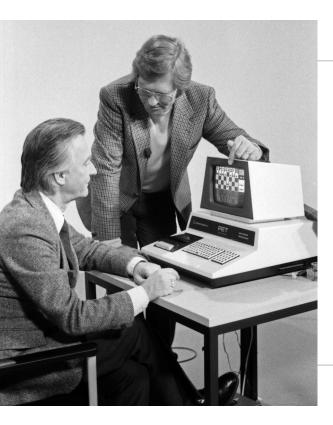
Building IT Infrastructure in Brazil



Brazil is amongst the most complicated and costly countries to import IT hardware. Top reason for this are tax rules which rely on protectionism and a bureaucracy in customs clearance process. Customs require you to have RADAR registration with appropriate IT import authorizations in order to import your desired hardware.



It is difficult to find a stable DC provider, the network connectivity is as much as ten times more expensive compared to US and EU, and there are large government hurdles. Primary one - 100% import tax on any electronic equipment being shipped in Brazil. As a result, it doubles the cost of the servers.

Nevertheless, Brazil produced good results in the categories of sustainability, labor costs and water availability. Unlike Brazil, availability of water is a major risk factor for data center operators in countries like the UK, Germany, Qatar, Hong Kong, Singapore, South Africa, Poland, the Czech Republic, China and India.

Infrastructure

The Brazilian market presents serious infrastructure challenges that needs to be taken into account. According industry watcher's data and market participants, there are likely concerns about the reliability and security of data storage in the cloud.

One of the major survey found that the possibility of a data breach and lack of trust in general were barriers to cloud adoption (the financial industry were the leading one). The consulting agency Capgemini marks out the situation could benefit U.S. cloud providers, who often bring to the table stronger security-related expertise and credentials. Lastly, major factors, as told by respondents, included data sovereignty and cost.



Development Cost _

Industry development is held down by number of additional issues. Energy cost, high prices and taxes of equipment translates to relatively expensive data center running costs. \$61 million is an average price for setting up data center locally. As found by Brazilian leading ICT trading group, it is 42% costlier than in the United States.

Maintenance alone cost around \$100,000,000 per year, which is twice as the U.S. amount. Despite these drawbacks, a vast amount of highly-resourced firms chooses to absorb these higher costs. The return is lower latencies and data sovereignty through domestic data centers which adds up for a better competitive value.

Setting up basic infrastructure

US \$ 35.380.000

Brasil \$ 61.000.000

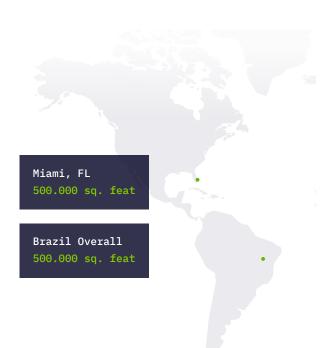
Maintenance
per year

US \$ 50.000.000

Brasil \$ 100.000.000

Data centers capacity _

Connectivity challenges should be also taken into account. As compared to other countries with competitive cloud sector, bandwidth cost in Brazil is much higher. There is shortcoming in reliable arrangement of infrastructure and service, notably when it all comes down to last-mile delivery. Considering these factors, it makes up for questionable availability of data stored in the cloud as steady broadband connection is required to be useful.



Despite all the drawbacks, Brazil remains to be the largest market for data centers in South America by accounting for 40 percent of the region's data center white space, according to the latest research from DCD Intelligence. Despite that, growth is being hold up in some instances by a lack of suitable colocation facilities.

Vast majority of data centers in Brazil have been established during the last few years. There are 42 data centers in BrazilB scattered around 18 locations through-out the country. Compared to the countries like the United States of America, data center infrastructure is still small in Brazil.

According to the study by consulting company Crushman & Wakefield, there are over 500 thousand square feet of functional data centers in Brazil, in comparison, Miami alone has more data centers capacity.

Taxing _

Tax duty in Brazil is high. Foreign businesses need to invest time and resources in finding ways reduce taxes. It surpasses 33% of the country's GDP, loved and hated by foreigners as well as locals. Brazil is highly attractive to foreign investors though. Call this tax system complex or simply confusing, but it has its peculiarities. Different types of duties are charged and sometimes it is hard to tell the difference between them.

At the time the world experienced the financial crisis in 2009, Brazil decided to put restrictions as its first move. 60 percent of imports were restricted in order to protect the local industry. Protectionism move wasn't greeted well by the major Brazilian media and industrial organizations in Brazil. It was considered like a cold wind from the past.

The main reason Brazil chose to use old strategy of Protectionism is to mature the industry in a country enough, so it can have a fair competition when exposed to more efficient foreign industries. Major issue for Brazil in this scenario, that while they take advantage of free trade for export of their manufactured goods to countries like United States of America, they do not provide free trade when goods made in other countries are coming back to Brazil.

As a result, Brazilian industry is having a hard time delivering the same quality and price as foreign businesses because of the local tax duty, the only way for the Brazilian government to make sure country's industry can survive is by adding taxes on the boundary of what the international society accepts without losing their free trade status.

At the same time as they implement dramatic tax reduction for companies that export product or services from Brazil. This prompt to a simple reasoning behind it. The government demands the money and Brazilians do not produce enough value per capita to handle the Brazil challenges.



Sourcing Infrastructure



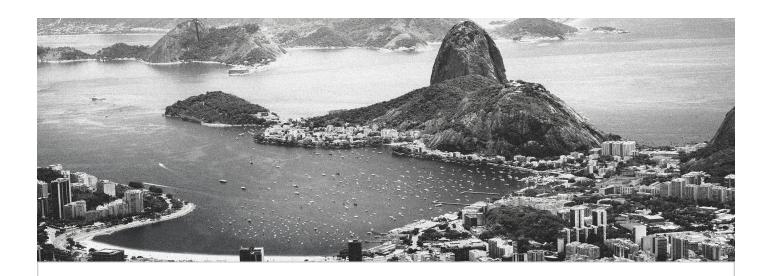
Shipping 4-8 weeks



Import taxes 70% - 120 %



Total price ~ 2X



In the case of trying to get all the required hardware by yourself, you need to take few things into consideration. When importing small amounts of IT hardware, you will need to add at least 100% to the value of the equipment. Tax variation ranges between 10% and 20%, it depends on the destination state in Brazil, but, for example, it won't vary a lot between Rio de Janeiro and São Paulo.

Taxes aside, shipping the goods is a challenge on its own. Custom broker is required to handle all important classification due to fact that most of data Heficed in Brazil center operators do not own an import license. Professional custom broker can give an estimate on expected charges and all the expenses involved in throughout the logistics process. 4 to 8 weeks is the usual time it takes to import servers with an experienced customs broker given that all thing goes smoothly and there are no irregularities, missing papers or other hurdles. In that case, shipping can take as long as 6 months.

Heficed in Brazil

By expanding to different regions, localizing our products and services, we make high quality hosting accessible to everyone, regardless of their location, language or budget. Heficed entered the Brazilian market in the end of 2013, starting with VPS services at first. However, the interest in our other services was great enough to prove that Brazilian companies and individuals have an unsatisfied demand for quality hosting services.

Despite the hurdle with local tax burden and other difficulties, the giant of South America is currently the fastest growing IT market in the region. Therefore, our new data center location in São Paulo will allow Heficed clients to enhance their online business as a result of increased stability and lower latency.



Infrastructure Development

Heficed has equipped the new data center with the most reliable UPS power supply system, robust heating, ventilation and air conditioning systems, as well as a wide range of security equipment, techniques and procedures to control, monitor and record access to the facility. By doing so, we managed to make our servers to have same disc space, bandwidth and the amount of domains allowed while maintaining adequate price.

Due to our advanced data center development in this region, currently Heficed is able to provide wide range of API enabled services - reliable cloud computing, dedicated servers, IP transit. We even go as far as making innovative business network services or completely custom solution depending on your business need, right here in Brazil.





Conclusions

There is always opportunity to bring your hardware and establish in the selected data center of Brazil. Considering taxes, bureaucracy involved and other issues, a better alternative would be to find a reliable partner who has been through the process many times before.

At Heficed we spent 10 years building infrastructure across the globe so you don't have to. If you would like to learn more or discuss your project in Brazil, please contact us [sales@heficed.com].