

Brazil's "Auxílio Emergencial" & "Caixa Tem" apps

During the early stages of the COVID-19 crisis, the Brazilian government launched two apps to mitigate the virus' socioeconomic impacts: *Auxílio Emergencial*¹ (AE) and *Caixa Tem*² (CT). Both are run by *Caixa Econômica Federal*, the largest state-owned bank in Latin America and one of the main banks responsible for welfare payments in Brazil. The apps work separately, the former (AE) being used for applying to receive the financial benefit the federal government created, while the latter (CT) to receive the cash transfer via a digital savings account. They are, nonetheless, complementary: You use one to register (AE) and the other (CT) to receive the funds if your application is accepted.

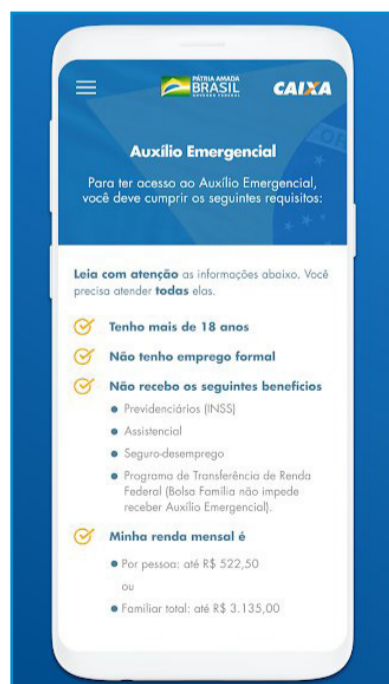
Both apps are available for the Android and Apple operating systems. AE has been downloaded 81 million times, while CT 88 million times. These figures represent about 40 percent of the Brazilian population (which totals 209 million people)³.

Auxílio Emergencial is the name of the main financial aid program the federal government rolled out to transfer cash benefits during the crisis. The program provides monthly payments to existing welfare beneficiaries, as well as payments to new users, including informal workers and individuals in vulnerable groups. The policy's plan was to pay financial aid to up to 73 million citizens, or about 35 percent of the Brazilian population.

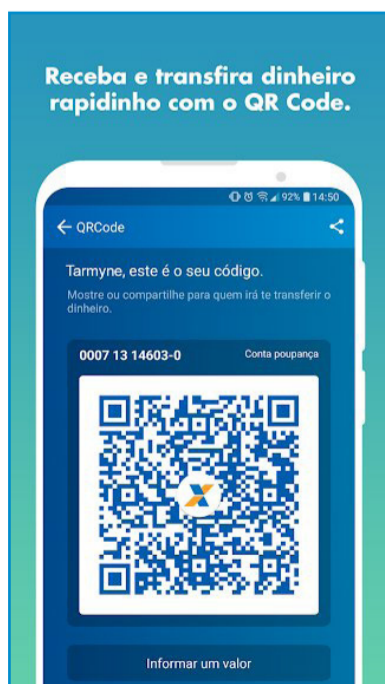
Reaching all 73 million citizens is a major task for the operation. The main Brazilian welfare registry system, CadÚnico, had records for only 37 percent of these people (equivalent to 27 million people). All others would have to use the AE app to apply, go through a government-run triage, and, if approved, use the CT app to create an online savings account and get the aid.

Three weeks after the apps' release (on April 7, 2020), 95 million people had applied for the benefit (a total number that went up to 107 million by end of May)⁴. Ultimately, 57 million people that applied received the benefit, 37 million were denied access, and the remaining were under review. It is known that several benefits were denied due to outdated identity records, which led to several public legal actions against the government.

Auxílio Emergencial



Caixa Tem



TEST SUMMARY

- » Broadly speaking, the apps are backed by a robust legal mandate. They also follow some provision of rights-based principles (such as data minimization) but have set no risk assessment or potential harms mapping.
- » In general, the legal mandate is adequate. The definition of the eligibility criteria was defined through a legislative process with civil society engagement. Added to that, the Decree gives operational provisions, such as defining the institutions involved in the development and management of the digital platform.
- » In terms of data protection, the legal mandate is clear. It sets which type of identification document is required for accessing the benefit and makes data requests that are related to the legal mandate set.
- » As a matter of attention, the Privacy Policy used for the apps was last updated in September 2016, before the apps release in 2020. Having in mind the scale of the operation, and that during the period a data protection legislation passed Congress, it is a matter of concern that the Privacy Policy was not updated as part of the apps release process.

LESSONS LEARNED

- » **Creating a database of millions of citizens at once is a burden for agile welfare payments.** Rather than creating new citizen registers, Brazilian policymakers should consider rethinking the existing administrative records, but mainly the identification system. In the first three weeks of the policy release, only 15 million users have received payment. The number is far lower than the number of citizens eligible for the benefit (75 million) and even lower than the number of users who registered using the app (95 million).
- » **The shortcomings of lacking a proper digital identity system in the country were never clearer.** The challenges involved in providing digital government services for almost half of the population are enormous, and the weeks-long timeframe to start payments of welfare payments are equally challenging. In spite of claims that Brazil was advancing in digital services and a digital identity system, it was clear that the country was not ready for the task.

APPLYING THE FRAMEWORK

Below, we apply an evaluation test the framework developed by the Center for Internet and Society (CIS) to understand the governance of digital identity systems. The test identifies the case study characteristics and its uses and has been applied to other digital identity cases in other regions, themes, and contexts⁶.

1. RULE OF LAW TESTS

The following are the most basic tests to make sure there is a rule of law framework to govern the use of *Auxílio Emergencial* and *Caixa Tem* applications.

1.1 LEGISLATIVE MANDATE

Is the use of the digital identity system codified under the current law? For this test to be satisfied, the use must be codified under the current law — the parent legislation or other supporting legislation that is in accordance with the scheme envisioned by the parent legislation.

The legislative mandate backing the “*Auxílio Emergencial*” (AE) and the “*Caixa Tem*” (CT) apps is valid.

The overall financial aid policy, called “*Auxílio Emergencial*,” was approved by Congress on April 2, 2020 ([Act 13982/20](#)), during the early stages of the COVID-19 crisis. The Act sets the eligibility criteria for one to receive the financial aid and sets the key specifications for it, such as aid amount and duration. It also determines (Art. 2, paragraph 9) that the aid will be paid by state-owned banks only and favors the use of online payment systems.

The Act also sets two important conditions for digital ID information: It removes the mandatory need for users to present in-person an official ID to apply for or receive the benefit (Art 4, I and Art 7), although it does require users to have one official Taxpayer ID number (CPF); it puts the burden of digital ID verification on the shoulders of state-owned bank databases only.

Lastly, the act authorizes the federal executive branch to regulate the matter, resulting in Presidential Decree [10316/20](#). Directly related to the digital ID topic, the Decree defines the public databases to be used for citizen triage (Art. 4, I and Art 7, in particular), those responsible for using and processing the data (e.g. Art. 4, II), the use of online applications to achieve the purpose of the policy (Art 5), and sets the official ID document mandatory for those applying for the benefit (and the accepted exceptions). The Decree also sets data processing norms within government agencies (Art 6).

Analyzing both apps' Terms of Use, they are regulated by a common [Privacy Policy](#), set by *Caixa Econômica Federal*. The Privacy Terms refer to important legislation related to data protection and privacy, such as the Internet Bill of Rights (Law 12965/14) and the Financial System Information and Secrecy Act 105/2001). The Terms were last updated in September 2016 and were as such not updated specifically for the app's release.

1.2 LEGITIMATE AIM

Does the act have a legitimate aim? For this test to be satisfied, there must be a legitimate aim for the use of the identity data.

The legitimate aim of the act is to provide financial aid to mitigate the socioeconomic impact of the pandemic.

Both the aforementioned Law and the Executive Decree state the aim to establish “exceptional measures of social protection to be adopted during Covid-19, with no provision of a sunset clause that states exceptional measures or limitations, such as time period or context in which the policy duration ends.

1.3 DEFINING PURPOSES

Does the act clearly define the purposes for which the ID can be used? For this test to be satisfied, the purpose for the use and control of the identity data must be clearly specified through a legislative process.

Both the Act and Decree define the specific purpose of the identification data used in the process. Together, the policies' documents determine what databases are used to identify beneficiaries, who is responsible for processing the data, and set specific mandates for sharing data among state-owned institutions.

1.4 DEFINING PLAYERS

Does the act clearly define all players that can use or manage the ID for the current purpose? For this test to be satisfied, the players who use and control the use of the ID must be clearly specified through a legislative process.

The Decree defines the players who can use and manage ID data in both apps, the federal ministries involved in the process, the state-owned data companies involved in data processing, and determines the state-owned banks responsible for financial aid applications, triage, and for payment⁸.

1.5 REGULATING PRIVATE PLAYERS

Is this use of the ID system by private players adequately regulated? For this test to be satisfied, the use of ID by private players is envisioned with an adequate regulation.

The Resolution has provisions for public sector activities actors only, with no exceptions made to private sector players.

1.6 DATA SPECIFICATION

Does the act clearly define the nature of the data that will be collected? For this test to be satisfied, the use of the identity data must be accompanied by a clear specification of the personal data to be collected and processed.

The aforementioned law and the decree define the nature of the data collected. The Law sets the government's national ID document that is mandatory in the process (the Taxpayer's ID, or CPF), the requirements for reporting data for family members and those under the age of 18, and exceptions accepted.

As part of the eligibility criteria and the public databases used to track beneficiary eligibility, the Decree defines secondary aspects of the data used in the process, including employment records, income and financial records, and other welfare benefits used.

The apps' Privacy Policy also mentions three specific types of data collected: data provided for the user's account (i.e. name, address, and telephone); app usage data, such as operation system and language, and data obtained from third parties. The Privacy Policy also states that the automated data the apps collect is anonymized and used for quality control only, and that cookies may be collected, or external websites used for targeted promotional campaigns.

1.7 NOTIFICATION MECHANISMS

Does the ID system provide adequate user notification mechanisms for this use case? For this test to be satisfied, there must be user notifications both for data use and possible breaches.

The apps' Privacy Policy has provisions for setting a generic notification mechanism for data collection. It refers to four contact access points for submitting queries and claims, but other than that it makes no mention of procedural process details, such as deadlines or administrative decision revision cases.

Nonetheless, the Privacy Policy has two important provisions for notification mechanism legislation: It states that it complies with all national norms and international recommendations (Section 4) and lists key legislation and norms it complies with, including two federal acts that have provisions for notification mechanisms, namely the Internet Bill of Rights (Act 12965/14) and the Federal Financial System Information and Secrecy Act (105/2001).

1.8 RIGHTS TO ACCESS

Do individuals have access, confirmation, correction, and opt out rights? For this test to be satisfied, the individuals' rights to their data are adequately guaranteed, although they are not allowed to opt out of the system entirely.

The Act has access rights provisions. The Privacy Policy has a contact link for revoking or changing information (Section 4), and states that users may deactivate cookies and data sharing with partners if desired.

1.9 REDRESSAL MECHANISMS

Are there adequate civil and criminal redressal mechanisms in place to deal with breaches of rights arising from the use of identity data? For this test to be satisfied, there must be an adequate redressal mechanism, whether through the legislation governing this specific use or through other acts, such as the data protection act.

The Act mentions no redressal or information access and correction mechanism, nor does the executive ordinance.

The Privacy Policy states that specific measures would be subject to the Internet Bill of Rights (Act 12.965/14), and to the Secrecy Act on operations of and information held by financial institutions (Complementary Act 105/2001). It also states that for "logged in" areas, users would be protected by the Brazilian Federal Constitution. All these processes and references are, indirectly, related to redressal mechanism systems.

2. RIGHTS-BASED TESTS

This section identifies key rights-based principles related to privacy and digital ID use.

2.1 DATA MINIMIZATION

Are principles of data minimization followed in the collection, use, and retention of personal data for this use case? For this test to be satisfied, there are rules in place to determine the appropriate amount of data to be collected and their retention period.

In general, the *Auxílio Emergencial* and *Caixa Tem* apps address data minimization concerns.

The Act and the Presidential Decree set the Taxpayer's ID (CPF) as the official ID document. This is coherent with the data collected during app use, namely the citizen's name, birthdate, and mother's name, which refer to the information linked to the CPF itself. Another set of information the apps request is the bank account number, which is associated to the policy's purpose of using online savings accounts to pay the financial aid.

The apps also collect user behavior data, such as MAC address, IP address, and geolocation GPS records. By the Brazilian Internet Bill of Rights (Act 12.965/14)⁹, app owners are required to store some of this information; additionally, the Privacy Policy states that, when used for other purposes, such information is anonymized and used for statistical control purposes only.

However, there are risks to data minimization because of third-party data. The Privacy Policy states that it shares cookie and website use for promotional purposes, including geotargeting and micro-targeting ads.

2.2 ACCESS TO DATA

Does the Act specify the access that various private and public players have to personal data in this use case? For this test to be satisfied, there should be mandates to control access to data.

The Act and Decree define the nature of access to data. As the legal mandate states, private players do not have access to data, and it specifies the public players that do (i.e. by mentioning a set of specific federal ministries, and their mandates; setting that the payment will be made only by state-owned banks, and restricting data sharing and processing to state-owned data management companies).

The apps' Privacy Policy (PP) also sets a mandate to control access to data. Logged data are restricted to use by *Caixa* as the banking institution, and there is limited personal data collection and sharing of non-logged data. There is also a provision for access to data restricted to *Caixa's* direct employees and their representatives.

However, the PP has provisions for the promotional and marketing use of the data. It determines that *Caixa* subsidiaries (private or public), including advertising and marketing agencies, social media companies, and mobile and web development companies, can have access to the users' online behavior via cookies, web beacons, and tracking technology.

2.3 EXCLUSIONS

Is the use of a digital ID to access services exclusionary in this use case? For this test to be satisfied, individuals should be allowed to use other forms of ID, as well as given greater say in controlling access to their data.

Applying for financial aid requires the provision of an official ID record, the Taxpayer's ID (CPF), which is used for tax processes. The requirement for providing a CPF was extended to all family members that affect the amount of the financial aid (e.g. in the case of the additional aid allowance provided to single mothers). The Decree also set exceptions to mandatory CPF provisions, applicable to cases of individuals already being granted welfare benefits without a reported and valid CPF.

The requirement of a valid CPF for almost all the beneficiaries, however, has created an exclusionary barrier.

The CPF is one of the main official ID registries in Brazil. Since mid-2019, the CPF has been set as the main unique identifier number in the country, and there are an estimated 173 million active CPF users. The CPF was created in 1968, and, since 2015, notary systems have gradually been issuing a CPF to newborns. Meanwhile, there is no estimated number of citizens who do not hold a CPF, and there are an estimated 30 million irregular CPFs in the country (2016).

The need to have a CPF, especially in the case of welfare benefits paid to vulnerable groups, resulted in an access restriction to the financial aid. Eleven million users who applied through the *Caixa* app were denied the aid due to outdated CPF registry statuses¹⁰, and those who do not have access to a CPF were unable to apply for one due to the closure of the issuing offices on account of the pandemic.

The government has since reacted¹¹ to the shortcoming by creating an online application process for new CPFs via e-mail, by eliminating the registration cost charged to apply for a new CPF, and by approving benefit payments to those holding outdated CPFs. There is no estimate of the number of citizens impacted by the mandatory use of CPFs, but considering that out of 95 million users who applied to receive the benefit, the estimated payment due to 75 million citizens, and the end result of only 15 million financial aid payments, it is likely that the mandatory use of the CPF had a major impact.

Another topic that deserves attention is the exclusive use of the online process to have access to financial aid. Internet penetration in Brazil is around 70 percent, and data packages are expensive. There are also other digital barriers worth considering, such as access to mobile phones and digital literacy¹². There is no estimate of the number of citizens who were denied access to the financial aid due to the digital barrier; however, the number of queues of vulnerable groups seeking help on how to use the app at Caixa physical offices was notorious¹³.

3. RISK-BASED TESTS

This section focuses on the perceived or existing risks related to privacy, welfare, equality, and inclusion, and the need to perform a risk assessment.

3.1 RISK ASSESSMENT

Is this use case regulated considering its potential risks? For this test to be satisfied, the use of a digital ID must be accompanied with a proper risk assessment.

There is no publicly available information regarding a proper risk assessment.

3.2 PRIVACY RISK MITIGATION

Is there a national data protection law in place? For this test to be satisfied, there should be a robust data protection framework that governs specific personal data to adequately reduce the risks.

In 2018, Brazil approved the General Personal Data Protection Legislation (Act 13.853/18), which is not in force during the coronavirus period (the law's sunrise period is due to end in August 2020; however, there is a strong debate to postpone it). That said, there is a robust data protection framework in force applicable to the apps, namely the Brazilian Internet Bill of Rights (Act 12.965/14), that guarantees a series of rights, including privacy and data protection and financial system data protection rules.

3.3 DATA BREACH

For this test to succeed, privacy by design systems should be in place to minimize the harm of data breach.

In terms of privacy by design, the executive ordinance states that the information needed to meet the eligibility criteria would be made available by the bodies holding the respective databases with binary outputs. Thus, it addressed confidentiality and protection measures in the legal mandate.

In terms of information security, the privacy policy has a specific section addressing information security (Sec. 6) stating that most of Caixa's services are encrypted through SSL (Secure Socket Layers) and firewalls. The PP also mentions the use of a two-factor authentication mechanism, and the app indeed requests the phone number to send a code for validation.

The PP makes no specific mention of systems in place to minimize the harms caused by data breaches. However, it does state that the non-identified data shared with third parties are clustered.

3.4 RESPONSE TO RISKS

Is there a mitigation strategy in place in case of ID system failure or breaches?

There are no mitigation strategies to address ID system failure or breaches or the linking of personal data to sensitive information related to the users' data.

1. <http://www.caixa.gov.br/auxilio/PAGINAS/DEFAULT2.ASPX>

2. <http://www.caixa.gov.br/atendimento/aplicativos/caixatem/paginas/default.aspx>

3. We reviewed the 1.20.4 "Caixa Tem" app version and the 1.0.0 "Auxílio Emergencial" app version.

4. <https://agenciabrasil.ebc.com.br/economia/noticia/2020-05caixa-pagou-r-766-bilhoes-em-auxilio-emergencial>

5. <http://www.mpf.mp.br/pb/sala-de-imprensa/docs/acao-civil-publica-mpf-e-dpu-auxilio-emergencial/vieww>

6. For a detailed description of the tests, check <https://digitalid.design/evaluation-framework-02.html>. For a version of the test applied in the health sector, go to <https://digitalid.design/evaluation-framework-case-studies/healthcare.html>
7. <http://www.caixa.gov.br/politica-de-privacidade/Paginas/default.aspx>
8. Brazil has two main state-owned Information Technology companies and two state-owned banks at the federal level.
9. http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l12965.htm
10. <https://agenciabrasil.ebc.com.br/economia/noticia/2020-04/receita-regulariza-11-milhoes-de-cpfs-com-pendencias-eleitorais>
11. <http://receita.economia.gov.br/noticias/ascom/2020/abril/receita-federal-recebe-84-mil-solicitacoes-de-inscricao-ou-regularizacao-do-cpf-por-e-mail>
12. For “Auxílio Emergencial,” it requires iOS 10.3 or superior, or Android 5.0 or superior. For “Caixa Tem,” it requires iOS 11.0 or superior, while for Android it says that it “varies per device.”
13. <https://www1.folha.uol.com.br/mercado/2020/05/apos-fila-de-espera-na-internet-caixa-atualiza-app-para-reduzir-tumulto-pelos-r-600.shtml>