

The LatAm Tech Report

November 2022

Latitud's opening letter

Latin America is a giant. Our numbers speak for themselves: we have a GDP that surpasses US\$ 5T, over 600 million habitants, and a territory that stretches from Tijuana to Tierra del Fuego.

These big numbers also come with challenges to overcome. This could be a deterrent, but we've seen time and time again that it works much like the opposite.

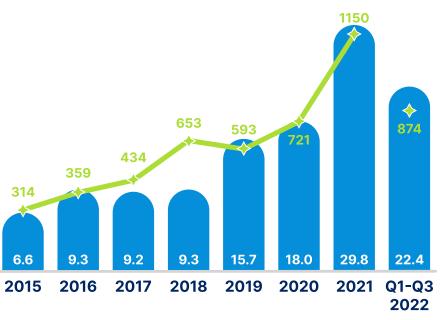
Startup founders are diving head-first into opportunities as vast as The Amazon River, finding – to borrow from our friends at NFX – <u>the fast-moving waters</u> that allow them to use technology to build amazing solutions. Not just incrementally better ones, but rather market-changing.

This journey of discovery can be a solitary one, often with unexpected storms. When the skies are clear once more, how to know if you'll spot a shore to explore?

In this first edition of **The LatAm Tech Report**, we hope to provide new coordinates for your opportunity map.

All of us in the startup ecosystem have been seeing a brand-new Latin America. After more than two years of pandemic life, the leap in digitalization has persisted beyond global trendlines. And even though 2021 brought an atypical boom in the number of deals (and high valuations), the region keeps on thriving.

2022 is already the second largest year for investment in LatAm Private Capital Investment in Latin America (USDb)



Source: LAVCA. Data as of September 30, 2022. Note: Private capital investment includes PE, VC, private credit and infrastructure & natura resources. Latin America's various industries feel this transformation, stemming from their customers' new digital habits.

So, we took a deep dive into the present and future of seven of these industries, which are also the ones that have been gaining investors' attention the most in recent years: Fintech B2B, Fintech B2C, E-commerce, SaaS, Proptech, Healthtech, and Climate tech.

Through data analysis and interviews with experts in each industry, we aim to answer a few questions:

Context setting: what happened in the past few years?

Looking back at the challenges and the founders and investors that pioneered each industry's transformation in the world and in Latin America is an essential step to understanding not only how we've arrived at the present moment but also how the future will play out.

• Trends: what are the common threads between segments and business models?

Some industries follow trends globally, while others produce their own regional trends. Taking into account new market needs and each vertical's maturity stage and funding history, we highlight the macro and micro trends that presented the highest growth.

• Opportunities: what's next?

For the founders and investors looking to the medium-term and long-term, we've also explored what players in each segment can leverage: underserved markets, infrastructure gaps, new technology, behaviors, and more. And since there are two sides to every coin, we also present the challenges they will need to face in the following years.

This report could be your first or just another step into this expedition. In every case, knowing the seas is essential to know when you should keep your hands on deck and when you should be fearless when navigating the tempest. For good captains, a rising tide is a chance to lift all boats.

Latitud

About Latitud

Latitud is building infrastructure to support the next generation of tech startups in Latin America. From community to software, we're creating a suite of solutions to help tackle the highest friction points for early-stage entrepreneurs starting companies in Latin America:

Latitud Go,

an **automated company formation** product to help founders be venture-ready:

go.latitud.com

Latitud Fellowships,

with **educational and networking programs** for entrepreneurs and angel investors.

Explore: latitud.com/programs/explore

Angels: latitud.com/programs/angels

Latitud Ventures,

which has already invested in 100+ startups:

venture.angellist.com /v/back/latitud

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About the authors – B2C Fintech



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Prior to Steamboat, Henrique spent his career in SaaS tech companies and in the venture capital world, working in a variety of roles from **corporate development and product to investment**. Henrique worked as Head of Strategy & Corporate Development at Greenplat, a B2B SaaS Cleantech focused on sustainability. Prior to that, he worked at TOTVS, the largest B2B SaaS company in Latin America, and Accenture. He has worked in Brazil, Chile, and France, with experience in VC (Canary, Atlantico, and Latitud), IB (BTG Pactual and Scotiabank), and SaaS Fintech (Palico), respectively.

Henrique holds an **MBA** from INSEAD in France and a **B.B.A** from Universidad del Desarrollo in Chile.



Alejandro Restrepo

Alejandro is a **part-time consultant** at **Latitud**, focusing on special projects. He is based in London, United Kingdom.

Alejandro has extensive experience in the investment world,

having worked for leading investment banks and private equity firms in Colombia. Prior to Latitud, Alejandro worked as an investment associate at Altra Investments, the leading Andean region PE fund. Before that, he worked at Vistra Advisors and Banicol, leading investment bank boutiques in Colombia. He also worked parttime/interned for Finkargo, an early-stage fintech focused on enabling international trade for LatAm's SMEs through financing.

Alejandro is pursuing an **MBA** at London Business School and holds a **BS** in Industrial Engineering from Universidad de los Andes in Bogotá, Colombia.



In collaboration with Marcial Gonzalez Fraga

About the author – B2B Fintech

Daniel is a **part-time consultant** at Latitud, focusing on special projects. He is based in Madrid, Spain.

Daniel has **extensive experience in financial risk management**, having worked as an FX & Derivatives Trader at two leading financial institutions. Prior to Latitud, Daniel worked at the trading floor of both Citibank and Grupo Bancolombia structuring FX and interest rate to reduce market exposure on corporate clients. He has also been fun of startups, having invested in the first micromobility startup in Colombia. He has worked part-time/internships on two search funds focused on buyouts in EdTech, IT, and software companies in Spain and Colombia.

Daniel holds an **MBA** from IESE Business School in Barcelona and a **B.B.A** from Colegio de Estudios Superiores de Administración (CESA) in Bogotá.



Daniel Ballesteros

About the *author* – *E*-commerce

Alejandro has extensive experience in the investment world, having worked for leading investment banks and private equity firms in Colombia. He was an investment associate at Altra Investments, the leading PE fund in the Andean region, and led investment bank boutiques at Vistra Advisors and Banicol. He also worked part-time at Finkargo, an early-stage fintech focused on enabling international trade for LatAm's SMEs through financing.

Alejandro is based in London, United Kingdom, where he is pursuing an MBA at London Business School. He holds a **BS in Industrial Engineering** from Universidad de los Andes in Bogotá.



About the authors – SaaS

Henrique is a **partner** at Steamboat Capital Partners, an M&A and capital raise boutique, leading the startup VC fundraising advisory practice. He is based in São Paulo, Brazil.

Prior to Steamboat, Henrique spent his career in SaaS tech companies and in the venture capital world, working in a variety of roles from **corporate development and product to investment**. Henrique worked as Head of Strategy & Corporate Development at Greenplat, a B2B SaaS Cleantech focused on sustainability. Prior to that, he worked at TOTVS, the largest B2B SaaS company in Latin America, and Accenture. He has worked in Brazil, Chile, and France, with experience in VC (Canary, Atlantico, and Latitud), IB (BTG Pactual and Scotiabank), and SaaS Fintech (Palico), respectively.

Henrique holds an **MBA** from INSEAD in France and a **B.B.A** from Universidad del Desarrollo in Chile.





About the author – Proptech

Julio Viana is a **finance and strategy specialist** turned **tech entrepreneur**. Passionate about building companies and solving complex problems, Julio has been building tech products for the real estate industry since 2017, firstly as an entrepreneur at **InfoProp** and later as an operator at the **iBuyer Grupo ZAP VivaReal**.

Julio's also an **angel investor** in companies such as Latitud, Yuca, AoCubo, Material Agora, PartYou, Pay2Sell, MaisMu, and Shamballa Beach.

Currently, he's "building the next generation of real estate fintech for Latin America."



About the *authors* – Healthtech

Thales is a **part-time consultant at Latitud**, focusing on special projects. Prior to Latitud, he spent his career working within the technology, consulting, and financial services sectors.

Thales worked in companies such as Palico, Nubank, Safra Bank, McKinsey & Company, and Goldman Sachs across several roles, such as **Strategy**, **User Acquisition/Growth**, **Operations, Customer Success, and Investments**.

Thales holds a **BS from University of São Paulo** and an **MBA from INSEAD**.





In collaboration with Marcial Gonzalez Fraga

About the *author* – Climate tech

Daniel was born in Miami (Florida, US) and grew up in Bogotá (Colombia). Second-time and a technical founder, he is currently a **co-founder** and the **CEO of Superplants**, which is battling climate change with technology. He has been awarded as one of the 35 Innovators under 35 LatAm 2022 by the **MIT Technology Review**.

Besides his startup, Daniel is currently pursuing a degree in entrepreneurship at **Babson College**. He's also a professor for Young Entrepreneurship at Platzi. Daniel has been a speaker at events like the World Biodiversity Forum in Davos, Switzerland, and the UNFCCC Climate Week in The Dominican Republic. Finally, Daniel is a community member of the **Latitud Fellowship**.



Daniel Salinas

Latin America: Future of B2C Fintech

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Latin America: Future of B2C Fintech

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- penetration opportunity
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 Challenges B2C Fintech startups are facing in LatAm

Case Studies

- Nubank
- PIX
- CoDi
- Transfiya, Yape, PLIN

Executive Summary



Latin America's fintech market has experienced exponential growth in the last decade, with more than 1,000 players distributed across the region. Factors such as low penetration and poor quality service from incumbents will continue to drive growth in the coming years.



The report organizes the B2C Fintech ecosystem into **6 different verticals**: **digital banking**, **digital lending**, **payments & remittances**, **investments & wealth management**, **personal finance & education**, and **insurtech**.



2021 was a record year for global funding worldwide. LatAm grew the most, led by consumer fintech, which grew by nearly 500% YoY. Looking forward, the early stage will continue to have momentum and attract capital from worldwide investors.

Executive Summary



Growth in the industry will continue to be driven by trends such as **Open Banking**, migration to **digital banks**, **embedded finance**, **digitalization of payments**, shift to **high-yield investments**, adoption of **cryptocurrencies**, **innovation on top of the existing financial infrastructure**, and M&As.



With increased funding in the industry, new players are breaking in and offering new kinds of solutions and features for different financial products. Among the top innovations, we highlight **new payment gateways**, **alternative credit scoring models**, **automation of processes**, and the emergence of **autonomous finance**, **biometrics**, and **voice commands**.

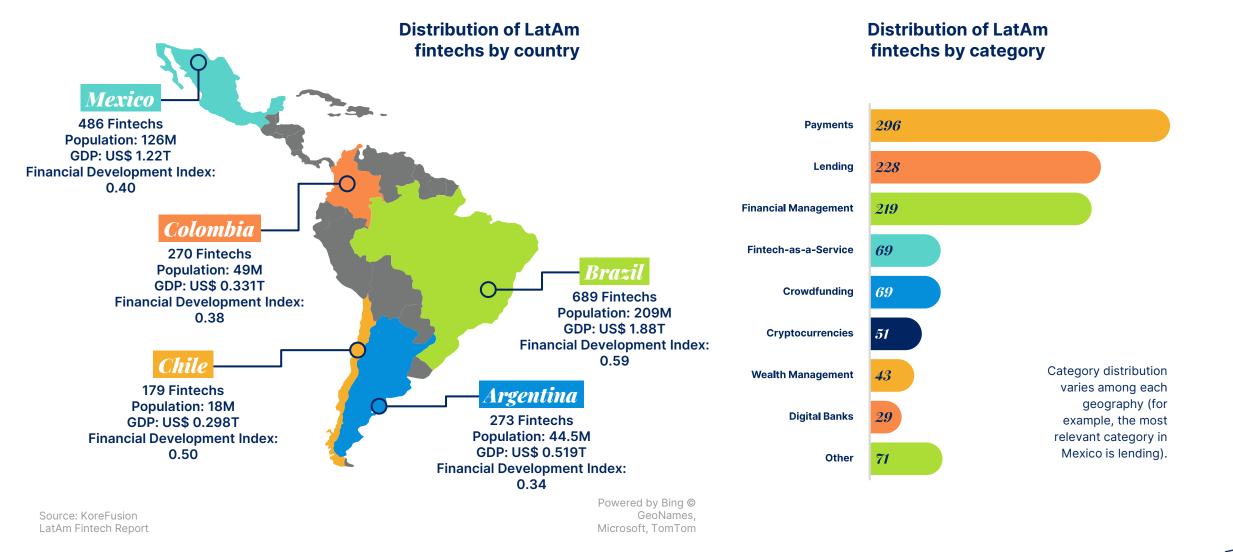


Despite all the development we've seen, the B2C fintech scene and its players still face relevant challenges, such as a **lagging regulatory environment**, **lack of trust from consumers in financial partners**, a **scarce talent pool** for data analysts, **data security concerns**, **rising inflation and interest rates**, and problems when relying on **imperfect information**.

Context Setting

The region has *more than 1,000* relevant fintech companies, with *new players emerging* every day

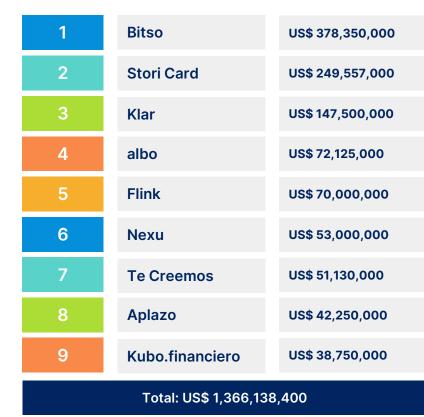
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### **Brazil** represents nearly 80% of all funding raised in the region since 2014, followed by Mexico with roughly 10% of the total

#### Nubank US\$ 3,257,602,393 2 C6 Bank US\$ 2,290,147,150 Creditas US\$ 853,950,000 **Banco Inter** 4 US\$ 799,924,724 Neon US\$ 720,333,922 6 meutudo. US\$ 413,453,187 7 Provu US\$ 1,400,000,000 **2TM** US\$ 250,300,000 9 US\$ 536,632,268 Geru 10 Solfácil US\$ 155,000,000 Total: US\$ 10,066,062,122

Brazil



Mexico

Total fundraised since 2014

Source: Crunchbase, as of March 2022, Latitud Analysis

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**Argentina**, **Colombia**, and **Chile** have raised a total amount similar to that of Mexico, and the remaining countries represent less than 1%

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Total fundraised since 2014

Source: Crunchbase, as of March 2022, Latitud Analysis

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### B2C Fintech has been a *dominant player* in the evolution of venture capital in Latin America

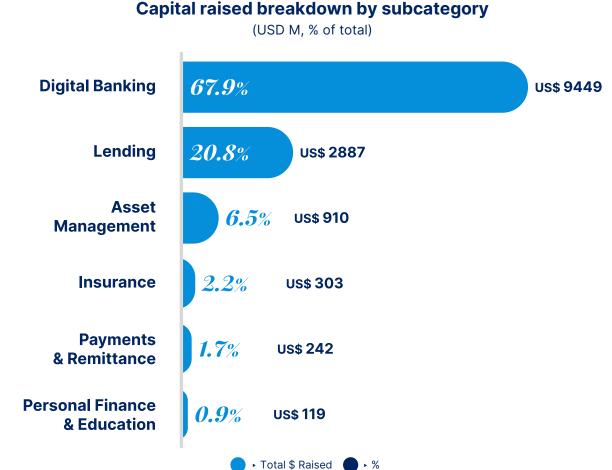
| Investor     | # of Deals | Selected Deals                                | Investor             | # of Deals | Selected Deals                         |
|--------------|------------|-----------------------------------------------|----------------------|------------|----------------------------------------|
| Y Combinator | 56         | Trii; Fintual; Z1;<br>TiendaDólar             | NXTP Ventures        | 49         | Pods; Securitize                       |
| monashees    | 55         | Neon; Ualá; Addi;<br>Open Co                  | <b>QED Investors</b> | 44         | Creditas; Nubank;<br>Bitso             |
| Kaszek       | 54         | Creditas;<br>Remessa Online;<br>Bitso; Warren | 500                  | 37         | Mujer financiera;<br>Apurata; magnetis |

### What are the *top players* in the industry?

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### 88% of *all consumer fintech funding* since 2014 went to Digital Banking (67%) and Lending (21%)



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US\$ 2 out of every US\$ 3 invested in B2C Fintech went to Digital Banking, the category with the most unicorns such as Nubank, C6 Bank, Inter, Neon, and Ualá.

US\$ 1 out of every US\$ 5 went to Lending, represented by new categories such as BNPL (Addi) and digital lending (Creditas, Provu, Geru, and others).

Asset management represented roughly 7%, led mostly by the crypto exchanges Bitso and 2TM (Mercado Bitcoin) and by the investment platforms Warren and Fintual.

The remaining ~5% is represented by Insurance, Payments & Remittance, and Personal Finance & Education.

Source: Crunchbase, as of June 2022, Latitud Analysis

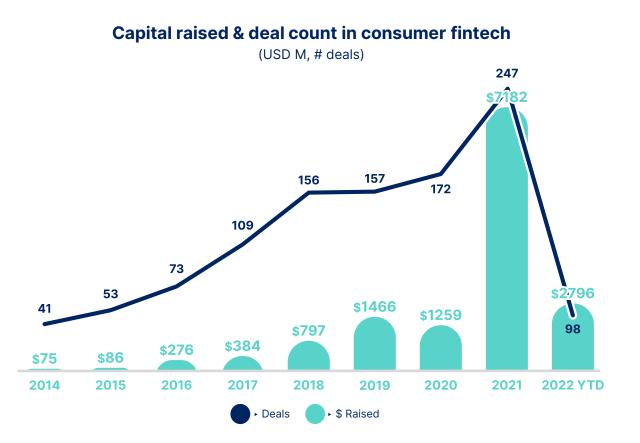
### 2021 was a record year for global funding worldwide. *LatAm grew the most*, led by consumer fintech, which grew by nearly 500% YoY

LatAm total fintech funding hit a record US\$ 12.9B across 315 deals in 2021 - consumer fintechs represented more than half of that amount, at US\$ 7.2B and 247 deals.

Despite an impressive hike, LatAm consumer fintech still only represents about 5.5% of the record total global fintech funding of US\$ 132B in 2021 (CB Insights).

According to investors, the early stage will continue to have momentum, while later stages (Series B and later) may suffer more scrutiny and challenges when fundraising.

LatAm is the fastest growing region in the world not only for fintech funding but also for overall venture capital funding.

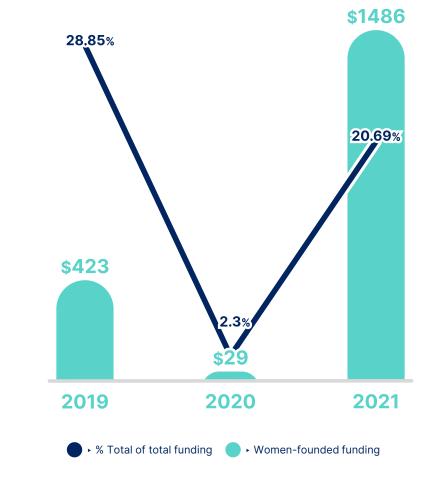


### *Women-founded B<sub>2</sub>C fintech startups* raised around 20% of the total in 2021, but 80% of that came just from Nubank's Series G

In 2021, about 20% of all funds raised by B2C Fintech startups went to women-founded startups. But approx. 80% of that (US\$ 1.2B) was just from Nubank's Series G.

In 2020, a year that Nubank didn't raise any rounds, total funding for women-founded startups was just US\$ 29M, or 2% of the total raised. Out of that amount, US\$ 22.5M came just from Warren's series B.

Other women-founded fintechs with >US\$ 50M raised include Geru and Keycash from Brazil and Stori from Mexico.



### **2022** is not quite up to speed with last year in terms of consumer fintech, and planned IPOs should be delayed

Q1

\$1.4b

\$4.3b

\$636m

\$5.6b

\$477m

\$7.0b

\$360m

\$5.5b

\$1.2b

\$14.8b

\$1.2b

\$13.5b

\$2.0b

\$16.3b

\$2.1b

\$17.1b

\$1.7b

\$15.4b

\$2.6b

\$9.0b

China

**Africa** 

Latin

America

Europe

Southeast

Asia

United

**States** 

Overall, fintech funding in Latin America saw a decline of 29% in the first half of 2022, in comparison with 2021's average (Dealroom). Still, it should be noted that the volume of investment in the first three guarters of 2022 has already surpassed 2020's investment.

With rising inflation and interest rates, consumer fintech was one of the most affected verticals in the fundraising landscape. After the record-breaking fundraised amount of just over US\$ 7B (Crunchbase) or just over US\$ 9B (Dealroom), led by the massive rounds of Nubank and C6 Bank, 2022 is not quite up to speed so far. In Q1, we have seen major rounds, including Creditas US\$ 260M Series F and Neon US\$ 300M Series D. In Q2, the largest round for fintechs in the B2C space was Solfácil's Series C. The credit fintech for solar energy systems raised US\$ 100M in May.

Nubank, which went public in late 2021 at a roughly US\$ 23B, a fall of about 40%. This outcome, added to the harsher market environment, will likely postpone most consumer fintech planned IPOs.

86% MENA South 26% East Asia 20% Africa 14% Europe -3% India -25% USA Latin -29% America -38% China **Total fintech** -14% funding Q2 Q2 **Q**3 Q4 Q1 Q2 Q3 Q4 Q1 2020 2021 2021 2022 2020 2020 2020 2021 2021 2022 \$353m \$67.7m \$273m \$256m \$552m \$392m \$1.0b \$650m \$824m \$181m \$47.3 \$86.2 \$60.6 \$125m \$91.8m \$238m \$962m \$486m \$501m \$270m m m m \$284m \$442m \$796m \$895m \$715m \$3.5b \$2.7b \$2.3b \$1.8b \$925m \$2.5b \$2.2b \$3.1b \$2.3b \$5.8b \$8.5b \$7.0b \$7.2b \$9.7b \$6.4b

**Q**3

2022

\$237m

\$161m

\$655m

\$3.7b

\$636m

\$5.3b

Source: Dealroom; Crunchbase, Fintech Global

In Latin America, the *path to IPO* is much clearer now versus a few years ago - especially in Brazil.

IPOs are important to keep the entrepreneurial flywheel going: ideas and capital help attract talent, talent leads to good exits, and capital and talent go back into the ecosystem.

We are seeing this play out as we speak. *The top quality of companies and talent in Latin America is as good as anywhere in the world*, and one of the reasons we continue to focus on the region.

Of course the market has shifted in 2022. Through most of 2023, we expect companies will continue to focus more on milestones and runway instead than growth at all costs."



## Macro Trends



*Cash* is still (very much) king in Latin America



Average household income is increasingly more compromised by debt After the covid-19 pandemic, Latin America became mobile-first



Migration of users to digital banks is accelerating



*Rise* of embedded finance

## Macro Trends



The *rapid digitalization* of payments continues



Shift from savings to higher-yield investments



Currency depreciation and low trust drive crypto adoption



2nd wave of innovation, on top of *developed infrastructure* 



*Consolidation* is playing a key factor in the fintech consumer segment



### *Cash* is still (very much) king in Latin America

Even though e-commerce is surging in the past two years (with double digits growth), cash usage also grew in the region. This underlines several problems across the region, from the unbanked or underserved populations to concerns and lack of trust around online and digital payments.

#### Average household income is increasingly more *compromised by debt*

5\$

In Latin America, banking lending interest rates have always been much higher than in developed markets. The rise of inflation as a consequence of the covid-19 pandemic and easier access to fintech products are also leading to these unprecedented levels of debt across the region.

#### After the covid-19 pandemic, Latin America became *mobile-first*

In Latin America, smartphones are more affordable and numerous than desktop computers. In some countries, even more widespread than bank accounts. After the pandemic pushed digitization forward, smartphones have also become Latin Americans' preferred way to shop.

#### Migration of users to digital banks is *accelerating*

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The lockdowns and quarantines during the covid-19 pandemic caused more people to adopt online services. At the same time, legacy customer service from incumbent banks is considered to offer poor quality of service and leads to unsatisfied customers.

### *Rise* of embedded finance

Retailers don't need to go through the complex process of getting a banking license and being subject to regulatory duties. Instead, they can pay for BaaS offered by different fintechs.

### The *rapid digitalization* of payments continues

**?**...

Digital payments have been playing a crucial role in the growth of e-commerce in LatAm. Consumers seek solutions that are easy to adopt, free, with real-time confirmation, and non-bureaucratic, such as Pix in Brazil.

### Shift from savings to higher-yield *investments*

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Improving levels of financial education combined with middle-class expansion and lower interest rates during the last years in the region have contributed to a shift of Latin American retail investors away from saving products toward higher-yield investments (i.e. equities).

#### Currency depreciation and low trust drive *crypto adoption*

Latin America is quickly becoming a role model for how crypto's future will look like for several reasons: lack of trust in governments, instabilities, high inflation rates, low financial inclusion, and high reliance on international transfers.

#### 2nd wave of innovation, on top of *developed infrastructure*

Today, there are many fintech companies with platforms to facilitate payments, issue financial products, and offer embedded finance, enabling faster time to market for emerging fintechs.

#### *Consolidation* is playing a key factor in the fintech consumer segment

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Consolidation through M&As reached an all-time high record of 26 deals in 2021, given well-funded fintechs integrating new services or expanding to new markets and incumbents defending their positions and overcoming regulatory burdens.

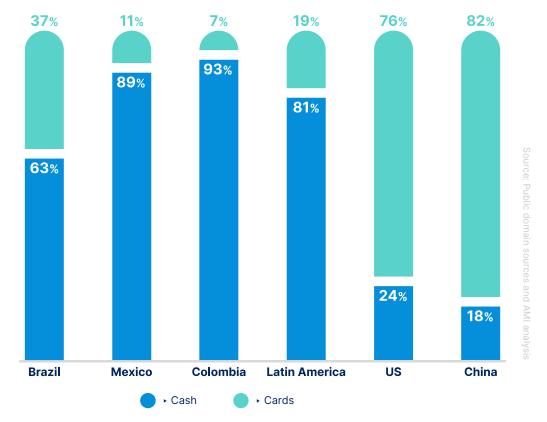
### **Cash** is still (very much) king in Latin America

The region's economy is still highly reliant on cash. It accounted for **85% of all in-person retail spending** in 2020, according to PYMNTS. The percentage has surprisingly increased in relation to another study shared by AMI in 2018 (on the right), which points to 81% penetration.

Even though e-commerce is surging in the past two years (with double digits growth), cash usage also grew in the region as, particularly in Mexico and Colombia, it is also often used as online payments in e-commerce through voucher-based services sold in physical stores. Still, **cash usage is expected to drop by 36%** by 2024, according to Worldpay (FIS).

These numbers underline several problems across the region: the unbanked or underserved populations, low penetration of POS and e-payment acceptance, high banking fees for consumers, and concerns and lack of trust around online and digital payments.





### Average household income is *increasingly more compromised by debt*, reaching all-time levels in Brazil

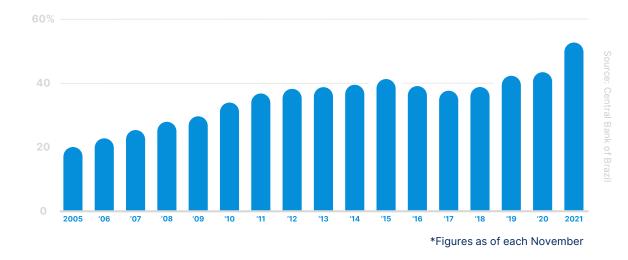
In Latin America, **banking lending interest rates have always been much higher** than in developed markets due to higher inflation rates, uncertainty, bank oligopolies, and higher risk because of a lack of credit scores for a large part of the population.

In Brazil, as of November 2021, the average household income was **51.9%** compromised by debt, an all-time high figure. The average credit card interest rate was 350% per year. The Central Bank's interest rate is now at **13.75% per month**. Two years ago, it was 2% per year.

The rise of inflation as a consequence of the covid-19 pandemic and easier access to fintech products are also leading to these unprecedented levels of debt across the region.

#### **Debt payments in Brazil**

Share of household income\*



Source: XP Investimentos, Brazil Central Bank

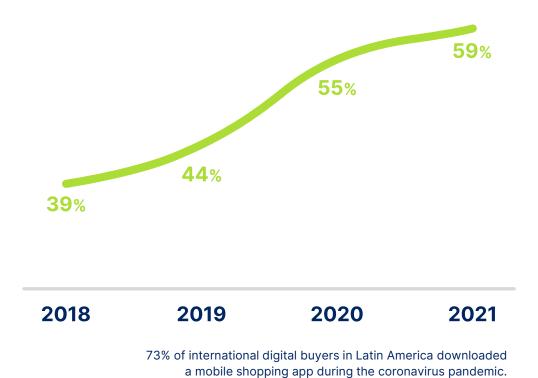
### After the covid-19 pandemic, Latin America became *mobile-first*, as smartphones became a *bridge to the world*

### In Latin America, **smartphones are more affordable** and numerous than desktop computers and, in some countries, even

more widespread than bank accounts.

After the pandemic brought millions of new consumers to ecommerce and pushed digitization forward, **smartphones** have now also become Latin Americans' **preferred way to shop**. Shopping apps were among the most downloaded mobile applications in 2021.

In terms of user experience, **buying on mobile can also feel easier than on desktops**. Since most smartphones are personal devices, consumers can load and save their card information, connect with digital wallet apps, and use biometric identification.



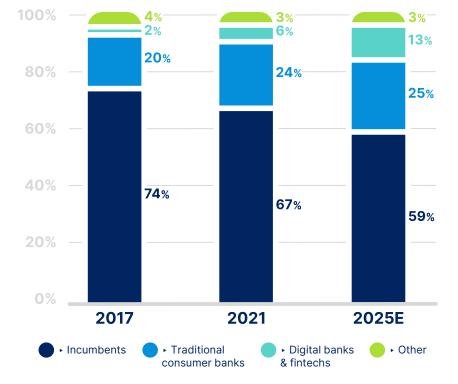
#### Mobile's share of total e-commerce sales

### Poor quality service of incumbents and covid-19 lockdown are *accelerating the migration of users* to digital banks

The lockdowns and quarantines during the covid-19 pandemic also caused more people to **adopt online services** for their everyday needs, accelerating the growth of digital banks in general.

Legacy customer service from incumbent banks is considered to offer **poor quality** of service and leads to **unsatisfied customers** due to long response times, bureaucratic processes, high rejection rates, and other problems.

As a result, the share of digital banks is rising rapidly. For example, outstanding retail credit attributable to digital banks in Brazil went from **2%** to **6%** between December 2017 and December 2021. That is expected to reach **13%** by 2025.



#### Total outstanding balance of retail credit (Brazil)

Digital banks and fintechs are gaining share both by attracting customers away from incumbents and by incorporating new individuals into the financial system.

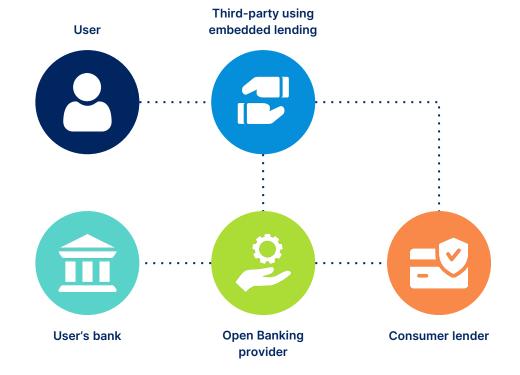
Source: Nubank IPO Prospectus; Oliver Wytman Report

### The rise of embedded finance is allowing non-financial institutions to offer financial products and *capture more value* from their customers

Previously, many of our financial interactions, such as loans or payments, were only possible through the use of banks. Nowadays, non-finance companies can provide financial services to their customers by connecting banks and fintechs to their platforms through APIs. We call this **embedded finance**.

Retailers don't need to go through the complex process of getting a banking license and being subject to regulatory duties. Instead, they can pay for **BaaS** offered by different fintechs.

As companies accumulate data and learn more about their customers, they will be able to add financial services to their value offer, **improving the customer journey** and **increasing their wallet share**.



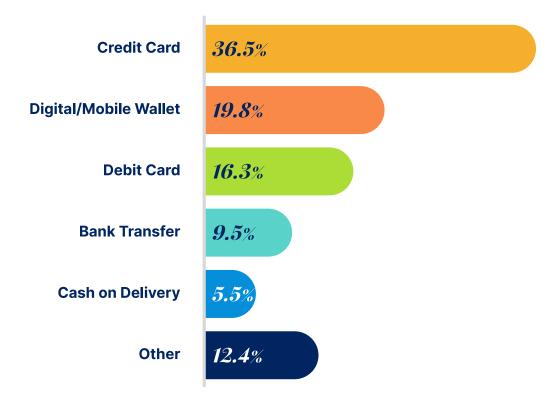
How embedded lending works

As mentioned by Angela Strange (A16Z), "Every company will be a fintech company thanks to embedded finance."

Source: Ebanx 2021; Gabriel Vasquez - A16Z

# The rapid digitalization of payments continues, serving as a *major facilitator of e-commerce growth*. Still, 5.5% of sales are paid with cash on delivery

## Distribution of e-commerce payments methods in Latin America



Source: FIS, The 2021 Global Payments Report; Ebanx Report 2021 **Digital payments** have been playing a crucial role in the growth of ecommerce in LatAm, bringing new consumers to e-commerce even in a region where cash is still king. E-commerce sites and marketplaces must offer customers a vast array of payment options.

Consumers seek solutions that are easy to adopt, free, with real-time confirmation, and non-bureaucratic, such as Pix in Brazil.

Specific market nuances are enabling the rise of new and **disruptive payment methods**, such as mobile wallets or BNPL.

**Invisible/automatic payments** are the next wave of innovation. **Authentication protocols** and **security standards** also evolve, in line with payments.

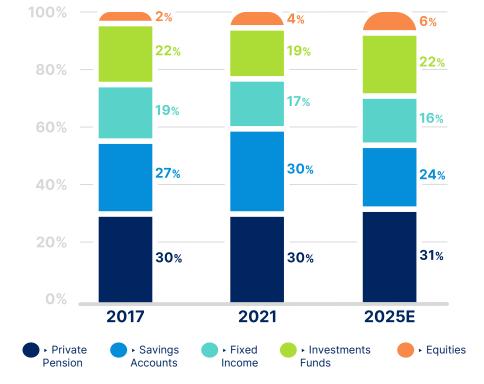
Source: Statista, E-Commerce Report 2021; Daniela Cadena, Director of Business Development at Chiper

## Customer experience, financial education, and lower interest rates are *driving the shift* from savings to higher-yield investments

Superior customer experience and low-cost open platform distribution models employed by D2C independent brokers are allowing them to rapidly gain market share from retail investment managers.

The expansion of **smartphones** allowed new entrants to acquire customers outside the walls of traditional banks. Improving levels of **financial education** combined with **middle-class expansion** and **lower interest rates** during the last years in the region have contributed to a shift of Latin American retail investors away from saving products toward **higher-yield investments** (i.e. equities).

There is still significant room in Latin America for further assets to shift away from banks into **investment accounts**, compared to developed regions.



#### Change in investment by asset class

Share of high-yield investments such as equities and investment funds are expected to continue increasing, at the cost of saving accounts and fixed income.

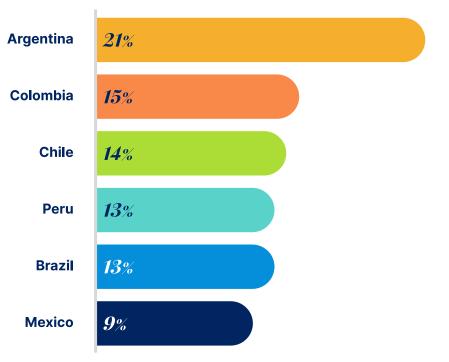
# Currency depreciation and low trust in the financial system and governments have driven crypto adoption in LatAm. However, *regulation lags behind*

Latin America is quickly becoming a role model for how crypto's future will look like for several reasons: lack of trust in governments, instabilities, high inflation rates, low financial inclusion (number of unbanked citizens), and high reliance on international transfers.

**Regulation** is one important trend to look for in the next years, with the main objectives of reducing potential money laundering and risks for investors and creating tax rules.

**El Salvador** is leading not only the region but also the world as the first country to implement wholesale adoption of crypto, with its acceptance of Bitcoin as a legal tender. Paraguay, Cuba, Argentina, and Panama are all considering similar adoption. **Brazil** is currently discussing a bill that creates ground rules for **digital currency** funds and their day-to-day use. If approved, Brazil will become the largest country in the region to regulate crypto.

## Share of respondents who owned or used cryptocurrencies



Developed economies have significantly lower adoption of cryptocurrencies: US (10%), Russia (8%), China (7%), Germany (7%), and Japan (4%).

Source: Statista, Yahoo! Finance, Bloomberg Linea

# The region is experimenting a *second wave of innovation*, which will enable B2C fintechs to build on top of developed infrastructure

Eight to ten years ago, there was no existing infrastructure for new financial services. Neobanks and other players, such as Nubank, had to build the infrastructure from scratch.

As of today, there are many fintech companies with platforms to facilitate payments, issue financial products, and offer embedded finance in general, enabling faster time to market for emerging fintechs.



Offers infrastructure and financial services to fintechs and embedded finance firms, which in turn allows them to issue prepaid and credit cards and launch digital accounts.



API that offers instant access, full coverage, integration of multiple banks, and security encryption for data safety. This enables businesses to make secure financial transactions without having to develop the necessary infrastructure.

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The first wave of B2C fintech, like neobanks and BNPL, figured out that there *wasn't any infrastructure available* at the time they rose, such as novel payment processes. So, they had to build it in-house. This created a massive barrier to entry for serving their customers, particularly the *underbanked*.

In the 2nd wave of innovation, *businesses are building on top of existing infrastructure and going to market faster and cheaper*. The infrastructure allows these B2C fintechs teams to be more *focused on their product* rather than building their business from the ground up."

— Gabriel Vasquez, Andreessen Horowitz

## Consolidation is playing a key factor in the B2C Fintech segment: <u>48 acquisitions</u> since 2014, with more than half taking place just in 2021

| Number of acquisitions | Organization name |
|------------------------|-------------------|
| 6                      | Nubank            |
| 6                      | Creditas          |
| 5                      | 2TM               |
| 4                      | Neon              |
| 3                      | TC - TradersClub  |
| 2                      | Ualá              |
| 2                      | Foxbit            |
| 2                      | Warren Brasil     |
| 2                      | ComparaOnline     |

Consolidation through M&As reached an all-time high record of 26 deals in 2021.

The momentum can be explained by well-funded fintechs integrating new services or expanding to new markets and incumbents defending their positions and overcoming regulatory burdens.

Most relevant M&As:

- Nubank: Olivia, Easynvest, Spinpay
- Creditas: Volanty, Bcredi, Minuto Seguros
- PicPay: Guiabolso
- Open Co: merger of Geru and Rebel

# Segment Trends



Digital Banking



Digital Lending



Payments & Remittance Investment s & Wealthtech

**M** 

Personal Finance & Education E

**Insurtech** 

# Segment Trends



#### Definition

Startups in this space provide services similar to traditional banks such as savings accounts, debit cards, credit cards, and other point-of-sale credit products.

#### Trend

Ability to easily compare financial products and services, focusing on distinct demographics, and providing specialized offers.

#### Definition

Consists primarily of non-bank companies or platforms that provide a range of consumer loans, business loans, and related underwriting services.

## **Trend**

Limited regulations for these lenders, lack of legacy infrastructure, pricing, customer demographic, and ancillary product offerings.

#### Definition

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Startups in this space facilitate transactions, from an an e-commerce payment to an international transfer.

#### Trend

This category is becoming blended across all the others and vice versa.

## Definition

M

New capital market players have emerged offering highspeed trading capabilities, automation, transaction routers, AI-based algorithms, pre-trade analytics, order execution, and portfolio management.

## Trend

Higher demand for alternative assets, making investment a social experience, and creating network effects.



**Definition** 

#### on

Startups in this space provide ways for the population to receive education and create better habits concerning their financial well-being.

#### **Trend**

Increased offering by the top digital banks and lending apps, and Open Banking as a way to unlock new products and opportunities.

## Eø

#### Definition

Startups that are bringing innovation to the insurance sector, in subcategories such as Health, Car, Phone, and Life.

## **Trend**

Increased offering by digital banks. But the reverse is not true: insurtechs are not offering fintech products to their customers.

# *Trends by segment: Digital Banking*

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Startups in this space provide services similar to traditional banks such as savings accounts, debit cards, credit cards, and other point-of-sale credit products.

Today's consumers are more discerning when it comes to choosing financial products. They value the ability to easily compare things such as savings account interest rates, credit card offers, and mortgage rates.

Fintechs in this segment differentiate primarily by **focusing on distinct customer demographics** (for example, Gen-Zfocused products) and by **providing specialized financial services** that can be tailored to the needs of individual consumers.

## NU neon ualá albo

| Founded           | 2013                              | 2016                             | 2017                               | 2016                                      |
|-------------------|-----------------------------------|----------------------------------|------------------------------------|-------------------------------------------|
| Geography         | Brazil,<br>Mexico,<br>Colombia    | Brazil                           | Argentina,<br>Mexico,<br>Colombia  | Mexico                                    |
| Total<br>Raised   | US\$ 3.9B                         | US\$ 720M                        | US\$ 544M                          | US\$ 72M                                  |
| Last<br>Round     | IPO (2021)                        | US\$ 300M<br>Series D<br>(2022)  | US\$ 350M<br>Series D<br>(2021)    | US\$ 45M<br>Series B<br>(2020)            |
| Lead<br>Investors | Sequoia,<br>Kaszek, DST,<br>Tiger | Quona,<br>Monashees,<br>Endeavor | Monashees,<br>Tencent,<br>Softbank | Magma<br>Partners,<br>Nazca,<br>Greyhound |

# *Trends by segment: Digital Lending*

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Consists primarily of non-bank companies or platforms that provide a range of consumer loans, business loans, and related underwriting services.

**Limited regulations for these lenders**, such as capital reserve requirements, and the **lack of legacy infrastructure**, such as physical branches, provide significant competitive advantages over traditional banks.

Their primary differentiators include **pricing**, **customer demographic**, and **ancillary product offerings**.

|                   | (C) creditas                        | Addi                                 | Open Co                                          | 🞽 kueski.                                     |
|-------------------|-------------------------------------|--------------------------------------|--------------------------------------------------|-----------------------------------------------|
| Founded           | 2012                                | 2018                                 | 2013                                             | 2012                                          |
| Geography         | Brazil                              | Colombia,<br>Brazil                  | Brazil                                           | Mexico                                        |
| Total<br>Raised   |                                     |                                      | US\$ 140M                                        | US\$ 323.3M                                   |
| Last<br>Round     | US\$ 260M<br>Series F<br>(2022)     | US\$ 200M<br>Series C<br>(2021)      | US\$ 115 M<br>Series D<br>(2021)                 | US\$ 202M<br>Series C<br>(2021)               |
| Lead<br>Investors | Kaszek, QED,<br>Softbank,<br>Nubank | a16Z, QED,<br>Monashees,<br>Softbank | Monashees,<br>Softbank,<br>Fintech<br>Collective | StepStone,<br>Cathay, FJ<br>Labs,<br>Endeavor |

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Pitchbook Q4 2020 Emerging Tech Trends Fintech; Morgan Stanley, The Rise of the E-Commerce Ecosystem 2021; Daniela Cadena, Director of Business Development at Chiper; Dominique Oliver, Co-founder at Amaro

Competition is really tough and differentiation is even tougher. Find the right edge to get a piece of the pie. And a rule of thumb for all fintechs: don't spend money on what is not making money."

— Guilherme Esquivel, Strategy Partner at EY Parthenon

## *Trends by segment: Payments & Remittance*

With just over US\$ 200M in total funding received, this category has the peculiarity of both market leaders in terms of customers (PicPay and Mercado Pago) being owned by large holding groups (JBS Holding and Mercado Livre, respectively) and having never raised money from external investors.

RecargaPay accounts for more than 50% of the total funding raised. Remessa Online represents the largest exit to date, being acquired in December 2021 by EBANX for around US\$ 250M.

This category is becoming blended across all the others and vice versa. PicPay and MercadoPago now offer credit cards, lending, and even crypto solutions.

|                   | РісРау                                                             | mercado<br>pago                                                                | <mark>اچ</mark> recarga <b>pay</b>                                        | Remessa Online                                       |
|-------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------|
| Founded           | 2012                                                               | 2004                                                                           | 2010                                                                      | 2016                                                 |
| Geography         | Brazil                                                             | LatAm                                                                          | Brazil                                                                    | Brazil                                               |
| Total<br>Raised   | -                                                                  | -                                                                              | US\$ 118.6M                                                               | US\$ 25.7M                                           |
| Last<br>Round     | Acquired by J&F,<br>holding that owns<br>JBS and Banco<br>Original | Launched by<br>MercadoLivre,<br>leading e-<br>commerce player in<br>the region | US\$ 80mm<br>Series C<br>(2021)                                           | Acquired by<br>EBANX for<br>US\$ 229M<br>(2021)      |
| Lead<br>Investors | N/A                                                                | N/A                                                                            | IDB Invest, Fuel<br>Venture Capital,<br>IDC Ventures,<br>The Venture City | Kaszek, GFC,<br>MAR Ventures,<br>Bewater<br>Ventures |

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Source: Crunchbase, as of March 2022, Latitud Analysis

## Trends by segment: Investments & Wealthtech

New capital market players have emerged offering high-speed trading capabilities, automation, transaction routers, AI-based algorithms, pre-trade analytics, order execution, and portfolio management. The participants generate revenues principally through software licensing for deployment on client servers and systems, cloud-based SaaS, and/or transaction-based fees.

The segment is also driven by demographic shifts and changing preferences. Rather than focusing on budgeting and savings, the next generation of Latinos is predicted to place more importance on **investing**, with **higher demand for alternative assets**. The trend is **making investment a social experience**, by creating **network effects** within the product. The combination of social platforms and financial products creates an active and engaged audience.

|                   | <b>()</b> Bitso                 | <b>W</b> warren                    | 🗩 Fintual                         | mognetis                              |  |
|-------------------|---------------------------------|------------------------------------|-----------------------------------|---------------------------------------|--|
| Founded           | 2014                            | 2014                               | 2016                              | 2012                                  |  |
| Geography         | LatAm                           | Brazil                             | Chile, Mexico                     | Brazil                                |  |
| Total<br>Raised   | US\$ 314.5M                     | US\$ 104.6M                        | US\$ 55M                          | US\$ 17.4M                            |  |
| Last<br>Round     | US\$ 250M<br>Series C<br>(2021) | US\$ 53M<br>Series C<br>(2021)     | US\$ 39M<br>Series B<br>(2021)    | US\$ 11M<br>Series B<br>(2020)        |  |
| Lead<br>Investors | Kaszek, QED,<br>Tiger, Coatue   | Kaszek, QED,<br>Ribbit,<br>Spectra | ALLVP, Y<br>Combinator,<br>Kaszek | Monashees,<br>Redpoint, 500<br>Global |  |

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## **Trends by segment: Personal Finance & Education**

Roughly US\$ 120M was raised in the past years, with more than 50% of the money going to Guiabolso, acquired in 2021 by PicPay.

Personal Finance Management (PFM) and education are increasingly being offered by the top digital banks and lending apps. New Open Banking trends and regulations will unlock new products and opportunities.

This is the only category in which the main players are not from Brazil but from Mexico.

|                   | 🕝 Guiabolso                                                                           | Resuelde                                            | mozper                                         | COLO                                                  |  |
|-------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------|-------------------------------------------------------|--|
| Founded           | 2012                                                                                  | 2009                                                | 2019                                           | 2014                                                  |  |
| Geography         | Brazil                                                                                | Mexico                                              | Mexico                                         | Mexico<br>US\$ 15M                                    |  |
| Total<br>Raised   | US\$ 66M                                                                              | US\$ 24M                                            | US\$ 5.1M                                      |                                                       |  |
| Last<br>Round     | Acquired by<br>PicPay for an<br>undisclosed<br>amount (2021)                          | US\$ 24M<br>equity and<br>financing<br>round (2020) | US\$ 3.6M<br>Seed Round<br>(2020)              | US\$ 7M<br>Series A<br>(2017)                         |  |
| Lead<br>Investors | Kaszek, Ribbit<br>Capital, VEF,<br>QED, IFC, Valor<br>Capital Group,<br>Igah Ventures | Alloy<br>Merchant<br>Finance, DILA<br>Capital       | Y Combinator,<br>Dux Capital,<br>Hetz Ventures | QED Investors,<br>Seaya<br>Ventures,<br>Founders Fund |  |

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Source: Crunchbase, as of March 2022, Latitud Analysis

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## *Trends by segment: Insurtech*

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With around US\$ 300M in funding raised, Insurtech is heavily dominated by Brazilian players: Alice with US\$ 175M, Pier with US\$ 42M, Justos with US\$ 39M, Pitzi with US\$ 30M, and Azos with US\$ 18.3M. The main subcategories for insurance are Health, Car, Phone, and Life.

Like most of the other main categories, Insurance is **increasingly being offered by digital banks**, but **Insurtechs are not offering fintech products to its customers**.

|                   | PIER.                                                       | alice                           | justos                         | 🙏 azos                                                                  | Ditzi                                                                                  |
|-------------------|-------------------------------------------------------------|---------------------------------|--------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Founded           | 2018                                                        | 2019                            | 2020                           | 2020                                                                    | 2012                                                                                   |
| Geography         | Brazil                                                      | Brazil                          | Brazil                         | Brazil                                                                  | Brazil                                                                                 |
| Total<br>Raised   | US\$ 42.1M                                                  | US\$ 174.8M                     | US\$ 38.6M                     | US\$ 18.3M                                                              | US\$ 29.8M                                                                             |
| Last<br>Round     | US\$ 20M<br>Series B<br>(2021)                              | US\$ 127M<br>Series C<br>(2021) | US\$ 36M<br>Series A<br>(2021) | US\$ 16M<br>Series A and<br>extension<br>(2021)                         | US\$ 10M<br>Series D<br>(2019)                                                         |
| Lead<br>Investors | Monashees, Raiz<br>Investimentos,<br>Canary, BTG<br>Pactual | Canary,<br>Kaszek,<br>Softbank  | Kaszek, Ribbit<br>Capital      | Prosus Ventures,<br>Kaszek, MAYA<br>Capital, Propel<br>Venture Partners | QED Investors,<br>Valiant Capital<br>Partners, Thrive<br>Capital,<br>Flybridge, Kaszek |

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Source: Crunchbase, as of March 2022, Latitud Analysis

# The Opportunity

# Financial inclusion is expected to increase in the region thanks to the *adoption of Open Banking*

New regulations in Latin American countries such as Mexico or Brazil are allowing individuals to share their financial information with third parties through **APIs**.

Given the **low penetration of bank accounts**, Open Banking is ideal for the region. Financial players can now rely on data from other sources, such as marketplaces.

This information can be used to **expand eligibility** for new products or services for many Latin Americans – bank accounts, credit cards, loans, etc. it can also be processed using data science and machine learning to create **relevant and tailored services** for the customers, adjusted to their needs and risk profile.

#### Expected adoption of Open Banking by country



No regulation yet, but has advanced a series of regulations that favored interoperability.



In phase IV of implementation, where institutions must share all their users' information.



Low adoption so far. Signed financial portability act in 2020.



Currently designing the Open Banking framework. Expected to be defined during 2022.

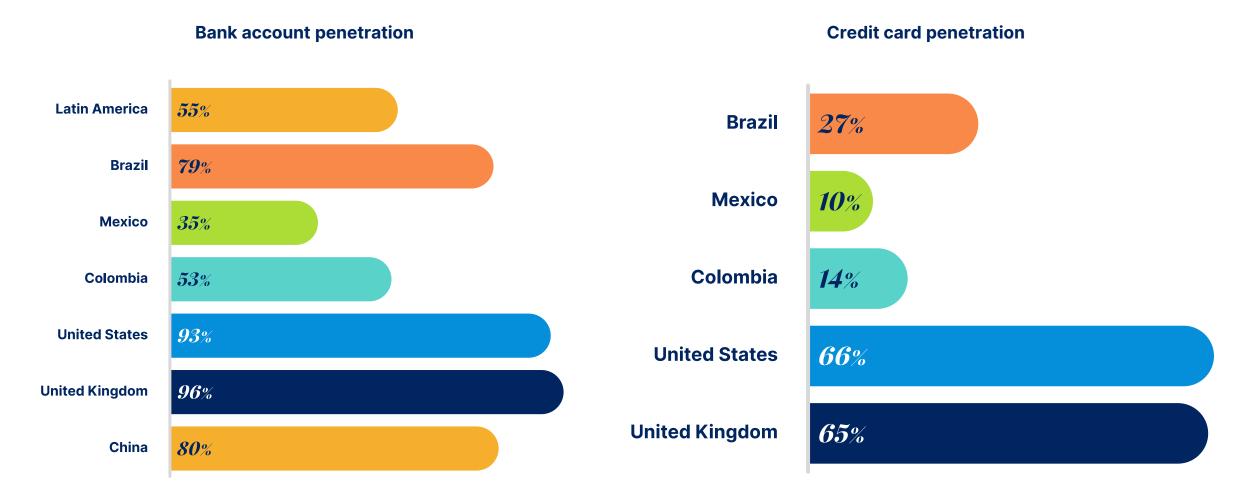


Passed Fintech Law in 2018, but expected to expand requirements in 2022.



Carrying out working groups to share perspectives and insights on Open Banking.

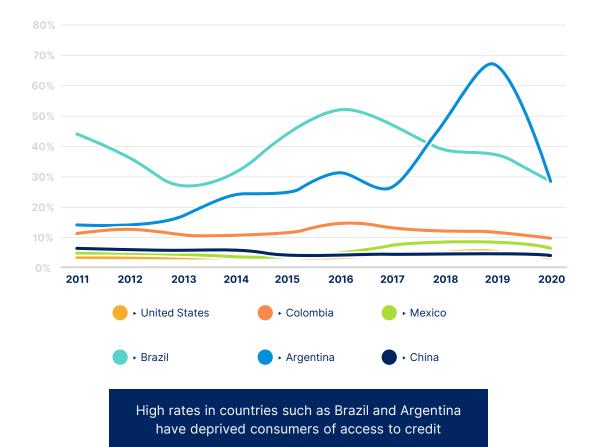
Financial services still offer a *significant penetration opportunity* ahead, as electronic payments and credit offerings to consumers continue to deepen



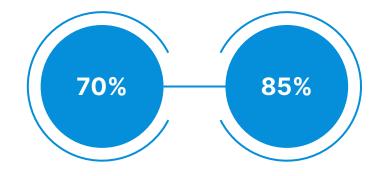
Source: Statista, World Bank Data, Nubank

High lending interest rates and market concentration create a *fertile environment* for disruption from new entrants who can level the playground with tech, data, and customer service

#### Lending interest rates



**Highly concentrated market** 



The largest 5 banks in Brazil, Mexico, and Colombia control 70-85% of all loans, deposits, and banking revenue, with **~20%** historical ROEs.

Lack of competition has resulted in less innovation, a more limited selection of products, and higher fees

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# Historical flaws of incumbent players and expansion of e-commerce and digital payments give rise to *all kinds of opportunities* for B2C Fintech players



Incumbent banks have high costs to serve, a product of expansive and extensive branch distribution supported by large workforces. New players are able to drastically reduce costs thanks to digital-native solutions and leaner processes. Given historically high concentration and low competition, incumbent players offer **poor service**, which results in unsatisfied customers and a lack of trust. This has reduced the switching cost to neobanks...



... which leads to higher trust in alternative finance: **70%** of Latin Americans believe in the positive impact of **crypto and decentralized finance**, which reflects in higher adoption rates of the former.



E-commerce in LatAm grew by **37%** in 2020. Fintech plays a crucial role in e-commerce transactions, becoming indispensable to travelers, from crossborder currency exchange to payment solutions.

## When it comes to innovation, fintech outstands as *one of the most disruptive industries*, with new solutions across all segments



Constant innovation in **Payment Gateways** is allowing consumers to access **different payment methods**, such as credit (BNPL options) and cryptocurrencies.

There's also an opportunity for payment methods to integrate **loyalty programs** in their systems since they are the touchpoint between customer and merchant. Using targeted discounts and rewards, they can improve the UX for customers and the ROI for merchants.

In the future, **blockchain-based payments** hold the promise of real-time, decentralized settlement. 17A

Alternative Credit Scoring considers alternative data points, such as education history and phone records, into their credit risk model. Combined with an intelligent and self-learning algorithm, it can lead to better lending decisions over time.

Some of the alternative lending market has been clawed away by the BNPL space. Still, loan volume growth has continued to expand and alternative models continue to proliferate.

We expect to see **more business model efficiencies**, such as automated data collection and technology-powered and streamlined credit decision-making processes. That way, the segment will continue to grow in importance.



Innovations in **Biometrics** will allow users to replace PINs and passwords as the primary authentication method when executing payments or transactions.

This is an addition to technologies like GPS and data mining combined with predictive modeling, artificial intelligence, and machine learning. These are already improving verification, authorization, and fraud monitoring while also promoting faster payment initiatives.

## When it comes to innovation, fintech outstands as *one of the most disruptive industries*, with new solutions across all segments



There's an emergence of **Autonomous Finance**, which uses artificial intelligence features to enable an app to autonomously create and execute a financial plan based on a person's goals, risk tolerance, age, and other factors.

Like autonomous vehicles, "self-driving" finance apps eliminate management processes and decision-making. They can integrate users' multitudinous sources of financial and transaction data, including debt, income, spending, investments, and any other financial products or services to maximize financial performance.

Several neobanks and traditional banks are currently developing autonomous finance applications.



Using **Voice Commands** to authenticate and authorize transactions and other operations promise to deliver an even better customer experience.

Other improvements in the customer experience when making digital financial transactions segment are seamless payments, recurring payments, one-click checkout, and order ahead.

These developments are driving and will continue to drive growth in the digital transactions volume, especially when talking about payments in omnicommerces.



## What are the *challenges* that startups in the industry are facing in *LatAm*?

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Latin America's regulatory environment lags in relation to developed countries

Despite significant progress in Open Banking and fintech regulations in countries like Mexico and Brazil, countries in the region are still in the first stage of proper implementation of their regulation. 54% of Latin Americans think this is the main barrier. <u>ิ</u>ก

#### Lack of trust in financial partners

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For historical reasons, Latin Americans don't rely on financial institutions, such as traditional banks, as they feel they are being ripped off with hidden fees or their capital is not safe. As of today, "friends and family remain the most influential source of information and validation." Fintechs need to innovate their interactions with consumers to change this.

Scarce talent pool for data analysts and new age technologies

The increasing rate of fintech solutions in the region has been higher than the increasing rate of new talent being developed, which creates fierce competition for talent. This is relevant, as talent determines the level of funding available to build fintechs.



Data Security

In virtual security, vulnerabilities are more discreet and can have a higher impact on users, as they can affect not only users' money but also their data. To establish a high-security platform, fintechs may implement the following solutions: two-factor authorization; biometric authentication; data encryption and obfuscation; realtime alerts and notifications; and behavior analysis.

Source: FIS, The 2021 Global Payments Report; Statista Database; Americas Market Intelligence

## What are the *challenges* the startups in the industry are facing in *LatAm*?



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#### Inflation and interest rates

The rising inflation and interest rates are starting to severely impact digital banks and lenders as default rates are growing at alarming rates.

Persistent challenges limit financial inclusion and expansion in consumption, driving the use of cash \_\_\_\_

Lack of access to credit, insufficient banking infrastructure, high rates of inflation, concerns about fraud, and reluctance to pay high fees for electronic transactions all contribute to the persistence of cash, which is still king.

Fierce competition across the region

While still with plenty of room to grow, LatAm has become one of the most well-funded fintech regions in the world, and the competition for talent and customers is sacrificing the previously known nice margins.



#### **Reliance on imperfect information**

Many lenders leverage their innovative credit assessment process in access to alternative data. Such data must be carefully assessed, as it can lead to subprime lending and high default ratios, as already seen in fintech lenders in developed economies.

Despite all the challenges encountered, both founders and investors agree on one point: differences in relation to developed markets are precisely the main opportunities to innovate.

#### Source: FIS, The 2021 Global Payments Report

Ualá's objective is for everyone to be included in the financial system with, at least, an account. *In Latin America, it is not fighting for people to drop another bank. It's a fight against cash.* 

There's a lack of trust. Customers are four times more likely to trust you if you're not a traditional financial institution. *So how to communicate with them? Show that you are not like the incumbents.*"

— Maia Eliscovich, Head of Merchant Acquiring at Ualá



# Case Studies

Nubank's IPO in Q4 2021 represented a *new milestone* for Latin America's business ecosystem, attracting international investment and increasing access to alternative investments for Latin Americans



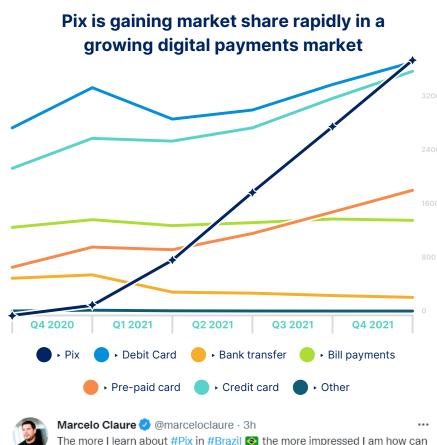
## The *instant payments* revolution has taken off in the region, led by Brazil's Central Bank *PIX* launch and exponential growth

Brazil is leading the way in the instant payments revolution: PIX is the most successful initiative in the region, by far, and may even be the leading case in the world too. This happens within a highly regulated environment, directly controlled by the Brazilian Central Bank (BACEN), and where the top five banks concentrate massive powers.

Officially launched in November 2020, PIX works on a 24/7 basis, with real-time clearing and settlement, and has a huge development roadmap ahead. The Brazilian instant payment system was the payment method with the highest growth rate in Latin American e-commerce in 2021. With fast adoption, PIX has outstanding statistics:

- 20% month-over-month growth average in one year.
- More than 364 million registered keys and 120 million registered users.
- More than US\$ 700B transferred in one year.
- 60% of the Brazilian population is already using Pix and the number keeps growing.
- The number of PIXs was 3 times the number of traditional transfers in June 2021.
- More so, PIX already surpassed the credit card ownership in the country, which is at 25%, according to the World Bank Global Findex. It has also outpaced boleto and card growth volumes when we talk about e-commerce payment methods in Brazil.

Source: https://blog.ebanx.com/en/the-future-of-payments-in-latin-america-is-instant/, Twitter (May 9th 2022)



The more I learn about **#Pix** in **#Brazil** the more impressed I am how car a government agency has built the most impressive real time payment solution ever with an exponential adoption. Other central banks and governments have a lot to learn

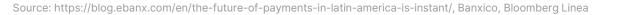
# In Mexico, CoDi missed its initial targets and customer adoption has become *the main challenge*

The PIX revolution in Brazil has been sending a really good message to regulators and stakeholders across LatAm, becoming a role model. However, other initiatives are not taking off just as easily, with Mexico's initiative being government-led and Colombia's and Peru's initiatives being private-led.

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**Mexico**: CoDi was designed by the local regulator with the goal to be a cash substitute and has been available since 2019. The issue here is that it was not designed for the online world and it was thus negatively impacted by the pandemic, losing the trust of millions of users as a result. Adoption is still the main pain point. CoDi also struggles to bring merchants, consumers, and banks to its platform.

While no total failure, it just hasn't grown exponentially like PIX and largely missed two of its main goals: the number of registered accounts (2019's goal was 18M, only 13M to date) and the number of transfers (2019's goal was 28M, only 4M to date). Cash will remain king in Mexico - at least until Codi really takes off.



# 2019 18,000,000 2022 12,854,584 6,000,000 12,000,000 18,000,000 • Meta de ususrios • Cuentas validadas acumuladas 2019 28,000,000

4,103,423

20,000,000

30,000,000

Operaciones totales acumuladas

10,000,000

Meta de transferencias

2022

#### Codi has largely missed both its main initial targets

# In Colombia and Peru, the private-led initiatives are *more successful*, particularly in the latter, with two growing different solutions

**Colombia**: the country's solution is called Transfiya and was designed by Minka, a Colombian fintech. Transfiya was launched in February 2020 and is a real-time transfer in partnership with ACH Colombia, an institution responsible for bank-to-bank operations in the country.

\_ \_ \_

So far around 7 million transfers with government subsidies were made via Transfiya and there are 14 traditional financial institutions and banks integrated into the system. This has enabled Transfiya's growth and nowadays the system has over 1 million users, besides 4 million transactions registered.

While these numbers are significant, in 2021 total transfers grew only by 20%, a sign that shows that Transfiya is still far from PIX's exponential growth. **Peru**: the country has not just one but two private and exportable payments solutions – Yape, an app by Peru's largest bank, Banco de Crédito del Perú; and PLIN, owned by YellowPepper in partnership with Peruvian banks BBVA, Interbank, and Scotiabank.

Yape started its operations in 2017, having only Banco de Crédito's clients as its customers and offering them an easier way to make P2P payments. Later, in May 2020, when its rival PLIN was launched, all Peruvians were able to use it.

Both solutions seem to be doing just fine and growing in a similar fashion: Yape and PLIN have around 4 to 5 million users each and the race is now aimed at partnerships, merchants' access, and adding financial institutions.

The only clear winner so far is the customer: digital payments and transfers adoption rates in Peru are growing steadily and have reached nearly 50% penetration.

# Latin America: Future of B2B Fintech

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#### Latin America: Future of B2B Fintech

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# **Executive Summary**

#### "Fintech is the gateway drug to venture financing in Latin America"

#### - Brian Requarth, Co-founder & CEO at Latitud

Fintech companies all over the region are booming, driven by a relentless need to produce **financial equality and social impact**. World-class talent in LatAm is producing creative solutions and creating companies that are changing people's lives while solving deep structural problems in the region.

Fintechs are still coming up on top from the ongoing health and economic crisis, which has been reaffirmed by the immense financing volume poured into all kinds of fintechs in 2021. These digital-first companies have made great use of real-time data and technology to better understand their customers' needs and adapt their solutions to their re-evaluated customer segments.

There are a couple of B2B Fintech sectors that stand out and that are driving profound changes in the region; these are the **enablers and often unseen players in the open banking, API, and BaaS space**. As collaborations and partnerships between incumbents and fintech players consolidate, these infrastructure companies will become key in making these alliances as smooth and frictionless as possible. On top of that, **embedded finance** will continue to surge with non-financial players offering payments, lending, and processing solutions to customers, with the aim of becoming a full-stack service provider while reducing churn and increasing their lifetime value.

Throughout this report, we hope to provide a clear picture of the B2B Fintech landscape in Latin America. We discuss our view of some of the trends happening across different verticals, analyzed the reasons for the high influx of capital to the region as well as identified challenges and opportunities certain business models might face.

# **Context Setting**

The way we understand B2B Fintech companies in this report is **two-fold.** On one end, we consider *those companies whose clients are other fintech players* (i.e., API fintechs, payment processors & networks, etc.) and at the other *those whose clients are non-fintech companies* (i.e., SME lending, payroll, etc.) Together, they make up the **B2B Fintech universe.** 



**486 Fintechs** Population: 126M GDP: US\$ 1.22T **Financial Development** Index: 0.40

## **Relevant Milestones** for Fintech B2B



## Thesis

Support for the infrastructure of incumbents (legacy banks and huge ecommerce players). First signs of alternative to traditional banking and information-based platforms (credit scores, comparisons).

## Models

Payment gateway, credit card infrastructure, electronic trading platforms, P2P lending, SME financing, automated investment service.

## *Companies*

VISA Mastercard

LendingClub
credit karma
PayPal

Source: Report from Alter on Business Model Thesis

## **Relevant Milestones For Fintech B2B**

## 2<sup>nd</sup> Milestone

## **Thesis**

Post financial crisis resulted in tighter financial regulations and distrust in banking institutions. Costumers start to look for transferable alternatives for their financial services. This gives rise to transaction based fintechs and the infrastructure to support it.

## Models

Includes payment issuers and processors, C2C money transfer, BNPL, blockchain tech, cryptocurrency and crypto trading platforms.

## *Companies*

Square
stripe
venmo
Klarna.

## **Relevant Milestones For Fintech B2B**



## Thesis

Latest milestone is being led by open banking. Core banking functions in B2C (saving, investment) and B2B (cards, payments) haven been challenged by new business models, aimed at new generation of users. The use of Artificial intelligence (AI) and Machine Learning (ML) have sped up automation and decision making. Blockchain have also expanded.

## Models

Open finance, neobanks, B2B payment platforms, zero commission stock brokerage, fraud prevention, non-prime lending.

## *Companies*

Robinhood 🖉

NU Solution NU PLAID ba/ance

Source: Report from Alter on Business Model Thesis





# Overview: B2B Fintech Deals in 2021

The B2B Fintech funding in Brazil, Mexico, and Colombia represents around 73% of the entire fintech financing volume. It is especially staggering in Colombia, where the total flow of funding in 2021 was US\$ 206M of which 90% went to B2B Fintech-related startups. In Brazil, although only 46% of the total fintechs raising capital went to B2B Fintechs, they represented around 90% of the volume.

All in all, most deals have been financed through equity rounds, but there have been cases of debt financing rounds such as the US\$ 380M round for Meu Tudo. Another deal to highlight was the 40% acquisition of J.P. Morgan of digital challenger C6 for US\$ 2B, that came as a corporate round.

Source: Crunchbase and Pitchbook

# Funding in the region has seen a staggering rise, making 2021 a *record-breaking year...*

Investment in fintech throughout Latin America has seen an unprecedented exponential growth during 2021. Fintechs in the region raised US\$ 138M in 2015 and US\$ 3.5B in 2020, showcasing the substantial rise in investment capital that LatAm has been able to seduce. But 2021 stands apart from other years in terms of growth by reaching US\$ 12.9B in funding throughout the year, with an amazing 269% increase in total funding from 2020. These two semesters have not only seen a raising dollar value of investment but also of the number of deals, with 2021 experiencing an increase of 72% in deal count. There were 132 more deals being executed in 2021 than in the whole of 2020.

Q2 of 2021 was a record-breaking moment with US\$ 6B in funding for fintech companies in the region, followed by US\$ 2.5B in Q3 alone. These numbers by themselves are very impressive, considering that the volume raised in Q2 is almost as large as what the whole market captured in the past 4 years.

The funding in 2021 was spread across stages with 68% of capital flowing to early-stage ventures, 14% to mid-stage, and 12% to late-stage. Early-stage funding has been higher in 2021 than in the past two previous years.



# ...And *there are a few reasons* that could explain such an appetite from investors.

**Brazil** is the largest economy in the region and home to the largest fintechs produced in the ecosystem. Nubank was born there and per CBI Insights report, 6 out of 10 of the largest equity deals made in LatAm were taken by Brazilian startups, among them Mercado Bitcoin, CloudWalk, Unico, and others.

Regulatory rollouts have been helping fintech funding in Brazil and proof of that are the Central Bank's Open Banking initiative and the electronic payment scheme (PIX), which has brought in 105 million registered people. Both these efforts are expected to bring a lot of innovation to the ecosystem in Brazil and help pave the wave for future startups. The Brazilian Central Bank passed a new regulation on Open Banking ("Sistema Financeiro Aberto") in May 2020, which allows for sharing of data and services among financial institutions, payment institutions, and other players licensed under the Central Bank. The last and fourth stage of this roll happened in October 2021.

#### B Bloomberg.com

#### Pix Mobile Payment: How Brazil's Central Bank Launched ...

Pix, a system which allows fast money transfers over smartphones, has become ubiquitous in the 11 months since it was launched by Brazil's... 1 month ago

#### Central Banking

#### Brazil's Pix system used by 62% of population - central bank

Brazil's real-time retail payment system, Pix, reached over 104 million users in the first year since its launch, the country's central bank...

5 days ago





*Mexico* is a significant player in the fintech industry, and it comes just behind Brazil in terms of funding. With the passing of the fintech law and a new regulation around Open Banking, the country has managed to foster a strong environment for the rise of this industry. In terms of funding, US\$ 821.5M was raised between 2015 and 2019, representing 97.9% of Mexico's total venture capital flow. In the first half of 2021, there has been already more than US\$ 1B in funding for fintechs in Mexico.

**Colombia** is the third largest fintech funding benefactor. During the first half of 2021, it raised US\$ 170M, with Addi standing as its flagship in the sector. Colombia has regulation around e-wallets, payment aggregators, and gateways, which fosters the startup community and helps pave the way for new raises. It's still 4 to 5 years behind Brazil or Mexico in terms of fintech regulation, but the country is moving in the right direction. One argument for the slower pace of fintech regulation and innovation in Colombia and other countries comes from the fact that the biggest banks are not international players but rather local banks, like Bancolombia in Colombia and Banco de Crédito del Perú in Peru. In contrast, international banking institutions are the largest players in some other markets, for instance BBVA in Mexico, which has contributed in some shape or form to an increase in collaboration between fintechs and banks.

#### TechCrunch

Mexico's fintech success: How tech is driving the population to ...

The country's fintech law (Ley Fintech) came into effect in 2018 and set the parameters for crowdfunding, cryptocurrencies, and APIs, alongside...



#### FinSMEs

#### Addi Raises \$140M in Series B Extension Funding

Addi, a fintech and digital commerce startup based in Bogota, Colombia, and Sao Paulo, Brazil, raised \$75m in extension Series B funding.

Sep 9, 2021



## Underpenetrated market – Open Banking and API fintechs

platforms such as Belvo and Pomelo are building the infrastructure that will enable future fintechs to offer products and services designed for the unbanked. LatAm has many unmet needs in this regard and presents a big opportunity for startups and investors, that is not seen in more developed economies. There is still a lot of disruption to be made using technology, data, and customer service in the region.

**Nubank** - Nubank has truly elevated the whole ecosystem, and it has been key in luring investors into the region. They have shown global firms such as Softbank, Tiger Capital, and a16z that winners of their size can come out and deliver returns to the whole fund. Nubank has managed to take a two-digit market share in an industry full of incumbents, with a strategy based on customer service and tech. A successful IPO will yield positive signals to VC investors and increase the flow of future capital to the region.

#### TechCrunch

#### Nubank files to go public

This morning Brazilian neobank Nu, better known as Nubank, announced that it has filed to go public. Today its F-1 filing remains private,...

1 month ago



#### TechCrunch

### Why QED, hot on Nubank, is bullish about LatAm fintech

As venture capital totals grow in Latin America, the region is about to see its leading champion go public. Nubank's IPO is coming into...

2 weeks ago



# **The largest deals of** 2021 for B2B Fintech

Payments and lending companies came out strong.

The largest deals for B2B Fintech were mostly led by companies in the lending and payments space. This underscores two things: **1)** the support fintech players have given to SMEs through credit facilities during the economic crisis and **2)** how digitalization of businesses, especially in ecommerce, has skyrocketed along with online payment solutions.

Source: Crunchbase and Pitchbook



*Mexico* 

Konfío + US\$250M

▶ US\$235M

## **M&A activity for B2B Fintech dominates**

With record levels in 2021, the region has seen 74 deals made throughout the year.

## **M&A transaction - Highlights**

**Creditas, the Brazilian lending platform,** acquired insurtech Minuto Seguros to expand its product offering. It has also bought electric motorcycle manufacturer Voltz for US\$ 18.2M and Bcredi to boost its real estate vertical.

**Digital bank Nubank** acquired Olivia, an Al financial assistant that learns spending patterns and recommends purchases.

**BS2 is a digital bank** for companies and individuals incorporated in Brazil, and the acquirer of WEEL, an AI platform that offers financing for SMEs through prepayment of receivables.

**Mexican fintech Konfio** acquired mobile payment provider Sr. Pago, which will strengthen the support the company gives to SMEs.

### **IPO transactions**

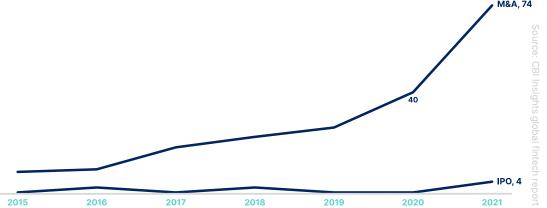
Nubank's IPO at the end of the year raised US\$ 2.6B by selling 289 million shares at a US\$ 48B valuation on its debut. Nubank's current valuation, at US\$ 23B, puts it around 40% of Brazilian bank Itaú's valuation, currently worth US\$ 58B.

dLocal, a cross-border payment platform, raised US\$ 617.65M in a NASDAQ IPO.

## Potential future IPOs in the short to medium-term

Brazilian fintechs Creditas and Ebanx look for an IPO, as well as Mexican fintech Clip.





## *Most active B2B Fintech investors* in LatAm throughout 2021

|     | Investor                | Туре        | Funding Rounds             |                           |                      |                         |                  |           |
|-----|-------------------------|-------------|----------------------------|---------------------------|----------------------|-------------------------|------------------|-----------|
| USA | Y Combinator            | ACCELERATOR | atrato                     | i Mendel<br><b>≪kredi</b> | pogolitop<br>Stintoc | <b>Z1</b>               | 🗲 contasimples   | simetrik  |
| BR  | KASZEK                  | vc          | belvo.<br>Skushki          | <b>₿itso</b><br>Fintual   | CLARA<br>            | Contabilizei.<br>JUSTOS | C cora<br>Konfío | 🔟 warren  |
| USA | <b>QED</b><br>INVESTORS | vc          | <b>₿ Bitso</b><br>• minu • | 🚧 betterfly               | Cora<br>milo         | 🕖 tribal<br>🕕 warren    | ⊞ наѕн           | Konfío    |
| USA | SoftBank                | vc          | C creditas<br>Кизнкі       | Konfío <sup>°</sup>       | Contabilizei.        | 🔀 betterfly             | Clip             | l Hashdex |
| BR  | M monashees+            | vc          | Addi<br>simetrik∃          | CLARA                     | fintoc               | flash                   | Open Co          | 🏓 pomelo  |
| BR  | DOMO                    | vc          | 88i Superatore             | credere                   | ContaÁgil 👗          | fin <mark></mark> ⊀     | 83               | 🖓 mutuus  |
| USA | FJ LABS                 | vc          | bxblue                     | +minu+                    | munoi                | be <mark>lv</mark> o.   | pomelo           | [ Treinta |
| USA | VALOR                   | vc          | <b>U</b> Bitso             | Cloudwalk                 | 树 betterfly          | 🕸 Hashdex               |                  |           |

## *Major LatAm-based investors* for B2B Fintech

|        | Investor       | AUM     | # Investments Made | Latest Investments        |
|--------|----------------|---------|--------------------|---------------------------|
| BR     | KASZEK         | \$2.03B | 167                | Konfío <sup>®</sup> Clara |
| BR     | (A) monashees+ | \$715M  | 190                | 🎾 pomelo 🛛 🔒 Addi         |
| BR/USA | VALOR          | \$302M  | 130                | () cloudwalk              |
| BR     | Redpoint       | \$215M  | 94                 | opismo                    |
| мх     | ΛLLVP          | \$200M  | 64                 | REW                       |
| мх     | 🕖 IGNIA        | \$198M  | 61                 | <b>Undosires</b> Sr. Pago |
| BR     | CANARY         | \$75M   | 130                | marvın.                   |
| BR     | ΑΤLΑΝΤΙΟΟ      | \$67M   | 8                  |                           |
| BR     | VOX            | \$27M   | 30                 | Celcoin                   |

# **Open Banking platforms or API Fintechs**

Open Banking is the concept under which financial institutions can share information from customers with third parties via API, in order to increase innovation, expand user experience, reduce transaction times, and optimize for lower costs. Open Banking aims at bridging the financial inclusion gap in LatAm and providing access to banking services while fostering financial inclusion.

**In terms of regulation:** PSD2 regulation for Open Banking,, initially implemented in the UK, has been gradually adopted in LatAm with countries such as Mexico having passed a similar law ("ley fintech") to regulate Open Banking. Fintech through Open Banking is in a unique position to increase the market size by generating greater financial inclusion.

Their business model: API fintechs monetize through a cost per call or sharing agreements with banks and financial institutions.

#### Promising startups in the space

- Belvo A fintech whose core product is an API that connects users with their banking, financial, and fiscal data.
- Quanto A single fully transactional API for all financial service providers.

• **Prometeo** – API platform for LatAm. It is the largest player in this field, with the highest number of connections. Has relations with 44 financial institutions and operates in 9 regional markets.

• Nufi – Mexican fintech that empowers companies to build financial products in Latin America.

#### **Challenges and opportunities**

• Foreign exchange markets could be where API is deployed next.

• Credit and microcredit fintechs are increasingly relying on API solutions to bring higher efficiencies and speed in loan deployment to their customers.

• Citi Banamex, Mexico's second-largest bank, announced it is building new APIs to connect fintechs in real-time, giving them access to relevant commercial information.

# Banking as a Service (BaaS) or Embedded finance

BaaS is all about taking bank functionality, compartmentalizing it, and then individually offering each function to non-financial companies. Users connect through APIs and BaaS players integrate with them so the non-financial companies can offer deposits, money transfers, payments, lending, currency exchange, and many other products. This possibility allows for a higher lifetime value and increased retention from the end users.

**Their business model:** These companies operate under a white-label banking platform or core banking software where they charge license fees and transactional fees.

### Promising startups in the space

• Swap – São Paulo-based BaaS that empowers companies to offer fintech-like products.

• **Dock** – Brazilian BaaS that provides white-label solutions to cover payments, digital/physical cards, and accounts to non-bank players.

• **Pomelo** – Provides fintech infrastructure and financial services for fintechs and digital companies.

## **Challenges and opportunities**

The founders of the companies interviewed for this report agreed that fintech-like services will tend to increase in the region and across industries and this is where BaaS solutions will make a strong impact. There are around 69 fintechs who currently offer fintech-as-a-service in LatAm.



The problem is called credit gap for SMEs in LatAm. In a nutshell, banks do not know how to assess risks on SMEs, thus charging high interest rates and passing on credit opportunities for businesses. This created the perfect breeding ground for credit fintechs in the region.

Credit fintechs offer higher transparency on rates and prices, which allows them to build trust with SMEs. Additionally, credit fintechs offer faster and more flexible solutions to SMEs, which are always in constant need of liquidity. Lack of legacy infrastructure (bank branches) and capital requirements (minimum reserves) for these lenders have provided a great competitive advantage over traditional banks.

Their business model: monetize primarily by originating loans and charging origination and related securitization fees.

#### **Promising startups in the space**

- Credijusto Provides an online lending platform designed to offer easy, reliable, and transparent credit for SMEs.
- R2 Capital Offers financing for SMEs working capital needs. Joined Y Combinator in in Winter 2021.
- Dinie Flexible, convenient, and easy to use financing solutions for SMEs embedded into digital platforms.

### **Challenges and opportunities**

• Increasingly competitive landscape in which 1 out of 5 fintechs operates in the lending sector. This vertical, along with payments, has the largest regional presence.

• Increased competition demands greater sophistication in the product offering, and single-product companies operating in this space will need to diversify to stay ahead.

The convergence between payments and credit is an interesting topic for lending fintechs. Payment terminals offer transactional data, which facilitates the analysis and collection of loans. Partnerships between lending, payment processors, and POS (Point of Sale) should be key moving forward.

# **Point-of-sale (POS) financing**

Some fintechs are solemnly focused on POS financing, like Addi and Flexico, while others offer the same service as part of a greater product offering, like Rebel and Kueski. POS financings are structured a little bit differently than lending products, as these come with an installment plan that makes the cost to the borrower more transparent than credit cards, for instance.

For merchants, these solutions translates into higher conversion rates, while customers enjoy the simplicity and transparency of each financing transaction.

**Their business model:** they can generate revenue via two streams: 1) Initially charge merchants a percentage fee on each transaction or a flat fee per transaction; 2) then also charge the end customer an interest rate on the "loan" based on credit score and duration of payment, though most players don't monetize from their customers if they pay on time.

#### **Promising startups in the space**

- Addi Provides credit and banking solutions through a BNPL (Buy Now Pay Later) business model.
- Kueski With KueskiPay, the fintech offers a BNPL solution for merchants and end users.
- Atrato It's a BNPL that integrates at the checkout site for shops, both online physically.

### **Challenges and opportunities**

• Covid-19 has accelerated e-commerce by 10 years globally, and LatAm is no exception, with a projected CAGR of 15% by the end of 2024. This generates an immense opportunity for POS financing players.

• The higher the e-commerce transactions, the higher the POS financing opportunity. According to dLocal, 54% of e-commerce spending in 2020 in Brazil was made through an installment plan offered by the merchant. The partnership between dLocal and Dinie, where the latter will be fully integrated with dLocal to offer pay-later solutions to SMEs, is a clear case of to where the BNPL vertical is moving (B2B).

## **Payment Processors and Networks**

Payment processors sit between the payment gateway and the issuer/acquiring bank. They notify the issuer bank when an online purchase occurs at a merchant's website and makes sure to settle the operation by crediting the merchant's account after the sale.

Payment gateways are the middleman between the merchant and their customers. They provide security for the transaction while sending credit card information to the payment processor and back to the customer. This is the interface the end customer sees when they enter the payment site during the last stretch of an online purchase.

POS systems are a combination of hardware and software that allow users and merchants to complete a buying transaction. Cashless methods such as credit and debit cards need a POS system to process the payment and close the sale, whether in person or online.

Their business model: monetize by taking a fee on the total payment volume that is processed. POS systems generate revenue via sales of their hardware and software.

#### Promising startups in the space (Payment processor)

- Kushki Digital payment platform based out of Ecuador.
- Epayco Offers services as a payment gateway and aggregator, headquartered in Colombia.
- Ebanx Offers end-to-end payment solutions across the entire e-commerce transaction flow.

#### Promising startups in the space (POS hardware)

- **Zoop** POS hardware solutions for merchants and payment gateway.
- Clip Terminal for SMEs to accept all electronic payment transactions.
- **Billpocket** Merchant service aggregator and mobile payments company.

#### **Challenges and opportunities**

• The payment landscape in the region is highly fragmented, due to a lack of standardization of local customs and regulations. Pushing for greater connectivity infrastructure will be key for customers to make speedy payments in different countries across the region.

▶ 5G technology is transforming payments through high-speed and always-on connection devices, where merchants and gig workers can unlock more information about their markets, products, and customers. As the infrastructure opens its way through the region, local players should be prepared for the opportunities ahead.

## Accounting, Finance, and Procurement

Companies offering accounting, finance, and management solutions for SMEs operate as cloud-based applications that link to a firm's finances to deliver back-office solutions. The goal is to increase productivity in their finance or back-office teams by allowing them to digitize a lot of the previous repetitive and operational tasks.

FP&A SaaS solutions offer easy reporting and analysis to SMEs' finance departments and allow for faster decision-making at the management level. Services can also expand to accounting, payroll, and electronic invoicing, allowing small businesses to be more agile, profitable, and efficient in their day-to-day tasks.

Their business model: they generate revenue via a SaaS model where they charge subscription fees to their customers.

#### **Promising startups in the space**

- **ContaAzul** Brazilian-based platform for SMEs that helps them to organize financial routines in one place.
- Nubox Software for accounting, payroll, and electronic invoice services for accountants and SMEs.
- Treinta Digital ledger for SMEs in LatAm.

### **Challenges and opportunities**

This type of companies will eventually run the risk of becoming a commoditized solution if they don't expand their stack and move towards embedded finance. Embedded procurement is a possibility that is gaining traction by allowing merchants to place orders in the same platform where they manage their accounting, payroll, and so on, which will be a competitive advantage and add a new and lucrative revenue opportunity.

# **Financial data platforms for** AML and KYC (Anti-fraud)

With the rise of fintech and online transactions, AML (Anti-money laundering) and KYC (Know Your Customer) procedures became imperative to detect fraud around financial operations. KYC is part of AML, which is a regulatory requirement for fintech companies and financial institutions to validate customers' identity documents.

Companies in this space use machine learning and AI to automate onboarding processes via face match, background check, risk analysis, ID validation, and automated optical character recognition, to help clients avoid fraud.

High costs for the implementation of AML and KYC procedures mean budgetary constraints for SMEs and rising fintechs, so external providers are tasked with easing the pressure with flexible API-based software.

Their business model: monetization comes primarily in the form of SaaS and on-premise offerings.

#### **Promising startups in the space**

• Idwall – A Brazilian fintech that develops software to help SMEs in the customer credentialing process.

### **Challenges and opportunities**

Regulations affecting the financial service industry are complex and in constant change due to market conditions or geography. The technology behind validation, governance, and supervision that these types of fintechs currently use will come with continuous evolution, which can be costly to develop.

# **Payroll and Benefits**

Few verticals in fintech tackle financial inclusion so directly as pay-on-demand startups, which offer employees the possibility to advance their already earned salaries at any moment. These companies aim to reduce the employee liquidity gap between paychecks and ease people's financial stress, as they avoid expensive loans.

The business model for Earned Waged Access (EWA) companies is mostly B2B and is offered to enterprises as a benefit for their employees and a way to motivate and retain talent.

Their Business Model: They generate revenue by charging employees a fixed or variable amount for every dollar withdrawn.

#### Promising startups in the space

- Minu The Mexico-based fintech aims to revolutionize the financial health of Mexican employees.
- Xerpay EWA solution fintech with headquarters in Brazil.
- Castor A Mexico-based EWA fintech with B2B and B2C solutions.

### **Challenges and opportunities**

• Successful payroll fintechs should understand the liquidity needs of the region as they expand, and know well the differences between wage cycles in each country. Algorithms should be flexible enough to accommodate their technology to the specifics of each market.

• The lack of a centralized payment software provider to distribute payments for enterprises stands as a challenge for fintechs. The decentralized nature of this system pushes EWA fintechs to find ways to circumvent or navigate the fragmented landscape while they aim to offer a frictionless solution to their clients.

**Paytech** 



HQ: Mexico City, Mexico Valuation to date: US\$ 2B

Funding to date: US\$ 453.3M

**Business Model:** System for electronic payments to businesses

*Founders:* Adolfo Babatz & Vilash Poovala

Stage: Series D

# d·local

HQ: Montevideo, Uruguay Valuation to date: US\$ 6.5B

Funding to date: US\$ 357M

Business Model: Cross-border payment processor for merchants in emerging markets

*Founders:* Sebastián Kanovich & Sergio Fogel

Stage: Public Company



 HQ: São Paulo, Brazil
 Valuation to date: US\$ 4.88
 Funding to date: US\$ 1.98
 Business Model: Online paymentbased e-commerce service for commercial operations

Founders: Luis Frias

Stage: Public Company

## **Digital Banks**

NU

HQ: São Paulo, Brazil Valuation to date: US\$ 23B Funding to date: US\$ 3.9B Business Model: Digital bank Founders: Cristina Junqueira, David Vélez, and Edward Wible Stage: Public Company



HQ: São Paulo, Brazil Valuation to date: unknown Funding to date: US\$ 2.3B Business Model: Digital bank Founders: Marcelo Kalim Stage: Series E / Corporate Round



Lending

## Konfío

H2: Mexico City, Mexico

Valuation to date: US\$ 1.3B

Funding to date: US\$ 706M

**Business Model:** Lending platform, payments, and software tools for SMEs

*Founders:* Francisco Padilla and David Arana

Stage: Series E



(Currently known as Covalto)

H2: Mexico City, Mexico

Valuation to date: unknown

Funding to date: US\$ 521.3M

Business Model: Lending platform for SMEs

*Founders:* David Poritz and Allan Pascal

Stage: Growth



HQ: São Paulo, Brazil Valuation to date: US\$ 4.8B Funding to date: US\$ 1.1B Business Model: Lending platform for retail and corporates Founders: Sergio Furio Stage: Series F

Infrastructure



HQ: São Paulo, Brazil Valuation to date: unknown Funding to date: US\$ 56M Business Model: API Fintech Founders: Pablo Viguera and Uri Tintore

Stage: Series A



H2: Buenos Aires, Argentina Valuation to date: unknown

Funding to date: US\$ 60M

**Business Model:** Fintech infrastructure and financial services

*Founders:* Gaston Irigoyen, Juan Fantoni, and Hernan Corral

Stage: Series A

X Dock

HQ: São Paulo, Brazil Valuation to date: US\$ 1.5B Funding to date: US\$ 280M

**Business Model:** Financial technology that integrates card issuing and core banking services

*Founders:* Fred Amaral and Diogo Frenkel

Stage: Private Equity



# **Global Trends**



 Payment processing

 B2B payment solutions Alternative

Alternative Lending

Revenue-based
 Financing

 B2B Buy Now Pay Later SME

Software Tools

 Expense Management, Accounting, and Procurement Open Banking

**1** 

Infrastructure

API-based
 banking software



Payroll & Benefits

 Advanced salaries and reward programs

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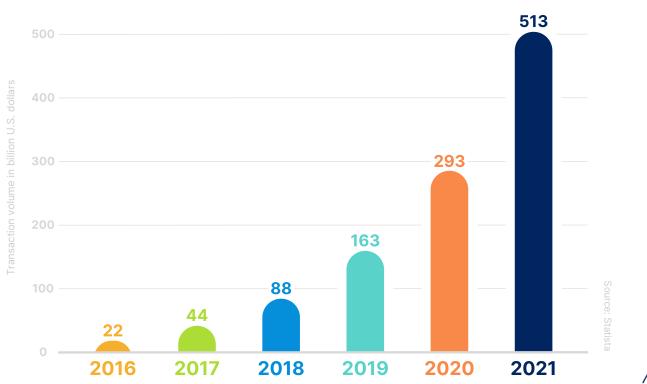
# Payments → Payment processing

At the intersection between software and payments lie new opportunities for fintech players.

## Payment facilitators (PF) are bridging the gap between software solutions and payment capabilities.

These work as a white-label solution that embeds into the software and is delivered via APIs.

Payment facilitators processed US\$ 929B billion in gross payment volume, which represents 6% of total global transactions. **Some expect PF gross payment volume to reach US\$ 2T by 2025.**  Transaction volume from payment facilitators
 Transaction volume by payment facilitators has seen a staggering worldwide growth from 2016 to 2021



Payments Payment processing

## ➡ Deal Activity



**S**FINIX



**US\$ 70M total funding** 

**US\$ 126M total funding** 

US\$ 24.2M total funding

This business model allows Independent Software Vendors (ISV) to accept, manage, and monetize payments in-house, rather than refer users to third-party providers such as PayPal.

## Benefits are:

Merchants: won't need to source a payment and software provider separately and will be able to offer a better customer experience, as services won't be spread out across different suppliers.

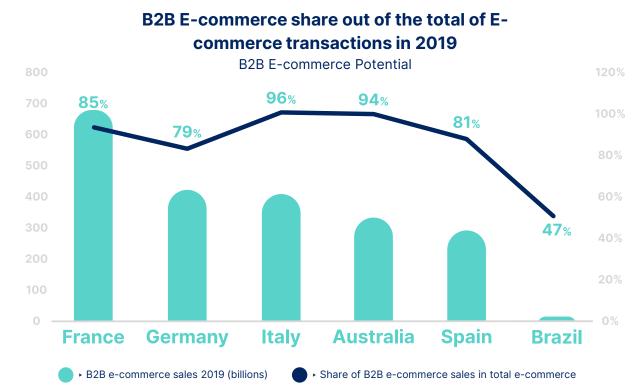
ISV: For ISVs, they will be able to diversify their revenue stream by owning the whole payment processing experience. Ultimately the ISVs will be able to capitalize on the huge payment market through the Payment Facilitator model.

# Payments → B2B Payment solutions

Expected growth of B2B E-commerce transactions in LatAm means greater opportunities for B2B Payment. Platforms to follow suit.

**B2B Payment solutions are a growing need for the digitization of of business payments**, by advancing how B2B players are performing their transactions.

The global B2B payments market was worth US\$ 870B in 2020 and is expected to reach US\$ 1.19T by 2028, according to Allied Market Research.



Brazil, a country whose GDP is 12.5% larger than Spain's, has 40x less E-commerce transactions and 1.7x lower B2B E-commerce penetration. As Latin America's largest E-commerce market (~30% Mkt share), Brazil has huge upside potential

Payments B2B Payment solutions

## → Deal Activity

ba/ance

higo

US\$ 86.5M total funding

US\$ 26.3M total funding

Payments and purchasing will tend to increasingly happen online, which will open an interesting opportunity for businesses to offer seamless experiences to their customers on their buying journey. Customization and personalization of the buying and paying process would be key for businesses wanting to offer a consumer-like experience to their buyers.

## Benefits are:

• Platforms will offer a variety of payment methods which will include ACH, credit cards, or wire tranfers.

• Platforms will also be able to underwrite the transaction financing directly from their checkout, so companies can offer better terms to their suppliers.

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## Alternative Lending → Revenue-based financing

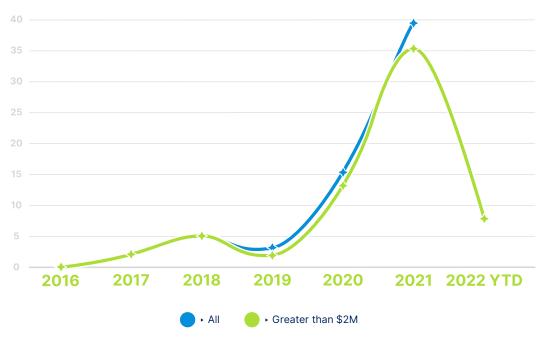
With availability of data comes easier credit decisions and as this becomes more accessible, revenue-based financing players will thrive.

**Revenue-based financing fintechs have had a good success in Europe and the United States.** This non-dilutive finance is designed to provide liquidity for working capital, marketing, and other overheads that do not require a large volume of cash upfront.

This allows founders to cover their financing needs without giving away equity or dealing with restrictive covenants. They service the debt through a flexible schedule that adapts to the cyclicality of their business.

The global revenue-based financing market was worth **US\$ 901M in** 2019 and is expected to reach US\$ 42B by 2027, growing at a CAGR of 61.8%.





Revenue-based financing deals have seen an incredible increase in 2021, with a total of US\$ 2B raised from companies in this space during 2021. The number of deals in 2021 were 2.6x those of 2020.

Alternative Lending Revenue-based financing

→ Deal Activity

## pipe

⇒ capchase

uncapped

US\$ 323.1M total funding

US\$ 949.6M total funding



**Benefits are:** 

• Cheaper source of financing compared to venture capital or bank loans.

 Flexible payment schedule tailored to each business operating as an e-commerce os SaaS.

## Alternative Lending → B2B Buy Now Pay Later

Still a relatively untapped market, B2B BNPL means opportunity for new players to join in. Partnerships like dLocal and Dinie reaffirms our views on this.

The success of B2C Buy Now Pay Later (BNPL) has given food for thought for other players to incorporate BNPL solutions for B2B segments. **B2B** transactions make up more than twice the volume for B2C and there some market conditions that make this business model specially interesting.

Success from BNPL for B2C has been huge, and digital solutions have streamlined lending processes while ovid-19 has put pressure on SMEs' cash flow. With rising B2B e-commerce transactions, we should expect BNPL solutions on this segment to grow.

SMEs in general, but specially in LatAm, suffer from a huge financing gap worth close to US\$ 1.2T.

#### Share of e-commerce transactions made using Buy Now, Pay Later services



The huge success of BNPL for B2C ecommerce is set to trickle down into the B2B space, prompting innovation and competition

Alternative Lending B2B Buy Now Pay Later

## ➡ Deal Activity

BILLIE Euros 129.7M total funding **B** behalf \$462M total funding

## Benefits are:

 Increased flexibility as companies have more specific financial needs than individuals.

• Eases pressure on cash flow and avoids overloading other financing vehicles.

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## SME Software Tools → Expense Management, Accounting, and Procurement

A staggering ~ 17% SME financing gap in LatAm means business for fintechs that offer corporate cards. Add up expense and FP&A software solutions and you've built a winning business model.

#### Corporate cards and expense management fintechs tailored to SMEs have picked up momentum in the past year.

These fintechs offer SMEs the possibility of fast sign-up, digital cards, higher credit limits, and integration with accounting and spend management software. This opportunity is especially interesting for LatAm players since the region has the second-highest financial gap for SMEs.

**The expense management software market was worth US\$ 5.4T in 2020** and is expected to reach US\$ 13.4T by 2026, growing at a CAGR of 15.9%

SME Software Tools **Expense Management, Accounting, and Procurement** 

## → Deal Activity

**Benefits are:** 

allowing SMEs to digitize and centralize all their accounting and spending processes.

Creates operational efficiencies by

### CLARA

US\$ 143.4M total funding

tribal

**US\$ 1.5B total funding** 

**Brex** 

ramp 🖌

US\$ 258.5M total funding

**US\$ 1.4B total funding** 

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**Fintechs offering back-office-as-a-service and FP&A** solutions are enabling startups and digital companies to outsource finance, legal, and other functions while offering affordable monthly subscriptions.

SME Software Tools Expense Management, Accounting, and Procurement

## ➡ Deal Activity

## •-• Abacum

US\$ 32M total funding

📥 BHub

US\$ 32.6M total funding

### **Benefits are:**

 Increase productivity by decreasing manual work time and automating a lot of the analog processes within the different business departments at SMEs.

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## 

Embedded finance will be getting even more attention as nonfinancial players incorporate fintech-like capabilities to improve their unit economics and retention.

Infrastructure fintechs are starting to become a real trend globally and specially in LatAm. Fintech-as-a-service and API fintechs are leveling the playing field for digital and non-digital companies to offer fintech-like products as they unlock multiple markets almost simultaneously. Fintechs, in general, continue to diversify their products and services and moving towards a full-stack financial solutions with time. To make this happen, they need back-end solutions that will enable this. This is where infrastructure fintechs come into play.

Global banking-as-a-service (BaaS) generated US\$ 2.41B in 2020 and is expected to reach US\$ 11.34B by 2030, with a CAGR of 17.1% from 2021 to 2030.

Analysis of preferences in using non-financial services companies as providers of financial services products



EY found that 68% of consumers are willing to consider a financial services product offered by a non-financial services company. Retail and Telco stand out as the industries that consumers are most open to, as fintech-like service providers.

**Open Banking Infrastructure** 

→ Deal Activity

pomelo

US\$ 60M total funding

### Benefits are:

• For non-fintech and fintech players alike, diversifying offerings allows them to capture new revenue streams and, in many cases, build loyalty with their customers.

• The lack of standardized Open Banking regulation in the region is a challenge for fintech players trying to scale up. Infrastructure fintechs like Pomelo provide a sort of regulation-as-a-service solution.

Embedded finance will *expand in the region*. Nonfinancial players, be it gig economy, marketplaces, and so on, will incorporate *financial solutions to their offering*"

— Juan Fantoni, Pomelo



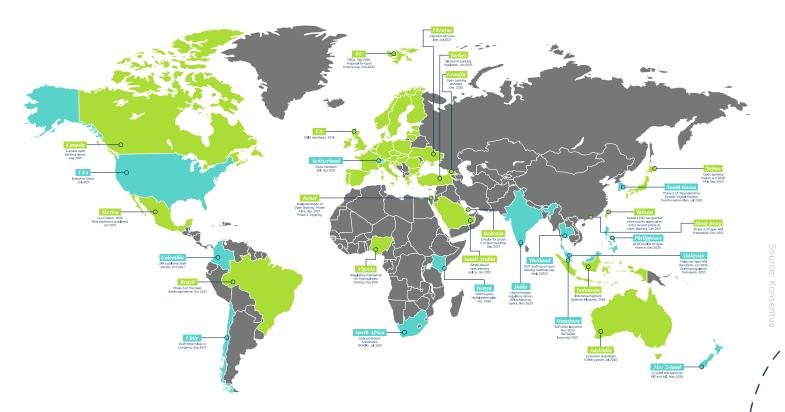
## Open Banking → API-based banking software

Open Banking is the revolution we were hoping for to rethink how financial services should work for all.

API-based banking software continues to mature as the demand for digital experiences grows even larger. PSD2 regulation in the UK, "fintech law" in Mexico, and some other initiatives happening across different geographies have incentivized the data sharing and connectivity of Open Banking between incumbents, fintechs, and many other players.

Open Banking was worth US\$ 7.2B in 2018 and is expected to reach US\$ 43T by 2026, at a CAGR of 24.4%

#### The world of Open Banking



*Open Banking API-based banking software* 

➡ Deal Activity





Working toward the digital business of tomorrow

US\$ 56M total funding

### **Benefit is:**

• Open Banking is all about the end customer, and an increased connectivity made possible through APIs will only allow people to have richer experiences within the financial system.

For Latin America to be able to achieve that financial future that we all want with lower rates of unbanked population and higher penetration of financial services, an *alternative infrastructure is needed. Open Banking is part of that*"

— Ximena Aleman, Prometeo



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With an increase in connectivity powered by Open Banking, two key "retention" outcomes occur. Employees with on-demand payroll and customers with greater benefits just stick around longer.

**Installment payment players are showing up across different verticals, and payroll is one that has gathered very interesting traction.** Payment platforms offer credit cards and salaries advancements solutions to employees. These offerings are also aimed at the unbanked or underbanked populations, which through their employers have access to different financial services like never before.

## → Deal Activity

clair

US\$ 19.6M total funding

US\$ 39.2M total funding

Hourly

US\$ 14.5M total funding

**Payflow** 



US\$ 1.8M total funding

### **Benefits are:**

• Greater financial inclusion for people who have been left out from the system, thus creating positive social and economic impact along the way.

 Happier employees are loyal employees, and by allowing these kinds of solutions, companies retain and motivate talent.

With an increase in connectivity powered by Open Banking, two key "retention" outcomes occur. Employees with on-demand payroll and customers with greater benefits just stick around longer.

Loyalty programs that help retain and reward customers have existed almost forever. But this time is different, since connectivity through APIs, enabled by Open Banking, have allowed fintechs to design specific reward programs for brands that will help them build better and deeper relationships with their customer.

## → Deal Activity

REW🔀RTH

US\$ 7.2M total funding

US\$ 52M total funding

## Benefits are:

Increased Lifetime Value (LTV) from customers.

Fintechs and merchants want to understand their customer better to offer *more personalized products and services* that will *increase sales conversion and sustain retention*"

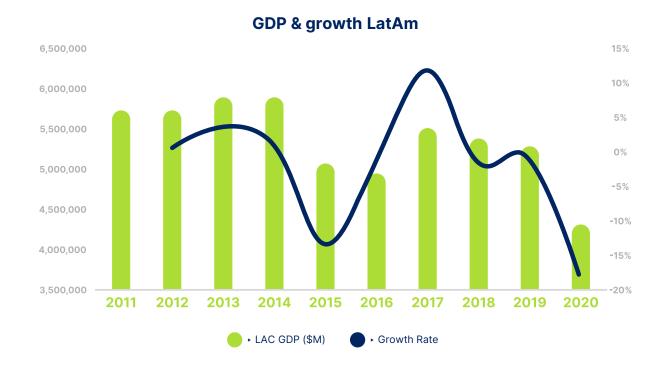
— Raphael Kappeler, Reworth





## **Economic context**

There has been an uneven GDP (Gross Domestic Product) growth in the region when measured in USD. However, when adjusted for PPP (Purchasing Power Parity), we see a steady and overall economic growth in the past 10 years.





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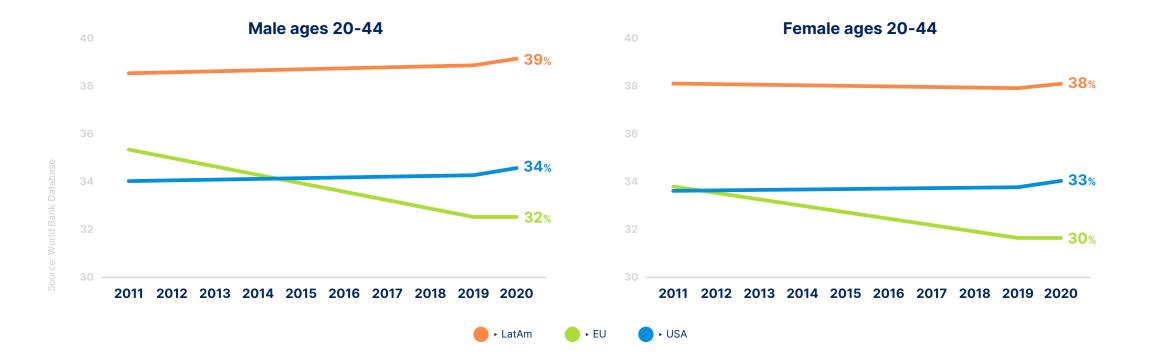


Source: World Bank Database

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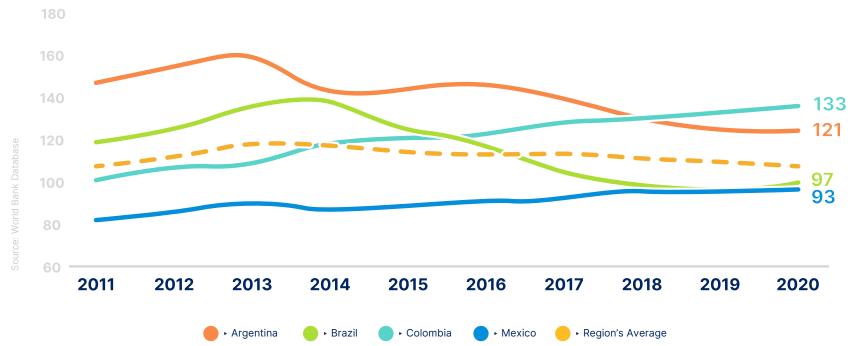
Sustained young population

Youth of population is a decisive factor on early-stage technology adoption, and from what we can see in the region, there is still a tendency of rising younger population. **These generations will have a strong impact on mobile and internet adoption and, with this, further usage of fintech products** – whether to make online payments and money transfers or to drive B2B solutions at their workplace. We should expect this trend to sustain going forward, specially in LatAm, where younger people represent close to 40% of overall population, well above more developed regions.



Mobile penetration per 100 people

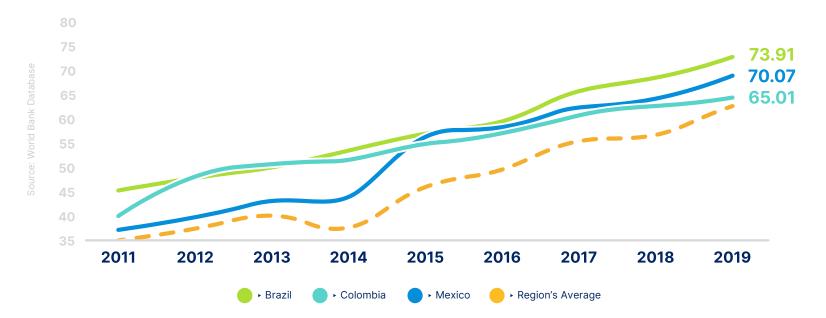
Mobile penetration for the four largest economies in the region remains well above 80 mobile devices per one hundred people. Special attention to Colombia and Argentina which, despite decline for the latter, remain well above most of the region's average.



Mobile penetration per 100 people

Internet penetration

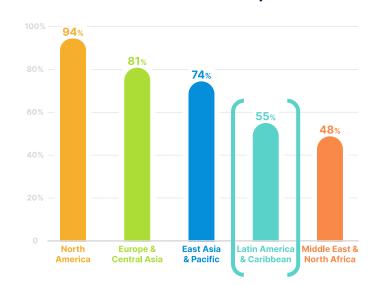
Internet penetration is increasing across the region, with the major economic players all showing positive signs of internet adoption. Brazil and Mexico, the two leading economies, show a +70% usage, whereas countries like Colombia are slowly catching up. LatAm is gradually digitizing and setting up the field for an increase in digital solutions.



Internet penetration (% of population)

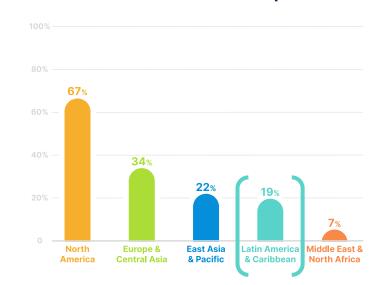
Opportunities ahead for financial tech companies to challenge the status quo

Incumbent banks have long controlled the banking sector in countries such as Mexico, Brazil, and Colombia, where they represent between 70% and 85% of all loans, deposits, and overall banking. The high concentration of players has shielded the industry from competition, resulting in a more concentrated market than in developed economies. **This has led to less innovation, higher fees, and a more limited selection of products and services than what goes on in more open markets.**



Account ownership

_ _



Credit card ownership

East Asia

& Pacific

Latin America

& Caribbean

North

America

Europe &

Central Asia

Debit card ownership

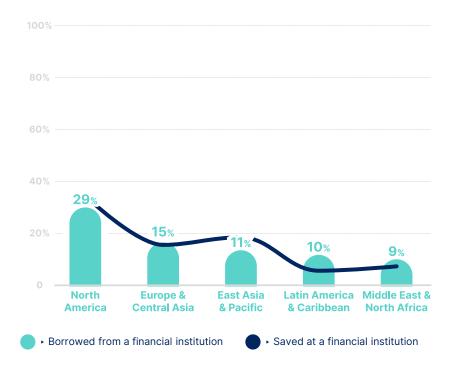


Middle East &

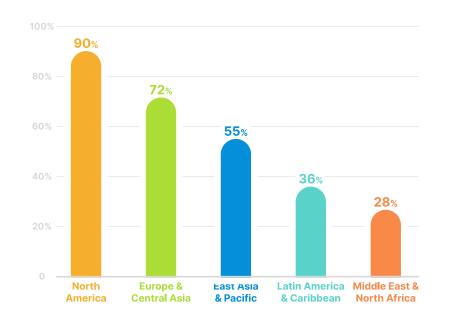
North Africa

The high cost to serve from big banks has led them to offer high-margin products and exclude large parts of the population from the banking system.

Lack of trust, poor customer service, and information asymmetry among the before-mentioned factors contribute greatly to low adoption of the traditional financial solutions offered by incumbents. This creates the perfect breeding ground for fintech.



Borrowed vs saved



Digital payments in the last year

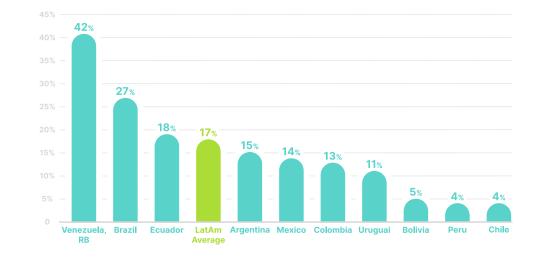
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The huge financing gap for SMEs is evident

The International Monetary Fund (IFC) estimates a count of 65 million firms, of which 40% were domiciled in developing countries. These companies have a US\$ 5.2T unmet financing need, from which LatAm is placed second, with a US\$ 1.031T funding gap as of 2018. The potential total demand for SME financing calculated by the IFC was of US\$ 1.391T in 2018, which is close to 20% of the whole region's GDP.

Panama Brazil Latin Guatemala Colombia Bolivia Mexico Peru Ecuador Costa Rica Dominican Argentina America & Republic Caribbean Does not need credit Well served Unserved Underserved

MSME access to credit, selected LAC countries (2011)



MSME Finance gap in 2018 (% of GDP)

Source: IFC data bank and Oliver Wayman "The Fintech Revolution" report

We can say that there are only opportunities for **B2B** Fintech ahead

Connectivity

More than 498 million people or 75% of the population in LatAm are now connected to the internet. LatAm has had one of the fastest growth rates of internet penetration in the world in the last 21 years with 2,658% growth, only second to the MENA region. LatAm has one of the highest fixed broadband subscribers, only beaten by East Asia. As internet connectivity improves and better infrastructure is developed, these numbers only tend to grow. Cell phone usage is a key determinant for the expected growth of financial services in the region: as more commercial transactions move online, users will be able to receive and send more payments via their mobile devices.

E-commerce & Payments

E-commerce and electronic payments bring important sources of information. As these tend to increase, more transactional data will be captured, allowing SME lending fintechs and even banks to determine more accurately the credit capacity of each borrower. This will naturally decrease the cost to borrow for SMEs and improve risk management for lenders.

Infrastructure

The financial infrastructure in the region has seen very relevant growth. New players are coming into the market to offer API infrastructure and banking-as-a-service functionalities, to enable non-financial players (think Rappi and Cabify) to offer bank-like products. To do this, they are completely redefining an outdated infrastructure platform that has only served legacy players for many years. This is very important for the rise of embedded finance in the region and is truly what is going to impact the lives of people the most.

Latin America: Future of E-commerce

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Latin America: Future of E-commerce

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- Fintech E-commerce Enablers
- Logistics Providers

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- Cross-border e-commerce is becoming increasingly more relevant
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- From competitive markets to high inflations and currency devaluations
- From using trusted payment methods to obstacles to international expansion

Executive Summary (1/11)



Latin America's US\$ 100B+ e-commerce market is **growing rapidly**, but still **far behind developed markets**. The region presents huge opportunities, as it is home to a **large population of young consumers** and has reached a **high level of internet penetration** comparable to developed markets.



E-commerce has **constant innovations shaping the future of the industry**, such as omnichannel strategies, artificial intelligence, customer loyalty programs, VoiceCommerce, customizations, and the personal shopper feature.



Key trends such as mobile-first, digitalization of payments, acceleration of cross-border ecommerce, growth of digital goods, and the emergence of social commerce and loyalty as a currency are **driving growth in the industry**.

Executive Summary (п/п)



This report organizes the e-commerce ecosystem into **6 different verticals**: (i) Online Merchants, (ii) Marketplaces, (iii) Aggregators, (iv) Technology Enablers, (v) Fintech E-commerce Enablers, and (vi) Logistics Providers.



E-commerce players **still face complex challenges** in the e-commerce industry, such as required local expertise to understand unique complexities, logistical challenges, high inflation and currency devaluation, financing and payment challenges, and difficulties to expand to new countries.

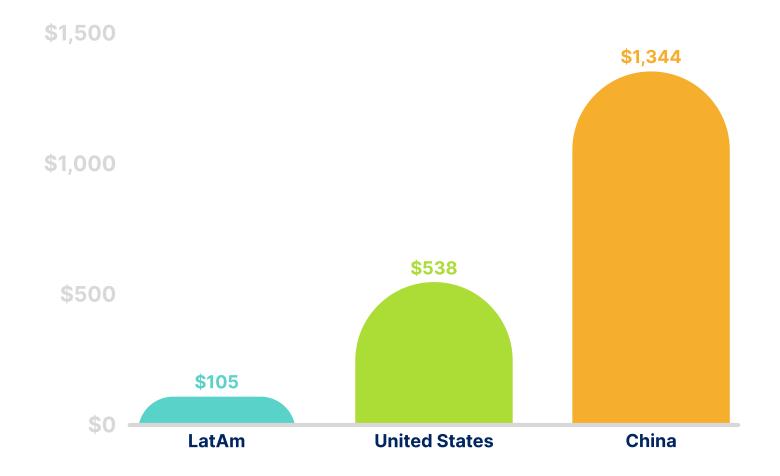


Investment in Latin American e-commerce **boomed** and is expected to continue as **there's still plenty of space** for new players and solutions.

Context Setting

LatAm's e-commerce versus the world

The LatAm e-commerce market is still only 19% of the size of the US market (US\$ 538B) and 8% of the Chinese market (US\$ 1,344B)



LatAm's e-commerce projections

While still far behind developed markets, the US\$ 100+B e-commerce market in Latin America is growing rapidly

Despite high growth, founders agree that there's **still plenty of space** for multiple players within the same vertical.

Covid-19 helped reshape growth for some categories. Among the **most favored** we have travel, fitness, and baby care.

Spikes in venture capital flow will further drive the growth of e-commerce in the near future.



Morgan Stanley, The Rise of the E-Commerce Ecosystem 2021; Statista, eCommerce Report 2021

LatAm's e-commerce projections

Fast facts

Market data						
	2021 e-com sales as % commerce	2021 m-com sales as % e-com	2021* - 2025** e-com CAGR	2021* - 2025** POS CAGR	2025 e-com sales as %** commerce	2025 m-com sales as %** e- com
<i>Colombia</i>	6%	54%	14%	8%	8%	62%
Mexico	6%	56%	17%	6%	9%	65%
Brazil	5%	57%	18%	9%	7%	65%
Argentina	15%	55%	26%	9%	23%	64%
Chile	8%	50%	18%	8%	11%	59%

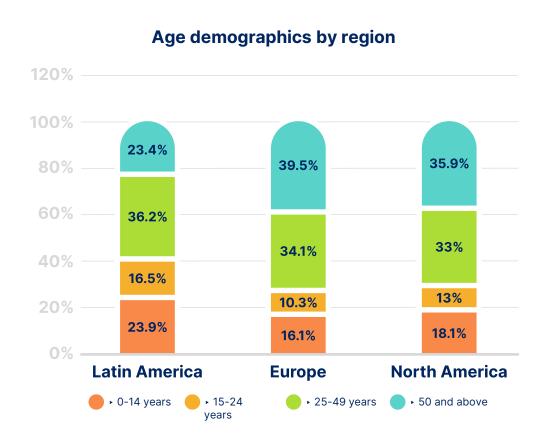
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Latin America represents a *great opportunity for e-commerce*

The region is home to a **large population of young consumers** and has reached a high level of internet penetration, comparable to developed markets.

Internet penetration by region

`````

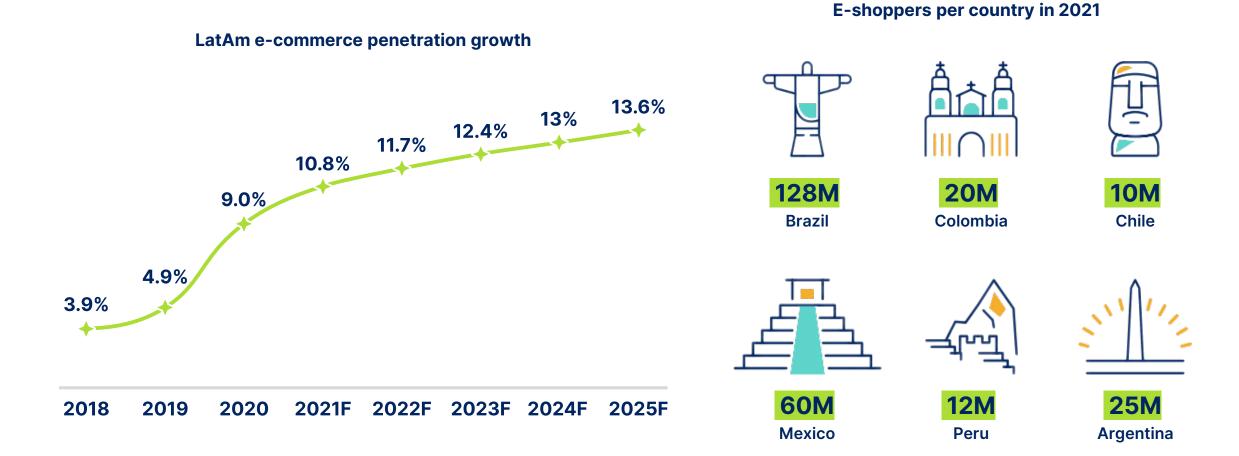




Since 2001, internet penetration has grown steadily, staying above China's performance and getting closer to US figures.

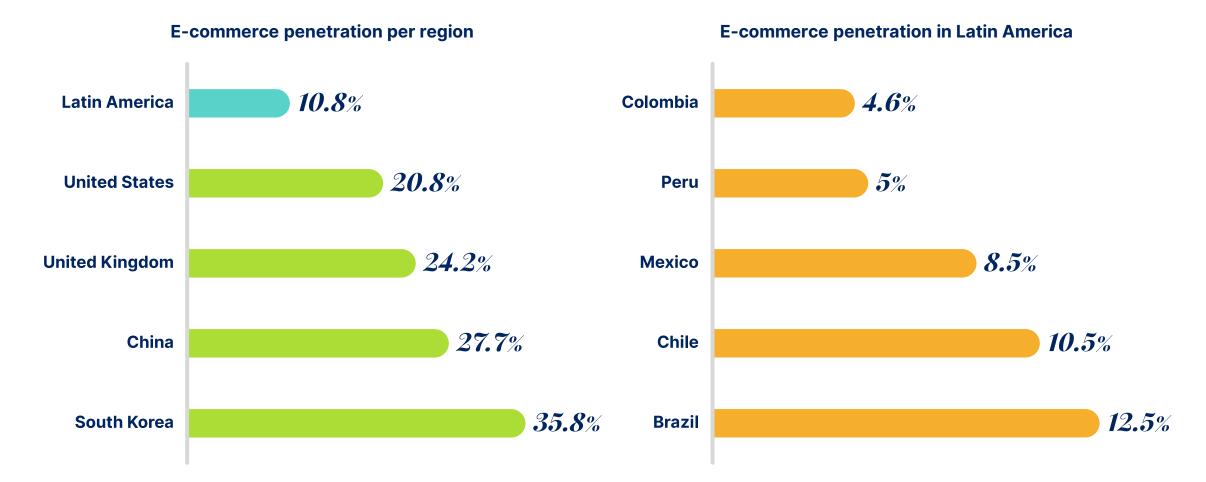
The World Bank Database

# The pandemic *accelerated the rate* of e-commerce penetration by almost three years



\_\_\_\_

However, it is still half as present as in the US and way behind other regions. Within *LatAm*, *Brazil and Chile* have the highest e-commerce penetration



eMarketer; Atlantico, Latin America Digital Transformation Report (2021); Fidelity International, BTG Pactual Research, Euromonitor (2021)

# The region offers a unique mix of large opportunities and critical problems waiting to be solved, which has provided a *fertile ground for the gig economy to flourish*



LatAm was the fastest-growing e-commerce market in the world in 2020, with **37%** growth. However, it is a much more **fragmented** and crowded market compared to other regions, such as the USA.

> Many Latin Americans turned to e-commerce for the first time during the covid-19 pandemic: **10+ million consumers** made their first digital purchase in 2020.





E-commerce is becoming more democratic in Latin America but it is still very **concentrated in urban areas**. There is still a lot of room to grow.

When we track the value of technology companies as a percentage of the economy (tech company market cap as a % of GDP) we clearly see that Latin America, at  $3.4\%^{(1)}$ , has a ways to go.



(1) Doesn't include tech companies publicly listed outside of Latin America; eMarketer, 2021; FIS, The 2021 Global Payments Report

# E-commerce is one of the *most dynamic sectors worldwide*, with constant innovation shaping the future of the industry



**Omnichannel approaches** became a necessity, including digital engagement strategies, channelagnostic payments, and flexible delivery methods.



Brands are taking things one step further and bringing the in-person experience straight to our devices using **Artificial Intelligence**.

**Customer loyalty bonuses** and easy re-ordering processes increase the average revenue per customer.



Voice Commerce: the processing of voice orders by smart agents, like Siri or Alexa, is on the rise. This tool is rarely suitable for an initial product search, but highly convenient for **re-ordering products**.



Customization and recommendation features are among the main benefits for customers.



Online Personal Shopper: online stores and marketplaces are enabling digital assistance from trained shoppers to optimize user experience.

### Top players *per industry*

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| Online Merchants | Marketplaces                  | Vertical Marketplaces                              | Social Commerce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
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| Magalu           | Chiper                        |                                                    | <b>)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|                  | mercado<br>libre <b>Rappi</b> | <b>Ö</b> frubana.<br>Carao <b>Tiji</b> .           | elenas Facily                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| falabella.       | AMARO 🔗                       | CargoX<br>CargoX<br>Clubbi<br>amiloz<br>nuvo cargo | favo for_me <sup>®</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|                  |                               | Fintech E-commerce                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| Aggregators      | Tech Enablers                 | Enablers                                           | Logistics Providers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
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| merama           | 🔿 nuvemshop                   | 0                                                  | PLoggi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
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## **Online** Merchants

Sell their own inventory of physical goods, specifically within online/digital channels.

Merchants can sell on **their own websites** or sell within **marketplaces**; they can be brands, re-sellers, direct-to-consumer companies, or retailers with an online presence.

Their growth is expected to come primarily from categories that are less penetrated today, such as **beauty**, **personal care products**, **and packaged foods**.

The space is currently **dominated by big players**. However, new incumbents are developing innovative strategies to reach consumers in new ways. Magalu

Magalu is a retail company that offers a **wide range** of furniture, electronics, appliances, computers, and more. In 2021, Magalu's revenue surpassed **US\$ 10B**.

### americanas

Lojas Americanas S.A. is one of the **most traditional retail chains** in Brazil, with over 1,700 stores. Customers can buy through the **website**, **app**, or at **kiosks** in stores.

falabella.

Falabella is a Chile-based company in the **retail and wholesale** of clothing and accessories, construction and home improvement products, electronics, beauty, and food products.



Formerly known as **Via Varejo**, Via is a Brazilian **retail group and parent company** to brands like Casas Bahia, Ponto (fka Pontofrio), and Extra.com.

## **Marketplaces**

Deliver value from connecting buyers and sellers, centralizing demand and supply.

Marketplaces do not hold inventory, but instead, **provide** technology solutions to enable sellers to list goods and buyers to make purchases.

The revenue model is a take rate on the **gross merchandise value** transacted on the platform (average 11%).

Today, **40% of LatAm's e-commerce** is already going through marketplaces, and curated marketplaces are seeking to **offer seamless shopping experiences** to consumers in categories where big players can't offer the same value-add.



As the **largest e-commerce marketplace in Latin America**, MELI also operates a shipping business, payments, ads, and other complementary segments.



Rappi is an **on-demand delivery platform** that helps consumers to order groceries, food, drugstore medications, and more.

## Çhiper

Chiper is a **B2B digital shopping platform** intended to streamline the supply chain of corner shops in LatAm.



Linio sells **goods and services**, such as home electronics, technology products, home appliances, fashion, and others.



Facily is a social commerce platform designed to participate in **group-buying deals** and provide **interactive shopping experiences**.

### AMARO

Amaro is a **curated fashion marketplace**, offering both private label and other brands.

Morgan Stanley, The Rise of the E-Commerce Ecosystem 2021; Daniela Cadena, Director of Business Development at Chiper; Dominique Oliver, Co-founder at Amaro

## Vertical Marketplaces

Connect demand and supply between companies within an industry.

While B2C marketplaces (and consumer tech in general) had a head start in Latin America, we will see B2B marketplaces emerging over the next years.

Vertical marketplaces sell products and services specialized in one industry and are **better positioned to build a moat around their customers than horizontal marketplaces**.

Emerging markets consumer companies that win sometimes **turn into superapps**, Rappi being the best example in Latin America. We expect to see the same in B2B: **successful companies will build the operating system for their industries** – integrating SaaS, Fintech, and Insurance into their offerings.

|            | ``                                                                                                      |
|------------|---------------------------------------------------------------------------------------------------------|
| 🍑 frubana. | Frubana supplies restaurants with food.                                                                 |
| FLOKI      | Floki is a <b>procurement SaaS + Marketplace</b> for food service.                                      |
| amiloz     | Amiloz is a Mexican <b>B2B marketplace</b> that supplies<br>CPG inventory to local corner shops.        |
| Tijl.      | Tul is supplying <b>hardware stores and construction</b><br><b>companies</b> with building materials.   |
| O, morado: | Morado is a Colombian <b>marketplace for beauty</b> shops.                                              |
| Clubbi     | Clubbi connects small food retailers to suppliers.                                                      |
| BELLEZA    | Circulo de Belleza supplies for <b>beauty salons</b> .                                                  |
| nuvo cargo | Nuvocargo is building the operating system to <b>facilitate transport</b> across the Mexico/US border.ĭ |
| CargoX     | CargoX is the <b>operating system for trucking</b> in Brazil.                                           |

## Social Commerce

Capitalizes on the trust people have on their friends, family, and even their favorite influencers.

Differently from traditional marketplaces who have to kickstart network effects from zero, social marketplaces can **rely on customers' existing relationships to grow**.

Facily, for example, provides a **"team purchase"** model where groups of people can team up to buy large quantities of common household items, unlocking discounts when the group size crosses a predetermined threshold.

Social commerce is particularly important for categories where consumers seek feedback, recommendations, or support from people they know.



Elenas is **digitizing the process of selling via catalogs and door-to-door** so women can more easily sell from home.

**∀** Facily

Facily connects consumers to the **best prices through group purchases**.



Favo is building an easier way for Latin Americans to **order groceries online** through social networks.

### for\_me<sup>\*</sup>

For Me Tips allows brands to **manage and enhance word of mouth**, connecting them, customers, and content creators through a **benefits & revenue sharing model**.

Morgan Stanley, The Rise of the E-Commerce Ecosystem 2021; Daniela Cadena, Director of Business Development at Chiper; Dominique Oliver, Co-founder at Amaro

Aggregators

A new breed of startups is acquiring and growing small but promising third-party merchants, and building out their own economies of scale.

Traditional brand loyalty has been diluted due to higher market fragmentation, and retailers are acknowledging the importance of **community building and customer engagement**.

Meanwhile, marketplace integrators provide tools to link online merchants into multiple marketplace platforms, with services including product curation, categorization, feature enhancement, and listing, as well as systems integration, inventory synchronization, and logistics.

For the marketplaces, integrators are a source of increased assortment, and also represent a **more sophisticated counterparty** than the individual merchants themselves.

## ELEVVÅ

Elevva **acquires and manages e-commerce brands**. It offers various services like retail management, e-commerce channel expansion, and vendor management.

## merama

Merama invests in the **leading online brands** in LatAm, offering working capital financing, channel optimization, new product development, regional expansion, and others.

VALOREO

Valoreo **acquires and grows e-commerce startups** with outstanding brands that sell category-leading products online.

Maximiliano Chab, Co-founder at Elevva; Domingo Cruzat, Co-founder at Merama

## **Technology Enablers**

Software companies that provide tools to launch, maintain, and scale e-commerce operations.

Small enterprises tend to **adopt an e-commerce platform to help manage increased complexities**, like integrating with several marketplaces and logistic providers, using digital marketing tools, or even creating a proprietary online store with a payment solution.

D2C efforts need to **compete against much larger marketplaces** in terms of customer experience (e.g., same-day or next-day delivery, AI-powered chatbots for customer support, etc.).

## olist

infra<mark>.</mark> commerce Olist **connects SMEs with major online retailers** and allows shopkeepers to advertise and sell in their marketplaces, enabling SMEs to **reach international markets**.

Infracommerce allows businesses to **design their digital strategy**, bringing together marketing, content, payments, and logistics.

ντεχ

VTEX provides a SaaS digital commerce platform that **enables brands to execute their commerce strategy**, build online stores, and integrate and manage orders across channels.

locaweb

Locaweb offers **digital marketing, cloud, and accommodation services** such as website hosting, WordPress hosting, domain registration, and email services.



Nuvemshop **helps SMEs build online stores**, offering support in product management, sales automation, integrations, and shipments.

## Fintech E-commerce Enablers

Players that offer payment processing, cross-border solutions, credit, and other financial services to online merchants and marketplaces.

New payment solutions **facilitate transactions on online stores and marketplaces** by allowing users to securely, easily, and quickly send and receive money online.

Some of them also help merchants and customers to be borderless, by providing quick and fair exchange between local currencies, all while **blockchain and crypto payments** emerge as a trend.

Many brands are also teaming with fintechs to offer **credit as an acquisition resource**.

**d**-local dLocal enables SMEs and corporations to get paid (pay-in) and to make payments (pay-out) online, in a safe and efficient manner.

Ebanx provides **cross-border payment processing services**, allowing global merchants to sell their products and services effortlessly and expand into Latin America.

Addi

**EBANX** 

Addi provides **point-of-sale lending** (Buy Now, Pay Later) and **consumer finance services** intended to promote digital commerce.

### stone

Stone offers SMEs **payment and management tools** and **flexible financial products**, with no bureaucracy and close and efficient service.



Tuna allows SMEs to **easily integrate with different payment providers**, enabling higher conversion rates with low processing fees and fraud costs.

Morgan Stanley, The Rise of the E-Commerce Ecosystem 2021

## **Logistics Providers**

Operators offering logistical services such as first-mile, distribution, last-mile, warehousing, sorting, reverse logistics, and others.

There has been a boom in the **"last-mile" delivery** segment, where Latin America has historically fallen behind. New companies are offering **cost-effective and timely delivery services**, through innovative models.

More and more people can keep track of their orders everywhere, through the **integration between delivery companies and marketplaces' scheduling systems**.

Further integrations have allowed the creation of **new business models**, such as streamlined warehousing services.

Finally, to meet the new customer requirements and adapt to the modern cross-channel approach, **traditional retailers are offering click & collect services**.



Loggi is an **online shipping logistics platform** designed to connect couriers to shippers.



Cubbo repurposes real estate assets and turns them into **urban distribution spaces for e-commerce businesses**, providing an integrated warehouse fulfillment network.



99minutos offers **same-day delivery for online shopping products with real-time GPS tracking** and efficient routing within Latin America.



Melonn **connects users with online stores** and offers real-time sync of inventories with warehousing facility to **increase the speed of packaging and delivery**.

Morgan Stanley, The Rise of the E-Commerce Ecosystem 2021; Brian York, CO-founder & CEO at Cubbo



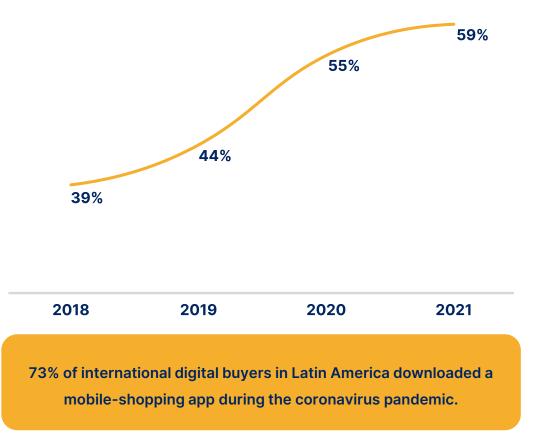
# After the covid-19 pandemic, Latin America became *mobile-first*, as smartphones became a bridge to the world

In Latin America, **smartphones are more affordable** and numerous than desktop computers and, in some countries, even more widespread than bank accounts – 97% of people with internet access own a smartphone.

After the pandemic brought millions of new consumers to ecommerce and pushed digitalization forward, **smartphones** have now also become Latin Americans' **preferred** way to shop.

In terms of user experience, **buying on mobile can also feel easier than on desktops**. Since most smartphones are personal devices, consumers can load and save their card information, connect with digital wallet apps, and use biometric identification.

Shopping apps were among the most downloaded mobile applications in 2021.



Mobile's share of total e-commerce sales

# The rapid digitalization of payments continues, serving as a *major facilitator of e-commerce growth*. Still, 5.5% of sales are paid with cash on delivery

**Digital payments** have been playing a crucial role in the growth of ecommerce in LatAm (even in a region where cash is still king), bringing new consumers to e-commerce.

Online stores, e-commerce sites, and marketplaces **must** offer customers a vast array of payment options.

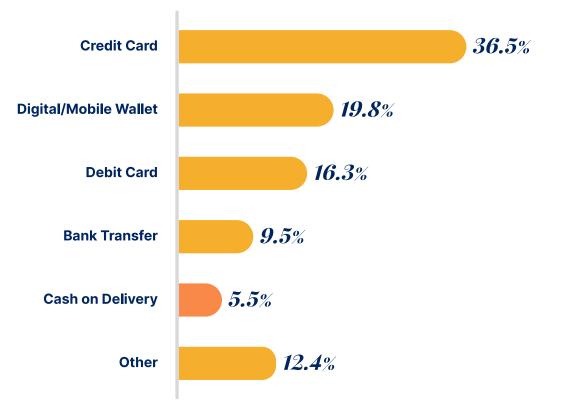
Specific market nuances are enabling the rise of new and **disruptive payment methods**, such as mobile wallets or BNPL (Buy Now, Pay Later).

Consumers seek solutions that are easy to adopt, free for individuals, with real-time confirmation, and non-bureaucratic, such as **Pix** in Brazil.

Invisible payments are the next wave of innovation.

Authentication protocols and security standards of payments also evolve in line with payments.

#### Distribution of e-commerce payment methods in Latin America



Statista, E-Commerce Report 2021; Daniela Cadena, Director of Business Development at Chiper

FIS, The 2021 Global Payments Report; Ebanx Report 2021

# Enabled by fintech solutions, *cross-border e-commerce is increasingly becoming more relevant*, but still only represents 11% of total retail e-commerce

Latin America represents a great opportunity for merchants looking beyond their borders for **larger addressable markets and diversification of risk**, while capturing hypergrowth.

New fintechs such as dLocal have emerged to offer solutions to merchants, facilitating payments, maximizing acceptance and conversion rates, and reducing the risk of fraud.

Cross-border e-commerce has also driven the **growth of logistic providers**, who can now also offer transportation and warehousing for international brands.

In general, underdeveloped countries have a larger crossborder share of online retail, indicating that **brick-andmortar sellers have yet to enter the online space**.



International & domestic e-

International giants are aware of the region's potential and have entered the market to compete with local champions.



Brian York, Cubbo (2021); Ebanx Beyond Borders Report 2020; Atlantico, Latin America Digital Transformation Report (2021)

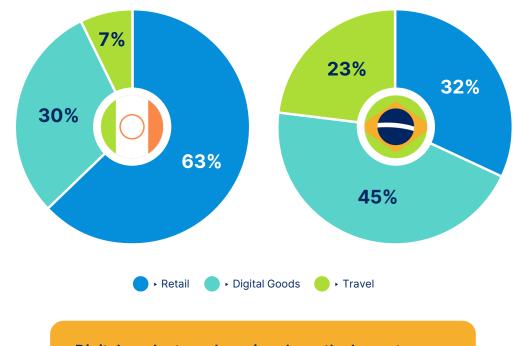
### Digital goods and services are *increasingly becoming more relevant* to e-commerce sales

Global companies, with the right localization and pricing strategy, have an opportunity to give access to a population **eager to consume** digital products and services.

The covid-19 outbreak further increased the **adoption of digital goods** such as streaming, e-books, video games, e-learning, and others. The gaming industry alone grew more than 30% in 2020.

Producers of digital goods are creating **new revenue streams** – e.g., video games commonly incorporating in-game purchases for recurring revenue.





Digital products and services have the largest crossborder share in Latin America: 13%

Ebanx Report 2021; FIS, The 2021 Global Payments Report; Atlantico, Latin America Digital Transformation Report (2021)

# Social commerce has *grown exponentially* in the last years, a trend expected to become stronger moving forward

Social commerce is defined as **buying and selling goods or services directly through a social media platform**. The industry in Latin America is expected to grow by 34.4% on annual basis to reach US\$ 6205.8 million in 2022.

Latin Americans' **willingness to share their life** on social media and the tendency for high mobile engagement as a whole urges ecommerce companies to look at the social commerce potential.

Replicating **China's** success, companies are offering product discovery via friends' feeds, product recommendations from friends and influencers, and the ability to **engage with brands directly**.

Big rounds raised by Facily, Favo, and, most recently, Elenas, are a good example of the **rapid acceleration of the social commerce trend**, powered by the virality of the marketing model and the establishment of existing social platforms.

#### Pinduoduo's case study

Pinduoduo emerged as China's new ecommerce platform focused on interactive and social shopping experiences online. It allows users to join team purchases, create their own and wait for people to join, or invite their friends to buy with them. In 5 years, Pinduoduo became a US\$ 572B company, with an active buyer base of 585 million, and it has accelerated the transition of commerce from offline to online in China.

Ebanx Beyond Borders Report 2020; Morgan Stanley, The Rise of the E-Commerce Ecosystem 2021; Business Wire, Latin America Social Commerce Market and Future Growth Databook 2022

### Loyalty as a currency is also a trend to look at, as it will be *key to differentiate* from competitors and retain valuable customers

Differentiation by price, product selection, or quality is very difficult to achieve due to strong competition.

To increase customer engagement, purchase frequency, and basket sizes, merchants are developing strategies to **build strong and loyal customer relations**, such as loyalty programs or clubs.

**81%** of consumers want to be able to earn loyalty points and redeem them at multiple types of retailers.

**69%** of shoppers state that they choose retailers based on customer loyalty programs or potential rewards.

#### **Relevant global loyalty platforms**







Ebanx Beyond borders report 2020



# Investment in Latin American e-commerce *boomed in 2021*, and is expected to continue as *there's still plenty of space* for new players and solutions

The covid-19 pandemic has driven the development and investment in new e-commerce business models, such as **social commerce** and **e-commerce aggregators**.

There's been a surge in demand from investors for **environmentally-friendly logistic providers**.

Investors keep focusing on companies that benefit from "network effects", such as curated marketplaces and social commerce.

Despite a notorious increase of investment in e-commerce companies in Latin America, the bulk of the capital is going primarily to **fintech e-commerce enablers**.



The *evolution of venture capital* in Latin America has been represented both by local and international funds, with *e-commerce* as one of their focus verticals

| Investor       | # Deals | Selected Deals        |                |                |                  |
|----------------|---------|-----------------------|----------------|----------------|------------------|
| 500            | 27      | CÍRCULO DE<br>BELLEZA | Josto          | RAWAPOTHECARY  | <u>come bien</u> |
| Y Combinator   | 26      | Rappi                 | FAIRE          | 99 minutos.com | e oico           |
| CANARY         | 25      | ELE∨∨Å                | <b>Facily</b>  | fen            | Clubbi           |
| FJ LABS        | 23      | VALOREO               | olist          | Çhiper         | O nuvemshop      |
| KASZEK         | 20      | VALOREO               | 99 minutos.com | Çhiper         | JOKR             |
| (A) monashees+ | 18      | Cubbo                 | ιγου           | Rappi          | Тіі.             |

### Latest investment rounds



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DEUNA provides a payments infrastructure that offers a **one-click checkout** and is integrated with **payment providers**. After raising a **US\$ 30M** Series A funding round led by Activant Capital, the startup **announced its expansion** to Mexico, Colombia, Ecuador, and Chile.

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The online supermarket application raised **US\$ 152M** on a Series B round led by General Atlantic and 500 LatAm. The funds will be used to fund its continued growth, including **geographic expansion** within Brazil, Mexico, and Peru, in addition to supporting investments in its tech stack.

## ELEVVÅ

Elevva raised **US\$ 30M** on a Seed round, from Redwood Ventures and 13 other investors. The company intends to use the money to **finance the acquisition of new brands and products** for its portfolio, for technological development, and to launch new platforms.



The online consumers marketplace raised **US\$ 12.5M** on a Series A round led by NFX and ALLVP. The funds will be used to **develop a new range of products**, creating a channel for the distribution of financial services such as credit and payment solutions.



Founded in 2018, Elenas is digitizing the business of **catalog and door-to-door selling** so that **women** can more easily **sell from home**. The startup raised **US\$ 20M**. The series B round was led by DILA Capital.



## The Challenge



Latin America is a **challenging market** that requires intelligent planning and experienced partners.

A diverse and fluid regulatory environment, complex tax implications, and a unique mix of consumer payment preferences add unique complexities to every Latin American market.



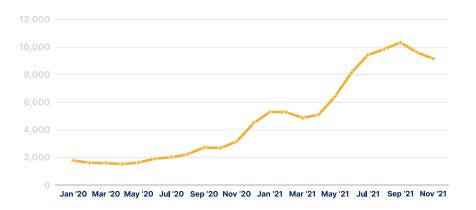
Traditional logistics and delivery operators are **expensive and unreliable**.

- Fulfillment delays and lack of reliability.
- 2. Cross-border customs delays and corruption.
- 3. Lack of end-to-end responsibility.
- 4. Lack of customer returns solutions.
- 5. Poor inventory management.



China's supply chain bottlenecks are **affecting shipping costs**.

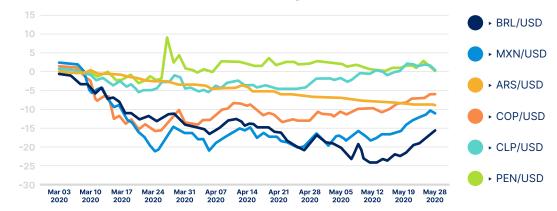
#### Global container freight rate index (in thousands of US\$)





High **inflations and currency devaluations** are impacting sellers, eroding margins.

#### Currency devaluation during covid-19 (%)



## The Challenges



### Reaching Latin American consumers requires offering **payment methods they use and trust**.

Mercado Libre exemplifies this with Mercado Pago & Mercado Crédito, and other ecommerces are growing by adding tools like BNPL to their checkout experience.



Persistent challenges around financial inclusion continue to **limit expansion of consumption** and benefit the use of cash.

Lack of access to credit, insufficient banking infrastructure, high inflation rates, concerns about fraud, and reluctance to pay high fees for electronic transactions all contribute to the persistence of cash.



Domestic cards are often **restricted for cross-border purchases**, viewed as a higher risk.

Neobanks such as Ualá have international debit cards, providing a payment method solution for cross-border transactions.



Difficulties to **expand to new countries** within the region.

Merchants are unable to expand internationally, get reliable and cost-effective working capital, and build technology tools to support their own online presence.

Despite all the challenges, founders and investors alike agree on one point:

The differences between LatAm and developed markets are precisely where the main opportunities to innovate are.

# Latin America: Future of SaaS

# *Contents*

#### Latin America: The Future of SaaS

#### **Context Setting**

- Defining SaaS
- A brief history of SaaS evolution
- Worth of top public SaaS companies
- Worth of top private SaaS companies
- Distribution of top private SaaS companies
- Funding for SaaS companies in LatAm
- LatAm M&A trends
- LatAm SaaS unicorns
- LatAm SaaS IPOs
- Diversity in LatAm SaaS startups
- 2022 for SaaS startups worldwide

#### **The Trends**

- Total market size growing at a 24% CAGR
- Spending and usage of SaaS products grew
- Saas "waste" and churn rates also grew
- SaaS is becoming more decentralized
- SaaS growth on top of dynamics accelerated by covid-19
- Segments with strong representation of local players

#### The Opportunity

- SaaS total market should triple by 2025 in Brazil
- Going vertical
- Localizing and going for SMBs
- Building a local robust ecosystem
- Segments still lacking strong local players

#### **The Challenge**

- The industry is more competitive, global, and mature
- SaaS companies still need a lot of capital
- There's a war for talent

# **Executive Summary**



Total funding for SaaS companies in LatAm reached over US\$ 2B in 2021, an impressive 7x growth in one year (compared to 2020) and 100x since 2013. But there's still room for improvement: SaaS fundraising in Brazil was only 1% of the USA's in the past 10 years, for example.



SaaS spending and usage are growing among companies and reaching more departments – but so is wasted and duplicated softwares as a service. The United States is still the home for the majority of the top SaaS companies, but that's changing little by little.

The pandemic has given momentum to a lot of SaaS companies, tackling segments such as cybersecurity, e-commerce, enterprise management, and remote work.

Some opportunities for LatAm SaaS companies are verticalizing, localizing, attacking the SMB segment, and building a robust local ecosystem. But some challenges are the more competitive, global, and mature competition; the amount of capital necessary to scale; and the ongoing war for talent, accentuated by the pandemic.

# **Context Setting**

### **Defining SaaS**

#### What is SaaS?

Software as a Service represents the most commonly utilized option for businesses in the cloud market. SaaS utilizes the internet to deliver to its users applications managed by a third-party vendor. A majority of SaaS applications run directly through your web browser.

#### SaaS advantages

SaaS provides numerous advantages to employees and companies by greatly reducing the time and money spent on tedious tasks such as downloading, installing, managing, and upgrading software.

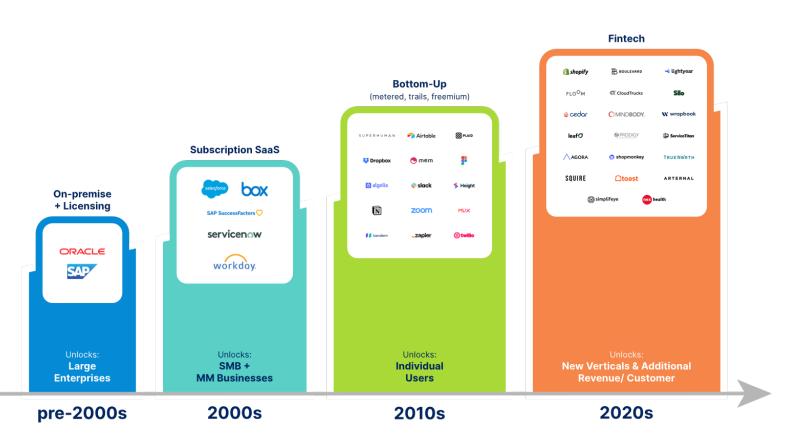
Vendors manage all potential technical issues, resulting in streamlined maintenance and support for the business. SaaS eliminates the need to have IT staff to solve problems such as data, middleware, servers, and storage on each individual computer. This frees up plenty of time for the technical team to spend on more pressing matters and issues within the organization.

### A brief history of SaaS evolution

From on-premise and licensing in the pre-2000s to the birth of subscription, powered by the evolution of the cloud thanks to services such as AWS and Google Cloud, SaaS came a long way until the 2020s.

The trends are now around vertical SaaS (niche-oriented solutions) and robust ecosystems.

While lagging until the mid-2010s, LatAm is now keeping up with the current global SaaS evolution pace.



#### The evolution of software business models

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Source: Future - Fintech Scales Vertical SaaS article

Listed public SaaS companies are *worth US\$ 1.21* and have grown at 37.7% CAGR

- Per definition, these companies bring at least 65% of their revenue through recurring software subscriptions.
- Public SaaS companies have steadily increased their market caps and are worth a combined US\$ 1.2T. 4 companies are already worth over US\$ 100B.
- In early 2022 there were another ~15 private decacorns in SaaS/Cloud expected to go public soon.



Top 20 listed SaaS companies in the U.S

| 1. Salesforce, Inc. (CRM) | \$185,0 bi |
|--|-------------|
| 2. Adobe Inc. (ADBE) | \$183,2 bi |
| 3. Intuit Inc. (INTU) | \$117,8 bi |
| 4. ServiceNow, Inc. (NOW) | \$101,1 bi |
| 5. Atlassian Corporation Plc (TEAM) | \$52,0 bi |
| 6. Shopify Inc. (SHOP) | \$49,6 bi |
| 7. Snowflake Inc. (SNOW) | \$48,2 bi |
| 8. CrowdStrike Holdings, Inc. (CRWD) | \$42,9 bi |
| 9. Autodesk, Inc. (ADSK) | \$41,8 bi 📄 |
| 10. Block, Inc. (SQ) | \$41,2 bi 📄 |
| 11. Workday, Inc. (WDAY) | \$38,6 bi 📄 |
| 12. Zoom Video Communications, Inc. (ZM) | \$35,4 bi 📄 |
| 13. Datadog, Inc. (DDOG) | \$33,9 bi |
| 14. Veeva Systems Inc. (VEEV) | \$32,1 bi |
| 15. Zscaler, Inc. (ZS) | \$24,2 bi |
| 16. Palatir Technologies Inc. (PLTR) | \$20,9 bi |
| 17. MongoDB, Inc. (MDB) | \$20,6 bi |
| 18. Paycom Software, Inc. (PAYC) | \$18,5 bi |
| 19. Twilio Inc. (TWLO) | \$18,0 bi |
| 20. Cloudflare, Inc. (NET) | \$16,9 bi |

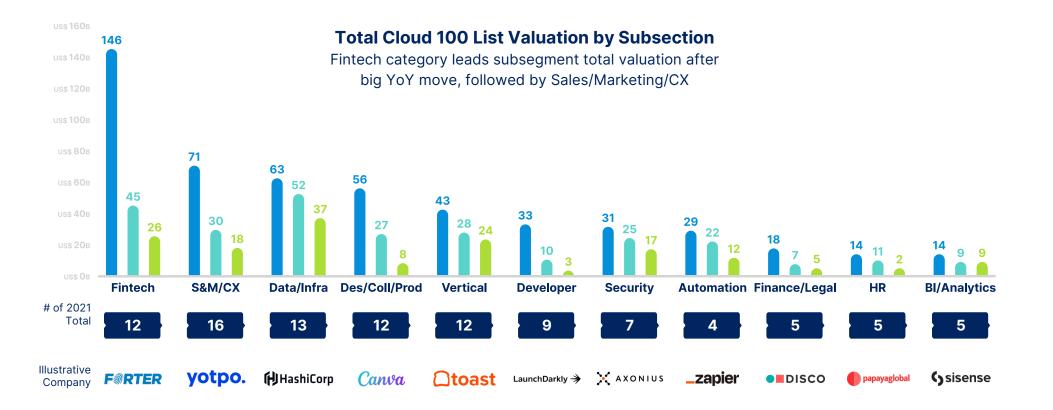
Source: The BVP Nasdaq Emerging Cloud Index, SaaStr, Mike Sonders - Largest SaaS Companies, as of June 2022

The Cloud 100 List has doubled in value this year and is now worth ~US\$ 500B, close to 20% of all the world's unicorns combined

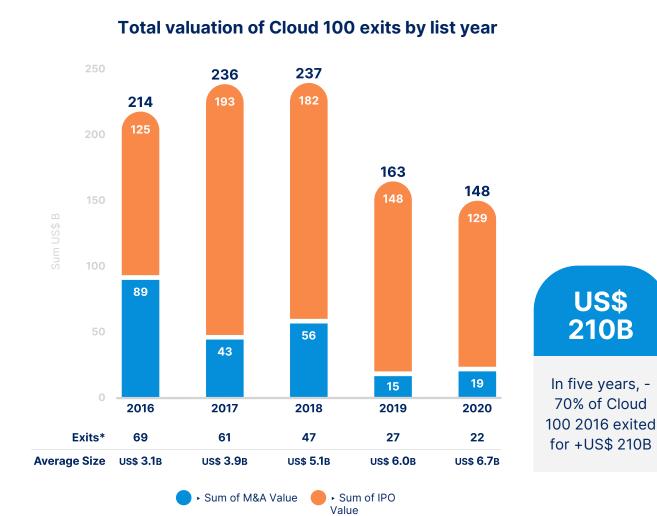
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The Cloud 100, elaborated by Bessemer Venture Partners, Forbes, and Salesforce Ventures, is the main yearly ranking for the top private cloud companies.

2021 Cloud 100 is now worth approx. US\$ 518B (+94% YoY) and includes pretty much all the SaaS unicorns in the world. This represents close to 20% of the total valuation of US\$ 3T of all the world's current unicorns combined.



The Cloud 100 has seen in five years *exits worth over US\$ 210B*, with large IPOs such as Snowflake and Zoom and M&As such as Slack and AuthO



_ _ _

Top recent IPOs

- Snowflake
- Slack
- Sprinklr
- Okta
- Zoom
- Confluent

Top recent M&As

- Salesforce: Slack, Mulesoft, Tableau
- ▸ Okta: Auth0
- Twilio: Segment, Sendgrid
- Thoma Bravo (PE): Talent, Medallia
- ► SAP: Qualtrics
- Intuit: Mailchimp

Source: Bessemer Venture Partners - The Cloud 100 2021 Benchmarks Report, 2021

While still dominated by the US, the Cloud 100 is now at ~30% *international players* - none are headquartered in LatAm

The rise of cloud is a global phenomenon Best-in-class cloud companies can be found all around the world, as evidenced by this year's Cloud 100 Honorees

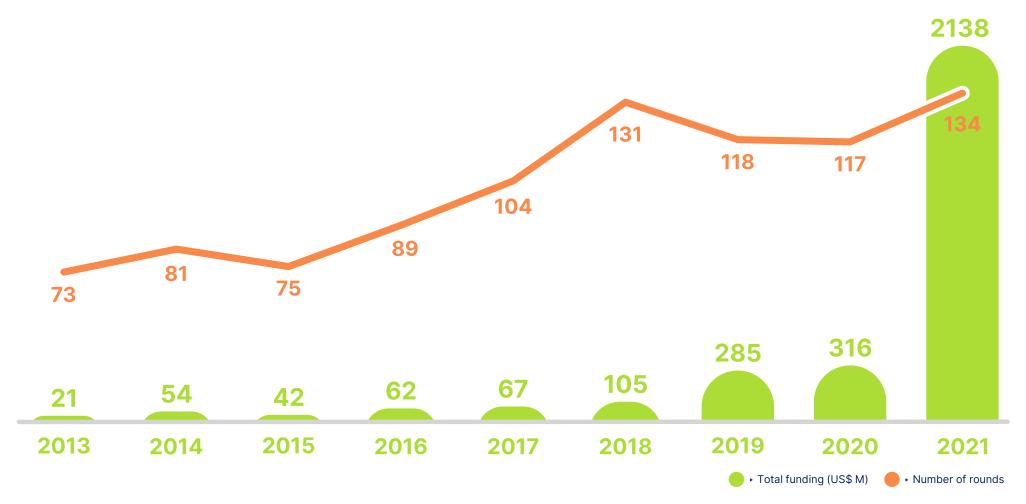


Currently, 30% of the Cloud 100 is international (i.e. not US based).

LatAm is not represented in the Cloud 100: none of the current honorees had headquarters or founding locations in Latin America.

Source: Bessemer Venture Partners - The Cloud 100 2021 Benchmarks Report, 2021

Total funding for SaaS companies in LatAm reached *over US\$ 2B* in 2021, an impressive *7x growth* in one year (compared to 2020) and 100x since 2013



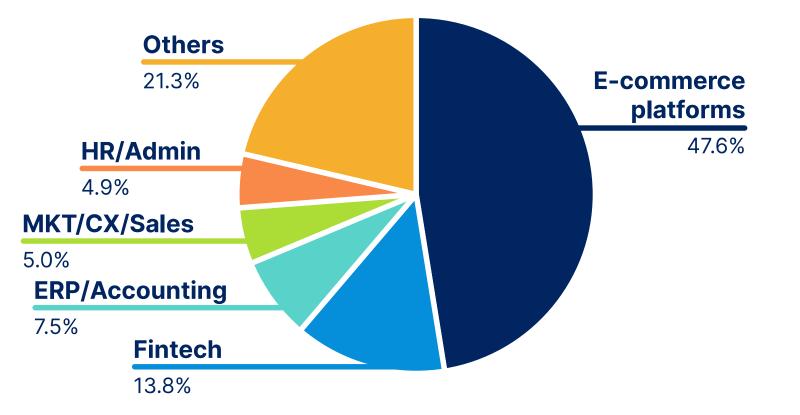
Source: Crunchbase, as of January 2022, Latitud Analysis

Breakdown by *main segments* of total fundraised (past 10 years)

E-commerce platforms represent roughly half of the total fundraised.

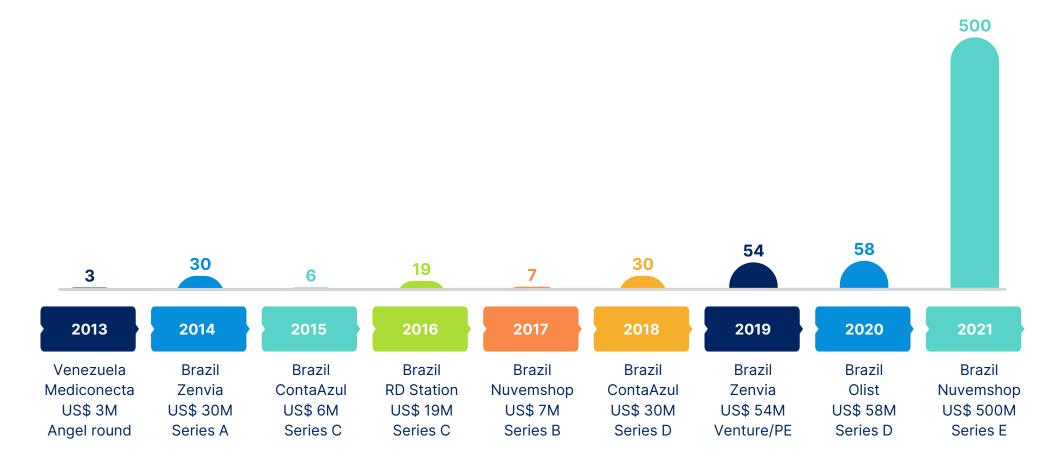
Fintechs, ERPs, MKT/CX/Sales, and HR/Admin amount for ~30%.

Nuvemshop and Locaweb alone account for nearly one third of the total fundraised amount.



Largest funding rounds are getting much larger: from US\$ 3M in 2013 to US\$ 500M in 2021 - almost an *800% YoY increase* from 2020 `````

Largest funding rounds per year

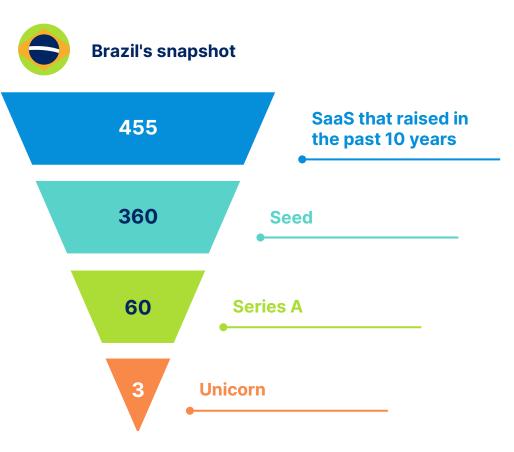


Source: Crunchbase, as of January 2022, Latitud Analysis

LatAm SaaS snapshot: SaaS companies that have raised in the past 10 years and with founding location and headquarters in the region

US\$ 3.2B raised in total (past 10yrs) by 455 companies headquartered in LatAm:

- 76% are at the pre-seed/seed stage.
- 11% early-stage (series A/B).
- 3 current unicorns and all crowned in 2021 (Nuvemshop, Olist, and Clara), if we consider Auth0, unico, and Incode as IDtechs.
- 40 exits (M&A or IPO).
- Only 3 active IPOs TOTVS, Locaweb, and Zenvia (NASDAQ).



Source: Crunchbase, as of January 2022, Latitud Analysis

The global players: born in *LatAm*, but with global headquarters

Players headquartered globally: US\$ 3B total raised (past 10 yrs), really close to the total raised (US\$ 3.2B) by companies with LatAm headquarters.

146 companies:

- IPOs include VTEX, headquartered in London.
- 23 M&As (including Auth0, Welltok and Drift).

| 1 | Outreach | US\$ 489,018,000 |
|----|-----------------|------------------|
| 2 | VTEX | US\$ 365,000,000 |
| 3 | Auth0 | US\$ 332,275,000 |
| 4 | Welltok | US\$ 262,230,798 |
| 5 | MURAL | US\$ 192,275,000 |
| 6 | Pipefy | US\$ 138,737,500 |
| 7 | Drift | US\$ 107,000,000 |
| 8 | SendGrid | US\$ 80,368,000 |
| 9 | Yalo | US\$ 73,000,000 |
| 10 | SafeGuard Cyber | US\$ 67,357,063 |
| 11 | Mosyle | US\$ 52,054,487 |

Source: Crunchbase, as of January 2022, Latitud Analysis

Brazil: funds raised (past 10 years)

Brazil leads the LatAm region by far with ~80% (US\$ 2.5B) of all the total funding raised by SaaS startups headquartered in the region.

Most of the funds were raised in 2021, US\$ 1.9B, led by the unicorns Nuvemshop and Olist.

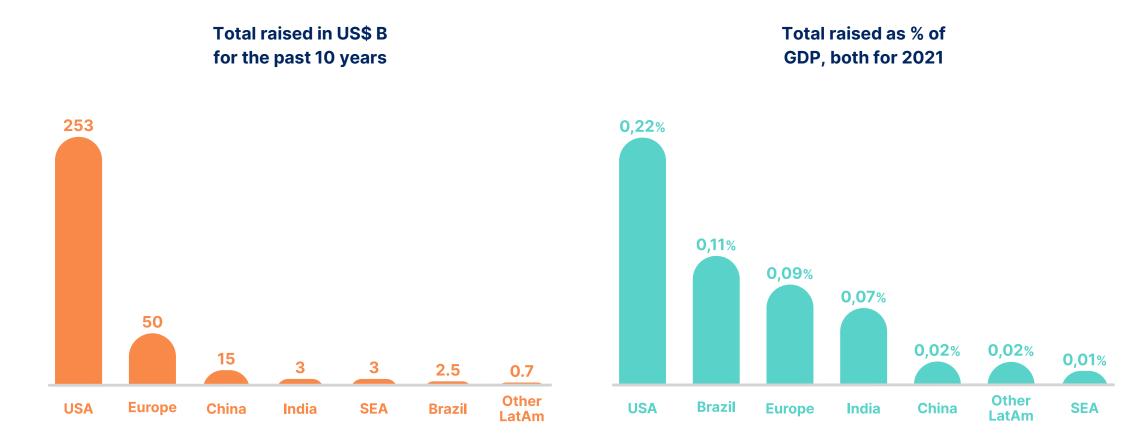
Brazil is also the only country with SaaS IPOs (VTEX, Zenvia, TOTVS, Locaweb).

Top 10 companies by funds raised

| 1 | Nuvemshop | US\$ 628,382,500 |
|----|-------------------------|------------------|
| 2 | Locaweb | US\$ 435,000,000 |
| 3 | Olist | US\$ 322,485,000 |
| 4 | Omiexperience | US\$ 137,584,423 |
| 5 | REALTIME.CO | US\$ 100,000,000 |
| 6 | Solinftec | US\$ 86,600,000 |
| 7 | Zenvia | US\$ 82,675,850 |
| 8 | RD Station | US\$ 76,220,305 |
| 9 | Superlógica Tecnologias | US\$ 63,500,000 |
| 10 | Arquivei | US\$ 52,406,317 |

SaaS *fundraising in Brazil* was only 1% of the USA's in the past 10 years. But its total raised as a % of GDP for 2021 was much closer, and ahead of Europe's

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Source: Crunchbase, as of January 2022, Latitud Analysis

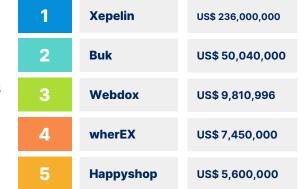
### Other *LatAm* countries: funds raised (past 10 years)

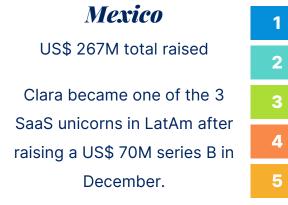
US\$ 339M total raised

Chile

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Xepelin's series A round was mostly debt and accounted for nearly 40% of total other LatAm funding.





US\$ 28M

1	Clara	US\$ 158,500,000
2	Conekta	US\$ 21,745,000
3	Yaydoo	US\$ 20,400,000
4	Sr.Pago	US\$ 13,520,000
5	Neta	US\$ 4,500,000

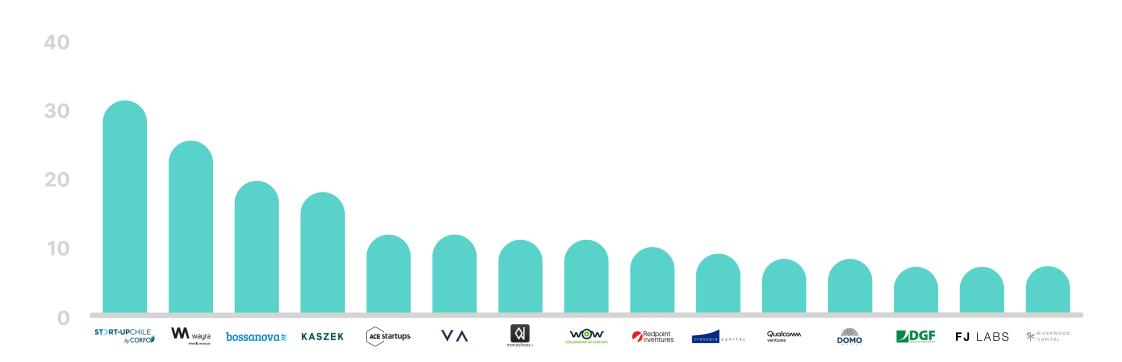
	1	Moova	US\$ 5,760,000
Argentina	2	GOintegro	US\$ 5,000,000
S\$ 28M total raised	3	Increase	US\$ 3,840,000
	4	hubally	US\$1,800,000
	5	Aivo	US\$ 1,450,000

Colombia US\$ 50M total raised

1	Ontop	US\$ 26,000,000
2	BEWE	US\$ 6,275,354
3	Peiky	US\$ 4,110,000
4	Demetria	US\$ 3,000,000
5	WeKall	US\$1,685,000

Source: Crunchbase, as of January 2022

## Most *active investors in LatAm's SaaS* over the past years



Local accelerator programs are important in the region and lead the number of deals (Startup Chile, Wayra, ACE Startups, WOW). Global accelerators are catching up fast, including Y Combinator and 500 Global. There are local VCs specialized in SaaS, such as Alexia Ventures, DGF Investimentos, and SaaSholics. `````

Source: Crunchbase, as of January 2022

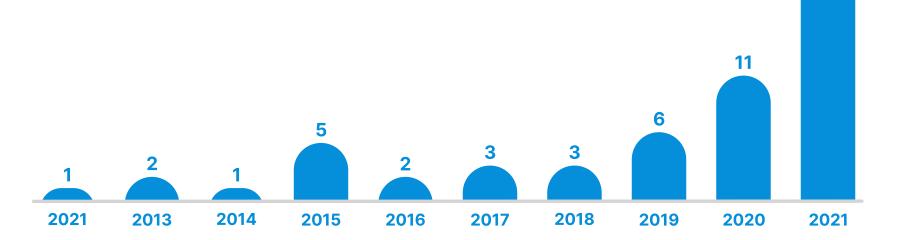
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## LatAm M&A trends: *number of acquisitions* over the years

Acquisitions are heating up in LatAm, in line with global trends for SaaS. 2021 M&As went up 100% YoY.

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Brazil leads the number of M&A deals in LatAm in the order of 5 to 1 – from both the acquired's and the acquirer's perspectives.



25

Source: Crunchbase, as of January 2022, Latitud Analysis

### LatAm *top recent* M&As

While most were between SaaS companies, fintechs also participated in important deals, such as the Linx acquisition by StoneCo (payments, POS) and the Guiabolso acquisition by PicPay (payments).



### Autho

Acquired by Okta in 2021 for US\$ 6.5B

Founded in Argentina

Bessemer Venture Partners, Salesforce Ventures, Trinity Ventures, Sapphire, Meritech Capital Partners



*Linx* Acquired by StoneCo in 2020 for US\$ 1.28B

Founded in Brazil

Redpoint eventures, Riverwood Capital, Astella Investimentos, DGF Investimentos, TPG Growth, Endeavor Catalyst



### **RD** Station

Acquired by TOTVS in 2021 for US\$ 330M

Founded in Brazil

DGF Investimentos, Redpoint eventures, Riverwood Capital, Astella Investimentos, TPG

Source: Crunchbase, as of January 2022

## The *unicorns*

The three current SaaS unicorns were all born in 2021 - Clara and Olist both in December.



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Nuvemshop, founded in Argentina as Tiendanube and now headquartered in Brazil, is considered LatAm's answer to Shopify as an e-commerce platform enabling merchants. It became a unicorn after raising a US\$ 500M round co-led by Insight Partners and Tiger at a US\$ 3.1B valuation. Other investors include Sunley House Capital, VMG Partners, Alkeon, and Owl Rock as well as Accel, Kaszek, Kevin Efrusy, Qualcomm Ventures, and ThornTree Capital from previous rounds.



Clara, founded in Mexico, offers corporate credit cards and expense management resources and is now expanding to Brazil. It achieved unicorn status after raising US\$ 70M in December in a Series B led by Coatue. Other investors include DST, monashees, General Catalyst, Avid Ventures, Global Founders Capital, and Alter Global.

# olist

The Brazilian e-commerce marketplace integrator has recently secured a US\$ 186M Series E led by Wellington Management at a US\$ 1.5B valuation. Joining Wellington in the round were funds managed by SoftBank, Corton Capital, Valor Capital Group, Goldman Sachs, and Globo Ventures, and also Kevin Efrusy.

## SaaS **IPOs**

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4 IPOs: 2 at B3, 1 at NASDAQ and 1 at NYSE. All companies were founded in Brazil. Linx was listed at B3 when it got acquired by Stone.

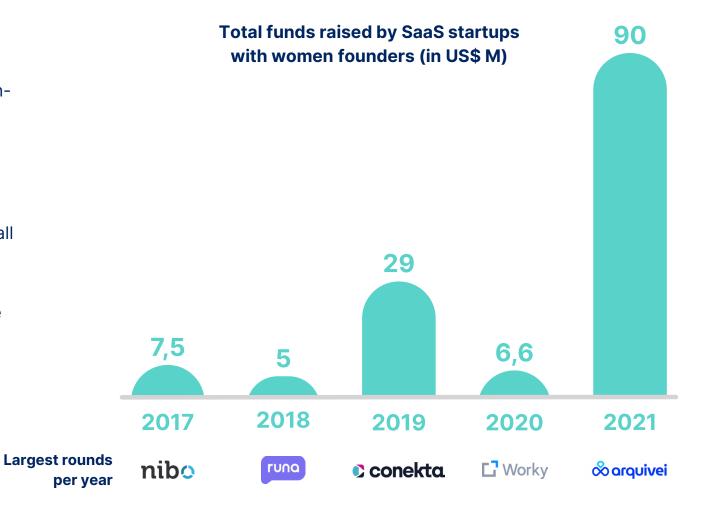
<b>Ο</b> ΤΟΤVS	VTEX	locaweb	
TOTVS	VIEX	Locaweb	Zenvia
Mkt Cap ~R\$ 18B	Mkt Cap ~US\$ 720M	Mkt Cap ~R\$ 4.4B	Mkt Cap ~US\$ 73M
Enterprise/ERP	E-commerce	Cloud hosting	Enterprise/CX
IPO Year: 2006	IPO Year: 2021	IPO Year: 2020	IPO Year: 2021
Raised US\$ 213M	Raised US\$ 361M	Raised US\$ 308M	Raised US\$ 150M
B3	NYSE	B3	NASDAQ

## Diversity: *women-founded* SaaS startups have proportionately nearly *three times less* fundraising than other startups

~15% of the SaaS startups were women-founded in LatAm. ~5% of the total funds raised went to womenfounded startups: US\$ 150M out of US\$ 3.1B.

There is still plenty of room to grow as the numbers show that women-founded SaaS startups are still lagging behind, raising around three times less overall than their counterparts.

~13% (US\$ 5.2B out of US\$ 40B) of total funds were raised by women-founded startups across all segments in LatAm.

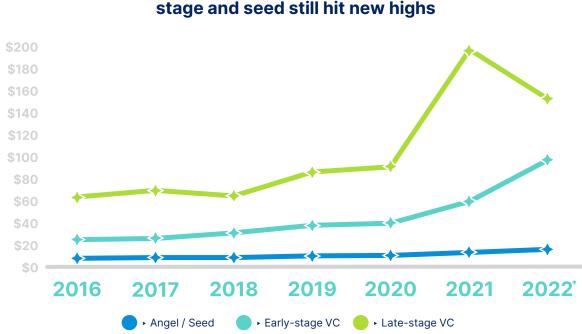


## In 2022, valuations globally have declined in late-stage SaaS startups. But early-stage and seed reach *new highs*

Stock prices of fast-growing software companies have been on a steep descent since late November 2021. Shares of these businesses have plummeted on average about 60% comparing to their recent 12-month highs (Meritech Capital).

PitchBook data shows that prices for venture capital deals for SaaS companies still have not fallen nearly as far as their public comparables. The median valuation of a late-stage software company dropped to US\$ 155M as of the end of May 2022, representing a 23% decline from the previous year. However, software valuations are still significantly higher than they were prior to 2021.

Meanwhile, valuations of early-stage deals, which tend to be more isolated from stock market volatility, have continued to climb as of May 2022, reaching a record of almost US\$ 98M, a 63% increase from last year's median value for SaaS startups at Series A and Series B. Farthest from the public markets, angel and Seed deals have been mostly immune to valuation pressures, rising to a median value of over US\$ 16M, a 28% increase from 2021.



While late-stage SaaS valuations decline, earlystage and seed still hit new highs



# The Trends



SaaS market size is growing at a 24% CAGR

<u></u> ×

SaaS

products

**50%...** 

... but SaaS waste spending and (duplicated, usage per orphaned, company are idle growing at software) is also *doubling* every year

**Companies** are churning through over 30% of their apps yearly

80% of top global SaaS companies are still based in the US, but that's changing

Apps are becoming increasingly decentralized and specialized across departments

<<u>/</u>>



growth...



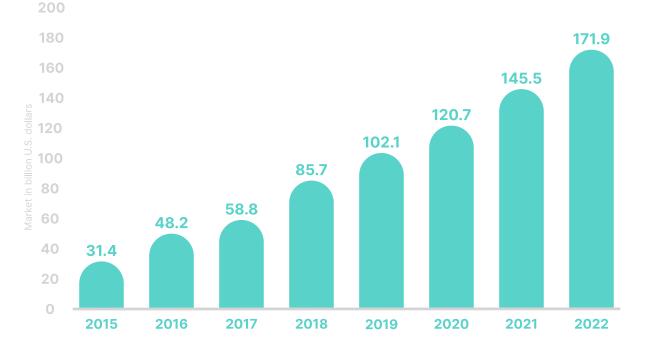
... and the Before covid-19, Covid-19 LatAm was pandemic already in a accelerated good position the dynamics for its *digital transformation* 

## Total market size growing at a 24% CAGR

The global market size of SaaS is expected to reach US\$ 171.9B by 2022, according to Gartner.

This would represent an impressive 24% CAGR since 2015. For LatAm, we expect this number to be even higher.

## Global public cloud application services (SaaS) market size, 2015-2022 (US\$ B)



Source: Statista, Gartner

### Spending and usage of SaaS products by companies grew by up to 50% in recent years...

## Overall spending per company on SaaS products is up 50%, and the number of unique apps in usage per company is up about 30% year-over-year.

Overall spending per company on SaaS products is up 50% and the unique number of apps in usage per company is up about 30%, reaching 137 apps overall on average, says Blissfully when comparing 2018 and 2019. Another report by Zylo, launched in 2022, claims that the average large company spends over US\$ 65M annually on around 323 SaaS products.

Interestingly, spending growth is outpacing the number of unique apps, which means more spending with existing vendors. This is strengthened by a consolidation in vendors, as M&A is increasingly hot for SaaS.

For LatAm, the spending on SaaS and IT in general still has plenty of room to grow. For instance, the corporate spending in IT as % of revenue in the U.S is 26%, while in Brazil it's 8,2%, more than three times less.

SaaS Statistic (per company)	Overall	Enterprises	Medium-level companies	Small-level companies
Spend	Up by 50%	US\$ 4.16M	US\$ 2.47M	US\$ 202K
Unique SaaS apps	137	288	185	102
App to person connections	-	21,580	4,406	624
SaaS app churn	30%	46%	29%	35%
# of duplicate apps	3.6	7.6	5.8	23
# abandoned app subscriptions	2.6 (up by 100%)	7.1	4.3	1.4
# of billing owners per company	-	98	32	10

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Source: Blissfully 2020 Annual SaaS Trends, Zylo 2022 SaaS Management Index, Itau BBA, FGV

### ... but we also saw the rise of *SaaS "waste" and churn rates*

### SaaS waste is doubling year-over-year

Paid apps add up quickly — and with so many apps available, it's easier than ever to waste money on duplicate or orphaned apps. That's especially true if companies grow fast and add SaaS apps without a strategic plan, a set of protocols for app sign-ups, or visibility into the overlap between apps.

2020 report data by Blissfully shows that waste on both duplicate and orphaned apps is growing year-over-year. Duplicate app subscriptions increased by 80% from 2018 to 2019. Similarly, orphaned app subscriptions are up by almost 100% across companies of all sizes, according to the report.

Duplicate, unused, and orphaned SaaS app subscriptions are not only costly but also create security risks. It's true that mistakes like these crop up when companies are moving fast, but we shouldn't necessarily accept wasted spending as an inevitable consequence.

## ... but we also saw the rise of *SaaS "waste" and churn rates*

## Companies are churning through more than 30% of their apps every year at this point in time

Companies are churning through more than 30% of their apps every year at this point in time. Over time, many apps offer more and more features, whether through acquisitions or internal expansion.

This includes both big platforms like Salesforce and HubSpot and smaller apps like Notion that offer enough flexibility in the workflow that they may eat into market share for things like Google Docs, wikis, Kanban boards, and project management tools.

While stronger in the US, this trend is also growing in LatAm.



## SaaS is still heavily US-based, but we're seeing more *decentralization*

## 80% of the top 100 global SaaS companies are still located in the US

And two-thirds of these top 100 global SaaS companies are headquartered in Silicon Valley. While not very surprising, this figure is still probably higher than many would have realized. With the current VC funding spree across regions, we can expect to see more top players emerging across the globe, particularly in Latin America, Europe, and Southeast Asia. This, coupled with increasinglyregionalized privacy and compliance requirements, might create the opportunity for more localized SaaS vendors.

However the US is still very strong not only in VC funding but also regarding talent and stock exchanges. For example, some companies originally founded in Latin America are now headquartered in the US due to their listing on the stock exchanges NYSE/NASDAQ.

## SaaS is still heavily US-based, but we're seeing more *decentralization*

### **Decentralized SaaS**

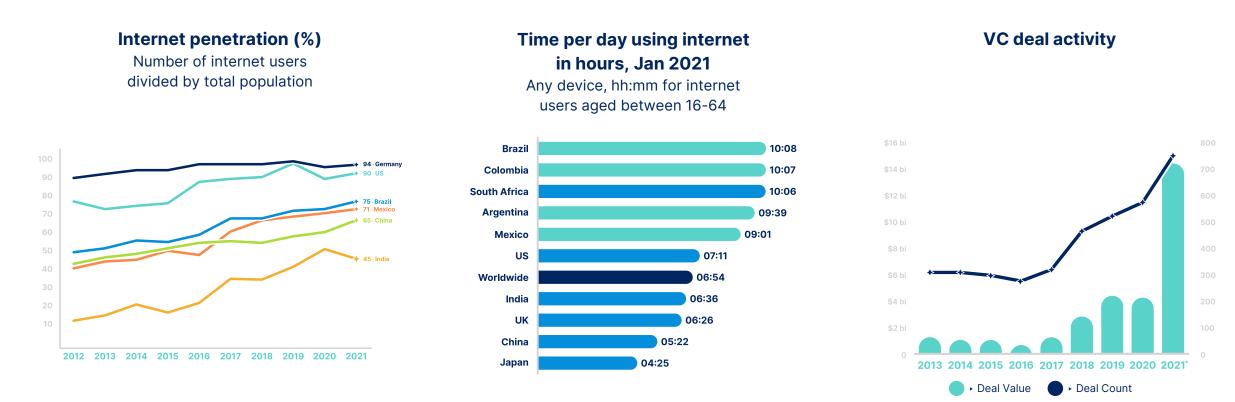
Long gone are the days when IT departments selected technology for the entire organization. The number of average billing owners per mid-sized company has increased from 12 (in 2019) to 21 (in 2020). This shows that each department chooses SaaS platforms that are most convenient for them. This is intuitive, as what works for the Marketing department of a company won't work for the Engineering one.

On that note, the use of SaaS is widespread across all departments. There is a 27.6% 2-year growth rate in all app categories. The SaaS apps with the most growth are in IT & Security, Customer Support, and HR.

On the flip side, trying to control and track how technology is used in the company can create a headache for IT departments.



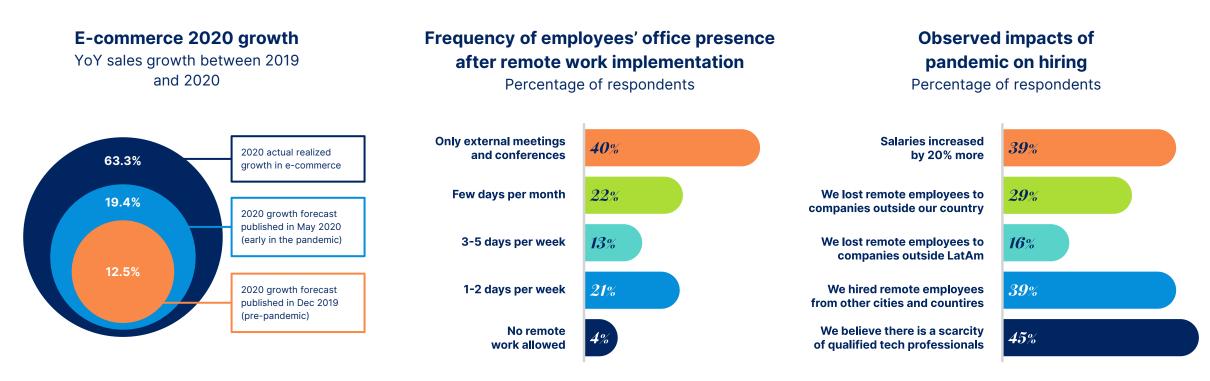
# Even before covid-19, LatAm was already in a *good position* for its digital transformation *exponential growth*...



LatAm population is among the top internet users in the world, well above the average. Internet penetration has reached levels in Brazil and Mexico higher than in China and India. Total startup investment in LatAm has also soared over 15X since 2014.

Source: Atlantico LatAm Digital Report 2021

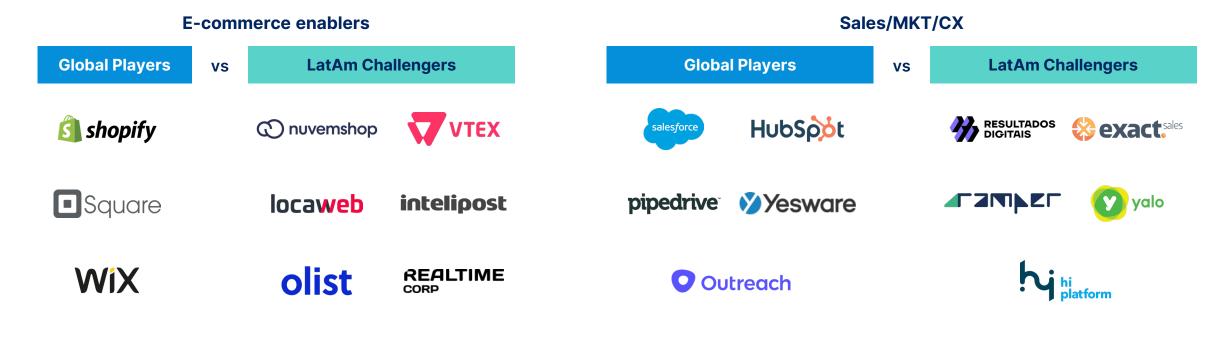
... and the covid-19 pandemic *accelerated some dynamics*, including ecommerce, remote working solutions, and fight for talent ``````



E-commerce enabler SaaS companies, such as Nuvemshop and Olist, gained important momentum after the pandemic - both raised large rounds and became unicorns in 2021. Remote working also bolstered enterprise cloud solutions ranging from Cybersecurity (Auth0 acquisition, unico's large round) to ERPs (Omie, Conta Azul). Finally, the war for talent is now even more competitive thanks to remote working and the threat of global companies hiring from abroad with stronger currencies and usually more funding.

Source: Atlantico LatAm Digital Report 2021

### Segments with *strong representation* of local players (1/2)

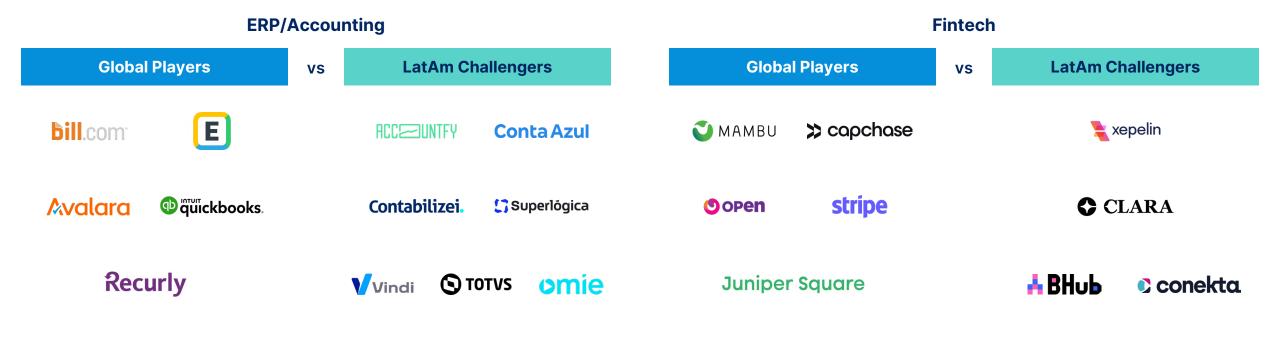


The local players are market leaders thanks to adaptation to local bureaucracy, integrations, and complexity of logistics and legal aspects of e-commerce.

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Local players are competing mostly for the SMB market as it's tough to replace the top SaaS serving globally established companies.

### Segments with *strong representation* of local players (2/2)



There are many LatAm challengers, particularly due to the complexities of accounting and taxes in Brazil, where most players come from. Most are SMB-focused. This segment has also a very active M&A scenario in LatAm.

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Fintech companies lead fundraising across the globe and in Brazil, but for SaaS in LatAm, it represents ~13%. Global players are still early in the region.



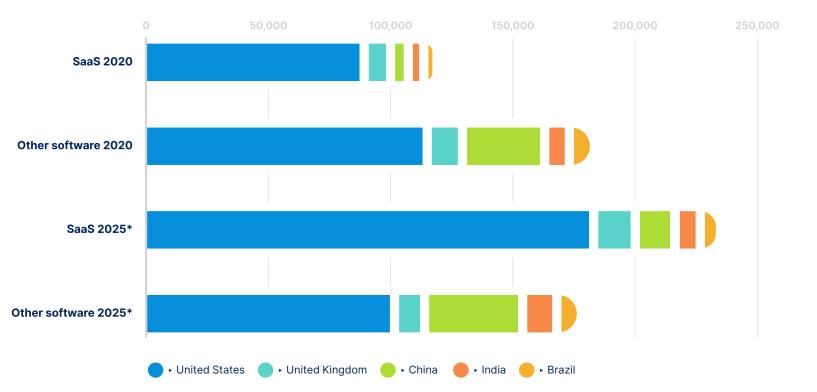
## SaaS total market size in Brazil should *triple* by 2025

Annual SaaS spending in Brazil, by far the market leader in LatAm, was € 1.5B in 2020, around 1.6% of that of the USA.

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By 2025, the SaaS market size in Brazil is expected to triple to  $\in$  4.5B, or 2.4% of the USA's for the same year. For comparison, India's would be at 3.2% of the USA's.

We estimate that excluding Brazil, LatAm's SaaS market size in 2025 would range from € 2B to € 3B.



In million Euros

Source: Reply; Statista estimates; teknowlogy Group

# **Opportunities for LatAm**

### **Going vertical**

Verticals are still a largely untapped opportunity for LatAm as only a few of the top-funded players are identified as such. Edtech, Agtech, and Healthtech represent the largest funding rounds thus far.

By assessing the Vertical SaaS market abroad, through the rise and IPO of major players such as Veeva (~ US\$ 30B market cap), we believe LatAm still has enormous opportunities. One large potential upside of Vertical SaaS is the significant natural entry barriers for particular markets, which makes it much harder for global companies to compete.

LatAm has already a very robust and established industrial ecosystem, but there are still many inefficiencies along the value chain that will become increasingly targeted by Vertical SaaS startups. Additionally, we're seeing opportunities for high growth in more niche markets and categories as products get increasingly specialized. There's really no limit to the number of niche markets that can be disrupted by software, and we expect to see a lot more of this in the near future.

There's plenty of knowledge in the region to think of something local and specific enough for a vertical and this is the best barrier against global players"

— Patrick Arippol, Partner at Alexia Ventures

# **Opportunities for LatAm**

### Localizing and going for SMBs

LatAm, and Brazil in particular, is already leading an important regional trend of startups focusing on ERP and/or management/financial/legal solutions, mostly focused on SMBs.

SMB is by far the largest business segment in Latin America, comprising around 99.5% of all the firms according to OECD. But tackling this market early represents an enormous opportunity not only because of its size. The complexity of regional taxes, bureaucracy, and other local challenges for SMBs serve as natural barriers for competitors as these startups scale.

These startups will eventually expand locally and build strong partnerships, as we can see with major established companies that are also becoming full stacks through M&As (for example, TOTVS). Offering large portfolios with often large integrations/APIs is very common in this subsegment.

The SMB segment is probably from where we'll see most of the innovation and success cases. The digitalization we saw on this market segment over the last two or three years combined with its market potential makes it a very attractive opportunity for entrepreneurs"

— Caio Bolognesi, Partner at monashees



# **Opportunities for LatAm**

#### **Building a local robust ecosystem**

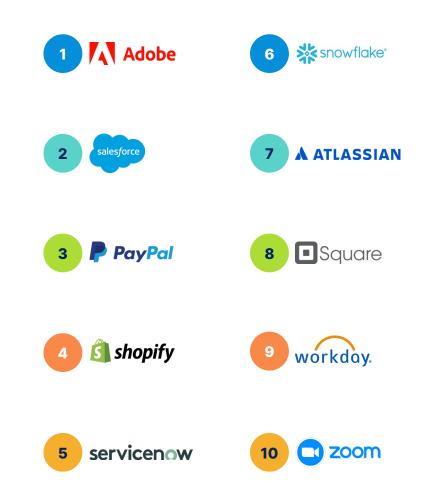
All of the Top 10 Companies from the BVP Cloud Index, shown on the right, have built and maintained strong robust ecosystems.

A company can start an ecosystem after achieving some base level of market awareness and then teaming up with other third-party partners. This creates infrastructure, allows scalability, and is a powerful defensibility mechanism.

In LatAm, the consolidation is already in place, noticeable by the steep increase in the number of SaaS acquisitions: 20 in 2021.

But beyond M&As, there are organic ways to build the ecosystem with local third-party players. This is just now picking up. Nuvemshop's app marketplace is a great success case as it currently has dozens of apps and the majority of them are local.

Robust ecosystems made of local players are one major opportunity for LatAm SaaS startups to scale and have a barrier of defense against the global players entering the region.



Source: Bessemer Venture Partners, 2021

In general terms, we still do see a *big opportunity of localizing staff and building local distribution channels and products* - the main case being Nuvemshop"

– Santiago Fossatti, Partner at KASZEK



Segments still *lacking* strong local players (1/2)



and locked in most of the top companies as clients. Tough to compete at this scale.

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and expanded aggressively. Given the universal nature of the products, it is challenging for the local players to compete.

Segments still *lacking* strong local players (2/2)



Most top players are not in LatAm yet, creating an opportunity gap. The main barrier for local players is the lack of expertise and the war for talent.

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Most top vertical global companies have no presence in LatAm yet. Adding up the massive and consolidated industries in the region, such as Agro and Healthcare, Vertical SaaS in LatAm has plenty of room to grow.



# Challenges for SaaS LatAm

#### The SaaS industry is becoming more and more competitive, global, and mature

We're still in the early innings of the SaaS market. Blissfully has conducted a survey with IT leaders in 2020, in which 25% said they were SaaS only. This number is projected to continue to rise, likely approaching the vast majority of companies in the next five to 10 years. That said, certain categories are maturing, with deep market penetration. These tend to include the early categories, like public cloud providers and CRM. In an increasingly crowded space, delivering value to consumers and positively differentiating your brand matters a lot more.

Even though there are tons of apps and solutions, there's still opportunity, especially in areas that have been slower to move into SaaS, like IT, Security, Compliance, and HR. These categories are seeing significant growth opportunities and will likely continue to see new entrants take advantage of this opportunity.

Finally, there's a trend for going lower-touch on sales, which requires less human interactions across the funnel. From the previous more high-touch model to low-touch, there are not many playbooks and expertise is scarce - in this case not just for LatAm, but all over the world. This could present an opportunity for LatAm founders to innovate and take the lead.

You must now be ready to compete with global players from the get-go. So we have seen the quality guidelines skyrocket recently"

Daniel Chalfon, Partner at Astella



# Challenges for SaaS LatAm

#### SaaS companies still need a lot of capital to scale - and succeed

On the bright side, about half of the top 100 SaaS apps are privately funded. On the other hand, those companies have raised on average over US\$ 100M in the USA. We all have seen that even though it's easier and cheaper than ever to get a company off the ground, it still takes significant capital to build a relevant, established business. And therein lies the opportunity.

As new companies push to be category leaders, they will need private funding to make the transition. And this is still a major challenge across LatAm, where even though VC funding rates are increasing, they still severely lag behind other developed countries, particularly if you don't consider Brazil.

The rising costs are also important to consider. With weak local currencies, must-have global products used by startups have become more expensive, and talents - also being targeted by global companies thanks to remote work - now command much higher paychecks but the revenues are still in the local currencies. In this tough environment, raising capital is quite important.

SaaS as a business model got much more mature over the years but still has a long way to go. It's only now that the Brazilian founders have the *playbook, contents, benchmarks, talents*, etc., and can now *innovate on top of all that*"

Patrick Arippol, Partner at Alexia Ventures



# Challenges for SaaS LatAm

#### The war for talent

It's pretty much a consensus among LatAm founders, and everyone we have interviewed for this report agreed, that finding talent is one major challenge in the region. While not exclusive to SaaS, as this affects the entire startup ecosystem in Latin America, SaaS has a few extra skills and positions that are crucial to scaling a business.

Product, go-to-market, CX, and tech-related roles are the main current and future bottlenecks. Covid-19 made things worse for LatAm startups in the sense that they are now competing with global remote positions, which, thanks to an extraordinary stronger USD currency, makes competing with comparable total comp packages really difficult.

LatAm is behind the levels of maturity and expertise you can find in Silicon Valley, for example. There are only so many expert talents in scaling a successful SaaS business well, regarding established playbooks and even writing their own. Bringing talents from abroad is a big challenge and the local ones are also being targeted by global startups, as mentioned in the previous paragraph.

It's really important to have *global-caliber talents*, particularly in engineering and product-related roles, which is becoming *increasingly more difficult* with so much global competition and liquidity"

Gustavo Souza, Partner at SaaSholics



# Latin America: Future of Proptech

# *Contents*

#### Latin America: Future of Proptech

#### **Context Setting**

- Global proptech unicorns and startups
- Transformational changes in the last 5-10 years
- Global evolution by category
- LatAm evolution by category
- Residential: the largest proptech category
- Market positioning for global proptech marketplaces
- Market positioning for LatAm proptech marketplaces
- 2022 for proptech
- Most important challenges proptech players are facing right now
- Private funding for real estate tech
- Top VC-backed proptechs in LatAm and geographical footprint of selected players
- Total funding for startups in LatAm, current stage, and types of investment
- The future of marketplaces and SaaS in LatAm's proptech
- Most active investors in LatAm's proptech

#### **The Trends**

- US investors: what were they saying before the pandemic?
- US investors: right after the pandemic hit, did they change their expectations?
- US investors: two years into the pandemic, what are they thinking?

#### The Opportunity

- The importance of digital transformation
- The opportunity of real estate tech in numbers
- Key themes: higher fragmentation and low NPS, low classified penetration / consolidation; acceleration of digital adoption
- Other themes: remote work; capital relocation; digital acceleration
- Proptech models considerations (LatAm)
- Which proptech markets are still not penetrated?
- Shifts in the next 5-10 years?

### Case Studies: unbundling existing platforms

- Unbundling CoStar
- Unbundling Zillow
- Unbundling Procore
- Unbundling Airbnb

# **Executive Summary**

**Real estate** — *and the companies that facilitate its transactions* — have been a cornerstone of investors' portfolios for the last 50 years. The global US\$ 9.6T total addressable market has, of course, evolved over that time. But until recently, these companies have been only facilitating advertising of listings, enabling buyers and sellers to connect to the traditional transaction system.

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All of this is being upended today. Across the globe, **covid-19 has accelerated trends such as remote work**, **relocation of capital from commercial to residential real estate**, **and increased adoption of digital transactions**.

Latin American real estate markets have low penetration rates and a lot of growth potential. It is also one of the markets where multinational companies are not present and most of the opportunities are being tackled by local entrepreneurs. With so much money already poured into global real estate, **where should investors and entrepreneurs go next?**

Context Setting

Real estate 1.0 was about bringing information and data online.

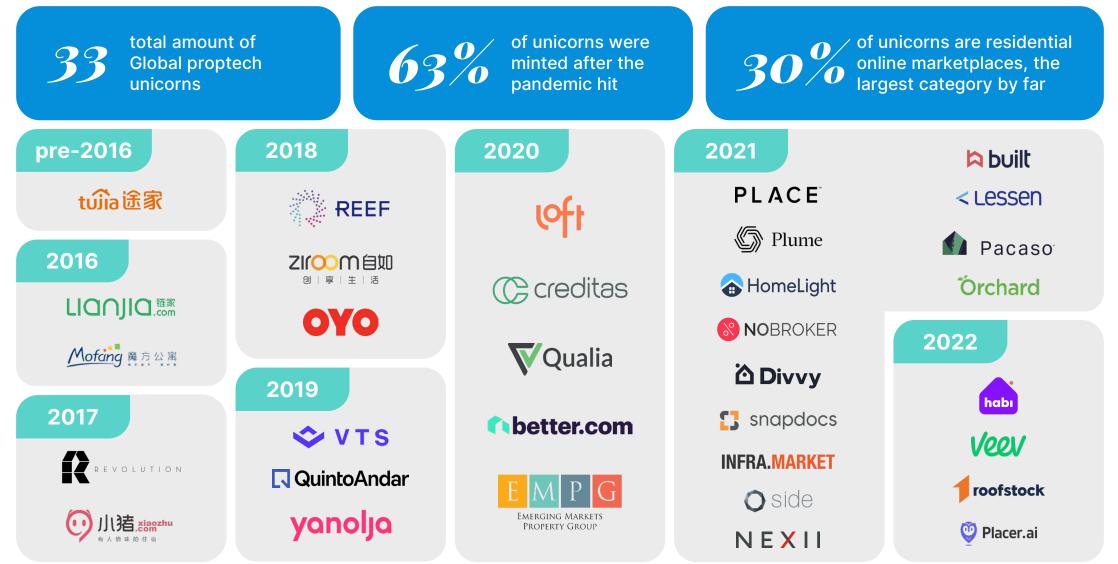
Real estate 2.0 was about the **transaction**. Integrating the sell side and buy side with financial products, having confidence and trust, and taking friction out of the transaction.

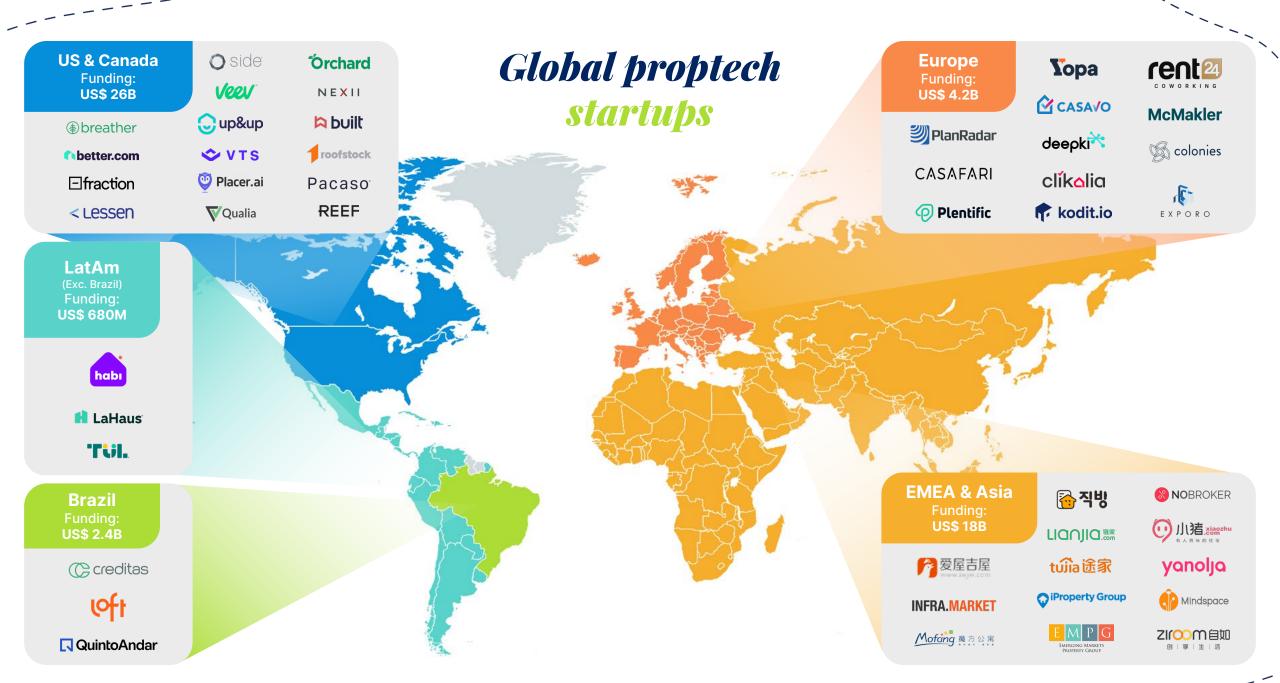
Real estate 3.0 is going to be about transforming and digitizing ownership, affordability, and tradeability. About taking out the friction of property management and fractional ownership. You can start to see these innovations in areas that are not properly served, like vacation rentals."

- Pete Flint, General Partner at NFX

Global proptech unicorns

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Sources: Crunchbase as of May 2022. Only includes companies that managed to raise above USD 100m. It may include public companies but only the amount raised privately. It excludes WeWork and Airbnb.

What are *the most significant transformational changes* that happened in the LatAm proptech market in the last 5-10 years?

"Besides **consumers moving online**, major changes happened in **mortgages and rent guarantees** that are now **easier and better** for both customers and property owners. Another big change was the emergence of operationally intensive players who focus on **locking in the customer** to make sure he will transact inside the ecosystem. These businesses are an **operation play** and not tech."

— Marcos Leite, General Manager at ZAP+

"Beyond the **digitalization** of traditional real estate transactions, the past years have seen an emergence of solutions catering to **real estate tourism and temporary housing solutions** as a lifestyle sector. Noteworthy in this category is the emergence of **national and international short-term & vacation rental players** in LatAm, as well as **fractional ownership models** for vacation homes, such as Casai or Kocomo in Mexico."

— Julian Roeoes and Santiago Danino, Picus Capital

"The major transformation of the last years happened in **how people use the internet to transact**. In the beginning, **classifieds** served as a substitute for **newspapers**. Quinto Andar was an important vector of this change. We decided we would treat real estate transactions **in the same way transactions were made in markets like tourism and ecommerce**. Now, most of the companies are online and this is good for everyone."

- André Penha, Co-founder and CTO at Quinto Andar

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Global evolution by category

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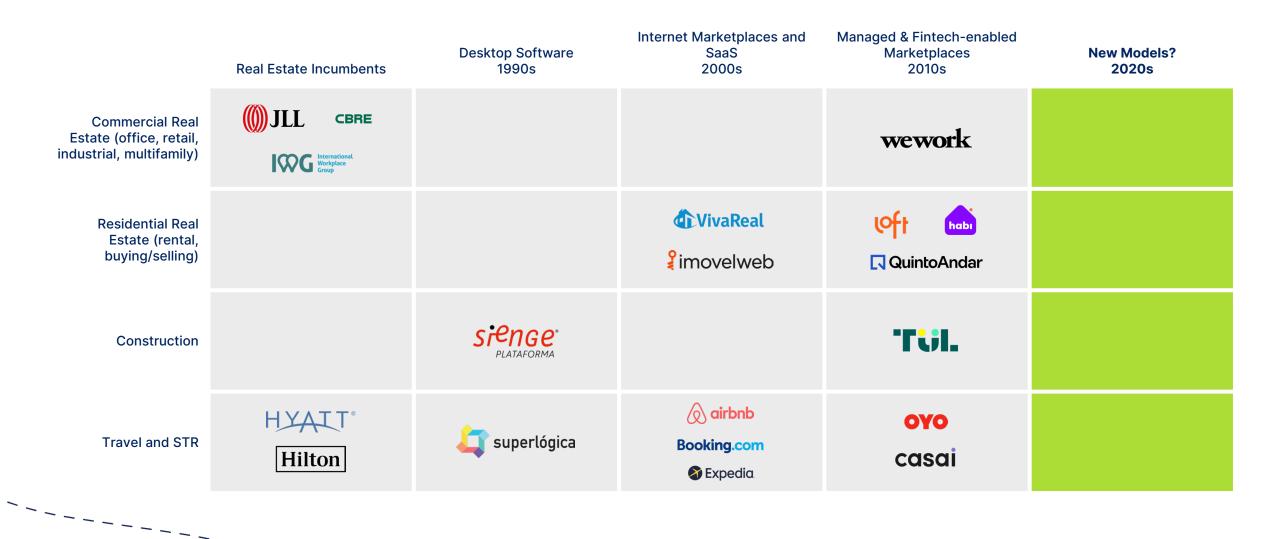
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### Most of the value unlocked by digital technologies in real estate happened in the last 20 years

	Real Estate Incumbents	Desktop Software 1990s	Internet Marketplaces and SaaS 2000s	Managed & Fintech-enabled Marketplaces 2010s	New Models? 2020s
Commercial Real Estate (office, retail, industrial, multifamily)	Image: Constraint of the second se	Altus Group	VTS LoopNet	REEF wework	
Residential Real Estate (rental, buying/selling)	Century 21 RE/MAX		<mark>∕</mark> Zillow <b>?trulia</b> Apartment ()) List	Opendoor COMPASS Örchard	
Construction		🔥 AUTODESK.	PROCORE	<b>Veev</b> Katerra	
Travel and STR	HYATT <sup>®</sup> Hilton		<ul><li><i>irbnb</i></li><li><i>Booking.com</i></li><li><i>i</i> Expedia.</li></ul>	<b>OYO</b> Sonder	

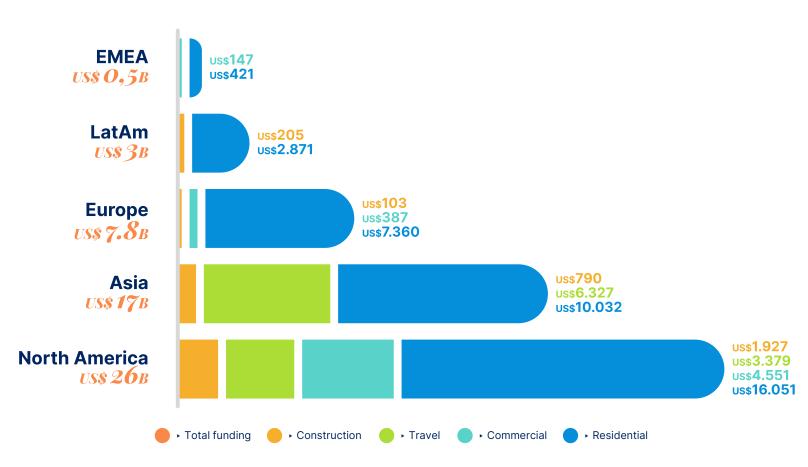
# LatAm evolution by category

### International players dominate commercial and travel, while local companies lead in residential and construction



# **Residential:** the largest proptech category

#### **Funding raised by top VC-backed companies**



### US\$ 33 billion

The total VC investment in the **residential sector** shows this proptech category is the **largest** by far. Travel is the second largest, with **US\$ 9.7B**.

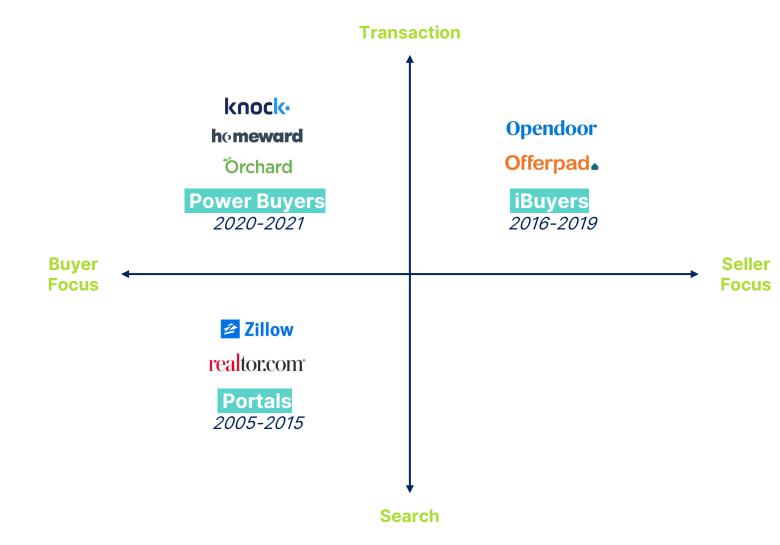
#### EMEA, Latin America, and Europe have

received considerably **less** VC investment compared to Asia and North America. Apart from **Tul**, a construction marketplace, **no company in Latin America was able to raise more than US\$ 100M outside of the residential category**. Although construction and commercial real estate are large markets, it has attracted **almost no capital** from investors.

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Source: CB Inisghts and Crunchbase. Only companies that raised above 100m were included. It excludes WeWork and Airbnb investments.

### Deeper look at *residential models* in the United States



300%

Growth in transaction made by Power Buyers.

This is the **fastest-growing category** of fintech-enabled marketplaces in the United States, reaching almost **4,000 transactions** in 2021. Companies like Orchard and Homeward act **on behalf of buyers** guaranteeing they will sell their previous house so that they can **buy a new one**, taking an important pain out of the process.

## Market positioning for global Proptech marketplaces



The first internet marketplaces used to bring information about properties online, aggregating demand to the supply side through lead generation.

Recent proptech marketplaces are now going deeper in the transaction, changing how incumbents operate completely and even creating new categories.

The intersection of fintech and proptech **unlocked a new stream of innovation in the real estate market** with iBuyers and Power Buyers.

## Market positioning for LatAm Proptech marketplaces



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# 2022 was an eventful year for Proptech

### Habi Series C US\$ 200M round

The data-driven residential real estate marketplace Habi announced a US\$ 200M Series C round in May. The company also announced a US\$ 75M additional credit line raised in June. The equity round in May minted the company a unicorn and the largest residential marketplace in Spanish-speaking Latin America. Habi has operations in Mexico and Colombia and it's fighting for market share in Mexico against Brazilian unicorns Loft and QuintoAndar.

### Drop in prices for Proptech public stocks

Higher inflation risks in 2022 increased the forecast for interest rates hikes, thereby creating widespread **fear of recession worldwide**. This has brought a negative outlook for tech and growth stocks. Proptech stocks have been **strongly affected**, **especially those with capital-intensive and low-margin business models**.

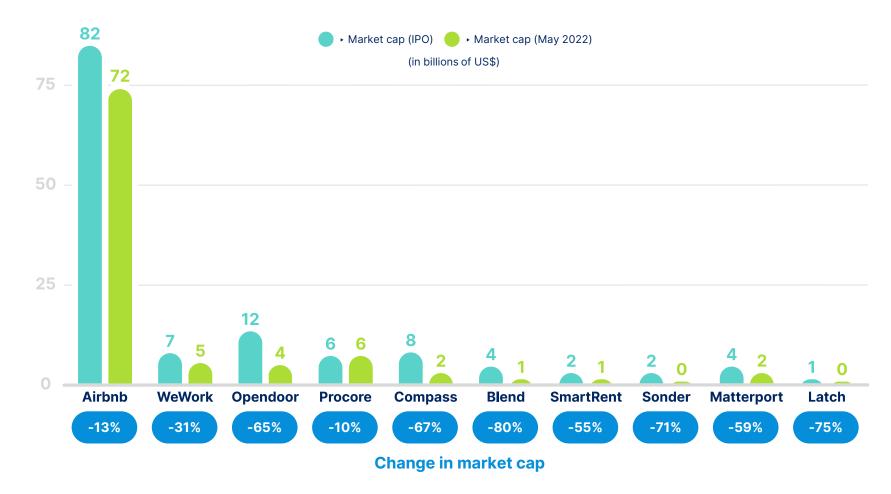
Most of the proptech stocks were **down almost 50% in Q2**. Prominent companies like Airbnb and OpenDoor closed Q2 with a 40% drop in stock prices while Sonder, Latch, and Blend fell more than 70% only in Q2 2022. This movement is expected to affect financing rounds for Proptech companies in private markets.

### Proptech startups layoffs

There has been a general offset in expectations of growth-stage proptech companies. Startups that raised late-stage capital in 2021 with aggressive growth targets needed to reassess their goals, resulting in layoffs worldwide.

In LatAm, Quinto Andar has reported layoffs that account for 4% (160 people) of its workforce and, in Loft, for 12% (159 people).

### **Recent proptech IPO's stocks are down significantly**



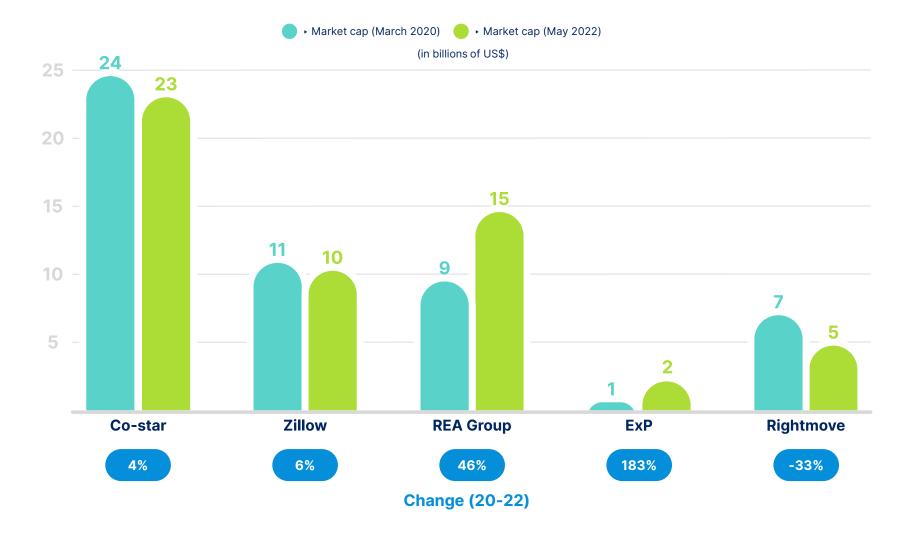
### **US\$ 94B**

Total market capitalization of Proptech companies that listed in the US in 2020 and 2021. **Airbnb represents 77% of total value**, **leaving other Proptechs with a combined US\$ 22B valuation**.

### -53%

Average reduction in market capitalization brought about since IPO. **Excluding Airbnb and Procore** that are down approximately 10% from the IPO, **average reduction goes to 63%**.

### Although old proptech incumbents are performing much better



### **US\$ 52B**

Total market capitalization of public proptech companies listed before Covid-19. **More than two years afterward**, and many ups and downs in the stock market later, **little has changed** – even after Zillow's iBuyer debacle.

#### 183%

Change in market capitalization for ExP, a **challenger digital brokerage** competing against Compass and other incumbents.

# What are the *most important challenges* proptech players are facing in LatAm right now?

"iBuyer, temporary housing, and broadly speaking capital intensive residential models will have to **closely manage their portfolios** in the context of accelerating inflation & interest rate fluctuations, but also need to **manage utilization rates and changing customer needs** driven by increased mobility and WFH trends."

- Julian Roeoes, Head of Americas, and Santiago Danino, Head of LatAm at Picus Capital

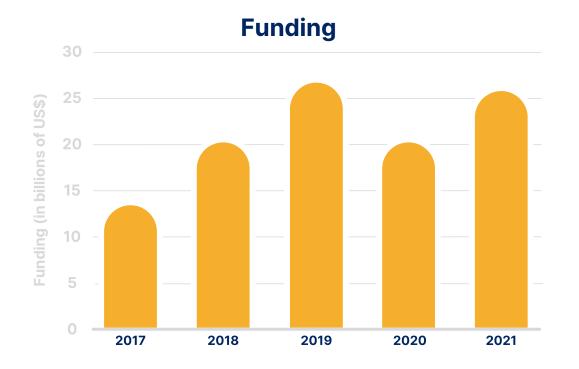
"There is **interesting stuff around the the transaction** in proptech. The sums of money involved are large and institutional capital from credit and debt facilities is needed. It is **much harder to find these facilities** in LatAm. OpenDoor, for example, raised **hundred of millions of dollars in debt** because there was this kind of facilities available." — **Pete Flint, General Partner at NFX** 

"Confidence and trust are the main challenges for startups in LatAm. There a very high distrust of government and taxes with informality representing a very high portion of GDP (60%). Technology and and real-time communication are important to **increase transparency** and make trust seamless. Real estate platforms are still in single-digital market share so there are a lot of traditional trust structures that are still not broken."

– Rodrigo Sánchez-Rios, Founder & President at La Haus

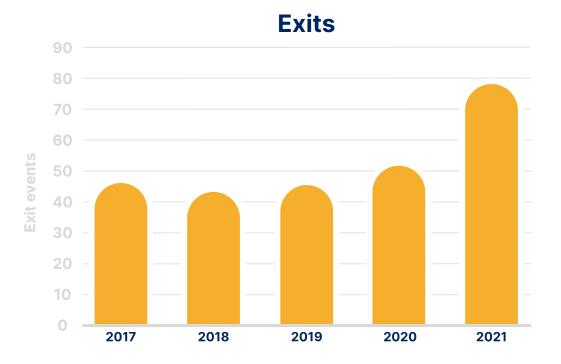
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### **Private funding for real estate technology grew strong**





Total venture capital funding to proptech startups in 2021 was slightly below 2019's levels and **US\$ 6 billion higher than in 2020**. Almost **10%** of the funding in 2021 went to **early-stage companies**, compared to **less than 5%** in the previous years.

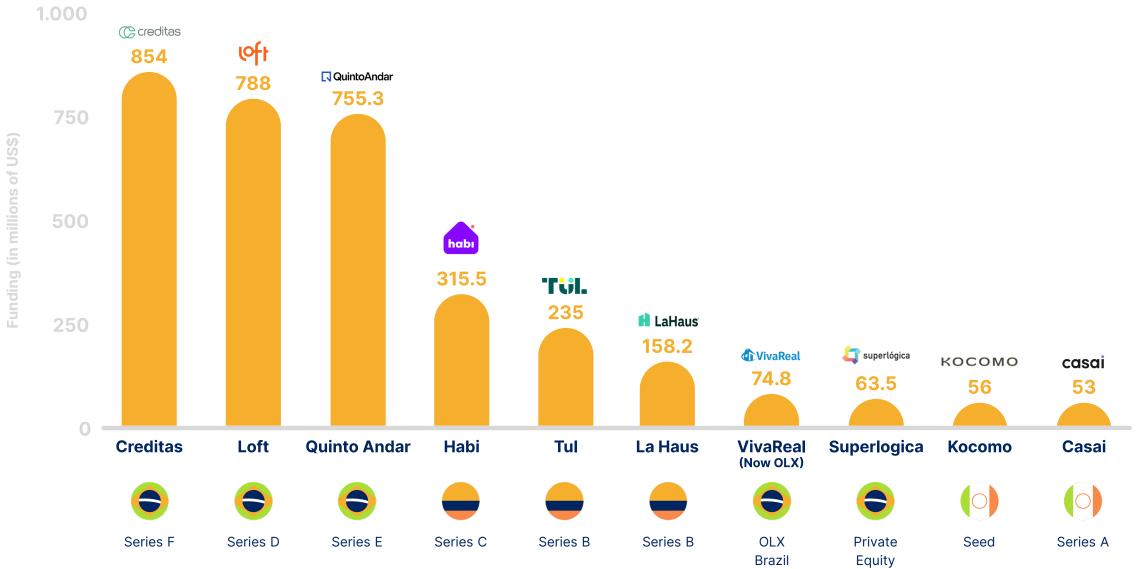


Growth in exits in the proptech space. With **higher rounds of funding**, late-stage companies are constantly **pursuing M&A initiatives**.

### Top VC-backed proptechs in LatAm

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### Geographical footprint of selected players

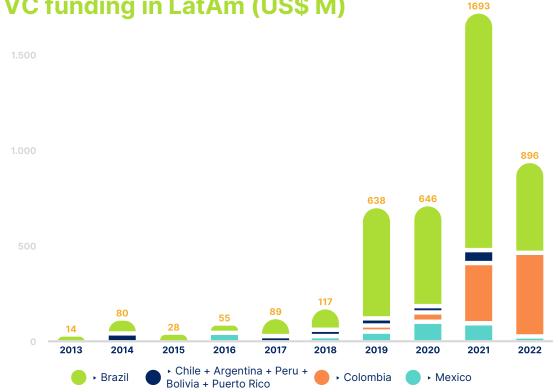


### **US\$4B**

Venture investors have poured US\$ 4 billion into Latin American startups and more than 90% came in the last four years. The development of the proptech ecosystem brough late-stage ronds that propelled the region.

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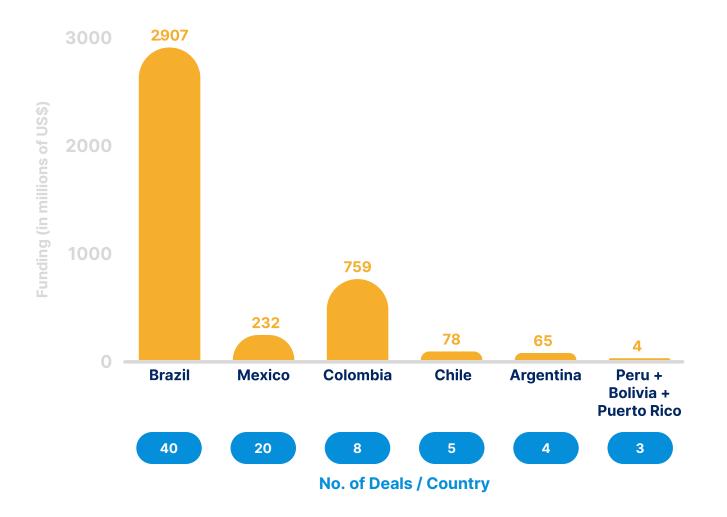
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VC funding in LatAm (US\$ M)

Source: Crunchbase as of May 2022. It includes all companies in the primary research that were not included in the global funding slide.

Total funding for startups in LatAm



70%

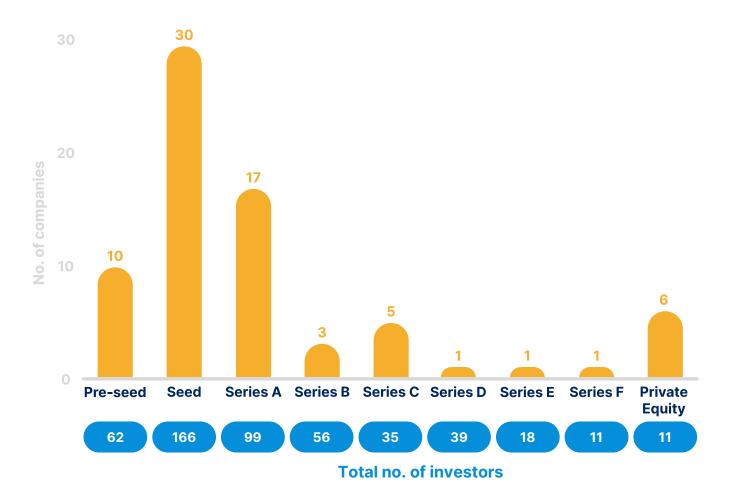
Brazil accounts for **70% of total funding** and **50% of companies** included in the research.

18%

Colombian startups are responsible for **almost 20%** of VC funding raised in Latin America. Although Colombia is a smaller country than Mexico, **most of well-funded proptech startups in Colombia have operations in Mexico** (e.g. La Haus, Habi, and Tul).

Source: Crunchbase - companies that raised at least USD 500,000.

Current stage of investment in LatAm



235

Number of **Venture Capital investors** registered in all rounds. A significant amount of institutional investors.

99

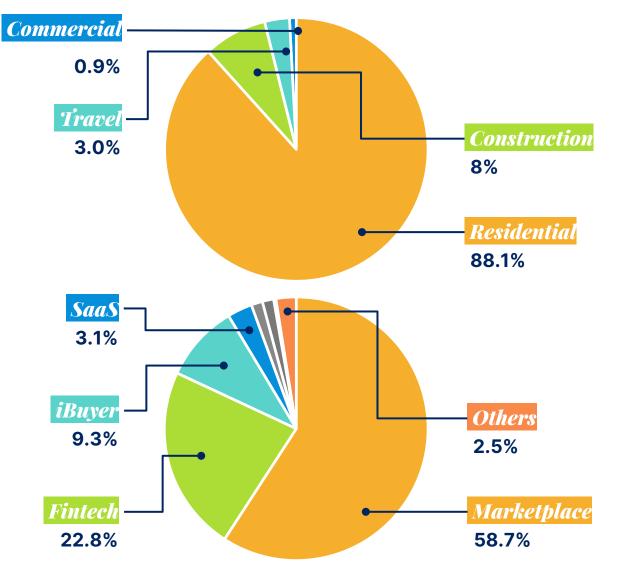
Angel investors registered in LatAm proptech startups. Many investors are **founders** of other VC-backed startups.

M&A

Two Series C companies that received VC investment **were acquired by challengers** (Navent and VivaReal).

Source: Crunchbase. It includes all investors registered in Crunchbase. The same investor may be included in two different rounds.

Types of investment in LatAm



88% in Residential

Almost all of the investments made in Latin America proptech startups were directed at companies in the residential sector, with only 12% going to other categories. This is in line with most of global investments in proptech.

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### 81.5% in Marketplaces + Fintechs

Investors have chosen **marketplaces as the preferred model** in Real Estate, with **59% of investments**, followed by **23% in Fintech**. Although marketplaces dominate the global landscape for proptech, the amount is more **disproportionate** in LatAm.

### How do you see the future of *marketplaces and SaaS* in proptech LatAm?

"Marketplaces have **already started doubling down** on their SaaS game for a while and vice-versa. In the future, **all platforms** will eventually compete for the **biggest slices of the pie** and they'll want customers and property managers to handle transactions, collections, financing, etc., **all in the same place**."

— Marcelo Lima, Partner at Monashees

"Marketplaces and SaaS are **enabling fintech solutions**. Often the best companies have a very predictable SaaS fee and also a transactional fee they benefit on top. It is easier to begin with SaaS and move after to a marketplace. But **SaaS works well when you are dealing with large companies** (e.g. industries in the U.S. like property management, multifamily, construction, and CRE). The problems with SaaS and real estate are high agent turnover and bad customers in brokerages."

Pete Flint, General Partner at NFX

## Most active investors in LatAm

15 most active VCs	No. of Deals
Y Combinator	9
Monashees	7
FJ Labs	7
Kaszek	7
Canary	5
Endeavor Catalyst	5
SoftBank	5
Global Founders Capital	5
Tiger Global Management	4
QED Investors	4
Redpoint eventures	4
Liquid 2 Ventures	4
Andreessen Horowitz	3
Graph Ventures	3
Clocktower Technology Ventures	3

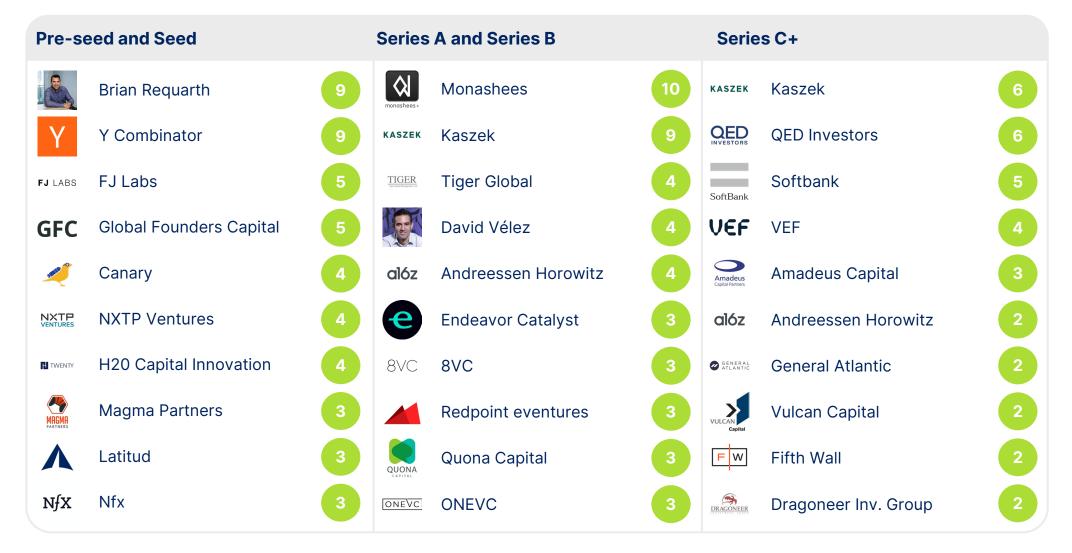
15 most active Angels	No. of Deals
Brian Requarth	8
Carlos Julio Garcia	3
Roger Laughlin	2
David Vélez	2
Mauricio Feldman	2
Fernando Gadotti	2
Edward Lando	2
Shaun Di Gregorio	2
Alexander Torrenegra	2
Simon Baker	2
Florian Hagenbuch	2
Travis Foxhall	2
Mate Pencz	2
Jonathan Wasserstrum	2
Julio Viana	2

Source: Crunchbase

## Most active investors in LatAm by investment stage

.....

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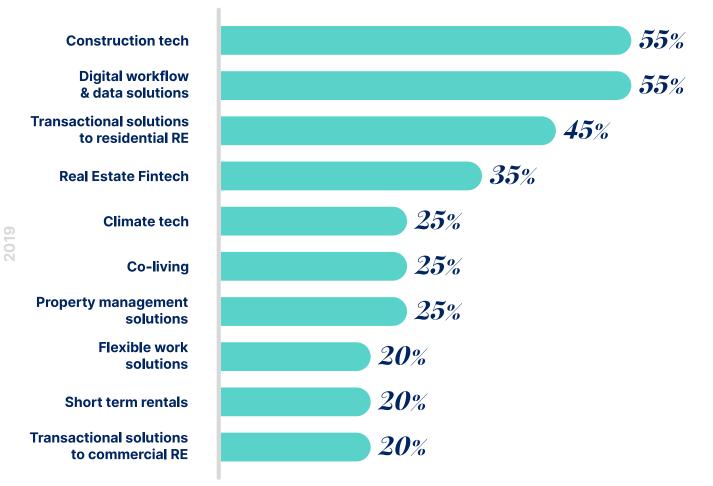
Source: Crunchbase as of May 2022.



There are plenty of studies which show you that real estate and its associated segments account for about 17-20% of global gross domestic product, and the real estate sector is larger than the securitised debt and equity market globally. So we wanted to *take the time to explore* that sector. We are one of the world's largest funds, so the sector gives us the opportunity to *deploy capital* at scale."

- Justin Wilson, Managing Director at Softbank

## **US investors:** what were investors saying before the pandemic?



"The challenge with investing in real estate tech is to find startups with teams that not only have world-class product and software capabilities, but also worldclass knowledge of finance, real estate, and operations."

— Pete Flint, partner at NFX

"The **amount of money** spent in real estate is **enormous**, and the data and tools we use today are **still based on insights from a decade ago.**"

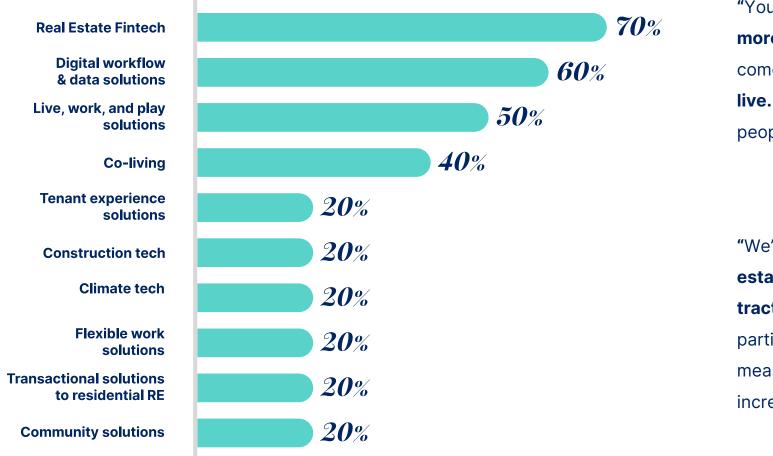
- Connie Chan,

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partner at Andreessen Horowitz

Source: https://techcrunch.com/2019/11/14/where-top-vcs-are-investing-in-real-estate-and-proptech-part-1-of-2/

US investors: right after the pandemic hit, did investors change their expectations?



"Young people still want cheaper, faster, more tech-enabled solutions when it comes to how they eat, work, play, and live. It's the business models where people need to take a deeper look." — Adam Demuyakor, managing partner at Wilshire Lane Partners "We're quite bullish on this space, as real

estate fintech companies have gained

traction over the last few months in

particular due to social distancing

measures and customer demand for

increased digitization."

– Brendan

Wall

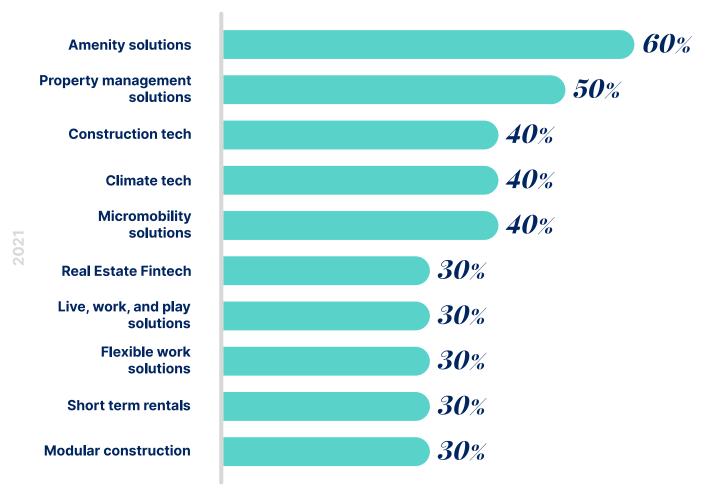
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Wallace, partner at Fifth

Source: https://techcrunch.com/2020/09/03/9-top-real-estate-and-proptech-investors-cities-and-offices-still-have-a-future/

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## **US investors:** two years into the pandemic, what are they thinking?



"Many **multifamily operators** are understanding that the integration of work/life/play is **creating a new need for amenities** and greater services in their offerings."

#### — Clelia Warburg Peters, partner at Bain Capital Ventures

"Remote working has contributed to the resurgence of the suburbs, and many suburban real estate markets have seen **increasing demand for homes** from both buyers and renters. *(...)* The SFR space is poised to **benefit from the migration from cities**, and the tech that supports SFR will likely have **positive ripple effects** across the industry."

#### - Christopher

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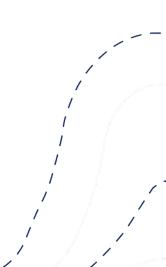
Yip, managing partner at RET Ventures

Source: https://techcrunch.com/2021/03/24/10-proptech-investors-see-better-era-for-residential-and-retail-after-pandemic/



66 **Digital transformation** is penetrating all markets. The next two years will show that more offline players will use online platforms. In the following years, new steps will be made toward *technologies* that are still not understood today. Data and intelligence are still used as mere statistics and not used in an *intelligent* way."

– André Penha, co-founder & CTO at Quinto Andar



⁶⁶ Real estate is the largest undisrupted market in the US, worth over US\$ 1.6T annually."

– Chamath Palihapitiya, CEO at Social Capital

... and worth **over US\$ 9.61** globally according to **MSCI**

(Size of the professionally managed global real estate investment market - 2019)

Key themes

- Higher fragmentation & low NPS: The lack of traditional industry consolidation in LatAm means the market is still served by a myriad of small mom 'n' pop brokers and independent agents without capital to go digital, which in turn means less pushback from incumbent traditional players.
- 2. Low classified penetration / consolidation: Online classifieds usually owned by large legacy media groups failed to consolidate the market and sub-invested in improving user experience. There are no classified incumbents (i.e. Zillow) in LatAm, which drives down advertising costs and competition risk.
- **3.** Acceleration of digital adoption: The 70% smartphone penetration in LatAm (rivaling China & US) has proven to be a fertile ground for food delivery and e-commerce, both accelerated due to covid-19.

| Item (US\$) | Brazil | Rest of LatAm |
|-------------------------|---------|---------------|
| # of Households | 66 mm | 124 mm |
| Resid. Property value | 4.7 Trn | 8.9 Trn |
| Outs. Mortgages value | 127 Bn | 170 Bn |
| Sales transactions p.a. | 206 Bn | 380 Bn |
| Households on rent | 18 mm | 40 mm |
| Rental payments p.a. | 47 Bn | 112 Bn |

Sizeable and growing market (TAM in LatAm)

The perfect storm: What took 50 years for the US, took 15 for China and *will take 5 for LatAm.*

Notes: TEB = Tech Enables Broker, (1) Proptech Penetration Index calculations = Total proptech funding for relevant category / GDP, Base 100 = US.

Sources: Crunchbase as of Dec 2020. Funding for US excludes WeWork funding. Macro data = Worldbank. Smartphone penetration from Statista Research Department. Market size data = Euromonitor and aptuno analysis.

Other themes

1. Remote work (Behavioral / Demographic)

Possibly the most significant long-term change to RE will be driven by mainstream remote/flex work adoption

- O De-urbanization / migration from city centers towards suburbs / cheaper cities
- O People will further delay home purchase decisions due to the recession and newly-found geographical flexibility
- O People are looking to maximize time with families / friends as opposed to minimizing office commute time

2. Capital relocation

Massive capital transfer from commercial real estate toward residental

- O E-commerce will accelerate the decline of brick-and-mortar retail in exchange for last-mile logistics infrastructure / residential developments
- O Zoom / remote work will lessen the need for business travel accommodation
- O Less overall space needed per employee will drive office property yields down
- O Low rates environment will make residential cap rates more attractive (especially from a risk-adjusted return standpoint)

3. Digital acceleration

The future is digital, seamless, and centralized

- O Acceleration of seamless online experiences vs. offline RE transactions
- O Appetite for one-stop-shop/marketplace consumer solutions will trickle down to real estate assets/products

Proptech models considerations (LatAm)

| | Horizontal classifieds | Tech enabled
broker ("TEB")
(sales focused) | iBuyer | Mortgages /
HELOCs | Rentals
marketplace | Integrated rentals
platform |
|---------------------------------------|---|---|---|---|--|---|
| Market Size (TAM) | #25 mm x US\$
150M = US\$ 3.7B | US\$ 600B x 3% =
US\$ 18B | US\$ 600B x 8% =
US\$ 48B | #7 mm x US\$ 50k
x 8% = US\$ 28B | US\$ 159B x 12% =
US\$ 19B | US\$ 159B |
| Underlying market expected growth | 0 | • | • | • | • | |
| Revenue profile
(Size & Frequency) | B2B (recurrent)
High frequency /
Low ticket | B2C (transaction)
Low frequency /
High ticket | B2C (transaction)
Low frequency /
High ticket | B2C (recurrent)
Low frequency /
High ticket | B2C (recurrent)
Mid frequency /
Mid ticket | B2C (recurrent)
High frequency /
Mid-low ticket |
| Gross margin / LTV
capture | O | • | | • | • | |
| CAC | 0 | 0 | • | O | 0 | |
| Network effects | • | • | C | C | | 0 |
| Capital intensity | 0 | C | | • | C | |
| Operational intensity | 0 | | • | ٠ | • | |

Which *proptech markets* are still not penetrated?

"Commercial Real Estate is an area which no one is pursuing right now. Commercial properties are very different depending on the region so is more difficult to standardize but there is a big opportunity for mortgage and rental solutions. I see more opportunities on the B2B side than the consumer side."

— Marcos Leite, General Manager at ZAP+

"We think there are great opportunities to be tackled in all sectors, but **commercial and construction** seem particularly exciting. They're still **the most untapped**, with very few tech-first players in these verticals, and there are a **ton of problems to be solved**."

– Marcelo Lima, Partner at Monashees

"While there is **potential for innovation across the entire proptech universe**, there are two markets which to date have seen limited development relative to their potential: **construction and vacation**. On the former, there are **multiple opportunities** for the development of models that enable all parties involved in a construction project to better collaborate, for instance, on **order management**. On the vacation front, there is **ample room for improvements in the foreign investment spac**e, making it easier to channel capital and contribute to local LatAm economies. Examples are Kocomo and Casai."

What shifts do you see happening *in the next 5-10 years*?

"We see three major shifts occurring across the LatAm proptech market within the next 5 to 10 years: **the democratization of access** and fractional ownership, **CRE innovation and tech-enablement**, as well as an emergence of **verticalized SaaS solutions**."

- Julian Roeoes, Head of Americas, and Santiago Danino, Head of LatAm at Picus Capital

"As it happened to Nubank, **tech adoption will bring more companies** to formal structures. Transactions are **personbased** and not data-driven. The quality of the current real estate inventory is broken and **we need to build the infrastructure**. La Haus is focused on residential development and new houses, increasing the speed of selling to maximize profits. Developers use very bad tools so **there is a lot of opportunity**."

– Rodrigo Sánchez-Rios, Founder & President at La Haus

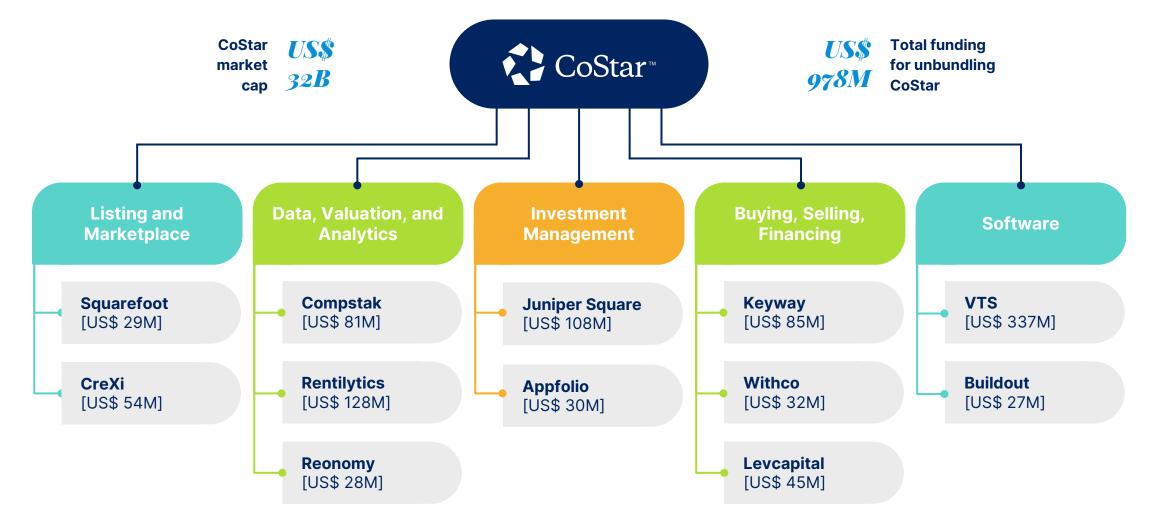
"We see **a lot of new models** in the US and we go around the world and think about the nuances that make the model work or not work in different regions. A lot of **proptechs are becoming full-stack platforms** so it is really difficult to differentiate between tech-enabled players and other platforms. This trend will continue. **Marketplace and software thrive in opaque environments.**" Case Studies: unbundling existing platforms

Real estate is a process from one end to another. The transformation from the internet perspective has been always that *the internet was doing* something that was innecificient before. The evolution that is occurring right now is that technology is *replacing* the process and *creating* new processes."

--- Simon Baker, Angel Investor & former CEO at REA Group

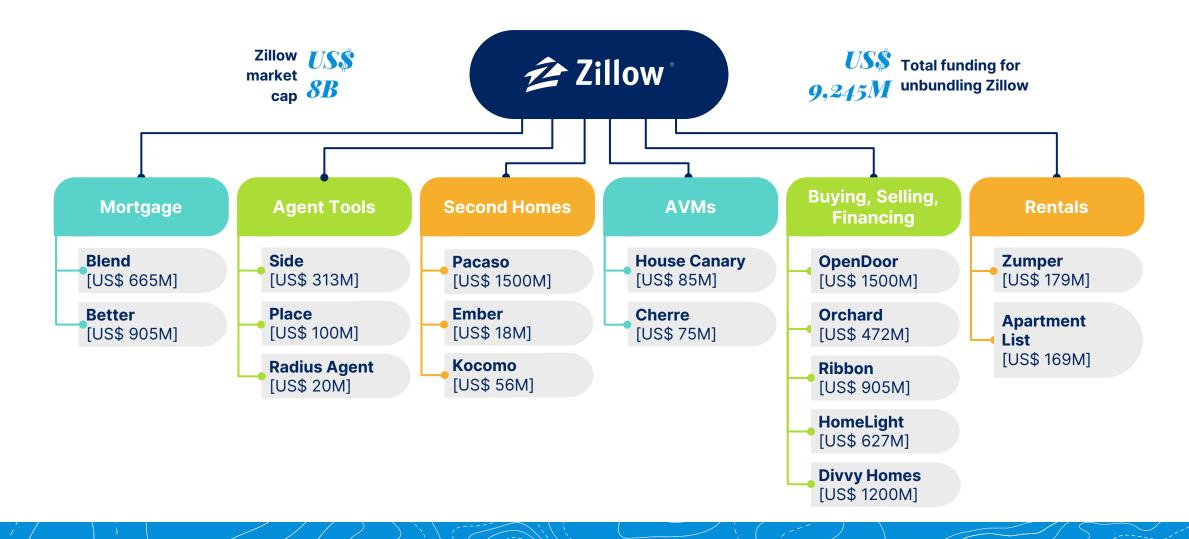
Unbundling *CoStar*

CoStar is an incumbent tech company in commercial real estate in the US and the undisputed leader in many categories



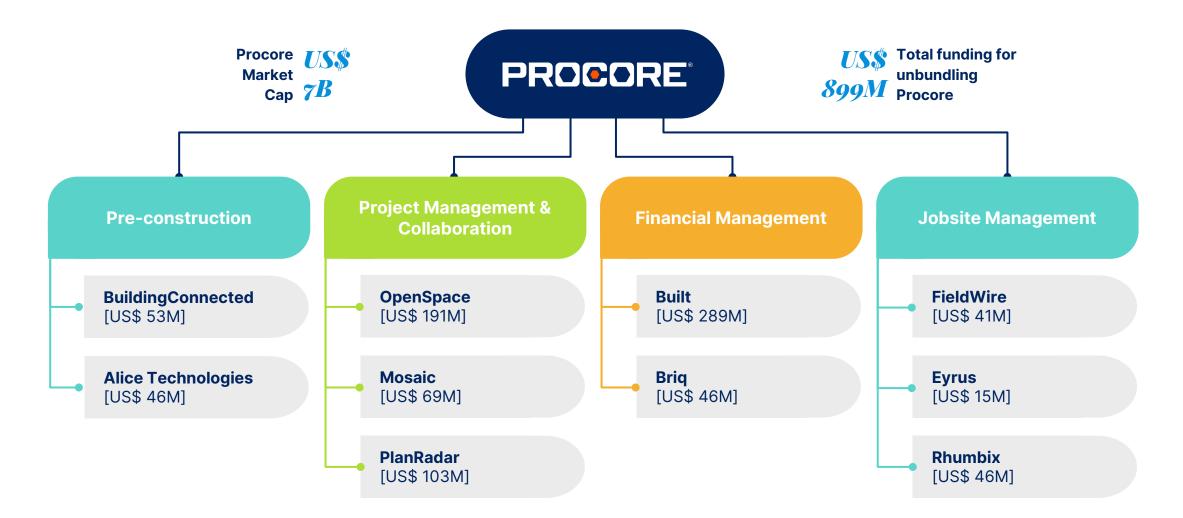
Unbundling *Zillow*

Residential marketplaces around the world (e.g. Zillow and REA Group) unlocked large market segments for unbundling



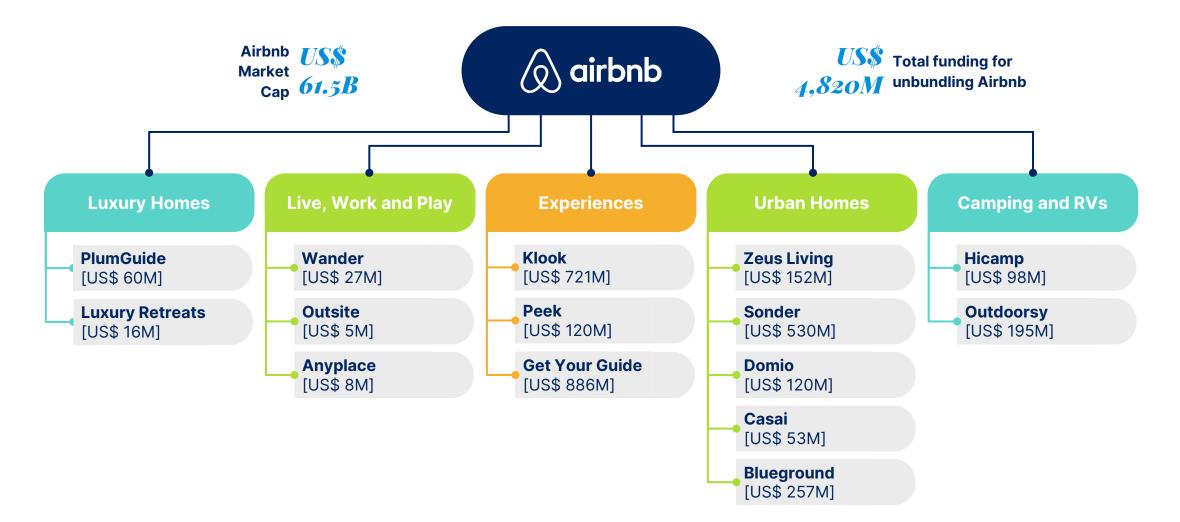
Unbundling **Procore**

Procore became one of the largest software platforms for the construction industry and is now fighting against many challengers



Unbundling Airbnb

Airbnb's platform is formed by different networks that are being unbundled by many new startups



Latin America: Future of Healthtech

Contents

Latin America: Future of Healthtech

Context Setting

- What is healthtech, and what are healthtech startups?
- Latin America's potentially large market
- Healthtech distribution per segment
- The growth in the volume of capital for healthtech startups
- 2021's funding snapshot, and largest rounds getting larger
- Funds raised per segment
- Amount raised per stage and M&A deals
- Amount raised per country and highlighted deals
- Unicorns and soonicorns
- Leading investment firms in healthtech
- Gender diversity in healthtech
- Rise of femtech
- 2022's funding snapshot

The Trends

- Covid-19's healthcare transformation
- Global Trends
- Latin American Trends

The Opportunity

- Opportunities from big healthcare players, insurance, and employers
- From LatAm to global healthtech trends
- Opportunity in the development of eHealth policies in LatAm

The Challenge

 Main challenges: data infra & privacy, talent, and regulatory environment

Case Studies

- Clivi
- Dr. Consulta
- Sami
- Saludtools
- Viuna/Tensoreye

Executive Summary



The objective of healthtech startups is as direct as making people healthier. That's the mindset present in healthtech leaders in Latin America, and these companies have demonstrated tremendous growth over the years, including increased gender diversity in its founder team, a considerable number of jobs created, and, most notably, better access to healthcare for those in need.



The sector had a strong 2021, with healthtech startups experiencing a positive impact on their business due to the pandemic. In addition, investment vehicles (e.g. accelerators, incubators, venture capital, etc.) are particularly bullish in Latin America. Latin America is stepping up its healthtech game, and the results are already being observed.



It's encouraging to see how many healthtech startups, apps, and technologies followed the upward trend of innovation in most countries in Latin America to improve the quality and efficiency of healthcare. And, most significantly, to provide this healthcare service to people who previously relied on public hospitals and had limited access to it in the region.

Context Setting

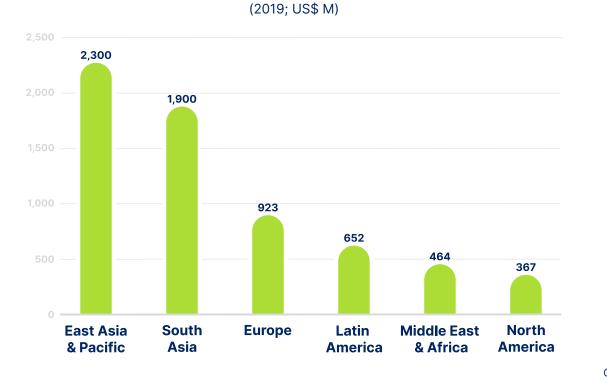
What is healthtech, and what are healthtech startups?

Healthtech refers to the health sector leveraged on technology. That can be applied to all aspects of this sector to allow us to have a better lifestyle. A healthtech startup offers these technological solutions, such as:

- Apps that allow to obtain information on different physiological variables, such as blood pressure and heart rate, in real-time and in a less complicated way. Increase the control of your own health and well-being by guaranteeing access to personal health information.
- Accurate, reliable, and fast prevention, diagnosis, treatments, and innovative medicines for diseases of different types.
- Improvements in access to health providers and health services, at any distance.
- Software for medical centers.

- Latin America has a large and increasing elderly population, becoming a potential market for healthtech solutions over the long term. The region also has an enormous healthcare expenditure, although still not comparable to developed countries.
- We can say that the Latin American healthcare system is inefficient, given low population access to basic needs and low health spending per capita.
- Regarding healthcare infrastructure and specialized workforce, Latin America lags compared to developed regions.
- Low access to public financing for healthcare projects and high out-of-pocket expenditure by the population creates opportunities for innovation through private investment.
- In summary, all these inefficiencies create an opportunity for healthtech solutions to improve the current life condition of the Latin American population.

With a large and increasing elderly population, Latin America has a *potentially large market* for healthtech solutions in the long term

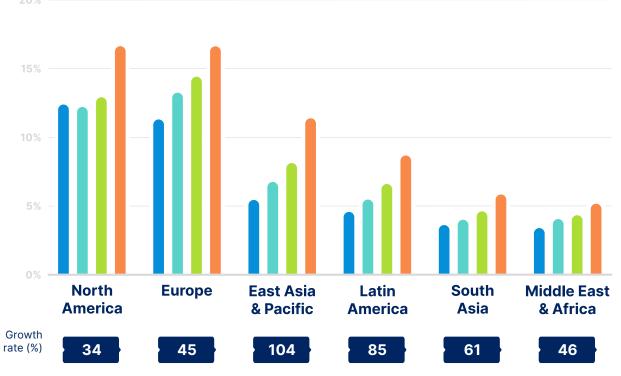


Total population per region

Population above 65 yrs as % of population

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Source: World Bank; OECD

The Latin American healthcare market is enormous but still *spends less* than other regions as a percentage of GDP



Average spending per capita per

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\$178

South

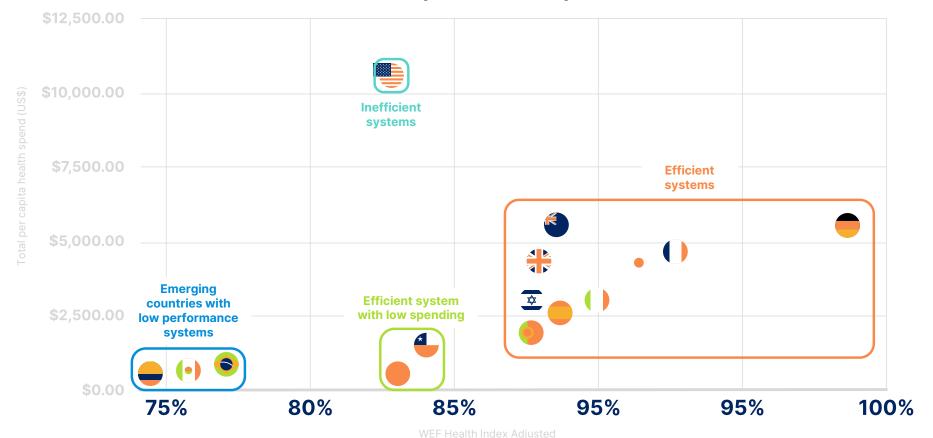
Asia

Source: Worldbank; WEF (Health Index: Access to improved drinking water and sanitation

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In terms of efficiency, Latin America's healthcare system has *a low performance* given low access to *basic needs* and *low health spending* per capita

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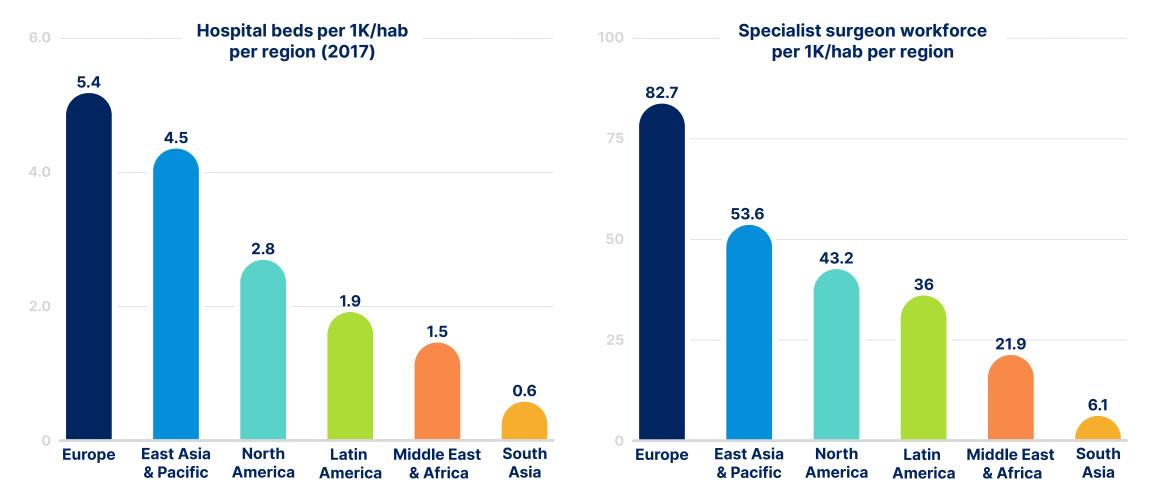


#### Efficiency of healthcare systems

Source: Worldbank; OECD

## Latin America *lags in terms of healthcare infrastructure* and number of *specialized healthcare workforce* compared to developed regions

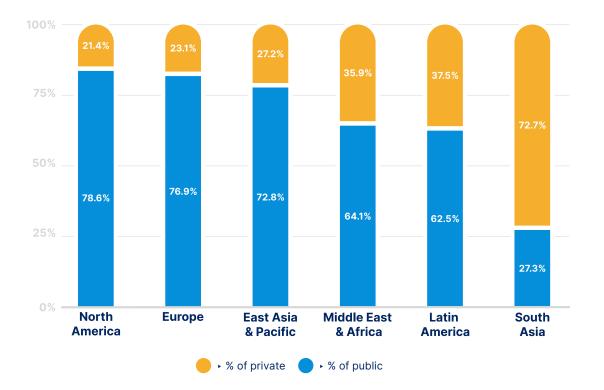
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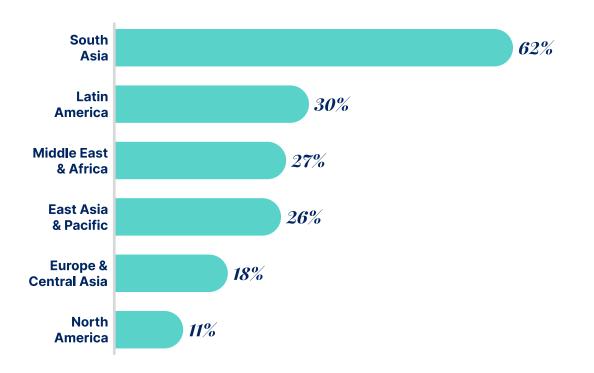
Source: Worldbank; OECD; Statista

With low access to public financing and high out-of-pocket-expenditure, the population in LatAm needs to rely on *private solutions* for healthcare

Public and private healthcare expenditure per capita (%, 2019)



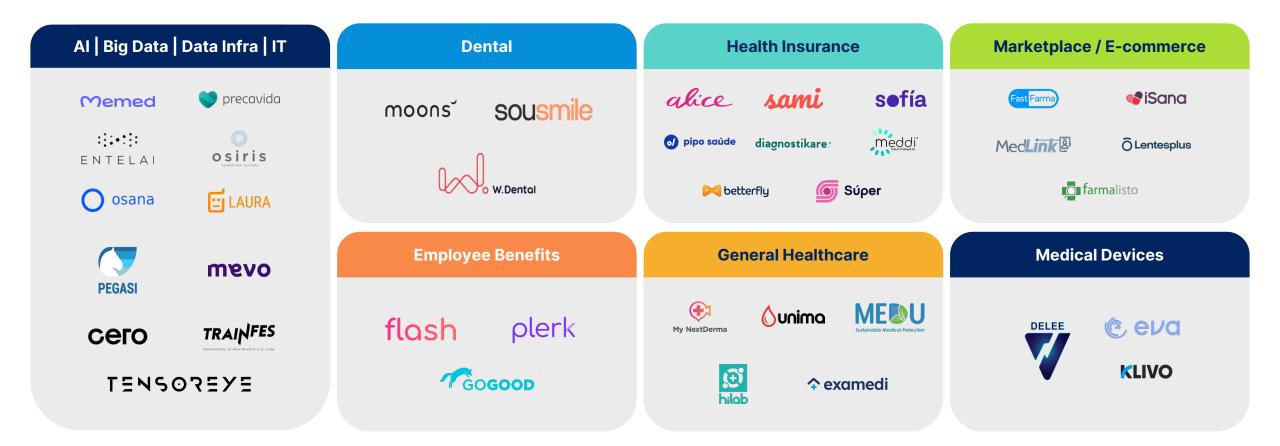
Out-of-pocket expenditure (2018, as % of current health expenditure) >



Source: Worldbank; OECD; Statista

Healthtech ecosystem: company distribution *per segment*

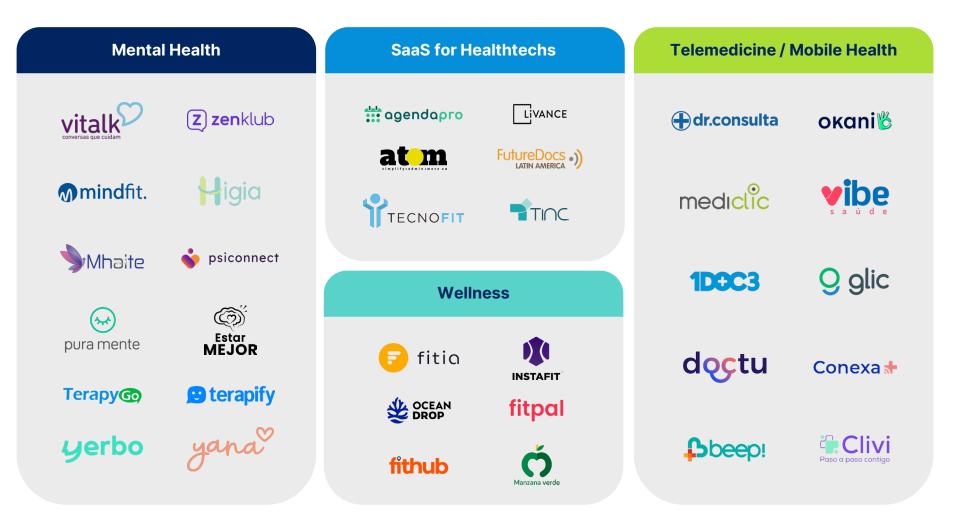
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Source: Crunchbase; Startupeable

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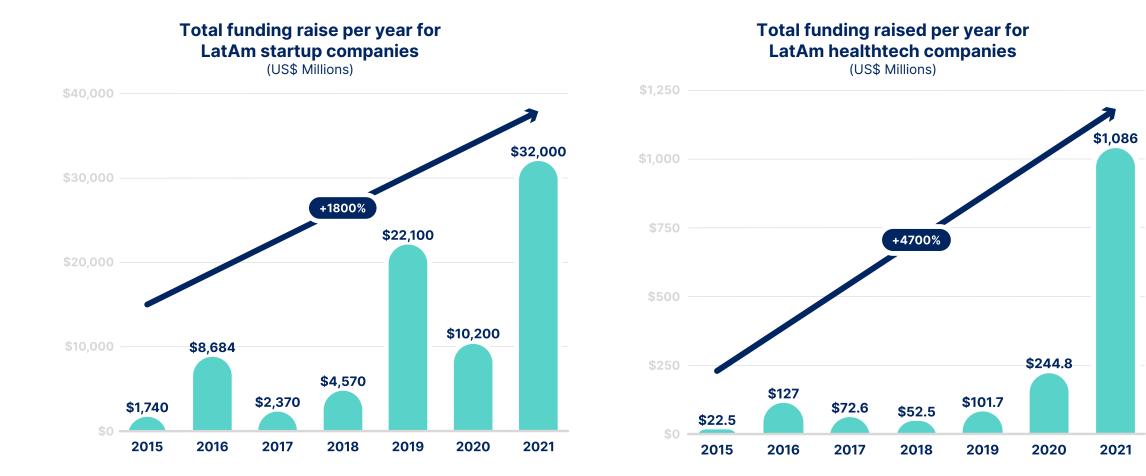
## Healthtech ecosystem: company distribution *per segment*



Source: Crunchbase; Startupeable

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Over the last years, the *growth percentage of the amount* raised for healthtech companies *surpassed* the whole startup sector combined in LatAm



Source: Crunchbase (Hubs: Latin America Companies; Latin America Healthcare Companies)

### **VC investment** in LatAm for healthtech has *accelerated* in 2021

#### Cumulative funding raised & deals per year - healthtech in LatAm



The increased necessity of new solutions in the healthcare space, high returns, and successful exits can partially explain this increased interest in the sector, as well as the amount of funding raised.

The covid-19 pandemic played an essential role in accelerating innovation through diverse verticals, such as Telemedicine, Remote Patient Monitoring, and Behavioral Health.

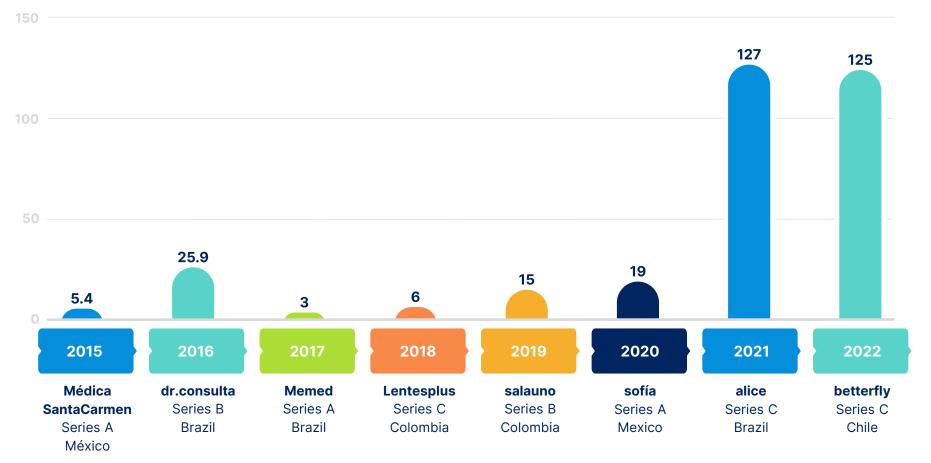
Using the US market as a reference, the increased venture capital activity in the healthcare sector incentivized other funds to invest in Latin America.

Source: Crunchbase; Medcitynews

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## The largest funding rounds are getting *much larger*: from US\$ 5.4M in 2015 to US\$ 125M in 2022 (LatAm, YTD)

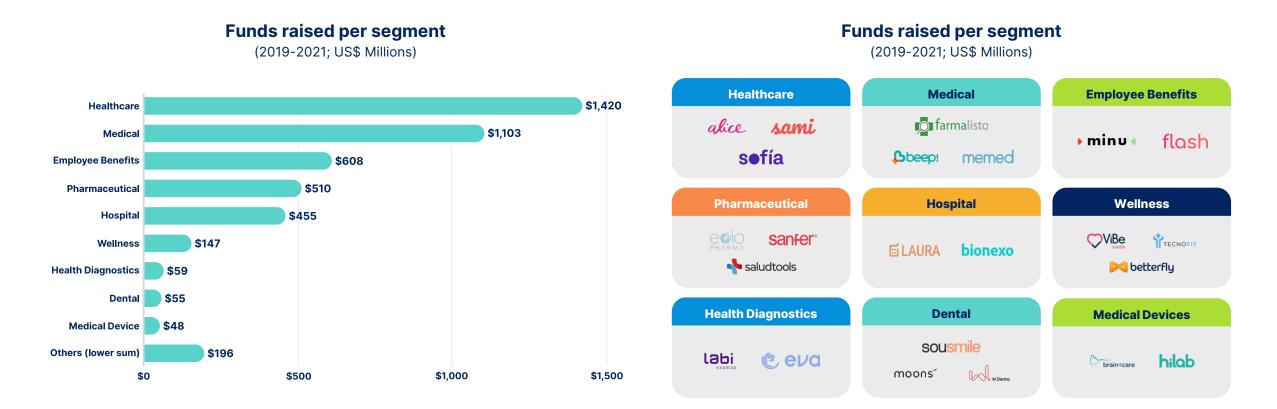
Largest funding round per year (US\$ Millions)



Source: Crunchbase

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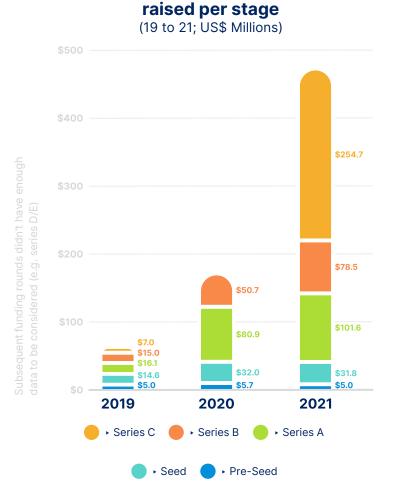
Regarding fundraising from 2019 to 2021 in LatAm, *most of the amount raised* belongs to companies within the Healthcare, Medical, and Employee Benefits segment



Source: Crunchbase

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## From 2019 to 2021, *funding mainly increased* for Series B and C investments in LatAm. M&A activity also experienced an *increase*



**Healthtech - Amount** 



>





Source: Crunchbase

## 2021 and 2022 have been *dynamic years* for healthtech in the Latin American region, with *considerable fundraising* activity



Main healthtech funding in LatAm

(21/22; Pre-Seed to Series E; US\$ M)

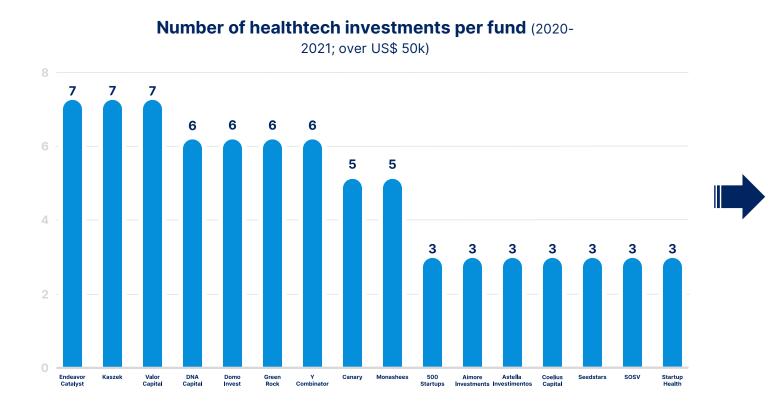
| Company   | Amount<br>raised | Funding<br>type | Main investors                                              |
|-----------|------------------|-----------------|-------------------------------------------------------------|
| betterfly | US\$ 125M        | Series C        | SoftBank Group<br>DST Global<br>QED Investors<br>Valor      |
| alice     | US\$ 127M        | Series C        | SoftBank Group<br>Kaszek<br>GloboVentures<br>g <sup>2</sup> |
| flash     | US\$ 100M        | Series C        | DNA Capital                                                 |
| memed     | US\$ 55M         | Series C        | Tiger Global<br>GFC<br>monashees                            |
| osana     | US\$ 20M         | Series A        | General Catalyst<br>Preface Ventures<br>Quiet<br>FJ Labs    |

Source: Crunchbase

Even though there's only one healthtech unicorn in LatAm (betterfly), *many startups are growing exponentially* and might also approach the status soon (soonicorns)



## *Leading investment vehicles* for healthtech in Latin America

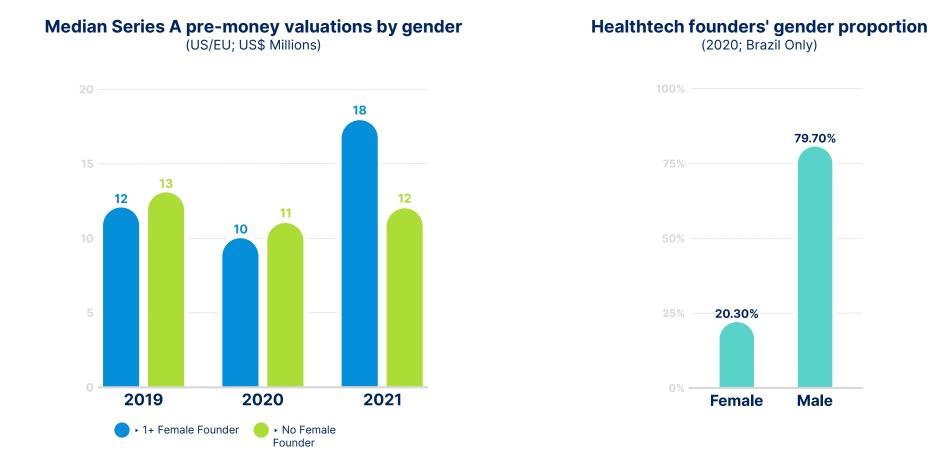




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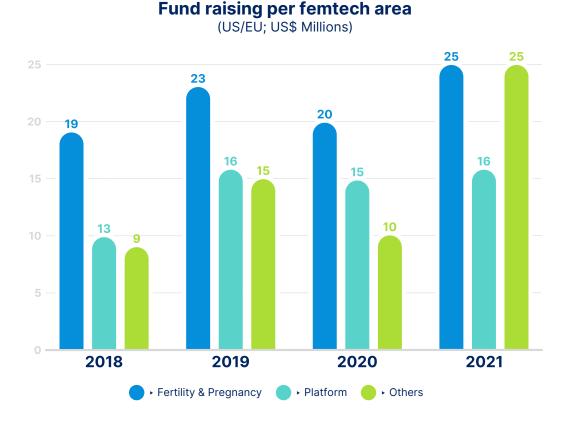
Source: Crunchbase

In terms of *gender diversity*, we can see *progress* in terms of the amount raised in 2021. But there's still *room for improvement* in healthtech founders' gender proportion



Source: SVB 2021 Healthtech Trends Report; Distrito 2020 Healthtech Report

*Femtech** has also experienced an increase in investments worldwide, led by *new segments* that improve quality of life for women



In 2021, the Others category (e.g. mental health, menopause, uterine and breast cancer) got the same raised amount as the Fertility & Pregnancy sector.



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Funding hit an all-time record of US\$ 1B in 2021.

Source: SVB 2021 Healthtech Trends Report

\*Femtech: deployment of tech-enabled products or services for women's health.

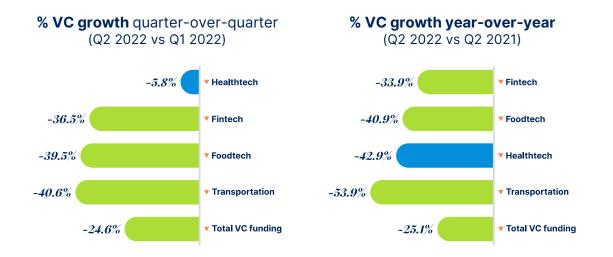
## 2022 is not quite up to speed with 2021 in terms of funding for for healthtech but is *on track to outpace 2020*

After a record year globally for healthtech startups in 2021, healthtech funding in Q2 was down over 40% vs. Q2 2021. Still, healthtech is the sector that decreased the least when comparing the second quarter with the first quarter of this year. Looking at the first semester of 2022, healthtechs are on track to outpace funding in 2020.

Talking about Latin America, a similar situation is seen in Brazil. US\$ 127,5M was invested in healthtechs in the first half of 2022. It's far from even half of what we've seen last year, but pretty close to the whole amount invested in 2020.

## In Q2, healthtech is the sector that decreased the least compared to Q1 2022

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### **Evolution of investments in healthtech**



Source: Dealroom; Distrito



## Covid-19 was a *game-changer*, accelerating the healthcare transformation and *giving rise to new industry trends* in Latin America

## Larger technology adoption from patients

Covid-19 contamination contributed to accelerating the adoption of digital solutions for health (e.g. telemedicine).

High adoption of digital tools in Latin America, such as smartphones, contributed to better usage of those solutions.

Hospitals pressured to improve financial conditions

Given attendance restrictions imposed by covid-19, hospitals were actively looking for new initiatives to reduce costs and keep the patient flow ongoing.

Increased adoption and acceptance of healthtech solutions to reduce contamination inside hospitals and clinics. Covid-19 healthcare transformation

## Higher acceptance from physicians toward technology

Covid-19 accelerated the adoption among doctors of new technologies to improve convenience and efficiency in their relationships with patients.

Recommendations of health technologies among doctors also accelerated their usage.

Ease of usability was key to increasing the usage among doctors.

## Higher response from regulatory agencies toward tech

Increased permission by regulatory bodies to use technologies that were not accepted before resulted in a boom of telemedicine in the region.

Experts believe that regulatory bodies will review their previous allowances, but it's unlikely that things will return to the state before covid-19, in which technology wasn't part of the usual activities.

Source: Internal and external interviews

# **Global Trends**

Source: objectbox.io; demigos.com; internal and external interviews; Crunchbase

### Remote Patient Monitoring

#### Definition

Regular real-time access to patients' data from different types of medical devices can be used in a preventive way, to avoid diseases. Also, remote patient monitoring opens up different possibilities to improve hospital procedures and increase efficiency.

#### Example

wheel

## Virtual Reality for Surgeries

### Definition

Virtual Reality has enabled surgeons to improve their skills at the operating table without actually having to work with real patients. In the end, VR tools increase the chances of success of surgeries.

> Example Apello

## Wearables

### Definition

**@** 

The increase in usage of smartphones created an opportunity to improve the communication between health solutions (e.g. apps, companies, hospitals, etc.) and patients through wearables. Those wearables increase life quality for patients by keeping track of their health status and preventing diseases.

Example

## Internet of Medical Things

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#### Definition

IoMT companies are improving operational efficiency by optimizing and automatizing workflows, consequently increasing safety in healthcare and reducing costs (e.g. providing automated clinic assistance, which also reduces the need for nurses and doctors).



## Big Data & AI

## Definition

The objective of big data & Al companies in healthtech is to improve the overall patient condition by predictive analysis. By leveraging the usage of digital tools such as electronic health records and biometric sensors, it's possible to use the data collected and report a better understanding of the users' condition.

### Example



## Data Interoperability

#### Definition

Data interoperability allows systems to share information among themselves, which is crucial to the future of healthtech. Nowadays, hospitals face some challenges regarding their legacy systems, which don't connect properly with new healthcare solutions. This creates several opportunities for those who want to improve hospital efficiency and patient quality of life.

> Example REDOX<sup>^</sup>

# Latin American Trends

Source: objectbox.io ; demigos.com ; internal and external interviews; Crunchbase

## Telemedicine

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#### Definition

Telemedicine provides health services virtually using professionals in order to prevent, diagnose, and treat different diseases. Similarly, Telemedicine allows people in areas with difficult access to have the possibility of obtaining a quality health service. In addition, by removing distance as a limiting factor, you can have greater cost efficiency and a high level of assistance.

## Examples + dr.consulta

## Mental Health

#### Definition

Mental Health has become extremely necessary nowadays, especially after the impact of the pandemic on our lifestyles. Mental Health platforms have become indispensable as a way of improving people's life quality. The healthtech startups in this vertical provide solutions to facilitate and democratize access to mental health services.

Examples

## **Z** zenklub

## Health Insurance

#### Definition

O

Healthtech startups in this sector offer access to comprehensive health insurance that is easy to purchase and with transparent terms.

> Examples sami

> > alice

## Wellness

#### Definition

Wellness companies focus on how to improve the life quality of their users through the usage of tech platforms offering services (e.g. a different type of sport, marketplaces of wellness companies, personal trainers, and nutritionists) and products (e.g. healthier food, fitness equipment, and other products).

#### Examples



Manzana verd

## Dental

## Definition

Companies within the Dental segment are offering new solutions for dental plans, new dental products with more competitive prices, and new software tools to improve dentistry office management.

## Examples

moons

sousmile

## **Employee Benefits**

### Definition

Employee Benefits companies are adjusting their clients' employee benefits (e.g. meal allowance, parking, gyms) accordingly to their preferences, and improving employee experience because of it.

> Examples flash

> > plerk

Covid-19 brought things that probably won't go back anymore -- for example, *telemedicine*. Previously, physicians were really conservative and would not accept this practice. After covid-19, it it will be *mandatory for most of the daily routine cases.*"

— Vitor Asseituno, co-founder & President at Sami





Besides *covid-19* as one of *the main contributors to growth*, there are other opportunities being observed in Latin America *regarding healthtech* 

| Opportunity                                                  | Description                                                                                                                                                                                                                                                                                                                                                                                              |  |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Increased interest in<br>tech from big<br>healthcare players | Several large healthcare players (e.g. pharma companies and hospital groups) have been showing interest in entering the healthtech market through acquisitions and venture capital vehicles. These companies in the region are looking for innovation and efficiency.                                                                                                                                    |  |
| Dissatisfaction with the<br>insurance sector                 | Several startups are appearing in the region to disrupt the insurance business.<br>Given the same context of fintechs that emerged in Latin America a few years ago, these companies are<br>improving the insurance experience for customers by providing a customized and transparent approach in<br>terms of availability, pricing, and service.                                                       |  |
| Employers as the top spenders in healthcare                  | In some countries (e.g. Brazil), employers are one of the biggest spenders in healthcare, and they normally rely<br>on insurance companies to provide healthcare needs for their employees.<br>With a surge in healthcare costs, some companies are developing their initiatives through the usage of<br>analytics and partnerships to improve their decision-making process regarding healthcare needs. |  |

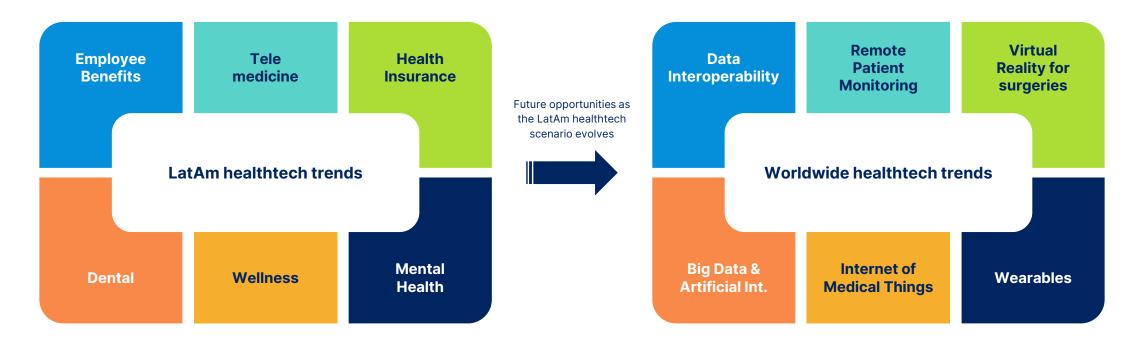
Source: latamlist.com

Europe has people with knowledge in other industries that you can leverage and bring to healthtech, but that's not the case in Latin America.

The real asset here is the contact and proximity with hospitals. Their openness to adopt new technologies is something that really helps companies to test and try their products."

— Sebastian Ramos, Tensoreye and Viuna

Healthtech companies in LatAm focus on *big problems using simple solutions*. Meanwhile, the world trend is to focus on solutions using more complex tools



Source: objectbox.io ; demigos.com ; internal and external interviews; Crunchbase

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## Compared to other nations, Latin America has the *opportunity to catch up*, given eHealth policy areas over the following years

eHealth is used as an instrument to develop health care and increase access to health information.

eHealth policy can be defined as a group of statements, regulations, and laws that manage the life cycle of eHealth.

One of its objectives is to determine eHealth's scope and evaluate eHealth's environment and conditions in different nations.

|    | Usage of big data by<br>the public<br>healthcare sector | Usage of big data by<br>private healthcare<br>companies | Electronic Health<br>Record legislation | National presence of<br>Electronic Health<br>Record |
|----|---------------------------------------------------------|---------------------------------------------------------|-----------------------------------------|-----------------------------------------------------|
| 6  | $\bigcirc$                                              | $\bigcirc$                                              | $\bigcirc$                              | $\bigcirc$                                          |
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## Main *challenges* for healthtech in Latin America



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With the growing number of healthtech solutions, an increasing volume of data is generated across different channels. This creates the necessity to synchronize all this information in a fast, reliable, and safe way.

Setting the balance in terms of data privacy will continue to be one of the main challenges. At the same time that patients are keener to share personal data to a certain extent, the government is increasing monitoring against cyber attacks and bad usage.



Hiring tech talent has never been an easy task, but with the advance of remote work, it became even harder to do it.

Local companies in Latin America now compete for talent against tech giants located everywhere in the world, and with the deterioration of the local economy, the salaries in foreign currency became even more attractive to top talent.



### **Regulatory Environment**

In general, regulatory barriers are high in the health sector. Also, different regions have different regulations.

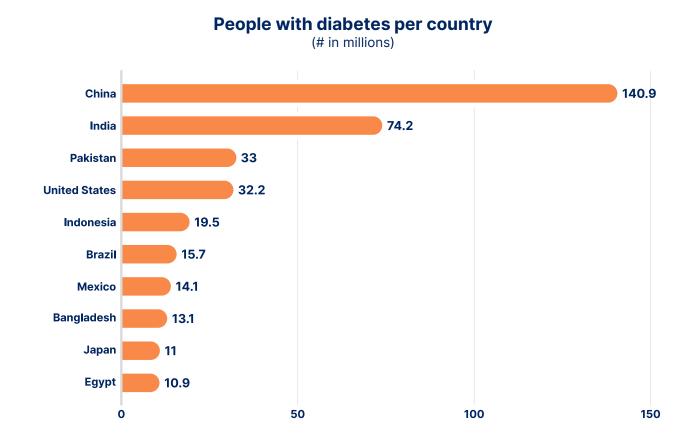
Understanding requirements and communicating with the relevant government institutions became essential to the success of every healthtech startup.

This added burden over innovative activities might add an extra layer of challenge to healthtech startups (e.g. delay to approve patents and research, lack of participation of regulatory bodies towards innovation, etc.)

Source: Internal and external interviews; objectbox.io; restofworld.org

# Case Studies

## Mexico's first digital diabetes clinic, *Clivi*, is aiming to address the country's growing necessity for affordable diabetes treatment



The International Diabetes Federation expects diabetes cases to rise by the end of the decade, as the number of people living with diabetes could rise to 578 million over the world by 2030.

Mexico is one of the world's leading countries for diabetes cases, currently standing as the 7th, with around 14 million people.

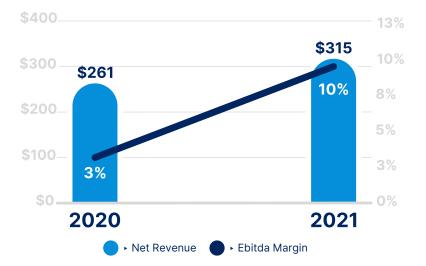
Clivi aims to address Mexico's need for effective and affordable diabetic medical care through its digital clinic service. In general, the patients only need a glucometer and a mobile device to communicate through WhatsApp.

Clivi provides reminders to the patients, informing blood glucose levels and body weight. It also provides access to monitoring graphics and content relevant to diabetics, including invitations to workshops and seminars with a medical team, guides on diabetes care, and the opportunity to communicate with and ask questions to Clivi's medical team.

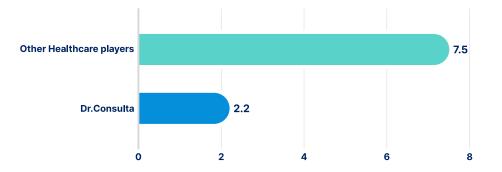
Source: mexicobusiness.news/health/news/clivi-mexicos-first-digital-diabetic-clinic; Statista

## *Dr. Consulta* has one of the largest primary care networks in Brazil and offers a wide range of specialties through a user-friendly online platform

### Dr.Consulta proxy for Net Revenue & Ebitda Margin



### Average number of exams per medical appointment



Dr. Consulta provides low-cost medical treatment by using digital tools to reduce healthcare costs.

It currently owns several clinics across different cities in Brazil, such as São Paulo, Rio de Janeiro, and Belo Horizonte.

Dr. Consulta addresses two main pain points: providing low-cost medical treatment for patients without a health plan, and providing a "branded" medical treatment for patients who don't know the doctors who they will have an appointment with.

Dr. Consulta provides a wide range of specialties (from GP to cardiologists), several exams, simple procedures, surgeries, and vaccinations.

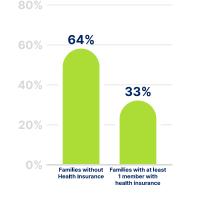
As a differentiating factor, Dr. Consulta provides a simple and user-friendly online scheduling platform for its users (web and app).

Recently, Dr. Consulta decided to invest in the health plan segment, through the partial acquisition of the startup cuidar.me.

Source: medicinasa.com.br/dr-consulta-plano-saude/

## *Sami* leverages data and analytics to make Brazilian health insurance plans more accessible to the overall population

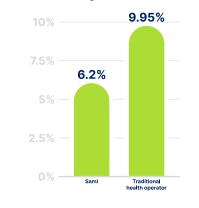
## Families with/without access to health insurance plans in Brazil



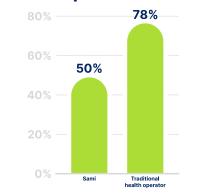
### Average monthly fee health plans in Brazil



## Price readjustment health insurance plans in Brazil



Average accident rate health plans in Brazil



The health insurance market in Brazil is approximately worth US\$ 40B.

According to the Brazilian Institute of Geography and Statistics (IBGE), approximately 64% of Brazilians live in families where none of the members have health insurance.

Sami focuses on small and medium-sized enterprises and individual micro-entrepreneurs. Price is key for this sector. Given that, the readjustment of Sami's plans follows the Broad Consumer Price Index (IPCA) and not the traditional readjustment of health operators. The idea is that small companies do not need to renegotiate and change plans frequently due to large adjustments.

For the user, Sami provides online hiring for health insurance plans. Each user has a doctor responsible for accessing their history, monitoring their health, and guiding the scheduling of appointments with specialists.

Physicians and healthcare institutions must agree to collect accurate data about their patients. This information is essential for Sami to continue improving its performance analysis – the startup claims that it complies with the General Data Protection Law (LGPD).

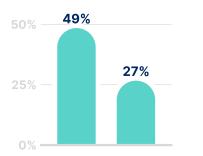
Source: [1] labsnews.com/en/articles/business/brazils-sami-of-health-plan-for-smes-raises-brl-111-million-in-series-a-extension/; [2] playcrazygame.com/2021/12/14/startup-style-health-plan-sami-receives-a-new-investment-of-r110-million,

## *Saludtools* is a digital platform that increases doctors' efficiency and allows them to focus on the most relevant problems during medical appointments

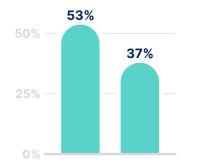


#### Number of doctors per 1000 habitants

Time spent by doctors at the office (% of time)



Time spent by doctors during examinations (% of time)



Over the last few years, doctors have been wasting time by doing a lot of administrative work rather than focusing on the interaction with the patient.

Given the constant pressure at work and long work hours, doctors are burning out from the job, and the relationship between doctor and patient has also been deteriorating.

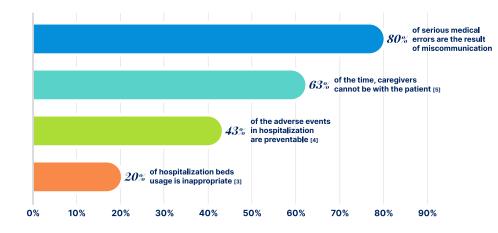
On top of these problems, hospitals and clinics do not provide administrative support tools for doctors.

With a Net Promoter Score three times higher in comparison to the industry average, Saludtools provides a ready-to-use tool for doctors to improve their experience while interacting with patients, reducing the time spent by doctors with paperwork.

As the next step, the Colombian startup aims to implement artificial intelligence capabilities into its product to transform patient conversations, notes, and documents into structured medical data. All this effort goes to keep improving the relationship between doctors and patients even more.

Source: Internal and external interviews

## *Viuna* (formerly part of *Tensoreye*) platform increases hospital capacity and patient care quality



\_\_\_\_

Tensoreye was founded by Colombian Sebastian Ramos. Although the company has its headquarters in Germany, the main objective is to tap into problems in LatAm. Tensoreye was focused both on the mobility and the healthcare market, providing Al-based computer vision solutions. Recently, the company spun off its healthcare product into a brand new company, called Viuna.

Thousands of patients die waiting for spare beds in overcrowded hospitals. Many others experience unnecessarily prolonged hospitalization stays and postponed critical surgeries, frequent causes of health deterioration. This also results in low reimbursement ratios, creating an enormous economic burden for hospitals. Additionally, caregivers are frequently overloaded with excessive paperwork and inefficient processes. Viuna's product enables transparent communication between hospital staff and provides real-time and predicted insights on daily processes and care services. Through this in-depth analysis and tuning of workflows, hospitals harness their total capacity in a cost-efficient manner. The real-time visual patient monitoring also enables hospital staff to focus on patients who need the most support, leading to better health care outcomes.

Source: [1] theguardian.com/society/2019/dec/10/thousands-of-patients-die-waiting-for-beds-in-hospitals-study; [2] pubmed.ncbi.nlm.nih.gov/24772600/; [3] bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-13-14; [4] pubmed.ncbi.nlm.nih.gov/18519629/; [5] ncbi.nlm.nih.gov/pmc/articles/PMC3238335/; [6] hipaajournal.com/effects-of-poor-communication-in-healthcare/

# Latin America: The future of Climate tech

## *Contents*

#### Latin America: Future of Climate tech

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- Understanding the problem and its magnitude
- LatAm climate is changing and the impact can be more devastating than in other regions
- Socioeconomic and Biophysical Characterization
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- World: urgency on climate policy
- Investments expected by sector in the developing world (BCG)
- Venture capital is starting to reallocate
- Latin America's economic and social context
- LatAm countries: opportunities range from
  - green hydrogen to certified food production

- LatAm climate tech startups: opportunities range from agriculture to sustainable supply chains
- Agtechs
- Green real estate
- Access to water
- Renewable energy
- Green hydrogen
- Al and machine learning
- Nature-based solutions
- Reimagination of processes and systems through moonshots

### The Challenge

Challenges per segment

## **Executive Summary**



Latin America is well-positioned to create effective climate solutions at speed and at scale.



Climate change is going to have a disproportionate impact on LatAm. There are exacerbating devastating consequences for Latin America more than for other regions of the world.



Political and social leaders are urged to engage in net zero catalysts and social behavioral changes, and markets are starting to see the change in green consumer choices.



But there's still a gap between the exponentially growing corporate commitments and the climate actions actually taken.



According to BCG and GFMA, the total accumulated investments for the next 3 decades to transition to a low carbon economy is going to be in the range of US\$ 100T and US\$ 150T. Biden's US\$ 369B (11.95% of the GDP of South America) Inflation Reduction Act for climate action accelerates the transition.

## **Executive Summary**



Climate tech investments are recession-proof and there is a growing need for solutions. Even with the difficult market conditions of 2022, climate tech investment is holding up. LatAm is still lagging in terms of investment, but it has a huge potential. Venture capital is starting to reallocate, opening opportunities for the region.



Some of the short-term trends for climate tech startups in Latin America are focused mainly in Mitigation, Adaptation, and Prevention of the effects of Climate Change.



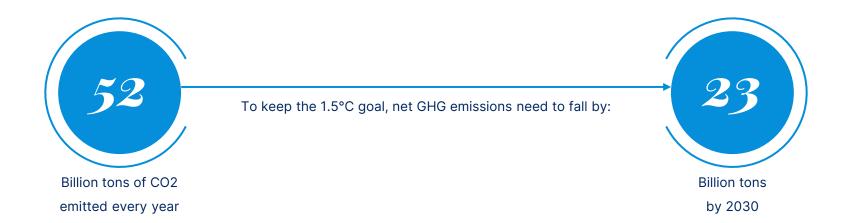
Opportunities for climate tech startups in the medium and long-term vary from agriculture and biodiversity monitoring to renewable energy and sustainable supply chains.



Dealing with outdated frameworks and regulations, global competition, and slow transition from investors, companies, and consumers are some of the challenges climate entrepreneurs will have to face.

# **Context Setting**

## Understanding the *problem* and its *magnitude*





### Emissions by sectors (CO2 only)

| Energy | Food, agriculture<br>& land use | Industry &<br>Manufacturing | Transport | Buildings |
|--------|---------------------------------|-----------------------------|-----------|-----------|
| 35%    | 24%                             | 21%                         | 14%       | 6%        |

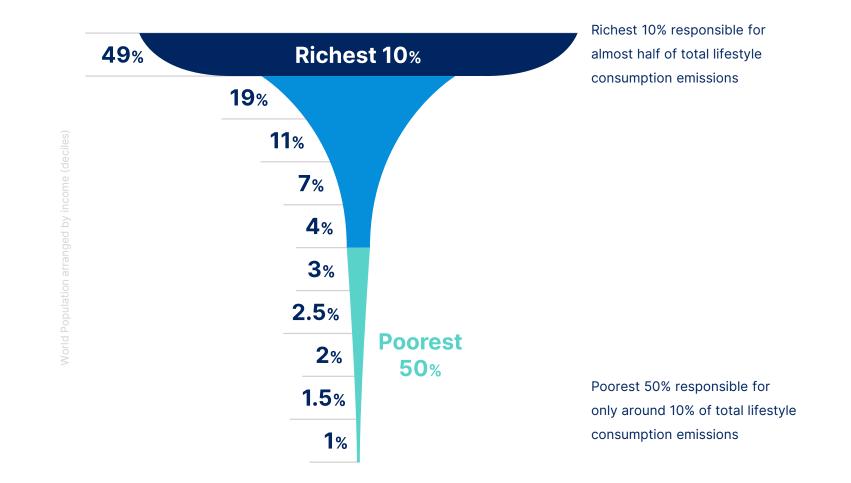
| Chemical       | Global warming potential | Residence time (yrs) |
|----------------|--------------------------|----------------------|
| Carbon dioxide | 1                        | 50-200               |
| Methane        | 21                       | 9-12                 |

There's a global opportunity in curbing global emissions. The industries that emit the most carbon dioxide are seen as an even bigger problem, since CO2 stays for longer in our planet's atmosphere in comparison to other chemicals, such as methane.

## Understanding the *problem* and its *magnitude*

Consumption emissions is a problem caused by the richest people, and a reflection of inequality. Therefore, LatAm has a huge opportunity to address this problem.

\_ \_ \_ \_



Zoom in LatAm: Due to its economic dependence on agriculture, energy, and metals/minerals, *LatAm climate is changing* – and the impact can be *more devastating than in other regions* 

Extreme weather conditions and more acidic oceans are going to change the lives of more than 300 million people. More than US\$ 10B would be lost in commercial activity in LatAm, a region with endemic and rich biodiversity, due to the barriers built by climate change. At the same time, more than US\$ 60B could be generated yearly by participating in the Carbon market, with a global size of US\$ 851B.

There are opportunities in markets such as Carbon, Eco-tourism, Agriculture, and Energy.

Dependence on exports of agricultural products Dependence on energy exports Dependence on exports of minerals, ores, and metals Non-commodity dependent countries

LatAm is a continent highly dependent on the exports of commodities like agricultural products, energy products, and metals/minerals

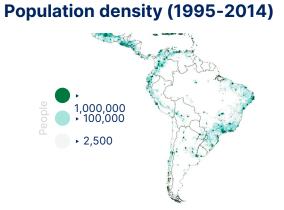
Sources: LSE: MSCI; WWF; UNCTAD (2019)

**Latin American** countries are sitting on some of the **most valuable carbon deposits** in the world."



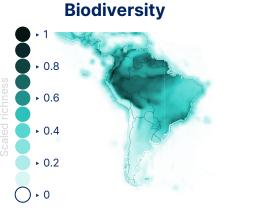
*Socioeconomic and biophysical characterization*: LatAm is a region of high-density cities, institutional instability, and socioeconomic informality. Yet is the most biodiverse region in the world, with the largest rainforest and richness in freshwater

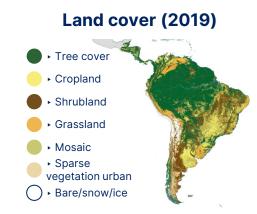
Central and South America is the second most urbanized region in the world, after North America. It has 81% percent of its population residing within cities. In this context, forests are playing a vital role to stabilize local climates.



Gross national income per capita









**Expected years of schooling** 

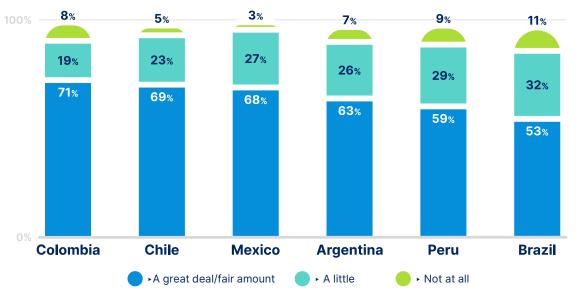


Sources: IPCC; WMO Report

#### Concerns about and consequences of *climate change* populate Latin America

Deforestation, glacier loss, human health, food security, migrations, and displacements: LatAm is vulnerable to unequal, severe, and highly sensitive consequences of climate change.

Glaciers in the tropical Andes **have lost 30% and more of their area** since the 1980s.



## Levels of concern about climate change in selected countries in LatAm

Sea levels in the region continued to rise at a faster rate than globally, notably along the Atlantic coast of South America south of the equator  $(3.52 \pm 0.0 \text{ mm per year}, from 1993 to 2021)$ . Sea level rise threatens a large proportion of the population, which is concentrated in coastal areas.

The Central Chile Mega Drought continued in 2021, **at 13 years to date**. This constitutes the longest drought in this region in at least one thousand years.

The Parana-La Plata basin's drought-induced damages to agriculture reduced crop production, including soybean and corn, **affecting global crop markets**.

South America is among the regions with the **greatest documented need for strengthening early warning systems**. Multi-hazard early warning systems (MHEWS) are essential tools for effective adaptation in areas at risk from weather, water, and climate extremes.

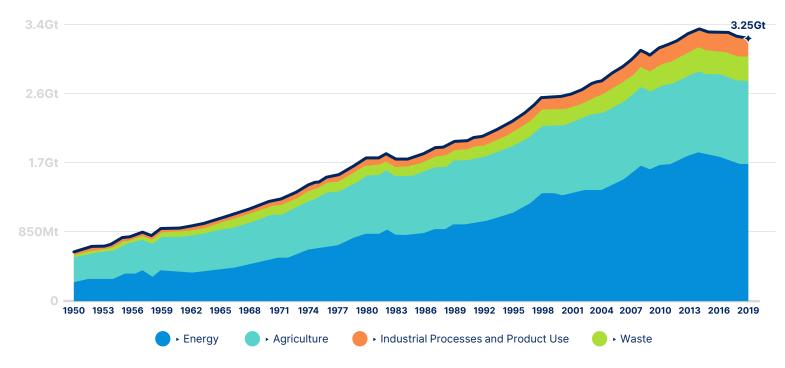
The Andes, Brazil's northeast, and the northern countries in Central America are among the **most sensitive regions to climatic-related migrations and displacements**.

**Deforestation in the Brazilian Amazon rainforest doubled** compared to the 2009-2018 average, reaching its highest level since 2009. 22% more forest area was lost in 2021 compared to 2020.

Sources: IPCC; Phys.org; WMO Report

# This severe situation would be *amplified by poverty*, population growth, and population density

2.6% of the region is going to be migrating from rural towns to cities (17M people) and this migration will likely have an impact on increasing urban pollution and the creation of new towns. Between 2.4M & 5.8M people can fall into extreme poverty only in Brazil due to climate change.

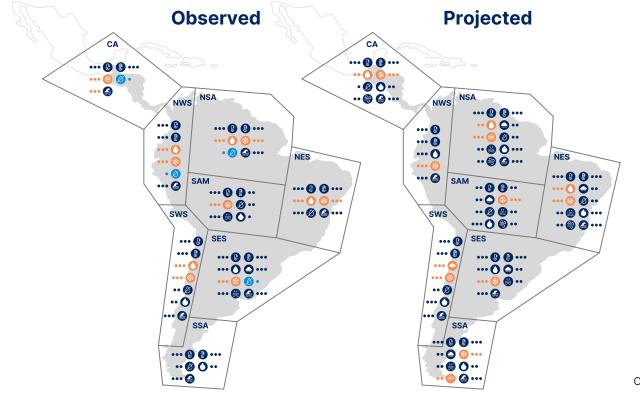


LatAm historical emissions by sectors (Kyoto GHG emissions, Data: PIK)

Source: Climate Watch Data

# This severe situation would be *amplified by poverty*, population growth, and population density

**Observed and projected hazards in Central and South America** 



#### CA → Central America NWS → Northwestern South America NSA → Northern South America SAM → South America Monsoon

NES ► Northeastern South America SWS ► Southwestern South America SES ► Southeastern South America SSA ► Southern South America

#### Hazards

- Image: Book temperature
   Image: Book temperature
   Image: Book temperature
- ▲ ► Extreme precipitation
- Flood and landslides
- Wind speed

#### **Direction of hazard**

Increase
 Increase and Decrease
 Decrease

## Extreme heat

- **O** ► Mean precipitation
- Ø ► Drought, dryness, and aridity

`````

- O ► Wildfire
- G ► Sea level

Confidence in attribution

- → Low
- •• Medium
- ●●● → High

Observed trends⁽¹⁾ and summary of confidence in direction of projected change in climatic impact drivers, representing their aggregate characteristic changes for mid-century and for RCP4.5, SSP3-44 4.5, and SRES A1B scenarios, or above within each AR6 region, approximately corresponding (for CIDs that are independent of SLR) to global warming levels between 2°C and 2.4°C⁽²⁾.

Sources: (1) WGI AR6 Tables 11.13, 11.14, 11.15 (Seneviratne et al, 2021); (2) WGI AR6 Table 12.6 (Ranasinghe et al, 2021)

Overview of other regions: throughout the world, there are different common yet significant consequences of climate change

Most regions of the world are going to get affected by natural consequences, and business, social, and territorial threats. Direct impacts are going to be common, and the main consequences of climate change would have a severe impact on the way the world prioritizes resources:

Europe: Cold temperatures are going to become less frequent due to the temperature increase, boosting energy demand in the Mediterranean and Western Europe. **More droughts are going to cause water scarcity** and a decrease in the quality of different resources. 40% of Europe's fresh water comes from the Alps (UN), and it would be affected by the melting of glaciers. Europe's **aging population and women would disproportionately suffer** from the impacts that climate change would have on agriculture, education, and employment.

Asia: By 2050, **up to US\$ 4.7T could be lost in Asia due to high emissions**. Severe typhoons are 400% more likely to occur and over 200 million Indians could experience lethal heat waves. Workability, infrastructure, food systems, and natural capital would suffer from significant shifts in Advanced Asia, Emerging Asia, and Frontier Asia.

North America: Regionally, America would be affected in different ways. **Preparation**, **adaptation**, **and mitigation costs** would cause longer cash conversion cycles and could potentially decrease investments in different sectors. Primarily, the housing market in the US could potentially **lose trillions of US\$** in the scenario that only high-risk homes are affected. Also, impacts on **agriculture and transportation** could lower the United States' economic growth.

Africa: 55-62% of the Sub-saharan African workforce is employed in agriculture and is **directly affected by climate change**. Private and public financing for humanitarian programs would have to be increased. **Although Africa is a small contributor** to greenhouse gasses, **it will suffer** from extreme water shortages, biodiversity loss, reduced food protection, and loss of lives.

Oceania: Southern Australia could spend **80% of the year in droughts**. Sea level rise and coral degradation could reshape the economy of Oceania. With over 10,000 islands, Oceania would suffer from a severe reallocation of the population and **the cost of living would increase substantially**.

Sources: European Comission; McKinsey Sustainability; Congressional Research Service; IPCC; Phys.org

The place of tech entrepreneurship in *battling climate change*

World: companies and founders in the climate tech sector



World: deal activity of climate tech

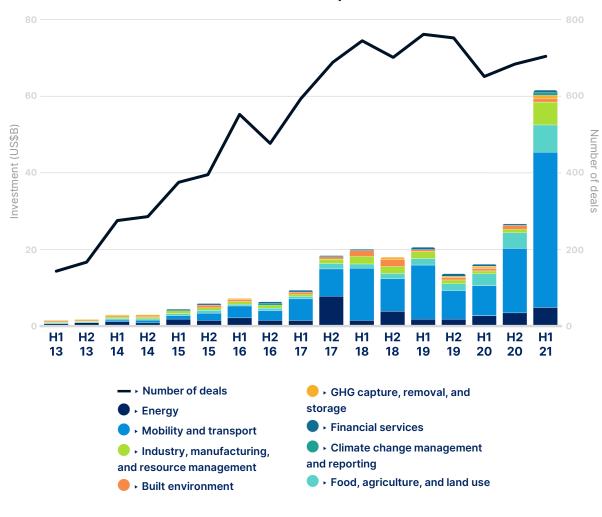
14 cents of every US\$ in venture capital are going to climate tech worldwide. In LatAm, this is not happening yet

Climate tech companies require capital to scale up, which means there is **a bigger opportunity when investing in pre-Seed and Seed**. A total of US\$ 222B was invested in climate tech between H1 2013 and H1 2021, across 3,000-plus startups. US\$ 87.5B was invested between H2 2020 and H1 2021 alone, representing 210% year-over-year growth. Over **6,000 unique climate tech investors** have put money into the sector since 2013, ranging from VCs to private equity firms, corporate VCs, angels, philanthropists, and governments.

- From H2 2020 to H1 2021, 65% of all investments were made in the US (US\$ 56.6B). Europe received US\$ 18.3B, while China received US\$ 9B. LatAm is not even close.
- Out of the **78 unicorns** in climate tech, **43 are in mobility and transportation**, which had a CAGR of 133% between H1 2013 and H1 2021. There are 16 European climate unicorns – and 11 of them were created last year.

5 top investment hubs: Boston, NYC, Berlin, London, San Francisco



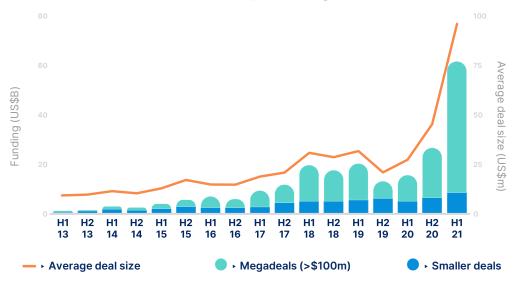


Investment into climate tech startups and number of deals

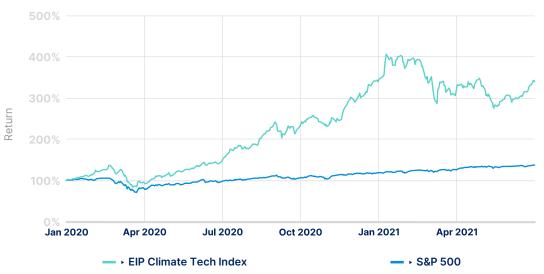
Number of experienced climate tech investors by deal stage



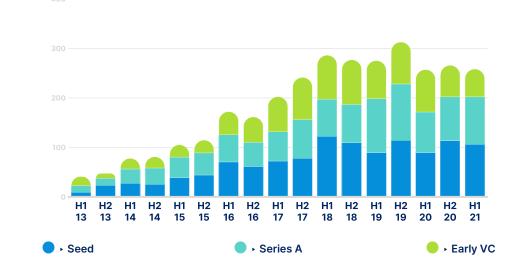
Climate tech startup funding by deal size



Total shareholder return for climate tech companies

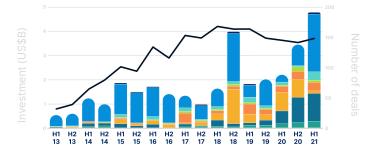


Number of early stage rounds worth more than US\$1m



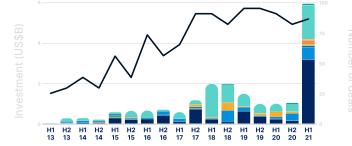
World: venture capital investment in climate tech by sector

Energy Funding raised and number of deals



Number of deals
 Waste heat capture/conversion/storage
 Renewable energy generation
 Nuclear generation
 Low GHG extraction and maintenance
 High efficiency energy intensive electronics, and smart monitoring/management
 Grid management
 Energy storage (thermal/electric)
 Alternative fuels

Industry, Manufacturing and Resource Management Funding raised and number of deals



Number of deals
 Waste management technology
 Transformative circularity, recycling and low GHG/efficient materials
 Low GHG plastics or plastic alternatives
 Low GHG materials and materials recycling
 Low GHG iron, steel and aluminium
 Low GHG extraction, supply and maintenance
 Low GHG concrete and alternatives for construction
 Low GHG chemicals (beyond plastics)
 Industrial residuals treatment and management
 Energy/resource efficient manufacturing processes

Mobility and Transport

Funding raised and number of deals



Number of deals
 Micromobility
 Low GHG light and heavy duty transport EVs and high efficiency vehicles
 Low GHG air transport
 Efficient transport systems
 Batteries/fuel cells

Climate Change Management and Reporting Funding raised and number of deals



 → Number of deals
 → Emissions data, monitoring, management and reporting
 → Climate risk and resilience management
 → Climate/Earth data generation

Source: PwC State of Climate Tech 2021, analysis of Dealroom data

Food, Agriculture and Land Use

Funding raised and number of deals



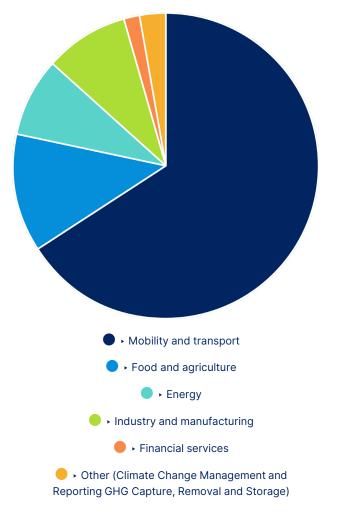
Number of deals
 Vertical and urban farming (Inc aquaponics)
 Value chain GHG reduction
 Precision agriculture and robotics
 Low GHG fertilizers and pesticides, insecticides and therepeutics & Land use management
 Low GHG/energy efficient equipment inc enabling software
 Earth and marine protection
 Alternative foods/low GHG proteins
 Agricultural biotech/genomics and natural solutions

Financial Services Funding raised and number of deals

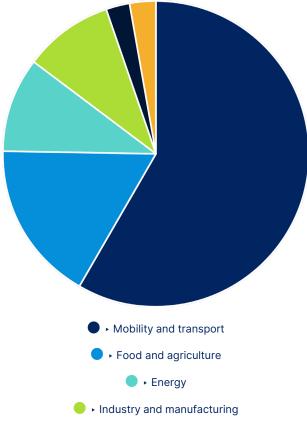


Number of deals
 Pensions
 Lenders
 Insurers and re-insurers
 Funds, portfolios and investment banking
 Banking (business and retail)

Climate tech funding by sector in **US** startups H2 2020-2020 H1 2021

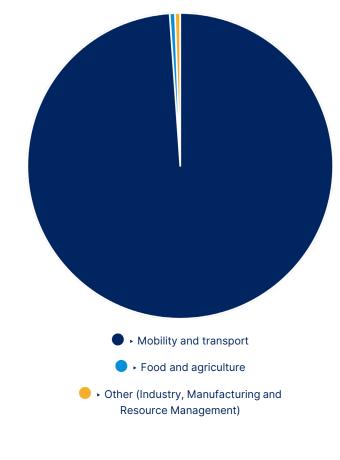


Climate tech funding by sector in **European** startups H2 2020-2020 H1 2021



● ► Built Environment

 Other (Financial Services, Climate Change Management and Reporting GHG Capture, Removal and Storage) Climate tech funding by sector in **Chinese** startups H2 2020-2020 H1 2021



Spotlight: worldwide traditional investors are already betting on climate tech

| Investor | AUM | Examples of Investments | Investor | AUM | Examples of Investments |
|------------|-----------|-------------------------|------------------------------|----------|-------------------------|
| YC | N/A | 🛞 Pachama REMORA | COATUE | US\$ 73B | Patch SWEEP |
| Sequoia | US\$ 85B | Carbon Watershed | Amazon | N/A | MOGY |
| SoftBank | US\$ 175B | | Plug and Play
Tech Center | N/A | greyparrot |
| World Fund | € 350M | JUICY
MARBLES® FOODS | Khosla
Ventures | US\$ 15B | LanzaTech 📐 Nitricity |
| BlackRock | US\$ 8.5T | Aladdin | Partech
Partners | US\$ 2B | 🛞 ADVANO |

Source: The Information; SoftBank Vision Funds Investment Strategy 2022; TechCrunch; Statista; Whale Wisdom; Crunchbase; Partech

Private, public, and investment *commitments*

Private

Amazon Initiative: US\$ 1B

Huella Chile, Reduce tu huella corporativo (Panama), and Huella de carbono (Peru) are all institutional programs working with the private sector to decarbonize their activities.

Unilever, Nestlé, J&J, Ecopetrol.

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Public

US\$ 5B from the IADB.

Investments

According to J.P. Morgan, sustainable funds attracted a **record US\$ 69.2B** in **net flows** globally in 2021. That's a 35% increase over 2020, when the previous record was set. However, investors have **yet to fully recognize the opportunity presented by the net-zero transition in Latin America**. Currently, the region only contributes to 2% of global green bond issuance.

Investment in the climate tech segment is recession-proof, with a growing need for solutions.

Even with the difficult market conditions of 2022, climate tech investment is holding up.

Though numbers in climate tech investment are down compared with 2021, a year that many agree is an outlier in the VC world, they're **on track to beat 2020 as the second hottest year for investment**, says TechCrunch's Tim de Chant.

Deal count was up 15.4% in the second quarter of 2022 in comparison to the year's first quarter, according to the tech website, citing Pitchbook research. Total market deal value also was up significantly in Q2.

The average value per deal has held steady at **US\$ 23.6M**, more than **triple what it was five years ago**.

LatAm has a huge potential but *is still lagging* in terms of investment when compared with other regions

Money committed in the world vs in LatAm

World

US\$ 369B (11.95% of the GDP of South America) for climate action given by Joe Biden Inflation Reduction Act. LatAm

BID: **US\$ 50B** in LatAm for climate and green financing in **LatAm and the Caribbean** through 2026.

European Union will invest € 750 billion through InvestEU to fight climate change. *US.*

LatAm represents **only 7%** of the investment made in ren. energies, but has one of the **highest potentials of production**.

US\$ 35.4M invested in agtech in LatAm through venture capital across 15 disclosed rounds in 2021 (J.P. Morgan & LAVCA).

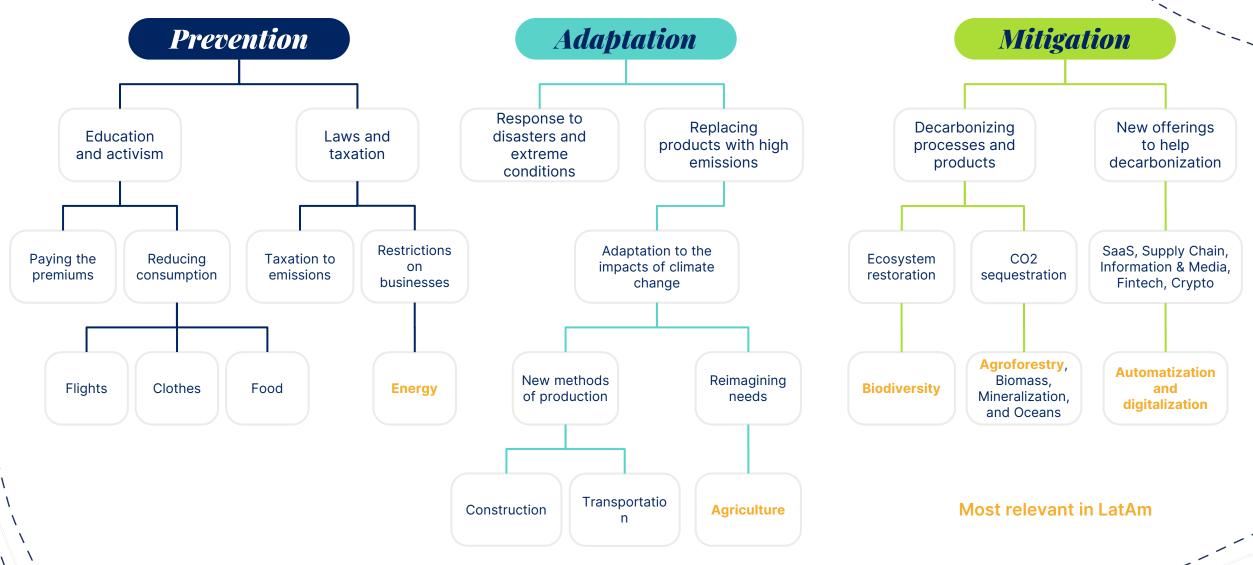
Over **US\$ 7B invested in agtech** in 2021 through venture capital in the world (**PwC**).

Spotlight: local investors in Latin America's climate tech





Spotlight: relevant verticals and areas of impact of climate tech startups



The value of climate tech startups

Just five years from now, PitchBook estimates the climate tech market will near US\$ 1.4T, representing a compound annual growth rate of 8.8%

- + Growing demand from businesses, consumers, and governments worldwide;
- Sense of purpose and belonging leads to better teamwork;
- Superior product performance;
- Competitive unit economics;
- Community driven and high network effects;
- Current stages: Idea & Research // Problem-Solution fit & Growth;
- Current financing: Bootstrapping // Pre-seed or Seed // Series A;
- + High climate performance potential and relevant total avoidable emissions are of high interest;
- Companies with the potential to save at least 10 metric tons of a carbon dioxide equivalent (Mt CO2e) per year would have easy access to funding;
- + Funding in VC and outside of the VC world **leads to easier exits**.

Source: Danijel Višević; Daniel Salinas

Global Trends in climate tech

Replacing high-emission foods with biotech alternatives

Food is going to be reimagined to be **more sustainable**. Plant-based, Cultured, and Fermentation-based meat are good examples of how the source of the food is being redefined.

Carbon accounting and calculation tools

Process of helping companies and individuals to calculate their carbon footprint.

Agroforestry and reforestation

The integration of trees in farm systems and the **intentional restocking of existing trees** that had been destroyed.

+ Electric transportation

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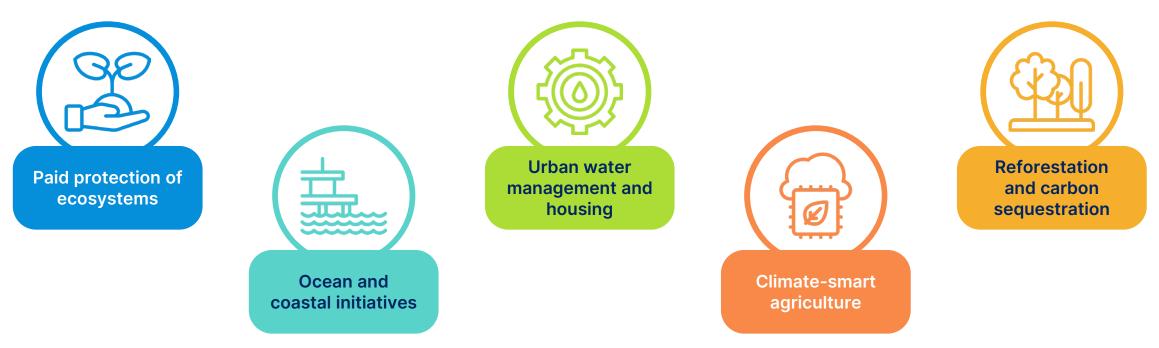
Refers to the **electrification** of our transportation methods.

Crypto climate tokenization

Usage of blockchain and crypto to **simplify the non-fungibility and trade** of carbon credits and environmental assets.

Current adaptations in LatAm for climate change

Deforestation, glacier loss, human health, food security, migrations, and displacements. LatAm would be vulnerable to unequal, highly sensitive, and severe consequences of climate change. A situation amplified by poverty, population growth, and population density.



Some of the current adaptations responses are:

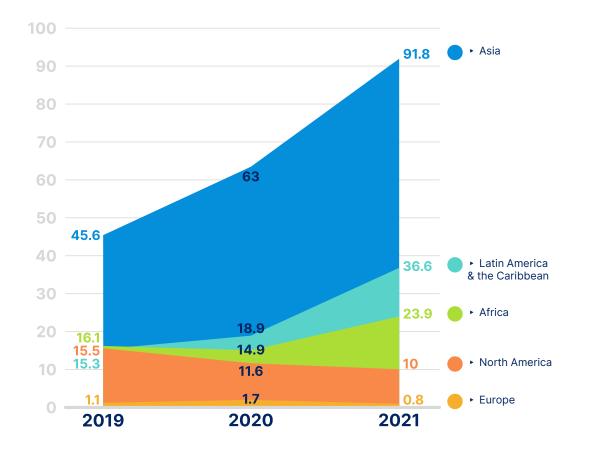
Source: Daniel Salinas

There is a gap between the volume of international investments and the number of mitigation solutions. That's *an area in which Latin America is strong* due to its low cost of projects and valuable reserve of carbon

- Poorer countries and those reliant on fossil fuels are the most exposed to the shifts in a net-zero transition, although they have growth prospects as well. (McKinsey)
- The Amazon basin positions LatAm as a leader in the voluntary carbon credit markets.
- Issuance of green bonds in Latin America more than doubled in the last two years and is helping finance renewable energy, transportation and land-use projects, even though LatAm represents only 2% of Global green bond issuance, as we've mentioned.

(J.P. Morgan)

Latin America is the second-largest provider of carbon credits in the voluntary markets - Transacted voluntary carbon offset volume by project region, 2019-August 2021 (MtCO2e)



_ _ _

Latin America sits on a valuable reserve of carbon that supports the business case for forest preservation - Stored Carbon Value in selected countries at 40\$/tCO2e (2020)



LatAm: *companies* in the climate tech sector

| Food | | | | Transportation | | | | Water | |
|-------------|-----------------------|-----------------------|--------------------|----------------|------------------|-------------|------------|------------|-----------------|
| Prevention | Prevention Adaptation | | Mitigation | Adaptation | | | Adaptation | Mitigation | |
| Atarraya | Honest Mit | NotCo | Verde | Mobi LatAm | ВеерВеер | Awto | Cocoche | | |
| | Perfekto | The Live
Green Co. | | Alterbike | Buser | LiteRide | Urbvan | | |
| Micro terra | Genius
Foods | Fazenda
Futuro | Compacto
Kilimo | Voltz | Econduce | E-moving | Vemo | | |
| Cheaf | Asanté | Save fruit | | AllRide | Ualabee | Mazmobi | Dezba | Nilus | Agua
Siembra |
| Assante | Rising Farms | Supefoods | | Bussi | Bender
Motors | Eco Planeta | Vetelia | | |
| foods | Gricha | ZoomAgri | | Bynd | Tembici | Nemak | VEU | | |
| PolyNatural | ral Desserto | | Algramo | Hitech | Electric | Ev | sy | | |

| Energy | | | | | | | | |
|-------------|--------------------|---------------|-----------------------|--------------|------------|-------------|------------|---------------|
| | | | | Mitigation | | | | |
| Atlas Power | BioEsol | Vinsomex | Pelletmx | Caliza | lluMexico | BIA | Powerstein | Devend Freema |
| CUBi | CHP Brasil | Eco Evel | Ruuf | Lemon | Neu Energy | Solfium | S2G | Beyond Energy |
| Onegrid | Tycho
Solutions | Greenfluidics | JustWe | Solarity | Rocasol | Galt Energy | Exolar | Pright |
| Clean Light | J3M | Urbix | Endurance
Electric | Tecnoligente | U energy | Nextenergy | Klik | Bright |

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LatAm: *companies* in the climate tech sector

| Agriculture & Land Use | | | | | | |
|------------------------|-----------------------|-------------|--------------------|--|--|--|
| Prevention | Adap | Mitigation | | | | |
| Agrapp | Agree Market Auravant | | Agrosmart | | | |
| Savefarm | Microendo | Aegro | Courageous
Land | | | |
| Saverarm | EcoTerra Agrofy | | BovControl | | | |
| Horus | Instacrops | Salus Mundi | Dense | | | |
| Agranimo | Sosty | Elwa | Ponce | | | |
| | Ecobot | Luxelare | Sioma | | | |
| Nuup | Verqor | Sima | Sistema.bio | | | |

| Sustainability as a service | | | | | | |
|-----------------------------|-------------------------|---------------------|-------------|-------------------|--|--|
| Prevention | | Mitigation | | | | |
| Greenplat | Desserto Superplan Sugo | | Moss | | | |
| orcenplat | Denda | Toroto | Tiendoo | | | |
| | Karun | Bono | Cirkula | Amazónico | | |
| Bureo | TriCiclos | Clevot | Bosquenible | Saving the amazon | | |
| Awake | Getfair | Cariuma | Sanimax | | | |
| | Sin
Carbono | New Hope
Ecotech | Bambuterra | Pachama | | |

| Materials | | | | | |
|-------------------|------------|------------|-------------|--|--|
| Preve | ntion | Adaptation | | | |
| Reinicia el ciclo | Trashin | WAS Co. | Reciqlo | | |
| | | Polybion | BioElements | | |
| Acquara | ReciPuntos | Algr | amo | | |

| Biotech | | | | | | |
|------------|---------------------------|--------|--|--|--|--|
| Prevention | Adaptation | | | | | |
| RebX | Botanical Solution | Solena | | | | |
| MetaBIX | Spora Biotech | | | | | |

LatAm: founders in the climate tech sector











Diego Saez Gil











Jose Manuel Moller



Ana Ortiz









Carolina Duque







Felipe Chavez

















Bold climate action could deliver at least US\$ 26 trillion in economic benefits through to 2030."



** The next 1,000 billion-dollar startups will be in climate tech.

— Larry Fink, CEO of Black Rock

World: urgency on climate policy

The Paris Agreement, COPs, and government commitments in general directed more funds and changed jurisdictions. We are probably going to change the current commitments to more aggressive pledges and prohibitions. According to an IPCC report, **"without immediate and deep emission reductions across all sectors, it will be impossible"** to limit global warming to the 1.5°C target. In the worst-case scenario, emissions need to be reduced by 43% by 2030. According to the Financial Stability Board (a G20 initiative), climate change is a **systemic risk that can affect our financial system**.

The opportunity

Successful climate startups should understand that they need to go **beyond governments' agendas** for climate innovation. Climate startups in Latin America need **ambitious paths** and should have an approach based on **new solutions and areas to expand** these agendas. Academia, government, civil society, financiers, policymakers, tech providers, and emitters can be involved by **providing support**.

66 *Most major emitters* aren't taking the steps needed to fill the 'inadequate' promises they have already made."

Latin America has a unique opportunity to *take advantage* of this green transition."

Ernesto Torres Cantu, CEO of Citi Latin America

Investments expected by sector in the developing world (BCG)

- Power: US\$ 6.2T expected to be invested in the developing world.
- + Heavy Road and Transport: US\$ 2.1T expected to be invested in the developing world.
- Light Road Transport: US\$ 1.9T expected to be invested in the developing world.
- Buildings: US\$ 1T expected to be invested in the developing world.
- Aviation: US\$ 0.3T expected to be invested in the developing world.
- Shipping: US\$ 0.2T expected to be invested in the developing world.
- Iron and Steel: US\$ 0.8T expected to be invested in the developing world.
- Chemicals: US\$ 0.2T expected to be invested in the developing world.
- Cement: US\$ 0.3T expected to be invested in the developing world.
- Agriculture: US\$ 0.6T expected to be invested in the developing world.

Source: BCG Report https://www.bcg.com/en-br/brazil-climate-report-2022-seizing-brazils-climate-potential

Venture capital is *starting to reallocate*, opening *opportunities for LatAm*

The mismatch between the industries with the greatest capacity to make progress on decarbonization and the industries receiving venture capital is starting to regulate, and it will come at the price of geographical **reallocation of capital**. The reallocation of capital **will come to global south**, and this will open huge opportunities for the built environment in LatAm specifically in terms of agriculture, food, and energy land. New investment thesis from climate tech VCs would also **benefit nature-based solutions in LatAm**, because climate tech VCs worldwide are looking for these solutions and their impact on biodiversity.

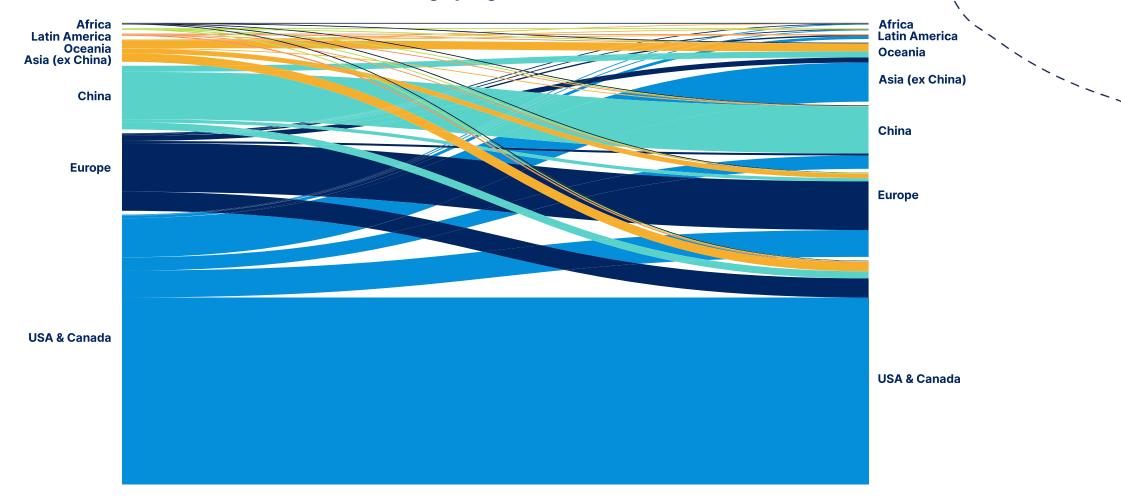


66 Climate tech will become the next big thesis for Latin America."

— Francisco Jardim and Marcella Falcão, founding partner and associate at SP Ventures (AgFunder News)

Latin America can deliver **more carbon reductions per USD invested than any other region in the world**. There is an urgency to shift capital towards new solutions and geographies. There is room for companies focusing on mitigation efforts but also for companies solving problems of high emissions products.

Climate tech funding by region H2 2020-2020 H1 2021



We see that the US, Europe, and China are **allocating resources between themselves**. Latin America and Africa are **only receiving 4%** of all climate funding. This is about to change due to foreign VCs and **LatAm has a huge potential for growth**.

Latin America's economic and social context



Materiality analysis is going to become crucial for every company in LatAm.

LatAm it's the **second most urbanized region in the world**, and the density of the cities causes vulnerabilities. Hurricane's Eta and lota economic impact and the covid-19 pandemic affected multiple factors of the economy and the quality of life. Education and landscape relevant disciplines and services are a need in most of the countries. In LatAm, it's about **identity and connectedness**. For most of the world its aesthetic enjoyment, recreation, health, and location attractiveness makes it the perfect place for ecotourism.

This creates the perfect context for climate startups to grow communities that are **actively supporting climate initiatives**. LatAm is the only region in the world in which more than two thirds of the electricity consumed comes from renewables.

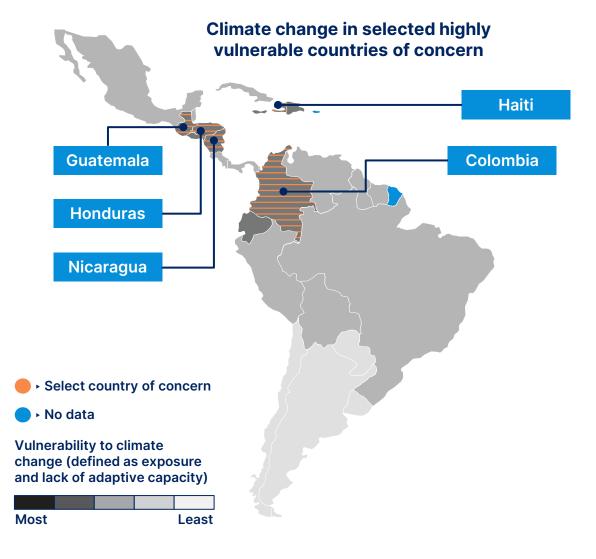
Although LatAm is not historically a high contributor to emissions, its **disproportionately experiencing the impacts** of climate change.

Latin America's economic and social context

66 Consider that for generations your

family has been growing certain crops and has learned the rhythm of the seasons and has a system for how and when to harvest. And suddenly those seasons are changing. And it's not just one season shifting and then going back to normal, but shifting permanently and continuously. It's very difficult to be able to adapt to that kind of rapid change in a way that in the short term still leaves you able to sustain your livelihoods and feed your family."

> Gabriela Nagle Alverio, Ph.D. student in environmental policy at Duke University



LatAm countries: opportunities range from green hydrogen to certified food production

(b) The Inflation Reduction Act of Biden (\$369B) will certainly reinvigorate the world's efforts to reduce carbon emissions and will encourage other countries, particularly LAC countries, to adopt legislation formulated along similar lines."

José Goldemberg, academic and former Environment Secretary for the Brazilian Presidency

- Panama: Panama wants to position itself as a hub of green hydrogen, and produce and export it to Europe. By 2030, between 81.4M to 140M long tons of green hydrogen would pass over the Panama Canal. 29% of what goes through the channel is fossil fuels, and this is going to be replaced, according to Rosilena Lindo (Panama's National Sub-Secretary for Energy).
- Chile: The country wants to develop better local technology, to not depend on others. The government's working on certifications, legislation, and transitions like a quota system. Under half of Chile's energy is derived from renewables currently. Chile's diverse geography makes them attractive. There's potential for solar in the north, hydrogen in the middle, and wind in the south. Only the Chilean's green hydrogen potential is around 70 times more than the current installed capacity.
- Colombia: water shortages are going to be more frequent and would require big adaptations inside the country, especially for agriculture. The energy sector in Colombia is one of the biggest contributors to its GDP. According to Bloomberg, Colombia reached US\$ 785M in new investment flows for clean energy in 2021, and this year the country is expected to kick off a multi-year renewable energy boom that will increase its wind and solar capacity by a factor of 13 from 2021 levels in the next four years. According to the U.S. Agency for International Development (USAID), the opportunity would be created mainly by fighting against commodity-driven deforestation and supporting sustainable forest management. Also, we add, by innovating in terms of software.

LatAm countries: opportunities range from green hydrogen to certified food production

- Peru: Peru's Nationally Determined Contributions are currently rated as insufficient, which means they need improvements to be consistent with the Paris Agreement. New strategies from the national government are expected and highly likely to occur. The U.S. Agency for International Development (USAID) is working with the government of Peru mainly in forest monitoring, climate adaptation, and natural infrastructure for hydraulic safety.
- Brazil: Brazil has an advantage over most of the other countries in Latin America. Boston Consulting Group released a Brazil Climate Report in Sept 2022 and, out of many different opportunities, here are some of the most interesting findings. 85% of Brazil's power matrix is renewable (vs. 26% in the world), and that can grow more. Brazil can be the main Carbon sink of the planet (0.6-1.0 Gt CO2e per year, while still being cost effective). Sustainable agriculture can scale to the world. Brazil is #1 in most key Nature Based Solutions levers. Brazil's hydrogen has a 5-day advantage against Chile's hydrogen in terms of access to the European market, due to location. Brazil also has more renewable fresh water and more renewable power capacity to generate hydrogen at scale. Port of Pecém (Ceará) and of Açu (Rio) should have particular attention. Brazil has over 1547 agtechs, an increase of 40% a year. Coffee and Soybeans would be the first food industries to shift to sustainable production at scale. Still, forest and meat are the main challenges for Brazil (vs. other countries, where the challenge is having more focus on energy and manufacturing). Brazil also pollutes more than the US and China, per dollar of GDP. Now according to Climate TRACE, Brazil pollutes more than the US in terms of GHG emissions in the sectors of waste and forests.
- Dominican Republic: 98% of the companies in the region are small and medium-sized. Some highlights of trends and opportunities are sustainable finance for tourism, recycling and waste management, and certified cacao production. The Dominican Republic has an avg of 150,000 hectares of cacao from around 40,000 producers and 36,236 registered farms, and 16.5% are dedicated to organic cacao. The region is currently the world's leader in exports of organic cacao, representing 60% of the volume of exports worldwide (CONACADO, IICA).

LatAm countries: opportunities range from green hydrogen to certified food production

Alert for islands and coastal ecosystems:

In the last 5 years there have been advancements in the commitments done by different countries, but **most** of the Islands and peninsulas are still in vulnerability."

— Inka Mattila, UNDP representative for the Dominican Republic, at her speech in LatAm Climate Week 2022

The small population of the Caribbean saw the impact on its Tourism industry due to covid-19, and this can be worst due to climate change. Islands depending on coral reefs are seeing them reaching their limits. It's common to see recovery and rescue efforts together with destroyed coral shelters.

The opportunity

Ocean access represents an opportunity to innovate and constantly try different solutions. Coastal ecosystems are going to have urgent needs for adaptation and migration, and systemic changes are going to be adopted quicker than in noncoastal ecosystems. Emergencies are going to happen faster, which means there is going to be more capacity of reaction and support from other countries. One avenue to explore is water desalination, for example.

LatAm climate tech startups: opportunities range from agriculture to sustainable supply chains

Latin American climate startups should have an approach to solutions that is not systematic but dynamic, taking into consideration the diversity of opportunities available and then rethinking business models at their core. The informality of the economy in Latin America could foster transformative system changes and feedback systems in multiple areas. There is going to be a shift from profitability to other types of business factors for investment decisions, such as sustainability.

Some industries climate techs in Latin America can tackle in the medium to long-term, considering the industries with the most emissions of CO2, are:

access to water; agriculture and livestock; biodiversity monitoring and decision-making, by using technologies like artificial intelligence and machine learning; decarbonization and consulting for companies of all types; digital and power electronics; energy as a service; green real estate infrastructure, from materials to emissions tracking; information technology and insurance for green assets; nature-based solutions, such as biodiversity offsets and sustainable supply chains; renewable energy, including green hydrogen; R&D for biotech and climate tech itself; SaaS for climate change adaptation, mitigation, and prevention.

We'll go deeper into some of these industries.

Agtechs: agricultural technologies have a huge potential impact in LatAm

The TAM of global agtech is estimated to reach US\$ 22B by 2025 (Statista). There are over 130 million farms in Latin America and the Caribbean (LAC), where 46% are smallholder farmers. The average size is estimated to be 50 acres.

The opportunity

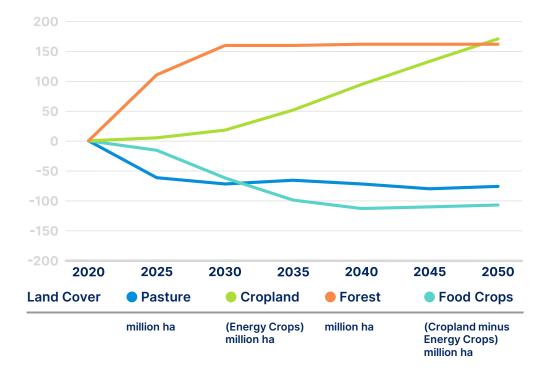
- Agfintech: through data science and aerial imagery, companies can certify and issue debt for farmers with sustainable agricultural practices, offering a "greenium" of low-interest rates.
- Digitalization to increase productivity per hectare: this can reduce pressure to expand agricultural land frontiers into forests by optimizing the use of inputs (e.g. fertilizers, crop protection, water). This front will have direct and indirect GHG impacts.
- Precision ag and biotech: optimization and substitution of inputs preserves water and reduces agrochemical use. These inputs can have a huge carbon footprint, while water management is key in climate uncertainty.
- Key infrastructure in agriculture or livestock: tackling infrastructure can help to fund farmers' transition toward a lower-carbon agriculture.
- Surplus food: marketplace platforms can connect buyers and sellers of surplus or near-to-expire food.

Agtechs: agricultural technologies have a huge potential impact in LatAm

Soon, LatAm is going to start using its land differently:

Curbing emissions will require a shift in land use to increase to satisfy demand for energy crops and preserve forest cover.





Source: IIASA NGFS Climate Scenarios Database, REMIND-MagPIE model

LatAm examples in the sector

Common Stambero.com



NSTACROPS

EatCloud









Green real estate: climate techs have the opportunity to tackle government and consumer's demand for greener living spaces

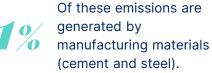
Recently, investors made net-zero commitments. Regulators developed reporting standards. Governments passed laws targeting emissions. Employees demanded action. And, finally, tenants demanded more sustainable buildings.

Regulatory requirements to decarbonize buildings and promote biodiversity conservation (e.g. Biodiverciudades); new materials and low-carbon heating and cooling systems; and identifying mispriced assets because of climate risks could become a competitive differentiation for real estate players and are opportunities for climate techs. To create green buildings and attract more tenants, climate techs can offer the real estate industry solutions like:

- Green building materials
- Green buildings, which include retrofitting
- Local energy generation and storage
- Services for reducing and tracking emissions

Leed certifications, Living Building Challenge, and green plot ratio for sustainable architecture can help to achieve a higher profitability in real-estate projects.





4-6 million jobs per year can be added with building transitions worldwide.

YU

ĊA

Estimated capital spending annually with buildings between 2036 and 2040.

LatAm examples in the sector

Sustainable Materials

POLYBION





Retrofitting







Access to water: a risk and an opportunity

Our total renewable freshwater resources are bigger than in most areas of the world, and that comes with a high competitive advantage in terms of cost of extraction of fresh water. Latin America is assuming that water is abundant – but, actually, it won't last for long. LatAm has a so-called "grey infrastructure" to transport water (dams, seawalls, roads, pipes, or water treatment plants). Watersheds filtration, retention, and detention are degrading at a fast speed for LatAm because of this grey infrastructure. Mexico, Lima, and Santiago would suffer more with a limited water supply.

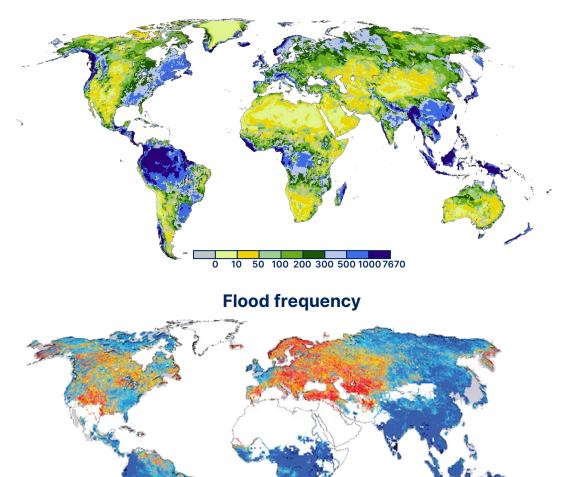
Flood frequency is going to increase, and if innovation is able to open the barriers of water filtration systems available at scale, South America could become the water provider of the world.

The "ley de agua" en Guatemala, and the inequality of access to water that Monterrey faced are examples of how there is material risks, regulatory overreach, and reputational damage due to lack of access to water. The governments can create water tariffs and impose corporate water restrictions.

Domestic water usage in LatAm would be double than in the world."

Fondosdeagua.org

Total renewable freshwater resources in mm year (1961-1990)



5 50 75 95 105 125 250 500 1000 Return period (years)

Access to water: a risk and an opportunity

The opportunity

Restoration and conservation of ecosystems can have a huge return on investment, by reducing suspended solids concentrations on water and bringing benefits to different communities as water projects become more conscious with the impact on the community (more USD per user). There is an opportunity to disrupt an industry mainly led by government policies, betting on segments such as advocacy, desalination, and satellites to monitor water resources and water supply.

Transportation by navigation, tourism, and urban planning are all going to be affected by innovations in the water industry, Water can become one of the main factors in various projects' assessments. This is an opportunity for investors as it has not been reached by other investors, such as the institutional ones.

LatAm examples in the

sector





Renewable energy: the falling demand for fossil fuels will contribute to the decline of oil revenues in the region, and open the space for climate techs focused on energy

There's a potential for rapid change in Latin America when talking about the transition to renewable energy infrastructure, considering the rise in electricity cost, the compromise Latin American countries have made, and examples like Chile's US\$1.4B Cerro Dominador solar power project, Gulf of Mexico's launch of an offshore wind industry, and the push into geothermal power generation by a number of countries.

The opportunity

Climate techs can bet on building, expanding, and integrating infrastructure for renewable energy; improving the renewable energy market's cost structure and distribution, especially when talking about decentralized production; dealing with asset stranding, like coal and gas power plants lost by the transition to a low-carbon economy.

US\$ 555B Investment opportunity for renewable energy infrastructure in LatAm by 2030 (IFC)



Countries in LatAm have already committed to a collective regional objective of 70% of renewable energy in their matrices by 2030 (Organización Latinoamericana de Energía)

Renewable energy: the falling demand for fossil fuels will contribute to the decline of oil revenues in the region, and open the space for climate techs focused on energy

Electricity generation mix by country in 2050

Global energy supply



LatAm examples in the sector



Green hydrogen: demand for hydrogen is expected to rise 163X for 2030, according to BCG

Green hydrogen is defined as hydrogen produced by splitting water into hydrogen and oxygen using renewable electricity. This is a very different pathway compared to other colors of hydrogen, like grey and blue (WEF).

One obstacle for green hydrogen is cost. When green hydrogen crosses the tipping point of US\$2/kg (U\$50/MWh), it becomes competitive for industrial use, the risks come down, and the revolution starts for Latin America and Africa as energy exporters. Seasonality can open opportunities for some Central and South american countries to have competitive advantages against other producers. Brazil and Chile can position as key players in the hydrogen segment.

More hydrogen

60%

Drop in green

hydrogen costs in

2050

 10_x

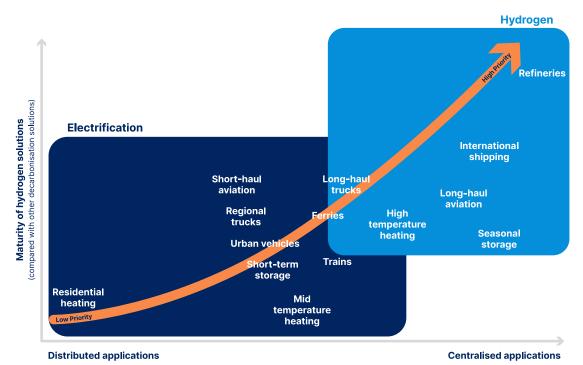
produced in 2050

than in 2020

Source: McKinsey

US\$ invested in hydrogen infrastructure by 2030

Green hydrogen policy priority



Green: Hydrogen produced by electrolysis of water, using electricity from renewable sources like wind or solar. Zero CO2 emissions are produced.

Purple/Pink: Hydrogen produced by electrolysis using nuclear power.

Blue: Hydrogen produced from fossil fuels (i.e., grey, black, or brown hvdrogen) where CO2 is captured and either stored or repurposed.

The colors of hydrogen

Turquoise: Hydrogen produced by thermal splitting of methane (methane pyrolysis). Instead of CO2, solid carbon is produced.

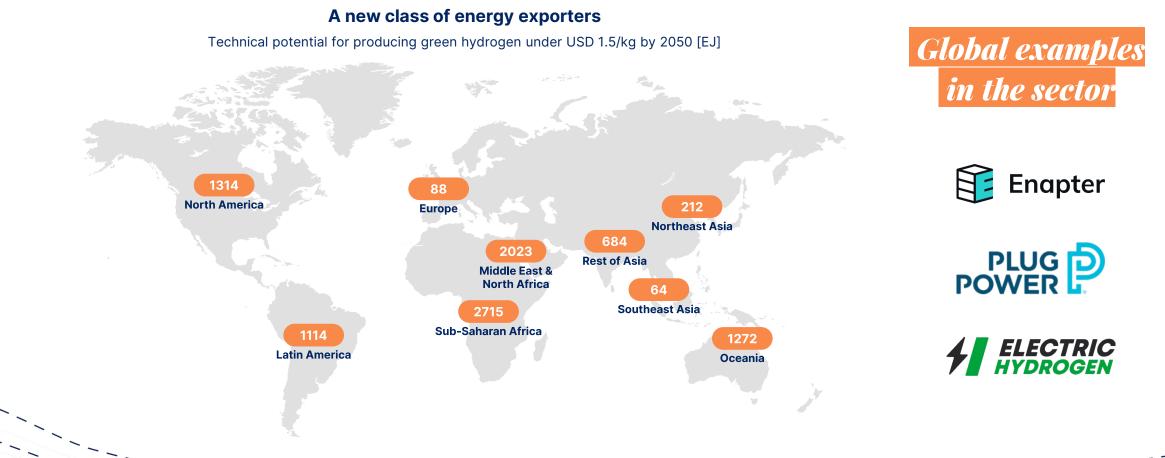
Grey: Hydrogen extracted from natural gas using steammethane reforming. This is the most common form of hydrogen production in the world today.

Brown/Black: Hydrogen extracted from coal using gasification.

Green hydrogen: demand for hydrogen is expected to rise 163X for 2030, according to BCG

The opportunity

Climate tech startups can look at all possible applications of green hydrogen: steel production; the blending of green hydrogen in the traditional gas network; mobility, industry, and energy (Hydrogen Valleys); and green data centers.



AI and machine learning: technologies that can battle for biodiversity and combat climate change

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| Framework for Using AI to Combat Clin | nate Change |
|---------------------------------------|-------------|
|---------------------------------------|-------------|

| s
S | Mitigation | | | | Adaptation and resilience | | | | | |
|------------------------|--|--|---|---|--|--|--|---|--|---|
| Topics | Measurement | Reductions | Removal | I | Hazard forec | asting | Vulnerability a exposure manag | | Fundamentals | |
| Subtopics and Examples | Macro-level
measurement
e.g., estimating remote
carbon natural stock | Reducing GHG
emissions intensity
e.g., supply forecasting for
solar energy | Environmental removal
e.g., monitoring
encroachment on
forests and other
natural reserves | | Projecting regionalized
long-term trends
e.g., regionalized modeling
of sea-level rise or
extreme events such as | | Managing crises
e.g., monitoring epidemics
Strengthening
infrastructure | | Climate research and
modeling
e.g., modeling of
economic and social
transition | |
| | Micro-level measurement | Improving energy
efficiency
e.g., encouraging
behavioral change | | | | wildfires and floods Building early | | igation
lations
ge-scale | Climate finance
e.g., forecasting carbon
prices | |
| | e.g., calculating the
carboon footprint of
individual products | e.g., calculating the Reducing carboon footprint of Reducing | | Technological removal
e.g., assessing carbon-
capture storage sites | | warning systems
e.g., near-term prediction
of extreme events such as
cyclones | | migration patterns Preserving biodiversity e.g., identifying and counting species | | Education, nudging, and
behavioral change
e.g., recommendations fo
climate-friendly
consumption |
| Uses
for Al | Gather, complete, and
process data
→ Satellite and IoT data
→ Filling gaps in temporally
and spatially sparse data | Strengthen planning a
making
→ Policy and climate-ri
→ Modeling higher-ord
→ Bionic management | te-risk analytics of
-order effects | | → Supply chain → Simulation → Simulation | | collaborative
ms
I data sharing
ced communication | Encourage climate-positive
behaviors
→ Climate-weighted suggestions
→ Climate-friendly optimization
functions | | |

Sources: BCG project experience; Climate Change AI, "Tackling Climate Change with Machine Learning", Global Partnership on AI, "Climate Change and AI: Recommendations for Government Action". Note: GHG = greenhouse gas; IoT = Internet of Things.

AI and machine learning: technologies that can battle for biodiversity and combat climate change

The opportunity

LatAm has the potential to easily gather data and test with big amounts of samples. This represents a competitive advantage for the development of tools that improve our understanding of nature. One example is machine vision technology, paired with big data and artificial intelligence, to develop monitoring that could help us decide in pro of conservation of our biodiversity. Other opportunities include improving prediction on electricity; discovering new materials; optimizing supply chain; and helping making more efficient buildings.



Source: BGC; MIT Technology Review

Nature-based solutions

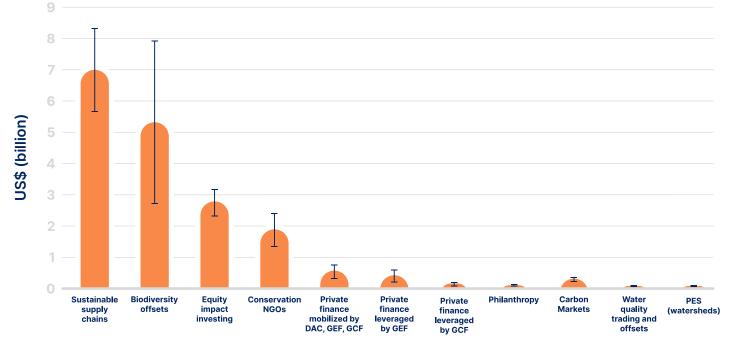
Nature-based solutions are actions to protect, sustainably manage, or restore natural ecosystems. They are a way for Latin America to help the world build resilience and fight climate change. Peatland and mangrove restoration, aforestation (seeding in a non-forest land), and other conservation efforts are some examples.

LatAm can be a leader on that, because it has an unbounded natural endowment to facilitate nature-based solutions.

Private companies, such as climate tech startups, could look to opportunities such as creating biodiversity offsets.

Private sector financing for NbS 2019 by category

(with upper and lower bounds)

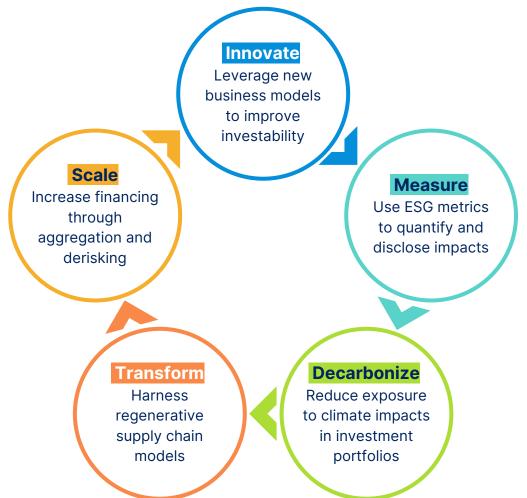


Only about 133 billion dollars are channeled into nature-based solutions, and **investments must triple by 2030** to meet the climate, the nature and land-neutrality targets."

Inger Andersen, Executive Director of the United Nations Environment Programme, 2022

Nature-based solutions

Private sector actions to accelerate finance for NbS





LatAm examples in the sector

Led by cooperatives and private investors in Peru, The case of Café Selva Norte is a great example of a US\$ 12M investment in an agroforestry project with great returns and also the sequestration of 1.3M tons of CO2 and the improvement of the land for 2400 producers.

In the climate tech sector, Courageous Land is a great example of agroforestry intelligence and successional, regenerative and multistrata crops can create profitable projects and add biodiverse and native species protection.

Reimagination of processes and systems through moonshots (e.g. quantum computing and CRISPR)

Quantum computing could bring about step changes throughout the economy that would have a huge impact on carbon abatement and carbon removal.

Visualizing postquantum climate action



Reform food and forestry

➡ Green fertilizers

→ Methane- reducing vaccines for ruminants



➡ Higher-density electric batteries for heavy-goods electric vehicles

➡ Higher-density electric batteries for energy storage Reshape industrial operations

→ Zero-carbon cement clinkers

 New carbon- capture utilization and storage (CCUS) solvents



Decarbonize power and fuel

➡ CO2 chemistry improvements for synfuels

- Better polymer
 electrolyte membrane and
 pulse electrolysis in H2
 generation
- More efficient perovskites for solar
- ➡ FeMo cofactor for green ammonia
- → Green ammonia for shipping



→ New direct-air capture (DAC) adsorbents

What is a reimagining processes and systems through moonshots?



R&D based in Latin America for the biotech and climate tech sectors would have a competitive advantage, as the region starts to position as a perfect place for research. Low costs of infrastructure and specialized labour makes LatAm great for reducing lab costs and fostering discoveries. Basically, developing high tech is cheaper in LatAm. By extending startups' runway, we can win the moonshots and they are not regional. The main challenge is accessibility to some special materials and lack of investors, specially for this type of moonshots, in LatAm.

Global examples in the sector

Quantum Computing

CRISPR

QM

CA ZYME



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There are **opportunities** for climate tech, but also **risks** in terms of *damages to property and assets and changes in crop productivity* worldwide. In *Latin America*, there's also the risk of **fluctuation in prices** due to the region's volatile currencies, and *legal and research costs*.

#### + Social and government instability

Challenging corporate and government frameworks and leaderships; litigation trends; country risks; greenwashing; personal responsibility; meat culture in Latin America; green premiums.

#### + Urgency on climate policy

Transparency in the legal frameworks, which are based on yesterday's world, is a challenge. Also, the current focus is limited to only one part of the climate innovation agenda.

#### Alert for islands and coastal ecosystems

Droughts and floods, tropical cyclones, energy infrastructure risks, food safety, and crop profitability are all challenges when dealing with islands and coastal ecosystems. In coastal places where assets have little to no value, there is going to be less economic risk; and therefore the impacts to marginalized communities living in those places is going to be higher. Islands could be affected disproportionately by the lack of allocation of resources.

#### Agtechs

Latin America really needs to keep up its agtech game. Otherwise, other countries are going to be more productive and LatAm would stop being the #1 choice to import agricultural products. New crops, places, and climates are going to allow other countries to cultivate crops that they were not able to cultivate before. For example, Russia started to develop the south of Siberia as a region for agriculture. Some of the Tundra ecosystems that were there are no longer Tundra ecosystems, and they are able to cultivate more due to the changes in climate.

#### AI and machine learning

There's a lack of multinational data sets or communities to feed the algorithms with data. Sensors' capabilities and precisions are other challenges. Finally, climate tech startups using these technologies need to obtain governments' permissions and battle for accessibility when acquiring sustainable materials.

#### Green real estate

Companies that deal with the real estate industry should be aware of devaluations due to extreme weather conditions and other consequences of climate change. Could possibly see a 40% reduction in annual returns.

### + Access to water

There's still a lack of evidence and knowledge for an increase on the funding of climate techs in the water space. There are also regulation challenges, since it's a space mainly led by government policies. There are high upfront costs and long holding periods in terms of investment. There is also the challenge of water security, the basic goal of water policies and management. A society with a high level of water security makes the most of water's benefits for humans and ecosystems and limits the risk of destructive impacts associated with water.

### + Renewable energy

Between challenges like capturing energy in the most efficient way possible, trying to do so at the best time of the day, and then storing it, the biggest challenge are actually in facing regulations and having adaptability to the current infrastructure.

### + Green hydrogen

Risks for climate techs tackling the green hydrogen segment include a slow transition to this source of energy; garnishing support from the sector, which could expand its green hydrogen usage; and safety concerns regarding accidents with hydrogen.

#### + *Reimagination of processes and systems through moonshots* (e.g. quantum computing and CRISPR)

Although the cheap costs of development of these technologies in LatAm should make the region attractive, the main challenges are the natural risk of having deep knowledge behind the solutions, the access to these solutions, and the networks and communities around them. There is often a lack of resources for these communities to be able to compete against more developed communities worldwide.

### Nature-based solutions

Private capital is not enough yet. Over US\$ 550B is invested annually in climate finance worldwide, 56% made of private capital, compared to only over US\$ 100B invested in nature-based solutions, 14% made of private capital.

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## Acknowledgements



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