Forward looking statements and non-GAAP information

Certain comments made in this presentation may be characterized as forward looking under the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on the company’s current assumptions regarding future business and financial performance. Those statements by their nature address matters that are uncertain to different degrees. Those statements involve a number of factors that could cause actual results to differ materially. Additional information concerning these factors is contained in the Company’s filings with the SEC. Copies are available from the SEC, from the IBM web site, or from IBM Investor Relations. Any forward-looking statement made during this presentation speaks only as of the date on which it is made. The company assumes no obligation to update or revise any forward-looking statements. These charts and the associated remarks and comments are integrally related, and are intended to be presented and understood together.

In an effort to provide additional and useful information regarding the company’s financial results and other financial information, as determined by generally accepted accounting principles (GAAP), these materials contain certain non-GAAP financial information. The rationale for management’s use of this non-GAAP information is included on page 57 and 58 of the company’s Form 10-Q for the nine months ended September 30, 2018, filed with the SEC on October 30, 2018. For reconciliation of the annual exit run rate for as-a-service revenue and other related information, please refer to page 59 of the company’s Form 10-Q for the nine months ended September 30, 2018. For other related information please visit the Company’s website at: www.ibm.com/investor
Today’s participants

Mark Foster
Senior Vice President, Global Business Services

Martin Jetter
Senior Vice President, Global Technology Services

Arvind Krishna
Senior Vice President, Hybrid Cloud and Director, IBM Research
Our clients are facing an urgent imperative to undertake significant business transformation.

Digital and Cognitive Transformation Journey

- Journey to AI
- Journey to Cloud
- Journey to Security
IBM has unique capabilities to help our clients drive cloud-enabled business transformation

- Comprehensive business and technology skills and assets
- Co-creation of new business platforms
- Orchestration of the end-to-end journey
- Transformation of customer experiences, workflows, applications and infrastructures
The market opportunity continues to shift toward cloud, with growth in both private and public

**Total IT Opportunity**

- **Traditional**
  - ~$0.6T
  - -8% CAGR (18-20)

- **Cloud**
  - ~$1.0T
  - 18% CAGR (18-20)

**Total Cloud Opportunity**

- **Private**
  - ~$0.4T
  - 16% CAGR (18-20)

- **Public**
  - ~$0.6T
  - 20% CAGR (18-20)

Services: ~$0.5T / Software: ~$0.4T / Hardware: ~$0.1T

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**Note:** 1. IBM addressable opportunity
Most enterprises are in the early phases of their transformation.

### A Large European Bank
Enterprises are ~15 – 20% along their Cloud journeys

<table>
<thead>
<tr>
<th>Year</th>
<th>Traditional</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>87%</td>
<td>30%</td>
<td>10%</td>
</tr>
<tr>
<td>2019-2020</td>
<td>60%</td>
<td>30%</td>
<td>10%</td>
</tr>
<tr>
<td>2021-2022</td>
<td>24%</td>
<td>61%</td>
<td>15%</td>
</tr>
</tbody>
</table>

#### Grow cloud maturity within the bank
- Increase cloud scope based on acquired experience
- Scale cloud within the bank; Cloud as the new normal

### The Hybrid Multicloud Reality
Projected for the next 10 years+

- **Private Clouds**
- **Public Clouds**
- **Dedicated Clouds**

#### The “Average” Enterprise Client:
- Has 1,000+ applications and 5+ clouds
- Requires portability, connectivity and consistent management between clouds
IBM’s cloud strategy uniquely drives value for enterprise clients

Hybrid
Enable enterprises across traditional, private and public environments

Multicloud
Client environments are heterogeneous with the majority of enterprises using 5+ clouds

Open
Build capabilities that are open by design, enabling client flexibility and portability across clouds

Secure
Provide reliability and continuous security for the client’s environment

Management
Consistent service level, support, logging, management and delivery across complete cloud environment
Westpac

Implementing a fully integrated, hybrid cloud to deliver services to 13+ million banking customers

- **Hybrid** – traditional, private, public – for greater agility, flexibility, and operational efficiency
- Application implementation that is **10x faster** and **3x as cost effective**
- A **secure environment** that addresses regulations for **data protection and privacy**

“We are able to keep our technology current, scale-up and down on demand, and deliver efficiency gains...”

-- Westpac CIO, Dave Curran

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American Airlines

Improved customer experience, lowered cost, rapid innovation and delivery transformation

- Migrated AA.com, kiosk, mobile in 5 months - 500+ servers to 400
- **Dynamic Booking rollout with flick of switch** to cities being hit by hurricanes
- IBM Services and IBM Cloud Garage Method; **innovative apps and features going live every month**

“IBM has an environment for whatever workload we want to throw at it... public PaaS, private PaaS, IaaS, cloud managed services, connections back to legacy on-prem infrastructure.”

“...we originally scoped [Dynamic Rebooking] out and it was a year’s effort... we did it in a third of that amount of time.”

-- American Airlines CIO, Maya Liebman
IBM’s end-to-end approach is helping clients with their journey to cloud
IBM has built a strong cloud foundation

**Offerings**
- IBM Cloud: private, dedicated, public
- Cloud Advisory and Migration practices
- Application modernization
- Digital Workplace, Network, Resiliency, and Security Services
- IBM Cloud Private, IBM Multicloud Manager, IBM AI Openscale, et.al.
- IBM Z, Power and Storage on Linux

**Capabilities**
- 60 cloud data centers across 19 countries
- IBM Services Platform with Watson on IBM Cloud, with 1,700+ client instances
- 100k+ migrations completed
- 1,000+ VMware clients

**Talent**
- ~90k cloud and enterprise application consultants / developers
- Expertise from 1000s of engagements across 20 industries
- 1,900+ cloud patents awarded in 2017

**Financials**
- $19B cloud revenue\(^2\)
- ~25% of IBM revenue is cloud
- $11B +24% as-a-Service revenue Yr/Yr\(^2\)
- ~30% of outsourcing backlog is cloud
- ~100 new clients per quarter on IBM Cloud Private

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\(^1\) 3Q 2018 Trailing 12 months; \(^2\) Annualized exit run rate; Yr/Yr at constant currency
Red Hat builds on this foundation and has evolved from an open source pioneer to a driving force in hybrid cloud computing.

**Pioneer of enterprise Linux and open platforms**
- Wide enterprise adoption
- Broad partner ecosystem
- Deeply engaged developer community

**Foundational technology for hybrid computing**
- Common platform across all environments
- Leadership in container management
- Based on open standards / cloud agnostic

90% Fortune 500 adoption
8M+ Developers
#1 Linux platform for applications

High growth, high value
IBM and Red Hat are highly complementary

IBM MULTICLOUD MANAGER

HYBRID MANAGEMENT, ORCHESTRATION & SECURITY

IBM MIDDLEWARE, IBM CLOUD PRIVATE FOR DATA
(ENABLED WITH IBM CLOUD PRIVATE & RED HAT KUBERNETES)

IBM CLOUD PRIVATE

IBM CLOUD PRIVATE PLATFORM SERVICES

RED HAT OPENSIFT CONTAINER ORCHESTRATION & MANAGEMENT
(KUBERNETES)

OPENSIFT PLATFORM SERVICES

OCI CONTAINER RUNTIME

RED HAT ENTERPRISE LINUX

PRIVATE CLOUD

PUBLIC CLOUD

GTS MULTICLOUD MANAGEMENT PLATFORM

INTEGRATED CATALOG, DEVELOPMENT & OPERATIONAL EXPERIENCE

DEVOPS AUTOMATION MANAGEMENT SECURITY
IBM and Red Hat join forces to accelerate hybrid cloud adoption

**Certified IBM middleware**
on IBM Cloud Private for deployment on Red Hat containers and Red Hat OpenShift

**IBM middleware integrated**
with open source under one common platform, fully supported from the hypervisor through client apps

**IBM middleware deployable**
everywhere that Red Hat OpenShift is supported

**Development lifecycle extended**
from inception to production, with built-in management for continuous delivery and operation

**Professional services**
to advise and implement IBM Cloud Garage Methods and Red Hat Innovation Labs
IBM and Red Hat together drive significant benefits to clients

<table>
<thead>
<tr>
<th>Benefits to IBM</th>
<th>Benefits to Red Hat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceleration of hybrid cloud adoption</td>
<td>Leverage industry expertise and scale</td>
</tr>
<tr>
<td>Extensive developer ecosystem</td>
<td>Accelerate expansion of open source portfolio</td>
</tr>
<tr>
<td>Cross-sell and new revenue opportunities</td>
<td>Expand reach of open technologies across enterprise clients</td>
</tr>
</tbody>
</table>

**Benefits to Clients**

- Enterprise-grade open hybrid cloud
- A path to migrate traditional workloads to the cloud
- Consistent management across multiple clouds
- A cloud that is secure to the core
IBM and Red Hat will accelerate hybrid multicloud adoption

Cloud Consulting, Migration and Application Modernization
Managed Services and Support
IBM Analytics and AI on multiple clouds
Red Hat acquisition creates cross-selling and new revenue opportunities across IBM

<table>
<thead>
<tr>
<th></th>
<th>Software</th>
<th>Global Business Services</th>
<th>Global Technology Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance trusted advisor position to clients on their hybrid multicloud journey</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Client application modernization</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Manage clients’ hybrid multicloud environments</td>
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<td></td>
<td>✓</td>
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<tr>
<td>Consistent hybrid multicloud environment</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>Analytics, data and AI with multicloud management</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accelerate open source adoption</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Leverage broader developer ecosystem</td>
<td>✓</td>
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</table>
Top misconceptions of IBM and Red Hat acquisition

❌ Red Hat is dependent upon an on-premise model

❌ There are other versions of Kubernetes available, which make the Red Hat growth opportunity less attractive

❌ IBM’s acquisition of Red Hat will damage the open source community

❌ IBM cannot capture the cross-selling opportunity while maintaining Red Hat’s neutral status

❌ IBM could achieve the same results through the existing partnership with Red Hat
Key takeaways

- Cloud is integral to enterprises’ digital transformation
- Hybrid cloud is a $1 trillion opportunity
- IBM’s end-to-end differentiated approach is hybrid multicloud for the enterprise
- Red Hat acquisition drives new growth opportunities across IBM
- IBM will become the #1 hybrid cloud provider