading on-premise offering as a dedicated instance on the IBM stack (WAS/DB2) hosted on Amazon EC2

Strategy 2

- Implement "ANY-Premise" strategy by creating an <u>on-demand SaaS</u> e-signature solution offering

Solution 2

- Introduce e-SignLive™ for LotusLive, a cloud-based e-signature service integrated with IBM's LotusLive cloud-based collaboration platform

Silanis "ANY Premise" e-Sign Strategy

Enterprise Solution "On-Premise"	Hosted Services "In-Cloud"	Online Services "On-Demand"
• Dedicated installation	• Dedicated installation	• Multitenant SaaS solution
• Dedicated e-sign process	• Dedicated e-sign process	• Configurable e-sign process
• Dedicated database	• Dedicated database	• Ready-to-Go
• Self-flexibility and control	• Self-flexibility and control	• Assisted flexibility and control
• Buy the software	• No software	• No software
• Buy the hardware	• No hardware	• No hardware
• Manage the infrastructure	• No infrastructure management	• No infrastructure management
• Enterprise cost	• Cloud economics	• Low cost

ON Premise ⟵————————————⟶ **OFF Premise**

silanis

Enterprise Solution "On-Premise"	Hosted Services "In-Cloud"	Online Services "On-Demand"
Choose On-Premise when: Unique requirements, customization is essential Enterprise requirements, multiple channels Integration and STP required	**Choose Cloud when:** Limited in-house IT resource availability/ expertise Still need flexibility to customize Integration and STP required	**Choose SaaS when:** Time-to-market, budget constraints highest concern Limited resources/expertise No hassle, ready-to-go Pilot/PoC Ad-Hoc process

ON Premise ← → **OFF Premise**

Silanis e-SignLive™ for LotusLive

silanis e-SignRoom™

LotusLive

Engage   **Connections**   **Meetings**   **Events**   **iNotes**   **Notes**

e-SignDoc™

**Files**   **Activities**   **My Network**   **Surveys**   **Chat**   **Charts**

e-Sign Documents with ANYone!

ANYwhere… ANYtime… ANYplace…

e-SignLive™

- Secure Web-based e-signing

- No software, zero software download

- Originators easily prepare and upload documents for signing

- Invite business partners and customers to sign as Guests

- Produce secure e-signed documents accessible in LotusLive

- Capture secure Electronic Evidence™ of the transaction

- Monitor and track e-signing activities

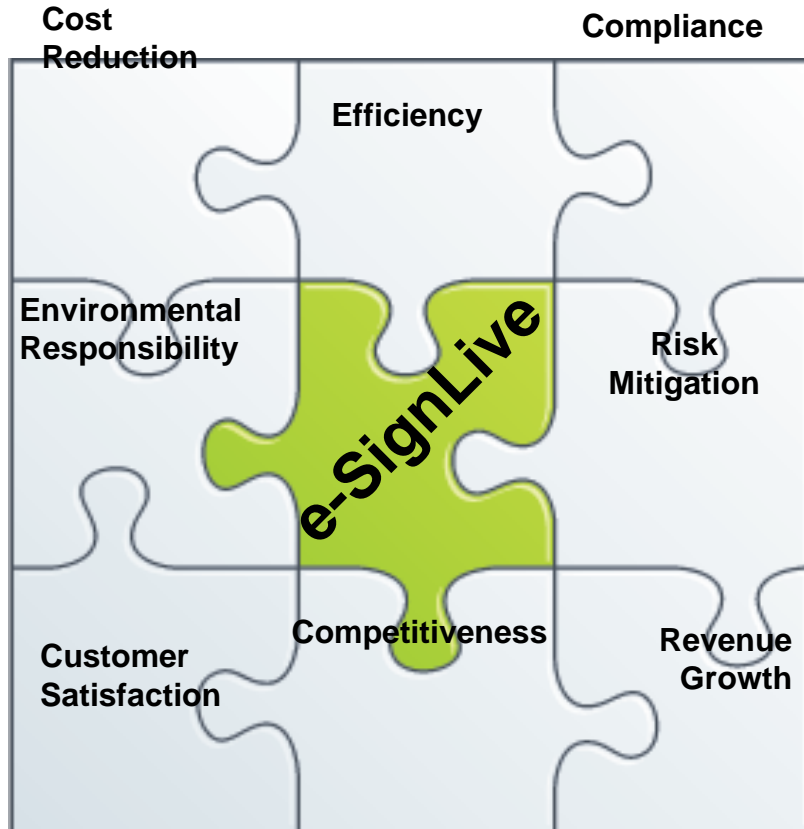- No integration required

- Start e-signing **NOW!**
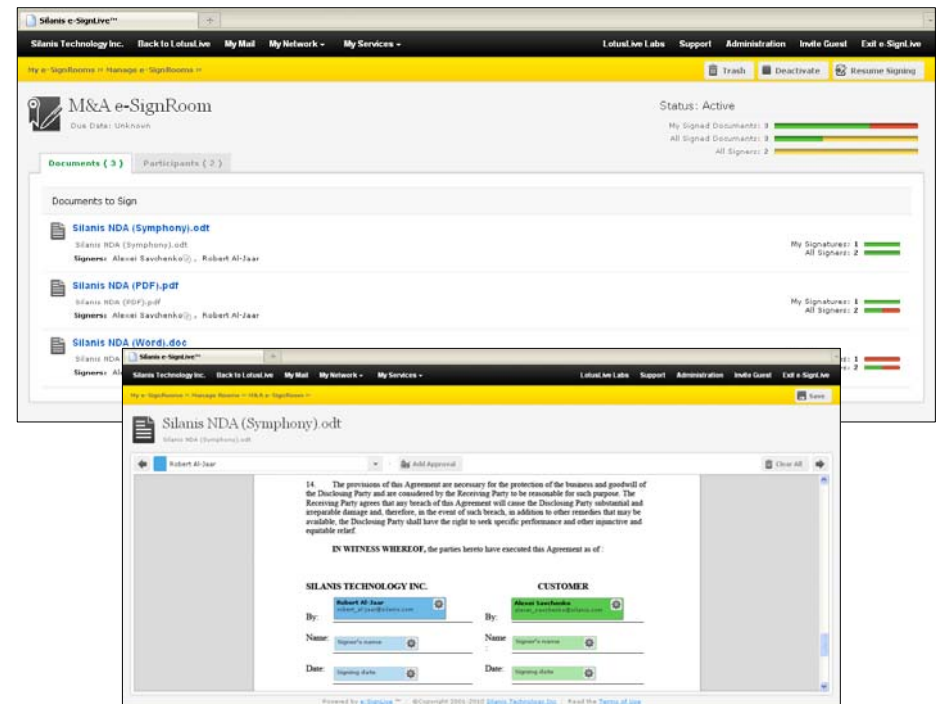
Target e-SignLive™ Business Apps

Stakeholder	Business Process Owner	Legal and Compliance	IT and Operations
Interested Executives	*GM, VP Line-of-Business*	*Chief Legal Officer*	*CIO, CTO, COO, Chief Architect*
e-Contracting Procurement HR Employee Onboarding Insurance Agent Onboarding Banking Credit Applications Real Estate Mortgage	• Reduce time and cost to get documents signed • Secure revenue and move business forward faster • Reduce drop-off risks and people changing their mind • Eliminate manual tasks and free-up time	• Reduce signing errors • Capture stronger evidence in signed documents • Strengthen legal and compliance position	• Increased regulatory compliance • Accelerate operational processes • Lower up-front investment • No software to purchase • No hardware to purchase • No infrastructure to manage

e-Signature Drivers, Benefits, and ROI

Cost
Reduction

Compliance

Efficiency

Environmental Responsibility

e-SignLive

Risk Mitigation

Customer Satisfaction

Competitiveness

Revenue Growth

Cost Reduction and Environmental Responsibility
- **$2.5 – 5.0 M annual savings -** *insurance*
- **$1.3 B annual savings -** *government*
- **$ 10 per insurance policy**
- **Over 50% reduction in "Green Bags" –** *lending*
- **Elimination of 80% of courier costs overnight -** *telecom*

Efficiency
- **100,000 hours/annually redeployed to loan officers**
- **50% gain in sales by eliminating manual steps**
- **80% of mortgage closings completed in last 3 days**
- **3,000 new business e-signed transactions daily**
- **Over 550,000 e-signed supply requests per month**

Compliance and Risk Mitigation
- **Risk reduction of 50% by eliminating loan exceptions**
- **Average NIGO rates of 50-75% reduced**
- **Avoided over 20 court cases with**
- **e-Evidence**
- **Greater control over process, actual versus required**

Customer Satisfaction, Competitiveness, and Growth
- **Online new policy 52 days to 10 minutes**
- **Online 401k application 14 days to hours**
- **B2C closing from 90 minutes to 15 minutes**
- **B2C new policy 30% reduction**
- **HR evaluation approved across 4 countries in 1 hour**

IBM and Silanis, Winning Together!

Outcome

- Brought to market two new service offerings in record time: in-cloud and on-demand (SaaS)

Approach

- Deployed the Silanis solution on the cloud-enabled middleware IBM WAS and DB2 solutions running on the Amazon EC2 cloud

- Leveraged the IBM LotusLive collaboration platform and open APIs running on the IBM Cloud

- Implemented seamless cloud-to-cloud integration

Results

- Customers are already using the in-cloud Silanis Dedicated e-Sign Service for insurance applications; lending applications soon to go live

- Customers are also using e-SignLive for LotusLive in real-estate, mortgage lending, insurance, and professional services

- Using technology that was only available to very large companies, e-SignLive allows companies small and large to:
  - Shorten the time to close deals
  - Achieve dramatic acceleration in mortgage cycle time
  - Increase revenue by attracting and signing up new customers
  - Significantly reduce operational costs
  - Benefit the environment by minimizing the use of paper

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Here's what you can expect next:

Contact us & sign up for our

Win in the Cloud with IBM Roadshow

SaaS@us.ibm.com

All executives who contact us will also receive a free white paper from Frost & Sullivan published July 2010.

Beyond the Platform: Choosing the Right SaaS Delivery Partner

IBM

Questions ?

**Replay of the webcast will be available shortly.
To access please visit: ibm.com/partnerworld/saas**