2016 Top Markets Report Cloud Computing Country Case Study

Brazil

INTERNATIONAL TRADE ADMINISTRATION

Brazilian has the largest computing services market in Latin America followed by Mexico, Chile and Argentina. As such, it has attracted the attention of vendors from across the world and become a very competitive environment. In seizing opportunities, vendors must contend with security concerns, connectivity shortfalls, high costs and a recessive economy throughout 2016. These make the Brazilian market a challenging, yet potentially rewarding one for companies with the resources and commitment to manage these issues.

Overall Rank

According to the consulting firm Frost and Sullivan, Brazil's cloud computing market revenue was \$217 million in 2012 and it is expected to reach \$1.1 billion by 2017.¹ This represents a five-year compounding annual growth rate of almost 40 percent. By 2017, the firm expects the SaaS market to lead at \$584.3 million in spending, while laaS and PaaS will be worth \$489.9 million and \$39 million, respectively.²

A survey conducted in 2014 by Capgemini found that nearly three out of four Brazilian IT decisionmakers use a SaaS application for enterprise resource planning or customer relationship management.³ Smaller but still-substantial numbers reported adopting IaaS (55 percent, largely for data backup purposes) and PaaS (39 percent); and the uptake rates of both (but especially IaaS) are expected to pick up in the next few years. Some of the key motivators cited by respondents include the desire to achieve cost savings, enable innovation and raise productivity.

The same Capgemini survey found that no single type of cloud computing deployment is significantly more popular. One in four respondents stated that they use public cloud services, one in six private, one in six hybrid and one in four indicated no preference. However, security-related concerns are expected to drive much greater adoption of private and hybrid cloud setups in the years to come, with a corresponding decrease in public cloud usage.⁴

Small and medium-sized enterprises (SMEs) will continue to command a large portion of cloud expenditures driving nearly half of Brazil's total, purchasing mostly SaaS, enterprise resource planning (ERP), customer relationship management (CRM) and supply chain solutions, among others.⁵ Cloud provider SAP sees unlimited opportunities to conduct business with over one million existing Brazilian SMEs.⁶ In fact, SAP already attributed 68 percent of its Brazilian revenues to SMEs in 2014.⁷

According to IDC, in 2014 almost half of Latin America's IT investments were in Brazil.⁸ Major U.S. providers such as Amazon, IBM, Microsoft, Oracle and Verizon maintain or have plans to introduce Brazil-based data centers to support their local cloud operations, while others like Dell, Google, Rackspace and Salesforce at least market their services in the country.⁹⁻¹⁷ Other foreign providers like German cloud heavyweight SAP, the UK's BT Global Services and Japan's Fujitsu are also present.¹⁸⁻²⁰ Prominent domestic players include major firms Locaweb, Mandic, Totvs and UOLDIVEO.²¹⁻²⁴ A variety of

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This case study is part of a larger Top Markets Report. For additional content, please visit <u>www.trade.gov/topmarkets</u>. U.S. Department of Commerce | International Trade Administration | **Industry & Analysis** telecommunications operators, such as Embratel and Telefonica's Vivo, offer cloud services too.²⁵ While it may be more difficult for these more recent entrants to wrestle IT spending from cloud-centric players, they have managed to craft credible offerings, according to Frost and Sullivan and likely have the financial resources to establish themselves in the sector.^{26, 27}

Although prominent players do not always directly compete in the same segments or offer interchangeable services, they do have a significant market share and contribute to a very competitive environment that demands a serious commitment of time and resources.

The Brazilian market presents further significant challenges that should be taken into account. Chief among these, according to numerous industry watchers and market participants, may be concerns about the reliability and security of data stored in the cloud.²⁸⁻³¹ One major survey found that the possibility of a data breach and a more general lack of trust were barriers to cloud adoption (especially among those in the financial industry).³² Though Capgemini, the consultancy behind the survey, points out the situation may actually benefit U.S. cloud providers, who often bring to the table stronger security-related expertise and credentials. Other major factors cited by respondents included data sovereignty and cost.

A host of additional issues weigh on the overall development of the industry. The cost of energy, along with high equipment prices and taxes, make running a Brazilian data center relatively expensive.³³⁻³⁵ The country's leading ICT trade group found that, at \$61 million, setting up a local data center is about 42 percent more costly than in the United States.³⁶ Maintaining this operation requires approximately \$100 million annually, more than double the amount in the U.S.³⁷ Given the competitive value of offering lower latencies and addressing data sovereignty concerns through a domestic data center, many well-resourced firms are likely to simply absorb these high costs.

Brazil also suffers from significant connectivity challenges. The cost of bandwidth is much higher than that in other countries with competitive cloud sectors and there are clear shortfalls in the reliable provision of service and in infrastructure, especially regarding the critical last-mile of delivery.^{38, 39} Such factors sow doubt in the availability of data stored in the cloud, which requires a steady broadband connection to be fully fuctional.⁴⁰

On a macroeconomic level, a potential contracting economy throughout 2016 and unfavorable exchange rates for U.S. exporters might contribute to the list of challenges posed by the Brazilian cloud computing market.

From a policy and regulatory standpoint, it is important to mention that in April 2014, Brazil's President, Dilma Rousseff, signed "Marco Civil Da Internet," a civil rights-based framework for the Internet. Dubbed the "Internet Constitution", the law seeks to reinforce the protection of fundamental freedoms in the digital age.⁴¹ This law has been followed by two legislative projects that are being developed in a collaborative process that has invited public participation: a decree law to further implement the Marco Civil through regulations and a data protection law. Both legislative projects attempt to strike a balance between protecting individual freedoms and creating a stable and open commercial environment.⁴²

In a highly publicized case in 2015, a judge invoked the Marco Civil to order ISPs to block access to the Internet application WhatsApp throughout Brazil in an effort to compel WhatsApp to cooperate with local police in an investigation. While the decision was reversed by an appellate court, it cast doubt on whether the Marco Civil will offer reliable protection to service providers and companies doing business in Brazil.⁴³

Despite its challenges, Brazil's IT market, the seventh largest in the world, with a population of 200 million, and sustained increasing purchases of U.S. computing services, can be quite a lucrative one for U.S. companies ready to compete in the market.⁴⁴

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 Brazil. 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.

- Usual buyers of cloud computing services in Brazil might include: SMEs and large companies.
- Preferred business strategies to enter/expand in the market might include: Distribution agreement.
- Common trade barriers to enter/expand in the market might include: There is still a cultural barrier when it comes to trusting the cloud. Due to the current economic crisis, Brazilian companies may decide to hold off investments on cloud computing. On the other hand, companies may decide to outsource cloud services to reduce costs and additional investments in infrastructure.
- Recommendations to bid and navigate government procurement processes: U.S. companies should work with a local partner to sell to government entities.
- American Chamber of Commerce in Brazil http://www.amcham.com.br/en
- The Brazilian-American Chamber of Commerce http://www.brazilcham.com/
- Brazilian Association of Software Companies
 <u>http://www.abessoftware.com.br/</u>
- U.S. Department of Commerce Country Commercial Guide <u>http://www.export.gov/brazil/build/groups/public</u> /@eg_br/documents/webcontent/eg_br_034878. pdf
- Trade Shows <u>http://en.futurecom.com.br/</u> <u>http://www.the-eshow.com.br</u>

Citations

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