

# IBM Z Executive Briefing for Jacksonville Z Council

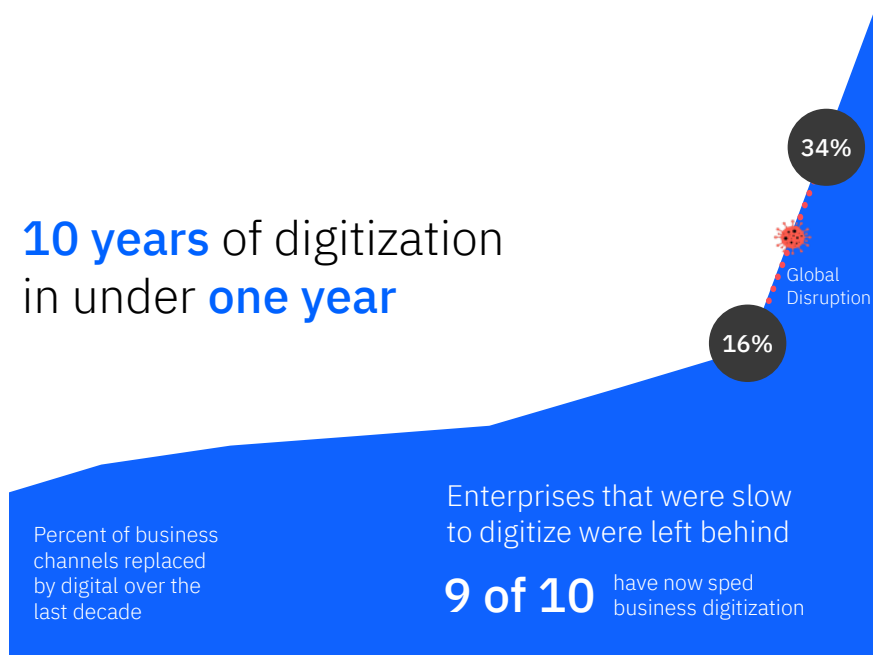
March 14th, 2023

**Joanie Gines**

World Wide VP,  
IBM Z Application & Platform  
Software Sales





# Digital transformation turns to reinvention

**10 years** of digitization  
in under **one year**



Source: IBM Strategy, McKinsey & Company, IBM Business Value (<https://ibm.co/virtual-enterprise>)

Urgency to build new businesses that create new advantage

-  Technological innovation
-  Customer-centricity
-  Ecosystem co-creation
-  Sustainability

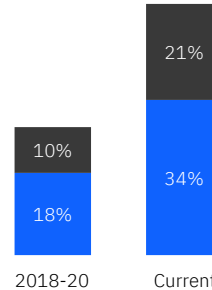
**7 in 10**

CEOs are driving large-scale change in value creation and ways of working

By 2026, half of revenue will come from businesses that do not exist today

Top priority

Top 3 priority



**6 in 10**

rank new business building as a top priority – doubling since the global disruption

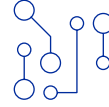
# Major challenges to address

... as digital transformation accelerates, extends to mission-critical processes



## Manage increased complexity, given heterogenous IT/ clouds

- 75% users utilizing two+ public clouds
- 70% workloads not on public clouds
- 20B internet-connected devices by '24



## Derive value from an explosion of available data

- 2-3x growth in total data by '25
- Chief Data Officer role growing fast
- Top AI needs for decision making and automated business operations



## Drive competitive operations, despite worker shortages

- 30% of innovation, client support, ecosystem and workforce, virtualized by '23
- 80% Enterprise agree that intelligent automation can improve business results<sup>6</sup>



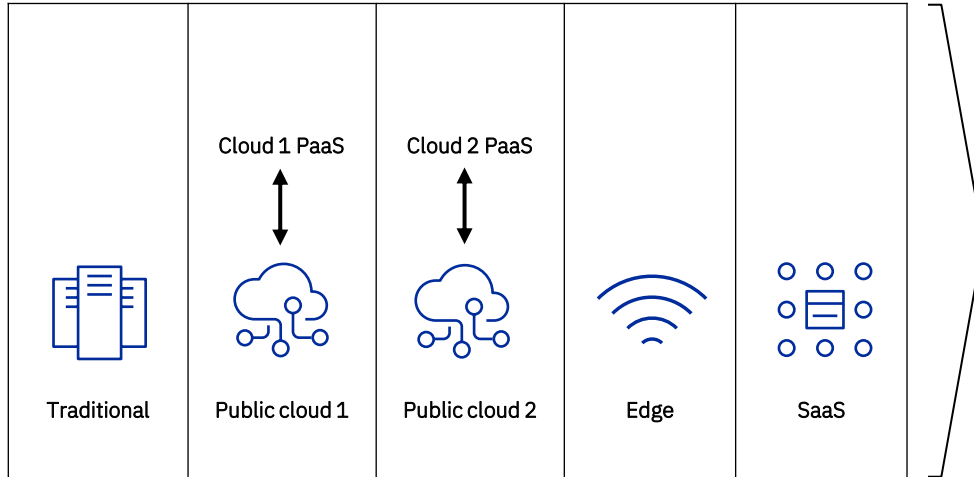
**Protect businesses from cybercrime:** 40% increase in number of malicious security breaches in 2020



**Be sustainable end-to-end:** 85% of companies have a sustainability strategy, only 35% have acted on it

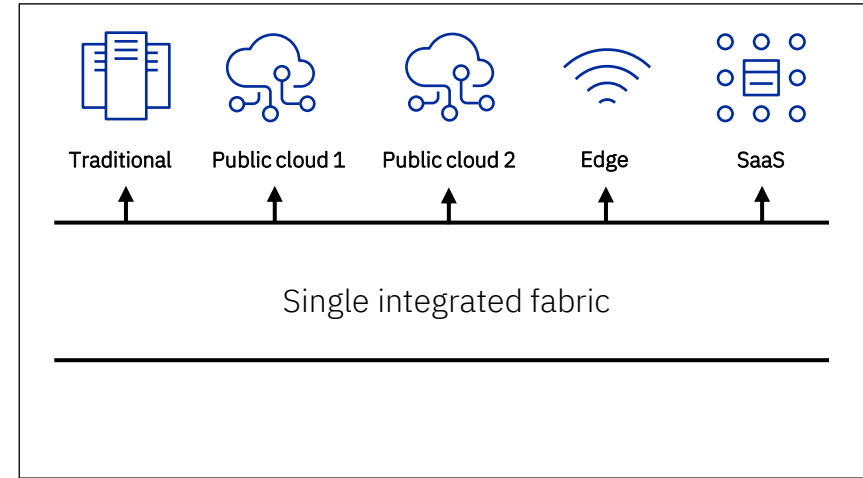
# Hybrid cloud, a better architecture for application modernization

Heterogenous environments are becoming more complex



- Proprietary technologies in separate environments
- Siloed developer teams with manual, duplicative processes

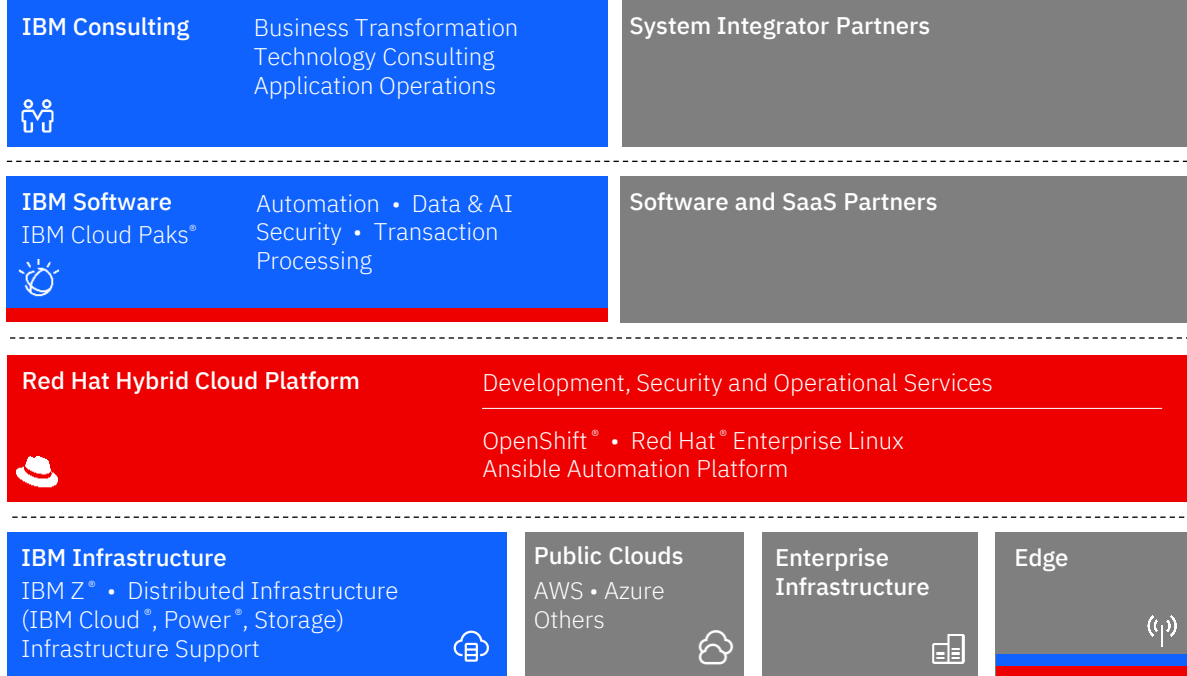
Hybrid cloud platform



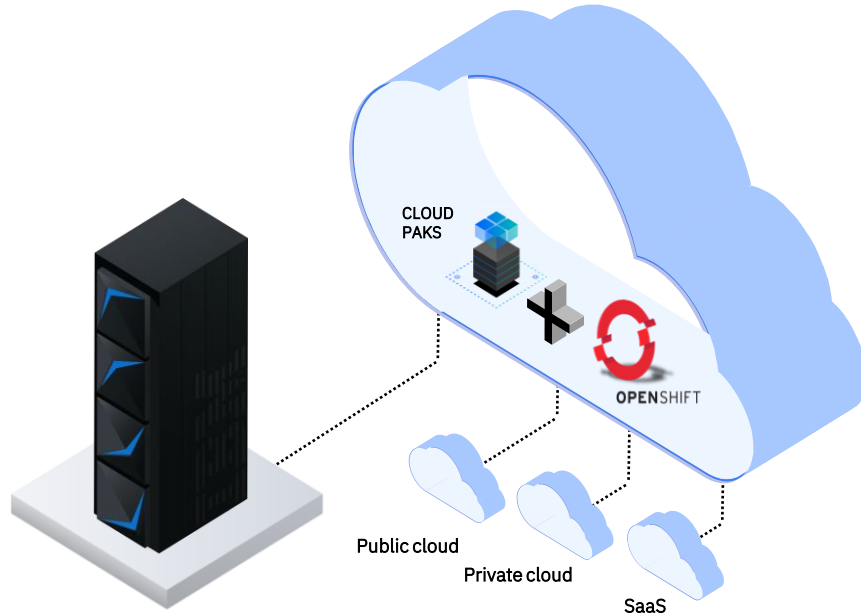
- A common platform
- Developer teams use agile practices with common set of processes

# IBM approach for Hybrid Cloud and AI

Be the catalyst that makes the world work better



# The best of the mainframe and the innovation of Cloud



Significantly expand your talent pool

Bring an enterprise-wide DevOps practice

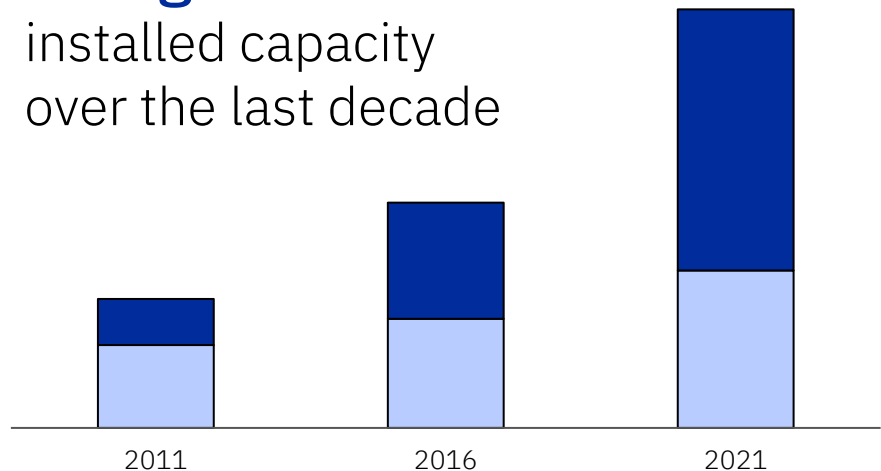
Easily access IBM Z data without moving off-platform

Optimize costs

Maintain the option of repatriating cloud applications

# IBM Z: Increasing momentum in the era of Hybrid Cloud

**>3X growth** in  
installed capacity  
over the last decade



Workload as measured by installed Million Instructions Per Second (MIPS)

Standard MIPS  
Specialty MIPS



67 of the Fortune 100

45 of the world's top 50 banks

8 of the top 10 insurers

4 of the top 5 airlines

7 of the top 10 global retailers

8 of the top 10 telco's

24 of the top 25 countries by GDP\*

\*24 of the top 25 global countries ranked according to their GDP have public sector organizations that run on IBM Z or IBM LinuxONE

According to Gartner:

*Application leaders responsible for a strategy to build a digital business platform should:*

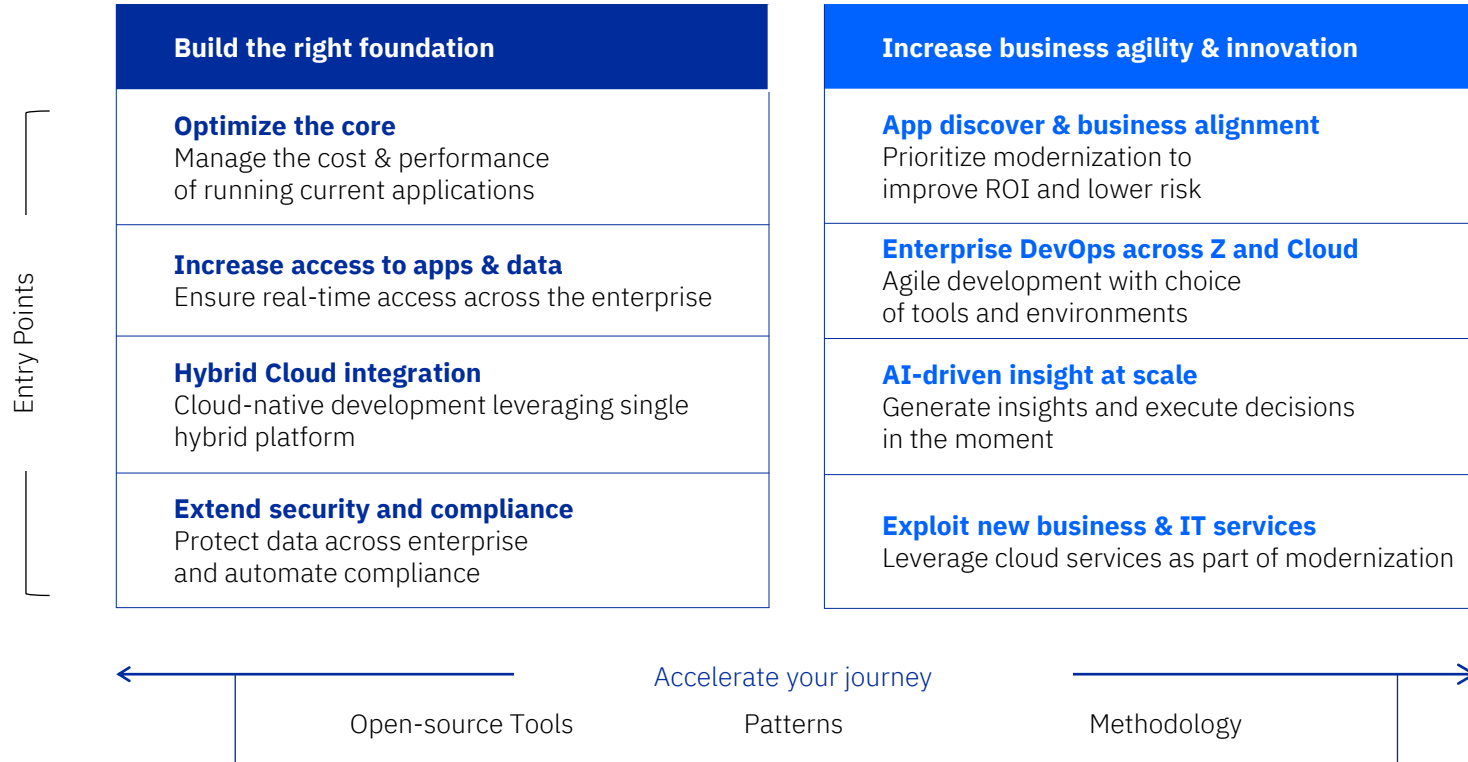


Exploit and **extend the value of your legacy** applications by removing obstacles, rather than viewing and treating those applications as a problem

Use **continuous modernization** as an alternative when a rip-and-replace program would be too costly, risky, or time-consuming



# IBM's approach lets you **continuously modernize** applications & data on IBM Z and Cloud



# IBM Z technology innovation

Drive innovation  
to remain the  
most secure,  
most reliable,  
most scalable  
transaction  
processing and  
data serving  
platform

2017

2022



**IBM z14®**

14nm  
Accelerated  
Encryption  
Virtual Flash  
Memory  
High-Speed  
Synch I/O  
Secure Service  
Containers



**IBM z15™**

14nm  
Accelerated  
Compression  
Accelerated Sort  
Secure  
Execution  
System  
Recovery Boost



**IBM z16**

7nm  
Accelerated AI  
Quantum Safe  
System  
Secure Boot  
Memory  
Encryption  
Flexible  
Capacity for  
Cyber Resiliency

**IBM z16™**  
Built to build the  
future of business

Up to 200 Telum Processor Cores  
7nm technology, 5.2GHz, 1.5x Cache  
11% per core performance improvement  
17% total system capacity growth  
25% more processor capacity per drawer  
Up to 40TB memory  
1 to 4 19-inch frames

# IBM z16 is built to build

We built a powerful and secure platform for business.  
Let's build the future of yours.



Predict and Automate for  
Increased Decision Velocity



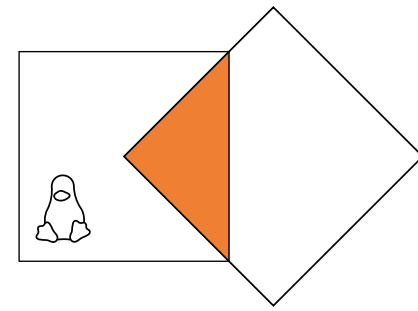
Secure with a Cyber  
Resilient System



Modernize with  
Hybrid Cloud

# Introducing IBM LinuxONE Emperor 4

## Building a sustainable infrastructure



Sustainability, without compromise

Reduce your energy consumption and costs with a highly efficient system

Deliver consistent transactional service levels with a massively scalable system

Build privacy and protection with a cyber-resilient system

# IBM Z innovations – Driven by design principles

Drive innovation to remain the most secure, most reliable, most scalable transaction processing and data serving platform

2017

2030



**IBM z14**

14nm  
Accelerated Encryption  
Virtual Flash Memory  
High-Speed Synch I/O  
Secure Service Containers



**IBM z15**

14nm  
Accelerated Compression  
Accelerated Sort  
Secure Execution  
System Recovery Boost



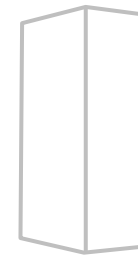
**IBM z16**

7nm  
Accelerated AI  
Quantum Safe System  
Secure Boot  
Memory Encryption  
Flexible Capacity for Cyber Resiliency

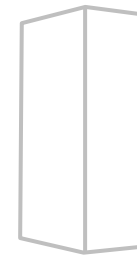


**IBM zNext\***

5nm



**IBM zNext +1\***



**IBM zNext +2\***

3nm

Continuous Compliance  
Foundation Models  
AI for Security  
Accelerated I/O  
Enhanced Workload Isolation  
Fully Homomorphic Encryption  
Quantum Integration

*\*Subject to change*

Thank you