

Google's Economic Impact in Brazil

September 2023



Important Information on Contents

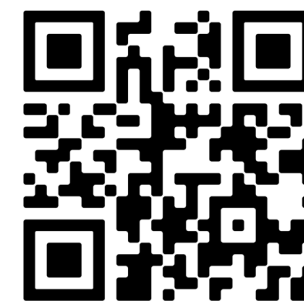
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All estimates are based on the latest available data as of time of analysis in 2023.

Access Partnership (<https://accesspartnership.com/>) is a global technology public policy consultancy, serving clients across Asia and globally. We work with the public sector, corporations, NGOs, not-for-profits and investors to identify opportunities and develop strategies to grow, improve service delivery, support economic prosperity and generate tangible impact.

Access Partnership's Economics Strategy team (formerly known as AlphaBeta) is a leading economic and strategy consulting practice with deep experience across a number of topics in the digital economy and the future of skills, sustainability, and economic development.

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Google's Economic Impact in Brazil:

Google tools support businesses and households

R\$153 billion

In 2022, Google Search, Ads, AdSense, Play, YouTube and Cloud helped provide **R\$153 billion** of economic activity for businesses in Brazil.

► This includes **R\$4 billion** in annual revenue for app developers through the Play Store, **R\$16 billion** in benefits (e.g., net advertising returns) for YouTube advertisers and content creators, and **R\$883 million** from Google Cloud tools in the form of cost savings and efficiency gains.¹

238,110 jobs

238,110 jobs in the app economy are currently being supported by the Android ecosystem.²

R\$31 billion

In 2022, households derived **R\$31 billion** of benefits, such as enhanced productivity and convenience, from Google Workspace tools.³

33 work days

Google Workspace saves Brazilian employees **264 hours (about 33 work days)** annually from accessing, storing and sharing online documents, as well as from meetings and collaborations.⁴

1. Business benefits from Cloud tools refer to net returns from the use of Google Workspace and Google Cloud Platform, after subtracting costs of implementation.
2. These refer to direct, indirect and spillover jobs which are supported by the Android ecosystem.
3. Tools assessed include Google Drive, Photos, Docs, Slides and Sheets, and are based on a 2022 consumer survey conducted by Access Partnership in Brazil, where n=500.
4. Estimates are based on a 2022 consumer survey conducted by Access Partnership in Brazil, where n=500. In this analysis, we are referring to 8-hour business days.



Executive Summary

Brazil's economic performance in 2022 was marked by a series of peaks and troughs. While strong economic growth was seen early in the year, the country also faced significant economic headwinds as post-pandemic growth began to slow.¹ Despite this, Brazil's digital economy continued to remain resilient, positioning the country to capture opportunities in areas such as talent attraction and global trade.² Moving forward, the government has pledged its commitment to ensuring sustained economic growth in the long-term, with a greater focus to be placed on bread and butter issues faced by citizens.³

In order to do so, it is crucial for the new administration to leverage the strong growth experienced by the country's digital economy in 2022. Improvements in digital infrastructure, increased uptake of technologies and a continued focus on upskilling for digital skills could reap significant benefits for Brazil's economy. For instance, digital technologies have already been playing a key role in boosting economic growth. In particular, in 2022, Google tools generated **R\$153 billion** of economic activity for businesses in Brazil. Apart from economic gains, there are also other benefits. For instance, Google Workspace saves Brazilian employees **33 work days** at work annually. In addition, households derived **R\$31 billion** from the use of Google Workspace tools, highlighting the convenience it brings to the lives of users. The Android ecosystem is also supporting over **238,000 jobs** in the Brazilian economy.

Google generates economic activity for Brazilian businesses and supports jobs

With growing Internet penetration rates as well as increasing time being spent on the Internet, Brazil's digital economy is ripe for growth.⁴ Google is already playing a key role in facilitating this, with its accessible and relevant tools being a part of users' everyday lives.

In particular, Brazilian businesses see sizeable economic benefits from the use of Google tools, which enable them to unlock new revenue opportunities, while enjoying lower costs of operation, ensuring they stay competitive in an ever-changing market. In addition, the Android platform also boosts the local economy by supporting jobs for Brazilians, both in the direct app development space as well as indirectly.

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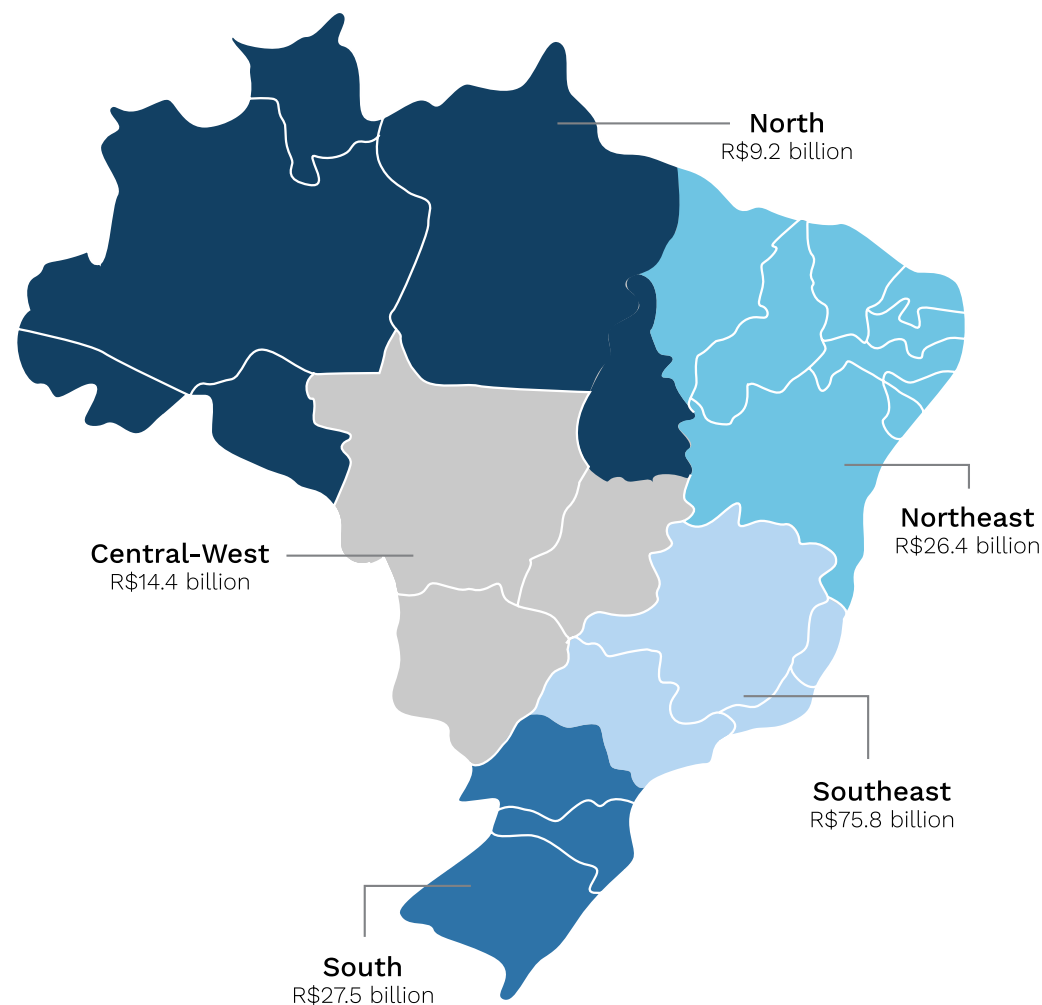


Google's benefits to businesses in Brazil span across the country

Google tools support Brazilian businesses across the country, with business benefits of **R\$153 billion** spread across all five regions.

Even rural-dominated regions such as the North or areas that may be more dependent on the agricultural sector see sizeable benefits, outlining the accessibility of Google tools and the equality they promote.⁵

Across the country, the Southeast region sees the largest benefits as it is the main hub for high-tech economic activity, with a high share of businesses and individuals using the Internet.⁶



NOTE: Figures may not sum due to rounding. Tools assessed include Google Search, Ads, AdSense, Play, YouTube and Cloud.

Google Cloud tools improve productivity and save time

In addition, Google Workspace and Google Cloud Platform enable businesses to collaborate in real-time and reduce information technology (IT) infrastructure costs, generating economic benefits as well as time savings for employees. Households also see increased productivity through their use of Google Workspace tools, outlining its cross-cutting benefits across Brazilian society.

R\$883 million

In 2022, Google Cloud tools enabled businesses to gain **R\$883 million** in the form of cost savings and efficiency gains.

33 work days

With Google Workspace, Brazilian employees save **124 hours (15.5 work days)** annually from accessing, storing and sharing online documents for work, as well as **140 hours (17.5 work days)** for meetings and collaborations.*

R\$31 billion

In 2022, households derived **R\$31 billion** of benefits, such as enhanced productivity and convenience, from Google Workspace tools such as Google Drive, Photos, Docs, Slides and Sheets.

*NOTE: Figures may not sum due to rounding.



Google Cloud tools are enabling the public and private sectors in Brazil



CERC

CERC, which is headquartered in São Paulo, is Brazil's first and largest cloud-native financial market infrastructure. It aims to quickly and simply connect stakeholders from various economic segments to reduce information asymmetry and facilitate growth of the financial market. Having its infrastructure in Google Cloud from inception has enabled CERC to be more agile and flexible, allowing the company to scale up efficiently without compromising on security. CERC has also explored the use of tools such as BigQuery, which allows for the processing and sharing of high volumes of data in a simple and customer-friendly manner.⁷



Prefeitura de Santana de Parnaíba

Santana de Parnaíba is a city located in the state of São Paulo with more than 136,000 inhabitants. The city used to have many citizens visiting municipal offices for support with a wide range of issues, prompting the information technology (IT) bureau to explore ways to simplify such processes, especially during the COVID-19 pandemic where their offices were closed. With the help of Google Cloud solutions, they were able to develop a virtual assistant, Anna, in just 49 days. Citizen usage of this tool expanded rapidly, with many utilizing it to find answers to COVID-19 related queries. Today, the virtual assistant is able to address citizen questions relating to topics such as tax services, public works and new decrees, among others, reducing the need for citizens to make trips down to city offices⁸



uisa

Located in Mato Grosso, **uisa** is one of the largest biorefineries in Brazil. It has become a pioneer in incorporating the use of blockchain technology into the production of Itamarati Demerara Sugar, one of the brands in the company's food portfolio. This will enable them to track information on planting and harvesting the sugarcane, as well as other production stages, overall improving efficiency, transparency and security. The company eventually intends to implement a similar approach in all its production lines, ranging from its sugar portfolio to sanitizing and personal care lines.

Appendix

A1. Methodology

The business benefits delivered by Google tools such as Google Search, Ads, AdSense, Play, Cloud and YouTube were estimated based on the economic value generated by Brazilian businesses from leveraging Google tools. We estimate the economic impact of Google Cloud based on the benefits that it generates for its users. We rely on Brazilian companies' investments in Google Cloud for this calculation and assume that every dollar invested in Cloud services by users generates a net return. The methodology we use does not include any Cloud services that are provided for free. The benefits of using Google tools do not include flow-on economic effects generated, such as further purchases from their suppliers or the economic activity generated by employees of these businesses who spend their wages in the broader economy. The benefits also do not account for the activities that may have been displaced by Google, nor do they attempt to estimate the incremental impact of Google on Brazil's economy in hypothetical instances where Google itself does not exist but similar companies do. The methodology adopted to derive the economic benefits gained by Brazilian businesses in this report is aligned with the US Google economic impact report methodology.⁹

The economic benefits of Google tools enjoyed per region were estimated by breaking down the business benefits generated in Brazil by various subnational metrics.

The number of jobs supported by the Android app economy was estimated by multiplying the country's app intensity by the number of employed workers and Android's share of app economy jobs.

The household benefits supported by Google Workspace tools are challenging to measure and analyse because individuals typically do not pay to use Google Drive, Photos, Docs, Slides and Sheets, which are free tools. In the absence of price indicators, the economic 'willingness to pay' principle provides a proxy for the dollar amount Brazilians benefit from these tools. Individuals were asked how much they value Google Workspace services, a value amount otherwise known as consumer surplus.

These insights were gathered through a survey conducted in April 2022 with 500 individuals based in Brazil. The sample size of respondents is statistically significant based on the Internet population in the country, at a 90% confidence level.

A2. References

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