Steps to Cloud Nine
The Cloud Transformation Journey

Martin Stubbs-Race, IBM Cloud Business Advisor
Steve Godbee, IBM ANZ CIO

IBM

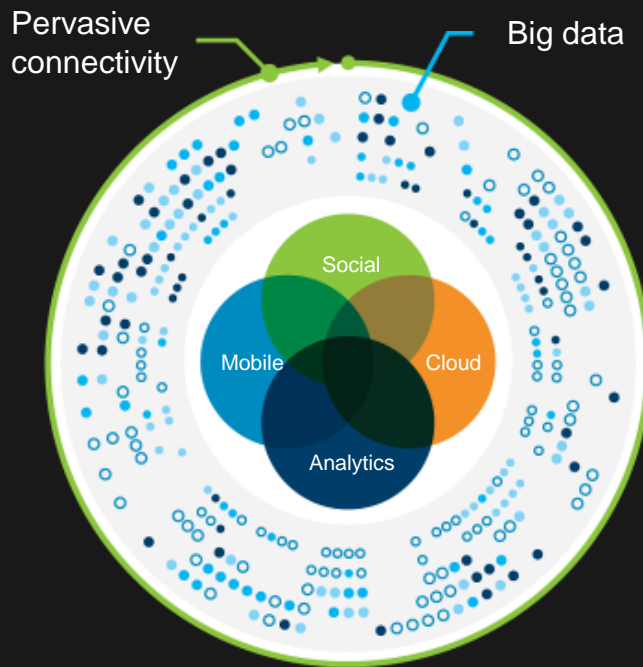# The Cloud Transformation Journey

Reinventing
Australian
enterprises for
the digital economy

National Institute of
Economic and Industry Research

Differences in market capitalisation for sample leaders and followers by 2025.

	FINANCIAL SERVICES	
	$billion	
Market capitalisation – leader in 2025	2025 $69	
Market capitalisation – follower in 2025	2025 $22	GAP $47
	RETAIL	
	$billion	
Market capitalisation – leader in 2025	2025 $78	
Market capitalisation – follower in 2025	2025 $1.5	GAP $76.5
	MINING	
	$billion	
Market capitalisation – leader in 2025	2025 $130	
Market capitalisation – follower in 2025	2025 $38	GAP $92
	TELECOMMUNICATIONS	
	$billion	
Market capitalisation – leader in 2025	2025 $102	
Market capitalisation – follower in 2025	2025 $48	GAP $54
TOTAL GAP		**$269.5 billion**

IBM

Over the Next 12 Years the Digital Economy will become the Economy

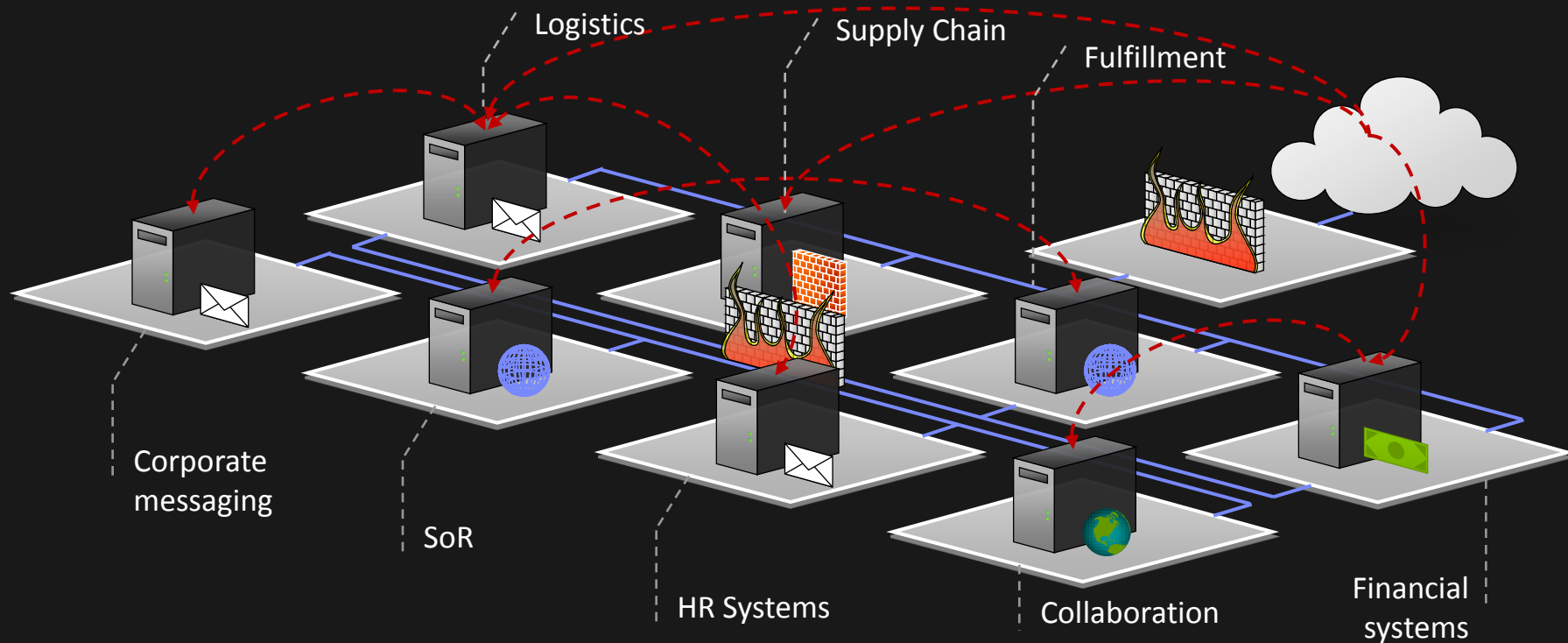|	
Customers become more connected	
Consumers and employees will demand more	
Organisations will get flatter and more agile	
Enterprises will make faster, more-data-base decisions	
Enterprises will face more sources of competition	
Underpinned by a heavy reliance on digital	

Digital transformation forces

Pervasive connectivity

Big data

Social

Mobile

Cloud

Analytics

IBM

Moving to a New World

Systems of Engagement are delivering user-centric services into the enterprise

Systems of Record (SoR)

Systems of Engagement (SoE)

WAN / LAN

Data Center

SoE Enablers:

- **Social** drives agility

- **Mobile** enables a 24x7 connected, engaged workforce

- **Analytics** enable data-driven insights for faster, smarter decision making

- **Cloud** enables ubiquitous access to resources and applications, and workload flexibility

But the Reality is we Have Legacy Apps to Deal With…

Logistics

Supply Chain

Fulfillment

Corporate messaging

SoR

HR Systems

Collaboration

Financial systems

IBM

Cloud Offers A New Way To Bring In User-Centric, SoE Services

A Cloud Operating Environment allows us to construct apps from APIs ... regardless of where they reside

SaaS
PaaS
IaaS

Cloud

Firewall

Datacenter

On-Premise Cloud

API Economy
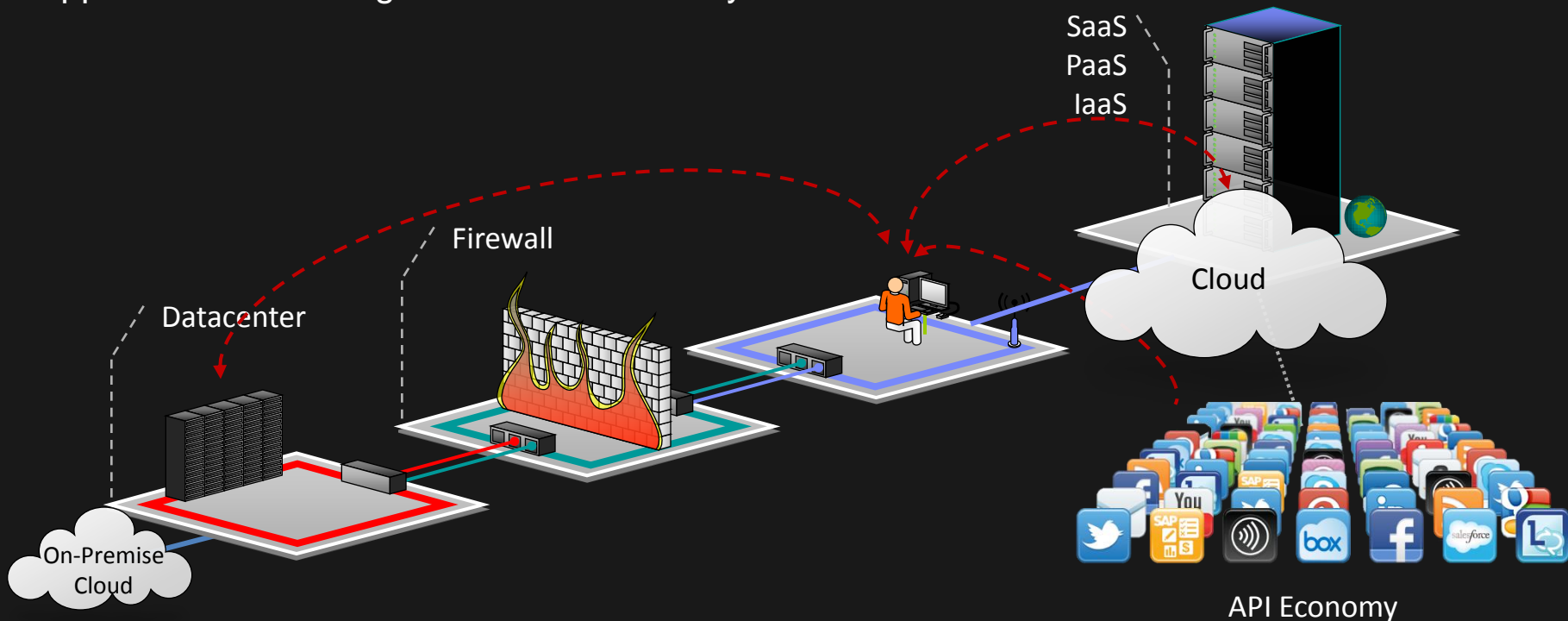
IBM's Transformation: An Ongoing Journey

- Keep company together & **stabilize business**
- Move to **integrated solutions**
- Dramatic **growth in services**

- Focus on open technologies and **high value solutions**
- Become the premier **Globally Integrated Enterprise**
- Move to **Values-based culture**

- Delivering **signature IBM client experience** with an **engaged workforce**
- Building a **Smarter enterprise** with data, cloud and systems of engagement
- Making **IBM essential** to clients, partners, investors and communities

Gerstner ('93 thru 2002)

Palmisano ('03 thru 2011)

Rometty ('12 to present)

1993

2003

2012

Watson

IBM

IBM's approach to transformation

IBM Strategy

IBM Values

Transformation Framework

Business Process Excellence

Organizational & Culture Change

Information Technology Enablement
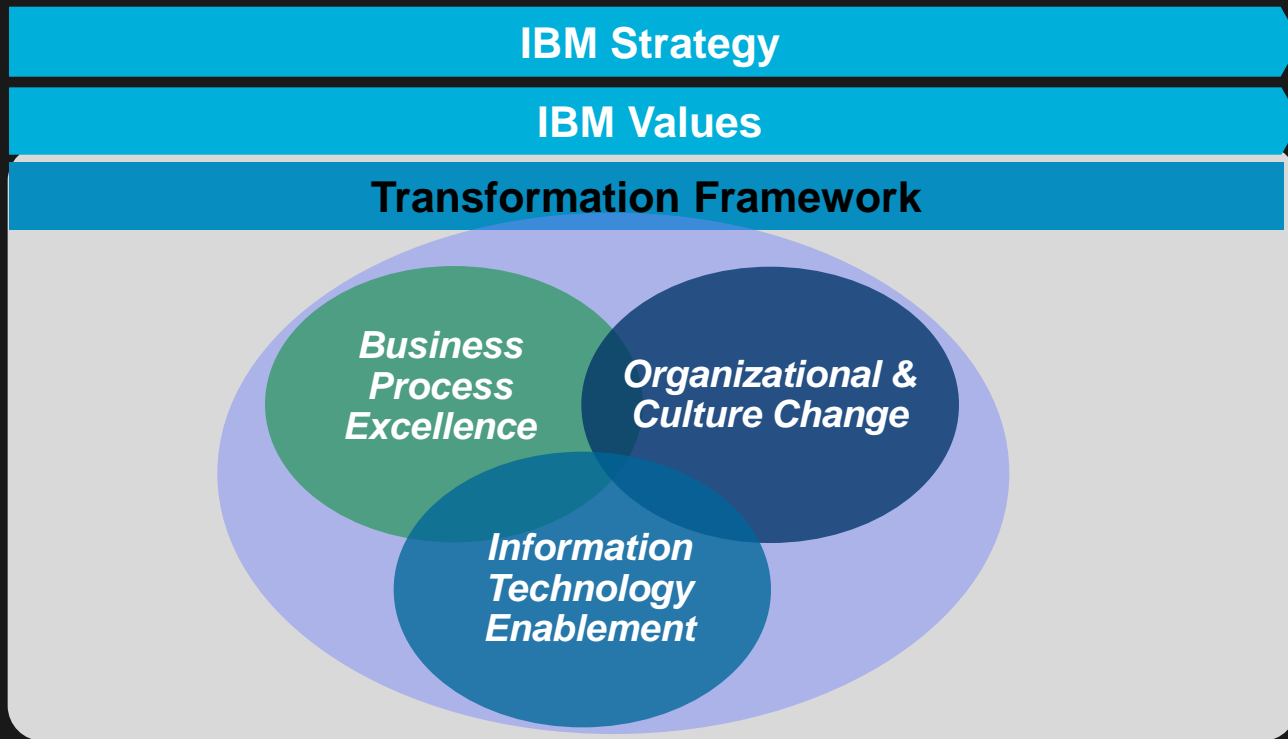
5 Principles of Smarter Transformation

Create a movement

Build a platform for continuous improvement

Pursue growth as well as productivity

Apply technology for smarter transformation

Establish an enterprise change capability

8

IBM

Technology: a catalyst for innovation and growth

The transformation of IBM's IT Organization Pervasive Consolidation

CIOs
128 to 1
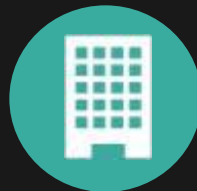
Data Centers
155 to 5
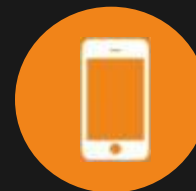
Applications
16000 to 3800

More than $1.5B in IT savings since 2005. Now we're reinvesting these savings in our future.
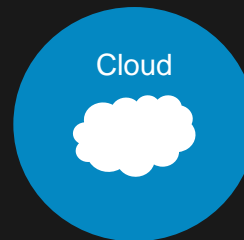Using IT not just as a productivity tool, but as a catalyst for innovation and growth

Analytics
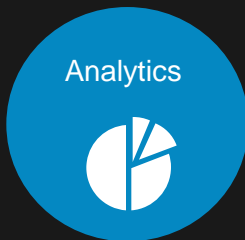
Projecting savings of $100M+

Social

Supports 428,000 bloggers 86,000 public comm

Mobile

Over 185,000 mobile devices

Cloud

Reduced server provisioning from 5 days to one hour

Watson Engagement Advisor

Helps contact center agents answer client questions

Six initial workloads chosen by the IBM CIO for Cloud

Analytics	Develop/Test	Collaboration	Storage	Prod Support	Self-Service
Blue Insight	**Develop/ Test Cloud**	**SmartCloud Meetings**	**Storage Cloud**	**Production Cloud**	**Self-Service App Env**
• Standardized BI/analytics capabilities • 300K users, 500 ported/ boarded apps • Predictive modeling (SPSS) and data mgmt • 50K peak reports/day	• Server setup from 5 days to 1 hour • 95% of new server reqs via this cloud • 13,000 VMs provisioned for 2,100 users	• 85% of web conference minutes • > 50M meeting minutes per month	• File storage cloud used by > 130K users & applications • Block storage cloud w/ automated tiering (50% reduction $/GB)	• Private cloud for lower tier/ departmental applications • First apps migrated and operating • Refining platform, expanding use on best fit basis	• Platform for composite app development and execution • Programmer-less app development • Example: >200 forms-based internal process apps
SaaS	**IaaS**	**SaaS**	**IaaS**	**IaaS**	**PaaS**

The IBM CIO cloud experience

Key lessons learned

- **Cloud adoption comes with benefits and risks**
    - Benefits of Cloud are real, but require careful planning & execution
    - Cloud providers are at various states of readiness and maturity – technologically and otherwise.
    - Security & service levels need to be well understood by IT and the business.

- **Private cloud is a viable first step**
    - Agility is biggest benefit and driver
    - Presents an opportunity to transform internal processes and organization for increased efficiency

- **Think small & targeted**
    - Small steps with tactical/point solutions, not sweeping infrastructure change
    - Application portfolio-led perspective works best

- **Enabling Self Service for IBM'ers creates new work for existing roles and requires new roles to be created**
    - System Integration skills and roles are critical

Cloud readiness assessment − By Workload

IBM

Ready for cloud

New growth workloads made possible by cloud

Collaborative Care

Analytics

Healthcare Payments

Infrastructure Storage

Information intensive

Banking & Financial Markets Solutions

Wealth Management

Isolated workloads

Collaboration

Risk Management

Sensitive Data

Workplace, Mobile, Desktop & Devices

Highly customized

Mature workloads

Not yet virtualized 3rd party SW

Business Processes

Pre-production systems

Disaster Recovery

Evaluate: May . . .or may not. . . be ready for Cloud based on their attributes or maturity

Complex processes & transactions

Batch processing

Development & Test

Regulation sensitive

Infrastructure Compute

IBM

Identifying the Most Appropriate Cloud Service Model

The Right Cloud for the Right Workload

Will your operating environment need to rapidly change or require ongoing customization?

Can your workload function with a given PaaS stack's standard offering?

Will out of the box functionality work for your business/process?

IaaS

- Foundation of Cloud computing
- sometimes referred to as Hardware as a Service (HaaS)
- service provider owns & runs the equipment. Client typically pays on a per-use basis.
- Dynamic scaling
- Shared or dedicated physical infrastructure

PaaS

- Platform as a Service (PaaS) is a way to rent hardware, operating systems, storage and network capacity over the Internet.
- Shared platform
- Shared phys infrastructure
- Access limited to platform software

SaaS

- Software as a Service (SaaS) provides On-Demand software
- All users will have the same version of software
- Application level multi-tenancy
- Shared physical infrastructure

IBM

Where to from here in your cloud journey: Here are some steps to consider:

Business	Developers	IT Operations
• Undertake a Cloud Assessment - infrastructure, platform software or combination • Cloud computing transformation advisory • Access new capabilities via IBM Marketplace eg. analytics tools, marketing tools, financial tools • Leverage IBM Marketplace to monetize company value	• Access PaaS catalogue - Bluemix on SoftLayer • Access SaaS catalogue - customise Software offerings	• Dev and test • Storage • Disaster recovery • Infrastructure refresh to cloud (eg. to SoftLayer using Racemi) • Collaboration eg. SmartCloud meetings • Packaged apps to Cloud (CAPEX to OPEX) • On-Premise / Off-premise / Hybrid

sgodbee@au1.ibm.com
mstubbsr@au1.ibm.com / @mstubbsr