DIGITAL REALTY™

Platform DIGITAL®

Enabling any-to-any distributed network connectivity at data centers

October 2023

Digital Economy and Digital Transformation

Driving Data Center Demand

Growing and emerging demand drivers that have further accelerated over the past year are driving the need for digital infrastructure globally

Digital Economy & Transformation	Accelerated Digital Trends	Digital Infrastructure Demand

Solid Demand Drivers Which Continue to Grow

- Cloud Computing
- Enterprise Modernization
- Streaming & Social Media
- E-Payment and E-Commerce

Emerging Trends with Enormous Potential
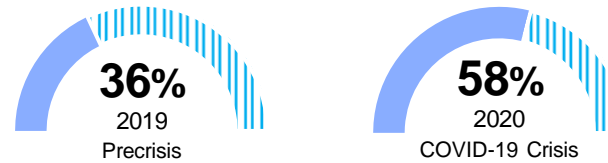
- Artificial Intelligence
- Internet of Things
- 5G Technology
- Edge Computing

### Digitization of Customer Interactions

Avg. Share of Customer Interactions that are Digital (%)

36% 2019 Precrisis

58% 2020 COVID-19 Crisis

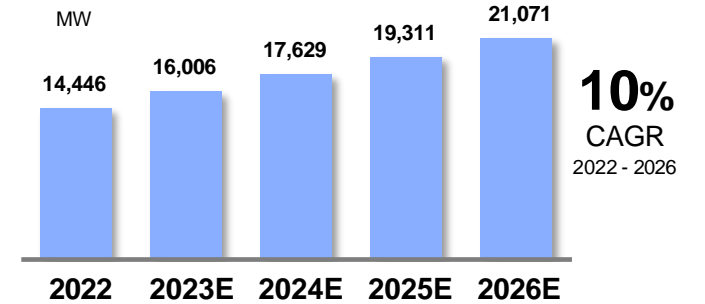**Rate of Digital Customer Interactions has Accelerated from Prior Forecasts by** [1] **3** yrs

Digitization of Products & Services

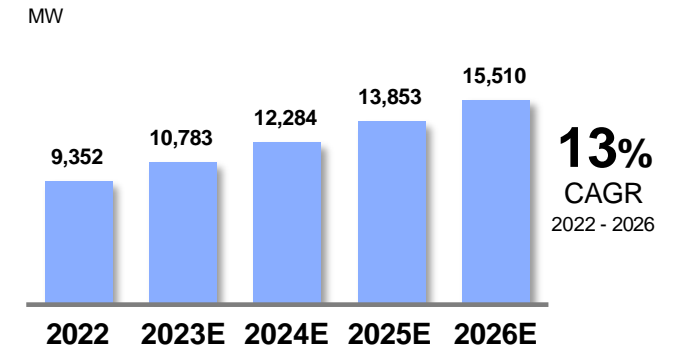Avg. Share of Products and/or Services that are Partially or Fully Digitized (%)

35% 2019 Precrisis

55% 2020 COVID-19 Crisis
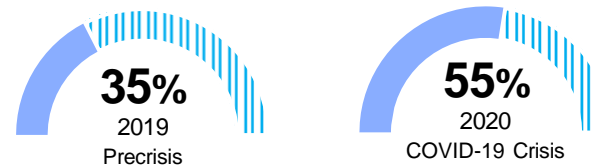
Rate of Products & Services that are Digitized has Accelerated from Prior Forecasts by [1] **7** yrs

Total Wholesale Leased Global

MW

- 2022: 14,446
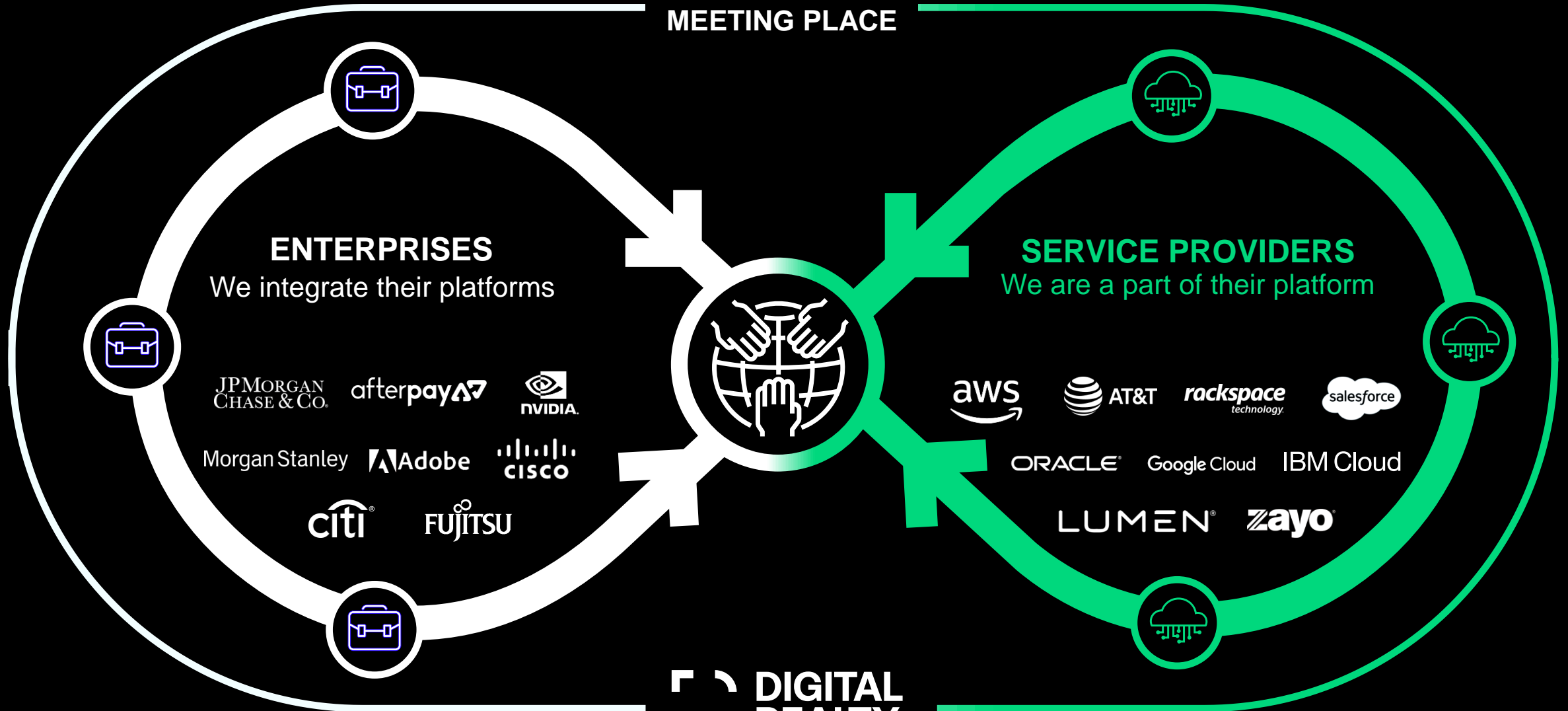- 2023E: 16,006
- 2024E: 17,629
- 2025E: 19,311
- 2026E: 21,071

10% CAGR 2022 - 2026

Total Hyperscale Leased Global

MW

- 2022: 9,352
- 2023E: 10,783
- 2024E: 12,284
- 2025E: 13,853
- 2026E: 15,510

13% CAGR 2022 - 2026

Requires a safe and open meeting place to deploy applications, data & controls

THE MEETING PLACE

ENTERPRISES
We integrate their platforms

JPMorgan Chase & Co. afterpay nVIDIA
Morgan Stanley Adobe cisco
citi FUJITSU

SERVICE PROVIDERS
We are a part of their platform

aws AT&T rackspace technology. salesforce
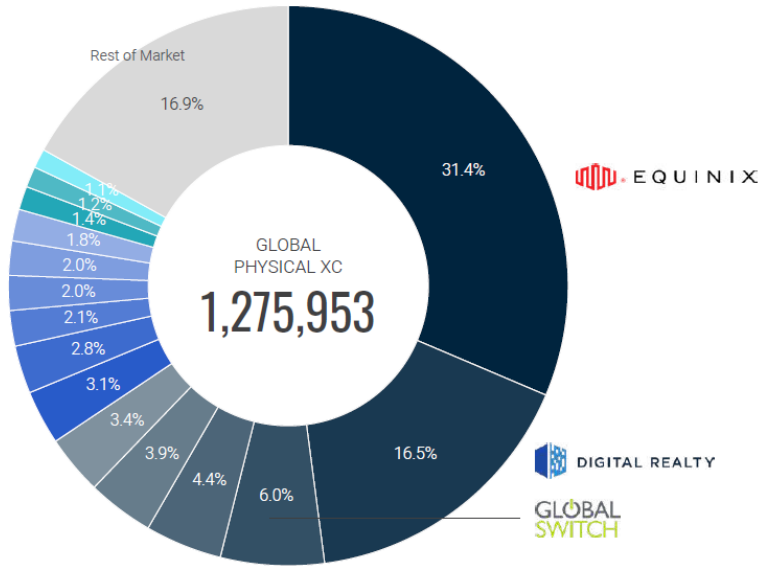ORACLE Google Cloud IBM Cloud
LUMEN zayo

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Physical and Virtual Cross Connect Leaderboard: 2022

Top 3 providers account for ~50% of global market (ex. China)

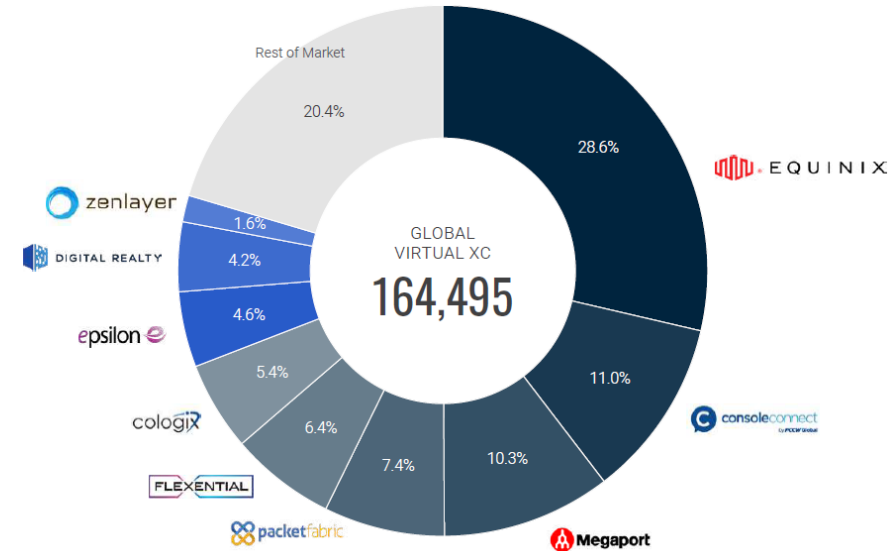| LEADERBOARD	
1	Equinix
2	Digital Realty
3	Global Switch
4	KDDI Telehouse
5	Digital Bridge
6	Cyxtera
7	NTT GDC
8	CoreSite
9	QTS
10	CyrusOne
11	Cologix
12	@Tokyo
13	NEXTDC
14	SUNeVision
15	Flexential

GLOBAL PHYSICAL XC
1,275,953

Rest of Market 16.9%

31.4% EQUINIX
16.5% DIGITAL REALTY
6.0% GLOBAL SWITCH
4.4%
3.9%
3.4%
3.1%
2.8%
2.1%
2.0%
2.0%
1.8%
1.4%
1.2%
1.1%

Physical Cross Connects

LEADERBOARD	
1	Equinix
2	PCCW Global (Console Connect)
3	Megaport
4	PacketFabric (Unitas Global)
5	Flexential
6	Cologix
7	Epsilon (KT)
8	Digital Realty
9	Zenlayer

GLOBAL VIRTUAL XC
164,495

Rest of Market 20.4%

28.6% EQUINIX
11.0% consoleconnect
10.3% Megaport
7.4% packetfabric
6.4% FLEXENTIAL
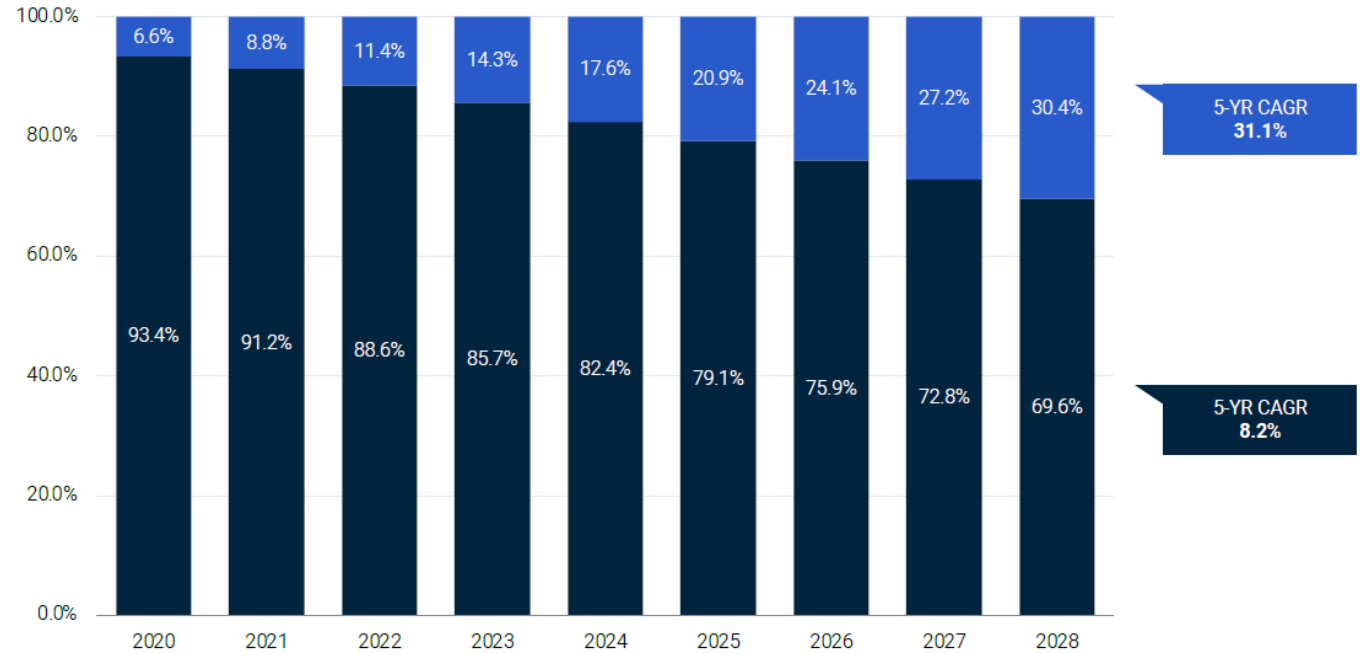5.4% cologix
4.6% epsilon
4.2% DIGITAL REALTY
1.6% zenlayer

Virtual Cross Connects

Physical vs Virtual Interconnection Market Size and Share
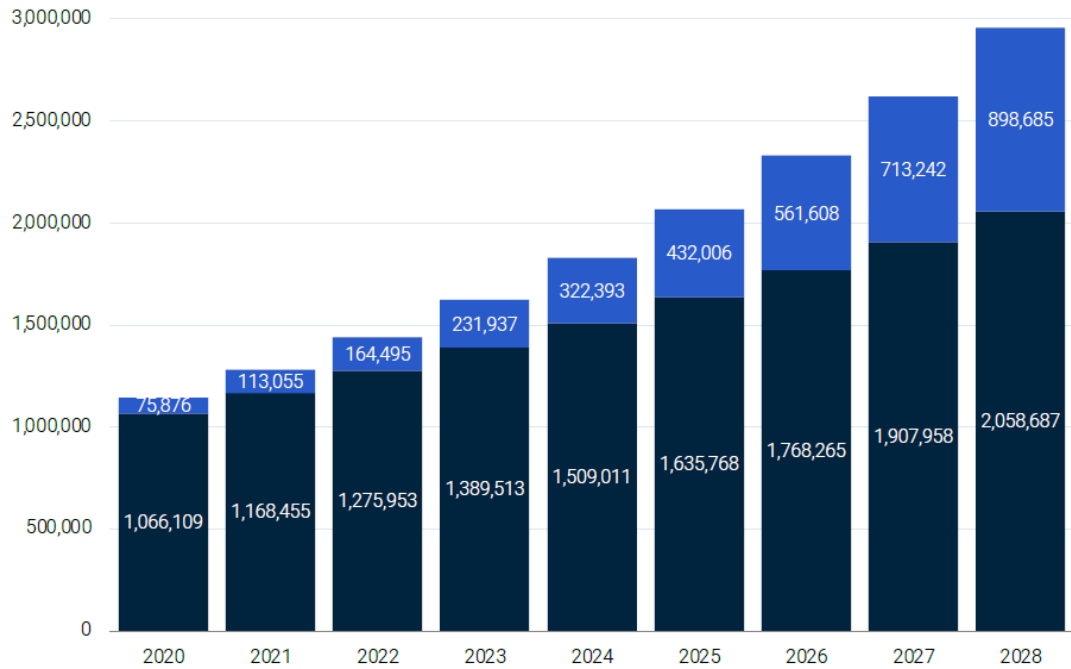
Number of Cross Connects

Percentage of Cross Connects

Left chart (Number of Cross Connects):

Year	Physical	Virtual
2020	1,066,109	75,876
2021	1,168,455	113,055
2022	1,275,953	164,495
2023	1,389,513	231,937
2024	1,509,011	322,393
2025	1,635,768	432,006
2026	1,768,265	561,608
2027	1,907,958	713,242
2028	2,058,687	898,685

Right chart (Percentage of Cross Connects):

Year	Physical	Virtual
2020	93.4%	6.6%
2021	91.2%	8.8%
2022	88.6%	11.4%
2023	85.7%	14.3%
2024	82.4%	17.6%
2025	79.1%	20.9%
2026	75.9%	24.1%
2027	72.8%	27.2%
2028	69.6%	30.4%

5-YR CAGR **31.1%**

5-YR CAGR **8.2%**

Virtual
Physical

Introducing PlatformDIGITAL® ServiceFabric™

Partners

Customers

Developers
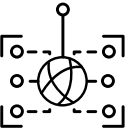
Orchestration Layer

Portal ← INTERFACE → **APIs**

Removes **complexity**

Interconnection Layer

Connect seamlessly to **open partner ecosystem services** built on global backbone
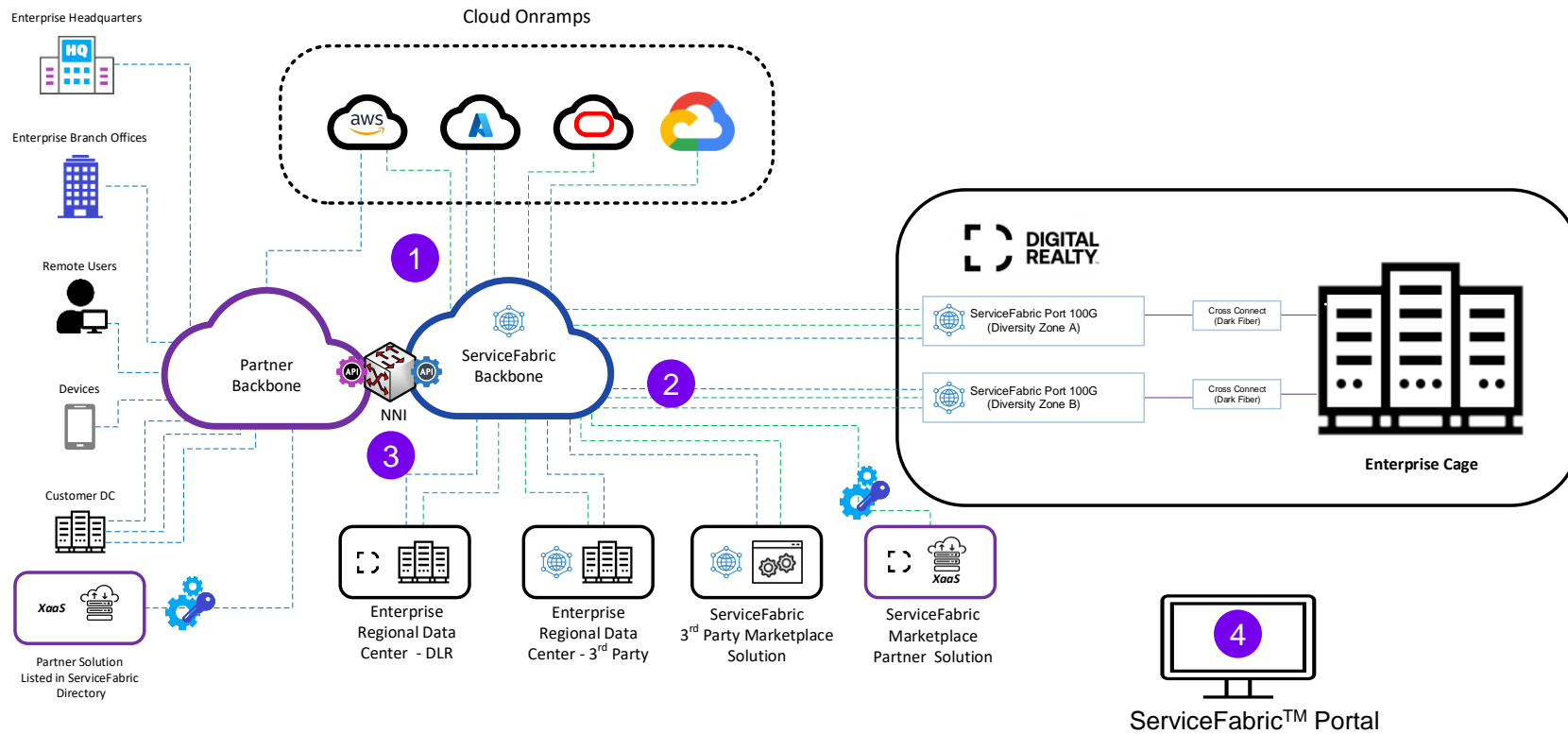
Data Center Layer

Implemented on **best-of-breed infrastructure and services** in multiple metros globally

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High Level Reference Architecture

Use Cases

1. Multiple partner(s) end-customers create dynamic private connections to Cloud Providers globally via single port

2. Multiple partner end-customers create dynamic private connections to Digital Realty sites globally via single port

3. Integrate partner SDN Offering(s) with ServiceFabric Connect APIs so their offerings leverage Digital Realty and other ServiceFabric partner services

Digital Realty Integrating Our Acquisitions
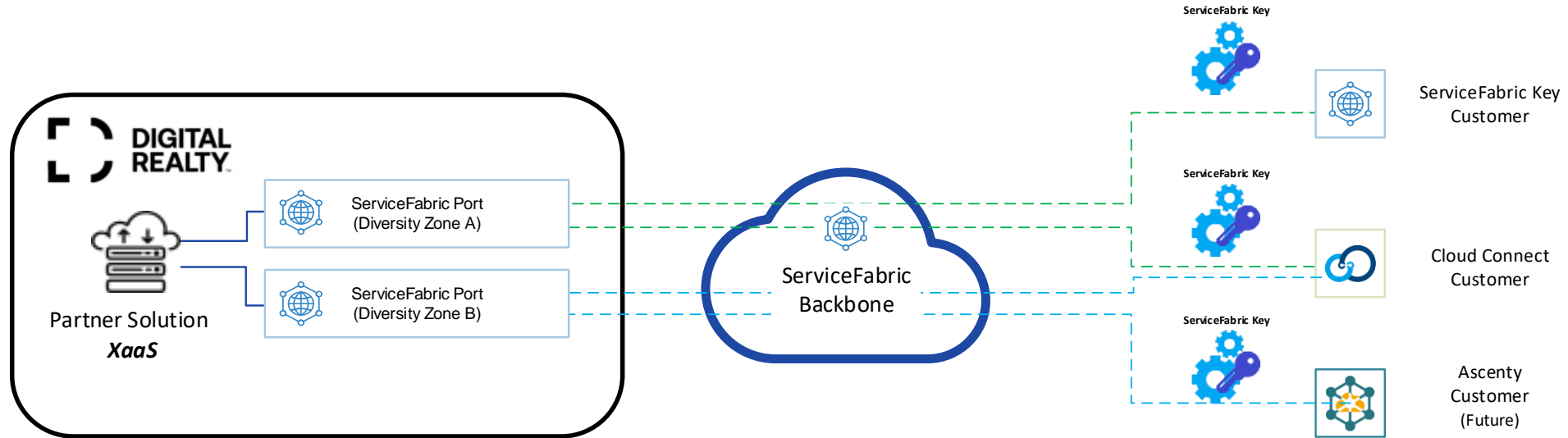
- Enables partners to add new revenue streams by gaining access to customers throughout the ServiceFabric ecosystem and future 3rd party Network Integration partners

- Customers can provision connections in real-time for fast revenue generation and simple try-n-buy scenarios with minimal integration work

- Partner chooses services to offer, owns the customer relationship for services purchased from them

- Digital Realty owns the customer relationship for ServiceFabric services

Example

Partner WAN Customer SDN to Digital Realty Colo Customer
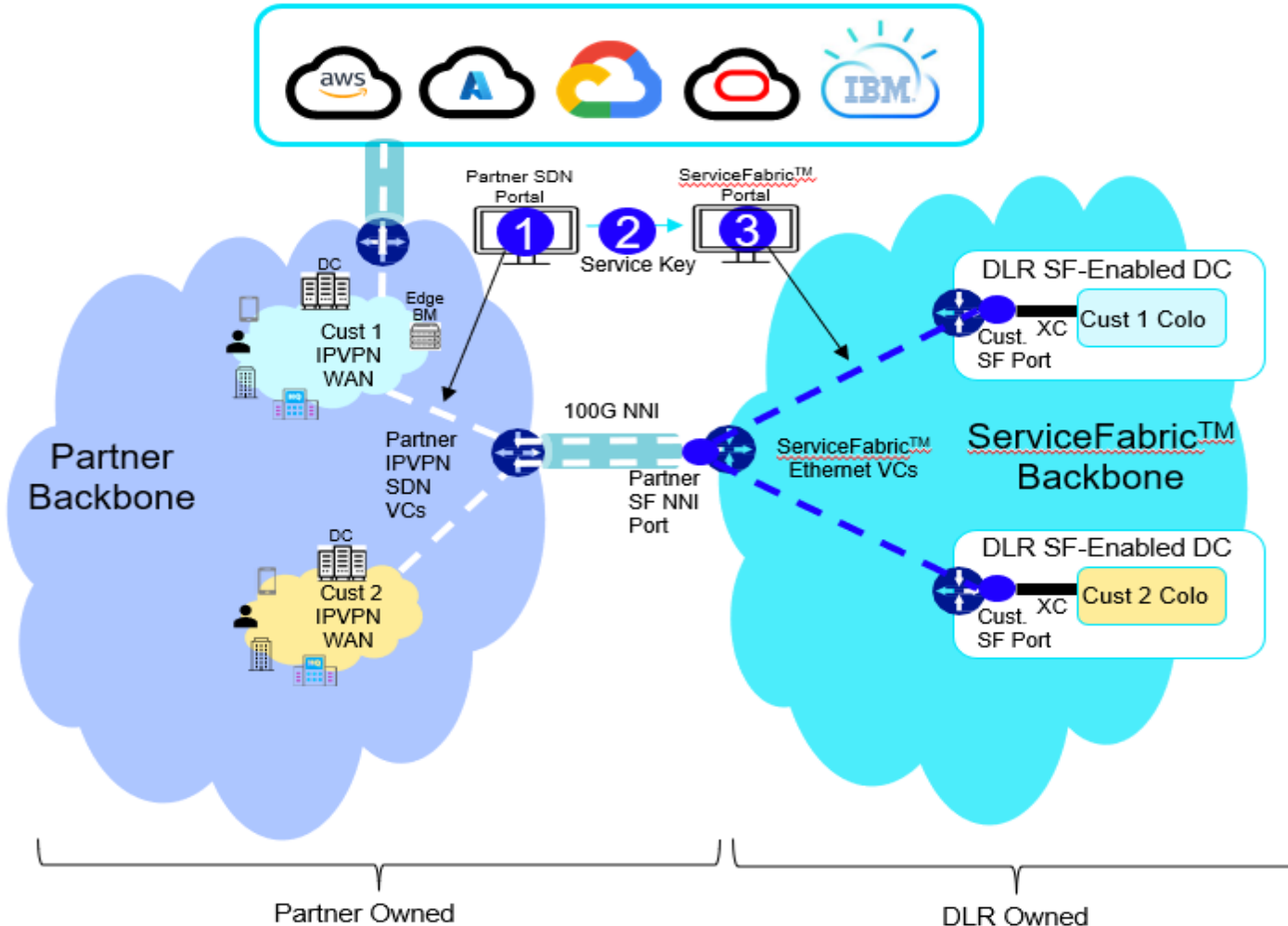
Lessons Learned

Workflow of connectivity ordering
Monitoring tools
Define responsibility between 2 parties
API Integration takes time.
Different brands compatibility
Location of POPs of partners
MTU Sizes
VLAN tagging

System Alerts integration
Modifying VLAN bandwidths
Service Key or Manual
Features do matter

Another Example

Resale and deployment of Partner Bare Metal in DLR Colo
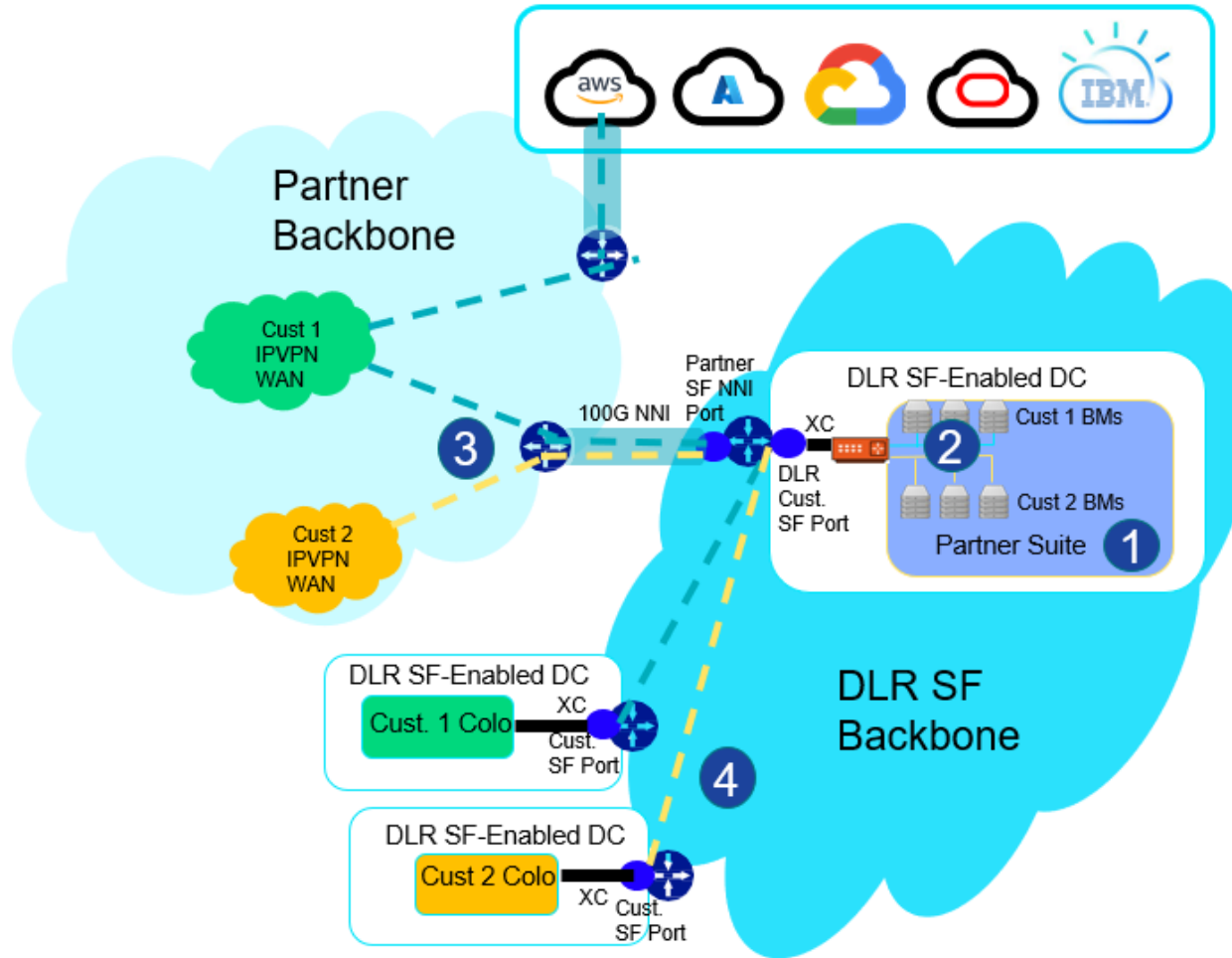
Win a Special Gift!

Scan the QR code and stand a chance to get a gift from our booth

Read this Hong Kong Data-First guide to meet your business needs.

Thank you

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