

Transf ermóvil, 10 Years With Us

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Abstract

Transf ermóvil is a project developed by ETECSA in 2015. Since then, it has become the primary digital payment platform in Cuba, with over 5.6 million users at the end of July 2025. During Covid-19, its usage grew significantly as it facilitated service payments and product purchases at a time when queues and crowds were being avoided due to health risks. For this reason, in addition to offering ease with e-payments, it contributed to preserving the lives of millions of people in Cuba.

Throughout these 10 years, it has always been available to users with stable and secure access 24/7. Its simple operation allows people who are not experienced with new technologies, including the elderly, to quickly become familiar with the application.

For companies and businesses, it facilitates e-payments for utilities, such as electricity and telephone services. It will also allow integration with any platform offering products or services that require a payment method.

Its recent innovations include the MiTransfer Wallet (2022) and the Online Payment Service (2019), as well as payments for telecommunications and utility services in general. This paper will review the past 10 years, which have been full of challenges, changes, and updates for the project, requiring infinite perseverance, creativity, and teamwork.

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Introduction

At the end of the 20th century, cellular telephony emerged and experienced an exponential technological advance that transformed the global paradigms of communication, trade and other key aspects of society. In the contemporary world, mobile devices—including tablets and portable computers—have become an indispensable tool deeply integrated into both personal and professional spheres. Meanwhile, the Internet evolved from a rudimentary information network into a critical infrastructure that underpin modern socioeconomic interactions. This technological convergence paved the way for the emergence of digital payment systems in the early years of the 21st century, transitioning them from conceptual frameworks to widespread adoption. By the first decade of the new millennium, electronic transactions had replaced cash-based exchanges in many economic sectors, marking a significant shift towards financial digitization. Pioneering platforms such as PayPal, eBay, and Mercado Libre established key architectures for secure cashless transactions, thereby catalyzing the proliferation of e-commerce and innovations related to it. Now, these developments is combined with the use of crypto assets, which have revolutionized the financial world. This has also changed the way we understand money and the separation of these financial operations from the banking system.

Advancements in information and communication technologies (ICT) have given rise to new payment systems for financial transactions between businesses and their customers. Specifically, these systems emerged as solutions to problems associated with handling physical currency (Tamayo, 1999):

- The need to reduce the cost of money and existing payment methods.
- Provide flexibility for small purchases and instant payments.
- Increase security and protection against fraud.
- The very rise of e-commerce and online payments on the Internet.

As an integral part of the digital transformation of the Cuban society, the progressive expansion of Internet access led to the growth of e-commerce across the country, both at the state and private sectors, through digital platforms and social media. In its early stages, this fledgling digital ecosystem lacked the infrastructure to process online payments, limiting transactions to the physical cash exchanges. This scenario experienced significant progress in 2015 with the launch of Transfervóvil, the first fully Cuban-developed digital payment platform, which marked a turning point in the nation's financial modernization.

In the first half of 2020, the figure of 950,000 active users was exceeded, and of these, 45% had joined in that same year, showing the importance that this platform was acquiring in Cuba. In this period, an average of 70 million operations were carried out, which represented a growth of more than 50% compared to the same period in 2019, and close to twenty services were implemented. All these indicators grew geometrically in the following years: services tripled to more than seventy; operations multiplied by ten, exceeding 700 million in the first half of 2025; and the number of users reached 5.6 million.

Every day of this first decade represented a challenge of development, innovation, and persistent will to move forward in order to offer Cuban society a financial digital transformation.

Making a quick review of Transfervóvil's project evolution timeline, it is worth mentioning some moments of particular relevance:

- **May 2007** – The first proposal for electronic payments emerged, using the Propia card as a debit card to pay the telephone bill, but it could not be achieved.
- **July 21st, 2014** – The conception and implementation of Transfervóvil began, linking it to the rise of mobile telephony in Cuba. The initial architecture of this platform was designed, but with a long-term strategy. (Virtualization, Webservices, short-code usage, layer and modular architecture).

- **February 10th, 2015** – The Transfervóvil Pilot Test begins (Telephone Bill Payment, through Telecommunications Agents at the Príncipe Telephone Exchange Center with approximately 50 TA).
- **March 18th, 2015** – Meeting with *Banco Popular de Ahorro* (BPA, for its acronym in Spanish) in which the development of the mobile banking module within the Transfervóvil project was agreed to begin as of September 2015.
- **November 30th, 2015** – The capability to make payments and transfers using Transfervóvil with BPA cards was put into practice. Integration with an accounting system.
- **February 23rd, 2016** – The Pilot Test for Mobile Top-Ups and Nauta Voucher Top-Ups begins through Telecommunications Agents at the Águila Telephone Exchange Center with approximately 45 TA. Launching of the first both APKs: Transfervóvil 1.160224 and ETECSA.
- **March 24th, 2017** – The capability to make payments and transfers through Transfervóvil using the BANDEC cards was put into practice.
- **March 31st, 2017** – The capability to make payments and transfers through Transfervóvil using the BANMET cards was put into practice.
- **March 2018** – Within the framework of the International Fair Informática 2018, a new version of Transfervóvil (1.180230) was released, capable of being updated via mobile data and integrating a dozen new services.
- **November 2018** – Within the framework of the Havana International Fair, the top-up service for mobile phone lines via bank cards (BPA, BANDEC, BANMET) was implemented.
- **August 2019** – A dozen new services were launched (Nauta top-up, microtop-ups, sending remittances, among others).
- **October 8th, 2019** – The first real digital payment using a QR code was carried out at the market located in the Sierra Maestra building.

- **February 2020** – The possibility of purchasing products by paying through Transfermóvil was extended throughout Cuba by means of Tuenvio, a virtual store chain under the charge of the CIMEX corporation.
- **March 2020** – A new Transfermóvil version was released, which included the ability to top up Propia cards. The new functionality Mis Cuentas was introduced.
- **August 2020** – A new version was launched with the following options: payment of the Nauta Hogar fee, improvements to electricity bill payment, and payment of taxes to the National Tax Administration Office of Cuba (hereinafter, ONAT, for its acronym in Spanish).
- **September 3rd, 2020** – Transfermóvil reached one million users.
- **January 12th, 2021** – The MiTransfer Boulevard was launched at Coppelia ice cream parlor in Havana. (ETECSA-GET).
- **March 2021** – Transfermóvil received the CITMA award, along with nine other works completed in 2020 with the greatest social and scientific impact.
- **April 26th, 2021** – Transfermóvil reached two million users (just in seven and a half months).
- **May 2021** – Transfermóvil received the ANIR National Award.
- **June 2021** – A new Transfermóvil version was released including the possibility to pay traffic fines and infringements.
- **December 27th, 2021** – A new Transfermóvil version was released with the following services: purchase of digital fuel vouchers, postage stamp, Caja Extra, and an update to the ONAT paragraphs.
- **January 29th, 2022** – The MiTransfer Boulevard surpassed 12,000 businesses.
- **February 17th, 2022** – Transfermóvil reached the third million users (just in 10 months).
- **February 27th, 2022** – Transfermóvil received a Special Award from CITMA due to its economic impact.
- **March 2022** – A new Transfermóvil version was released, improving its accessibility for visually impaired individuals.

- **March 2022** – In collaboration with the international company Óptima, the capability for its points of sale to sell through Transfermóvil was implemented.
- **March 2022** – Transfermóvil received the Grand Jury Prize at the International Fair Informática 2022.
- **August 19th, 2022** – La Bolsa MiTransfer was launched.
- **December 27th, 2022** – The payment of document tax (stamp duty) is implemented.
- **February 28th, 2023** – The Cuban mobile wallet was launched, and Transfermóvil reached 4 million users.
- **April 26th, 2023** – Transfermóvil received the Excellence Award in the Popular Vote category.
- **May 17th, 2023** – Transfermóvil obtained a prestigious special international mention, REMTECH 2023, which was withdrawn days later due to blockade-related issues.
- **October 2023** – A new Transfermóvil release was launched with several services aimed at telecommunications agents.
- **December 2023** – This was the most productive year in Transfermóvil's history up to that point, with seven APK releases, over fifteen new services and improvements, and nearly one billion transactions. The implementation of the document tax payment solution is beginning to be widespread.
- **January 2024** – Through the payment option to those users selling their Parranda beer bottles, the Cuban Brewery collected more than 1 million bottles.
- **February 2024** – More than 4 million digital stamps for procedures were exceeded, facilitated by the Transfermóvil solution.
- **March 2024** – The MiTransfer mobile wallet received a special award at the International Fair Informática 2024.
- **April 2024** – The new product MITPV was launched: a 100% Cuban point-of-sale solution.
- **April 2024** – Transfermóvil received recognition from the Ministry of Finance and Prices for its contribution to tax payments.

- **June 24th, 2024** – The digital on-boarding page was launched, enabling legal entities and self-employed workers (TCP, for its acronym in Spanish) to receive payments via Transfervóvil in their businesses and stores.
- **June 29th, 2024** – the Transfervóvil platform reached 5 million users, with over 80,000 businesses having the capability to receive e-payments.
- **October 15th, 2024** – A new product was launched within Transfervóvil: MiTurno, for booking appointments to purchase foreign currency at the currency exchange office (CADECA, for its acronym in Spanish). APK version: 1.241002.
- **November 27th, 2024** – Commercial procedures associated with liquefied gas in Holguín were incorporated into MiTurno. It then spread to almost all provinces.
- **December 2024** – New heritage views from different provinces were implemented within the Transfervóvil APK. A joint effort with the Office of Procedural Formalities Facilitation for the Payment of Contributions (OFA, for its acronym in Spanish).
- **December 17th, 2024** – A new financial operations module for users of Banco Financiero Internacional (BFI, for its acronym in Spanish) was implemented. Release: 1.241211.
- **February 10th, 2025** – Transfervóvil's 10th Anniversary. The APK Release 1.250210 was launched, including a logo change and new services such as Alternative Fixed Telephony (TFA, for its acronym in Spanish) top-up and payment of the heritage contribution through the MiTransfer wallet.
- **February 20th, 2025** – Transfervóvil received the popular vote award at the Excellence awards.
- **April 21st, 2025** – A new Transfervóvil version was released, including payment, transfer, and query operations for the *Clásica* card through the MiTransfer mobile wallet.
- **May 8th, 2025** – Implementation of new offers for heritage tours: Bus Tour, together with OFA and TRANSTUR.

- **May 10th, 2025** – Start of the pilot test using the sales terminals: MITPV from Transfervóvil for the liquefied gas sale in Cienfuegos.
- **June 29th, 2025** – Transfervóvil received a recognition from ONAT for its contribution to the digital transformation in tax payment.

This chronological data illustrates the technological contributions of the Transfervóvil project through the implementation of new services. The project is not only a digital payment platform, but also a social project focused on the needs of Cuban society. For every societal demand driven by a need, the Transfervóvil team has come up with a technological solution associated with improving a process, contributions that have resulted in sustainable solutions over time and have not always been confined to the financial world. Notable examples include the first-time implementation of payment for product purchases in Cuba in February 2020, just days before the country declared the start of the Covid-19 pandemic. This was a joint effort with CIMEX for online payments in the TuEnvío stores, which enabled millions of virtual purchases, avoiding physical contact and preserving citizen health. Until then, purchasing products from virtual stores with digital payments using Cuban bank cards was unthinkable in Cuba. The purchase of postage stamps was another service that was implemented through digital payment at a time when paper stamps were not available for legal procedures. In less than a month, a solution was developed in conjunction with the Ministry of Communication (MINCOM, for its acronym in Spanish), the Post Office of Cuba, the Ministry of Justice (MINJUS, for its acronym in Spanish), and other institutions. Collaboration between entities, whether state or private, has been among the project's development strategies. The linkage between entities, where each contributes to a high-impact final product with time-efficient execution, has been widely used for creating new Transfervóvil services.

Forty percent of the implemented services are the result of user recommendations and suggestions. This reflects the project's popularity. A team of communication professionals and technical

specialists monitors and participates in various social media groups. Recommendations and comments about current services or potential new ones are taken into account.

The great success of the application, responsible for all the aforementioned results, lies with the specialists who have worked, frequently uniting days and nights, throughout these 10 years. This team has gained experience, always ensuring the protection of the legacy so that it continues advancing and remains sustainable.

The implementation of digital strategies (such as the expanding online stores and widely adopting QR codes in state and private entities) drove the development of mobile commerce (M-Commerce). Currently (2025), Transfervóvil has established itself as a multifunctional platform, integrating essential services with significant social impact. One of the most valuable Transfervóvil's products is the MiTransfer wallet (formerly Bolsa MiTransfer), which is referred to below. These features reflect Transfervóvil's contribution to the process of financial computerization in the country, positioning it as a key tool in the digital transformation of the local economic ecosystem. In Cuba, more than 70% of digital operations are carried out through Transfervóvil.

Materials and methods

To complete this paper, research on related texts, observations, analyses, and data reviews were used. Furthermore, interviews with Transfervóvil specialists from various media outlets were utilized.

Results

Transfervóvil: Evolution, technique, challenges and improvements in the Cuban mobile payment app

As previously mentioned, the digitization of financial services has been a significant milestone in the global economy, and Cuba is no exception. With the launch of Transfervóvil, Cuba now boasts its first mobile payment app.

As previously explained, the digitization of financial services has been a significant milestone in the global economy, and Cuba is no exception of this digital transformation. The emergence of Transfervóvil marks the arrival of Cuba's first mobile payment

application.

The evolution of Transfervóvil can be divided into three phases. During the first phase (2015-2019), the application needed to increase its user base in order to cover e-payments for public services. This solved one of the main problems that Cuban society had at that time, which was the long lines for cash payments that had to be made monthly. However, this growth was slow because users had to gradually adapt to the digital transition and gain confidence and security.

During the second phase (2020-2023), significant progress was made globally in developing online stores and remote payment systems for products that were then delivered to homes. The first steps in this direction were taken in 2019 and materialized at the end of that year and the beginning of 2020. This evolution was timely, as the development of online shopping became decisive in the coming years due to the proximity of a pandemic. Despite the limited experience in this area, their ability to adapt to changes contributed to the project's success. Overall, the balance was positive. For the first time in Cuba's history, Cubans could shop in a virtual store and pay online through Transfervóvil and their products were delivered to their homes. At that time, the integration standards with Transfervóvil were established for any store or business to implement online payments. The number of users grew exponentially, causing virtual stores to face an overload due to the relationship between demand and supply. Going back to Transfervóvil, it also had to promptly guarantee greater scaling of the platform through bigger infrastructure. Many optimizations were also made at the code and database level, enabling the implementation of dozens of new services and supporting the growth of millions of users.

In its most recent phase (2023-to the present), the MiTransfer wallet was created, a process that began back in 2022. Of all the products created, the wallet has the greatest potential and scope. With the MiTransfer wallet, financial services and processes are decoupled from banking functions related to users, allowing non-banking entities to handle these payment functions. Each person has virtual accounts

in the wallet, that are topped up via payments made with bank cards within Transf ermóvil. In the case of the USD account, top-up comes from abroad via remittances.

The MiTransfer wallet’s strength lies in its ability to function without direct banking operations if the money is already in virtual accounts. It also represents an opportunity for the unbanked persons and provides an alternative in the event of financial system failures. Very few countries have 100% national wallets. Currently, there are challenges and opportunities, such as the increasing prevalence of crypto assets in today’s world. This is a point of evolution for projects such as Transf ermóvil.

It is essential to continue on teaching new technologies not only for senior citizens, but to anyone who are interested in acquiring this knowledge. Regarding this matter, several studies have consistently shown that platform usage is not age-dependent which is a positive result that has remained consistent over the years and highlights the application’s (APK) ease of use. An interesting finding reveals that women use Transf ermóvil more frequently than men, while 10.6% of users are aged over 60. Figure 1 shows the growth of Transf ermóvil

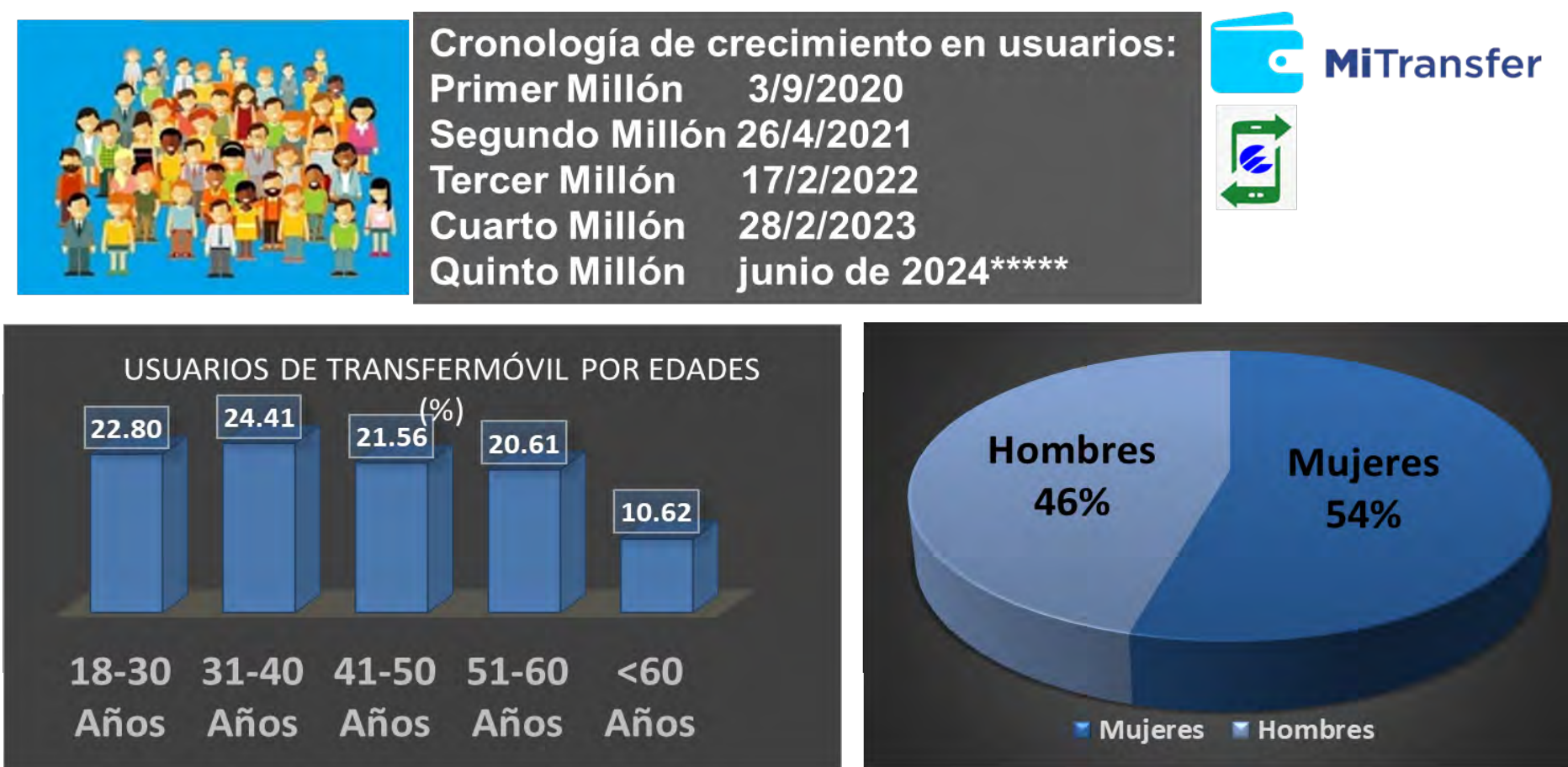


Figure 1. Chronology of user growth by age group and gender using the platform. Author’s own work.

users over time and their distribution by age and gender. —a highly positive and sustained outcome over the years, which highlights the

user-friendly nature of its application

Transfermóvil processes approximately 130 million transactions per month, averaging 48 transactions per second. Throughout its 10-year history, the platform has not experienced any security breaches that compromised the service. This is a positive aspect for a platform that handles money.

Table 1 shows the geometric growth of operations within Transfermóvil’s core services. This sustained growth underscores

	2020	2021	2022	2023	2024	2024VS 2023
Pago Factura de Electricidad	3.3 M	5.5 M	9.52 M	12.74 M	22.9 M	180%
Pagos de la ONAT	120 K	400 K	1.29 M	3.56 M	6.7 M	188%
Pagos en línea (comercio Electrónico)	1.4 M	4 M	5.13 M	6.5 M	12.8 M	196%
Pagos de servicios de telecomunicaciones	15 M	50 M	150 M	173 M	190 M	109%
Transferencias	9 M	15 M	68.5 M	95 M	135 M	142%
Total de Operaciones	140 M	340 M	785 M	977 M	1323 M	135%

Table 1. Geometric growth of essential services in Transfermóvil. Author’s own work

the platform’s increasing popularity and usage. Today, Transfermóvil is part of every Cuban’s daily routine and represents an essential technological tool in everyday life.

1. Online payment

On Transfermóvil, people can make online payments for purchases

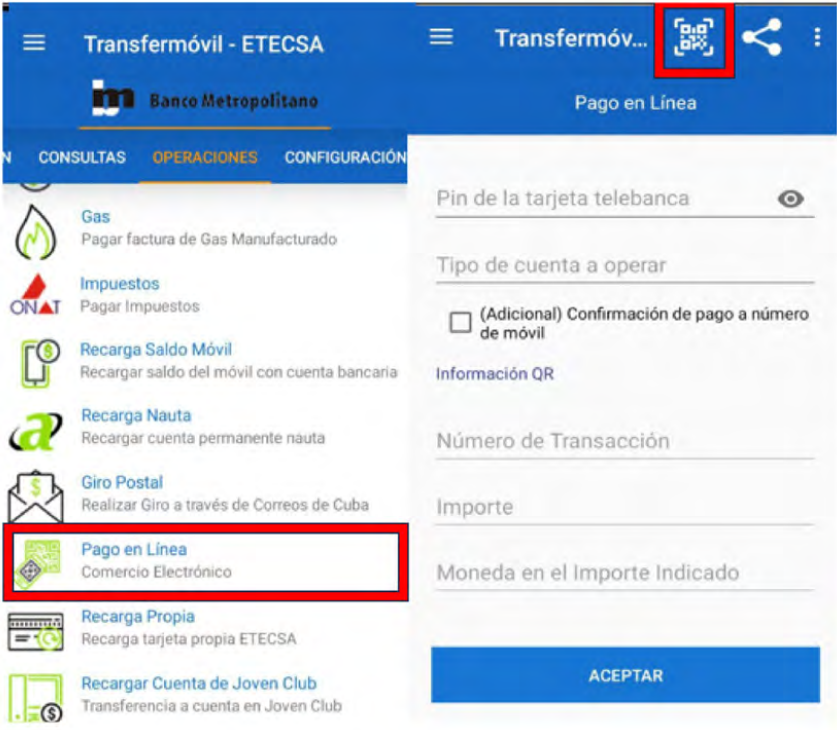


Figure 2. Online payment service on Transfermóvil. Taken from the application

at private or state-owned establishments. This payment method includes the merchant’s details. It can offer bonuses, has no payment amount limits, and only requires scanning the QR code and entering the PIN for authentication, as shown in Figure 2.

On Transfermóvil, online payments are classified based on the nature of QR code:

- Static QR: This QR code has a fixed format and is exclusively issued by the MiTransfer Boulevard platform. It contains the business’s details, but not information regarding the specific product or service to be acquired.
- Dynamic QR: This QR code varies based on the product or service the customer wishes. Generated by a business, it includes transaction-specific data, such as the transaction number, amount, and currency.

Online payments have grown significantly over the past five years, with an average annual growth rate of 54.7% between 2020 and 2024. 2024 saw the highest growth rate, with transactions exceeding 107%. Several variables have impacted this outcome. First, the successful policy of encouraging online payments has

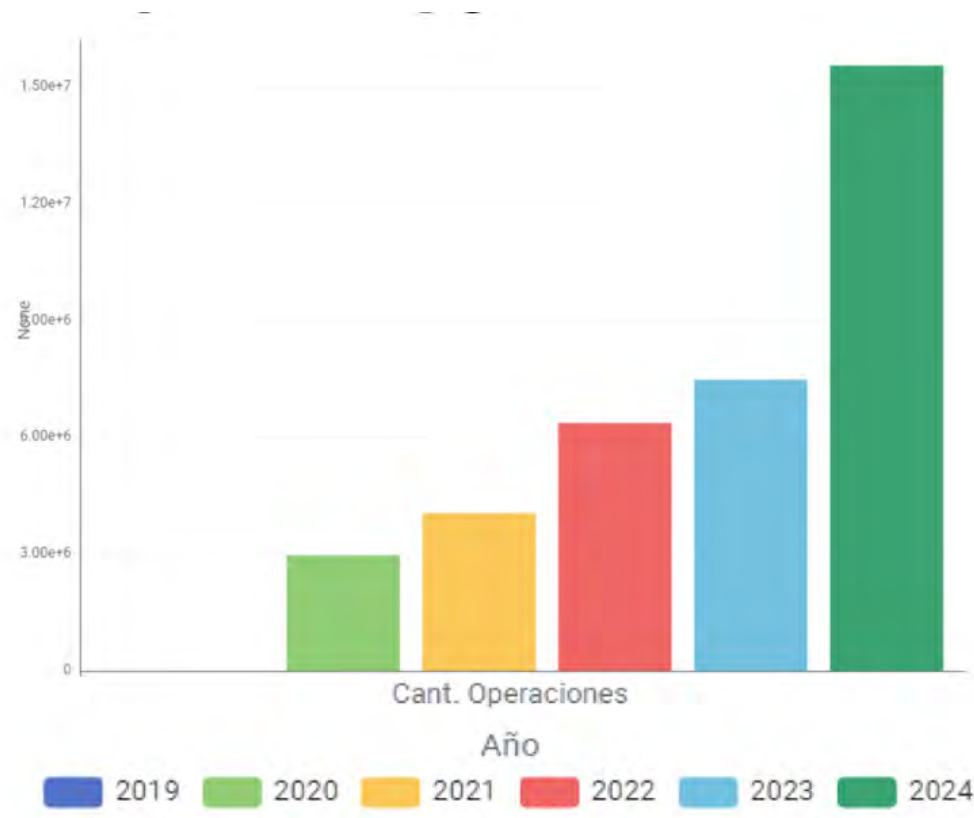


Figure 3. Online Payment Amount (2020-2024). Taken from the analysis of online payment behaviors on Transfermóvil

contributed to this increase, as has the difficulty of obtaining cash. Additionally, electronic payments reduce operating costs associated with transferring, protecting, and securing money. Figure 3 shows the

growth of online payments from 2020 to 2024.

There are good examples of these electronic payment policies being implemented. The first case study is ETECSA, which offers all its services via electronic payments. More than seven years ago, it became the first entity to eliminate long lines at its offices by digitally transforming all its service processes. Transfervóvil played a leading and fundamental role in this transformation, covering all payments related to the entity’s services within the APK. This platform generates more than 85% of the company’s revenue.

With the Caja Extra service, customers make digital payments to the entity and receive cash in return. This service originated due to the lack of ATMs in our society. Once again, Transfervóvil has provided a technological solution that allows Cubans to obtain cash at no additional cost. The population has been very pleased with this service. ETECSA was a pioneer in this area, as it reduces operational costs related to transportation and security since most of the time, commercial offices close without cash because it is dispensed through the Caja Extra service.

Another example is TRD Caribe chain store. Based on a successful strategy, it extended online payments to its entire chain of stores, which now represent an important volume of its revenues in millions of pesos.

During the first years of its use, from 2020 to 2021, dynamic QR codes were the most popular, but in subsequent years, static QR codes became more prevalent due to their versatility of usage and the fact that they don’t require technology; only a material (paper, plastic, etc.) with the QR code. The following graph (Figure 4) shows the evolution of online payments.

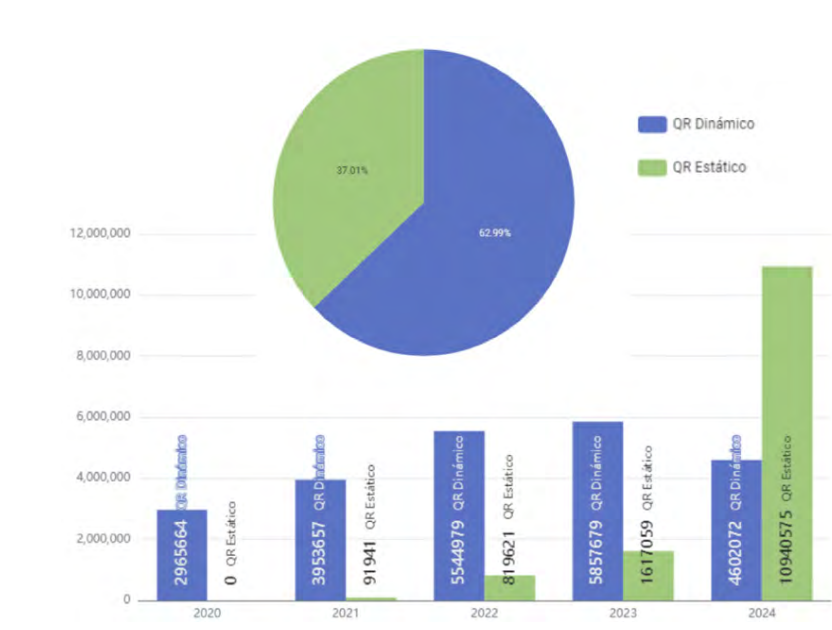


Figure 4. Online payment evolution.
Taken from Analysis of online payment behaviors on Transfervóvil

The MiTransfer Boulevard platform was jointly developed with the Computing Services for Tourism Company (GET, for its acronym in Spanish). This platform is in charge of generating QR codes for the different merchants and allows both their management and reconciliation of their financial operations.

Currently, more than 250,000 businesses and commerce accept online payments via Transfervóvil. This is an additional development strategy that has been successful for over four years and has grown exponentially in terms of results.

Although the statistics obtained regarding e-payments can be evaluated as good, the percentage of online payments compared to the total payment operation capacity is far from the desired level. This indicates that efforts must continue to mitigate non-technological factors affecting the achievement of desired online payment indicators.

The inter-account transfer service remains the most popular feature of Transfervóvil. Online payments doubled, and the Caja Extraservice quintupled in 2024, indicating their growing popularity. For every fifteen transfers, one online payment is made. For every Caja Extra transaction, 3.5 online payments and 53 transfers are carried out. Figure 5 shows the distribution of online payments through Transfervóvil by province.



Figure 5. Distribution of online payments through Transfervóvil by provinces.
Author’s own work.

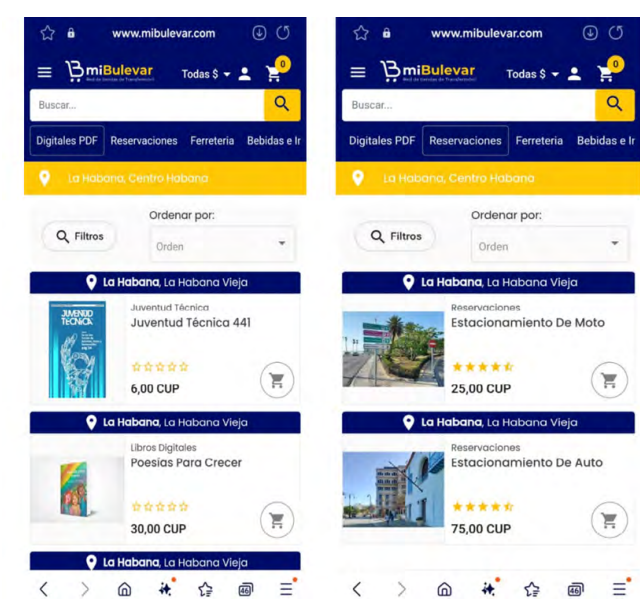


Figure 6. Transfervóvil’s online store galleries

Transf ermóvil, in collaboration with Avangenio, offers another solution: The Point-of-Sale Terminal (MITPV, for its acronym in Spanish):

1. Payment for products and services purchased. At the customer's request, specific services, such as Caja Extra, can be added.
2. This method can be used for self-service payments. Customized service.
3. Multiple payment options: Transf ermóvil, Visa and Mastercard, Cash, etc.
4. Each payment is classified by product and quantity.
5. Refunds. This option is editable in multiple languages.
6. Ability to connect to an accounting or inventory system.

Figure 7 shows the MiTransfer Point-of-Sale Terminal.



Figure 7. MiTransfer Point-of-Sale Terminal

Transf ermóvil has laid the groundwork for future innovations in Cuba's e-commerce ecosystem. In summary, the data shows that the App has solved immediate problems of financial access and operational efficiency. It is also driving a structural transformation in the Cuban economy, providing tangible benefits to citizens, private businesses, and the State. Its continuous evolution suggests that it will remain a key driver of digitalization in Cuba in the coming years.

2. MiTransfer Wallet

Since its launch on August 19, 2022, as a complement to Transf ermóvil, it has transformed the Cuban financial landscape and

reached nearly one million active users. This digital wallet operates independently of the banking network and is experiencing a growing trend in operations and users. It has enabled tens of thousands of unbanked individuals to participate in the Cuban e-commerce ecosystem, despite not having bank cards, by facilitating them to make digital payments. It is a Transfervóvil's product that has not yet reached maturity due to various non-technological causes. Therefore, a well-defined policy has been established to promote its use by offering new services that are attractive to both banked and unbanked users. As its use is strengthened with new services, MiTransfer will become a better alternative to bank cards. Currently, the MiTransfer wallet has two virtual accounts: one in CUP and one in USD. However, it has the ability to have other virtual accounts. With the CUP account, you can receive money from bank cards through the wallet top-up option in each bank-associated APK. The USD account receives money from abroad through remittances. The MiTransfer wallet offers a similar service portfolio to other banks: online payments, transfers, and utility payments can be made.

The maximum amount of money in each virtual account in this wallet is 80,000 CUP for CUP accounts and 5,000 USD for USD accounts. To register for the Transfervóvil APK, you only need to own a mobile telephone line and enter your identity card information and set your PIN.

The telecommunications agent module, the first independent module of Transfervóvil in 2015, is within the mobile wallet. Since 2024, it has been integrated into the wallet, giving these economic players a greater range of service options to offer: payment of telephone bills, mobile top-ups, Nauta top-ups, Nauta Hogar payments, Propia card top-ups, Alternative Fixed Telephony top-ups, (known as TFA, for its acronym in Spanish) and purchase of plans and data packages.

In 2025, the MiTransfer wallet included the option for individuals to use the Cuban Clásica card. This allows users to make transfers between Classic cards, check their account balances, view recent transactions, and make online payments. This is another example of collaboration between entities.

Currently, there are several lines of development open for new services associated with the wallet. These services are expected to be launched this year and, due to their societal impact, should encourage its use.

Conclusions

Transfervóvil has established itself as a fundamental tool in the digitization of financial and commercial services in Cuba. Its evolution from a simple fixed phone bill payment application to an all-encompassing digital payment platform reflects its commitment to the Cuban people. Over the past 10 years, Transfervóvil has contributed to the economic, social, and technological development of various sectors of Cuban society. It has been a pioneer in transforming the digital society with substantial significance especially in the financial sector. It is a platform offering more than 70 IT services and products that facilitate financial transactions. The most notable include the MiTransfer wallet, MiTransfer Boulevard, MiTurno, the telecommunications agent module, and MITPV, among others.

There is still much to be done and technological challenges and obstacles to overcome. The project's sustainability and its role in the transformation of digital society are priorities in the project's strategy for the coming years. Teamwork and technological networking with other economic actors will be paramount in developing new services. The digital transformation of a society is not a destination but a path to be followed, one that must be consistent in every new service design. This digital transformation will yield better results to the extent that strategic, timely, and rapid decisions are made.

In the context of economic reforms, implementation is key to achieving Cuba's technological and financial sovereignty. Its success depends on the ability to scale solutions that balance innovation, accessibility, and security while addressing the real needs of the population. Transfervóvil is more than an APK; it is a symbol of how Cuba can adapt technology to its particularities. It shows that inclusive digital alternatives can be built even in

complex environments. Its evolution will serve as an indicator of computerization progress in Cuban society in the coming years.

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