

**Tpaga Inc. (Tpaga SAS)**  
www.tpaga.co

## Introduction

Tpaga's vision is to become the mobile wallet of LATAM and empower a cashless world.

Tpaga enables consumers to receive and spend money through their mobile device. Tpaga is working towards being a payment solution for anyone in Latin America (LATAM), but mainly aimed at the majority unbanked (roughly ~70% or 400MM+<sup>1</sup>).

Founded by veteran entrepreneurs that founded the one of the first successful startups in the region Tappsi (which became the second largest taxi hailing app in LATAM). The founding team are scrappy, technical, user-focused and most importantly have scaled a business to acquisition.

The team has build a digital wallet known as Billetera Tpaga (Tpaga Wallet) which allows users to load money into the account or link credit/debit cards and use it for various payments. Billetera Tpaga allows the unbanked to participate in e-commerce without having a credit/debit card.

## Competition

There are several direct, potential and indirect competitors which are:

- Direct LATAM: Conekta (OXXO Pay), Regalii, PagaMovil, movil red, ClicPago, ComproPago, Open Pay, MolP, Netero, EWally, Sr. Pago, EBanx
- Financial Institutions (Colombia): Bancolombia, Grupo Aval (Banco de Bogota, Banco de Occidente, Banco Popular, Banco AV Villas, Corficolombiana, Casa de Bolsa)
- Financial Institutions (LATAM): Banco Santander Mexico, Banorte, BTG Pactual, Banamex, BBVA Bancomer (BBVA), Banco do Brasil, Banco Santander Brasil, Caixa Economica Federal, Banco Bradesco, Itaú Unibanco (Itau Corpbanca Colombia), Banco do Brasil,
- Financial Institutions (Global): Citigroup (Citi Colombia), HSBC (HSBC Colombia)
- Indirect LATAM: NuBank, BankFacil, Naspers (PayU LATAM)
- Credit Card: American Express, Diners Club, MasterCard (Debit MasterCard, Maestro) Visa (Visa Debit, Visa Electron)
- Indirect: Apple (Apple Pay), Google( Android Pay), (Samsung) Samsung Pay, PayPal (Braintree/Venmo), Square, Coinbase, Ripio (formerly BitPagos), Transferwise
- Teleco (in LATAM): Telefonica, America Movil, Movistar, Milicom, Virgin Mobile

Mobile money market remains largely fragmented with no clear leader, one in which has a presence throughout all of LATAM. The competition solely is with emerging "leaders" in Mexico. Even though there are 70<sup>2</sup> fintech startups just in Colombia, Tpaga appears to be the only company that is offering payment processing for both credit/debit card, bank account and cash users with key partnerships that will allow the greatest options of payments.

<sup>1</sup> <http://pubdocs.worldbank.org/en/113791483565360488/N2UnbankedV5.pdf>

<sup>2</sup> <http://www.finnovista.com/fintech-radar-colombia>

## Key Risks

### Revenue Model

I believe Tpage has a clear revenue opportunity through key partnerships with enterprise and SMB clients. The current business model (before Oct 2017 launch) will charge 3% via Tpage payment platform and 8% per every USD \$1 (or COP ~\$2,900) that is processed through Tpage Wallet application. Because the app has not been launched yet it will be important to try to gauge and understand:

- How long will it take to achieve 2% of Colombia to adopt Tpage?
  - How long will it take to achieve 5%? 10%? 25%?
- What will the frequency be for Tpage users? Of the daily payment needs, how many times will users use Tpage as a payment option?
- What is the LTV:CAC?

Below shows a rough monthly revenue model using the Wallet: average user spend x .08% x 4 weeks. Below are different scenarios and their associated revenue potential in Colombia:

	Total User	Percent of Population <sup>3</sup>	Average User Spend* per Week	Revenue* per User at 8% (of \$1)	Monthly Revenue*
Scenario 1	1.5MM	2.5%	\$10	\$0.80	\$4.8M
Scenario 2	2.45MM	5%	\$15	\$1.20	\$11.7M
Scenario 3	4.9MM	10%	\$20	\$1.60	\$31.3M

\*Amounts are in USD

### Security & Fraud Protection

With the rise in cyberattacks and cyberwarfare, I believe it is important for Tpage to have a robust security infrastructure to protect itself. As LATAM looks to become a cashless economy, there will be a rise of new mobile wallet, but as many start-up setup shops, it will be that many will do so without the knowledge of cyber risks involved. This is a dangerous trend when countries and regions still lacks the proper infrastructure and legislation to fight against cyber criminals.

Anyone looking to invest in Tpage will need to test (using a 3rd party security firm) for any possible vulnerabilities and address them before they could cause harm to its user. Data breaches could have catastrophic consequences in the growth of Tpage. This is particular that one must pay attention to since Venmo<sup>4</sup> was shown to have had a vulnerability that could be exploited via optional SMS feature that allowed users to authorize payments simply by replying to a text message with a provided 6-digit code, which can allow an attacker with physical access to a victim's iPhone can steal money from that user's account.

A few points to address:

- Is identity verification robust enough (i.e. prevent attacker impersonating a user)?
- Is there a possibility of fraudulent registration using a victim's mobile number or registration of a large number of users using bots

<sup>3</sup> The 2017 the population of Colombia is 49,065,615

<sup>4</sup> <http://www.securityweek.com/flaws-venmo-payment-app-allowed-hackers-steal-money>

- Are there any exploitable weaknesses in the registration process?
- How are sensitive data (credit card info, DOB) stored end-to-end?

And how is Tpage currently addressing:

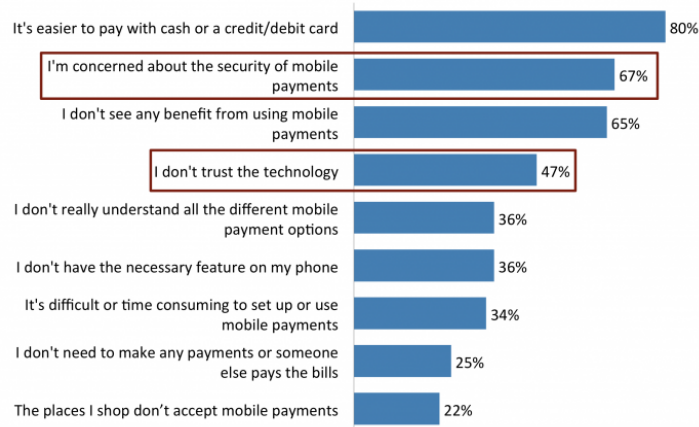
- Protection against reverse engineering that might lead to malicious behavior such as stealing encryption keys and executing implantation methods
- Detection of abnormal behavior (i.e. possible charges that might not follow user behavior or changes in the user account)
- Protection of user information being sent to 3rd party APIs

Lastly what are the insurance requirements? What is the protection plan for each users (i.e. up to what amount)? And what are the terms (i.e. use Tpage once a month)?

We will also need to be on some of the reasons early traction might not take off in Colombia (or other parts of LATAM. Based on a survey done by BI Intelligence<sup>5</sup>, most reasons are relating to trust of security. This is similar in that 65%<sup>6</sup> of people in LATAM don't use banks, because "they just don't trust banks".

#### Top Reasons Consumers Don't Use Mobile Payments

Among US nonusers of mobile payments, Q4 2015



(Source: US Federal Reserve, n=1,802, BI Intelligence)

#### Government

Government regulation impacts Tpage's business domestically in Colombia as well as future markets throughout LATAM. Tpage is subject to regulations that affect the payments industry in the markets they intend to operate.

- How will Tpage work with local regulators in Colombia and the rest of LATAM to make sure that they are within regulations and that regulatory actions don't change against their favor?

#### Traditional Financial Institutions

Tpage may face competition from traditional financial institutions, due to the cartel nature of the industry as well as the rigid regulations. In terms of total assets, the largest banks are

<sup>5</sup> 2016 BI Intelligence Mobile Payments Report

<sup>6</sup> <https://colombiareports.com/30-4-colombians-age-15-bank-account>

Bancolombia (22.8% of the total), Banco de Bogotá (14.2%), Davivienda (13.5%), BBVA (10.2%) and Banco de Occidente (7%). These five banks virtually dominate the banking industry in Colombia and accounts for two-thirds of total sector assets.

Several of the Colombian banks (and LATAM based banks) have their own version of a mobile wallet, but with terrible UI/UX and sometimes some of the apps don't work at all.

- Will Tpgaga partner with existing financial institutions in Colombia and rest of LATAM to provide services and as a funding source - much like how PayPal and Venmo work in the US?

### **Expansion (Market)**

It is clear that Tpgaga's opportunity is clearly in LATAM, due to the fact that the payments/mobile money industry is still very nascent. However, we have to craft a strategy that makes sense in terms of expansion which will allow Tpgaga to take the majority of the market much like Uber did.

However expansion into other markets outside Colombia will prove to be a challenge since, each country has their own financial regulations, some more stringent (such as Chile) than others, despite LATAM's recent move to deregulate this sector.

- Increasing competition coupled with regulatory forces and the rise of new solutions on top of the traditional ecosystem - will this cannibalize payment profitability in the future?
- Will user behavior differ from country to country? If so, how will Tpgaga cater to each country? Will users prefer to use banking options and/or credit cards (i.e. Brazil)?

### **Exit**

We can point to PayPal as the prime example, founded in 1998, PayPal had its IPO in 2002 and was acquired by eBay in July 2002 for USD \$1.5B, with a valuation of over USD \$23 a share, or 77% above the IPO price. Today, PayPal's share price is USD ~\$62 (PYPL) and has a market cap of USD +\$70B.

A similar exit, we can point to is Braintree which was acquired by PayPal for USD \$800M<sup>7</sup> in and Venmo which was acquired by Braintree for USD \$22M in August 2012 after it raised series A August 2011.

We can also look at successful examples of other regional players in emerging markets:

- Alipay (China): Part of Alibaba.com and has 54% share of China's US\$5.5 trillion mobile payment market
- WeChat Pay (China): Part of Tencent Holdings Limited and has 300MM+ users worldwide
- M-Pesa (Kenya, Tanzania, Afghanistan, South Africa, India, Romania, Albania): Launched by Vodafone for Safaricom and Vodacom
- Paytm (India): Valuation of USD \$7B

### **Thoughts**

I first came across Tpgaga when I was living in Colombia mid-2015 through a mutual friend. At the time their goal was to become a digital bank in LATAM for everyone. However, at the time Tpgaga was a

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<sup>7</sup> <https://techcrunch.com/2013/09/26/paypal-acquires-payments-gateway-braintree-for-800m-in-cash>

payments gateway for merchants (which at the time seemed to be competing with a vast number of other fintech companies in Colombia). The challenge with being a payments gateway is that the vast majority of the population in Colombia does not use cards which makes the market very small. Since then they pivoted to building a solution that serves an unmet need (the unbanked) that virtually the vast majority of LATAM needs, with +70% of the population are financially excluded, meaning they have no bank accounts or credit cards. A robust mobile wallet designed for LATAM is a natural next step for the rapidly growing smartphone users and e-commerce.

Tpaga has a great founding team, that actually has experience building a successful company in the region. I believe the product so far is promising and fits a clear need in the region. The company follows a trend of user-focus dating back to Tappsi.

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## **Summary**

Founded by two extremely scrappy founders and one former engineer of Tappsi. Team of ~10 employees based in Bogota, Colombia. Series A investment opportunity. Tpage will have 50K+ users day 1 on October 2017 launch.

### **Business**

1. Tpage is a payment service providers (PSP) in the form of digital wallet and payments gateway currently available only in Colombia
  - o Billetera Tpage (Tpage Wallet) is a digital wallet used make payments and uses linked credit/debit cards or cash deposited via Western Union
  - o Tpage API which is a payment gateway for merchants to process payments

### **Market**

1. Tpage Wallet initially targets the 21MM+<sup>8</sup> smartphone users in Colombia
2. The TAM opportunity of LATAM's population is 630MM+ (across 33 countries and dependencies) and Tpage specifically aims at the 400MM+<sup>9</sup> "unbanked" individuals
3. Strong growth of smartphone and e-commerce in LATAM at USD \$40B in 2016 growing at a CAGR of 17% to USD +\$80B by 2019

### **Users**

1. Currently has 150+ SMB and enterprise partnered as a payment method in Colombia, including the largest market chain in LATAM, largest gas station chain in Colombia, Tappsi and 50 on-demand companies in Colombia including Rappi
2. Minimum 50K+ initial users (just from taxi drivers) on October 1, 2017 launch

### **Financials - TBD**

1. Raised USD \$1.2M in seed, primarily in Colombia including USD \$120K from YC

### **Competition**

1. Big players: PayPal, BBVA, Bancolombia, Banco de Bogota, Banco Occidente, Credencial, Bancoldex, Davivienda, Banco AV Villas
2. Small players: ePayco, Conekta, YellowPepper, Naspers (PayU LATAM)

### **Team (management)**

1. Andrés Gutiérrez (Co-founder & CEO)
2. Juan Salcedo (Co-founder & CPO)
3. Sebastian Vásquez (Co-founder & CTO)

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<sup>8</sup> <https://www.statista.com/statistics/467750/forecast-of-smartphone-users-in-colombia>

<sup>9</sup> <http://latintrade.com/reaching-the-unbanked-400-million-potential-customers-are-still-waiting-for-a-bank-to-find-them>

## Competitive Analysis

Payments industry in LATAM is still relatively nascent with several countries passing different laws deregulating the industry. Tpage's currently does not have an immediate strong/established competitors in Colombia, however, there are competitors throughout LATAM which is YellowPepper (Mexico and Colombia), ePayco (Colombia) and Conekta/OXXO Pay (Mexico).

Traditional financial institutions such as Billera Movil (Bancolombia), Aval Pay (Grupo Aval), Smart Wallet (Davivienda and CitiBank) and BBVA Wallet, along with potential competitors such as PayU LATAM pose as strong competitors as well. There are several different competitors in both developed and emerging markets such as Paypal/Braintree (NA/EMEA), Alipay (China).

### 1. ePayco (Competitor in Colombia)

Founded in 2011 by Juan David Rua, who saw the opportunity to provide better solutions to the main e-commerce particularly in Colombia. EPayco offers to charge economic rates to those who perform as freelancers or those who charge sporadically, or those who are engaged in sales in electronic commerce, among other tasks.

EPayco is a web platform (mobile and web) that integrates all digital payment means by facilitating financial inclusion of users who do not have bank accounts and allows them to start doing business with a simplified savings accounts. EPayco charges a 2.99% commission plus COP \$600 on each transaction while similar products charge anywhere between 4-8%.

### 2. YellowPepper (Competitor throughout LATAM)

Founded by Rafael Russ, Serge Elkiner, YellowPepper, is a US based digital wallet startup aimed at the LATAM market. YellowPepper's most recent funding announced October 2016 totals their entire funding to date of \$39M. Yepex works on the existing card infrastructure and targets only those with credit/debit cards.

The Yepex wallet is an mobile based digital wallet where the users can store all their different credit/debit cards and purchase without giving away sensitive information (i.e. PAN, expiration date, CVV).

- The app instead transacts with a unique token that can either be communicated to the merchant manually or via HCE/QR codes
- Available 9 countries including US, Mexico, and Colombia - they are not a direct competitor to Tpage yet, rather is competing with PayPal

### 3. Conekta (Competitor throughout LATAM)

Founded by three engineers Leo Fischer, Hector Cardenas, Cristina Randall from the University of Waterloo in 2011. Conekta, based in Mexico was created with the intention to help drive and optimize eCommerce in LATAM. Recently Conekta launched cash payments via OXXO Pay and limited interbank transfers within Mexico; in addition to that, international payments via Visa, Mastercard, and American Express. Conekta's most recent funding was announced October 2016 of USD \$6.6M Series A led by Conconi Growth Partners.

OXXO which is Mexico's leading cash collector for e-commerce purchases announced in February 2017 the launch of OXXO Pay with Conketa. With a network of +15K branches in Mexico, OXXO is in a preferential position to harness the huge potential of cash payments within e-commerce and accounts an estimated 20%<sup>10</sup> of all e-commerce payments in Mexico. The app is mainly used to facilitate a single payment as opposed to being a wallet that stores cash (much like a prepaid debit card might be). Some of the features of OXXO pay are:

- Real time payment notifications where users can get update the moment a buyer completes the payment at an OXXO location
- Use of 14-digit reference code instead of a voucher

#### 4. Traditional Financial Institutions (Potential competitors)

One of the challenges of the financial system in Colombia is the financial institution's slow adoption into digital. This allows fintech startups to position themselves as the main agent of change, forcing the more traditional players to evolve at the same pace. Currently, it is known that there are two strategies: opt for open innovation in collaboration with startups in which BBVA does, or innovation as an internal resource without being linked with startups. Very few financial institutions in Colombia offer digital payment options in other emerging markets such as Grab (GrabPay), Paytm, Wechat (Wechat Pay).

##### Billetera Móvil - Grupo Bancolombia

Bancolombia is the largest commercial bank in Colombia and currently represents the best cast of digitalization Colombia. According to Juan Carlos Mora (CEO of Bancolombia) "2/3 transactions (outside and including Colombia) by Bancolombia are done digitally and roughly 68% of the transactions are carried out in Colombia are digital. Mora also added that Bancolombia plans to invest USD \$120M with the aim to continue developing methods and technology to enhance customer experience.

Launched in 1Q15<sup>11</sup>, since then has 5.5MM+ downloads<sup>12</sup> in Colombia will be able to use their cell phone as a means of payment in commercial establishments.

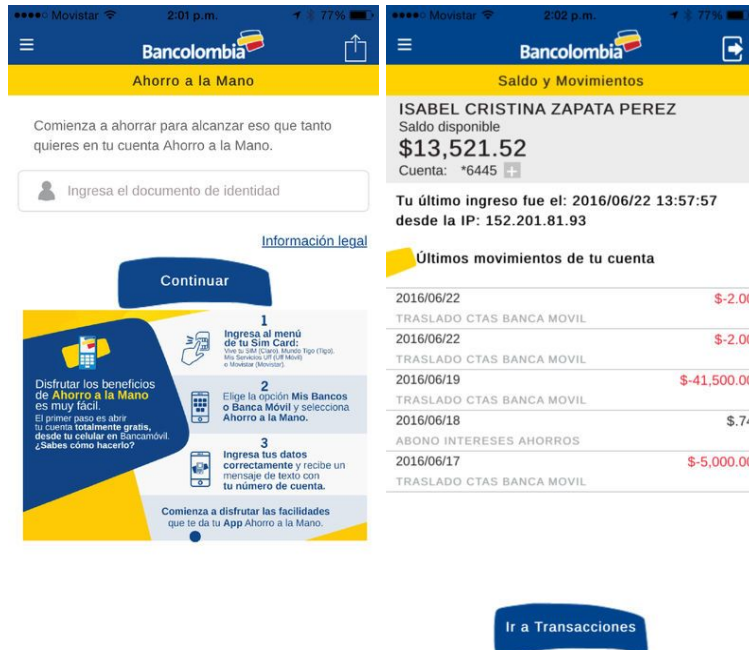
While living in Colombia, I had a bank account with Bancolombia primarily because it is known as the "best bank" and largest meaning more services and access throughout the country. Being a user of the app both on iOS (iPhone 6) and Android (Samsung Galaxy Note 5), I found the app not work particularly on iOS with examples such as connecting to the app being extremely difficult to use, along with having a large number of bugs preventing most of its functions. The app felt more like an extension to online banking but still required to physically visit a bank, which can take upwards of 30 mins (during rush hour) and lines that can take up to 60 mins.

<sup>10</sup> <http://amiperspectiva.americasmi.com/e-commerce-cash-payments-keep-growing-in-latin-america>

<sup>11</sup> <http://www.portafolio.co/negocios/empresas/bancolombia-lanzo-billetera-movil-22184>

<sup>12</sup> <http://www.portafolio.co/negocios/empresas/asamblea-general-de-accionistas-de-bancolombia-504203>





Screncap of Billeteria Movil 3Q17 and it's rather basic and difficult UI/UX (source: Bancolombia)

### BBVA Wallet

Banco Bilbao Vizcaya Argentaria, S.A. (BBVA) is a multinational Spanish banking group and is the second largest bank in Spain with a large presence in LATAM. BBVA also fosters the innovation of finance systems throughout LATAM. The BBVA wallet is not available in Colombia. It is likely that BBVA may try to enter the Colombian market. Furthermore, Tpgaga may compete with BBVA as they look to enter the Mexico market.

The "BBVA Wallet" App is a digital wallet that is provided to its customers more as an extension to its online banking services. BBVA reported that the app has +809K downloads and can be used for purchases instead of credit and debit cards. The app also boasts up to 15% discount on certain establishments through partnerships. Additional features are:

- Security features such as the ability to report a lost/stolen cards in a flash and/or temporarily block transactions
- Real-time rewards redemption and the ability to earn cash back

### 5. PayPal & Braintree/Venmo (What Tpgaga can become and future competitor)

I believe PayPal, currently is the best representation of what Tpgaga can become in LATAM. PayPal operates a worldwide online payments system that supports online money transfers and serves as an electronic alternative to traditional paper methods like checks and money orders. It is also noted that PayPal for years tried to expand into LATAM around seven years ago and most recently partnered with Mexican telecommunications giant América Móvil<sup>13</sup>. The alliance's focus will be on a new mobile wallet platform, which lets users pay for items by smartphone scans.

<sup>13</sup> <http://www.bankingtech.com/444072/paypal-plans-latin-america-growth-with-america-movil-alliance>

Arnoldo Reyes (head of financial services and business development for LATAM) mentioned focusing on developing strategic partnerships, particularly banks allow PayPal to scale fast. Reyes also added that banks provide the front-end and PayPal the back-end of the online payment system. Larger banks have been signing up for the partnerships as a way to stand out from rivals. "Banks in LATAM are almost like a bucket full of piranhas. Every bank is trying to outdo the others," and "signing up with PayPal gives banks cachet as well as new fee revenues".

According to CEO Sulman, Braintree's P2P payments service Venmo is growing by leaps and bounds...Our strategy is to provide even more value to users and tie the Venmo community into the PayPal merchant marketplace so that they can use Venmo to buy things. That could happen potentially as soon as later this year or in the early part of next year."<sup>14</sup> PayPal said Venmo doubled its total transactions to USD \$17.6B<sup>15</sup> during the same time along with 81% of Venmo's users being millennials.

## Market, Industry & Trend

### Financial Services Industry LATAM

For years, the mobile money industry in Latin America has been playing catch-up with the rest of the world, with only banks offering digital wallet. While low rates of financial inclusion coupled with a rapidly increasing penetration of mobile technology have presented a fertile ground for the growth of mobile money, it hasn't proven an easy business, requiring heavy and continued investment for several years before achieving scale and maturity. Consistent economic growth, stable macroeconomic policies in many countries, and reforms to deepen financial markets have supported credit expansion in recent years. This still leads to a very small number of actual bank accounts and an even smaller population using credit cards throughout LATAM.

### Financial Regulations in Colombia

Until recently, "mobile money" was considered illegal<sup>16</sup>, on October 21, 2014 the Congreso de la República de Colombia (Congress of Colombia) passed Ley de Inclusion Financiera No. 1735 (Law No. 1735)<sup>17</sup> which allows for the creation of a new type of financial institution called Sociedades Especializadas en Depósitos y Pagos Electrónicos (Specialized Electronic Deposit and Payment Institutions). This allows the authorization to perform remote cash-in and cash-out operations, allocate funds in electronic deposit accounts, and the offer of select transactional services, such as remittances, transfers, and payments. This new law, however, does not allow the offering of credit. The implementation of the law has however been slow, but Colombia currently has one of the most comprehensive and enabling regulatory frameworks for mobile money allowing opportunities such as Tpaga to thrive.

### Payments in LATAM

One of the addressed problems with LATAM is that the vast majority of consumers still do not use banks where in the case of Colombia the unbanked is still 60% with 51%<sup>18</sup> of young adults

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<sup>14</sup> <https://www.forbes.com/sites/ryanmac/2015/07/20/as-paypal-goes-public-again-ceo-hints-at-working-with-amazon-and-sets-sights-on-acquisitions>

<sup>15</sup> <https://www.cnet.com/news/venmo-paypal-wacky-social-mo-pay-the-rent-get-likes-and-jokes>

<sup>16</sup> <https://www.oecd.org/finance/Colombia-financial-markets-2016.pdf>

<sup>17</sup> <http://bit.ly/2ey3BDd><http://bit.ly/2ey3BDd>

<sup>18</sup> <https://www.bbva.com/en/fintech-companies-making-inroads-latin-america>

owning a bank account. Furthermore only 27% of consumers in LATAM totally, have credit cards and still the reality a small percentage is willing to put its credit card information online.

Payment cards penetration in Colombia 2017 is roughly at 26% for credit cards and 52% for debit cards (with the actual usage much lower), it is still known that 57%<sup>19</sup> (based on online respondents in Nielsen's global survey in 2016) still pay cash-on-delivery and cash payments.

LATAM Payment Card Penetration 2017		
Country	Credit	Debit
Brazil	30%	70%
Mexico	25%	37%
Colombia	26%	52%
Argentina	51%	69%
Chile	55%	71%
Peru	20%	32%

(Source<sup>20</sup>: World Bank Findex, AMI analysis)

Below image shows online payment providers throughout LATAM.



(Source: America's Market Intelligence<sup>21</sup>)















<sup>19</sup> <http://www.financecolombia.com/nielsen-57-of-colombian-e-commerce-shoppers-still-pay-cod-cash-on-delivery>

<sup>20</sup> <http://amiperspectiva.americasmi.com/why-debit-cards-could-drive-up-latam-e-commerce-sales>

<sup>21</sup> <https://www.slideshare.net/AmericasMarketIntelligence/mcommerce-in-latin-america-67603088>

Due to the fact that there are no option, lacking an acceptable payment method to buy online is frustrating. Many use vouchers that must be printed and paid for in cash at affiliated agents, which can sometimes take up to 72 hours after the order was made. Once printed, only about 30% of vouchers are actually paid for, creating uncertainty and inventory problems for merchants.

Various countries in LATAM have cash payment leaders which are Boleto Bancario (Brazil), OXXO (Mexico), Efecty (Colombia), and PagoEfectivo (Peru). As a result, cash is still “king” in LATAM and solutions such as Tpga will fulfill these needs.

Country	Cash payment penetration of all e-commerce sites	Cash payment providers
 Brazil	25%	safety>pay 
 Mexico	30%	safety>pay  
 Colombia	34%	safety>pay   
 Peru	33%	safety>pay 
 Argentina	40%	  

(Source: E-bit, PayU, AMIPCI, Americas Market Intelligence<sup>22</sup>)

### Smart Phone in LATAM

Smartphone penetration in the region was roughly +55%<sup>23</sup> in 2016 and is forecasted to reach well over 70% by 2020.

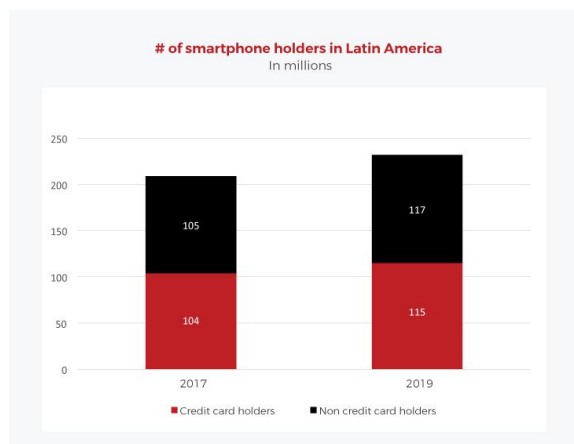
4G coverage is rapidly expanding throughout LATAM and is roughly reaching 60% of the population and is set to reach 80% in 2017. Coupled with growing smartphone adoption, this will drive an accelerating migration to 4G/LTE. It is noted that LATAM<sup>24</sup> is expected to fall slightly short of average global 4G penetration in 2020, but will remain above average mobile penetration rates worldwide. GSMA forecasts that LATAM will reach 38% 4G penetration in 2020, more than doubling the 16% (in 2016), but falling slightly below the 41% global average.

- The global average is skewed by North America which is +82% penetration, while Europe is at 61% and APAC at 45%.

By 2019, smartphone penetration is expected to exceed +70%<sup>25</sup> in Mexico, Colombia, and Chile.

1. Internet penetration in 2016 was 386MM or 63.0% of LATAM<sup>26</sup> population.

<sup>22</sup> <http://amiperspectiva.americasmi.com/e-commerce-cash-payments-keep-growing-in-latin-america>  
<sup>23</sup> <https://www.gsmaintelligence.com/research/?file=9e927fd6896724e7b26f33f61db5b9d5&download>  
<sup>24</sup> <https://www.gsmaintelligence.com/research/?file=508c922afc76e7da4d0d8de285a0c360&download>  
<sup>25</sup> [http://amiperspectiva.americasmi.com/wp-content/uploads/2017/03/AMI\\_Insights\\_to\\_win\\_ecommerce\\_LA\\_-final.pdf](http://amiperspectiva.americasmi.com/wp-content/uploads/2017/03/AMI_Insights_to_win_ecommerce_LA_-final.pdf)  
<sup>26</sup> <http://www.internetworldstats.com/stats2.htm>



(Source: AMI Perspectiva<sup>27</sup>)

**SMARTPHONE VS. BANKING PENETRATION**

Country	Smartphones	Bank Account
Brazil	48%	72%
Mexico	60%	48%
Colombia	62%	63%
Argentina	53%	72%
Chile	66%	69%
Peru	43%	39%
Others	36%	32%

(Source: World Bank Findex<sup>28</sup>, eMarketer)

**Mobile Money in LATAM**

Over the last few years, financial regulators have understood the power that mobile money has to deliver financial services to the underserved, combat poverty, and boost the economy. Therefore, most regulators across the region have adopted an enabling regulatory framework for mobile money, or are actively working towards adopting one for their market<sup>29</sup>.

The full potential of mobile money worldwide has not yet been realized, with 2.5B+ people in emerging markets and developing countries still lacking a viable alternative to the cash economy and informal financial services. 1.7B+ of them have mobile phones, but the mobile money industry has found it challenging to launch and scale services for the unbanked because yet many policy and regulatory environments are not genuinely enabling.

Deregulation efforts in the financial sectors throughout LATAM are just starting to paying off and, coupled with industry investment, mobile money services are responding with very fast-paced growth across all the relevant metrics: accounts, agents, and transaction volumes and values. LATAM was the fastest-growing region in terms of growth in registered accounts of mobile money in 2016<sup>30</sup>.

<sup>27</sup> <http://amiperspectiva.americasmi.com/e-commerce-cash-payments-keep-growing-in-latin-america>

<sup>28</sup> <http://datatopics.worldbank.org/financialinclusion/region/latin-america-and-caribbean>

<sup>29</sup> [https://www.gsma.com/publicpolicy/wp-content/uploads/2013/02/GSMA2013\\_Report\\_Mobile-Money-EnablingRegulatorySolutions.pdf](https://www.gsma.com/publicpolicy/wp-content/uploads/2013/02/GSMA2013_Report_Mobile-Money-EnablingRegulatorySolutions.pdf)

<sup>30</sup> [https://www.gsma.com/mobilefordevelopment/programme/mobile-money/mobile-money-latin-america-industry-taking-off#\\_ftn1](https://www.gsma.com/mobilefordevelopment/programme/mobile-money/mobile-money-latin-america-industry-taking-off#_ftn1)



Timeline of regulatory progress of LATAM countries that allows mobile money (source: GSMA)

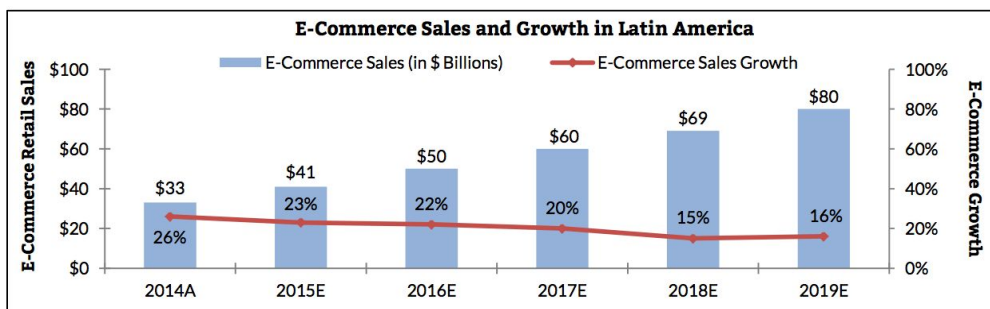
The mobile money industry in LATAM is also still relatively young, but 2016 was a year of rapid growth, showing a very positive response from the private sector to the regulatory developments made in the region. Currently, there is no clear dominant player throughout LATAM (such as other emerging markets) and only “strong” regional players exist.

- DAU mobile money accounts grew from >1MM in December 2011 to 10MM+ by the end of 2016
- The number of live mobile money services in LATAM grew from >11 to +30 during this period, resulting in +3 countries having more mobile money accounts than bank accounts

Mobile money in other parts of LATAM are already developing, because over 90% still use cash, Uber<sup>31</sup> and Rappi still take cash. This provides a great opportunity for Tpgaga to service businesses and customers while giving a richer user experience.

### E-commerce

LATAM is one of the fastest-growing regions for e-commerce, behind APAC. Online retail sales are expected to grow at a CAGR of +17% between 2014 and 2019 to +\$85B in sales.



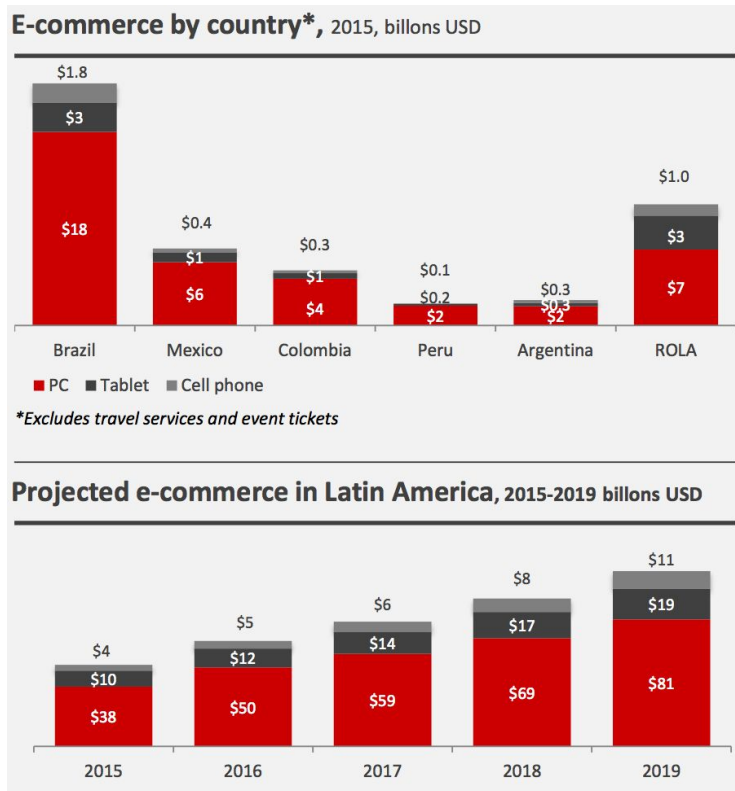
Source: eMarketer

At USD +\$85B, estimates points that current number of online buyers are at approximately 34MM+ and is expected to grow 2x to 60MM+ buyers by 2019. E-commerce in Colombia saw a 50%<sup>32</sup> growth between 2013-2016. These point to the expected demand for a mobile payments platform that will enable the “unbanked” to purchase items on e-commerce sites.

<sup>31</sup> <http://www.financecolombia.com/uber-colombia-cash-illegal-rojas>

<sup>32</sup> <http://www.eltiempo.com/tecnosfera/novedades-tecnologia/crecen-las-ventas-a-traves-de-internet-30858>

LATAM mobile (not including tablets) e-commerce in 2016 totaled \$5B and is projected to reach +\$11B by 2019.



(Source: America's Market Intelligence<sup>33</sup> some actual figures may differ)

The growth in digital commerce is reflected in the emergence of regional players such as MercadoLibre – one of six LATAM ‘unicorns’ (startups valued +\$1B) and Rappi which is considered one of the fastest growing startups in the region. It is also noted that e-commerce is growing faster among non-credit card holders as opposed to credit-card holders. Examples are that even popular apps such as Rappi that around 60-65% of orders are still paid in cash.

### Economy of Colombia (post 2Q17)

Despite the lackluster economic growth where GDP growth projected at 2.0%<sup>34</sup> for 2018, lower interest rates and inflation will boost purchasing power of consumers, whose confidence and spending could gradually return to normal, once they get used to the new tax conditions, with growth in household consumption of 1.6% in 2017 and 2.3% in 2018<sup>35</sup>.

With the FARC (Fuerzas Armadas Revolucionarias de Colombia) ceasing to be an armed group, disarming itself and handing over its weapons to the United Nations on June 27 2017 ending the 52 years of conflict between Colombia's government and the left-wing rebels. The peace agreement with the FARC includes ambitious rural development goals, in which Colombia banked on the demilitarization of violence-plagued regions to allow for further reduction in defense

<sup>33</sup> <https://www.slideshare.net/AmericasMarketIntelligence/mcommerce-in-latin-america-67603088>

<sup>34</sup> [https://www.bbvaereasearch.com/wp-content/uploads/2017/07/SituacionColombia\\_3T17.pdf](https://www.bbvaereasearch.com/wp-content/uploads/2017/07/SituacionColombia_3T17.pdf)

<sup>35</sup> <https://www.bbvaereasearch.com/public-compuesta/situacion-colombia-tercer-trimestre-2017>

spending. This would free up funds to balance the budget and attract much-needed longer term foreign direct investment. With the peace there are new opportunities for investment in infrastructure modernization, and expansion of the agriculture and tourism industries.

Despite all this, credit card usage steadily growing and e-commerce is robust, with projected double-digit growth for the next several years. Potential investors in any fintech startup should note that the Colombian economy will recover, but it is likely the recovery cycle will be slow, due to limited exogenous sources of growth.

#### Colombian Tech Sector

Investing in a LATAM based startup is increasingly becoming an interesting opportunity since the LATAM startup ecosystem (particularly in Argentina, Colombia, Mexico and Brazil) has evolved. Tpage was part of Y Combinator's (YC) S17 class making them the fourth startup to come from Colombia, after Hogaru (W17), Rappi (W16) and Platzi (YC W15) - these recent examples show the robustness and growth opportunity of the Colombian tech sector.

Being an early stage investor also provides advantages with the conversion rate between most LATAM currencies favoring USD (in the case of USD to Colombian Pesos 3:1), this makes investing in LATAM startups highly attractive.

Additionally:

1. Consumer growth of 2% in 2017 and projected 2.6% growth in 2018<sup>36</sup>, between 2007-2012, Colombia's tech industry grew with a CAGR of +177% to a total of USD +\$6.8B<sup>37</sup>.
2. Colombia is the third largest provider of IT in LATAM (after Brazil and Mexico) and generates USD +\$2.5B<sup>38</sup> in revenue yearly.

Colombia's economic growth potential is now widely recognized but still, lags behind other emerging markets in terms of productivity and competitiveness. Colombia recognizes the situation and several governments have attempted different public policy formulas to promote the competitiveness of the productive base.

In 2010 the Development Plan (Plan de Desarrollo) of the administration of President Juan Manuel Santos included a chapter devoted to Sustainable Growth and Competitiveness which led to the creation of INNPulsa Colombia<sup>39</sup>, a program by Bancóldex (The Bank of Foreign Trade) was created in 2012 in an effort to support and promote business hyper-growth, led by innovation throughout the country.

Medellin has an efficient and dynamic local innovation system with Ruta N which is an innovation agency created in 2009 with the mandate to implement the Strategic STI Plan (Science, Technology, and Innovation), which ambitiously aims to transform Medellin into the LATAM capital of innovation. Some of these programs are aimed at actively investing and supporting startups in the region and have been one of the driving force to enable working with existing

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<sup>36</sup> BBVA Research: Colombia Outlook 1Q17, Colombia Outlook 2Q17, Colombia Outlook 3Q17

<sup>37</sup> <http://money.cnn.com/2015/03/13/investing/colombia-tech-silicon-valley>

<sup>38</sup> <https://www.forbes.com/sites/jeanbaptiste/2016/10/03/6-tech-companies-from-colombia-to-watch/#cd7e5096cec5>

<sup>39</sup> <http://scioteca.caf.com/bitstream/handle/123456789/709/CAF%20N19%20V4.pdf?sequence=9&isAllowed=y>



incumbents within several industries (such as finance)<sup>40</sup> allowing greater success for startups in certain sectors.

Having spent a significant time in Colombia specifically Bogota and Medellin, I believe Colombia is well positioned in becoming one of LATAM's most promising tech hubs<sup>41</sup>. Cities such as Bogota and Medellín have robust engineering talent, coupled with research universities (top universities such as Universidad de los Andes, Universidad EAFIT) fostered innovative engineers (particularly software developers) and entrepreneurs who have the vision for the future to craft good apps that help people solve problems with examples such as Rappi, Hogaru, Platzi, FLUVIP, OFI.com.co, Tappsi and Torre (formerly Bunny Inc.), despite the lack of scale one would find in a developed market such as the US and EU.

## Product

### Story

The story of Tpage began when Andrés Gutiérrez and Juan Salcedo (while still at Tappsi) realized that users prefer to pay by card instead of cash (at the time you can only pay via cash) and a problem is that the costs for a credit card machine meant that transactions would be very high, and with each transaction being small, it would mean that those costs would eat into the profit.

When Tpage was created no one in Colombia was thinking about e-commerce at the time. In January 2016, Tpage as an API, with Tappsi and Merqueo as the clients. In just one year they went from two to 100 clients, and the transactions went from COP \$60,000,000 to COP \$450,000,000 (USD ~\$158,718). Within two years since inception, Tpage has achieved +150 clients, including Tappsi, Mi Aguila, Merqueo and Osaki.

Tpage has ambitious plans for FY 17 as they seek to become the payment gateway for 2K+ companies and mobilize about COP \$20B (equivalent to USD \$6.8B) in transactions.

### Tpage Wallet (Billetera Tpage)

The Tpage Wallet (Billetera Tpage) is a multi function mobile application available for both Android and iOS devices. Billetera Tpage allows the process of payments of credit cards and paying electronically (physical locations and online). The key feature for Tpage Wallet is that the app is designed for those who may not have a credit card or even a bank account.

Set to launch October 1, 2017, users will be able to link credit/debit cards (for those who have them) as well as deposit cash into the wallet via Western Union and pay for various payments such as:

- Paying for taxi rides (via Tappsi) where 50K+ taxi drivers in will be able to process payments (both plastic and nonplastic payments), previously Taxi drivers could not process credit cards

<sup>40</sup> [http://www.oecd.org/cfe/leed/OCDE%20LEED%20ESTUDIO%20DE%20POL%C3%8DTICA%20\\_Medellin\\_ES.pdf](http://www.oecd.org/cfe/leed/OCDE%20LEED%20ESTUDIO%20DE%20POL%C3%8DTICA%20_Medellin_ES.pdf)

<sup>41</sup> <https://techcrunch.com/2014/11/22/an-overview-of-colombia-one-of-latin-americas-most-promising-new-tech-hubs>

- Pay for purchases at any of 2.6K+ retail locations of the Almacenes Exito (also known as Grupo Exito which is the largest<sup>42</sup> supermarket chain in LATAM)
- Pay for items/services on Rappi
- Pay for utilities (almost all electric and water)
- Pay for cell phone bills (all 10 cell carriers including Movistar, ETB, Tigo, Claro), as well as TV and internet providers



A mockup of bill payments options - Oct 2017 release (source: Tpaga)

Previously Tpaga developed (Tpaga API) which was both a merchant app and payment gateway that allowed for payment processing for merchants. Based on a previous “how to use the Tpaga video”<sup>43</sup> the app functioned more like Square and Paypal combined.

- The payment gateway originally charged 3.3% commission + COP \$600 for every transaction<sup>44</sup> made.
- Tpaga API processed COP \$3,500,000,000 (USD \$1.2M) in transactions in 2016

Lastly I believe Tpaga’s strategy of adopting a mobile-first approach positions them well to capture millennials in LATAM. The number of physical banks between 1995-2015 declined worldwide, and financial institutions are rethinking their strategies<sup>45</sup>. This secondary effect of Tpaga’s strategy would target roughly +20%<sup>46</sup> of LATAM’s population following insights that.

- 25%<sup>47</sup> of millennials never set foot inside their bank’s branch

<sup>42</sup> <https://frontera.net/news/global-macro/watchlist-10-of-the-largest-supermarkets-in-emerging-markets>

<sup>43</sup> <https://www.youtube.com/watch?v=UDUloERIYGk>

<sup>44</sup> <https://web.archive.org/web/20160717051503/https://tpaga.co>

<sup>45</sup> [http://newsroom.bankofamerica.com/files/press\\_kit/additional/2016\\_BAC\\_Trends\\_in\\_Consumer\\_Mobility\\_Report.pdf](http://newsroom.bankofamerica.com/files/press_kit/additional/2016_BAC_Trends_in_Consumer_Mobility_Report.pdf)

<sup>46</sup> <https://publications.iadb.org/handle/11319/6992>

<sup>47</sup> Digital Banking Report: 2017 Retail Banking Trends and Predictions

- 87%<sup>48</sup> of them prefer mobile banking

## Team

The founders of Tpage are the founders and early employee of Tappsi. Tappsi is one of the most successful startups in Colombia that became the second largest taxi hailing app next to Easy Taxi. Some of Tappsi's accomplishments are:

- Named "World's Most Innovative Companies" in 2015<sup>49</sup> by Fast Company
- Tappsi is Colombia's most downloaded taxi app
- Servicing 1.5x more rides than its closest competitor, including Uber at over 1.5MM+ rides per month

Tappsi has earned a reputation for safety and convenience through market-specific tactics, regulation-friendly practices, and first-of-its-kind platform innovations and features. In late 2015<sup>50</sup> Tappsi joined Brazilian startup Easy Taxi and as a result, Andres joined the board of directors. Because the founders have seen and scaled a business, this critical experience makes them truly unique.

**Andres Gutierrez** (co-founder & CEO) is a serial entrepreneur that is known for being the co-founder and co-CEO of Tappsi. Andres is also on the board of directors for Easy Taxi. Andres started his career with Crown Holdings, Inc. (a company that manufactures food packaging) as a marketing analyst and became a marketing manager. Andres also worked in venture capital at Amazon Venture Capital (Bogota) and previously co-founded Cotiza.co is an online marketplace that aimed to bring an end to the gruesome, time-consuming process of searching, quoting and hiring services before working on Tappsi. Andres received a BBA in business administration from Universidad de Los Andes.

**Juan Salcedo** (co-founder & CPO) is a serial entrepreneur and known for being the co-founder and co-CEO of Tappsi. Juan has a strong technical background as a software engineer who started programming at the age of 10. Juan started building applications for various companies (specifically in payments) at 12 and eventually worked on a startup idea Voice123 with Alex Torrenegra (a well known entrepreneur in Colombia), which became part of Torre Inc. Juan started his career at Top Producer Systems (Move, Inc.) as a project manager in Canada post-college. Juan received a bachelor's in electrical engineering and a master in industrial engineering from Universidad de Los Andes along with participating in the Endeavor Innovation and Growth Program at Stanford University.

**Sebastian Vásquez** (co-founder & CTO) is an engineer that joined Tpage as a co-founder/CTO and previously was a backend developer (Ruby on Rails backend system) at Tappsi. Sebastian also obtained a BA in computer science (equivalent) from Universidad de Antioquia.

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<sup>48</sup> <https://www.jumio.com/2016/11/survey-millennials-mobile-banking>

<sup>49</sup> <https://www.fastcompany.com/company/tappsi>

<sup>50</sup> <https://techcrunch.com/2015/12/15/easy-taxi-tappsi>