Presentation on Business Activities
of the
IT & Communication Business Unit

October 27, 2015
Mitsui & Co., Ltd.
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   - Business scale, performance, global presence

2. Roles in the 7 Key Strategic Domains
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3. Priority Business Areas
   - Communications infrastructure in emerging nations, TV shopping, industrial IT-related business, cyber security

4. Key Words for the Future
   - Three Key Words
1. Overview and Position of the Business Unit
1. Overview and Position of the Business Unit (BU)

Organization Chart

- Iron & Steel Products BU
- Mineral & Metal Resources BU
- Infrastructure Projects BU
- Integrated Transportation Systems BU
- Basic Chemicals BU
- Performance Chemicals BU
- Energy BU I
- Energy BU II
- Food Resources BU
- Food Products & Services BU
- Consumer Service BU
- Corporate Development BU
- Corporate Staff Divisions

**IT & Communication Business Unit**

**COO**

Assistant to COO

COO Staff
- Strategic Planning Dept.
- Human Resources & General Affairs Dept.

**Business Domains**

- Internet & Telecommunications
- Media
- IT Platform
- IT Solutions

◆ 13 HQ Business Units + 3 Regional Business Units
1. Overview and Position of the Business Unit

**Business Domains**

- **Internet & Telecommunications**
  - High-speed communications
  - Electronic payment
  - Internet-related
  - Contact centers/BPO
  - Net marketing

- **IT Platform**
  - Data platforms/Big Data Industry × IT
  - Other new business domains

- **Media**
  - Video content
  - Broadcasting-related
  - TV shopping
  - E-Commerce

- **IT Solutions**
  - S/I
  - Cloud services
  - Cyber security
  - IoT, M2M-related
1. Overview and Position of the Business Unit

ICT Related Investments In The World

Six personnel from the IT & Communication BU have been posted to the Mitsui & Co. (USA) Silicon Valley Office and MGI (a venture investment subsidiary), to acquire new technology and business models. (Highest no. among Japanese trading companies)
1. Overview and Position of the Business Unit

Business Scale & Performance

Investment Balance

- **FY March 2014**: ¥77.3 bil
- **FY March 2015**: ¥89.8 bil
- **FY March 2020**: ¥200-300 bil

PAT

- **FY March 2014**: ¥12.8 bil
- **FY March 2015**: ¥5.7 bil
- **FY March 2020**: ¥10 bil + α

*FY March 2014 PAT is based on US GAAP, FY March 2015 is based on IFRS.*
2. Roles in the 7 Key Strategic Domains
2. Roles in the 7 Key Strategic Domains

- **Hydrocarbon Chain**
  - Energy upstream to downstream and expansion of related businesses
    - Upstream oil & gas development, commercialization (LNG, Chemicals, Power Generation)
    - Transportation and associated businesses (ships, steel pipes, infrastructure development)

- **Mineral resources (urban & underground) and materials**
  - Mineral mining to material processing, building a recycle-oriented society
    - Development and production of mineral resources, processing, distribution and recycling of products
    - With focus on technical advancement, expand steel and chemical material business

- **Food and agriculture**
  - Provide solutions for increasing production and stabilizing food supply
    - Fertilizer and food resources, Food product materials
    - Agricultural, food and nutritional sciences

- **Infrastructure**
  - Contribute to new nation building and business expansion from infrastructure
    - Power generation, water supply and port terminals
    - Next generation development of local economies

- **Mobility**
  - Services related to manufacturing, marketing & financing of transportation machineries
    - Automobile, industrial machinery, ships, aircrafts, mass transit and rail transportation systems
    - Logistics business and expansion to other “Key Strategic Domains”

- **Medical / Healthcare**
  - Business development in healthcare and pharmaceutical value chain
    - Hospital business and surrounding healthcare services
    - Pharmaceutical development, manufacturing and marketing

- **Lifestyle products and value-added services**
  - Consumer linked business utilizing next generation functions (IT, Finance, Logistics)
    - Clothing and food (distribution, data, e-commerce)
    - Housing (real-estate, financial and related services)
3. Priority Business Areas

(1) Telecommunications infrastructure in emerging nations
(2) TV shopping
(3) Industrial IT-related business
(4) Cyber security
Past Telecommunications Business Initiatives

1980s
- Deregulation of Communications
  - 1984 Japan Telecom (JT)
  - 1985 DDI Corp.
    - Teleway Corp.
    - Japan Communications Satellite (JSAT)
  - 1986 International Telecom Japan
    - TTNet
    - Tokyo Telemessage
  - 1987 IDO
  - 1989 DDI Cellular Group

1990s
- Diffusion of Mobile Communications
  - 1991 Digital Phone Group
  - 1992 TU-KA Group
  - 1994 ASTEL Group

2000s
- Development of i-mode → Emergence of smart phones
  - 2013 PT Internux/Indonesia
  - 2015 Afrimax/Africa

- Arrangement of arrival of 4G/LTE

2010s

【Mobile phone sales】T-GAIA (formerly Telepark), Brightstar
【Call centers】Relia Communications (formerly Moshi Moshi Hotline)
【Internet】AOL Japan
【Mobile content】Buongiorno/Italy
* Mitsui has exited T-GAIA, Brightstar, AOL Japan and Buongiorno
3-1 Telecommunications Infrastructure in Emerging Nations

Core Strategy
Provide LTE to emerging nations (urban areas) lacking in internet infrastructure and capture the growth of the emerging markets

(1) Mobile internet communication standards to be unified to the LTE global standard (already adopted by 30 countries, including China, USA, Japan, and India)

(2) Provide 4G services in urban areas where mobile internet use is concentrated

(3) Meet the need for high-speed communication in markets lacking fixed networks
3-1 Telecommunications Infrastructure in Emerging Nations

**LTE Business in Indonesia**  
*(PT Internux (PTI): Mitsui & Co.’s equity participation of 20%)*

PTI provides LTE services in Jakarta and Medan under the Bolt! brand name. Mobile data communication is expected to grow rapidly in Indonesia, and PTI is responding steadily to this growth and contributing to improving the communications environment in Indonesia.

**Strengths of PTI (Bolt!)**

<table>
<thead>
<tr>
<th>Communication speed</th>
<th>◆ Approx. 10 times faster than existing mobile communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>◆ Provides a service with data-based communication fees 70% lower than its competitors</td>
</tr>
<tr>
<td>Coverage</td>
<td>◆ Covers 98% of Jakarta’s population (about 32 million people). Future plans for expansion of the service area focusing on large cities.</td>
</tr>
<tr>
<td>Subscribers</td>
<td>◆ Approx. 1.3 million subscribers acquired in first 18 months of operation. The number of subscriptions continues to grow.</td>
</tr>
</tbody>
</table>
3-1 Telecommunications Infrastructure in Emerging Nations

**LTE Business in Sub-Saharan Africa (Afrimax)**

In September 2015, Mitsui & Co. took equity participation (approx. ¥6 billion) in Afrimax, which is developing the LTE business in Sub-Saharan Africa. Afrimax began providing LTE services in Uganda in February 2015, and plans to expand its LTE operations to dozens of countries across Sub-Saharan Africa. Although there is a lack of mobile communications infrastructure in Sub-Saharan Africa, the region’s mobile data traffic is expected to increase rapidly. The mobile communications infrastructure business is the bedrock upon which growth is built, and using this business as a platform, Mitsui aims to create a range of services, including mobile payment and EC.

**Strengths of Afrimax**

- **Communication speed**: Over 10 times faster than existing mobile communication
- **Multinational development**: Began providing services in Uganda in 2015, and plans to expand to over ten countries in Sub-Saharan Africa
- **Alliance with Vodafone**: Provides services under the Vodafone name, a powerful brand in Sub-Saharan Africa as well
- **Highly experienced management team**: The team has started up mobile communication businesses in the Middle East, Africa, Central & South America, and Russia since the 90s, and is highly conversant with the communications business in Africa

**Mobile data traffic in Sub-Saharan Africa to grow 20-fold between 2013 and 2019**

※Monthly Petabytes

【Source: Sub-Saharan Africa Mobility Report Appendix – Ericsson】

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3-2 TV Shopping

QVC Japan
(Mitsui & Co.’s equity participation: 40%)

A TV shopping company operated by QVC (USA) and Mitsui & Co. since 2001. Net sales were ¥9.62 billion in FY 2014 (Jan–Dec). Mitsui & Co. has been involved from start-up. A 24-hour live shopping channel that has established a reputation as a reliable brand.

CCTV Home shopping (CCTVS)
(Mitsui & Co.’s equity participation: 25%)

In January 2011, Mitsui & Co. took equity participation in TV shopping company CCTVS, a subsidiary of the leading Chinese broadcaster CCTV. By utilizing the strong brand of CCTV as China’s largest state-owned broadcaster, CCTVS has rapidly increases its viewership to over 100 million households.

Naaptol
(Mitsui & Co.’s equity participation: 5%)

In March 2015, Mitsui took equity participation in one of India’s leading TV shopping firm, Naaptol. Besides its 24x7 Shopping channel available in ca.70mil households across the country, with over 100hours of advertising every day ,Naaptol is also well known due to its infomercial business as well as its e-commerce website.
3-3 Industrial IT-related Business

Core Strategy
Create large-scale business models by gathering, analyzing, controlling and utilizing data obtained by the IoT.

- Focussing on industrial domains where gathering, analysis, control and use of Big Data can be a game changer. We are already active in the healthcare, agricultural and financial (Fintech) domains.

- Seeking to build horizontal cross-industry Big Data platforms

- In addition to project investment, also actively pursuing exploratory investment for the purpose of acquiring business seeds.
3-3 Industrial IT-related Business

Agricultural IT
(Farmers Edge)

In March 2015, Mitsui & Co. took equity participation in the Canadian agricultural IT firm, Farmers Edge. The company is a leader in the precision agriculture sector, and we aim to enhance the company’s value and create new business in collaboration with the Food Resources and Chemicals Business Units.

Healthcare IT
(EarlySense)

In February 2015, Mitsui & Co. concluded a US$5 million investment agreement with Israel’s EarlySense. EarlySense produces sensors for detecting users’ respiration, heart rate and movement, and possesses data technology for detecting sleep state and patient deterioration. We will target to create new business, leveraging EarlySense’s technology.

FinTech
(Money Forward)

In October 2015, Mitsui & Co. invested approx. ¥300 million in Money Forward, a provider of automated household accounting and asset management services for individuals and cloud accounting services for SMEs. Mitsui & Co. aims to use its equity participation in Money Forward as a launch pad for creating business leveraging big data in the Fintech sector.
3-4. Cyber Security

Core Strategy
Use advanced Western security technology to counter the growth, diversification, and increasing sophistication of cyber attacks. Take advantage of the growth of the cyber security market.

✓ Cyber security market growing in parallel with increase in cyber attacks in recent years (10% annual growth rate expected to continue, to reach a market scale of $120 billion in 2017)
✓ Attack methods becoming more diversified and sophisticated. Single solution security equipment unable to provide complete protection, especially against targeted attacks.

(1) Global Cyber Security Market Forecast

(2) Recent Security Incidents

<table>
<thead>
<tr>
<th>Company</th>
<th>Cause</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Targeted attack email</td>
<td>1.25 million items of personal information</td>
</tr>
<tr>
<td>B</td>
<td>Targeted attack email</td>
<td>Over 10,000 items of personal information</td>
</tr>
<tr>
<td>C</td>
<td>Targeted attack email</td>
<td>Policy-related information and material</td>
</tr>
<tr>
<td>D</td>
<td>Web application vulnerability</td>
<td>Personal information of 130,000 employees</td>
</tr>
</tbody>
</table>

(3) Who is responsible?

Mischief Makers
Ideology (not financial)

Criminal Gangs
Financial

Terrorists
Terrorism

Countries
Confidential information
3-4. Cyber Security

Mitsui Bussan Secure Directions, Inc. (MBSD)

A specialist security firm offering full-spectrum support for cyber security management

Professional Services

Security Diagnosis
- Web application diagnosis
- Smartphone application diagnosis
- Embedded device diagnosis/RIA diagnosis
- Network diagnosis/Server configuration diagnosis
- Smartphone game diagnosis
- Targeted attack resistance diagnosis

Security Monitoring

Consulting Services

Security Consulting
- Information security promotion organization support/CSIRT set-up support
- SIEM introduction/operation support
- Network traffic attack analysis/Targeted attack email training

Analysis
- Malware analysis
- Forensics

Incident Response
- Blocking communication with an attacker
- Threat information database/Human Intelligence

Diagnosing of vulnerabilities in websites and networks by Japan’s top diagnostic technicians

Monitoring of unauthorized access to prevent cyber attacks
(24 hours a day/365 days a year)

High-level security analysis through threat information databases and endpoint solutions. Anomaly detection through analysis of big data, high-level security design and operation through construction of security monitoring platforms.
3-4. Cyber Security

**Conventional SOC = Entry Protection**
*Defence as a “Gate” against malicious attack*
- Monitors firewalls, IDS/IPS, WAF and other security devices
- Only analyzes valid attacks from out of numerous alerts and notifies client company
- Defends networks from attack 24 hours a day, 365 days a year

**PSOC = Entry, Exit & Internal Protection**
*Control, recovery, countermeasures and hunting after attack and intrusion*
- Analyzes attack start point, content, and purpose
- Checks for presence of latent malware at the endpoint
- Determines what kind of organization launched an attack (Hunting)

**SOC: Security Operation Center**
- Monitors firewalls, IDS/IPS, WAF and other security devices
- Only analyzes valid attacks from out of numerous alerts and notifies client company
- Defends networks from attack 24 hours a day, 365 days a year

**PSOC: Private Security Operation Center**
- Analyzes attack start point, content, and purpose
- Checks for presence of latent malware at the endpoint
- Determines what kind of organization launched an attack (Hunting)

**Objective 1**
By automating services, provide security services to SMEs and not just large corporations.

**Objective 2**
Strengthen response to new sophisticated threats.

**US security service company**
**Brand new “Security-as-a-Service” business model providing companies with an automated package for security devices from function to operation.**

**Other companies possessing advanced technology**
(Under investigation)

**Security Operation Center**
- Dependence on security engineers and skills
- Response to new security threats based on advanced technology

**Other companies possessing advanced technology**
(Under investigation)
3-4. Cyber Security

US Cyber Security Business (Alert Logic)

In September 2015, Mitsui & Co. took equity participation in US security service firm, Alert Logic. Alert Logic provides a full-package, pay-per-use service from functioning to operation and monitoring of security devices installed at internet and corporate network boundaries, and is growing rapidly as a provider of “Security-as-a-Service”.

Provision of operation and monitoring services for security devices normally requires the initial creation of a Security Operation Center manned by several skilled security engineers, but by employing big data analysis and other technological tools, Alert Logic has developed Security Operation Centers that operate under highly automated and computerized systems. This has made it possible for Alert Logic to provide security services to companies with a diverse range of needs, including SMEs, with limited security engineer resources.

By partnering with Alert Logic as it continues to grow in the USA, the world’s largest cyber security market, and leveraging its advanced technology, we aim to both strengthen the capabilities of MBSD and also develop business together in the Japanese and Asian markets.
4. Keywords for the Future
4. Keywords for the Future

Business Development in Emerging Markets Based on the Time Machine Model

There are many examples of past successes resulting from the introduction to Japan of business models created in the USA. In future we will develop businesses in S.E. Asia and Africa that has succeeded in the USA and Japan.

Telecommunication companies Mitsui invested in in the past.

USA→Japan→Emerging Markets (Past Examples)
1. Operation of QVC Japan→ TV Shopping in China and India
2. Rise of US contact centers →Relia, Inc.* established→Contact centers in Thailand and Vietnam (MOCAP)
3. Investment in domestic telecommunications businesses→Investment in PT Internux Indonesia and Afrimax

*Formerly Moshi Moshi Hotline
4. Keywords for the Future

Attaining new and innovative technologies and business models started from US and EMEA

Our teams in NY and Silicon Valley aim to uncover new technologies and business models through investments and business development.

Next-Generation IT investments

- WellAware/Service for Oil & Gas industry
- Box/Collaboration platforms for enterprises
- GNS Healthcare/Healthcare-related data analytics
- LifeCode/Cancer Genome Analysis and Reporting
- Netskope/Cloud access control services
- DocuSign/DTM e-signature platform
- Addvocate/Information curation and discovery

Keywords for the Future

- Big Data Analytics
- M2M/IoT
- AI
- Cloud
4. Keywords for the Future

Participation in industrial IT projects that contribute to other business units

By driving business of Industrial IT, our Business Unit contributes to strengthen Mitsui’s assets across verticals including Oil & Gas/Energy, Healthcare, Agriculture.
Appendix

Principal Business of the Four Business Domains
Internet & Telecommunications

Business Overview

Development of communications service platforms for high-speed communications, e-commerce, electronic payment, etc., in combination with marketing, contact centers, and other related service business

Sectors of Activity & Principal Investments

**High-speed communications/Mobile communications**

- **Internux/Indonesia**
  Developing high-speed mobile communications business centered on Jakarta

- **Afrimax/Africa**
  High-speed mobile communications business launched in Uganda, now planning to expand to over ten Sub-Saharan countries

**Electronic payment**

- **QIWI/Russia**
  Developing contact centers, digital marketing, BPO business

- **Suvidhaa/India**
  Providing kiosk terminal services, payment collection services through small & medium-sized retailers and electronic payment services in Russia and India

**Contact centers/Marketing**

- **Relia, Inc./Japan**
  Contact centers, BPO business

- **MOCAP/Thailand & Vietnam**
  Contact centers, BPO business

- **AOL Platforms Japan**
  Digital advertising
Placing broadcasting and TV shopping as our core businesses, working to identify and pursue opportunities in new media, in the midst of advancement of fusion between the internet and said core businesses.

### Sectors of Activity & Principal Investments

#### TV shopping

- **QVC Japan**
  - Developing multimedia retail business centered on TV

- **CCTV Shopping /China**
  - Developing TV shopping business across China

- **Naaptol/India**
  - Developing TV shopping business across India

#### Broadcasting, video services, etc.

- **World High-Vision Channel/Japan**
  - Operation of 24-hour, fully free, general programming BS channel BS12 TwellIV

- **Kids Station/Japan**
  - Operation of Kids Station, a children’s educational and animation pay channel with one of the highest household penetrations in the industry

- **FactoryMade Ventures/USA**
  - US media planning and development company with its head office in L.A.

#### E-Commerce

- **Vatgia/Vietnam**
  - Developing e-commerce business in Vietnam

- **BookLive/Japan**
  - Developing e-book stores in Japan

- **Tokyo Otaku Mode/USA**
  - Developing of cross-border EC business worldwide
**IT Platform**

### Business Overview

Creation of data platform business in various industries, including healthcare, agriculture, resources and energy, through gathering, analysis, control, and utilization of data.

### Sectors of Activity & Principal Investments

#### Healthcare

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>iMedical/Japan</td>
<td>Creation of data platform business providing high value-added services through gathering, analysis, and utilization of healthcare data</td>
</tr>
</tbody>
</table>

#### Agriculture & resources

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FarmersEdge/Canada</td>
<td>Promotion of high value-added solution business through data integration management and data analysis leveraging the IoT</td>
</tr>
<tr>
<td>WellAware/USA</td>
<td>Development and sale of vital sensors and analysis business.</td>
</tr>
<tr>
<td>Axelspace/Japan</td>
<td>Sale of images and other services from microsatellites</td>
</tr>
</tbody>
</table>

#### Energy

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tianjin EV Energies/Tianjin, China</td>
<td>Integration management, analysis and control of energy distribution data, electric power regulation and storage using batteries, etc., energy-saving services for buildings</td>
</tr>
</tbody>
</table>

#### Fintech

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Forward/Japan</td>
<td>Development and sale of vital sensors and analysis business.</td>
</tr>
<tr>
<td>Money Forward</td>
<td>Personal finance management service and cloud accounting system.</td>
</tr>
</tbody>
</table>

#### Smart Community

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Futurecity Solutions/Japan</td>
<td>Creation of new solution services to build smart lifestyles and a smart society</td>
</tr>
<tr>
<td>MBK Arup Sustainable Projects/UK</td>
<td>JV with Arup, a leading global engineering company</td>
</tr>
</tbody>
</table>
IT Solutions

Business Overview

Creation of new projects in fields including the cloud services, cyber security, and IoT/M2M sectors with our core IT subsidiaries positioned at the center. Constant refinement of our IT capabilities, and provision of IT know-how and functions across the Mitsui & Co. group as a whole.

Sectors of Activity & Principal Investments

Cloud services & big data

Development of wide-ranging IT solutions applicable to various industries. Provision of one-stop solutions providing optimal ICT environments through services encompassing IT consulting to system development, maintenance and operation, and data center and cloud services.

Cyber security

Cyber security specialists providing services including vulnerability assessment, consulting, managed service, integrated log analysis, APT countermeasures, provision of threat intelligence and protection for next-generation endpoints.

IoT

Provision of IoT and M2M-related solution services. Sale and installation of electrical equipment and material.

Data centers

Developing a data centre with the highest quality and performance in Jakarta city, which is launching service in Q2 2016.
360° business innovation.