



FINANCIAL TELECOM

BUSINESS MODEL LOCAL AGENT
 BOP IMPACT CUSTOMERS, STORE OWNERS
 CONNECTIVITY HIGH SPEED

Barared

Low-cost Telecommunications and Banking Services in Mexico City Help BOP Customers and Mom-and-Pop Shop Owners

A large share of the population in Mexico lacks access to affordable financial and telecommunications services. Created in 2006, Barared is a private network of service booths, equipped with tablets and located in mom-and-pop shops that provide low-cost telecommunications, financial transactions, and other services to the BOP in Mexico City. Barared partners with the storeowners, who earn commissions on operations, and provides them technical and business support. As of January 2014, Barared had set up 1,000 such kiosks across 35 municipalities in Mexico City, where it offers some 70 different services.

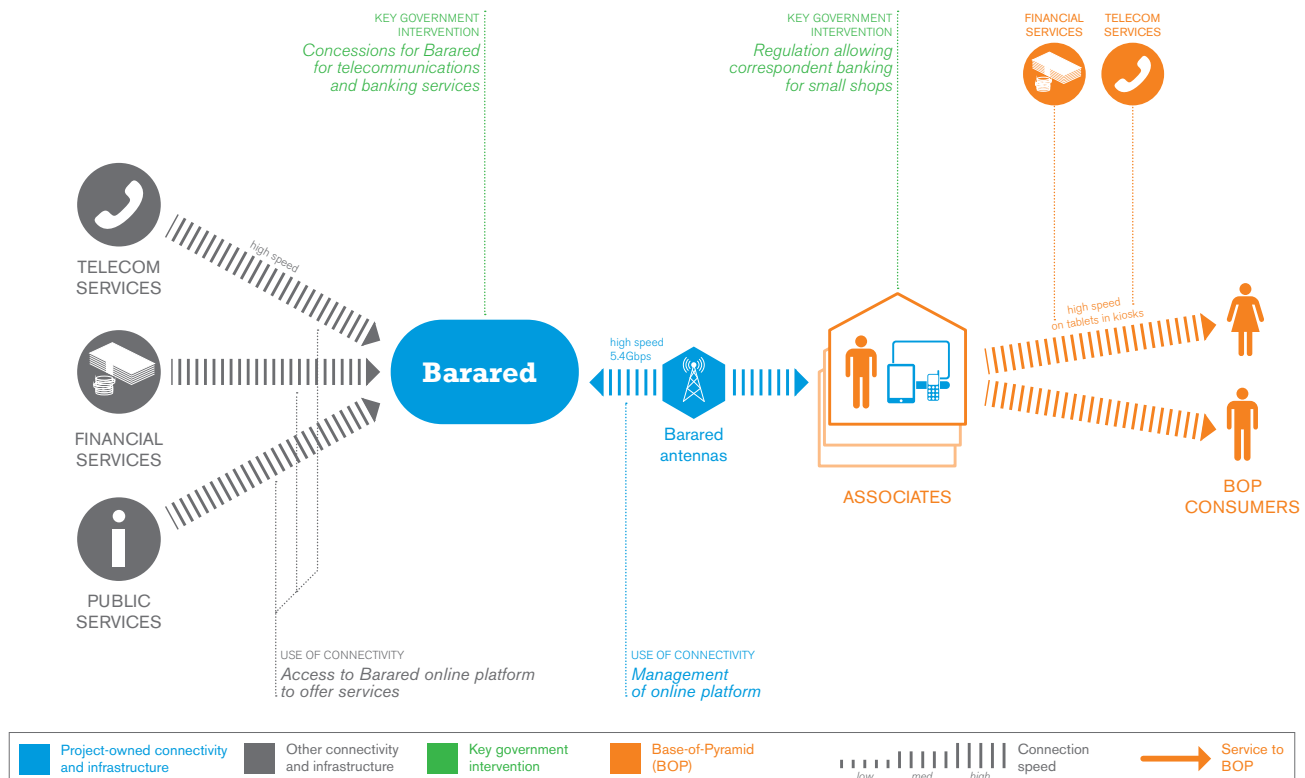
Role of Broadband and Data Connectivity

Providing secure financial transactions and a (growing) range of other services meant Barared needed a fast and secure data network to work on. As connectivity was poor in its targeted neighborhoods, Barared invested in building the necessary broadband infrastructure with Wi-Fi antennas that provide a bandwidth of 5.4 Gbps in a 14-kilometer diameter area. Barared has also been equipping its kiosks with tablets that allow BOP customers to access a wide range of real-time services previously inaccessible to them (or, available but at a much higher cost). These new broadband-enabled services also allow retail owners to significantly increase their revenues and further create local employment.

Key Success Factors

Barared's success was driven by its strategy of diversifying from telecommunications to banking and other services while keeping a simple delivery terminal through the booths it installs in mom-and-pop shops. Today, its large investments in technology and its own network of broadband Wi-Fi antennas are a huge asset that will generate more revenues when Barared starts to provide Internet, voice, and content to local residents. Finally, Barared built an innovative financing model between end-customers, service providers (e.g., banks and telecommunications operators), and associates (retail owners), and offers an attractive value proposition to all of them.

System Diagram: Barared



Implications for Policymakers

Important changes in the regulatory environment in Mexico were critical to enable Barared to operate under this model. In the financial field, authorities allowed and regulated correspondent banking, forbidding any kind of exclusivity. In the telecommunications sector, authorities granted Barared federal concessions, which allowed for building and operating a proprietary network that provides any kind of telecommunications service (television, Internet access, telephony, etc.). Policymakers can help such models emerge by speeding up certification processes, which enables new players on the market to operate and earn revenues faster. Such regulations are key to improving financial inclusion and access to services within the poorest neighborhoods, where considerable potential in economic activity and employment remains to be exploited.

Website

<http://www.barared.mx>



Description of Business Model

History of Organization

Mexican entrepreneur José de Jesús González Macín created Barared in 2006 through the firm Servicios Caseteros, Barared first offered voice and SMS services under the brand Barafón through public telephone booths located in retail outlets in poor neighborhoods in Mexico. As its business was threatened by growth in the mobile market and the decrease of prices in fixed telephony, it progressively diversified the range of services offered thanks to new regulations (Mexican banking authorities allowed correspondent banking in 2009) and new capital (since 2010, IGNIA has invested US\$6.1 million in the business). Barared is now a multi-service network providing a wide menu of products and services from telecommunications to financial transactions. It partners with over 50 client companies, including three banks (Compartamos Banco, Kubo, and Banamex, Mexico's second-largest bank) and 50 non-banking companies (including Telmex, Movistar, Telcel, CFE, and GasNatural). Barared is also partnering with Coca-Cola for advertising and to provide product information. Barared started to develop its network in the poorest slums of East Mexico City (in the Chimalhuacan area), and plans to expand throughout Mexico before replicating in other Latin American countries.

Value proposition

Barared has built an innovative transaction platform between three stakeholders: service providers, retail storeowners (hereafter "associates," acting as intermediaries), and customers, who are mostly from the unbanked BOP population.

Customers: In phone booths (hereafter "kiosks," called *casetas* in Mexico) installed in retail outlets, Barared offers a wide range of self-services: voice calls (local, national, international, and toll-free numbers), cellphone top-ups, bill payments (electricity, water, telephone), email access, Skype videoconferences (which will allow for providing tele-medicine by 2015), and banking services (account deposits, withdrawals, remittances, microloans, micro-insurance). Service providers set their prices, which are among the lowest on the market (e.g., remittances are free and withdrawals cost only 10 MXN, i.e., US\$0.8, versus an average of US\$2.2 through banks). In addition, the lending platform Kubo offers microloans on a 16-week period for a competitive annual interest rate of 37-40 percent (versus 70-80 percent on the market, and 52.6 percent on average for Kubo clients). The average loan amount is US\$92, and after seven months of operations, Kubo has not recorded any defaults. Barared enables customers to access new services at less distance (on average 100 meters away versus 10 kilometers away

previously), saving commuting fees (about US\$2-\$3 per trip) and time (investing on average 10 minutes versus 95 minutes previously). Delivery of services is also more convenient (customers can conduct several types of transactions at a single point and mom and pop stores are open longer hours than bank branches) and safer (financial transactions are cashless).

Associates: Mom and pop shops are often small family businesses with simple offerings and little access to business management tools. Via Barared, associates increase the sustainability of their business through:

- A new range of ~70 services available on tablets installed in the booths by Barared. Associates reach new customers and typically double their revenues, from commissions on operations and other sales generated (50 percent of Barared customers also purchase a non-Barared product).
- Email access and administration apps provided on a personal tablet that help them monitor their business (e.g., management of cash flows, inventory, costs, and revenues).
- Business management support by Barared through training, logistics support, relationships with new suppliers, access to a network, advertising tools, etc.
- Microcredits to expand their business, provided through the Kubo platform. Loans can reach US\$3,850, with annual interest rates of 37-40 percent (depending on the client's risk profile).

Overall, Barared enables associates to increase their revenues and competitiveness on the local market, especially against bigger stores set up in the neighborhood.

Service providers: Barared provides a delivery channel that enables companies to offer services at low cost to new customers. Service providers pay a setup fee, a monthly fee,



and a fee per transaction, which depend on the nature of the service.

Barared's main competitor is Oxxo, the largest chain of convenience stores in Mexico, though Oxxo does not specifically target the BOP. Barared has a strong competitive edge because of its credibility among storeowners.

Technology Aspects

To equip its kiosks with high-speed connectivity, Barared is building its own broadband network of Wi-Fi antennas, which provide a bandwidth of 5.4 Gbps in 10-20 km diameter areas. As of March 2014, Barared had set up 27 antennas covering 70 percent of Mexico City (i.e., about 14 million inhabitants). It plans to add 13 more antennas by end-2014 to reach an additional 10 percent of the population. Wi-Fi is currently only used in mom and pop shops, but Barared plans to start serving resident end-users by end-2014, providing its own service of Internet, voice (fix and mobile), and content. After an in-depth study of the best adapted customer handset, Barared chose the iPad because it is user-friendly, simple (little training is needed), robust, and able to provide numerous functionalities, including videos. Barared provides each shop with two tablets: one for the customers (running service applications inside the kiosk) and one for the associate (running administrative systems for the business). The proprietary information system is based on iOS, and the software was developed jointly by Barared and GoNet, a technology services company. Three sites, located in Monterrey and Mexico City, monitor data security (sites are redundant so that if one server fails, the other two are able to take over). Broadband connectivity has a direct impact on the diversity, price, and quality of the services: it allows for widening the range of available services to customers, lowering costs for service providers and hence their price for the customer (e.g., providing e-banking is a lot cheaper than operating branch offices), and improving service quality, such as transaction speed. Overall, Barared's broadband network helps to better integrate the BOP into economic value chains both as customers (reducing the gap in access to financial transactions and telecommunications in poor neighborhoods) and producers (increasing incomes of BOP mom and pop owners).

Business Design

Operations and distribution: Barared has built a dense network of 1,000 kiosks set up in existing retail outlets (mom and pop shops, pharmacies, corner groceries, etc.), strategically located in areas with a large flow of customers. Four hundred kiosks offer the full range of Barared services, including correspondent banking, while the remaining 600 to date only provide telecommunication services (but will be upgraded to all Barared services by end-2014). Barared aims to set up a kiosk every 600 meters so that customers can access one within 300 meters from home. Management of operations is divided into four regions of Mexico City (North,

South, West, and Ecatepec). In each region, one Team Leader supervises one or two Operations Coaches, who in turn supervise Account Executives. The 14 Account Executives support associates in their businesses (each one visits 35-50 associates once or twice per week, depending on their needs). In addition, an Acquisition Team of 28 people is in charge of recruiting new associates (they are expected to sign up eight associates out of 40 visited per month). A call center handles customer feedback, associate queries, etc.

Staff recruitment and training: To recruit its new associates, the Acquisition Team first collects data and builds maps to identify active mom and pop stores in strategic locations. Then, the team gets in touch with targeted stores (through calls, letters, etc.) before visiting them. The teams assesses the business according to 24 criteria that include business acumen, legal status, banking requirements, inventories, etc. Associates must own their locations or have a leasing contract, and operate the business themselves, or with the help of their family (Barared does not work with chains). The store must also look attractive for customers (sufficient space, walls painted, etc.). On average, Barared recruits one associate out of 20 visited (it aims to recruit one out of 16 visited). As of June 2014, Barared will allow other stores to operate Barared booths, with the exception of banking services, which will remain exclusive for one associate per zone. Once recruited, new associates sign a contract with Barared and receive training. Barared runs five training centers where associates must attend at least 100 hours of training classes per year. Sixty percent of training is in-person classes, while 40 percent is in the field. An Account Executive supports each associate, visiting the store once or twice a week and helping the associate in using the technology and managing and promoting the business.

Marketing: Barared provides marketing tools to associates to promote the services offered: posters, flyers, signs, leaflets, etc. It also conducts street marketing (such as truck advertising), focusing on local campaigns rather than mass media. Its marketing messages highlight the comprehensiveness of the services offered, along with the reliability of the technology. Word-of-mouth is also efficient to acquire new customers.

Business model: Service providers set the customer prices of services typically lower than through other delivery channels. Barared charges service providers fixed and variable fees on transactions, depending on the type of services and the number of customers served. It also charges its associates a one-time membership fee for investing in the technology, and then pays them through commissions per transaction. Overall, 65 percent of Barared revenues come from service providers (among which 70 percent are monthly fees, and 30 percent are setup fees and transaction fees), 20 percent come from commissions on transactions, and 15 percent come from Barared products (voice communications). Associates are in charge of collecting or disbursing the cash

to customers once they complete transactions in the kiosk (an alert goes off on the associate's tablet, letting him/her know that a new operation is pending approval and collection). Transactions operate through associates' own bank accounts. At the beginning of each day, they must have at least US\$192 on their account (there is no cash float threshold, as cash-in happens to be largely superior to cash-out).

Policies and regulations: Barared would not have been able to operate under this model without important changes in Mexican regulations. As Barared was a new model in the financial sector, it took time to overcome government resistance and convince it to adapt its regulations. Barared had to wait 18 months before banking authorities allowed it in 2009 to provide correspondent banking (it is currently the only company operating in that area). The law forbids any kind of exclusivity in correspondent banking, enabling Barared to offer banking services for any bank in its booths. In the telecommunications sector, Barared's relationship with the government was easier, and in 2011 Barared acquired several federal concessions (it has five concessions to date), enabling it to extend its services from voice and data to banking, mobile, and commercial services. Finally, a new regulation now requires mom and pop owners to register with the fiscal administration. Barared will provide support to its associates in the registration process through its tablets.

Other ecosystem aspects: Barared was the first entrant on the correspondent banking market and created new demand among BOP customers. More competitors may enter the market later on, so Barared signed exclusivity agreements with its associates. The telecommunications industry is moving fast and Barared, through its Wi-Fi network, is well positioned to meet the increasing demand for fast connectivity. This attracts new clients, such as Coca-Cola, which is currently partnering with Barared (customers who buy a Coca-Cola product get 15 minute of free Internet). In the long run, Barared plans to become a mobile telecommunications company to meet end-customer needs in Internet, voice (fixed and mobile), and content. A decrease in technology costs and broader access to capital (e.g., with the increase in the number of impact-investing funds) would boost Barared growth.



Evaluation Framework

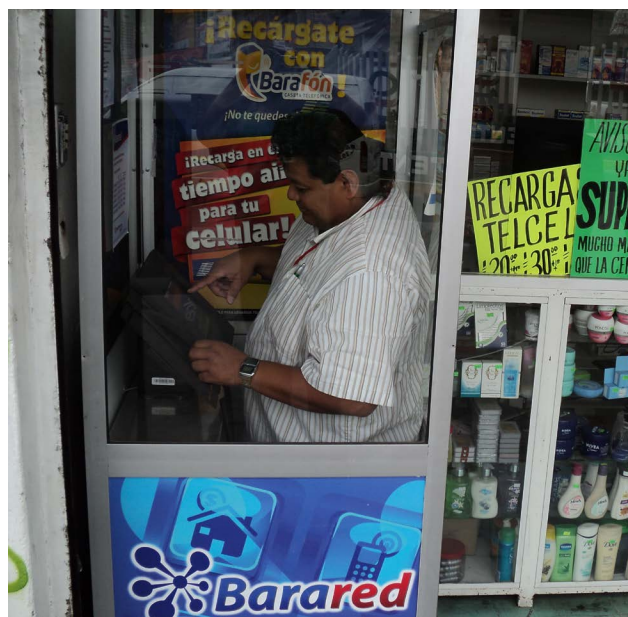
Is the project solving the problem?

Problem Magnitude

A large share of the population in Mexico lacks access to affordable financial and telecommunications services. Due to insufficient competition, broadband penetration is very low at 10.6 percent for fixed broadband subscriptions and 4.6 percent for mobile broadband subscriptions (Broadband Commission, 2012), and consumer prices are high at US\$1.69 per Mbps versus US\$0.51 on average among OECD countries. On the financial side, 57 percent of the population in Mexico does not have access to a banking branch in their municipality.¹ The issue is more critical in BOP neighborhoods. In the Chimalhuacán area, for instance, only two bank branches serve 100,000 adults (versus 14.5 bank branches per 100,000 population in all of Mexico).² To access financial services, the BOP population has to travel long distances (10 km on average in Mexico City, which has its own costs) and carry cash unsafely.

Solution Provided

Tool quality: Telephone booths are combined with robust and easy-to-use tablets, able to support a wide variety of services (it has endured tests from the Mexican SEC, Banamex, and field trials). Software has also undergone various user tests.



1 World Bank, "More than Half of Mexican Households Don't Have a Bank Account," 2 December 2012. <http://www.worldbank.org/en/news/feature/2012/12/12/mexico-more-than-half-of-households-do-not-have-bank-account>.

2 World Bank, Commercial Bank Branches (per 100,000 Adults). <http://data.worldbank.org/indicator/FB.CBK.BRCH.P5>.

Service quality and comprehensiveness: There is a dense network of kiosks accessible within meters from customers' homes, and a wide range of about 70 services, from telecommunications to financial transactions. There are real-time services with reliable technology.

Scale and Reach

Total number of service delivery points: 1,000 kiosks across 35 municipalities of Mexico City (Federal District and its metropolitan area); 400 kiosks provide banking correspondence and 600 offer only telecommunications; 1,700 kiosks in 48 municipalities are planned by end 2014.

Total number of users: Unknown (a Customer Relationship Management Department will be set up in 2014 and will allow for better monitoring this number).

Average number of operations: 35 operations per day per kiosk (10-15 voice calls, 10-12 mobile pop-ups, two bill payments, and seven banking transactions); 1.2 million operations per month. Goal of 45 operations per day by end-2014 (more than 50 stores already register over 100 transactions a day).

Growth rate: 70-80 new associates per month.

Acceptance and Usage

Acceptability: Good fit with residents' habits of accessing products and services locally in their own neighborhoods, especially through mom and pop shops; simple and user-friendly tool with audio/visual help; high flow speed due to broadband.

Usability: Self-use by customers on tablets; user-friendly interface chosen after extensive tests; available support from associates (for help on device and cash management) and Barared call center.

Socio-economic Impact

Social outcomes: Higher social inclusion of the BOP population through access to new or cheaper services, e.g., telecommunications and financial transactions.

Economic impact: Customers save time (1-2 hours) and money (US\$2-\$3 per trip) on transportation and get more economic opportunities through financial services (withdrawals, loans, etc.). Associates increase their income (which typically doubles thanks to Barared) and are likely to create more jobs (more than 4-5 new jobs would be generated in each store).

Gains in efficiency due to technology: Administration applications installed on associates' tablets help them manage such financial matters as cash flow, inventory, and costs and revenues, and thus monitor their business more closely and improve its sustainability. Service providers gain access to new end-customers at low cost thanks to technology.

Economically sustainable?

Barared managed to attract significant private funding (including US\$6.1 million from IGNIA) to cover large investments. The company expects to break even in 2014-2015, generating revenues from fees charged to service providers, commissions on transactions, and sales of communication services. At the local agent level, mom and pop shops typically double their revenues. Barared end-users benefit from lower cost access to telecommunications and financial services closer to home.

At the BOP end-user level:

Initial cost: No initial fee to access Barared kiosks.

Direct cost of services: Prices are set by each service provider. Average cost per transaction: US\$0.5.

Additional indirect cost: Typically no or few transportation costs, since kiosks are available throughout the neighborhood.

Average household income for target beneficiaries: ~US\$400 per month in current areas (targeting segment E); plans to target segment D areas earning ~US\$550 per month.

Cost of best alternatives: A withdrawal is charged US\$1.2 through other delivery points and US\$2.2 through banks, versus only US\$0.8 through Barared (free for Banamex customers). Remittances are typically charged a 4 percent fee on the market (0 percent through Barared).

New income-generating opportunities that will help BOP users pay: Opportunity for customers to take out a loan, which can help generate new income if they invest in economic activity.

Ability to reach the poorest: Over 90 percent of customers and associates are from the BOP.

At the associate level:³

Why Barared is attractive for them: New services and modern equipment attract more in-store traffic and commissions; and additional sales bring in new sources of revenues. Barared kiosks are generally the single largest source of revenue for associates, and their earnings are bolstered further by Barared's continuous introduction of new services.

Expected revenues: Average monthly commissions for storeowners are US\$110; their margins are around 25 percent of service provider payments for voice calls, 6 percent for top-ups, and 50 percent for banking payments. Their overall revenues are typically doubled with commissions plus other purchases made by Barared customers (one of two transactions generates another sale of non-Barared products).

Initial investment: US\$280 (i.e., 10 percent of the total investment cost for Barared, which pays the remaining 90

³ The statements in this section concern only associates offering the entire range of broadband-enabled services.

Scale and BOP Reach

Barared has installed **1,000 service booths** with tablets in retail outlets of Mexico City, providing BOP urban households with low-cost telecommunications and financial services (35 operations per day on average in each booth).

Sustainability

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Replicability

The model has a **high potential for replicability** in dense underserved and underconnected urban areas, provided that adequate regulation and authorizations for correspondent banking are in place.

percent). This is reinvested by Barared in training, support, and services to associates.

Loyalty/churn: 4 percent of associates drop out, in most cases following shop bankruptcy.

At the service-provider level:

Initial cost: Membership fee, depending on type of product.

Direct cost of services: Depending on type of products and number of transactions.

Avoided costs/additional sales from this service: Barared allows service providers to deliver their services at lower cost and reach new customers in poor areas.

At the Barared level:

Total number of people employed at central level: 190.

Revenues and profit: US\$7 million in transactions processed in 2013, including US\$1.4 million in revenues for Barared; US\$2.7 million loss in 2013; expected US\$5.4 million net revenues and positive EBITDA in October 2014.

Total investment required: US\$7 million in investments made by Barared to date.

Initial and ongoing funding: US\$6.1 million invested by IGNIA as of December 2013; remaining from CEO and bank loans.

Scalable?

What have been the key challenges and success factors to date for the project?

Generate the idea and make it go through many regulatory doors: To be able to launch its innovative model, Barared faced strong resistances from banking authorities before being allowed to provide correspondent banking. It finally managed to get proper authorizations and, since 2011, the company has won five federal concessions, which allowed it to extend services from voice to broadband-based banking services.

Convince investors of the company's potential and get the money to grow: Barared has now proved that it positioned itself on the market at the right time, and it might attract new investors.

Gather the required human capital: Barared took time to build a strong team by convincing the right people to leave safe jobs to build the company.

Set up a large broadband network to allow expansion: Barared has been able to expand its business by building an increasing number of Wi-Fi antennas, which was initially challenging in terms of getting the proper bandwidth and quality of service. Barared progressively managed to automatize its building process and is now able to set up a new antenna in one month and a half.

What are key challenges today to scale further?

Ensure quality delivery of services while expanding, with expected costs and margins, making sure that mom and pop owners earn enough money and trust Barared.

Increase the number of transactions by launching and promoting more services.

Choose the right mom and pop owners by building the marketing team capacity to convince them to join.

Replicable at scale?

What are external prerequisites for the project to be replicated in a new country?

Similar retail environment in densely populated areas.

Proper regulation and authorizations for correspondent banking: For instance, Barared could not replicate its model in Argentina (where correspondent banking is forbidden) or in Brazil (where correspondents must be exclusive and offer only the services of one bank).

Additional Information

Exchange rate used for this case study:

1 USD = 13 MXN

Sources:

Barared website: <http://www.barared.mx>

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Contact persons for the project:

José de Jesús González Macín, CEO and Founder, Barared
josegonzalez@barared.mx

Alvaro Rodríguez Averri, CEO, IGNIA
ara@ignia.mx

Ignacio Alvarez López, Investment Officer, IGNIA
ial@ignia.mx

José de Jesús González Macín

Founder & CEO

An Endeavor entrepreneur since 2013, José de Jesús González Macín is the founder and CEO of Barared. Prior to creating the company in 2009, he had 15 years of experience in sales in the telecommunications industry. He holds a MBA from the PanAmerican Institute for High Business Direction and a PhD in Management from the Autonomous University of Nuevo León.

What are your next steps and future plans?

Two of our client companies are pushing to launch Barared in other countries in 2015. But for now we want to deliver quality service for our clients in Mexico City, make our coverage there denser, and go to different cities in this country. We might try to open up in a new country by co-investing with a local entrepreneur as a franchise or by teaching our know-how to build another company there, using our systems to make it more profitable. In Brazil for instance, we could offer a franchise to a local bank.

What recommendations would you give to an entrepreneur willing to replicate your model in Latin America?

First, you have to get the regulatory environment favorable to provide the right services for your end-users, and build your solution supported by the proper concessions. Second, you have to focus on the quality of the products you offer and on ensuring a great user experience, because gaining customers' trust is key for them to use your range of services.

What recommendations would you give to a Latin American policymaker who wants to encourage replication of your model?

The State tries to generate jobs out of large companies, whereas mom and pop shops are the most important job provider in Mexico. However, regulations are not made in any way to support them. Policymakers need to build policies in order to protect those jobs and businesses, otherwise it will become harder and harder for these people to generate income. Passing laws that allow correspondent banking is also key for us to be able to provide our whole range of services. The Mexican law in that regard is fulfilling our need.



What support would you request from a donor?

They could help by supporting the mom and pop shops. For example, they could give some investment capital or help build the network, material and systems that each shop needs to efficiently deliver its services. Donors could provide support directly to mom and pop shops, or through Barared by investing in our company. We are running a very capital-expenditure-intensive business (90 percent of our capital expenditure is invested in networks and in mom and pop shops), as we create an infrastructure that does not exist yet. We need more capital expenditure to grow faster and set up many more antennas; this is an investment donors could take on. Once we have a network we can start connecting the mom and pop owners and generate revenues. Additionally, investing in broadband infrastructure would improve all forms of inclusion, because digital inclusion is a prerequisite for financial inclusion, medical inclusion, etc.