TECNOLATINAS
THE LAC STARTUP ECOSYSTEM COMES OF AGE
2021

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This new edition builds on multiple reports and information generated in recent years by valuable ecosystem players such as LAVCA, Distrito, Crunchbase and Pitchbook. The project emerged out of the work we were doing with IDB Lab under the leadership of Irene Arias Hofman and Yuri Soares.

All the analyses contained in this study were developed by a team made up of Tomás Raúl Vicente Gutiérrez Oyhanarte, Milagros Gutiérrez Oyhanarte and Manuel Solanet under the leadership of Ignacio Peña. The design was performed by Daiana Hindi and Melanie Minujen, who graciously accepted suggestions and requests from the extended team.

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Executive Summary

A startup revolution is unfolding in Latin America and the Caribbean (LAC). Latin entrepreneurs are demonstrating world-class vision, business skills, and grit. They are transforming our lives for the better, generating jobs at scale, and delivering massive value for their shareholders.

There are 1,005 technology companies born in the region that raised over $1 million. These companies are collectively worth $221 billion, raised $28 billion, include 28 companies worth more than $1 billion, and have over 245,000 employees.

Accelerated growth has been witnessed throughout the broader ecosystem. Its value multiplied by 32 times in the last decade, going from an estimated $7 billion in 2010 to $221 billion in 2020. Most of the growth took place in the past four years. Tecnolatinas have shown they can grow and prosper even in difficult contexts: while their value grew from $7 billion to $221 billion in the last decade, the leading 40 publicly-listed traditional companies from across the region saw their market capitalization fall by $489 billion.

The revolution is accelerating: the time to achieve a $1 billion valuation has been steadily decreasing with the help of digital technologies and solutions, such as mobile and cloud computing, and more mature ecosystems. While it took decades for pioneers such as Totvs to achieve that value, the latest unicorns (such as C6, Loft, Ualá) achieved that status less than three years after they were founded.
A startup revolution is unfolding in Latin America and the Caribbean (LAC). Latin entrepreneurs are demonstrating world-class vision, business skills, and grit. They are transforming our lives for the better, generating jobs at scale, and delivering massive value for their shareholders. There are 1,005 technology companies born in the region that raised over $1 million. These companies are collectively worth $221 billion, raised $28 billion, include 28 companies worth more than $1 billion, and have over 245,000 employees.

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Geographic strategies vary across LAC: while Brazilian startups focus on their local market, startups from the rest of the region are forced to internationalize in order to scale. In Brazil, 83% of the Tecnolatinas have local strategies and represent 74% of the ecosystem value. Outside Brazil, 49% of the Tecnolatinas have local footprints, but they only represent 5% of the ecosystem value, with the other 95% of value coming from the 51% of companies with regional or global strategies. The need for internationalization partly explains the asymmetry between Brazil and the rest of LAC and represents a challenge for entrepreneurs and local policymakers that calls for regional collaboration.

Fintech and E-commerce represent 72% of the ecosystem value and are the leading sectors across the region in terms of value. But startup activity is spreading across sectors and we identified 16 sectors with companies worth more than $500 million.

The Tecnolatinas ecosystem is poised for continued growth and can play a critical role in building a future of abundance, inclusion, and regeneration in LAC. A valuation of over $2 trillion and more than $30 billion of annual venture capital investments by 2030 would be consistent with international benchmarks and with LAC’s current trajectory.

We highlight eight levers to achieve this potential: igniting unactivated countries, activating Deep Tech, activating medium-sized metropolitan areas, facilitating internationalization, strengthening corporate VC, scaling immature digital sectors, increasing focus on inclusion and regeneration, and increasing female representation.

The study is divided into four chapters. The first chapter provides an ecosystem overview. It shows that the LAC startup revolution is exploding and has reached a scale and relevance that turns it into a powerful engine of transformation and a force to be reckoned with. It also highlights the countries that are leading the revolution.

The second chapter analyzes the geographic strategies of the Tecnolatinas. It presents five plays and shows that three (Brazil, regional and global) are dominating investor interest and value. It stresses the importance of internationalization for startups outside Brazil and the ensuing need for regional collaboration.

The third chapter presents the sectors that dominate ecosystem activity. It tells a story of initial concentration in a few sectors as well as increasing diversification.

The fourth chapter explores future growth potential and new frontiers for the development of the ecosystem. It shows there are massive opportunities ahead and provides a sense of the size of several opportunity areas.
1,005 Startups
Terminology and methodology

We use the term Tecnolatinas to describe technology-based private companies born in Latin America and the Caribbean (LAC) and owned by founders from the region. The definition includes the wide range between early-stage startups and well-established companies worth tens of billions of dollars and with thousands of employees. Most of them are entrepreneur-driven digital ventures. Tecnolatinas share their attractiveness for venture capital investors as well as a distinct potential for impact due to their scalability and their capacity to ignite and consolidate entrepreneurial innovation ecosystems across the region. These ecosystems are critical for the transformation of LAC’s economy in the context of the unfolding technology revolution.

The present report builds on the 2017 Tecnolatinas study, which was developed in collaboration with NXTP Labs. While in the previous report we analyzed the companies with an estimated value of over $25 million, in this edition, we extended the scope to include the Tecnolatinas that raised more than $1 million of capital and with an estimated value of $6 million or more.

There are thousands of Tecnolatinas that have not yet reached those criteria and are therefore not included in this report. Including them is unfeasible because the data available about them is much more limited and unreliable, and they are in a highly volatile phase of development. However, they are highly unlikely to impact the conclusions of the report in a meaningful way due to their limited aggregated size in terms of capital raised and value.
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For consistency purposes, we excluded from this study companies in which most of the ownership was sold to multinational corporations, such as OLX and PedidosYa. While these companies signal the potential of LAC's ecosystems to create highly valuable assets, their value is very difficult to estimate, and today, they are more similar to the local operations of international technology companies than to the other Tecnolatinas.

At the same time, we included 43 companies that were founded and lead by LAC entrepreneurs and with a significant part of their team based in Latin America, but that have decided to base their headquarters overseas, mostly to facilitate their global expansion. They include companies such as Gympass, which was founded in Brazil, by Brazilian entrepreneurs and with operations in over a dozen countries.

We used multiple sources to identify the Tecnolatinas included in the study. They include the previous Tecnolatinas report as well as databases and reports from Crunchbase, LAVCA, Pitchbook, and Distrito.

The consolidated list of companies went through a detailed curation, validation, and profile augmentation process. We eliminated companies that were out of the scope, reviewed, and corrected conflicting information with alternative sources and complemented the existing information to build detailed profiles of each Tecnolatina using hundreds of articles, reports, press releases, and company websites. Each profile includes variables such as name, sector, year funded, founders, investors, headquarters, markets of operations, capital raised, value of last round, estimated valuation, number of employees, webpage, etc.

The value of publicly listed companies is based on the market capitalization as of December 31st, 2020. For unlisted companies with a publicly disclosed value, we used the last disclosed valuation. To estimate the value of unlisted companies without a publicly disclosed value, we used a multiple of six times the last financing round. We decided to include Despegar as one of the companies that achieved valuations of over $1 billion, even though at the end of the 2020 its market capitalization was $0.9 billion because the company was valued at more than $1 billion for most of the period between its IPO in 2017 and 2020, when the COVID crisis interrupted international travel.

We added the estimated value of all Tecnolatinas to estimate the value of the ecosystem of the entire region and of each country and sector, designating as Ecosystem Value the sum of the value of the Tecnolatinas in that particular ecosystem. This enabled us to make a series of comparisons across time and geographies and to identify the strategies that are proving more successful in the region. When we refer to value creation in relation to Tecnolatinas, we refer to increase in the value of the companies.

Based on this information we proceeded to perform over 200 analyses, complementing the information of the database with further reports and industry data, to obtain the insights included in the study.
VC AND STARTUP ECOSYSTEM DEEP DIVE

ECOSYSTEM OVERVIEW
Our lives were transformed astronomically by the COVID-19 pandemic. Suddenly, hundreds of millions of people across LAC had to stay home, and shops were closed.

Companies such as Rappi and MercadoLibre enabled hundreds of millions of people to access food, groceries, clothes, and other needs safely from their homes and allowed hundreds of thousands of shop owners to continue operating despite the crisis.

E-commerce and logistics Tecnolatinas employ tens of thousands of people. Over 600,000 people live from selling in MercadoLibre. Rappi connects over 150,000 independent couriers and serves more than 350,000 businesses, mostly local SMEs.
We identified 1,005 Tecnolatinas that created $221 billion of value. The vast majority of that value was created over the past decade, during a period when the largest traditional LAC companies destroyed $489 billion. A comparison between the 2017 and the 2021 Tecnolatinas studies shows that the number of startups roughly tripled over the last four years while their value increased by a factor of 5.7.

Most of LAC’s ecosystem value (86%) is concentrated in two countries: Brazil and Argentina. Brazil is the largest home base with 513 startups, 16 Tecnolatinas worth over $1 billion, and 51% of the region’s venture capital activity in 2019. Despite its market environment challenges, Argentina is home to the second-largest concentration of Tecnolatinas worth over $1 billion (5) and gave birth to the uncontested leader of the ecosystem MercadoLibre. Mexico, Colombia, Chile and Uruguay are gaining ground and also have companies worth over $1 billion.

Tecnolatinas are serving as powerful job engines. They created 245,000 jobs, with hundreds of thousands of people earning from buying and selling on their platforms.

Creating the first $1 billion of value is getting easier for LAC startups as the ecosystem matures. While the first pioneers took many years to reach that threshold, some of the latest companies were able to reach it in about a year.
The LAC startup ecosystem is already having massive impact

Until recently, most business leaders and policymakers in LAC dismissed the trailblazing growth of the startups in the region. This report shows that today that view of the world is untenable.

Tecnolatinas have created $221 billion of value, raised over $28 billion of equity, and have 245 thousand employees.

Today there are already 28 Tecnolatinas worth over $1 billion. They include some of the most valuable companies in the region, such as MercadoLibre (worth over $80 billion), multinationals with 30 offices in 15 countries such as Globant, and thriving Deep Tech startups such as NotCo.

The value creation trajectory of Tecnolatinas has been impressive. Most of the ecosystem value was created in the past few years: 83% in the past four years and more than 95% in the past decade.

And this is just the start!

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Ecosystem value is very concentrated in a few companies, sectors and geographies. Most (86%) of the ecosystem value is concentrated in only two countries: Argentina and Brazil. Two sectors represent 72% of the value created to date: Fintech and E-commerce. And the 28 Tecnolatinas with valuations greater than $1 billion represent 79% of the ecosystem value.

But the revolution is spreading across the region and across sectors. Today there are already 6 countries with ecosystems that created over $500 million of value that represents 71% of the population of LAC. Simultaneously, we identified 18 sectors with companies that raised over $100 million, signaling that the market already validated that the opportunity is far greater than still.

Tecnolatinas are also spreading their wings internationally, particularly outside Brazil, where 95% of start-ups have either regional or global footprints.

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1. We considered activated ecosystems those with value of over $500M

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Our first Tecnolatinas report was published four years ago, in January 2017. That was the first systematic study of the LAC startup ecosystem and it featured 123 startups worth over $25 million. In this edition, we expanded the scope of the study to 1,005 companies that raised over $1 million and are worth over $6 million. To provide a more clear view of the evolution of the ecosystem over time, we compared a few key metrics using the criteria of the 2017 study.

This comparison enables us to see three trends. First, the LAC ecosystem is growing at an accelerated pace: the number of startups worth over $25 million went from 123 to 314 (multiplying by 2.6x), their total value went from $38 billion to $216 billion (multiplying by 5.7x), and the number of companies worth over $1 billion went from 9 to 28 (multiplying by 3.1x). Second, the ecosystem value has been driven by the most success companies: the value of companies worth more than $1 billion went from $23 billion to $175 billion (multiplying by 7.5x), and their share of total value went from 62% to 79%... (continues in the next page).

### Evolution of the ecosystem in the past four years using criteria from the 2017 Tecnolatinas study

<table>
<thead>
<tr>
<th>2017</th>
<th>Difference</th>
<th>2020</th>
</tr>
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<tbody>
<tr>
<td>123</td>
<td>&gt;</td>
<td>314</td>
</tr>
<tr>
<td>$38B</td>
<td>&gt;</td>
<td>$216B</td>
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<td>9</td>
<td>&gt;</td>
<td>28</td>
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<tr>
<td>$23B</td>
<td>&gt;</td>
<td>$175B</td>
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<tr>
<td>62%</td>
<td>&gt;</td>
<td>79%</td>
</tr>
<tr>
<td>66%</td>
<td>&gt;</td>
<td>59%</td>
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- **Startups worth over $25M**: 123 → 314 (+2.6x)
- **Value from startups worth over $25M**: $38B → $216B (+5.7x)
- **Tecnolatinas worth over $1B**: 9 → 28 (+3.1x)
- **Value from Tecnolatinas worth over $1B**: $23B → $175B (+7.5x)
- **Ecosystem value comes from B$+ companies**: 62% → 79%
- **Startups comes from Brazil and Argentina**: 66% → 59%

*Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports*
... Third, the revolution is spreading across the region: the percentage of companies worth over $25 million that originated in Brazil and Argentina went from 66% to 59%.

These trends clearly show that the past four years have seen spectacular growth and a shift towards a new phase in the ecosystem's history, which went almost overnight from an early promise to become a force to be reckoned with and a powerful lever for the development of the region.
Tecnolatinas grew in value, while traditional companies contracted

A comparison of the value trajectory of Tecnolatinas with traditionally publicly-listed companies reveals a powerful story. While traditional companies are struggling, innovative entrepreneurs empowered by the latest technologies and business practices are thriving. During the past decade, traditional companies have destroyed $489 billion, while Tecnolatinas (which were insignificant at the beginning of the period) created $214 billion. We find this picture remarkably insightful, because it shows two contrasting stories unfolding in the region. We believe this represents a powerful signal to investors, business leaders and policymakers. While traditional companies continue to be critical for the region, this reminds us that in a world of accelerated technological change, value will concentrate and power will shift to the most innovative and dynamic players.

Evolution of the value of Tecnolatinas versus the market capitalization of leading publicly-listed traditional companies from LAC between 2010 and 2020

Tecnolatinas¹

$214B

Traditional²

-$489B

1. Considers the value generated by the startup ecosystem in the last 10 years.
2. Considers the market cap variation in the last decade of the most valuable companies with liquid stocks per country, including Banco de Chile, Santander Chile, Banco de Crédito, Entel, Copec, Falabella, Cencosud, Latam, Parque Arauco, Banco Itau, Banco Bradesco, Petrobras, Telefónica Brazil, TIM, OI, Vale, Multiplan, Iguatemi, BRF, Ecopetrol, Bancolombia, Davivienda, Cemento Argos, Nutresa, ISA, Grupo Financiero Galicia, Banco Frances, Banco Macro, YPF, IRSA CP, Pampa Energía and Tenaris.

Source: Surfing Tsunamis, Bloomberg and Yahoo Finance
Value is concentrating on innovation

When comparing the evolution of the value of publicly-listed digital against traditional companies in LAC, we see that the contrast between them is not the result of the COVID crisis or a short term fluke, but rather a consistent story that has played out over the past decade.

The publicly-listed Tecnolatinas are worth 37 times what they were worth ten years ago. Meanwhile, the leading traditional companies from the largest companies from Brazil, Mexico, Colombia, Argentina, and Chile are worth between 33% and 70% of their value at the start of the period.

This is consistent with what we are seeing in other markets. Innovative technology companies are creating more value and taking leadership positions in the rankings of the most valuable companies. This pattern is likely to continue as the technology tsunami accelerates over the next decade.

Evolution of market capitalization of publicly-listed digital and traditional companies from LAC between 2010 and 2020

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Evolution of market capitalization of publicly-listed digital and traditional companies from LAC between 2010 and 2020

1. Digital includes: MercadoLibre, B2W, Despegar, Pagseguro and Globant
2. Mexico includes: Banorte, Santander Mexico, América Móvil, Walmart Mexico, FEMSA, CEMEX, Bimbo, Soriana and Alpek
3. Chile includes: Banco de Chile, Santander Chile, Banco de Crédito, Entel, Falabella, Enel, Cencosud, LatAm and Parque Arauco
4. Brazil includes: Banco Itau, Banco Bradesco, Petrobras, Telefónica Brazil, TIM, Oi, Vale, Multplan, Iguaçu and BRF
5. Colombia includes: Ecopetrol, Bancolombia, Aval, Davivienda, Cemento Argos, Nutresa and ISA
6. Argentina includes: Grupo Financiero Galicia, Banco Frances, Banco Macro, YPF, IRSA CP, Pampa Energía, Central Puerto, Loma Negra and Tenaris

Source: Surfing Tsunamis, Bloomberg, Yahoo Finance
LAC with ecosystem value of $221B, 97% originating in 8 countries

The LAC startup ecosystem is a force to be reckoned with that is creating value on a massive scale. In the graph we can see how the ecosystem activity is spread throughout the region.

Eight countries represent 97% of the ecosystem value. Brazil is the central hub of the ecosystem, with 513 Tecnolatinas (51%), $14 billion capital raised (50%), and $91 billion of ecosystem value (41%).

Mexico follows it next in terms of activity, with 170 Tecnolatinas (17%) and $4 billion of capital raised (13%), but only with $10 billion of ecosystem value (5%). Argentina has less Tecnolatinas (78 or 8%) but more equity raised (18%), and much more value ($99 billion or 45%).

Next come Chile and Colombia with similar levels of activity as Argentina, but with lower ecosystem value to date because their ecosystems are in an earlier growth phase.

Finally, Uruguay, Guatemala, and Peru are new shining stars leading the way among smaller countries.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Brazil and Argentina have over $50 billion of ecosystem value and concentrate 59% of the startups, 68% of the capital raised, and 86% of the value created. As already seen, Brazil has the most consistent ecosystem and Argentina stands out due to the presence of MercadoLibre.

Mexico is quickly catching up and already has an ecosystem of 170 Tecnolatinas worth $10 billion, and is followed by Colombia (76 startups, $8 billion of value), Chile (78 startups, $5 billion of value) and Uruguay (8 startups, $1 billion of value), all of which have thriving ecosystems. The number of startups in these countries is significant.

Most other countries are either unactivated or in very early stages of their development. However, the rise of Guatemala and Peru shows there are still large untapped opportunities in the rest of the region.

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1. EV stands for ecosystem value. It is the sum of the value of all the companies based in an ecosystem.

Note: This segmentation does not include 43 startups (4%) based overseas that represent $1.1B raised (4%) and $6B value created (3%).

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Tecnolatinas have over 245,000 employees and serve as platforms that provide a livelihood to hundreds of thousands of people. Most of the employees (142,000 or 58% of the total) work for the largest 32 Tecnolatinas (3% of total), that have over 1,000 employees. Of those, roughly half (74,000 or 52%) work in companies with between 1,000 and 4,999 employees. This shows that there is a social impact rationale for seeking to create +$1 billion companies that goes beyond the value of the company. Put simply, the most successful startups become job creation engines. International experience suggests this pattern is likely to become even stronger. Amazon already has more than 1 million employees, after hiring more than 400,000 people in 2020 alone.
Six LAC countries with companies worth over $1B

There are already 28 companies worth over $1 billion (up from 9 only four years ago) in LAC, proving beyond doubt that Latin Americans can create large technology companies at scale, something that never happened in the history of the region and highlights that it can take part in the unfolding technology revolution.

The undisputed leader is MercadoLibre. The next three most valuable Tecnolatinas are focused on Fintech in the Brazilian market and are all worth over $10 billion: Stone, Pagseguro, and Nubank.

Most large countries already have Tecnolatinas worth over $1 billion: Brazil (16), Argentina (5), Mexico (3), Colombia (1), Chile (1), Uruguay (1) and overseas (1). Gympass is considered a Tecnolatina because it was born, grew and still had large operations in Brazil.

Note: Despegar is included as one of the companies that worth over $1B, even though its market cap as of December 31st 2020 was $0.9B because the company was valued at more than $1B for most of the period between its IPO in 2017 and 2020 when the COVID crisis interrupted international travel.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
VC AND STARTUP ECOSYSTEM DEEP DIVE

GEOGRAPHIC STRATEGIES
More than 1.2 billion people don't have access to electricity around the world. That means no refrigerator, no cell phone, no computers, and improper lighting to study at night.

Kingo Energy is a company that brings light to the most vulnerable using advanced technologies. The company originated in Guatemala and shows we can use the power of technology to unleash a wave of exponential inclusion in LAC by democratizing access to basic needs. It also proves that great companies can come out of smaller countries without an established startup ecosystem.
One of the most important decisions Tecnolatinas must make is choosing a geographic strategy. The patterns found in this segment of the study highlight the critical importance of internationalization for Tecnolatinas, and the need for regional collaboration and support networks.

We found five geographic strategies: Brazil, Regional, Global, Mexico, and Local, but the first three dominate 97% of the ecosystem value. The most common pattern is for startups to be born and remain focused on the Brazilian market, which provides a large enough market for Tecnolatinas to thrive in. However, most of the capital (56%) and the ecosystem value (66%) is concentrated in companies with regional or global plays.

There is a stark contrast between companies born in Brazil and those born elsewhere in the region. While local plays represent 74% of the value created by startups from Brazil, regional and global plays represent a whopping 95% of the value created by Tecnolatinas born in other countries.

A similar pattern is observed among the companies worth over $1 billion. While 11 of the 16 Brazilian startups worth over $1 billion are local, all the LAC companies born outside that country are global or regional.

Companies can be born with international strategies, and internationalization is critical for success for companies that originate outside Brazil. A large portion (47%) of the early-stage companies born outside Brazil are either regional or global. The percentage of international companies grows to 73% once they have raised between $25 million and $500 million, and the percentage of capital raised grows to 78% in that bracket and 100% after that.
The most common geographic play among Tecnolatinas is focusing on the Brazilian market. This play is followed by 42% of the startups, attracted 35% of the capital raised and accounted for 30% of ecosystem value.

Many Tecnolatinas adopt global (19%) and regional plays (15%), despite being young, because they need to expand overseas to achieve scale. These plays capture most investor interest, representing 16% and 40% of capital raised respectively, and concentrate 15% and 52% of ecosystem value respectively.

This pattern stands in contrast with traditional LAC companies, which typically focus on their local markets for extended periods, then begin exporting and only become Multilatinas often through acquisitions after becoming dominant domestically.

For Tecnolatinas, scalability is critical from the start. Outside Brazil that means going regional or global... (continues in the next page).

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<thead>
<tr>
<th></th>
<th>Brazil</th>
<th>Global</th>
<th>Regional</th>
<th>Local</th>
<th>Mexico</th>
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<tbody>
<tr>
<td><strong>Startups</strong></td>
<td>424/42%</td>
<td>190/19%</td>
<td>151/15%</td>
<td>115/11%</td>
<td>125/12%</td>
</tr>
<tr>
<td><strong>Capital raised ($B)</strong></td>
<td>10/35%</td>
<td>5/16%</td>
<td>11/40%</td>
<td>1/5%</td>
<td>1/4%</td>
</tr>
<tr>
<td><strong>Value created ($B)</strong></td>
<td>68/30%</td>
<td>33/15%</td>
<td>114/52%</td>
<td>4/2%</td>
<td>3/1%</td>
</tr>
</tbody>
</table>

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Local plays in Mexico and other smaller markets are less common. Only 12% of startups chose to follow those strategies, often as starting moves followed by international expansions.

However, local plays in Mexico and markets outside Brazil have not proven to be sustainable and represent a disproportionally smaller share of equity raised (4% and 5%, respectively) and ecosystem value (1% and 2%, respectively). The upside potential of local markets outside Brazil is simply much smaller, and focusing exclusively on one market exposes a company to a later attack by a stronger regional competitor.

The need to be international means that Tecnolatinas outside Brazil have the challenge of dealing with the complexity of developing multiple markets with different customer behaviors, competitive contexts, and regulatory environments. Furthermore, most public agencies have difficulty supporting them overseas.

We believe this creates an opportunity to develop regional collaboration networks between ecosystem builders, integrate digital markets, and harmonize regulatory environments.
Investors seem to favor international plays with more capital. While 34% of startups are focused on international markets, they captured 56% of equity.

Regional plays raised the most capital per startup. They represent 15% of the Tecnolatinas but captured 40% of total capital to date, with an average capital raised of $73 million. This stands in stark contrast to startups focused exclusively on Mexico ($9 million), on other smaller markets ($12 million) and even with Brazilian plays ($23 million).

The fact that companies from outside Brazil need to internationalize grow and prosper highlights the need to develop regional collaboration networks between ecosystem builders, to integrate digital markets, and to harmonize regulatory environments.

### Startups by geographic strategy

<table>
<thead>
<tr>
<th></th>
<th>Startups (#)</th>
<th>Capital raised ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>29</td>
<td>190</td>
</tr>
<tr>
<td>Global</td>
<td>190</td>
<td>19%</td>
</tr>
<tr>
<td>Regional</td>
<td>151</td>
<td>15%</td>
</tr>
<tr>
<td>Mexico</td>
<td>125</td>
<td>34%</td>
</tr>
<tr>
<td>Local</td>
<td>115</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>1,005</td>
<td>11%</td>
</tr>
</tbody>
</table>

### Capital raised by geographic strategy

<table>
<thead>
<tr>
<th></th>
<th>Capital raised ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>10</td>
</tr>
<tr>
<td>Global</td>
<td>5</td>
</tr>
<tr>
<td>Regional</td>
<td>11</td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
</tr>
<tr>
<td>Local</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
</tr>
</tbody>
</table>

Note: Sum may differ from 100% due to roundings

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
“There are two types of people. Those who see the world as it is and adapt to that, and those who see the world as it is and refuse to adapt.”

MARCOS GALPERIN
FOUNDER & CEO MERCADOLIBRE
Internationalization drives 95% of value outside Brazil

Consistent with what we saw in the previous graph, here 66% of the value created by Tecnolatinas comes from regional (51.6%) and global (14.7%) plays, while local plays represent only 34% of the value despite being adopted by 66% of the companies in the LAC ecosystem.

However, there is a stark contrast in strategies between startups from Brazil and those from other countries. While local plays represent 74% of the value in Brazil, international plays represent 95% of the value outside Brazil.

Note: Sum may differ from 100% due to roundings
Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Of the 350 startups born outside Brazil that raised between $1 million and $10 million, 47% either have regional (21%) or global (27%) footprints. A similar proportion holds in terms of capital raised in that bracket. The percentages are similar across brackets for capital raised.

Internationalization is critical for growth for Tecnolatinas born outside Brazil: 78% of the capital raised by the companies that raised more than $20 million (100% of the capital that went to companies that raised more than $500 million) went to fund international strategies.

The need for internationalization is explained by three factors. First, the need for scale to achieve profitability and the limited scale of markets outside Brazil. Second, digital companies have to acquire sufficient scale to either compete with Brazilian and global competitors or become attractive acquisition targets for regional consolidation strategies. Third, in the case of companies that are introducing globally relevant innovations, global markets offer much more attractive and strategically relevant growth opportunities than LAC.

Geographic strategies among Tecnolatinas born outside Brazil by stage of maturity

Note: Sum may differ from 100% due to roundings
Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
All Tecnolatinas born outside Brazil and worth over $1B are international

The fact that there are no instances of Tecnolatinas outside Brazil worth over $1 billion with only a local footprint reinforces the importance of early internationalization.

Of the 28 Tecnolatinas worth over $1 billion, 16 are from Brazil and 12 from six other countries. The most common geographic strategy among these companies is local (11 or 39%), followed by regional (9 or 32%) and global (8 or 29%).

The majority (11 or 69%) of Brazilian startups worth over $1 billion have local focus, but all (100%) of those born in other countries are either regional (5 or 42%) or global (7 or 58%).

Argentina has the second highest number of startups worth over $1 billion outside Brazil, two of them are global in scope (Globant and Auth0).

Number of Tecnolatinas worth over $1B by country of origin and geographic strategy

- Total: 28 startups
- Brazil: 16 startups, 11 local, 4 regional, 1 global
- Argentina: 5 startups, 2 local, 2 regional, 1 global
- Mexico: 3 startups, 2 local, 1 regional
- Colombia: 1 startup, local
- Chile: 1 startup, regional
- Uruguay: 1 startup, regional
- Overseas: 11 startups, 8 global, 3 regional

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
According to FAO’s 2020 State of the World’s Forests, agricultural expansion (particularly cattle ranching and animal feed production) accounts for over 90% of deforestation in LAC, accelerating climate change and putting valuable ecosystems at risk. But it is possible, through disruptive technologies, to make food abundant without compromising the environment or contributing to animal suffering.

NotCo is a startup originating from Chile using artificial intelligence and biotechnology to produce plant-based hamburgers and dairy products that look, smell, function, and taste like animal-based.

The company proves that LAC startups can be leaders in the alternative protein revolution. It also points to the huge untapped opportunity in LAC’s Deep Tech sector.
For LAC to fully leverage the opportunity created by the technology tsunami and the capabilities of its people, the region will need a diverse entrepreneurial innovation ecosystem that tackles a wide range of sectors.

In this chapter, you will see that the LAC ecosystem is almost entirely focused on digital plays and that two sectors (E-commerce and Fintech) are most prevalent in the region. The concentration is particularly strong in ecosystem value, where they account for 72% of the value. These sectors are predominant across ecosystems.

Beyond these two sectors, the region presents a panoply of emerging sectors. There are 16 sectors in which LAC entrepreneurs have built companies worth more than $500 million. The success of early entrepreneurs in a new sector leads to increased interest and new startup activity. Therefore we believe that it is safe to assume that as Tecnolatinas worth over $1 billion begin to emerge in these new sectors, we will see virtuous cycles that will fuel growth, diversification, and resiliency in the regional ecosystem.

We find similar patterns of geographic strategies across sectors. Local plays are most frequent across sectors in terms of the number of startups, and Brazilian plays are prevalent in all sectors except Fintech.
The LAC ecosystem is dominated by digital startups. Two sectors are prevalent: E-commerce and Fintech which concentrate 72% of ecosystem value, 50% of the capital raised and 29% of startup activity. The revolution started with E-commerce, which represents 45% of the value in the LAC ecosystem. In 2020 the sector grew faster than anywhere else in the world (37% versus 28% globally) but still presents huge opportunity ahead, considering that the penetration of E-commerce over retail sales is only 6% when in China that figure is 25%.

But the biggest new sector is clearly Fintech, which took off in the past five years and today represents 20% of startups and almost 30% of capital raised and ecosystem value.

There is no standard relation between value generated, capital raised and startups. It depends on the sector itself. Software Development has 6% of value but only 1% of startups, while SaaS has 2% and 8% respectively... (continues in the next page).

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
... The opportunity in Fintech is massive. According to McKinsey, digital finance could boost the GDP of emerging countries by $3.7T by 2025, a 6% increase versus business-as-usual, adding $2.1T of new credit, creating 95 million new jobs and bringing 1.6 billion people into the financial system. Benefits from Fintechs include radically lower costs (80-90%) compared to traditional banking.

The advantages of digital finance are enabling emerging countries to leapfrog ahead of the US and Europe. China and African countries such as Kenya present the highest mobile payment penetrations globally, enabled by mobile providers such as M-Pesa and Internet giants like Alibaba through the Ant Group. The rise of mobile payment further accelerates the adoption of E-commerce.

Latin America stands to benefit enormously from digital finance because roughly half of its population does not have access to financial services, particularly among lower-income segments. A similar share of SMEs is underserved. Furthermore, countries such as Brazil present some of the highest financial spread rates in the world. That is why the opportunity is hotly contested by traditional players, Internet platforms such as MercadoLibre, and Fintech startups.
Fintech and E-commerce dominate ecosystem value in both of the largest LAC ecosystems. In Argentina, they represent 85% of value and in Brazil 69%.

Fintech and E-commerce are also the leading sectors in the mid-sized ecosystems, representing 39%, 31% and 39% of the value created by companies from Mexico, Colombia, and Chile, respectively.

In Uruguay, the pattern is even more pronounced, as these sectors represent 97% of the ecosystem value in that country.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
The LAC ecosystem is positioned to scale a range of new sectors. We found there are 52 Tecnolatinas worth over $500 million spread across 16 sectors, all of them digital in nature. Of those companies, 24 are worth between $500 million and $1 billion and the other 28 are worth more than $1 billion.

Fintech and E-commerce represent 23 (44%) of those companies, 12 of which are startups worth over $1 billion and 11 are worth between $500 million and $1 billion. That is consistent with the picture portrayed so far in this chapter.

LAC entrepreneurs have proven they can create very valuable businesses in 14 other sectors, ranging from Proptech and Mobility to Edtech, Gaming and Cybersecurity. It is now up to ecosystem builders to nourish them and look for unattended opportunity spaces to leverage their talent.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Startups (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fintech</td>
<td>17</td>
</tr>
<tr>
<td>E-commerce</td>
<td>8</td>
</tr>
<tr>
<td>Proptech</td>
<td>6</td>
</tr>
<tr>
<td>IT/Software Development</td>
<td>4</td>
</tr>
<tr>
<td>SaaS</td>
<td>4</td>
</tr>
<tr>
<td>Travel/Tourism</td>
<td>3</td>
</tr>
<tr>
<td>Mobility</td>
<td>2</td>
</tr>
<tr>
<td>Edtech</td>
<td>2</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>2</td>
</tr>
<tr>
<td>Gaming</td>
<td>2</td>
</tr>
<tr>
<td>Marketplace</td>
<td>2</td>
</tr>
<tr>
<td>Logistics &amp; Distribution</td>
<td>2</td>
</tr>
<tr>
<td>Healthcare/Life Sciences</td>
<td>1</td>
</tr>
<tr>
<td>Consumer/Retail</td>
<td>1</td>
</tr>
<tr>
<td>Data Management</td>
<td>1</td>
</tr>
<tr>
<td>Telco</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
The ecosystem is hatching multiple new sectors

The figure on the right presents in graphical format all the sectors of the LAC ecosystem according to the value they created (horizontal axis), the number of startups they have (vertical axis), and the capital they raised.

Two things jump immediately to our attention. The first one is how much the two most prevalent sectors stand out from the rest, particularly in their value and the amount of capital they raised.

The second thing that we can see clearly is that there is a cloud of smaller sectors being hatched. As seen previously, many of these sectors already have companies on their way to achieve $1 billion valuations. We believe we can expect additional activity and growth in those sectors.

As the LAC ecosystem diversifies, it will become increasingly resilient and powerful, bringing more benefits to society.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
LAC is full of sectors ready to grow

Once we expand the previous graph and double click on the cloud of smaller sectors, we find a whole panoply of sectors.

We see three groups. First, on the top, are SaaS and Healthcare and Life Sciences, which have achieved over $2 billion in ecosystem value and have around 80 startups each.

Second, on the lower right, we see a cloud of sectors that have already created more than $2.5 billion and include Logistics & Distribution, Proptech and Cybersecurity, among others.

Finally, on the lower left, we see a constellation of sectors that have emerged in recent years and have huge potential, such as Blockchain, Cleantech, Agtech and Biotech.

We believe this picture is highly encouraging for the future of entrepreneurial innovation in the region.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Early stage activity is more intense in proven sectors

The heatmap on the right shows in darker colors the sectors that present more startup activity and more value.

As we can see, the sectors that concentrate the darkest squares on the column that measures the value of each sector (last on the right) are the same that also present the darkest squares on the columns that measures early stage activity (first ones on the left).

What this tells us is that once startups achieve success in a sector, they spark interest from other entrepreneurs and investors who want to join the “gold rush.” This is not only because of the validation effect, but also because there is collective learning about key success factors in a particular field.

For example, some of the executives who built MercadoLibre went on to create Kaszek Ventures to invest in startups and focused on sectors where their expertise was more valuable... (continues in the next page).

Number of Tecnolatinas by sector and capital raised

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Number of Tecnolatinas by capital raised</th>
<th>Total Tecnolatinas (n)</th>
<th>Total value ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1-10M</td>
<td>$10-25M</td>
<td>$25-50M</td>
</tr>
<tr>
<td>Fintech</td>
<td>123</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>E-commerce</td>
<td>58</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>SaaS</td>
<td>65</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Healthcare/Life Sciences</td>
<td>67</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Edtech</td>
<td>35</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Mobility</td>
<td>33</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Proptech</td>
<td>27</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Adtech &amp; Marketing</td>
<td>37</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Software</td>
<td>32</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Marketplace</td>
<td>22</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Agtech</td>
<td>23</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>522</strong></td>
<td><strong>109</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Ecosystem builders should balance their efforts between established and new sectors. On one hand, they should continue to accelerate the growth of leading sectors such as Fintech. On the other hand, the biggest opportunities for impact (and often for return) are in frontier markets such as Biotech.

The key is to analyze the underlying potential for impact and value creation enabled by emerging technologies at a fundamental level. Doing that reveals massive and largely untapped opportunities for value creation in areas such as Artificial Intelligence, Electric and Autonomous Mobility, Renewables, Energy Storage, Biotechnology, Additive Construction, etc.

There are several ways to ignite and then scale up those sectors, such as creating communities and forums, developing national strategies, deploying targeted matching funds, and launching demonstration projects. But at the end of the day, the most important thing is looking for highly talented pioneers who can open new ground and create entirely new industries.
VC AND STARTUP ECOSYSTEM DEEP DIVE

OPPORTUNITIES FOR IMPACT
A new space era is dawning, enabled by more powerful electronics, a host of new disruptive technologies such as reusable rockets, and the rise of a new cadre of space entrepreneurs and investors.

Satellogic is a global space tech company born in Argentina that is at the forefront of this revolution. It put over 20 Earth observation satellites in orbit at a fraction of the cost and time of traditional solutions.

The company proves that LAC can play an active role in the process of transforming humanity into a spacefaring civilization, a change that can radically improve life on Earth and unleash tens of trillions of dollars of value.
The LAC startup ecosystem presents huge opportunities for growth. To give a sense of the scale of the opportunity, an ecosystem value greater than $2 trillion and annual venture capital investments of more than $30 billion are comfortably consistent with historical trajectories and international benchmarks. The region saw its venture capital activity grow by 68 times over the past decade. But it still invests very little relative to other countries on a per capita basis. China, for example, invests 7 times more on a per capita basis than LAC. Israel 117 times. Accelerated growth is possible; China multiplied its VC sector by 35 times in six years. Estonia by 82 times in a decade. It is not unreasonable to expect over $40 billion of venture capital investments by 2030 in LAC.

We see three broad types of levers to close the gap while shaping the ecosystem to build a better future: activating new markets, boosting the growth of startups, and placing greater focus on inclusion and regeneration.

The region can activate 19 countries with little (7) to no (12) startup activity representing 21% of total LAC population. It can also activate large cities: today, startups are concentrated in 12 large cities, there are 68 other cities with more than 1 million people with insignificant startup activity. Moving beyond digital and activating Deep Tech ecosystems has massive untapped potential: while in Israel it represents more than 80% of total investments, in LAC (where we have over 640,000 full-time researchers), it represents approximately 7% of investments. Corporate venture capital (CVC) is another opportunity area: LAC should multiply its CVC by almost ten times to achieve the same relative weight as in the USA. Female talent is also not sufficiently tapped into: while only 10% of LAC startups have a female founder, in the USA, that figure is 22% and rising. Finally, there is also an opportunity to further boost the impact on inclusion and environmental impact through disruptive technologies like 3D printers for construction, distributed renewables, digital education, batteries, biotechnology, etc.
The Tecnolatinas ecosystem is growing at an accelerated pace, poised for continued growth and will become a major force in LAC’s economy in the coming decade.

LAC’s ecosystem value multiplied by 32 times between 2010 and 2020 and venture capital activity multiplied by 68 times between 2009 and 2019. As we show in the following pages, there is ample room for further growth in the coming decade. International benchmarks point to significant room for greater venture capital penetration. It is also becoming easier to create and scale startups in the region as the ecosystem matures and investor confidence grows. The exponential growth of technologies such as AI, IoT, Synthetic Biology, Blockchain, Clean Energy, Augmented Reality, etc. should provide additional fuel for growth. And there are many untapped levers for additional growth.

An ecosystem with a value of more than $2 trillion and annual venture capital investments of more than $30 billion per year would be consistent with the current trajectory and the potential ahead.

Source: Surfing Tsunamis
LAC invested $4.6 billion in startups in 2019; that is 68 times more than in 2009. But this is only the beginning. The region is still far from its potential. Today LAC invests $7 per capita in startups per year. That is a shadow of what other countries invest on entrepreneurial innovation. Israel invests 117 times more on a per capita basis than LAC, Estonia 42 times more ($293 per capita), Ireland 17 times more ($120 per capita) and China 7 times more.

When we compare VC investments as a percentage of GDP, we also see that LAC is far from other countries. The region only invests 0.1% of GDP, 3 times less than Ireland (0.3%), 10 times less than Estonia (1.0%) and 27 times less than Israel (2.7%).

Furthermore, the global VC industry is growing at a rapid pace. According to the Center for American Entrepreneurship, global VC investments multiplied by more than 6 times between 2009 and 2019. Even the most mature countries, like Israel, continue to grow year after year. Therefore, if the region embraces the technology revolution, it is reasonable to imagine LAC VC annual investments growing more than $30 billion by 2030.

Note: All LAC countries and Estonia VC investment from 2019; the rest from 2020
Source: Surfing Tsunamis, LAVCA, IMF, World Bank, KPMG, IVC
Time to create first $1B in value is falling

Creating and scaling technology companies in LAC has never been easier. It took decades for pioneers like Softtek and Totvs to achieve a $1 billion valuation.

The Internet revolution lowered barriers and reduced the time to reach a one billion dollar valuation. It took eight years for MercadoLibre to reach that milestone, starting in 1999.

The smartphone revolution and cloud computing further lowered barriers allowing companies like Rappi and Auth0 to achieve valuations of $1 billion in 4 to 6 years.

The boom in LAC investor interest in the last four years allowed some of the youngest batch of LAC startups achieve valuations of $1 billion in less than two years.

The increased ease of building and scaling businesses should continue, as the technology revolution accelerates and the LAC ecosystem matures. The region should leverage this unique opportunity to leapfrog into the future.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports, World Economic Forum
**Three levers for growth and impact**

The LAC startup ecosystem has massive potential for growth and for impact. It could become a powerful engine that allows the region to leapfrog into the future and reach its potential. That will require vision, the elimination of barriers and proactive support. Without them, it is easy to imagine a distorted future, in which only some sectors have flourished and the ecosystem is only a shadow of what it has become in other regions.

We see three levers for growth and impact. The first one is activating new markets, such as unactivated countries, Deep Tech and other new engines such as new mobility and Cleantech, and activating medium metropolitan areas.

The second is boosting the growth of startups by facilitating internationalization, strengthening corporate VC and accelerating sectors with no Tecnolatinas worth over $1 billion.

The third is shaping the ecosystem by increasing the focus on inclusion and environmental sustainability, as well as female representation.

---

1. Igniting unactivated countries  
2. Activating Deep Tech and new engines  
3. Activating medium metropolitan areas  
4. Facilitating internationalization  
5. Strengthening corporate VC  
6. Accelerating sectors with no startups worth over $1B  
7. Boosting social and environmental impact  
8. Increasing female representation
There are 19 LAC countries that represent 21% of the population of the region that have collectively created less than 1% of the ecosystem value.

Even worse, there are 12 countries in which we could not identify startups that qualified for this study: Bahamas, Barbados, Bolivia, Cuba, Guyana, Haiti, Nicaragua, Dominican Republic, Jamaica, Surinam, and Trinidad & Tobago. Even if for some mistake we missed one or two startups, we think the point stands: there is huge untapped potential.

Countries like Estonia and Israel have proven that being small can be a source of strength and advantage. Guatemala and Peru are already building an active ecosystem, showing that activating these markets is doable.

Igniting unactivated countries could add at least 20% of additional growth to the rest of the region and bring dynamism and prosperity to local economies. This is a big opportunity that the region should not waste.

21% of LAC’s population created less than 1% of value
Number of Tecnolatinas per capita is unrelated to population

Sometimes people who are not familiar with the world of innovation extrapolate rationales from the industrial era and think that smaller countries are disadvantaged to build startup ecosystems. But that line of thinking is not consistent with the data.

In this graph we see that the number of startups per million people is not related to the size of the country. When we organize countries in segments by population size, we find that there is significant variability within and across segments.

Chile has the highest penetration per capita, despite being in the third tier of population size, yet has 21 times more startups per capita than Ecuador.

Uruguay has the third highest penetration despite being a relatively small country; and in that segment Costa Rica has 10 times more startups per capita than Honduras. Argentina has 9 times more startups per capita than Venezuela.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Part of the challenge is strengthening the rule of law

The graphs on the right show that startup activity is correlated with judicial independence and corruption control.

Countries with more corruption control present more startups per million inhabitants. Countries with greater judicial independence also show higher levels of startup activity.

This does not mean that the only reason for having lower startup activity levels is corruption. As we can see, both Chile and Costa Rica have similar levels of judicial independence but very different levels of startup activity.

Other factors are also important. As we can see on the lower graph, there is a significant correlation (39%) with human capital. Targeted policies have also played a critical role in activating startup ecosystems in developed countries like Israel.

But these graphs remind us that the overall context of a country has a significant effect on startup creation and survival rates.

Source: Surfing Tsunamis, World Economic Forum, Transparency International
When we compare unactivated countries (the 19 LAC countries that have not reached an ecosystem value of more than $500 million) potential at Costa Rica and Chile levels, two regional benchmarks, it is possible to see that there is an opportunity to multiply the level of ecosystem activity of the unactivated countries by between 6 and 30 times.

Costa Rica has the highest startups per capita in the unactivated group. It has 5 startups that raised more than $1 million of capital and a population of 5 million inhabitants, resulting in one technology startup (that raised more than $1 million) per million inhabitants. Meanwhile, unactivated countries have on average a population of 7.5 million inhabitants and 1 startup per country. If these countries reached Costa Rica levels of activity they would go from 1 to 9 startups per country and capital raised would increase from $5.4 million to $24 million.

Similarly, if unactivated countries reached the levels of activity of Chile, the country with the highest level of startups per capita in the region, they would go from 1 to 39 startups per country and from $5.4 million to $348 million in capital raised.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
When we compare the unactivated countries' potential at Estonia and Israel levels, it is possible to see that there is at least a 6,000x growth opportunity in those countries.

While, on average, there is only 1 technology startup that raised more than $1 million per country in the unactivated countries of LAC, there are 2,000 startups in Estonia (with a population that is a fraction of the average of the population of unactivated countries) and 9,000 startups in Israel.

When we compare the capital raised we see that while each unactivated country raised $5.4 million in total, Estonia raised $385M and Israel raised $8.3 billion in 2019.

Something interesting to note is that while Israeli and Estonian entrepreneurs focus almost exclusively on international markets (with less than 5% of startups being focused on the local market), the majority (60%) of startups in unactivated LAC countries have local strategies.

Clearly, that is one of the vectors of change needed for success.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Huge untapped opportunity in Deep Tech in LAC

In 2019 LAC invested less than $300 million in venture capital (less than 7% of VC investments in that year) on Deep Tech startups. That is a very small sum when we compare to Israel (with 9 million people versus 650 million in LAC), where the private sector is investing billions in multiple Deep Tech areas and consider that the sector comprises super powerful levers for economic growth, such as AI, Cybersecurity, IoT, Automotive and other like Robotics, Biotech, Advanced Materials and Nanotech, and generally, technologies are not always capitalized throughout the paper.

These sectors hold huge promise to transform humanity and LAC cannot afford to be left behind. Just to get a sense of the potential, different consulting firms estimate that artificial intelligence can add approximately 1% of GDP growth per year to the global economy while it is estimated that the steam added only 0.3% and changed the world.

To get a sense of the untapped potential, we should remember that according to the Inter-American and Ibero-American Network, the region has over 640,000 full-time researchers doing R&D.

Source: Surfing Tsunamis, LAVCA
“There are a lot of smart people working to solve tough problems. This is going to impact our society as a whole and I see it growing exponentially as we speak.”

LOREANNE GARCÍA
CO-FOUNDER AND CHIEF
PEOPLE OFFICER OF KAVAK
When we map startups by city we see that there is strong concentration of activity in the largest metropolitan areas.

This is not surprising. Larger cities have bigger and deeper human capital pools and more universities to draw upon. It makes sense that the revolution begins there.

At the same time, Palo Alto and Boulder developed vibrant startup ecosystems before New York, and small cities across the US and other countries are successfully developing startup ecosystems.

Only 12 metropolitan regions in LAC have more than 10 startups. There are 68 other cities with more than 1 million people that have not reached that threshold. Those cities represent 57% of the people living in cities with more than 1 million people in LAC.

1. Activated considers cities with 10 startups or more

Note: Total population in big cities is 35M capita

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcunch, Research Reports and Media Reports, World Economic Forum
Internationalization is critical for startups born outside Brazil. Tecnolatinas with international plays captured 95% of the ecosystem value, even though they represent 51% of the companies. Even excluding MercadoLibre, international plays account for 85% of startup value.

Tecnolatinas with international strategies also have an average value ($488 million) 17 times higher than those focused on local markets ($29 million).

The countries that stand out for their ecosystem value and startup activity on a per capita basis (particularly Argentina, Chile, Uruguay and Guatemala) also rely more heavily on internationalization.

We believe this represents an additional challenge for these startups vis-a-vis Brazil, where companies can flourish with focus on their local market. This partly explains why Brazil is growing more rapidly than other ecosystems.

This calls for the development of collaboration efforts to lower the barriers for international startup activity (such as digital single markets) and for the creation of regional platforms to support internationalization.

<table>
<thead>
<tr>
<th>Geographic Strategy</th>
<th>Share of startups (%)</th>
<th>Share of value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>49%</td>
<td>21%</td>
</tr>
<tr>
<td>Regional</td>
<td>24%</td>
<td>74%</td>
</tr>
<tr>
<td>Global</td>
<td>27%</td>
<td>95%</td>
</tr>
</tbody>
</table>

International Tecnolatinas startups (% of total)

<table>
<thead>
<tr>
<th>Internationalization</th>
<th>Value</th>
<th>Startups</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;50%</td>
<td>95%</td>
<td>27%</td>
</tr>
<tr>
<td>25% - 49%</td>
<td>21%</td>
<td>51%</td>
</tr>
<tr>
<td>1% - 24%</td>
<td>49%</td>
<td>4%</td>
</tr>
<tr>
<td>&lt;75%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
LAC CVC should be more than 10 times higher

Corporate venture capital (CVC) has grown in importance internationally in recent years. Corporations outside LAC understand that they cannot continue to cope alone with the rate of technological change that is coming their way and that they can become more competitive by investing in and collaborating with startups.

Today, 18% of global venture capital is driven by CVC. In the USA, CVC represents 56% of the industry.

In 2019, LAC corporations invested around a half a billion dollars in startups. If corporate venture capital in 2019 had the same relative weight as in the United States, LAC CVC would have been more than 10 times higher, adding almost $5 billion to the sector and doubling its size.

CVC is important not only for growth, but also to provide liquidity for later rounds and exit options for startups that can be beneficial for corporations. In the USA, the share of CVC grows as startups mature because corporations invest in startups that are more ready to be integrated into their business.

Source: Surfing Tsunamis, LAVCA, World Bank, Forbes, IESE, Toptal, Pitchbook
LAC’s focus on 3 sectors leaves other opportunities untapped

The TECNOLATINAS revolution is heavily concentrated in a few sectors and has yet to spread to new verticals with huge potential. The evaluation of the investment spread in contrast to regions such as the USA, Asia, and Israel, points to highly concentrated investments.

While the top three sectors represented 70% of venture capital investments in LAC, the top three sectors accounted for 43% of investments in the USA, 53% in Asia and 57% in Israel.

As we saw in the previous chapter, LAC still has significant space for growth in multiple verticals. In the graph, we also see that some of these sectors have gained significant traction in other regions, highlighting the size of the opportunity. These include Biotech & Pharma (13% in USA), Commercial Services (11% in Asia) and Cybersecurity (22% in Israel).

Top sectors by VC investments in 2019 in USA, China, Israel and LAC

Share of VC investments (%)

Source: Surfing Tsunamis, LAVCA, IVC, NVCA, KPMG
The LAC innovation ecosystem has activated powerful growth engines such as E-Commerce and Fintech. These engines also have a significant impact on inclusion, democratizing access to basic needs and improving lives across the region. But the technology revolution that is unfolding offers the possibility for further social and environmental impact.

The startup ecosystem can play a role in bringing these benefits to the region. Technologies such as satellite-based Internet, 3D printed houses and digital education solutions enable the democratization of basic needs at a much lower cost than traditional solutions.

At the same time, solutions like renewable energy, electric mobility, energy storage and alternative proteins or cultured meat will enable much lower environmental footprints at lower costs.

**Examples of levers for inclusion and environmental impact**

- Satellite internet
- 3D printed houses
- Renewable energy
- Electric mobility
- Earth monitoring satellites
- Digital education
- Digital health
- Energy storage
- Alternative proteins
- Artificial intelligence

Source: Surfing Tsunamis
Female participation should increase, enabling further growth

LAC has yet to learn how to fully leverage the talent of women. This is a global phenomenon and LAC seems to be in a position similar to Israel, but there is major growth potential vested in embracing diversity.

Increased women’s participation is critical not just because it provides an additional talent pool, but also because of the diversity of perspectives and contributions it can provide. Only 10% of LAC startups have at least one female founder. That figure is similar in Israel (9%) but significantly higher in the USA (22%), a country that is still making concerted efforts to increase female participation (almost doubling their participation over the past decade).

When we compare the share of all-female founder startups in the USA and LAC, the gap is even wider. While in the USA 6.1% of the startups are founded by all-female teams, in LAC the representation of these is only 2.3%.

Source: Surfing Tsunamis, LAVCA, World Bank, Forbes, IESE, Toptal, Pitchbook
Conclusion

The Tecnolatinas revolution has come of age in LAC, and the startup ecosystem is a powerful engine for growth and transformation across the region. The ecosystem is on a trajectory to create trillions of dollars in value in the decade and to mobilize tens of billions of dollars per year in investments. Entrepreneurs, investors, corporate leaders, and policymakers should take note and leverage this historic opportunity.
References

APPENDIX

TOP COUNTRIES OVERVIEW
Brazil ecosystem overview

Brazil is the leading hub for startup activity in LAC. With 35% of the population of the region, the country generated 51% (513) of LAC’s Tecnolatinas, 41% ($91 billion) of the ecosystem value, and 16 (57%) of the companies worth over $1 billion of the region.

Brazil has a larger market, but also a higher level of activity on a per capita basis, with 2.4 startups/million inhabitants versus 1.6 LAC’s average. The availability of VC has also been critical for Brazil’s success, as its startups raised 50% of capital in the region.

Four sectors represent 46% of the Brazilian ecosystem: Fintech (16%), Healthcare/Life Sciences (10%), E-commerce (10%) and Software as a Service (10%).

The companies worth over $1 billion represent 75% of the Brazilian ecosystem value.

Sao Paulo is the Brazilian startup hotspot, generating 65% of startups in the country. Tecnolatinas generated more than 122K jobs in Brazil.

Brazil highlights

- **513 Tecnolatinas**
- **$91B Ecosystem value**
- **2.4 Tecnolatinas per M inhabitants**
- **>122K Jobs created**
- **50% of capital raised in LAC**
- **Fintech**
- **41% of LAC ecosystem value**

Top Tecnolatinas based in Brazil

<table>
<thead>
<tr>
<th>Company</th>
<th>Sector</th>
<th>Valuation range</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone</td>
<td>Fintech</td>
<td>$10-50B</td>
<td>Sao Paulo</td>
</tr>
<tr>
<td>Pagseguro</td>
<td>Fintech</td>
<td>$10-50B</td>
<td>Sao Paulo</td>
</tr>
<tr>
<td>Nubank</td>
<td>Fintech</td>
<td>$10-50B</td>
<td>Sao Paulo</td>
</tr>
<tr>
<td>B2W</td>
<td>E-commerce</td>
<td>$5-10B</td>
<td>Rio de Janeiro</td>
</tr>
<tr>
<td>Totvs</td>
<td>IT/Software Development</td>
<td>$1-5B</td>
<td>Sao Paulo</td>
</tr>
</tbody>
</table>

Leading cities by number of Tecnolatinas

- Sao Paulo 65%
- Rio de Janeiro 9%
- Florianópolis 3%
- Belo Horizonte 3%
- Curitiba 16%
- Others 16%

Leading sectors by number of Tecnolatinas

- Fintech 16%
- Healthcare/Life Sciences 10%
- E-commerce 10%
- Saas 10%
- Edtech 6%
- Adtech & Marketing 4%
- Mobility 4%
- PropTech 4%
- Others 36%

---

1. Ecosystem value considers the sum of the companies value. To estimate the value of startups without public information we applied a multiple of 6x to the last capital raised which is consistent with the sale of c.17% of the equity in the round.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports, World Economic Forum
Argentina ecosystem overview

Argentina stands out for the impressive value creation of its Tecnolatinas: they generated $99 billion of ecosystem value despite having only 78 (8%) of LAC’s Tecnolatinas. Most of that value was created by MercadoLibre. As of December 31st, 2020, the company had a valuation above $80 billion, representing 84% of local ecosystem value. Argentina has 3 more companies with valuations greater than $1 billion: Globant, Auth0 and UALÁ.

Unfortunately the future looks less promising: the country is lightly above the region in terms of startups per capita (1.8 startups/-million capita versus 1.6 LAC’s average), the founders of the three most valuable argentine Tecnolatinas moved to Uruguay and others to the US and, while its startups captured 18% of LAC capital, its share of VC has been very low in recent years.

Buenos Aires is the cradle of Argentine startups, generating 85% of startups.

Four sectors represent 46% of the Argentine activity to date: Fintech (18%), Adtech (11%), E-commerce (9%) and Software as a Service (8%).

Tecnolatinas generated more than 37K jobs in Argentina.

---

**Argentina highlights**

- 78 Tecnolatinas
- $99B Ecosystem value
- 1.8 Tecnolatinas per M inhabitants
- >37K Jobs created

**Top Tecnolatinas based in Argentina**

<table>
<thead>
<tr>
<th>Company</th>
<th>Sector</th>
<th>Valuation range</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercadolibre</td>
<td>E-commerce</td>
<td>&gt;$50B</td>
<td>Buenos Aires</td>
</tr>
<tr>
<td>Globant</td>
<td>IT/Software Development</td>
<td>$5-10B</td>
<td>Buenos Aires</td>
</tr>
<tr>
<td>Auth0</td>
<td>Cybersecurity</td>
<td>$1-5B</td>
<td>Buenos Aires</td>
</tr>
<tr>
<td>UALÁ</td>
<td>Fintech</td>
<td>$1-5B</td>
<td>Buenos Aires</td>
</tr>
<tr>
<td>Despegar</td>
<td>Travel/Tourism</td>
<td>$0.5-1B</td>
<td>Buenos Aires</td>
</tr>
</tbody>
</table>

**Leading cities by number of Tecnolatinas**

- Buenos Aires 85%
- Cordoba 6%
- Others 9%

**Leading sectors by number of Tecnolatinas**

- Fintech 18%
- Adtech & Marketing 11%
- E-commerce 9%
- Others 44%
- SaaS 8%
- Marketplace 5%
- Agtech 5%

---

1. Ecosystem value considers the sum of the companies value. To estimate the value of startups without public information we applied a multiple of 6x to the last capital raised which is consistent with the sale of c.17% of the equity in the round.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports, World Economic Forum
Mexico ecosystem overview

Mexico is the second largest ecosystem in terms of number of startups, with 170 (17%) and third in ecosystem value, with 5% of LAC’s value, despite having 20% of the region’s population.

But we see this as largely due to the fact that the ecosystem began to gain strength more recently. We see this clearly in the share of startups and capital raised: while the accumulated share of deployed capital is 13%, in more recent years it has grown closer to 20%, making the country the second most active VC ecosystem in the region.

Mexico has three (11%) companies with valuations greater than $1 billion: Kavak, Softtek and Kio Networks, which together represent more than 30% of the Mexican ecosystem value of $10 billion.

Three sectors represent 48% of the Mexican ecosystem to date: Fintech (30%), Software as a Service (9%) and E-commerce (9%).

Mexico City is the cradle of most Mexican startups, generating 75% of startups.

Tecnolatinas created more than 44K jobs in Mexico.

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Mexico highlights

- **170** Tecnolatinas
- **$10B** Ecosystem value¹
- **1.8** Tecnolatinas per M inhabitants
- **>44K** Jobs created

Top Tecnolatinas based in Mexico

<table>
<thead>
<tr>
<th>Company</th>
<th>Sector</th>
<th>Valuation range</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kavak</td>
<td>Marketplace</td>
<td>$1-5B</td>
<td>Mexico City</td>
</tr>
<tr>
<td>Softtek</td>
<td>IT/Software Development</td>
<td>$1-5B</td>
<td>Monterrey</td>
</tr>
<tr>
<td>Kio Networks</td>
<td>IT/Software Development</td>
<td>$1-5B</td>
<td>Mexico City</td>
</tr>
<tr>
<td>AlphaCredit</td>
<td>Fintech</td>
<td>$0.5-1B</td>
<td>Mexico City</td>
</tr>
<tr>
<td>Konfio</td>
<td>Fintech</td>
<td>$0.5-1B</td>
<td>Mexico City</td>
</tr>
</tbody>
</table>

Leading cities by number of Tecnolatinas

- Mexico City 75%
- Guadalajara 4%
- Monterrey 5%
- Others 16%

Leading sectors by number of Tecnolatinas

- Fintech 30%
- SaaS 9%
- Marketplace 3%
- Clean tech/Energy 4%
- Cleantech/Mobility 5%
- Healthcare/Life Sciences 6%
- E-commerce 9%
- Others 33%

---

¹ Ecosystem value considers the sum of the companies value. To estimate the value of startups without public information we applied a multiple of 6x to the last capital raised which is consistent with the sale of c.17% of the equity in the round.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports, World Economic Forum
Colombia has a startup profile in line with its size. The country accounts for 8% of LAC’s population and has 7.5% (76) of its Tecnolatinas, with 1.5 startups/million inhabitants, versus 1.6 on average in LAC.

Two sectors account for 45% of the Colombian ecosystem to date: Fintech (28%) and E-commerce (17%), and RAPPI is the only company with a valuation greater than $1 billion, representing more than 40% of Colombian ecosystem value of $8 billion.

Despite the low startups generation in the country, total capital raised represents 12% of total investment in LAC.

Consistent with what we see in the other countries, Bogota, the capital, accounts for 79% of Tecnolatinas in Colombia.

Tecnolatinas generated more than 17K jobs in Colombia.

Colombia highlights

<table>
<thead>
<tr>
<th>Tecnolatinas</th>
<th>Ecosystem value¹</th>
<th>Tecnolatinas per M inhabitants</th>
<th>Jobs created</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>$8B</td>
<td>1.5</td>
<td>&gt;17K</td>
</tr>
</tbody>
</table>

Main sector by value

<table>
<thead>
<tr>
<th>Sector</th>
<th>of LAC Tecnolatinas</th>
<th>of LAC ecosystem value¹</th>
<th>Tecnolatinas of capital raised in LAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics</td>
<td>8%</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>Fintech</td>
<td>28%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-commerce</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Leading cities by number of Tecnolatinas

- Bogota 79%
- Medellin 8%
- Others 13%

Leading sectors by number of Tecnolatinas

- Fintech 28%
- E-commerce 17%
- Logistics & Distribution 5%
- Marketplace 5%
- Others 40%
Chile has the highest number of startups per million inhabitants in the region: 4.2 versus an average of 1.6 in LAC. The country has 8% (78) of Tecnolatinas despite having only 3% of LAC’s population. This is the result of a sustained and systemic effort by the country to create an entrepreneurial innovation ecosystem.

Another promising sign is that even though Chilean startups so far raised 3% of capital, in the past years the country has achieved significantly higher shares of VC flows. Ecosystem value is slightly below what would be expected given the size of the country (2% of LAC ecosystem value), but this is explained by the fact that the ecosystem is still catching up with the regional leaders.

Three sectors represent 35% of Chilean ecosystem to date: Fintech (18%), Software as a Service (9%) and E-commerce (8%). Crystal Lagoons is the only company with a valuation greater than $1 billion, representing more than 35% of Chilean ecosystem value, which is estimated at $5 billion.

As was the case in the other major ecosystems, the nation’s capital (Santiago) is the Chilean startup hotspot, home to 86% of startups in the country.

Tecnolatinas have generated over 12K jobs in Chile.
Uruguay is leading the way among smaller countries. Despite having a population of only 3.5 million (0.5% of LAC), the country has one of the highest levels of startups per capita (2.3 startups/million capita versus 1.6 LAC’s average). The ecosystem is growing, has consistent support from the public sector and has recently attracted several of the most successful entrepreneurs from Argentina.

The country already has a company worth over $1 billion, Dlocal, representing more than 95% of the Uruguayan ecosystem value, estimated to be between $1 billion and $5 billion.

Uruguay represents 1% of LAC with 8 Tecno-latinas. Three sectors represent 87% of the Uruguayan ecosystem to date: Fintech (37%) Software (25%) and Mobility (25%).

Startups from Uruguay raised 1% of LAC’s funding to date.

Montevideo is the home to all Uruguayan Tecnolatinas, procreating 100% of startups in the country.

Tecnolatinas generated more than 700 jobs in Uruguay.

---

**Top Tecnolatinas based in Uruguay**

<table>
<thead>
<tr>
<th>Company</th>
<th>Sector</th>
<th>Valuation range</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>dLocal</td>
<td>Fintech</td>
<td>$1-5B</td>
<td>Montevideo</td>
</tr>
<tr>
<td>Scanntech</td>
<td>Fintech</td>
<td>$50-100M</td>
<td>Montevideo</td>
</tr>
<tr>
<td>Bankingly</td>
<td>Fintech</td>
<td>$10-50M</td>
<td>Montevideo</td>
</tr>
<tr>
<td>IronHide</td>
<td>Software</td>
<td>$10-50M</td>
<td>Montevideo</td>
</tr>
<tr>
<td>Meitre</td>
<td>SaaS</td>
<td>$10-50M</td>
<td>Montevideo</td>
</tr>
</tbody>
</table>

---

1. Ecosystem value considers the sum of the companies value. To estimate the value of startups without public information we applied a multiple of 6x to the last capital raised which is consistent with the sale of c.17% of the equity in the round.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports, World Economic Forum
Guatemala is leading the way in Central America, with Kingo Energy shining as its most successful startup. The country’s ecosystem is still in its early stages and represents less than 1% of LAC, with 4 Tecnolatinas.

The country has significant potential for growth, with 0.2 startups per million inhabitants versus 1.6 in LAC.

Three sectors represent 100% of Guatemala ecosystem to date: Energy (50%) Mobility (25%) and Healthcare/Life Sciences (25%).

No company has reached a valuation above $1 billion. Guatemala’s total ecosystem value is higher than 100 million.

Venture capital activity has been limited in Guatemala, which attracted only 0.1% of the capital raised in LAC.

Guatemala City concentrates 100% of startups in the country.

Tecnolatinas already generated more than 500 jobs in Guatemala.

### Top Tecnolatinas based in Guatemala

<table>
<thead>
<tr>
<th>Company</th>
<th>Sector</th>
<th>Valuation range</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingo Energy</td>
<td>Energy</td>
<td>$50-100M</td>
<td>Guatemala City</td>
</tr>
<tr>
<td>Osigu</td>
<td>Healthcare/Life Sciences</td>
<td>$10-50M</td>
<td>Guatemala City</td>
</tr>
<tr>
<td>Iguama</td>
<td>Mobility</td>
<td>$10-50M</td>
<td>Guatemala City</td>
</tr>
<tr>
<td>Hybrico</td>
<td>Cleantech/Energy</td>
<td>$10-50M</td>
<td>Guatemala City</td>
</tr>
</tbody>
</table>

1. Ecosystem value considers the sum of the companies value. To estimate the value of startups without public information we applied a multiple of 6x to the last capital raised which is consistent with the sale of c.17% of the equity in the round.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports, World Economic Forum
Peru ecosystem overview

Peru is beginning to create its own ecosystem. The country has 15 Tecnolatinas, a share of over 1% of LAC, with 0.5 startups per million inhabitants versus 1.6 in LAC.

Two sectors represent 40% of the Peruvian ecosystem to date: Fintech (20%) and Software as a Service (20%).

Peru does not yet have a Tecnolatina worth over $1 billion. The total ecosystem value is estimated to be between $100 million and $500 million.

Peruvian startups represent 0.2% of the capital raised in the region to date, but activity in recent years has grown significantly. Lima is the center of Peruvian startups, hosting 93% of the startups in the country. Tecnolatinas generated over 500 jobs in Peru.

### Top Tecnolatinas based in Peru

<table>
<thead>
<tr>
<th>Company</th>
<th>Sector</th>
<th>Valuation range</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crehana</td>
<td>Edtech</td>
<td>$50-100M</td>
<td>Lima</td>
</tr>
<tr>
<td>Busportal</td>
<td>Mobility</td>
<td>$10-50M</td>
<td>Lima</td>
</tr>
<tr>
<td>Juntoz</td>
<td>E-commerce</td>
<td>$10-50M</td>
<td>Lima</td>
</tr>
<tr>
<td>Hello ZUM</td>
<td>Fintech</td>
<td>$10-50M</td>
<td>Lima</td>
</tr>
<tr>
<td>FIT Big Data</td>
<td>Data Management</td>
<td>$1-10M</td>
<td>Lima</td>
</tr>
</tbody>
</table>

### Peru highlights

- 15 Tecnolatinas
- $>100M Ecosystem value¹
- 0.5 Tecnolatinas per M inhabitants
- >500 Jobs created
- 1% of LAC Tecnolatinas
- <0.1% of LAC ecosystem value¹
- 0.2% of capital raised in LAC
- Mobility

### Leading cities by number of Tecnolatinas

- Lima 93%
- San Isidro 7%

### Leading sectors by number of Tecnolatinas

- SaaS 20%
- Fintech 20%
- Others 60%

---

¹. Ecosystem value considers the sum of the companies value. To estimate the value of startups without public information we applied a multiple of 6x to the last capital raised which is consistent with the sale of c.17% of the equity in the round.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports, World Economic Forum
APPENDIX

COMPANIES WORTH OVER $1B OVERVIEW
Profiles of Tecnolatinas worth over $1B

HQ in Argentina
Sector: E-commerce & Fintech
Value Range: +$50B
Footprint: Regional
Leading E-commerce platform with rapidly growing financial services operation.

HQ in Brazil
Sector: Fintech
Value Range: $10 - $20B
Footprint: Brazil Local
Services its costumers through payment and management tools and flexible financial products.

HQ in Brazil
Sector: Fintech
Value Range: $10 - $20B
Footprint: Brazil Local
Online & mobile payment services for commercial operations in Brazil.

HQ in Brazil
Sector: Fintech
Value Range: $10 - $20B
Footprint: Regional
Independent digital bank, that offers digital credit cards, transfers and payments.

HQ in Argentina
Sector: IT / Software Development
Value Range: $5 - $10B
Footprint: Global
Software developer providing solutions for organizations all over the world.

HQ in Brazil local
Sector: E-commerce
Value Range: $5 - $10B
Footprint: Brazil Local
E-commerce group with 4 different market-oriented brands.

HQ in Colombia
Sector: Logistics & Distribution
Value Range: $1 - $5B
Footprint: Regional
Connects commerces with clients, transforming the delivery process.

HQ in Brazil
Sector: IT / Software Development
Value Range: $1 - $5B
Footprint: Global
Software relationship and management support company.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Profiles of Tecnolatinas worth over $1B

HQ in Brazil
Sector: Gaming
Value Range: $1 - $5B
Footprint: Regional

Developer and publisher of mobile games.

HQ in Brazil
Sector: Fintech
Value Range: $1 - $5B
Footprint: Brazil Local

Digital regulated bank established in 1994 as traditional and transformed in past years.

HQ in Brazil
Sector: Edtech
Value Range: $1 - $5B
Footprint: Brazil Local

Education company that offers technology, services and content.

HQ in Argentina
Sector: Cybersecurity
Value Range: $1 - $5B
Footprint: Global

Identity management platform for application builders, developers and global enterprises.

HQ in Brazil
Sector: Telecommunications
Value Range: $1 - $5B
Footprint: Brazil Local

Datacenter and telecom company specialized in connectivity, hosting and cloud computing.

HQ in Chile
Sector: Proptech
Value Range: $1 - $5B
Footprint: Global

Offers technology that enables crystal clear lagoons of unlimited sizes to be built and maintained at a very low cost.

HQ in Uruguay
Sector: Fintech
Value Range: $1 - $5B
Footprint: Global

Cross-border payments technology company which handles and processes transactions in emerging markets.

HQ in Mexico
Sector: Marketplace
Value Range: $1 - $5B
Footprint: Regional

Online used car sales platform based in technology and transparency solutions.

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Profiles of Tecnolatinas worth over $1B

**Loft**
HQ in Brazil  
Sector: Proptech  
Value Range: $1 - $5B  
Footprint: Regional  

*Online marketplace to find and easily sell and buy properties.*

**99 minutos**
HQ in Brazil  
Sector: Mobility  
Value Range: $1 - $5B  
Footprint: Brazil Local  

*Provides taxi services through its software that enable users to request taxis by phone.*

**KIO**
HQ in Mexico  
Sector: IT / Software Development  
Value Range: $1 - $5B  
Footprint: Global  

*Software developer that offers robust solutions for organizations.*

**EBANX**
HQ in Brazil  
Sector: Fintech  
Value Range: $1 - $5B  
Footprint: Regional  

*Integrated payment solution for E-commerce transactions.*

**Gympass**
HQ in USA (Originally from Brazil)  
Sector: Marketplace  
Value Range: $1 - $5B  
Footprint: Global  

*Online gym platform that offers a wide variety of fitness and wellness facilities.*

**iFood**
HQ in Brazil  
Sector: Logistics & Distribution  
Value Range: $1 - $5B  
Footprint: Brazil Local  

*Delivery app that connects restaurants with consumers.*

**Loggi**
HQ in Brazil  
Sector: E-commerce  
Value Range: $1 - $5B  
Footprint: Brazil Local  

*Matches couriers to shippers based on geolocation and free capacity in the vehicle.*

**Logg**
HQ in Brazil  
Sector: Proptech  
Value Range: $1 - $5B  
Footprint: Brazil Local  

*Simplifies the rental of residential real estate for landlords and renters.*

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports
Profiles of Tecnolatinas worth over $1B

HQ in Mexico
Sector: IT / Software Development
Value Range: $1 - $5B
Footprint: Global

-*Builds the intelligent digital platform their clients rely on to capture new business opportunities.*

HQ in Argentina
Sector: Fintech
Value Range: $1 - $5B
Footprint: Regional

-*Offers prepaid cards to help users keep track of spending and manage their personal finance.*

HQ in Brazil
Sector: Fintech
Value Range: $1 - $5B
Footprint: Brazil Local

-*Free digital bank that offers credit card and financial services for people and commerce.*

HQ in Argentina
Sector: Travel/Tourism
Value Range: $0.5 - $1B
Footprint: Regional

-*Online travel agency that enables people to book transportation and accommodations.*

Source: Surfing Tsunamis, Tecnolatinas, LAVCA, Crunchbase, Pitchbook, Techcrunch, Research Reports and Media Reports