OPPORTUNITIES IN THE JAPANESE ICT SECTOR

BUSINESS SWEDEN

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Tokyo
ICT IS JAPAN’S LARGEST INDUSTRY AS SHARE OF GDP
ENORMOUS AND CRUCIAL NATIONAL INDUSTRY

MARKET OVERVIEW

- ICT is Japan’s largest industry by contribution to GDP (JETRO) and accounted for approximately 10.7 percent of GDP in 2010. The ICT industry sector is growing faster than the economy on average.

- The Ministry for Internal Affairs and Communications is seeking unconventional, innovative ideas that could impact the global information and communications industry.

- Japanese companies’ competitive edges have been eroded by low-cost competitors in other countries.

- The Japanese government and Japanese companies realize the importance of developing new innovative ICT solutions.

CONTRIBUTION TO GDP BY INDUSTRY (IN 2010)

JAPAN IS AN IMPORTANT ICT MARKET FOR INTERNATIONAL SWEDISH COMPANIES WITHIN THE INDUSTRY

SOURCE: JETRO, METI, IDC, BMI RESEARCH

Source: JETRO White Paper on ICT – November 2013
JAPAN IS HOME TO LARGE MULTINATIONAL COMPANIES
BUT MANY COMPANIES ARE STRUGGLING IN THE INTERNATIONAL COMPETITION

COMPANY SIZE BY TURNOVER 2014-2015

NET INCOME OF SELECTED COMPANIES

MANY LARGE JAPANESE COMPANIES STRUGGLE WITH PROFITABILITY AND ARE SEARCHING FOR OVERSEAS SOLUTIONS

SOURCE: ANNUAL REPORT OF EACH COMPANY
3RD LARGEST MARKET WITH THE HIGHEST ARPU IN ASIA
JAPAN HAS LARGE MARKET WITH INCREASING NUMBER OF SUBSCRIBERS

FORECAST OF NO. OF SUBSCRIBERS [MILLION]

AVISAGE REVENUE PER USER (ARPU) IN USD (2013)

JAPAN HAS HIGH ARPU OF WHICH A MAJORITY IS MADE UP FROM DATA SERVICES

SOURCE: BMI RESEARCH, BANK OF AMERICA MERRILL LYNCH GLOBAL WIRELESS MATRIX 1Q2014, DATED
21 APRIL 2014
ASIA IS THE LARGEST REGIONAL CELL PHONE MARKET
CONSUMER PREFERENCES DIFFER IN ASIA COMPARED TO EUROPE

<table>
<thead>
<tr>
<th>Region</th>
<th>2015e</th>
<th>2018e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific</td>
<td>51.7</td>
<td>52.2</td>
</tr>
<tr>
<td>Middle East &amp; Africa</td>
<td>15.2</td>
<td>16.0</td>
</tr>
<tr>
<td>North America</td>
<td>9.8</td>
<td>9.1</td>
</tr>
<tr>
<td>Latin America</td>
<td>9.1</td>
<td>9.3</td>
</tr>
<tr>
<td>Western Europe</td>
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<tr>
<td>Eastern Europe</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Australasia</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

DIFFERENCES IN CONSUMER PREFERENCES FOR MOBILE PHONES IN 2013

JAPANESE (ASIAN) CONSUMERS ARE MORE LIKELY TO BUY JAPANESE (ASIAN) MOBILE PHONES

SOURCE: EUROMONITOR 2015

* 40.3 MILLION MOBILE PHONES IN 2013
JAPAN IS HOME TO SOME OF THE LARGEST OPERATORS THAT ARE DRIVING DEVELOPMENTS IN THE JP MARKET

TOP TELECOM COMPANIES BY TOTAL REVENUE 2013 [BILLION EUR]

<table>
<thead>
<tr>
<th>Company</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T Wireless (USA)</td>
<td>94</td>
</tr>
<tr>
<td>Verizon Wireless (USA)</td>
<td>88</td>
</tr>
<tr>
<td>NTT Docomo (Japan)</td>
<td>77</td>
</tr>
<tr>
<td>China Mobile (China)</td>
<td>75</td>
</tr>
<tr>
<td>Deutsche Telekom (Germany)</td>
<td>60</td>
</tr>
<tr>
<td>Telefonica (Spain)</td>
<td>57</td>
</tr>
<tr>
<td>Softbank (Japan)</td>
<td>47</td>
</tr>
<tr>
<td>Vodafone Mobile (UK)</td>
<td>46</td>
</tr>
<tr>
<td>America Movil (Mexico)</td>
<td>44</td>
</tr>
<tr>
<td>Orange Mobile (France)</td>
<td>41</td>
</tr>
<tr>
<td>China Telecom (China)</td>
<td>38</td>
</tr>
<tr>
<td>China Unicom (China)</td>
<td>35</td>
</tr>
<tr>
<td>KDDI (Japan)</td>
<td>31</td>
</tr>
</tbody>
</table>

OPERATOR MARKET SHARE IN 2015 (NO. OF SUBSCRIBERS)

- Softbank: 28%
- NTT Docomo: 44%
- KDDI: 28%

JAPANESE TELECOMMUNICATION OPERATORS ARE AMONG THE WORLD'S LARGEST OPERATORS

SOURCE: HTTP://WWW.TOTALTELE.COM/RES/TOTAL%20TELECOM%20PLUS/TT_OCT14_G100.PDF
BMI RESEARCH TELECOMMUNICATION REPORT JAPAN DECEMBER 2015
The Japanese content market was valued at approximately 11.3 trillion yen in 2013. About 50 percent was video content and about 40 percent text-based content, and less than 10 percent audio-based content.

The digital content market has been growing steadily in recent years. The market grew by 2.3 trillion yen from 2012 to 2013.

Smartphones was the most used/viewed medium in Japan with an average of 135 minutes of daily "screen minutes" compared to 125 minutes for TV, 28 minutes for Laptop/PC and 15 minutes for tablets.

E-commerce has become increasingly popular and most Japanese consumers are comfortable shopping online. Japan is the 4th largest E-commerce market.

Almost half of all online purchases are made on a smartphone or tablet, which makes Japan leading within mobile E-commerce.

JAPAN IS A SOPHISTICATED MARKET FOR DOWNLOADABLE CONTENT AND E-COMMERCE IN GENERAL

JAPAN IS A HUGE ICT MARKET WITH VAST POTENTIAL FOR SWEDISH CYBER SECURITY COMPANIES

VAST POTENTIAL WITHIN CYBERSECURITY

- Japan is underdeveloped when it comes to cybersecurity and recent international security breaches have underlined the need to bolster cybersecurity defenses.
- In 2014, Japan experienced close to 13 billion attempted cyberattacks, of which 40% originated from China. The fiscal year 2013, saw roughly 5 million cases of unauthorized access to Japanese government agencies, an increase of 400% from the previous year.
- Several high profile hacker attacks have been carried out in the past against Japanese targets.
- A "Cyber Security Strategy" was released on June, 2013 by the National Information Security Center (NISC) with a mid and long-term strategy on information security.

BUSINESS OPPORTUNITIES EXIST FOR SWEDISH COMPANIES THAT SPECIALIZES IN CYBER SECURITY

SOURCE: YANO RESEARCH INSTITUTE, JAPAN SCIENCE AND TECHNOLOGY AGENCY (JST) / RESEARCH INSTITUTE OF SCIENCE AND TECHNOLOGY FOR SOCIETY (RISTEX)
CONTACT US

BUSINESS SWEDEN IN TOKYO

Business Sweden
1-10-3-200 Roppongi, Minato-ku,
Tokyo, 106-0032, Japan
T +81 3 5562 5000
tokyo@business-sweden.se
http://www.business-sweden.se/japan/