2016 Top Markets Report Cloud Computing
Country Case Study

South Korea

South Korea, ranking 5th in this report's analysis, is one of the most stable markets for cloud computing due to existing infrastructure and government financing for of ICT and cloud expansion. Foreign and U.S. providers have ample experience in the market and are still finding opportunities for growth, particularly in the private cloud sector. Operating in South Korea comes with certain regulatory challenges, particularly when dealing with public institutions. In addition, large U.S. and foreign providers already exist in the market and many Korean SMEs have established cloud enterprises. That said, the market is primed for ample growth and presents a strong and stable environment with a high demand for cloud services.

Overall Rank

5

South Korea has an advanced existing telecommunications infrastructure that has supported substantial growth in the ICT sector for years. The country has been a regional leader in both ICT and cloud computing and has the distinction of being one out of five mature markets in the Asia-Pacific and Japan (APJ) region, which includes Australia, Japan, New Zealand and Singapore. Even with an advanced ICT and cloud infrastructure, South Korea represents a top market for significant future growth. Research and Market analysts predict the South Korean cloud computing market will grow at a compound annual growth rate of 22 percent over the years 2013-2018.[1] One key motivator of the projected growth is expected substantial government investment in private cloud computing for government agencies.[2]

The South Korean government has or is expected to enter numerous public and private partnerships to expand cloud services regionally through data center development. Additionally, South Korea has existing universal broadband access, driving demand for investments that utilize the universal broadband to expand access to cloud services. South Korea is the global leader in broadband penetration, at 97

percent, and the leader in average peak connection speed, 20.5 megabits per second, according to Akamai Technologies in Q3 2015.[3, 4]

In its 2014 report on regional "Cloud Readiness," the Asia Cloud Computing Association indicated that South Korea has the sixth highest level of readiness among the 14 countries examined in the region. It ranks among the highest in broadband expansion, which is a key component of the cloud infrastructure. While South Korea tied India for the largest fall in the ranking (down four spots from second), the faults did not lay in South Korea's cloud readiness. Rather, it was due more to gains in other countries.[5]

Along with the other mature markets in the APJ region, South Korea offers strong growth prospects for cloud services. Cloud management and security services, for example, were projected to grow nearly 30 percent in 2015 to $264.5 million in the APJ as a whole.[6] Gartner predicts that by 2018, total public cloud services spending in the APJ region will be $11.5 billion.[7] South Korea's commitment to investing in cloud services for government agencies sets the country as a leader in the APJ region for public cloud services spending.

Gartner offered an interesting sector outlook on the APJ cloud market, providing guidance for cloud sector investment through 2018.[8] The firm predicts that at 21.5 percent, SaaS will make up the largest sector share of the overall market, next PaaS will account for 3 percent, then cloud management/security services 4 percent, and IaaS 9.8 percent, with the remaining 52.5 percent attributed to the cloud advertising market.[9]

While overall the South Korean market is strong, there are issues for U.S. companies looking to enter the market. The most important challenge concerns security within the South Korea government and among the general population, which has been exacerbated by recent global breaches of information stored on clouds in numerous countries, including South Korea.[10] This psychological barrier to storing data in the cloud will be an ongoing issue for U.S. providers in South Korea. In addition, concerns over the hacking of information on public clouds have driven the South Korean market towards adopting private clouds, which are considered to be more secure.

Also, in the wake of disclosures about surveillance activities, many South Koreans remain concerned about U.S. Government access to data stored by U.S. companies. Combined with consumer concerns over cloud security, psychological barriers appear to be the biggest inhibitor of access for cloud providers.

Another challenge is the potential for slower growth in the South Korean economy. While the ICT market is predicted to perform well, some sources project that the Korean economy will face a significant downturn in 2016.[11, 12]

U.S. companies are not alone in recognizing the market opportunities in South Korea. The country's SME market contains a substantial number of domestic cloud providers who benefit from government investments and incentives for local companies. The implicit challenges of entering a somewhat saturated market should not overshadow the growth potential. While South Korea's slip in the "cloud readiness" ratings referenced a potential weakening in cloud infrastructure compared to its Asian competitors, the government recently invested in an executive structure within the official bureaucracy to support ICT development. Specifically, in 2013, the Ministry of Science, ICT and Future Planning was created.[13] The budget increased more than $12 billion for this new ministry saw in

2014 and the aforementioned drop in regional competitiveness will probably spur greater investments in years to come. This is a development that should be carefully tracked.[14] Therefore, South Korea seems well adjusted to sustain its position as a cloud and technology leader in the Asia-Pacific region.

South Korea's historic strength in ICT infrastructure and cloud development in the Asia-Pacific region is leading to strong participation by U.S. companies, including numerous plans for the future. In 2015, for example, Microsoft released a predictive cloud service based on its Azure learning machine released in the United States in 2014.[15] The service differs from existing data mining, analysis and artificial intelligence as it is capable of making predictions based on data trends, which could increase the demand for cloud services in a number of fields.

Along with this release, Microsoft plans to invest $450 million over five years on a South Korean data center, as part of a predicted $5.2 billion investment in the country through expanded infrastructure projects and jobs.[16] In addition, Cisco committed to expanding its Intercloud business to support the development of South Korea's Internet of Things (IoT) market. Cisco invested $2 billion in the Intercloud (the so-called "cloud of clouds") in 2014 and is expected to make further expansion a priority. The Intercloud system involves a global interconnection of public, private and hybrid clouds for processing and contributing to the growth of the IoT industry. Lastly, Google is expected to set up a campus in Seoul, South Korea, to expand the company's presence in the country.[17] While impressive, these are only a few of the major cloud investments U.S. companies are making in South Korea.

South Korea represents a historically strong market for cloud services, despite existing market competition and the presence of established providers. Demand, which derives from local and national infrastructure investments, is still projected to remain strong for capable U.S. vendors. South Korea should be a top market considering the growth potential for cloud services in 2016.

Guidance and Resources for Exporters

The following information is intended to provide guidance and resources for U.S. exporters looking to sell their services in South Korea. The information

was provided by U.S. Department of Commerce staff located in-country as well as by input from U.S. Department of Commerce industry specialists. As mentioned, the information is only intended to serve as guidance and does not guarantee sales or success in the market.

- Preferred business strategies to enter/expand in the market might include: Joint venture.

- Common trade barriers to enter/expand in the market might include: There are certain business sectors that U.S. service providers have difficulty entering (due to data privacy issues) such as finance, education and health care.

- Recommendations to bid and navigate government procurement processes: To obtain

contracts or navigate procurement processes U.S. firms should partner with Korean companies.

- American Chamber of Commerce in South Korea: http://www.amchamkorea.org/

- U.S. Department of Commerce Country Commercial Guide http://www.export.gov/ccg/korea090824.asp

- Industry Association https://eng.sw.or.kr/main/index.html

- Trade Shows http://worlditshow.co.kr/wp2/eng/ http://www.kitas.kr/new2/eng/info/info1.php

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Citations
1 http://www.researchandmarkets.com/research/4htwp4/cloud_computing
2 http://www.thewhir.com/web-hosting-news/south-korean-government-boost-private-cloud-spending-report
3 http://www.forbes.com/sites/alanmcglade/2014/02/06/why-south-korea-will-be-the-next-global-hub-for-tech-startups/
4 https://www.akamai.com/us/en/about/news/press/2015-press/akamai-releases-third-quarter-2015-state-of-the-internet-report.jsp
5 http://www.asiacloudcomputing.org/research/cri2014
6 http://www.networksasia.net/article/public-cloud-services-mature-apac-markets-hit-7-4-billion-2015-gartner.1421740044
7 http://www.gartner.com/newsroom/id/2963417
8 http://www.networksasia.net/article/public-cloud-services-mature-apac-markets-hit-7-4-billion-2015-gartner.1421740044
9 Ibid
10 http://www.itpro.co.uk/security/22968/south-korean-data-breach-results-in-220m-records-stolen
11 http://english.hani.co.kr/arti/english_edition/e_business/723761.html
12 http://www.focus-economics.com/countries/korea
13 http://www.forbes.com/sites/alanmcglade/2014/02/06/why-south-korea-will-be-the-next-global-hub-for-tech-startups/
14 Ibid
15 http://www.datacenterknowledge.com/archives/2014/09/22/report-microsoft-data-center-coming-to-south-korea/
16 Ibid
17 http://www.sciencebusiness.net/news/76874/%E2%80%9CWe-want-Google-to-be-an-engine-of-entrepreneurship-in-Europe%E2%80%9D

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