



Japan Market Opportunities

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March 2nd 2018

Japan is home to one of the largest
global Internet user bases

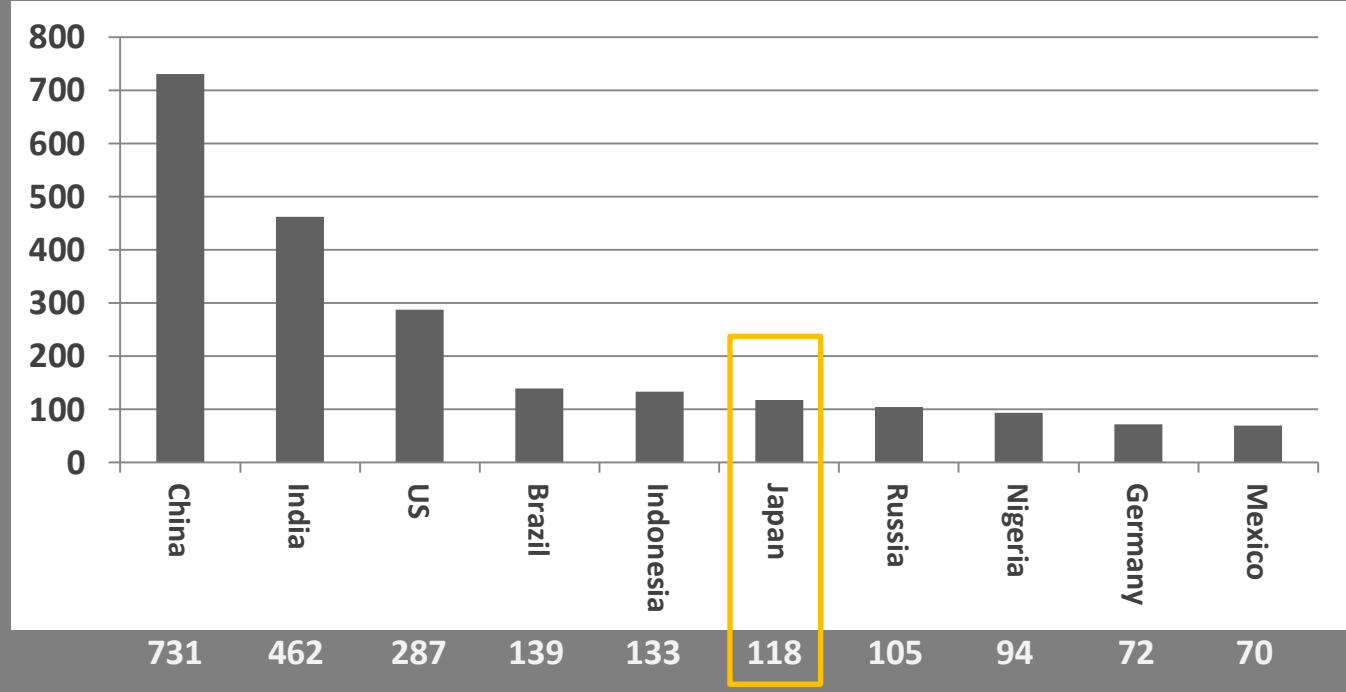
Japan has **fast and sustained**
growth of internet traffic

Japan is also a **fast growing** holiday
destination for APAC based people

Internet Users & Internet Traffic

INTERNET USERS

INTERNET USERS BY COUNTRY TOP TEN (MILLIONS)



Source: Statista.com

Japan Breakdown

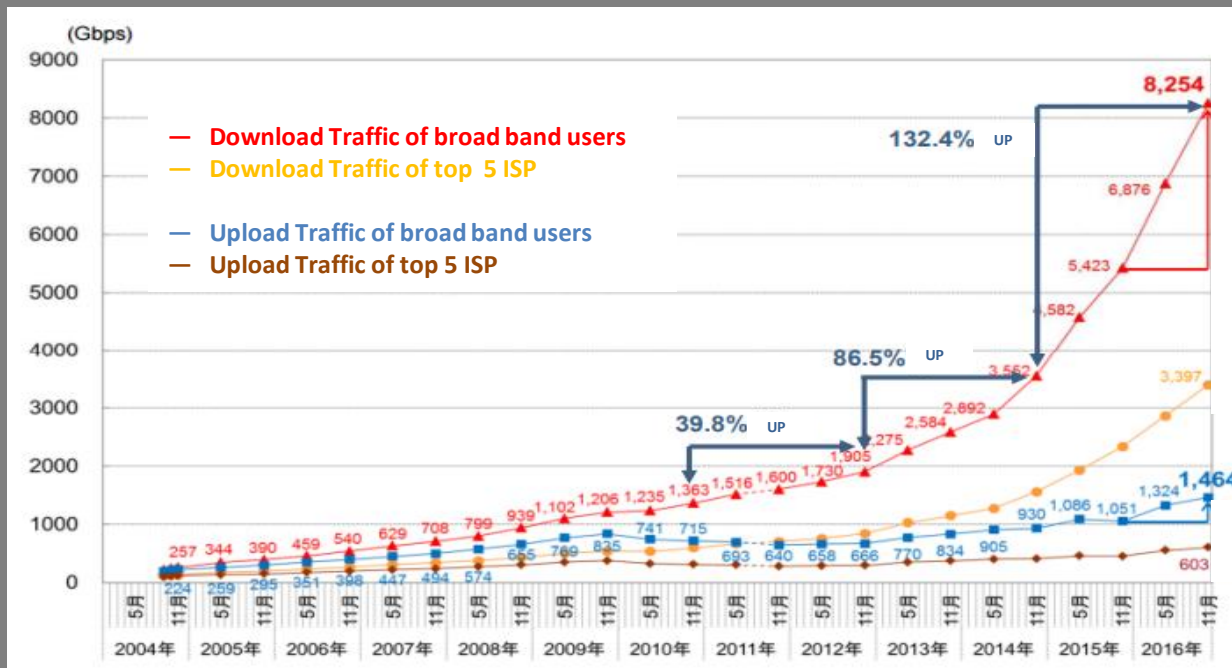
118
Million
Internet Users

107
Million
Mobile Users

17%+
Use Three or
More Devices

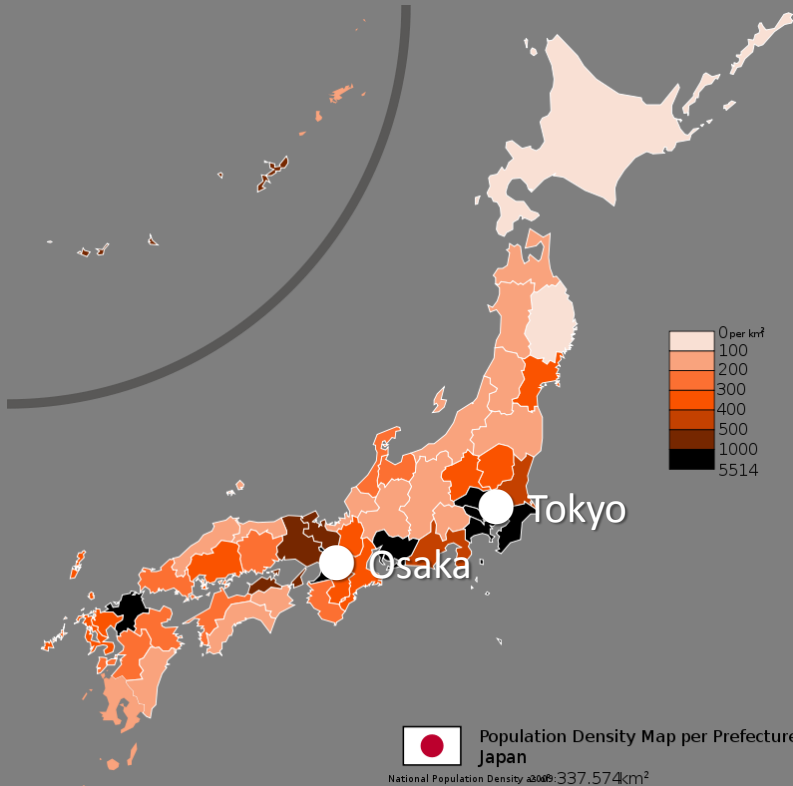
JAPANESE TRAFFIC MARKET TREND

- DOWNLOAD TRAFFIC APPROX **8.3TBPS** / UPLOAD TRAFFIC APPROX **1.5TBPS**
- +52.2% / +39.3% ANNUAL GROWTH



Source: Ministry of Internal Affairs and Communications, JAPAN
"Aggregation and Provisional Calculation of Internet Traffic in Japan"

POPULATION CONCENTRATIONS



Japan's
Population

126,672,000
(2017)

Population Percent
on Honshu
Pacific Coastline

80%

Population in and
Around
Greater Tokyo

36.2
Million

GDP generated
From Greater Tokyo

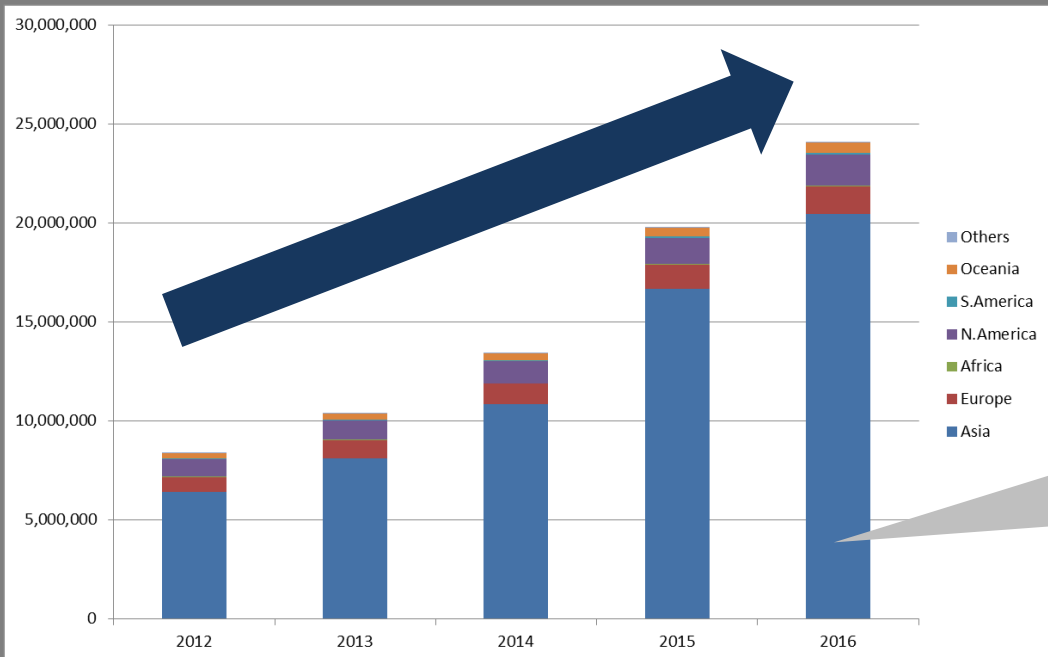
Approx.
30% of Japan

Source: Wikipedia

Influx of Overseas Visitors

NUMBER OF FOREIGN VISITORS

- JAPAN HAS SEEN **288% GROWTH** IN NUMBERS OF OVERSEAS VISITORS
- MANY **ASIAN COUNTRIES** HAVE **OVER 20% YEAR ON YEAR GROWTH**



	2014		2015		2016	
	No. of Visitors	Growth %	No. of Visitors	Growth %	No. of Visitors	Growth %
Asia Total	10,819,211	33.3	16,645,843	53.9	20,428,866	22.7
South Korea	2,755,313	12.2	4,002,095	45.3	5,090,302	27.2
China	2,409,158	83.3	4,993,689	107.3	6,373,564	27.6
Taiwan	2,829,821	28.0	3,677,075	29.9	4,167,512	13.3
Hong Kong	925,975	24.1	1,524,292	64.6	1,839,193	20.7
Thailand	657,570	45.0	796,731	21.2	901,525	13.2
Singapore	227,962	20.4	308,783	35.5	361,807	17.2
Malaysia	249,521	41.4	305,447	22.4	394,268	29.1
Indonesia	158,739	16.0	205,083	29.2	271,014	32.1
Philippines	184,204	70.0	268,361	45.7	347,861	29.6
Viet Nam	124,266	47.1	185,395	49.2	233,763	26.1
India	87,967	17.1	103,084	17.2	122,939	19.3
Macau					99,425	18.0
Israel	18,808	29.9	21,928	16.6	29,436	34.2
Mongolia					21,408	7.6
Turkey	14,766	18.5	17,274	17.0	18,155	5.1
Other Asia					156,694	18.3

Breakdown of Asian visitors into Japan

Source: 「日本政府観光局(JNTO)」

Asians are more online and mobile when on vacation

- ASIAN TRAVELERS ARE LEAST LIKELY TO USE OFFLINE METHODS WHEN BOOKING TRIP RELATED ITEMS.
- RESEARCH DONE BEFORE TRIP, BUT ALSO DURING TRIP, ESPECIALLY FOR SEEKING SHOPPING RELATED ITEMS.
- ASIAN TRAVELERS LEAD THE WAY IN TERMS OF USE OF MOBILE APPS.

Source: treksoft.com

NUMBER OF FOREIGN RESIDENTS

- JAPAN HAS OVER 2.1 MILLION FOREIGN RESIDENTS
- OVER 677,000 ARE LONG-TERM RESIDENTS
- OF WHICH 480,000 ARE FROM ASIA
- NEARLY HALF (220,000) OF THAT FIGURE IS FROM GREATER CHINA

2.1 Million foreign residents in Japan

677,000 Long term

480,000 From Asia

220,000 From
Greater China

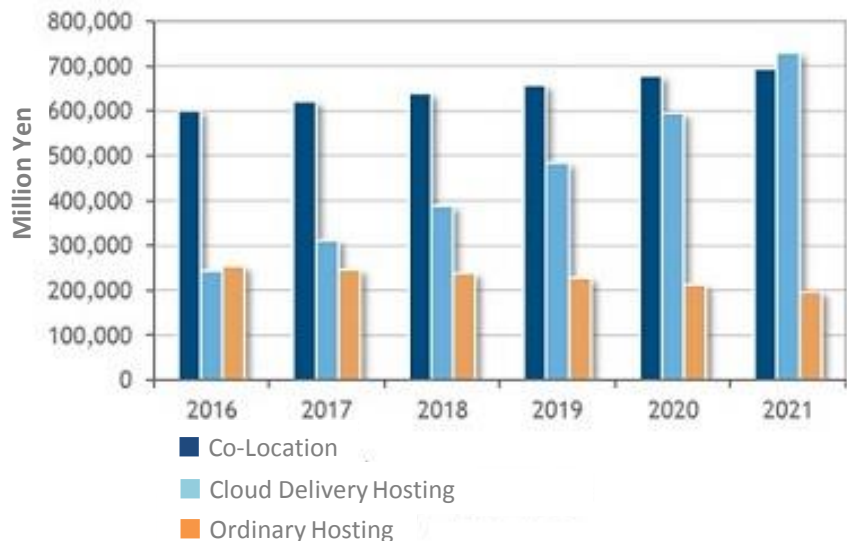
Foreign visitors driving more **data traffic growth**

Foreign visitors still want their **domestic data feeds**

Foreign residents also need **access to “home” sources**

Japan Market Opportunity

Healthy State of Japan's DC Market



Stable Growth
across whole market

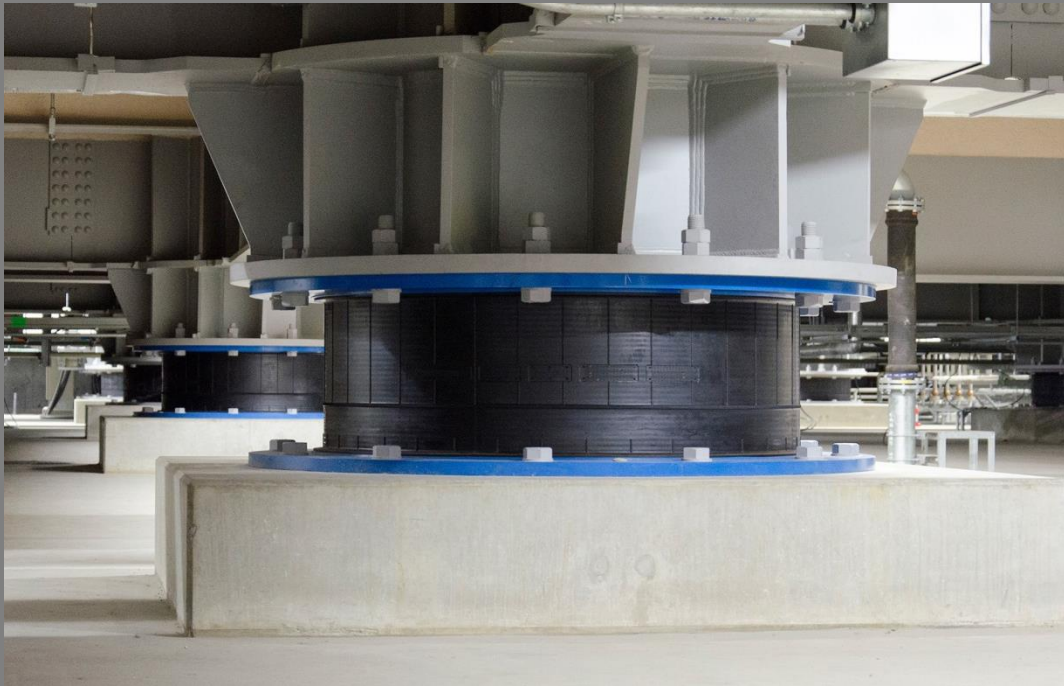
➔ Rapid Growth
of Cloud Delivery Hosting

Source: IDC Japan, 10/2017
<https://www.idcjapan.co.jp/Press/Current/20171005Apr.html>

WELL-DESIGNED DC

Seismic
Isolation

UPPER LEVEL FLOORS ISOLATED VIA RUBBER BEARINGS



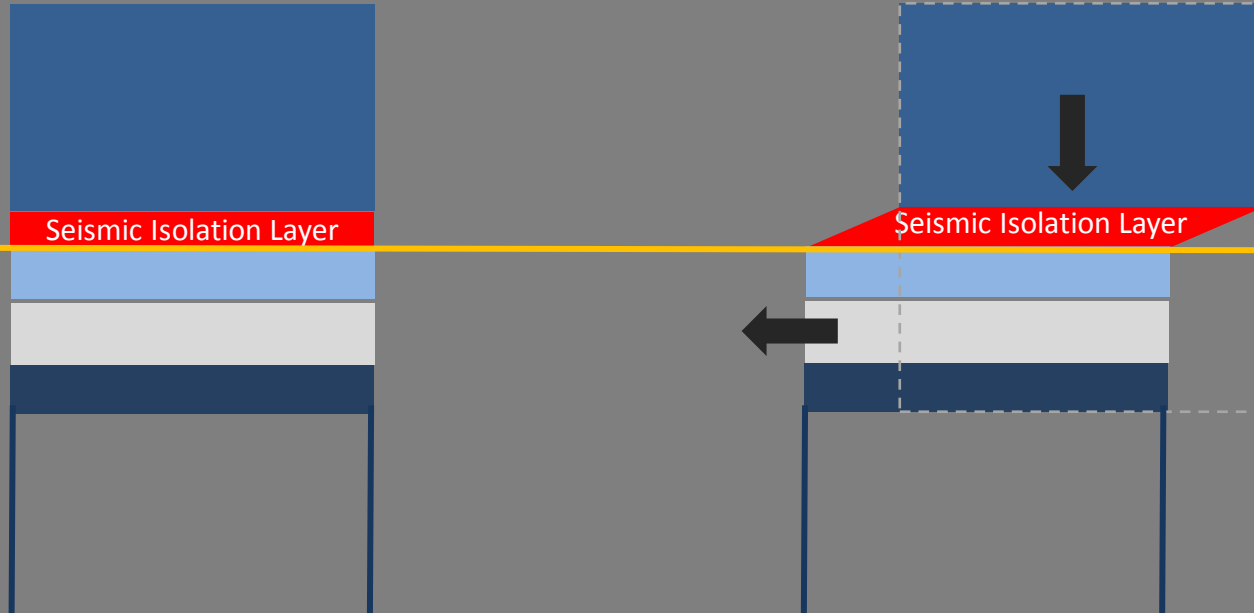
Reduces
Vibration

WELL-DESIGNED DC

Normal

Earthquake

GROUND LEVEL

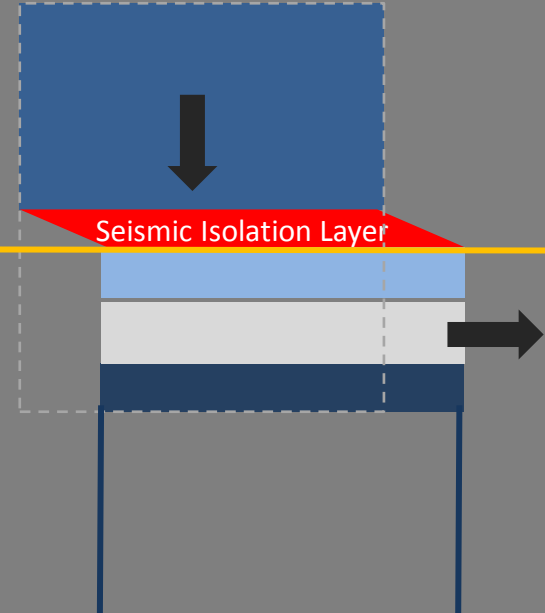
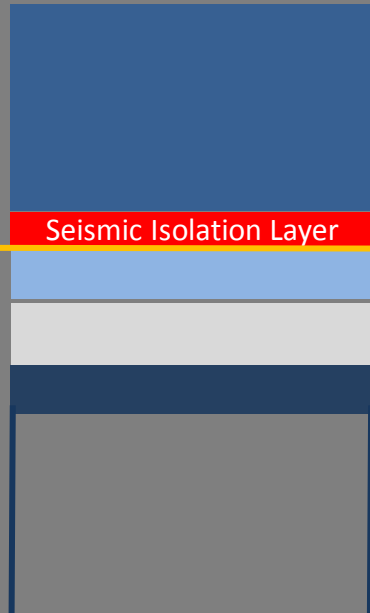


WELL-DESIGNED DC

Normal

Earthquake

GROUND LEVEL



WELL-DESIGNED DC

Normal

Earthquake

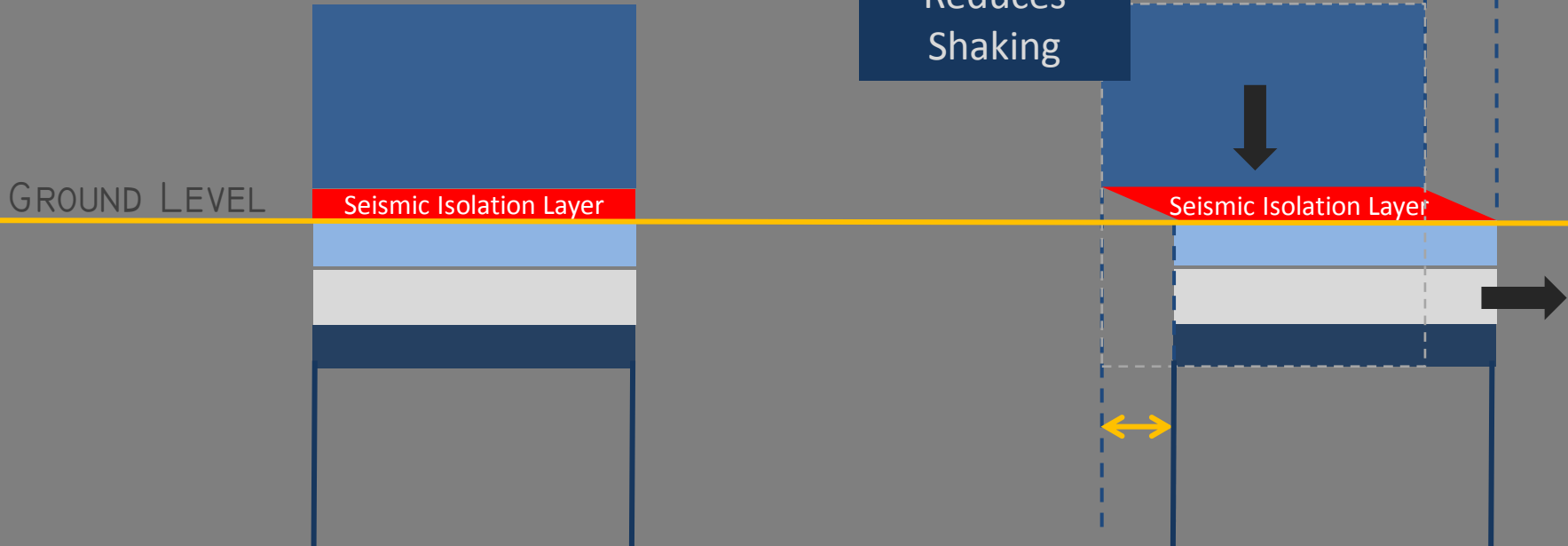
Lateral Travel

GROUND LEVEL

Seismic Isolation Layer

Reduces Shaking

Seismic Isolation Layer



So where should I locate my PoP?

MAJOR LOCATION FOR PEERING

OSAKA



TOKYO

MAP OF JAPAN

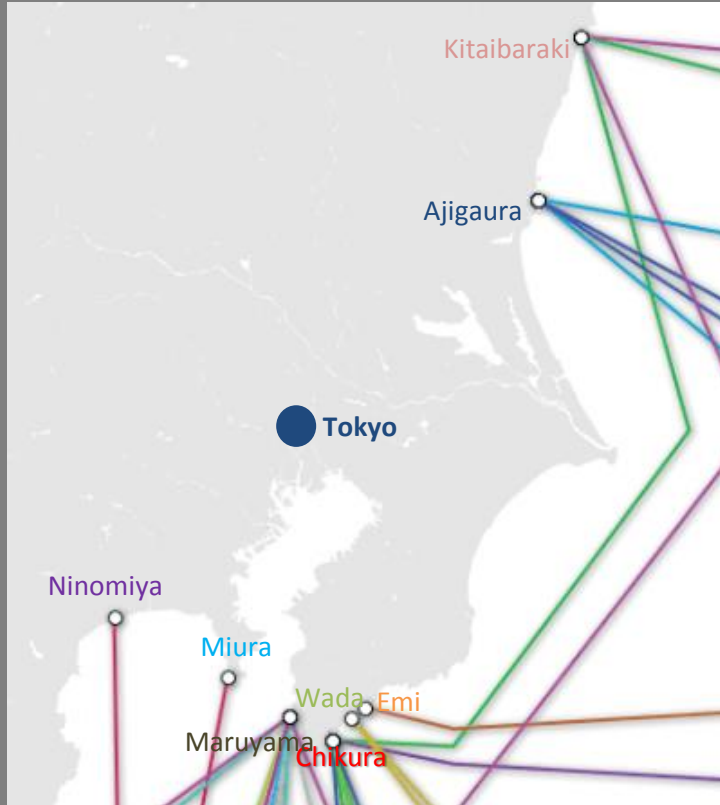
Tokyo – Osaka 400km direct = Hong Kong - Hainan Island



Let's take a look at Tokyo

- ✓ Major carrier's backbone are concentrated in the Tokyo metropolis
- ✓ Lack of Datacenter space availability in the Tokyo metropolis
 - Major OTT players are starting to locate server farms in suburban locations
- ✓ Olympic Games are coming in 2020
 - Skyrocketing real estate & construction fees
 - Building new DCs with a certain qualities quite challenging until after Olympics

CLS TO TOKYO



<https://www.submarinecablemap.com/>

Kitaibaraki

- APCN-2
- Japan-U.S. Cable Network (JUS)

Ajigaura

- EAC-C2C
- Pacific Crossing-1 (PC-1)

Emi

- Tata TGN-Pacific

Wada

- FLAG North Asia Loop/REACH North Asia Loop

Chikura

- APCN-2
- EAC-C2C
- FASTER
- Southeast Asia Japan Cable (SJC)
- Unity/EAC-Pacific

Maruyama

- Asia Pacific Gateway (APG)
- Asia Submarine-cable Express (ASE) / Cahaya Malaysia
- Australia-Japan Cable (AJC)
- JUPITER
- Japan-U.S. Cable Network (JUS)
- New Cross Pacific (NCP) Cable System
- Trans-Pacific Express (TPE) Cable System

Miura

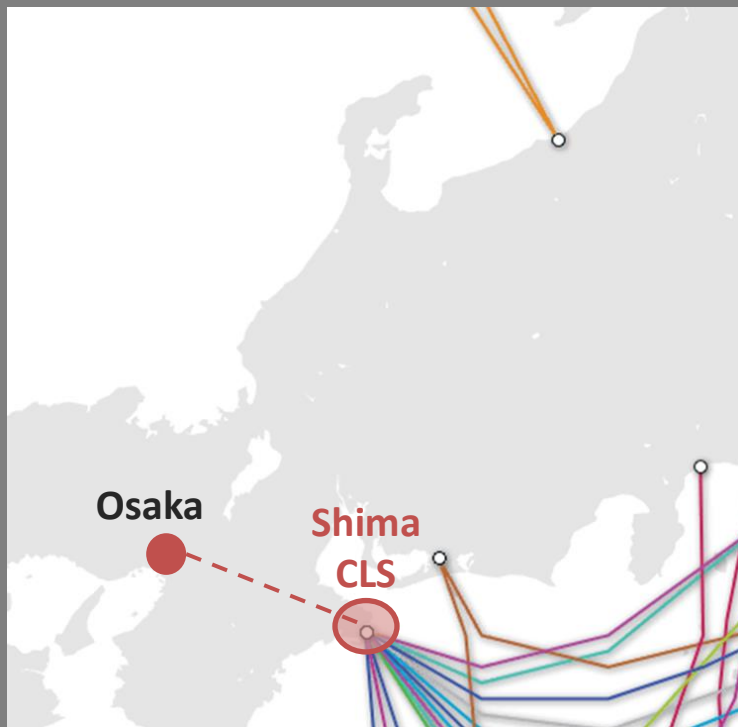
- FLAG Europe-Asia (FEA)

Ninomiya

- FLAG Europe-Asia (FEA)

How about Osaka?

- ✓ Major Carrier's backbone are concentrated in central Osaka area
- ✓ Many Foreign companies are opening their 2nd or 3rd Japanese POP in Osaka to provide location diversity
- ✓ Shima CLS Challenges
 - Only a limited number of providers have the right to provide back haul to Dojima Area from the Shima CLS in Mie prefecture.



<https://www.submarinecablemap.com/>

Shima

- Asia Pacific Gateway (APG)
- Australia-Japan Cable (AJC)
- EAC-C2C
- FASTER
- JUPITER (2020)
- Japan-U.S. Cable Network (JUS)
- Pacific Crossing-1 (PC-1)

To Summarise

Big Potential

Growing number of Internet Users, Traffic Volumes and Foreign Visitors

Bright forecast for DC market

But be sure to get in early to avoid capacity constraints

Leverage the Quality

Facilities in Japan are generally top notch, choose purpose built datacenters

Tokyo and Osaka are Japan's 2 Top Cites for Connectivity

Each City has their own challenge

Japan awaits 😊!!

Q&A