

Fast Path to leverage cloud computing for more security-rich desktop virtualization (Desktop Cloud)

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What is top of mind for CIO...

How do I support BYOD?

What's my mobile strategy for B2E and B2C?

How do I adapt and automate my service desk for multiple point of entries?

How do I secure access?

How do I leverage business analytics?

How to I drive new revenue as a social business?

How to I optimize access to data?

Should I develop new mobile apps in HTML5 or native?

Can I migrate from laptops to tablets?

How do end users connect securely to the corporate network?

Do I upgrade to Windows 8 or do I need Windows 7 first?



What is the “high performance flexible” workplace?

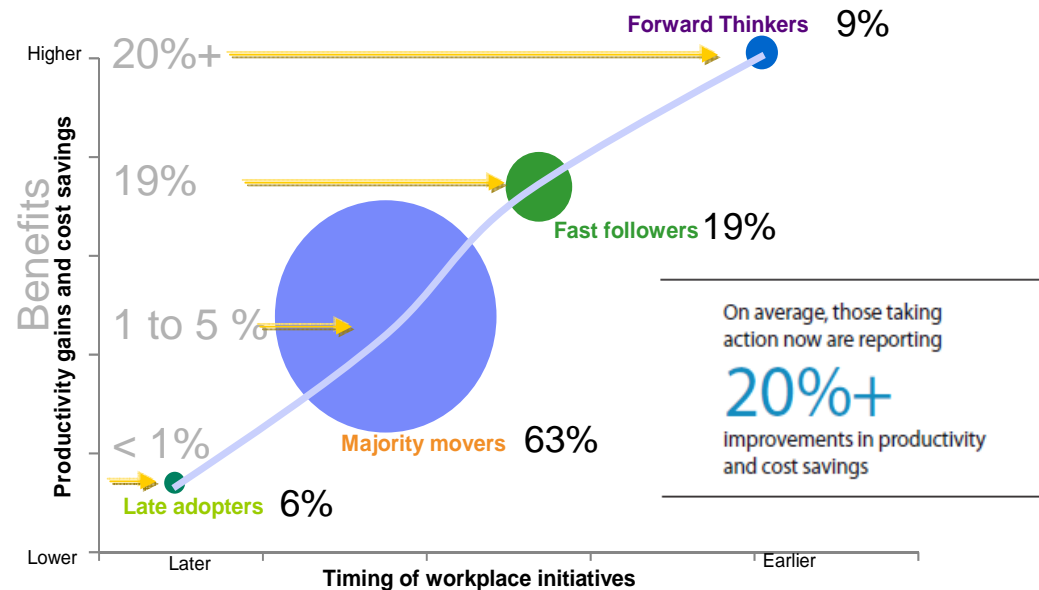


A virtualized and physical environment characterized by **accessibility, connections, collaboration and user choice** – for real time anywhere any device mobile decision making and heightened productivity through **more effective access to data and applications** – resulting in improved business value.

**IBM Center for applied insights survey
675 CIO’s and IT managers on their Workplace intentions**

Characteristics of forward thinkers?

- Workplace and mobility strategy
- Greatest # of devices and BYOD
- Mobile app platform and app stores
- Tendency to leverage managed services
- Desktop/application virtualization and cloud based app. delivery models
- Self service, automation and crowd sourcing
- Unified communications, collaboration and social networking tools

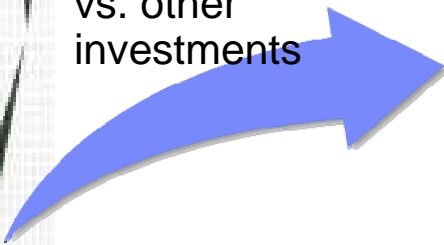


* Other equivalent terms: flexible or smart workplace.

CIOs and IT managers are placing high priority on the flexible workplace — and expecting significant benefits

74%

are placing greater priority on the flexible workplace vs. other investments



% of respondents expecting significant improvements from the flexible workplace

Productivity



Security

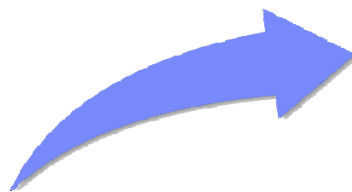
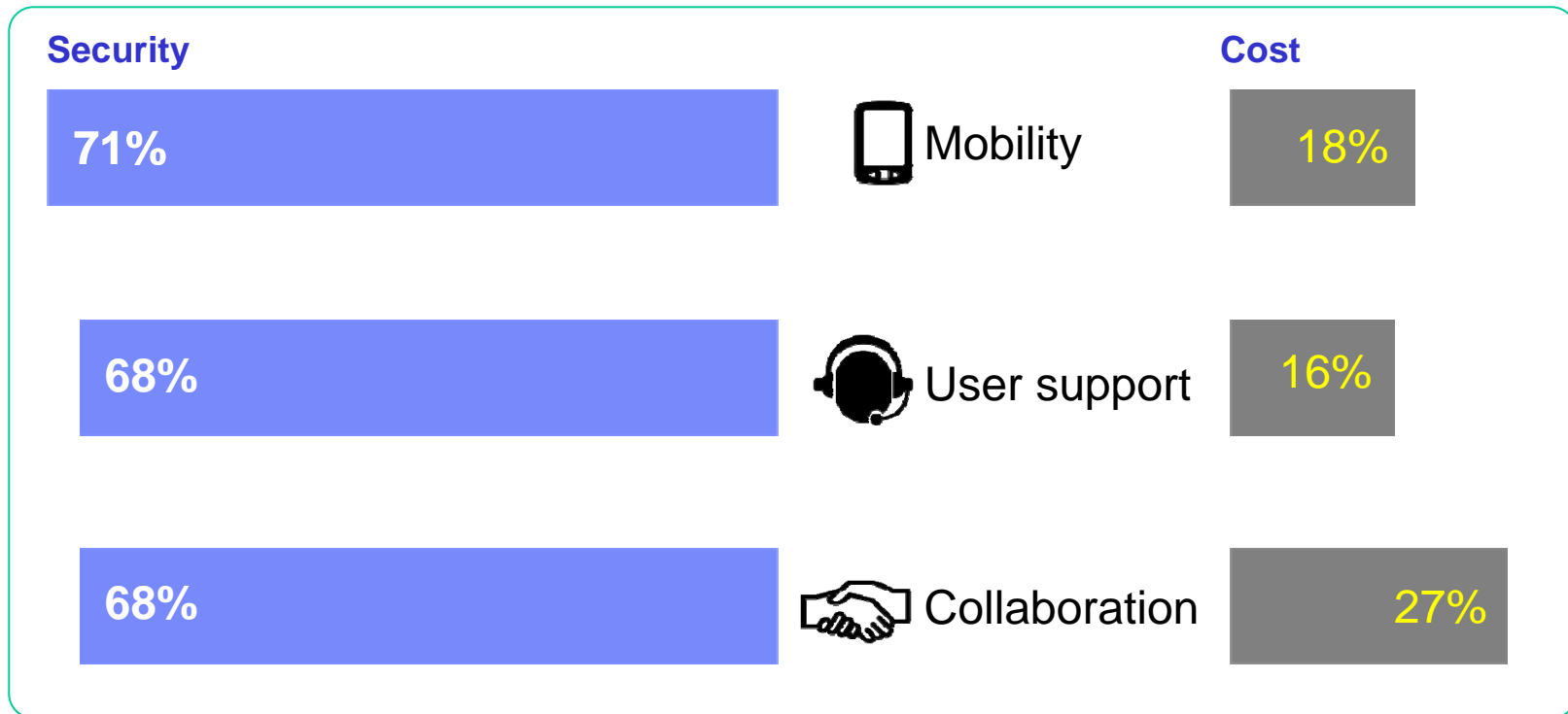


Financial



While cost remains an important challenge, security is the chief concern among IT executives adopting the flexible workplace.

Survey question: "What is your most significant challenge in each of these areas?"



Security is the chief concern among study respondents across all three key focus areas of the flexible workplace



Case study: a forward-thinking bank in the United States builds a strategy for the flexible workplace



Situation

U.S. bank with an increasingly mobile workforce requiring new levels of mobility support and information access



Challenge

Meet new mobility demands while maintaining required levels of security and compliance; leverage existing infrastructure investments



Solution

Step 1: planning

- Conduct analysis of current environment
- Map existing environment to flexible workplace

Step 2: implementation

- Virtualized application solution
- Integrated Windows 7 migration
- New mobility support



Results

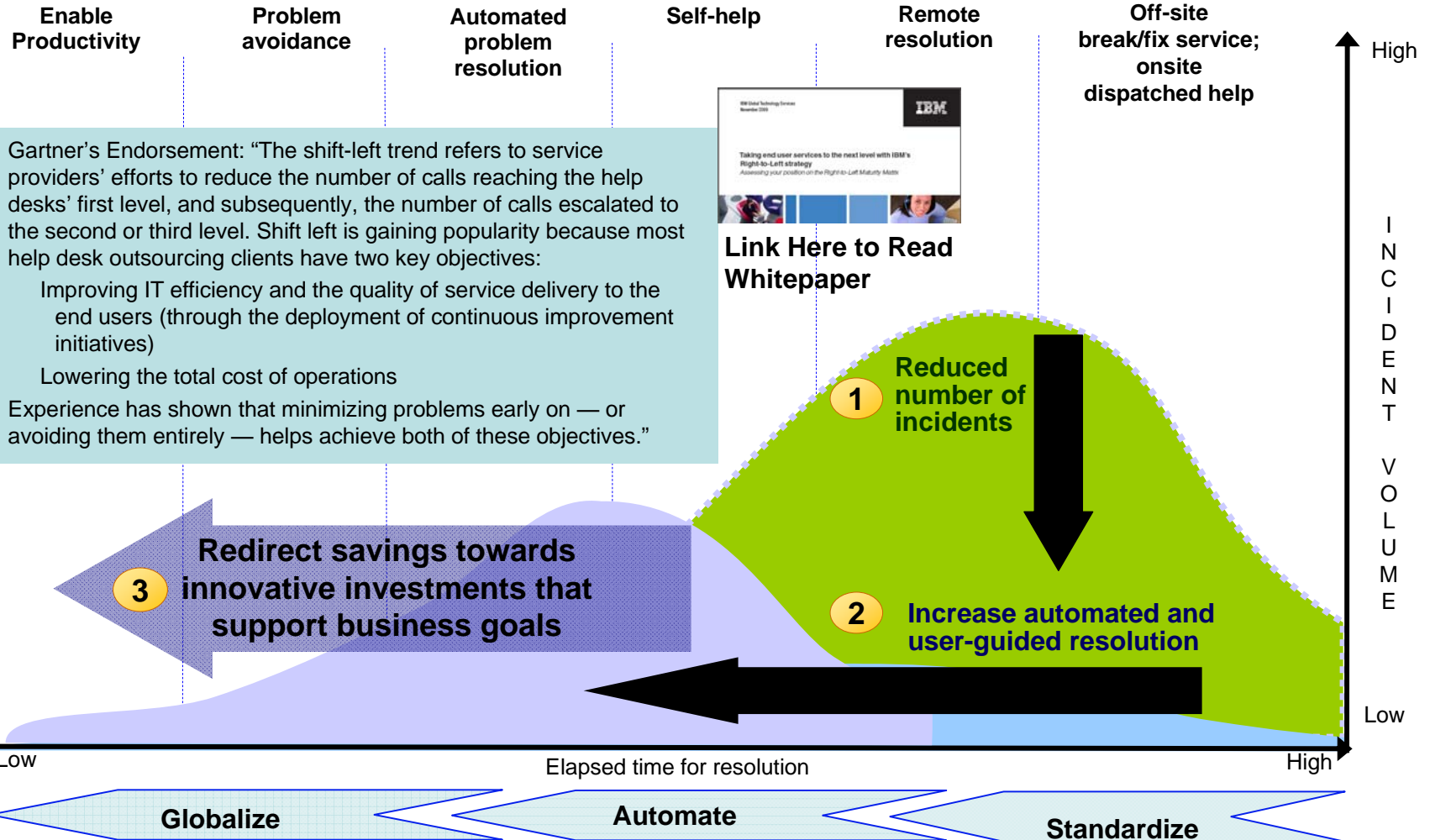
- IT configuration streamlined by 60%
- Reduced costs and risks for Windows 7 migration
- Enhanced mobile access and security



A holistic and strategic approach places this bank among forward thinkers, with improvements across all three key focus areas

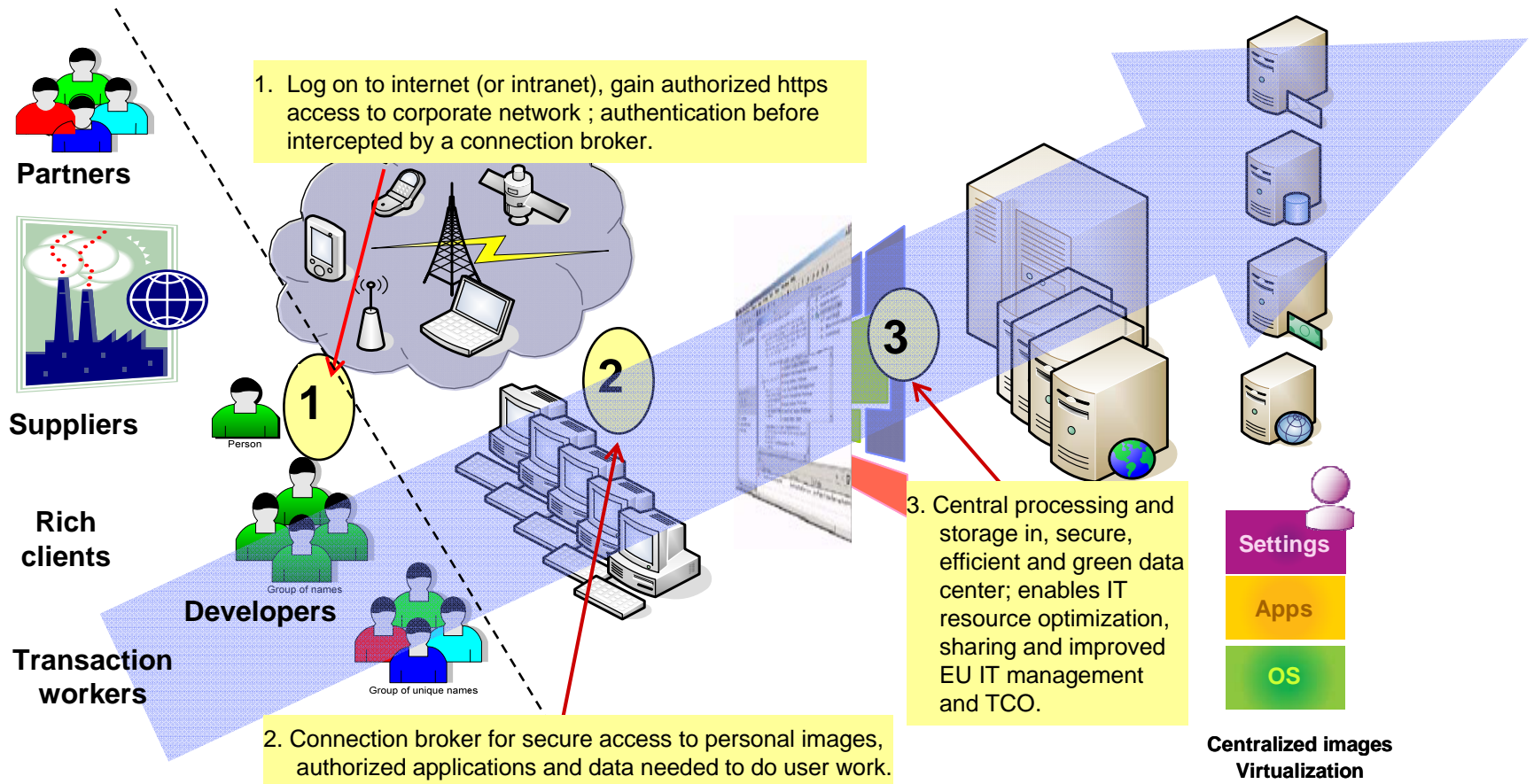


The IBM “Right-to-left” strategy delivers on cost take-out, productivity and innovation



¹ Gartner, *Dataquest Insight: Address Seven Key Help Desk Trends to Boost Client Satisfaction*, Gianluca Tramacere, August 3, 2007.

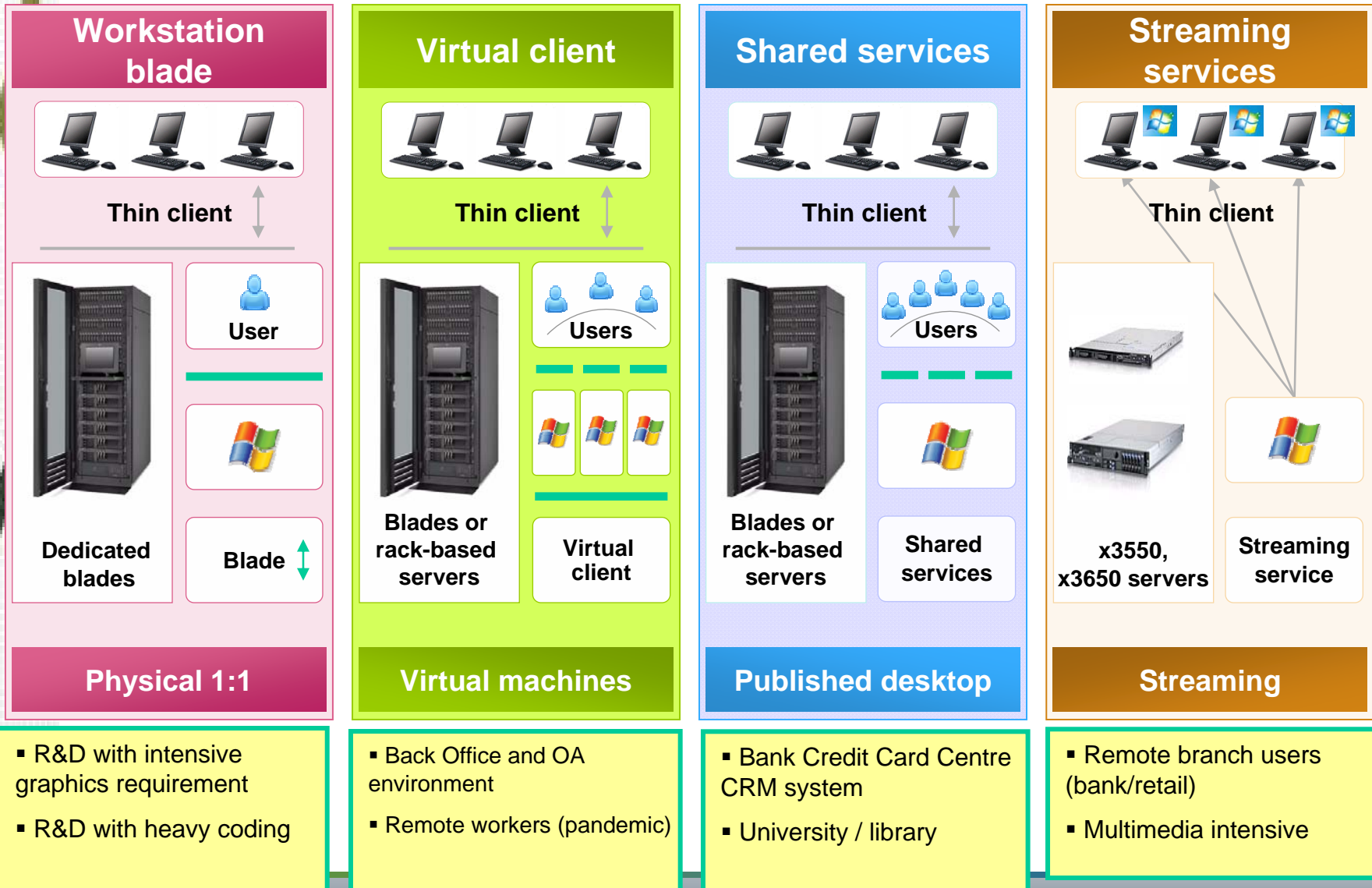
Desktop Cloud: A comprehensive end-to-end client solution that leverages virtualization technology to support distributed end users



Decouples OS/applications and data
Removes interdependencies with the hardware

IBM Smart Business Desktop Cloud (SBDC)

- Different user cases require different approaches



IBM Methodology and proven approach: Smart Migration and Application Deliver model (SMAD)



- Discover current environment
- Analyze performance

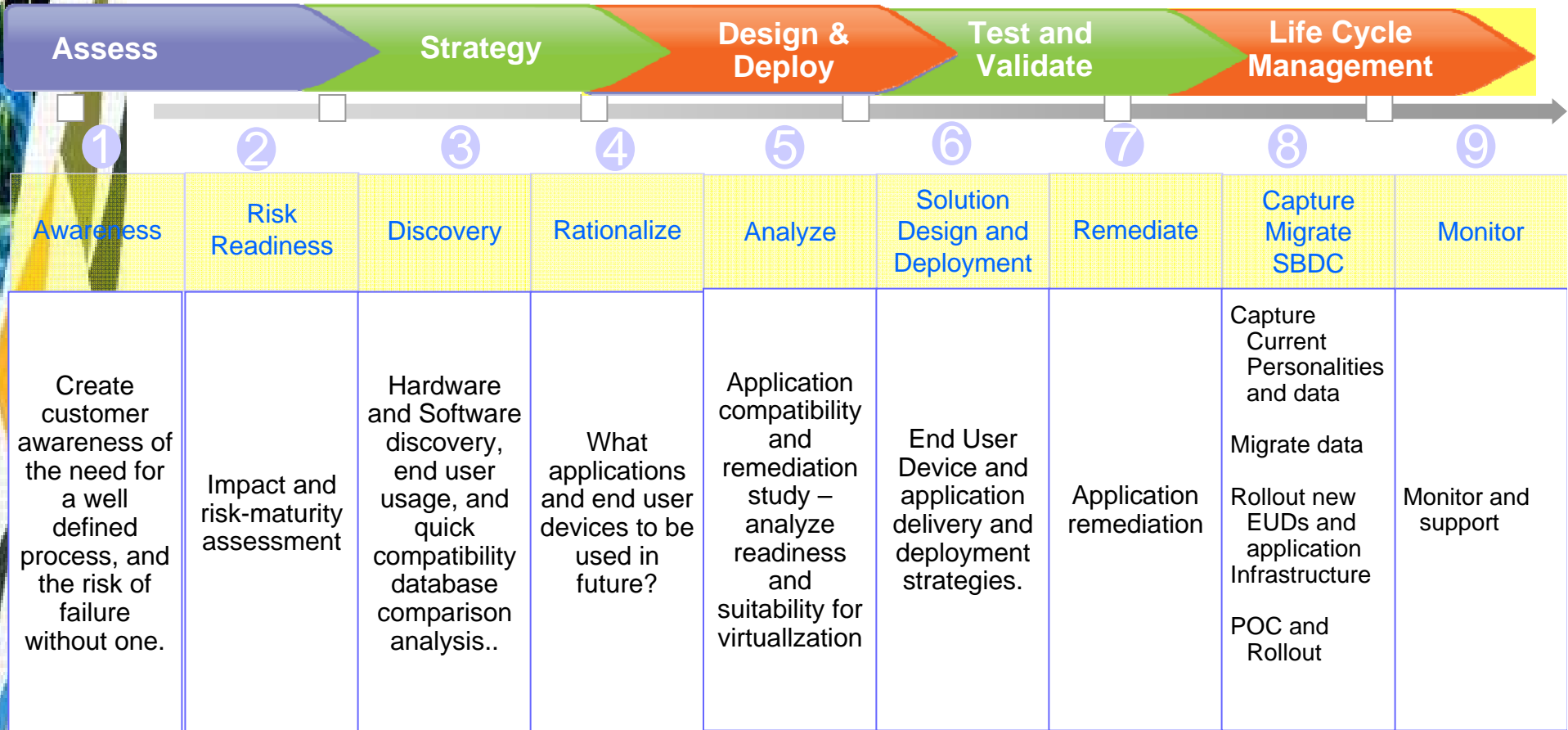
- Rationalize
- Remediate or replace apps
- Delivery strategy
- Deployment plan

- Migrate apps
- Capture user profiles
- Roll out solution
- Migrate end users

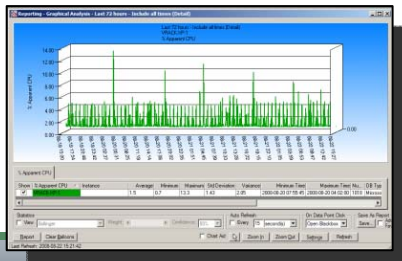
- Monitor
- Apply deep analytics
- Automate service implementation and support



IBM Smart Migration and Application Delivery Methodology – 1 of 3



Starting with a fact-based assessment and discovery of the client's environment as a baseline



Site and Enterprise Visualizers

Web based tool to allow you to drill down into system, user and applications details found in the Assessment.



Assessment Reports (Total and by Region)

- **Executive Summary Results**

A summary of the most important information obtained during the assessment period.

- **Build List Results**

Contains the virtual machines within each planned hypervisor and expected or recommended behaviour and specifications.

- **Software Package Plan**

Document to assist in the preparation of software images and virtualized application packages.

- **Storage Planning Results**

Document to assist in the planning of disk storage and SAN disk IOPS.

- **Application Port Usage Results**

Shows application port usage by application and potential application latency.

- **Migration Plan Results**

Document to assist in the preparation, piloting and migration of physical desktops to a virtual desktop infrastructure.

- **Plan Settings Results**

Documented settings and configuration used for the VMP too

- **Power Planning**

Summary of all power consumption and potential power savings when desktops are virtualized.

- **Technical Analysis Results**

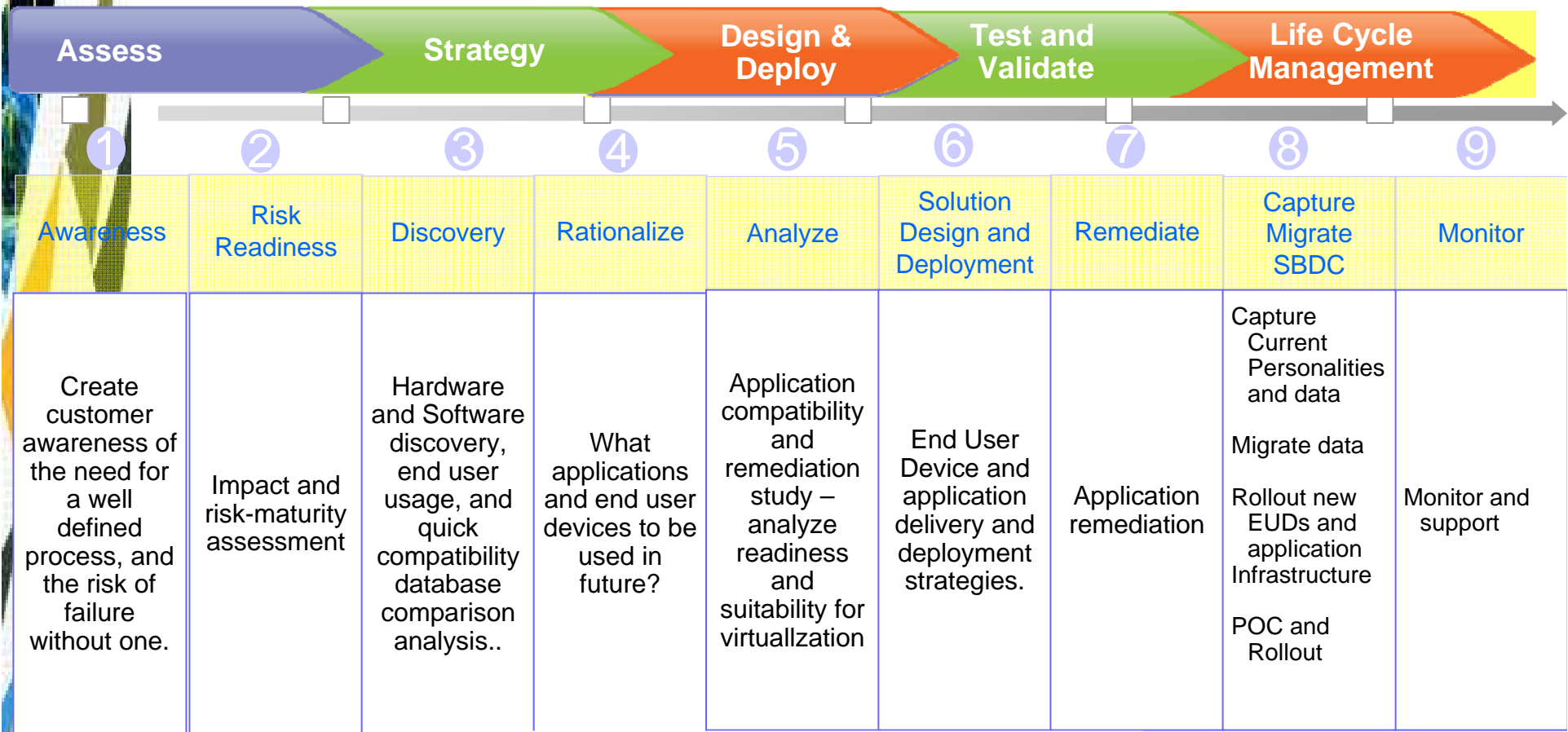
Contains the hypervisor specifications and virtual machine allocation for the modelled desktops.

For your reference

- [Sample Assessment Report](#)
(Word doc, includes output report screen captures)
- [Sample Assessment Results – SBDC Example](#)
(PPT, template for presenting assessment results to client)



IBM Smart Migration and Application Delivery Methodology – 2 of 3



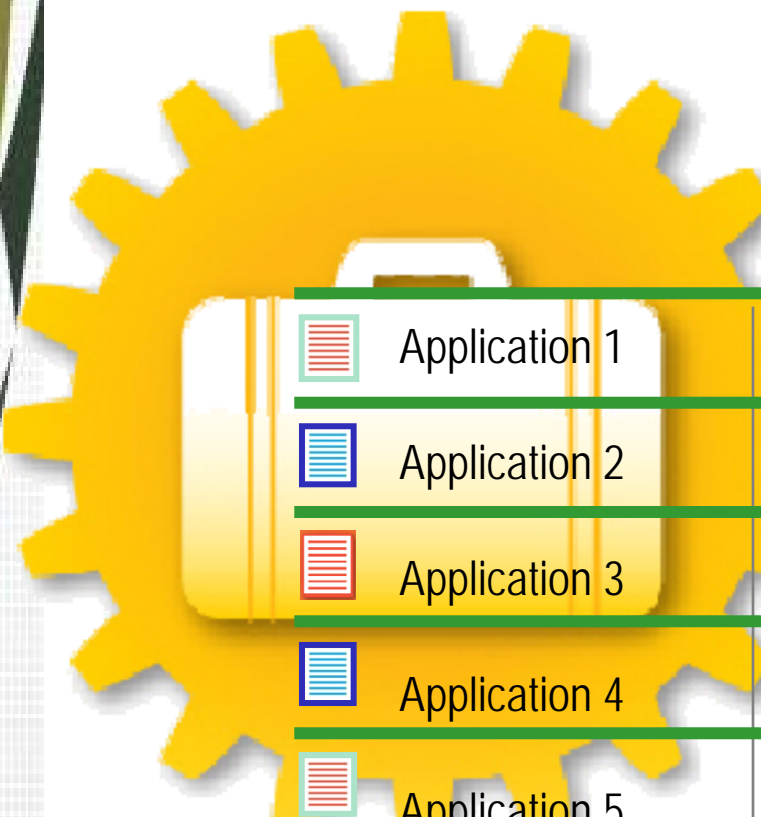
Followed by deep analysis of the data to define the best-fit design for integration, management and monitoring of applications across multiple end points

- Optimal path for migration to Windows 7
- Options for application virtualization
- Enabling mobility to any device, any place, any time





Save time and money by planning virtualization, mobility application strategies with Windows 7/8 migration: if you virtualize you may not need to migrate

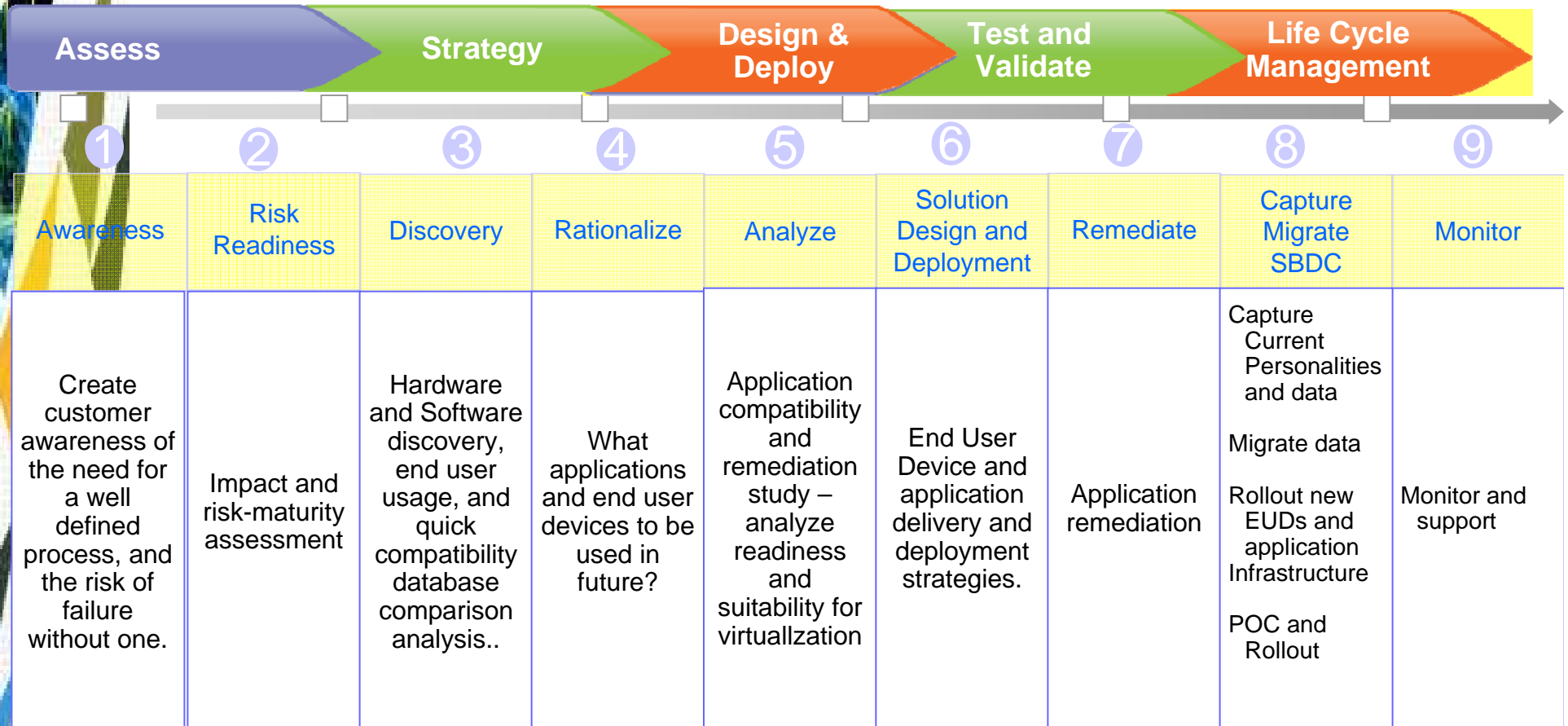


	64 Bit	Middleware	Win XP	Windows 7	Server 2008	App Data	Virtualized	Shared	Streamed	Performance	Dependencies
Application 1	●	●	●	●	●	●	●	●	●	●	●
Application 2	●	●	●	●	●	●	●	●	●	●	●
Application 3	●	●	●	●	●	●	●	●	●	●	●
Application 4	●	●	●	●	●	●	●	●	●	●	●
Application 5	●	●	●	●	●	●	●	●	●	●	●

● Ready for migration/virtualization ● Needs remediation ● Upgrade or replace



IBM Smart Migration and Application Delivery Methodology – 3 of 3



By leveraging proven methods, analytics and automation, IBM can help clients define one intelligent roadmap that optimizes IT resources, application usage and employee flexibility.



Desktop virtualization value proposition

Traditional “Hard” savings

- Desktop refresh deferrals
- Fat vs Thin client savings
- Help desk call volume reductions
- SW licensing costs/compliance
- Network engineering prep reduced
- Energy savings
- Real estate savings from work anywhere model

“Soft” benefits

- Decline of desk side support/IMAC
- Centralized management and operations
- Flexibility of end user access
- Security (assets, access and data)
- Tighter compliance
- End user productivity improvements
- Workplace flexibility: Employee sat. value
- Data center class back-up and recovery
- Faster time to provision desktops & applications
- Avoidance of over-provisioning laptops
- Device sharing vs dedicated PC
- Enables BYOC end user device of choice
- Free-seating...any device, anywhere
- Floor space savings
- Quick assimilation of new workers/workloads
- Faster Windows 7 migration
- Microsoft licensing control based on usage
- Reduced application remediation spend
- Faster deployment of new business applications without hardware/OS version dependencies

*** NOTE:** *“Soft benefit” factors have typically been ignored as more traditional hardware and software savings were more readily measured. The industry has not quantified standard soft metrics in a consistent manner yet. With more experience these will become available from measured pilots.*



Why IBM? Because of our leadership, experience and track record....



- 4.3 million end points under management; 750 000 virtualized IBM #1: market share
- 40 years experience; extensive R&D and innovation
- World Class Center of Competency for virtualization – largest Citrix farm in world
- Most strategic invested alliances with skills and delivery expertise sharing
- Go to proven leader to address other vendors failures
- Microsoft Migration factory with 480 experts; 5 000 Microsoft specialists WW
- 4000+ successful Microsoft migrations
- IBM internal: 200 000 BYOD end points by year end.
- 10 years experience in managed mobility
- Managed Services Desk: 5M users, 1400 clients, 4.3M calls/month
- 70 delivery centers; 50 + languages
- Unique analytics and innovative self service portal
- Leadership rank Y2Y (Gartner Magic Quadrant); #1 for completeness of vision in North America!
- Follow the sun consistent global delivery for managed services
- Deep industry knowledge, industry briefing centers and partner alliances
- Portfolio incorporates leading edge security technology

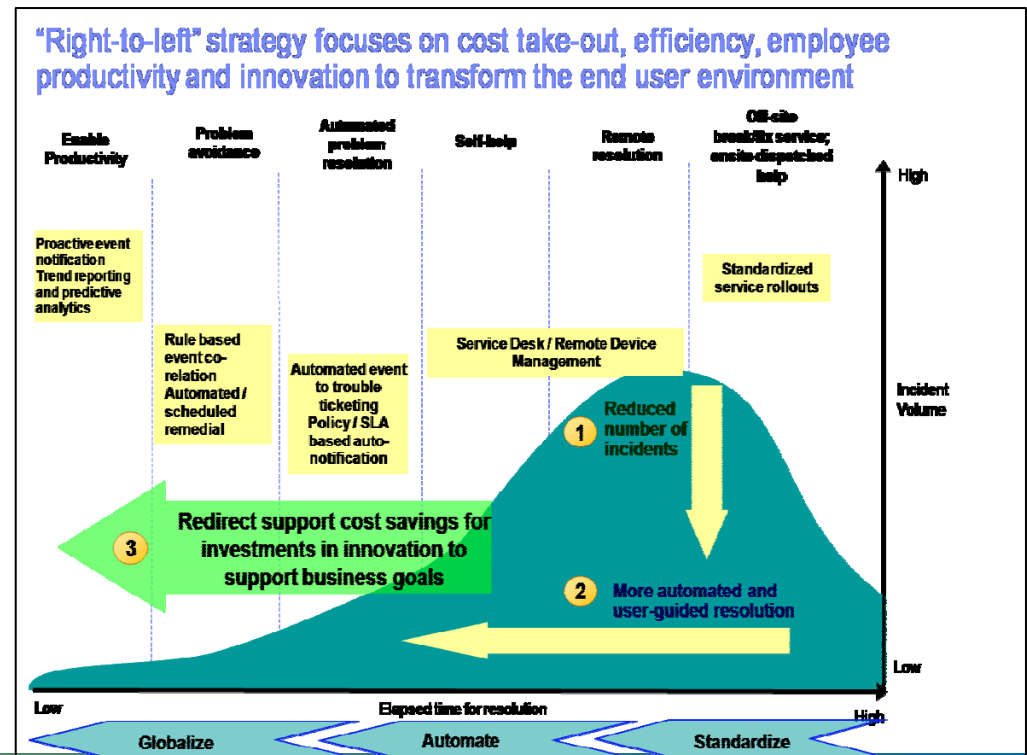
IBM Smart Desktop Cloud at leading Indian Financial BPO helps plug data leakage and provide secure environment.

Background

- Client is one of the leading BPO services providers, in the Indian Financial Services Sector
- High levels of control and security and data leakage protection capabilities were prime requirements
- Client wanted to expand with an additional center at Mumbai for 1,400 users to cater to its business growth
- Before engaging with IBM, customer used to have a traditional approach of fulfilling individual pieces required for the project

IBM Proposed solution

- IBM used R2L strategy & proposed a hybrid solution comprising a complete fit out to IT equipment rollout, supported by managed services comprising of smart desktop cloud solution, that provides,
 - Secure environment
 - Data leakage protection
 - Limited agent mobility
 - IBM leveraged the integrated managed services play to deliver a complete services solution, helping mitigate critical business and controls requirement
 - IBM also provided the client with a very convenient slab based pricing



IBM “EDA Cloud” Accelerated POWER7 Development

98% of WW compute cycles for POWER7 development hosted in Austin, Texas data center

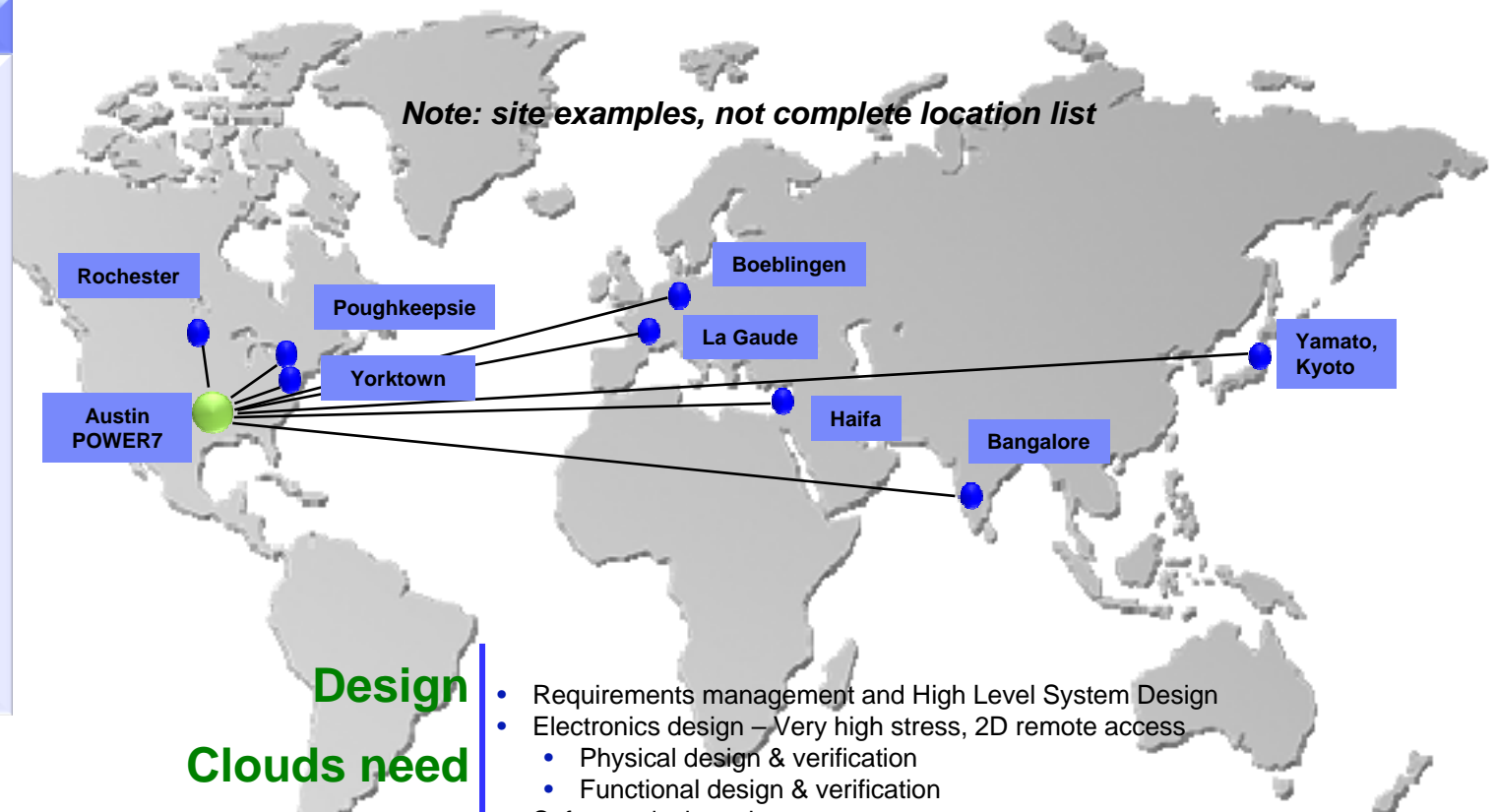
Characteristics

Remote user Access

Designers in all locations access centralized resources via Thinkpad and a remote (2D) access client

Shared, Centralized Development

Austin systems used for interactive and batch work at 90% utilization around the clock, seven days a week



**Design
Clouds need
to support all
design
domains**

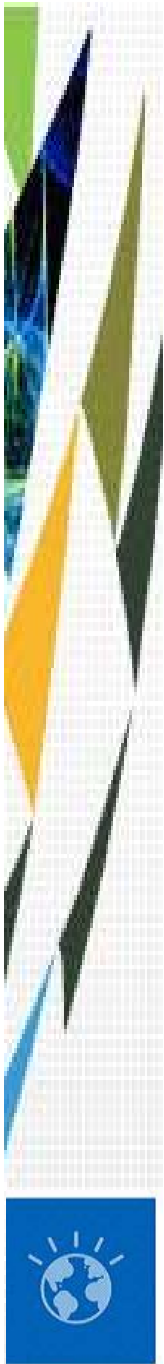
- Requirements management and High Level System Design
- Electronics design – Very high stress, 2D remote access
 - Physical design & verification
 - Functional design & verification
- Software design – low stress
 - Embedded SW
 - Systems management/control SW
 - Operating Systems
 - Middleware
 - Applications
- Mechanical system design – high stress, 3D remote access



IBM EDA Cloud Reduces Cost

- **Cost Reduction – IBM 2x designers on same budget**
 - Replacing Workstations with Laptops
 - Consolidating Data/Storage
 - Reduced support
 - No local storage to manage
 - Reduced network shadowing
 - Consolidating Servers/Workstations
 - Significantly reduced support
 - Consolidated Data Centers
 - Allowed for higher peak usage with same number of servers.
 - Compute power never a gate to tape out
 - Reduced Support
 - More Efficient Data Centers
 - Higher Utilization on Servers
 - More projects to drive usage

- **Improved Efficiency - Any designer can work on any project anywhere in the world**
 - Designers
 - Can work from any where work, home, vacation...
 - Work on multiple projects
 - Seamless access to large compute cloud
 - Can work on state of the art projects from any where in the world
 - Managers
 - Can use design resources any where in the world.
 - Data Centers
 - Consolidated data centers can manage larger peak usages
 - Compute is never the gate to tape out.
 - Legal
 - Data is only in USA there is no importing or exporting of data.



Thank you

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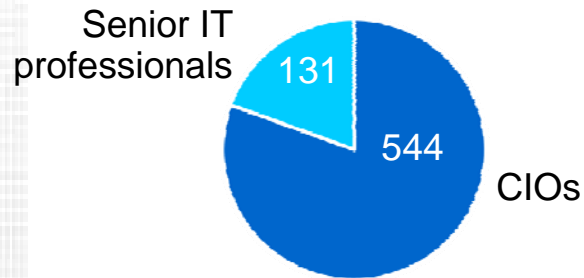
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To find out what leaders are doing to enable change and innovation, IBM conducted a global workplace study.



675
CIOs and IT professionals



6 countries across 4 continents

- Australia
- China
- India
- Japan
- United Kingdom
- United States



Multiple
industries



End User virtualization management with partners: RES or AppSense, enables full management of the environment and pools user personalization

