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Cyber Security Latest Technology and Market Trend Seminar 2022 hosted by Daiwa Securities

Internet Initiative Japan Inc. (IIJ)

The Prime Market of the Tokyo Stock Exchange (Ticker symbol: 3774)

November 21, 2022

Disclaimer

Statements made in this presentation regarding IIJ's or managements' intentions, beliefs, expectations, or predictions for the future are forward-looking statements that are based on IIJ's and managements' current expectations, assumptions, estimates and projections about its business and the industry. These forward-looking statements, such as statements regarding revenues, operating and net profitability are subject to various risks, uncertainties and other factors that could cause IIJ's actual results to differ materially from those contained in any forward-looking statement.

Agenda

- 1. About IIJ**
- 2. IIJ's Network Services**
- 3. IIJ's Security Services**

IJ has been taking initiatives in Internet Infrastructure field in Japan

Established	December 1992
Number of Employees	4,355 (approx. 70% engineers, 20% sales, 10% back office)
Listed Market	The Prime Market of the Tokyo Stock Exchange (Ticker symbol: 3774)
Large Shareholders	NTT group (26.9%), Koichi Suzuki (5.9%), Global Alpha (5.0%) <small>*Koichi Suzuki is Founder, Chairman and Co-CEO of IJ</small>

◆ The first established full-scale ISP (Internet Service Provider) in Japan

- ✓ Operate one of the largest Internet backbone networks in Japan
- ✓ Introduce many in-house developed Internet-related network services
- ✓ Highly skilled IP (Internet Protocol) engineers from the inception
- ✓ Support blue-chip clients from the early 90s

◆ Well recognized “IJ” brand among Japanese blue-chip companies’ IT division

- ✓ Differentiate by reliability and quality of network and systems operation, no critical network troubles ever since the inception
- ✓ Long-term (almost 30 years) client relationship

◆ At the leading edge of IP R&D

- ✓ Differentiate by continuous service developments and business investments
- ✓ Enhancing Cloud, mobile, security, solutions related to BigData, IoT and data governance
- ✓ Always ahead of telecom carriers and systems integrators (SIs) with regards to network services development and operation

...and many more

• Number of employees is consolidated basis and as of Sep 30, 2022.

• We voluntarily delisted from the U.S. NASDAQ Market in April 2019. Our ticker symbol at the OTC (Over The Counter) is IJJIY.

• Large shareholders are as of March 31, 2022 and their shareholding ratios (%) are calculated by deducting number of treasury stock from the total number of shares issued except for Global Alpha whose information is based on their filing as of March 2021. Suzuki's ownership includes his wholly owned private company portion.

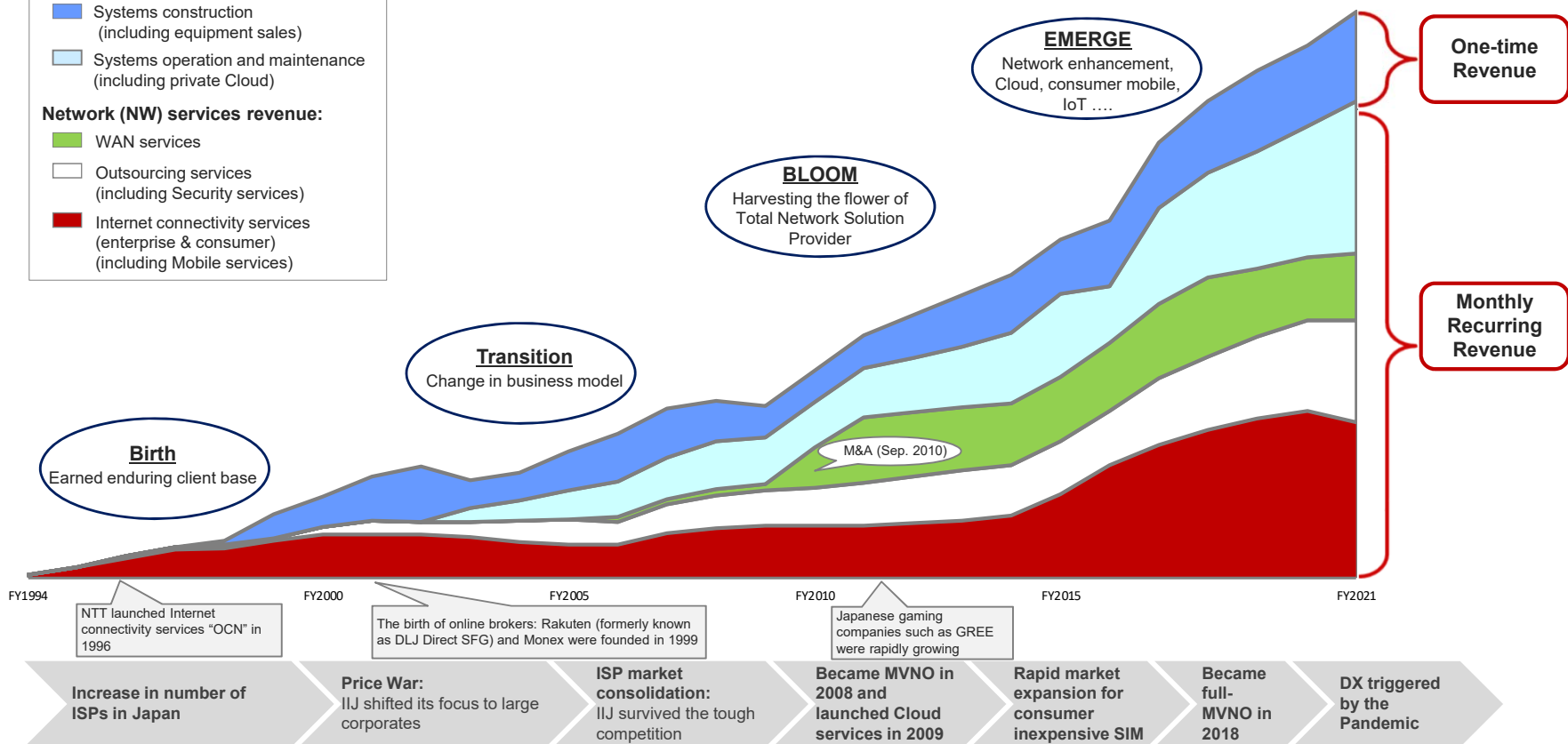
From ISP to Total Network Solution Provider

Systems Integration (SI) revenue:

- Systems construction (including equipment sales)
- Systems operation and maintenance (including private Cloud)

Network (NW) services revenue:

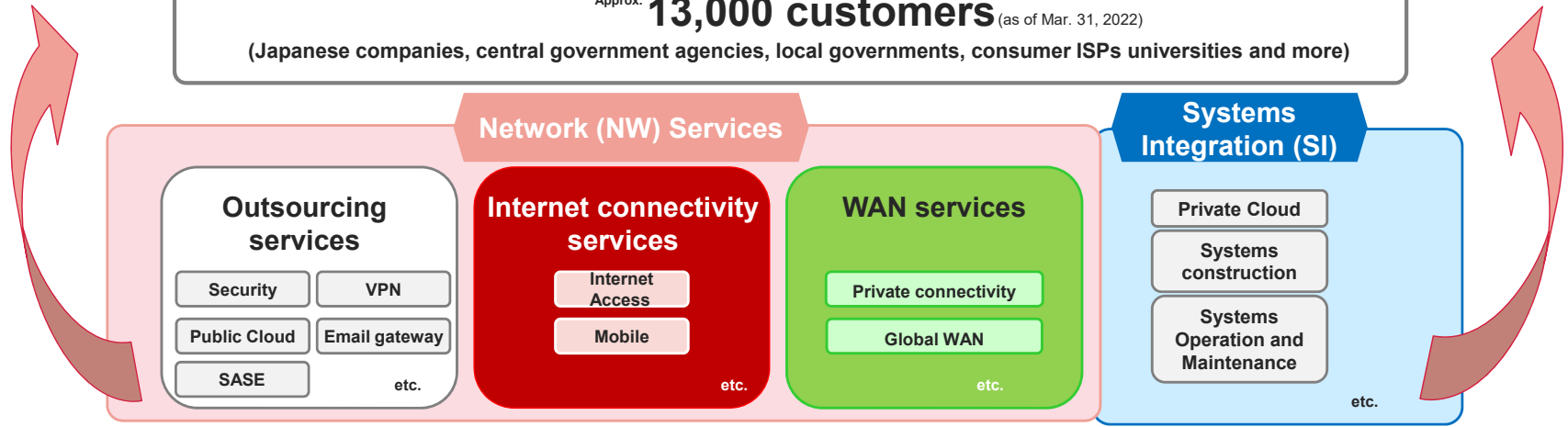
- WAN services
- Outsourcing services (including Security services)
- Internet connectivity services (enterprise & consumer) (including Mobile services)



IJ as a Total Network Solution Provider

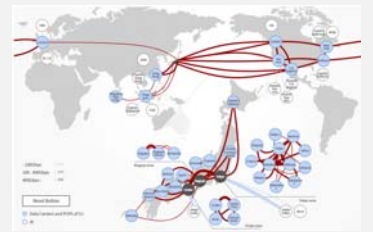
Offers various network services and systems integration together in many projects

Approx. **13,000 customers** (as of Mar. 31, 2022)
 (Japanese companies, central government agencies, local governments, consumer ISPs universities and more)



Major cost components of Network services (mostly non-revenue linked cost)

- Fiber leasing cost for Internet backbone and WAN access line
- Depreciation cost of network equipment, data center operation cost etc.
- Personnel cost for network service development and operation
- Mobile data interconnectivity and voice service purchasing cost for mobile services



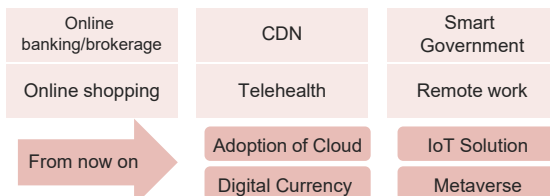
IJ's Backbone Network

IJ's Material Issues



Lead network infrastructure advancement with technological innovations and contribute to solving various social issues

◆ Bringing innovation with IP



◆ Own highly energy effective data centers

- Industry top level PUE (FY21): Matsue 1.22, Shiroi 1.42

◆ Information disclosures based on the TCFD Recommendations

- Reduce greenhouse gas emissions at its own data centers which account for more than 70% of greenhouse gas emissions (Scope 1 and 2) through "usage of renewable energy" and "improvement of energy conservation"

Measures	Targets
Usage of renewable energy	To increase the renewable energy usage rate of data centers to 85% in FY2030.
Improvement of energy conservation	To keep the PUE of the data center at or below the industry's highest level until FY2030 through continuous technological innovation.



Provide safe and robust Internet services that support social infrastructure

◆ Provide stable and safe Internet connectivity services, construct and operate Internet backbone that cover the world



◆ Support privacy protection regulations. Had acquired EU BCR and APEC CBPR



Provide an arena for people with diverse talents & values, where they can exercise their skills & actively and boldly take on challenges

- ◆ Corporate culture of taking initiatives and challenging new things since the inception
- ◆ Human resources culture of sincerely striving to meet the demands of clients
- ◆ Lower than the industry average turnover rate

FY19	FY20	FY21
4.6%	3.6%	4.2%

◆ Target for diversity: the ratio of female managers

Apr. 2022	FY24 target	FY27 target
5.7%	6%~	8%~

For more information about IJ's corporate governance, please visit

➤ <https://www.ij.ad.jp/en/ir/integrated-report/governance/>

Overview of corporate governance	Operation of the Board of Directors	Operation of the Board of Company Auditors
Operation of the Nomination and Remuneration Committee	Design of Remuneration for Directors	Business Operation
Operation of Internal Audit	Initiatives for Information Security	Related Party Transactions

- PUE(Power Usage Effectiveness) is a metric that shows how efficiently electricity is used at a data center. The closer to 1.0 is considered to be good.
- TCFD: Task Force on Climate-related Financial Disclosures
- Scope 1 and 2 (Greenhouse gas emissions by a company): Direct emissions from the use of fuels and industrial processes at the company and indirect emissions from the use of electricity and heat purchased by the company (as defined by the GHG Protocol)
- The turnover rate of IJ's and is calculated by dividing leavers for the fiscal year by the number of full-time employees at the beginning of that fiscal year. The industry average turnover rate is announced by the Ministry of Health, Labor, and Welfare

Management Structure



Koichi Suzuki

- Founder of IJJ
- Chairman, Representative Director and co-CEO
- Holdings of IJJ share: 5,316,361 shares (5.9%)
- Date of birth: September 1946



Satoshi Murabayashi

- Executive Vice President and Director
- Prior to joining IJJ in 2021, CIO at MUFG Financial Group, Inc.
- President and Representative Director of DeCurret Holdings, IJJ's affiliated company, as a concurrent position
- Holdings of IJJ shares: 1,901 shares (0.0%)
- Date of birth: November 1958



Eiji Katsu

- President, Representative Director and co-CEO & COO
- Prior to joining IJJ in 2012, Vice Minister of Finance
- Holdings of IJJ shares: 99,350 shares (0.1%)
- Date of birth: June 1950



Yasuhiko Taniwaki

- Executive Vice President and Director
- Prior to joining IJJ in 2022, Vice-Minister for Policy Coordination of Posts and Telecommunications at the Ministry of Internal Affairs and Communications (MIC)
- Holdings of IJJ shares: none
- Date of birth: September 1960

Full-time Directors

Senior Managing Directors

- K. Kitamura
- A. Watai (CFO)

Managing Directors

- T. Kawashima
- J. Shimagami (CTO)
- N. Yoneyama (CIO)

Outside Independent Directors: (of which, 1 female, 35.7% to the total directors)

- T. Tsukamoto Honorary Advisor of Mizuho Financial Group
- K. Tsukuda Honorary Advisor of Mitsubishi Heavy Industries, Ltd.
- Y. Iwama Outside Director and Chairman of the Board of Nikko Asset Management Co., Ltd.
Former Chairman of Japan Securities Investment Advisers Association
- A. Okamoto Former President and CEO of Iwanami Shoten, Publishers (one of the best publishing houses in Japan)
- K. Tonosu (Ms.) Outside Director of JAPAN POST INSURANCE Co., Ltd.
Former Board member of Deloitte Touche Tohmatsu LLC

Company Auditors

(of which, 3 outside, 1 female)

- K. Ohira
- M. Tanaka (Ms.)
- T. Michishita
- K. Uchiyama

Reward for full-time directors

Annual salary	Fixed monthly remuneration	Cash	67%~71%
Substitution for retirement allowance	Fixed amount	Stock-option	6%~11%
Performance-linked remuneration	Variable amount	Restricted stock	22%~24%

Interview with outside director, Mr. Tsukamoto, can be found here

- https://www.ijj.ad.jp/en/ir/integrated-report/outside_director/

(Note) Above percentages are in the case of full paid performance-linked remuneration. Performance-linked remuneration varies (0~4 months in general) along with financial performance

Strength

High technological capabilities

- ◆ First full-scale ISP in Japan
- ◆ Highly skilled Internet-related engineers
- ◆ NW service development & operation capabilities
- ◆ Reliable Internet backbone operation
- ◆ Excellent customer base
- ◆ Corporate culture of pioneering spirit

Weakness

- ◆ Business domain mostly in Japan
 - IIJ's overseas business is mainly global network operation and is to increase Japanese clients' loyalty
- ◆ Smaller in size compared to competitors
 - IIJ continuously develops innovative network services and solutions to be ahead of the market needs

Opportunity

Digitalization (DX) in Japan

- ◆ Internet traffic increasing
- ◆ Security demands expanding
- ◆ Cloud shift
- ◆ Japan, slow IT adopter, including public sector is changing triggered by the pandemic

Threat

- ◆ Slow IT adoption in Japan
 - IIJ focuses on promoting digitalization of large Japanese companies with various network services and systems integration to fully meet their needs

Comprehensive Lineups of IT services

Unit: ¥ (JPY) billion (bn)

About IJ	Business Model
Strength	Growth Strategy

Revenue category		FY21 revenue	About		Business Situation & Outlook													
Network services	Internet connectivity services for enterprise	37.9	<table border="1"> <tr> <td>IP</td> <td>13.68</td> <td> <ul style="list-style-type: none"> Core service providing from the foundation Highly reliable dedicated connectivity services for enterprise (multi-carrier, redundancy etc.) Contracts are based on bandwidth Enterprises use the service for their main Internet line </td> </tr> <tr> <td>Mobile</td> <td>20.35</td> <td> <table border="1"> <tr> <td>Enterprise mobile (IoT usages etc.)</td> <td>10.26</td> </tr> <tr> <td>MVNE (Providing to other MVNOs)</td> <td>10.09</td> </tr> </table> </td> </tr> </table>	IP	13.68	<ul style="list-style-type: none"> Core service providing from the foundation Highly reliable dedicated connectivity services for enterprise (multi-carrier, redundancy etc.) Contracts are based on bandwidth Enterprises use the service for their main Internet line 	Mobile	20.35	<table border="1"> <tr> <td>Enterprise mobile (IoT usages etc.)</td> <td>10.26</td> </tr> <tr> <td>MVNE (Providing to other MVNOs)</td> <td>10.09</td> </tr> </table>	Enterprise mobile (IoT usages etc.)	10.26	MVNE (Providing to other MVNOs)	10.09	<table border="1"> <tr> <td>IP</td> <td> <ul style="list-style-type: none"> Matured market (hard to entry) Blue-chip client base Major cost is fiber leasing, network equipment depreciation, and personnel cost Expect the revenue to continuously increase along with traffic volume and contracted bandwidth increase </td> </tr> <tr> <td>Mobile</td> <td> <ul style="list-style-type: none"> Expect infrastructure utilization & profitability to improve by gathering various traffic such as IoT/enterprise/consumers <ul style="list-style-type: none"> Enterprise: Expect the demand to increase mid-to-long term Consumer: maintain and increase market share subscription) with new consumer plan in competitive market </td> </tr> </table>	IP	<ul style="list-style-type: none"> Matured market (hard to entry) Blue-chip client base Major cost is fiber leasing, network equipment depreciation, and personnel cost Expect the revenue to continuously increase along with traffic volume and contracted bandwidth increase 	Mobile	<ul style="list-style-type: none"> Expect infrastructure utilization & profitability to improve by gathering various traffic such as IoT/enterprise/consumers <ul style="list-style-type: none"> Enterprise: Expect the demand to increase mid-to-long term Consumer: maintain and increase market share subscription) with new consumer plan in competitive market
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Internet connectivity services for consumers	23.4	<table border="1"> <tr> <td>Mobile</td> <td>20.37</td> <td> <ul style="list-style-type: none"> Inexpensive SIM services (mainly data), Direct sale (via IJ web), Indirect sale (via sales partners such as retailers) </td> </tr> </table>	Mobile	20.37	<ul style="list-style-type: none"> Inexpensive SIM services (mainly data), Direct sale (via IJ web), Indirect sale (via sales partners such as retailers) 													
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WAN <small>(Wide Area Network)</small>	26.4	Closed network used to connect multiple sites	Stable market for long-term															
Outsourcing	40.5	<p>Various in-house developed Internet-related service line-ups</p> <table border="1"> <tr> <td>Security</td> <td>22.22</td> <td> <ul style="list-style-type: none"> Managed security services, Security Operation Center services and so many more </td> </tr> <tr> <td>Public Cloud</td> <td>2.87</td> <td> <ul style="list-style-type: none"> Offered as a part of Cloud service line-ups </td> </tr> </table>	Security	22.22	<ul style="list-style-type: none"> Managed security services, Security Operation Center services and so many more 	Public Cloud	2.87	<ul style="list-style-type: none"> Offered as a part of Cloud service line-ups 	<ul style="list-style-type: none"> Have been developing services based on Zero Trust concept Acquire enterprise demand by cross-selling services Continuous service development is important Demands for security and remote access to increase continuously 									
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SI	Operation and Maintenance	60.0	<table border="1"> <tr> <td>On-premise Systems</td> <td>34.18</td> <td> <ul style="list-style-type: none"> Operation and maintenance of constructed systems </td> </tr> <tr> <td>Private Cloud etc.</td> <td>25.78</td> <td> <ul style="list-style-type: none"> Promote Cloud shift with abundant, highly reliable, value-added private Cloud related service line-ups </td> </tr> </table>	On-premise Systems	34.18	<ul style="list-style-type: none"> Operation and maintenance of constructed systems 	Private Cloud etc.	25.78	<ul style="list-style-type: none"> Promote Cloud shift with abundant, highly reliable, value-added private Cloud related service line-ups 	<ul style="list-style-type: none"> Expect great business opportunity in the middle-to-long term as internal IT systems migrate to Cloud Revenue to increase continuously along with accumulation of construction projects 								
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Construction <small>(including Equipment sales)</small>	35.4	System construction related to office IT, security, Cloud, IoT, Internet-related construction such as Online banking & brokerage, backbone network for university, and E-commerce site	<ul style="list-style-type: none"> Through providing SI, offer greater value as IoT and Cloud usage penetrate 															

Monthly Recurring Revenue

83.1%

One time revenue

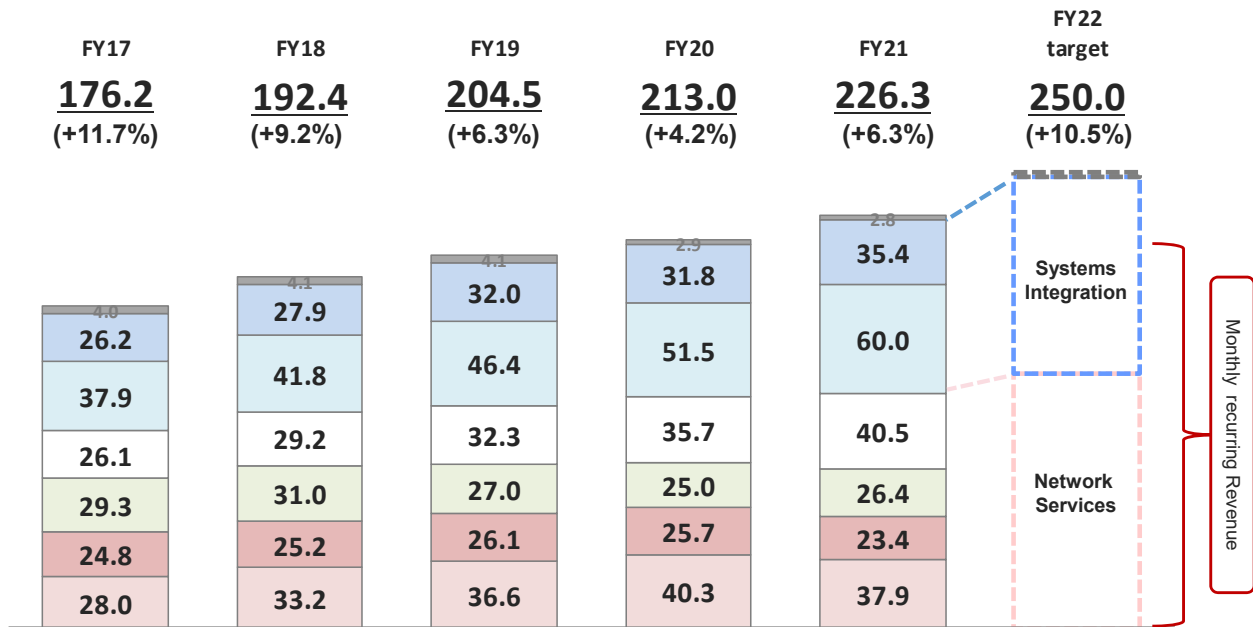
Monthly Recurring Revenue Accumulation

Unit: JPY billion
% = Year over year change

Revenues

- ATM Operation Business
- Systems construction (including equipment sales)
- Systems operation & maintenance (including Private Cloud services)
- Outsourcing services (include security-related services)
- WAN services
- Internet connectivity services for consumers (including consumer mobile)
- Internet connectivity services for enterprises (including MVNE and enterprise mobile services)

Monthly recurring revenues

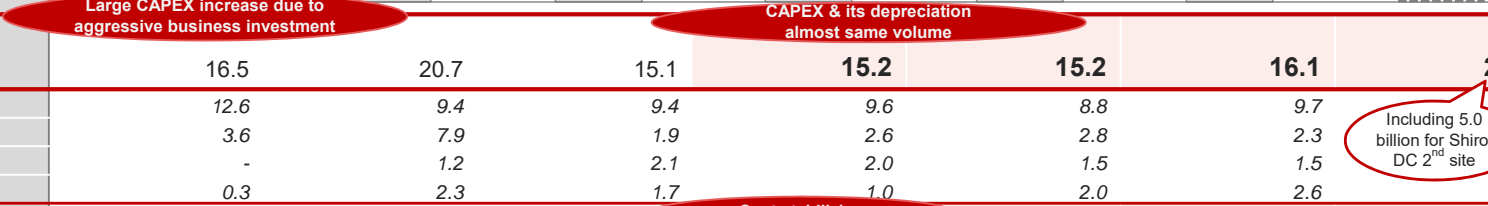
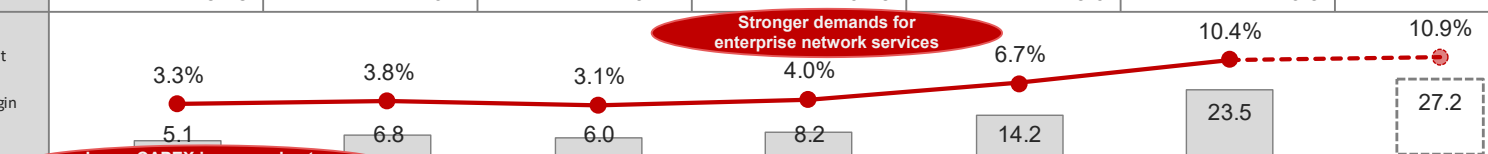


Cloud service revenues	17.9	20.1	23.6	26.2	28.7
Security-related service revenues	12.1	14.1	16.4	18.4	22.2
Mobile service revenues	35.3	42.0	46.1	47.5	40.7

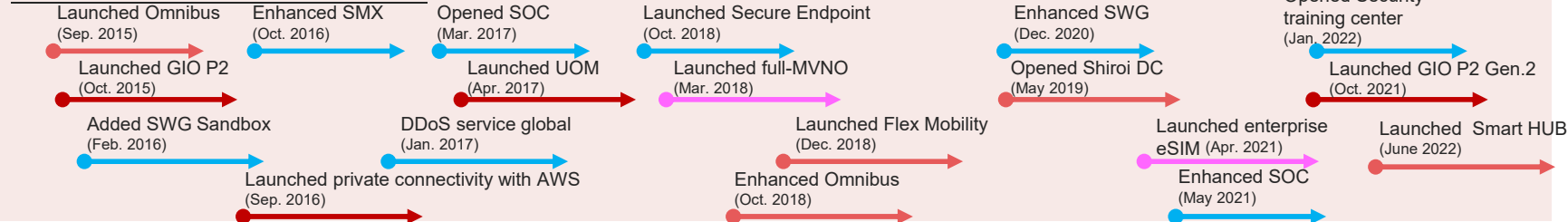
- Mobile revenue decreased year over year in FY21 due to ARPU decrease for consumers and change in unit charge for MVNE clients
- Systems construction and systems operation & maintenance revenue increase for FY21 includes PTC revenue which became IJ's consolidated subsidiary from Apr. 2021
- During FY20, ATM operation business was impacted by the COVID-19 pandemic due for example to the store closure and smaller number of users coming to stores
- WAN revenue decreased year over year in FY19 and FY20 mainly due to certain large customers' migration to our mobile services (cheaper than WAN to connect multiple sites)
- Year over year growth rate written for FY17 revenue is calculated by comparing FY16 revenue which is prepared with U.S. GAAP and FY17 revenue which is prepared with IFRS

Capex & Business Development/Profitability Improvement

	FY16	FY17	FY18	FY19	FY20	FY21	FY22 targets
Revenues (¥ bn)	157.8	176.2	192.4	204.5	213.0	226.3	250.0
Operating Profit (JPY billion)	5.1	6.8	6.0	8.2	14.2	23.5	27.2
Operating Margin (%)	3.3%	3.8%	3.1%	4.0%	6.7%	10.4%	10.9%
CAPEX (¥ bn)	16.5	20.7	15.1	15.2	15.2	16.1	21.5
NW services	12.6	9.4	9.4	9.6	8.8	9.7	-
Cloud	3.6	7.9	1.9	2.6	2.8	2.3	-
Shiroy DC	-	1.2	2.1	2.0	1.5	1.5	-
SI, others	0.3	2.3	1.7	1.0	2.0	2.6	-
CAPEX-related depreciation and amortization (¥ bn)	10.9	12.1	13.9	14.4	14.5	15.1	-
Number of employees	3,104	3,203	3,353	3,583	3,805	4,147	-



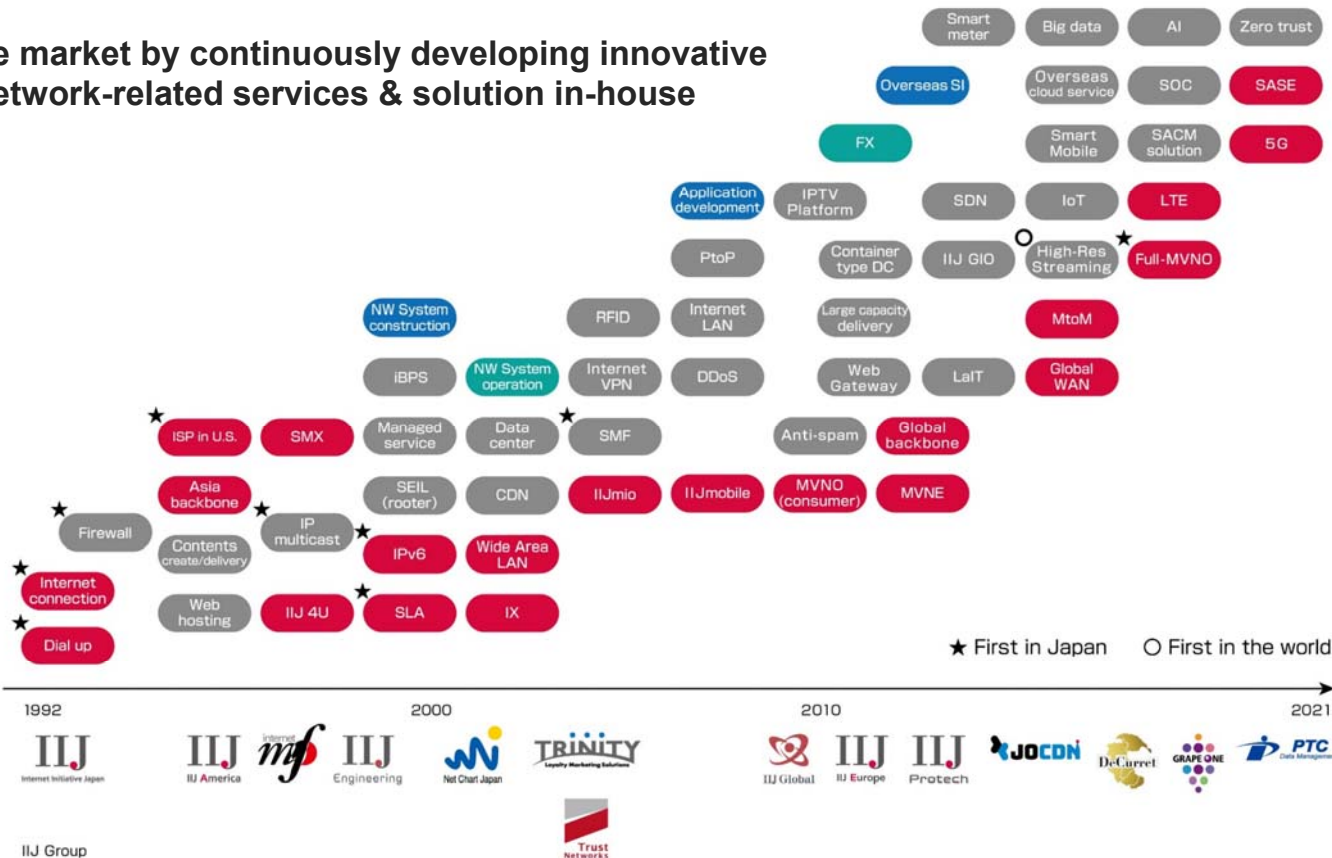
Various Network Services Asset



- FY16: US-GAAP, from FY17: IFRS
- CAPEX-related depreciation and amortization is calculated by excluding depreciation and amortization of assets that do not have the nature of capital investment, such as right-of-use assets related to operating leases, small-amount equipment and customer relationship

Service & Solution Development Capability

Initiate the market by continuously developing innovative various network-related services & solution in-house



Excellent Customer Base

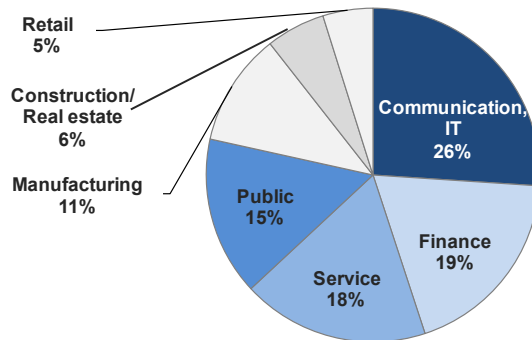
- ◆ Through reliable operation, continuous use of Internet connectivity services since the inception of IJ
- ◆ Our reliable infrastructure operation and cross-sell strategy have led to low churn rate

Cover Most of Top Revenue Companies



Revenue Distribution by Industry

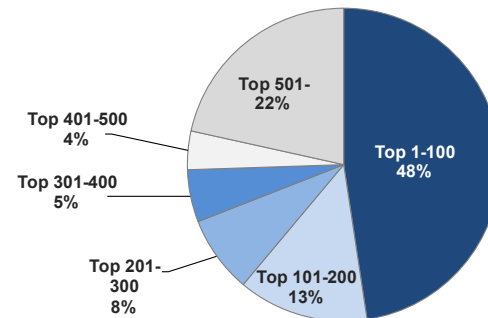
- IJ's client base is well diversified among industry sectors because what we offer, Internet connectivity and security for example, is needed by every industry



- Top ten firms in each industry taken from annual revenues are selected by IJ based on the Yahoo! Japan Finance website (finance/sales/whole market/daily).
- The service penetration and the revenue distributions are based on IJ's FY21

Revenue Distribution by Clients

- About 80% of the total revenue were generated from top 500 clients
 - Much room to grow revenue per customer from the current client base
 - Cross selling strategy is important
- Largest client revenue portion to the total revenue was less than 3%



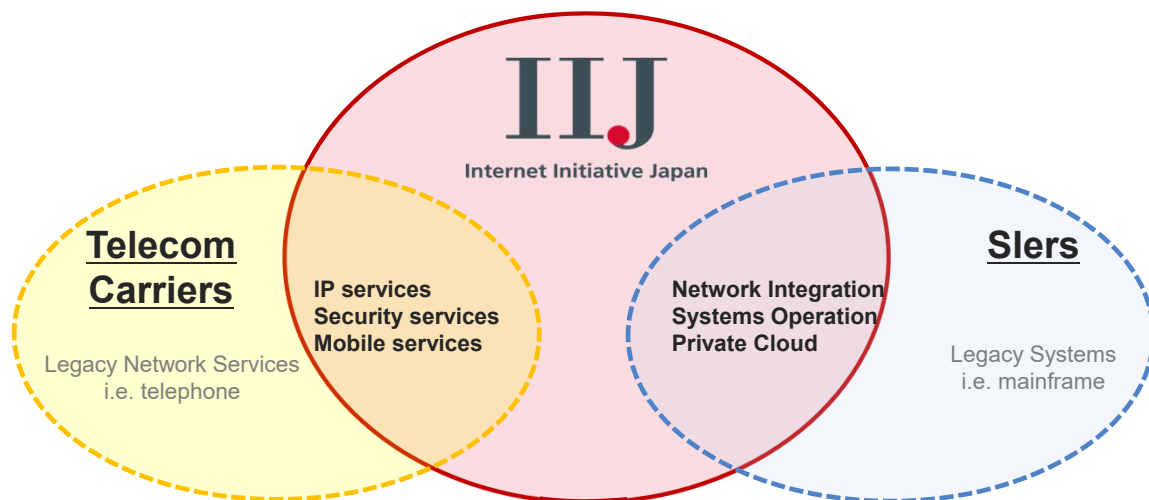
Competitive Advantages

Against telecom carriers, IIJ

- Has highly skilled IP (Internet Protocol) engineers
- Is faster to move than bureaucratic organizations
- Focuses on blue-chip companies' IT needs with SI

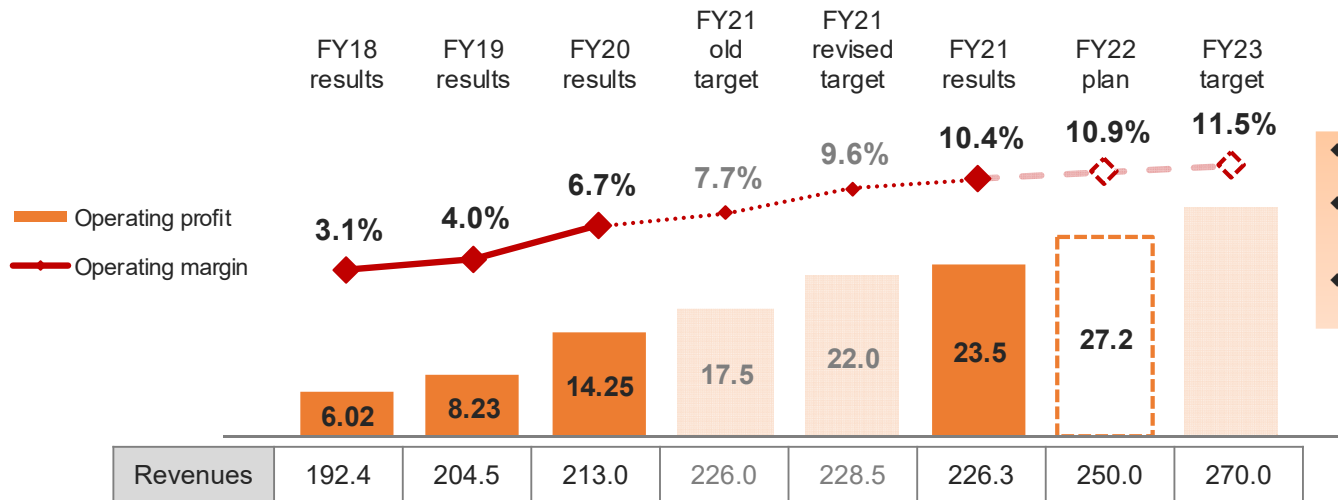
Against systems integrators (Slers), IIJ

- Operates one of the largest Internet backbone (Slers do not)
- Has network service assets & development capability (Slers do not)
- Focuses on Internet-related open type systems



**IIJ deals with newer systems and growing IT market
(Not involved in heavy and legacy systems)**

Mid-term Plan (FY21-FY23)



- ◆ Plan to largely expand business in the long term
- ◆ Continuously seek business investment & M&A opportunities
- ◆ Expect market capitalization to further increase

Key Points of the Mid-term Plan

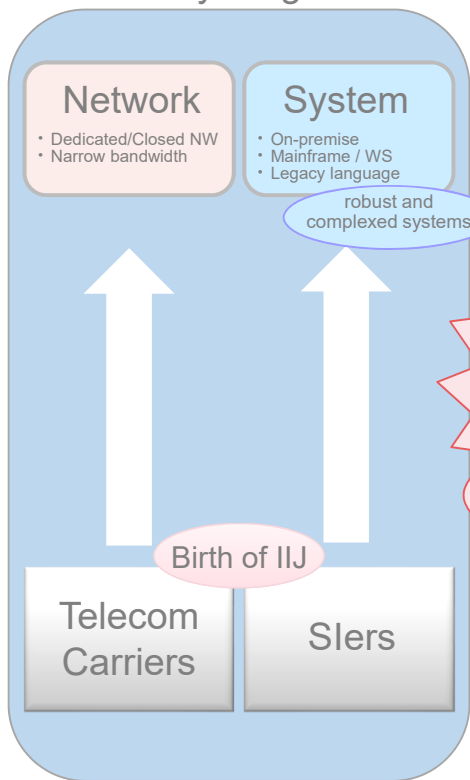
- ◆ Continuously develop services & solutions
- ◆ **Execute & strengthen the current strategy, target to improve operating margin**
- ◆ Market capitalization to largely increase including M&A opportunities etc.
- ◆ Contribute to sustainable networked society through technology innovation and network operation

FY23 Operating Margin Target



Drastically Changing Enterprises Circumstance

30yrs Ago

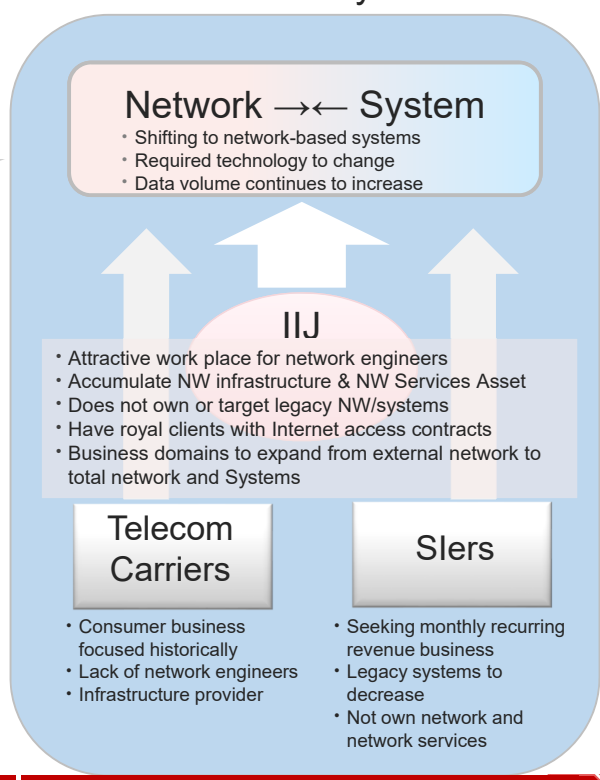


Emergence of Internet
Based on software technology

Struggling switch to open systems

- High Speed/Capacity Network
- CPU/Storage Performance Improve
- Internet Usages Progressed
- Security for various incidents
- Zero Trust Concept
- Gradual Cloud Shift
- Data Analysis and AI
- Preliminary IoT usages
- Still slow move in conservative Japan
- IT adoption at last forced by Pandemic

Nowadays



- Labor shortage require more IT
- Japan needs more competitiveness by IT
- Every CEO says DX (Digital Transformation)
- Legacy NW and Systems to be reformed
- Internet Traffic Continue to Increase
- Cyber Security Demands
- Importance for Data governance
- Cloud Systems Penetration
- 5G SA adoption and advanced IoT projects

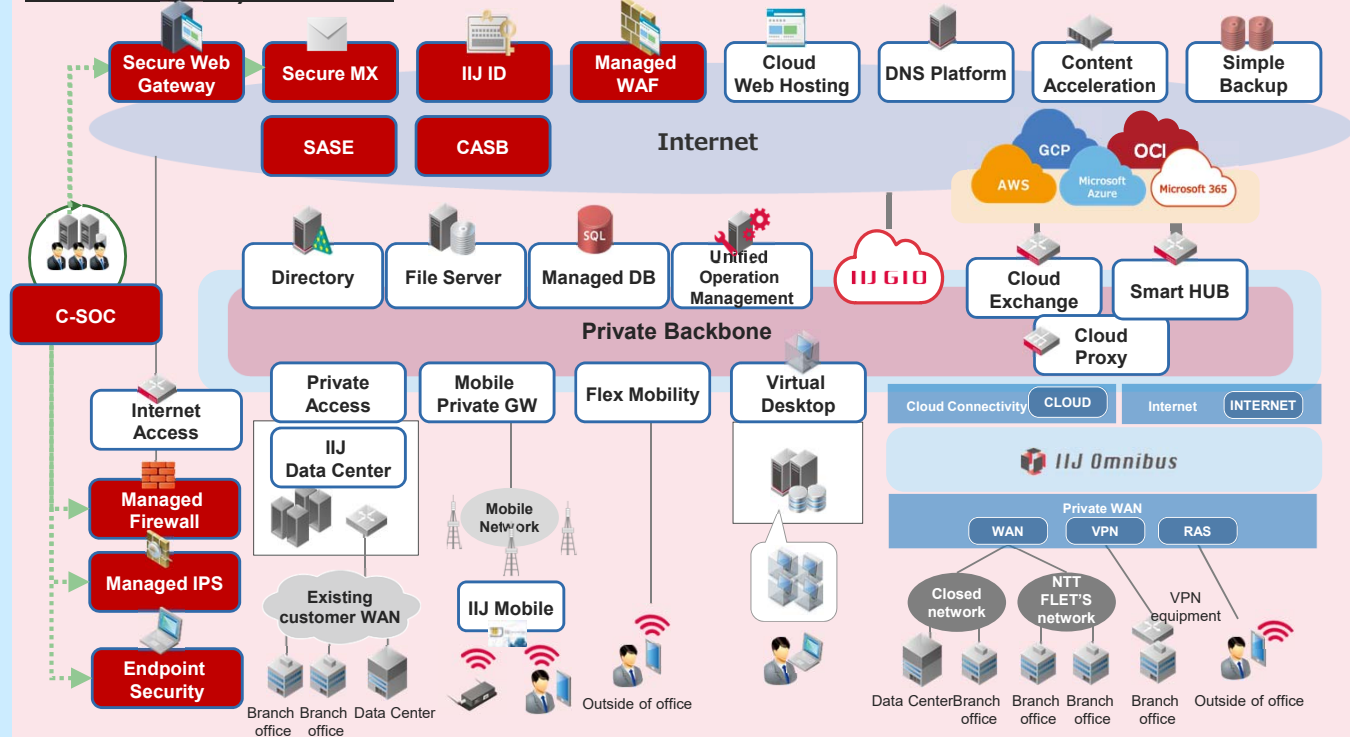


Comprehensive NW system solution with NW services & SI

Systems Integration (SI)



Network (NW) services



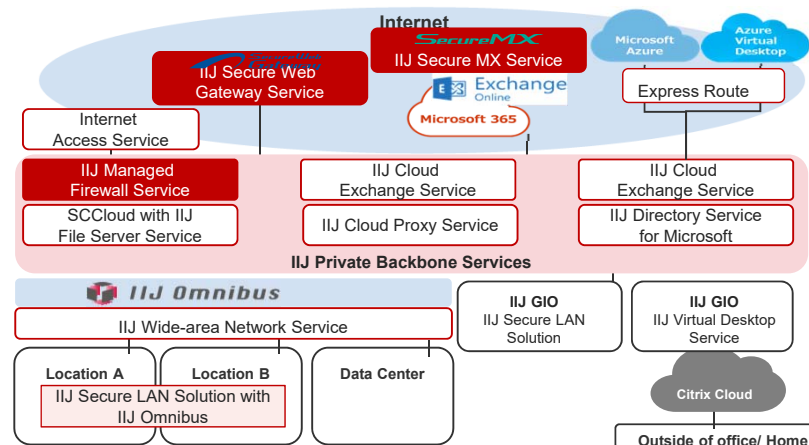
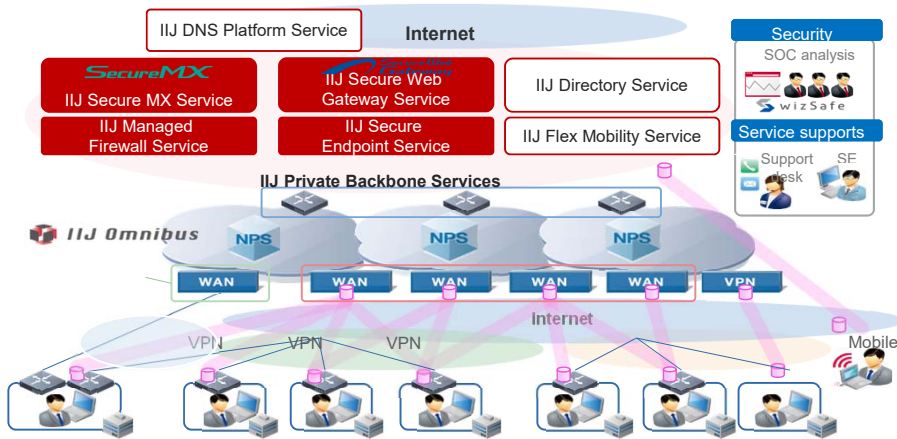
Combining in-house developed NW services and SI

Multi-year-confirmed contracts related to network replacement etc.

- ◆ Orders received around 4Q21 (excerpt from 4Q21 earnings' presentation material)
 - Total contracted revenue: over ¥10 billion, 5 projects whose revenue volume ranging from a little less than ¥1 billion to over ¥5 billion (These projects' revenues would be largely recognized as network services)
 - Contract period: 3 to 4 years
 - Construction & operation of NW replacement and/or shared platform infrastructure such as Internet connection environment for all Tokyo metropolitan high schools and WAN to connect all Tax Offices in Japan

- ◆ Orders received around 1Q22
 - Total contracted revenue: approximately ¥3.5 billion, 9 projects whose revenue volumes ranging from over ¥0.2 billion to ¥0.8 billion (These projects' revenues would be largely recognized as network services)
 - Contract period: 3 to 5 years
 - Several large-scale SASE projects for private sector clients, construction of network infrastructure for a major financial institution, construction of administrative information infrastructure systems for a certain central government agency, etc.

Images of the multi-year-fixed contracts related to network replacement etc.



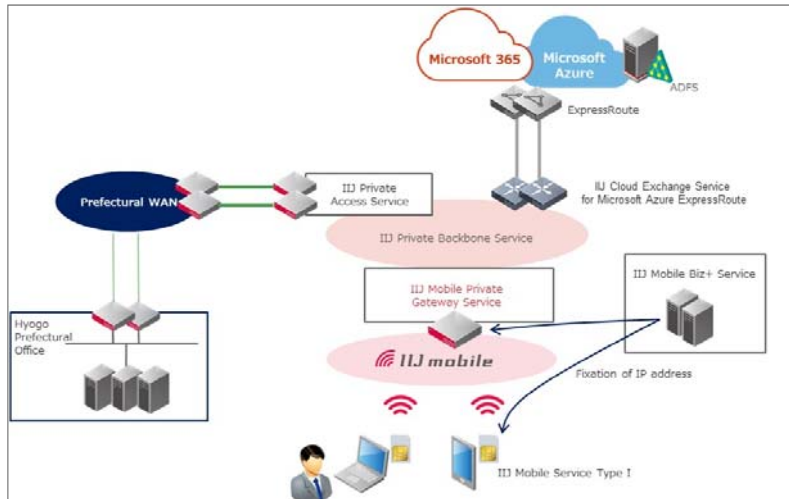
Network systems in Japan are gradually changing along with the penetration of Cloud, DX, Zero Trust, IoT, Digital Work Place etc.

Favorable business environment as IIJ now has greater opportunity to propose various NW-based service solutions

Case studies of combining multiple NW services (1)

Hyogo prefecture (Jan. 2022)

Work from home infrastructure capable of connecting up to 90 thousand people simultaneously

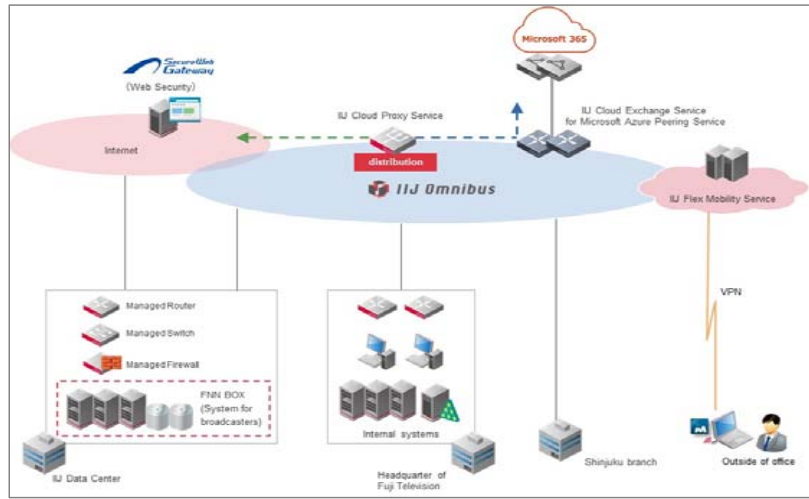


Services provided

- IIJ Mobile Private Gateway Service
- IIJ Mobile Biz+ Service
- IIJ Mobile Access Service Type I
- IIJ Cloud Exchange Service for Microsoft Azure ExpressRoute
- IIJ Private Access Service

Fuji Television Network, Inc. (Apr. 2021)

Stable connectivity and reduction of operation load with cloud-based Internet gateway



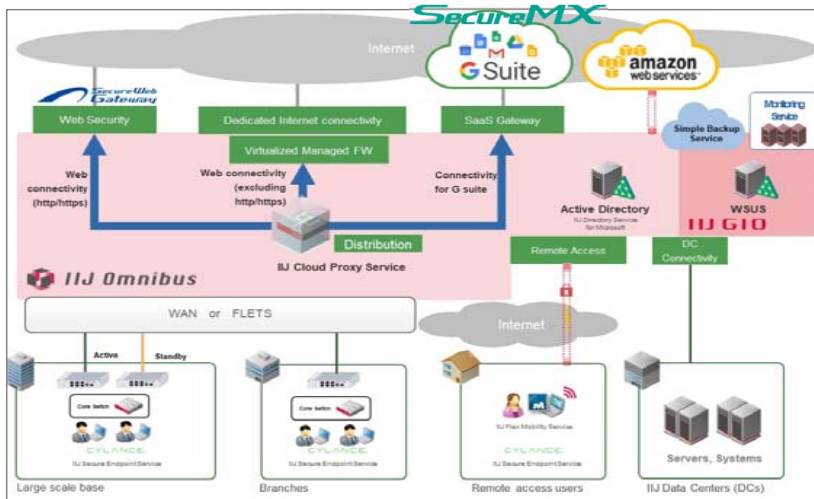
Services provided

- IIJ Omnibus Service
- IIJ Cloud Exchange Service for Microsoft Azure Peering Service
- IIJ Cloud Proxy Service
- Internet Connectivity Service
- IIJ Managed Firewall Service
- IIJ Private Access Service
- IIJ Secure Web Gateway Service
- IIJ Flex Mobility Service
- Managed Router Service

Case studies of combining multiple NW services (2)

Kokusai Kogyo (May 2022)

Update NW of 50 branches nationwide with IJ Services
Stabilization of connectivity and improvement of reliability

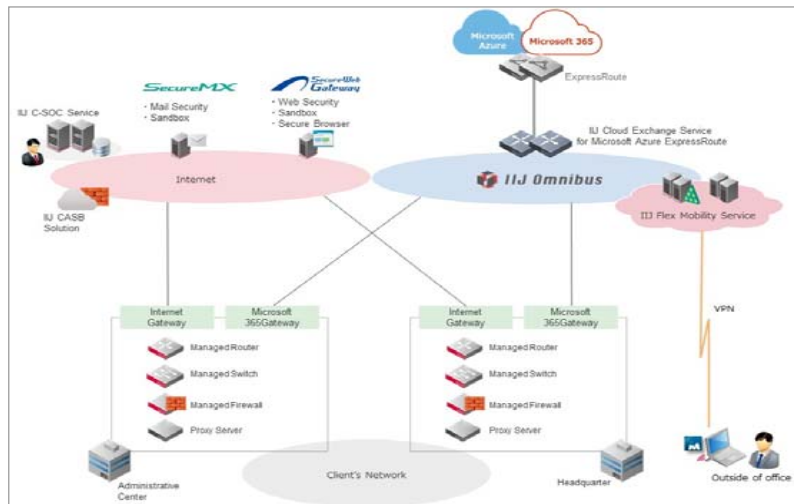


Services provided

- IJ Omnibus Service
- IJ Cloud Proxy Service
- IJ Private Backbone Service
- IJ Secure Web Gateway Service
- IJ Managed Firewall Service
- IJ Secure Endpoint Service
- IJ Flex Mobility Service
- IJ Directory Service for Microsoft

Bank of Yokohama, Ltd. (Jan. 2021)

Stable connectivity and reduction of operation load with cloud-based Internet gateway

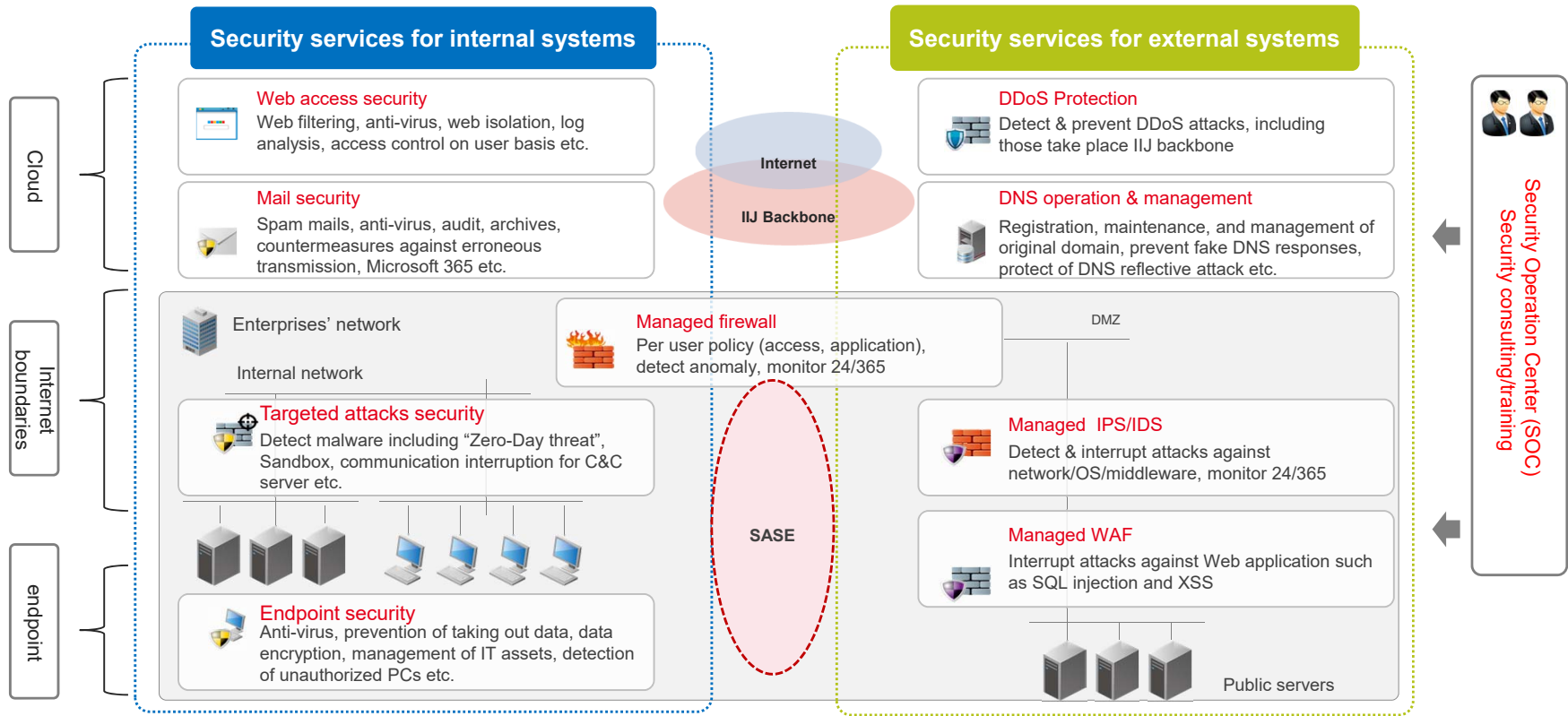


Services provided

- IJ Cloud Exchange Service for Microsoft Azure ExpressRoute
- IJ Secure Web Gateway Service
- IJ CASB Solution
- IJ Flex Mobility Service
- IJ GIO Infrastructure P2
- IJ Secure MX Service
- IJ C-SOC Service
- IJ Managed Firewall Service
- IJ Omnibus Service
- IJ Unified Operation Management Service (UOM)

Provide Security Services over Network

Information Analysis Platform utilizing information and expertise only available to ISPs



• SASE (Secure Access Service Edge) is a concept to shift controls of network and security on the route to Cloud services to enable secure access from any points, instead of the conventional centralized management through headquarters or data centers.

Initiatives taken by IIJ for Security

- 1994 Started providing firewall services (first in Japan)
- 1999 Started providing fully-managed firewall services (first in Japan)
- 2004 Started providing spam mail filtering (first in Japan)
- 2005 Added sender domain authorization technology/spam mail protection (first in Japan), Started providing IIJ DDoS Protection Services
- 2006 Started providing IIJ Managed IPS Service and **IIJ Secure MX Service (SMX)**
- 2009 **Started providing IIJ Secure Web Gateway Service (SWG)**
- 2015 Added sandbox option (function to detect behaviors as a countermeasure against targeted attacks)
- 2016 Constructed information analysis platform (constructed platform to analyze log data within our backbone to realize early detection and countermeasures against increasingly sophisticated threats)
- 2017 Started providing DDoS Protection Service (terabit-compatible), Opened new Security Operation Center (SOC) and started providing C-SOC Service**
- 2018 IIJ Security engineers provided trainings at an international security conference “Black Hat USA 2018” (first as Japanese)**
- 2018 Started providing IIJ Secure Endpoint Security Service
- 2019 Started providing IIJ Managed WAF Security Service (public web system vulnerability countermeasures)
- 2021 Started providing IIJ CSPM Solution (Cloud Security Posture Management which means cloud security management)
- 2021 Opened IIJ Security Training School (launched business for IT division personnel assigned for security to become specialists)**
- 2022 Started providing IIJ Secure Access Service (in-house developed SASE service)**

Invited and trained police officers to our SOC

- Apr. 2017 Hyogo prefecture (1 year)
- Oct. 2018 Shimane prefecture (3 months)
- July 2019 Hokkaido prefecture (3 months)

Certification of multiple international standards

- Feb.2020 Mail, Web Security Services
- Apr. 2020 IIJ Managed IPS/IDS Services
- Mar. 2021 DDoS Protection Service, IIJ Managed WAF

Continued afterwards

Training programs by experienced lecturers and active SOC analysts

IJ Security Service Revenue

Unit: JPY billion

Security Services

FY15

FY16

FY17

FY18

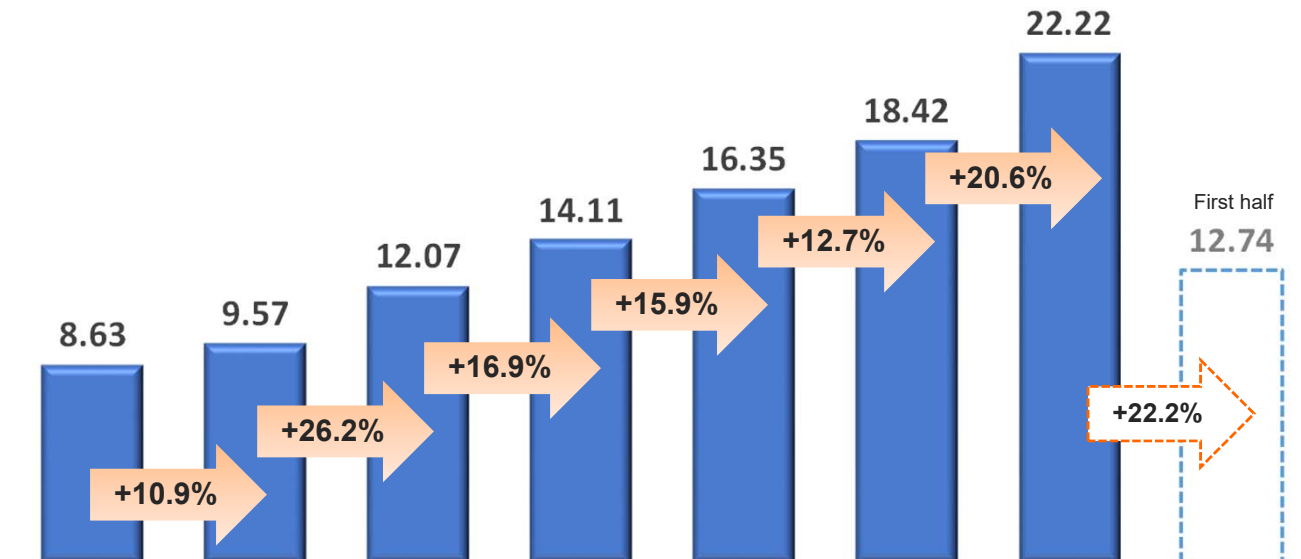
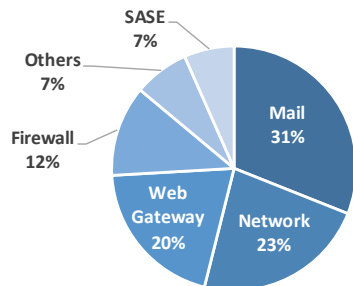
FY19

FY20

FY21

FY22

FY21 Security Service Revenue Breakdown



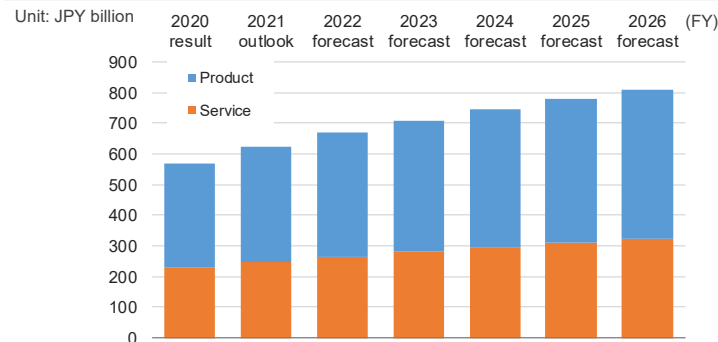
Total Security business (service + SI)	FY15	FY16	FY17	FY18	FY19	FY20	FY21
	-	-	14.62	16.77	19.18	21.47	25.44

- All of security service revenue (recurring) is recognized in outsourcing services
- Security service is a general term for individual security service
- Security projects outside the scope of our security service provision are handled through system integration (SI); security SI in FY15 and FY16 are not counted.

Security market and competitors

- ◆ **Movement to review security** after telework expansion
- ◆ With the changes in the way we work, there is a shift toward **zero trust model** whose premises is “all traffic is untrusted”
- ◆ Along with cloud migration, mechanisms to ensure **safety relating to cloud** are attracting attention
- ◆ Opportunities to propose SMX together with Microsoft365 are increasing as the SaaS adoption gains momentum

Network security business market forecast



Source: Fuji Chimera Research Institute "2021 Network Security Business Survey"
<https://www.fcr.co.jp/pr/21117.htm>

	IJJ	LAC	NTT Security	NRI Secure Technologies
Category	Total network service solution provider	Vendors specialized in security		
Feature	<ul style="list-style-type: none"> • Provide a number of first in Japan full managed security services over network • Security services utilizing information and expertise unique to Internet Service Provider 	<ul style="list-style-type: none"> • Many emergency response record • KDDI capital participation in Dec. 2013 • SOC as a core operation 	<ul style="list-style-type: none"> • Founded in Aug. 2016 by integrating NTT Communications (“Ncom”), Ncom Security and overseas subsidiaries’ security businesses 	<ul style="list-style-type: none"> • Founded in 2000 as a Nomura Research Institute’s group company • High penetration toward large enterprises (especially finance) • Cover upper layer consultation to managed type services
FY21 revenue	<p>¥25.4 billion</p> <p>(of monthly services: ¥22.2 billion)</p>	<p>¥42.7 billion</p> <p>(of services, ¥19.4 billion)</p>	N/A	N/A
Number of employees dedicated to security	<p>IJJ(non-consolidated) 346</p> <p>As of Sep. 30, 2022</p>	<p>consolidated 2,172</p> <p>As of Apr. 1, 2022</p>	N/A	<p>525</p> <p>non-consolidated, as of Oct. 1, 2022</p>

Focused Security Services

IIJ Secure MX Service (SMX)

- ◆ Cloud-based integrated mail security service (16 yrs in operation)
- ◆ Differentiating by in-house developed filtering, providing support in Japanese, update etc.
 - Minimize mail threats with multi filtering, able to store unlimited mail data in DCs located in Japan, prevent accidental transmission/information leak with the system
- ◆ Competitors withdrawing from the market



Cloud based mail security market
Share No.1

(Resource: Fuji Chimera Research Institute) monthly BT Sep. 2019 "Cloud based mail security service market survey" based on FY18 figure base

SMX contracted accounts

Sep. 2022	2.83 million
Sep. 2021	2.65 million
Sep. 2020	2.41 million

IIJ DDoS Protection Service

- ◆ Comprehensive service to protect enterprise network system from DDoS attacks (17 yrs in operation)
- ◆ Service model unable for Slers & vendors who do not have NW backbone to offer
 - Realize reliable web services by avoiding overloaded network and server triggered by huge traffic
 - 24/365 operation by security engineers who have expertise obtained through ISP business
 - Automatically detect and prevent DDoS attacks
 - Internet access line are also within service coverage
 - Global coverage and capability of preventing terabit level large-scale attack (Jan. 2017)
- ◆ High penetration rate toward large financial institutions

IIJ Secure Web Gateway Service (SWG)

- ◆ Cloud-based integrated web security service (13 yrs in operation)
- ◆ Differentiating by in-housed developed engines etc. to block and isolate web functions etc.



<Resource> ITR "ITR Market View: Cyber Security counter market 2021"

SWG contracted accounts

Sep. 2022	1.23 million
Sep. 2021	1.19 million
Sep. 2020	1.12 million

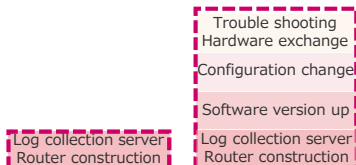
IIJ C-SOC Service

- ◆ Comprehensive security incident response service provided by IIJ security engineers
- ◆ Operational SOC service unique to ISPs: visualize invisible threats by applying IIJ's unique intelligence, execute initial response as well as notification etc.
- ◆ Service policy: individual operation and monitoring including other managed services
- ◆ Relatively expensive monthly transaction

Coverage comparison

<Competitors>

<IIJ>



Information resource of IIJ

Security equipment log	170 billion lines per month
Mail access log	3.8 billion lines per month
Web access log	90 billion lines per month
Monitoring node	48 thousand
Number research sites by web crawler	Over 400 thousand per day

- ◆ IIJ's been long fulfilled the SASE concept through individual services such as managed firewall
- ◆ Launched in-house developed SASE services by packaging security requirement

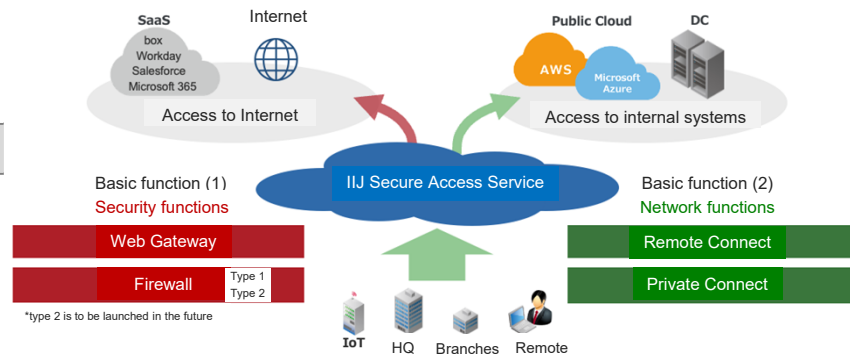
Why SASE Services are attracting attention

- ◆ Acceleration of cloud shift of enterprise system
- ◆ Spread of flexible work style including telework
- ◆ Increase in information leak due to internal fraud & criminal activity

Features of our SASE Service

- ◆ A packaged product utilizing the existing security functions' strength
- ◆ Differentiate by operation in Japan
 - Handle Japanese enterprises' information asset in data centers located in Japan
- ◆ High compatibility with other IIJ's security services functions such as C-SOC
- ◆ Developed in-house with a focus on cost effectiveness
 - Improve operation productivity and centralized management with IIJ's original UI
 - Monthly service charge: IIJ ¥500 - ¥990 per user, competitors ¥1,000 over per user
- ◆ Small smart & low price range (minimum 50 users)
 - Competitors target large number of users such as global corporations (over 500 users)

Image of service provision



Comparison with Prisma Access "PA"

ISA	PA
Mainly for network within Japan	Mainly for global network
Mid-to-low price range	High-priced, high functionality, high efficiency
Japanese language support	-
Packaged by aggregating managed services	Require large-scale integration when installing
Extensive engineers support	Automation & XDR-centric design



The internet started in Japan in 1992, along with IIJ. Since that time, the IIJ Group has been building the infrastructure for a networked society, and with our technical expertise, we have continued to support its development. We have also continued to evolve our vision for the future and innovate to make it a reality. As an internet pioneer, IIJ has blazed the trail so that others could realize the full potential of a networked society, and that will never change. The middle "I" in "IIJ" stands for "initiative," and IIJ always starts with the future.