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Betting on Chance in Colombia: How game network operators succeed in providing financial services to the poor while other networks fall behind

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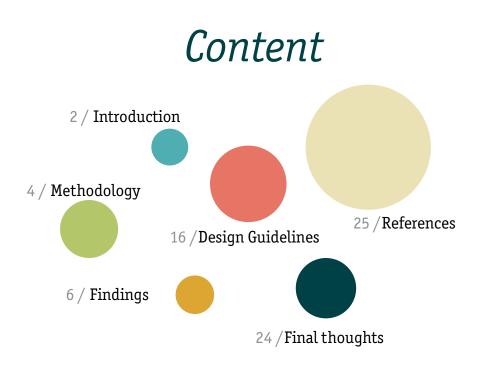
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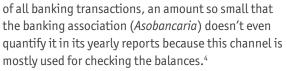
### Introduction

A lthough there are now more cellular phones than inhabitants in Colombia and banks offer mobile banking services at no cost, by and large, the poor prefer to use game networks for conducting their financial transactions.<sup>1</sup> This study explores the underlying factors that motivate the preference for game networks and their services over other platforms. We hope that our findings can contribute towards future innovations that promote financial inclusion.

Game networks have nationwide presence through kiosks and independent sellers—via Point of Sale (POS)—terminals located in city streets and rural areas. Since 2007, these networks have increased the offer of services to the extent that nowadays people can do banking transactions, send remittances, buy insurance, pay utilities, and reload prepaid energy and phone services, all in one spot.

Between 2007 and 2011, *non-banking correspondents* moved around US\$ 7.7 billion.<sup>2</sup> Meanwhile, game networks totaled about US\$ 15.2 billion in remittances alone.<sup>3</sup> In the same time period, mobile banking transactions only represented 0.5%





While in countries such as Kenya, India, and the Philippines, *mobile money services* (MMS) have become a tool for financial inclusion for the poor, in Colombia, cellular phones are mostly used for necessary calls, often through informal "minute-sellers" which offer lower-cost minutes than the prepaid plans. The contrast between the game network's popularity and the sluggish adoption of other digital networks presents an interesting opportunity for identifying key aspects of users' needs that mobile services have failed to address.



Chance is a widely popular betting game in Colombia, especially among the poor. In essence, this game is a more economical version of a lottery —about US\$ 0.25 per bet—in which a person tries to guess two, three, or four of the winning numbers drawn by an official lottery. Although prizes are a lot less than winning a lottery —around US\$ 250—people have more chances of winning.



# Methodology

iven that 51% of Colombian workers have informal jobs and that 70% of them work in sales, we decided to perform in-context interviews targeting 18-25 street sellers in the metropolitan area of Medellin.<sup>5</sup> Using contrastive recruitment, we targeted 21 subjects for an in-depth study of behavioral patterns including attitudes, practices, and strategies for earning, paying, saving, borrowing, and managing money. These activities were compared against the different means and options available in the areas where informal sellers live and work. This comparative analysis helped to reveal the underlying values and factors that determine the preference and uptake of particular services. Although this study was limited to Medellin, the city reflects recurrent conditions of the country's urban areas in terms of poverty, unemployment, and inequality.<sup>6</sup>

Our definition of "informal workers" refers to people whose primary economic objective is to provide basic sustenance to their families rather than capital accumulation per se. People in these conditions have minimal chances of complying with the requirements set by formal financial institutions.<sup>7</sup> With low education levels and minimal employment opportunities, these workers survive by selling fruits, candy, newspapers, and small goods, or by providing services such as polishing shoes, washing cars, or selling cellphone minutes. To generate income, informal workers set up *sale-places* in busy streets, which means they constantly have to struggle for their right to work with official authorities and illegal groups that control the use of public space.







### Findings 1 Proximity, immediacy and simplicity

KEY CONCEPTS: Proximity Simplicity Transparency Ability to set aside Minimal requirements

he business of informal sales relies on the small amounts of cash that people carry in their pockets and that are easily accessible for buying products and services on the go. Not only do street sellers need to have access to small amounts of cash, but also, the gains in cash at the end of the day are used to buy the next day's goods. This situation leaves very little room for using other payment and saving options in the place of cash.

In other words, informal workers that spend all day in streets and public spaces opt for payment and payment channels that allow them to purchase, pay, send, and save in small amounts and without having to leave their workplace. Transaction services that require a bank account are, therefore, not a feasible option. None of our informants found bank accounts useful or valuable given the inefficiency and inconvenience of waiting in line to deposit cash that they would need to withdraw again the next day. Further, most subjects felt that bank account fees often amount to more than what they make in a day's work.

By contrast, game kiosks allow them to send money, buy reloads, and make payments from their workplace without the hidden costs and through a simpler process. Kiosks become a practical tool for setting aside or using available resources as these informal workers earn some income.

Importantly, the wide availability of kiosks, both in cities and small towns, represents a great advantage for almost all subjects who often send money to a close relative living in another location. To send a remittance, users only need to provide identification, phone number, and an address. Since kiosks specialize in small remittances, users do not need to fill out the long forms that banks use to prevent from money laundering and terrorism financing. Furthermore, clerks at kiosks operate the terminals, exchange money, and solve questions so that users are not expected to own or know how to use a specific device.









# 2 Adapting to the users' income cycles

KEY CONCEPTS: Control over resources Adaptable consumption Short-term cycles

products and services in smaller units but at higher prices as a way of keeping open the possibility of using "unassigned" or "uncommitted" money to address unexpected needs. In other words, they prefer to pay a price in order to retain control of resources instead of committing these for future use. This need to keep control over resources, along with the uncertainty of a stable income, also leads many informal workers to avoid long term payment commitments such as credit, rent, stay, and services; they fear that defaulting on payments and facing legal consequences would worsen their current living conditions.

Buying a cellular phone minute, half an hour of Internet time, or a dollar of energy are some of the ways people manage spending and retain control over unspent resources. The value of being in control, of both expenditures and savings, has become more evident with the expanding prepaid energy service offered by *Empresas* Públicas de Medellín (EPM), Medellin's public utilities company. This service is provided to low-income households that have difficulties paying their monthly bills. The company installs an energy counter inside the home which, enabled with a pin-pad, lets the user enter a reload code purchased at game kiosks for as little as one dollar. Users of this service feel that having the option to reload small amounts and monitor their energy use has

enabled them to stay within budget and save resources. This reload system also shows that it is important to offer services that adapt to income patterns of users and gives them control over usage. By adjusting payment cycles to usage patterns, users no longer fall behind payments or get cut from services.

While formal workers receive regular salary payments that allow them to seek longer-term services, informal workers tend to avoid these commitments. Almost all of the subjects tried and failed paying credits for things such as a pair of shoes or a cellular phone and are now excluded from the formal credit sector.





# 3 Reconfigured families with shared responsibilities

KEY CONCEPTS: Family cohesion Shared responsibilities Ability to set aside, re-distribute and share

igration due to displacement and to the search for employment opportunities separates and reconfigures families. Parental absence due to abandoment, separation or death, and the inability to survive from a single income source also affect the roles and responsibilities of family members.

The traditional paternalist family model, whereby the father is the sole provider and an authority figure, is uncommon among informal workers. Instead, families ensure their survival



through other familial arrangements: mothers, children, and older relatives all need to work and contribute to expenses. There are no quotas of fixed economic responsibilities, but each member is expected to help resolve the needs of the family.

Likewise, authority and decision making is no longer a parental role but a shared responsibility. Family members gather their earnings in a common fund. The management and redistribution of that fund is often channeled through the person regarded as the most organized, responsible, and able of the group. Cohesion between family members remains in spite of physical distances, thus making remittances a crucial service for group survival.

In some cases, adapting to social and economic changes turn families into

transient groups. New members join the family while others leave. Domestic partners, single mothers, and relatives who can no longer survive on their own all affect family structures and the roles within the group. In this context, families prefer to use services and tools that allows them to contribute, share, exchange, and transfer value easily among members. While cash is the predominant means for contributing and sharing, service reloads, remittances and staples are also common ways in which members help each other. In the vast majority of cases, money and expense management is a group activity, not an individual action.





# 4 Using alternate channels for saving and borrowing

KEY CONCEPTS: Proximity Immediacy Flexible contribution Simplicity Minimal requirements

he lack of meaningful benefits in formal savings institutions and the high penalties in formal credit institution drive the poor away from banks, and towards informal services.

Even though game networks offer banking services, by serving as non-banking correspondents, informal workers do not use these services. These workers perceive banking services as useless, complex, and costly. Almost all subjects interviewed noted that the amounts of money they handle are so small that a bank account is not worth their while: interest rates do not compensate charges, the security level is unnecessary, and access to a bank account does not guarantee access to credit.

With scarce and unstable income, most informal workers chose to save money outof-sight—in cans, inside clothes, or in the back drawer—to cover occasional expenses or unforeseen needs. However, saving is not a habitual activity since it entails giving up a resource in addition to gaining selfcontrol or discipline. Walking long distances over using public transport or skipping meals are common ways to create saving opportunities. Although keeping a shared fund among family members, these savings are used for covering monthly expenses such as rent or utilities, not for future needs or for improving their livelihood.

Regarding credit or loans, informal workers rely on informal "payday" or "drop-to-drop" loans. These loans, operated mostly by criminal groups, charge 20% daily interest rates and are repaid in a month or less. Many of the subjects interviewed use these loans since they have no access to formal credit. Far from feeling at great personal risk, subjects expressed appreciation for these lending services. Many mentioned that, unlike banks, payday loans offer quick credit evaluation, immediate cash availability, and on-site services. Some even noted that even if they had access to formal credit, they would still prefer payday loans because a bank would take days to process a request and can always reject it.





# 5 Public Space as an intangible asset

KEY CONCEPTS: Recognition Legitimacy Turning intangible assets into formal benefits

he need to access a wide customer base turns many informal workers towards public space as sites that can serve as a workplace and a source of income. Public space is at the center of an informal economy that provides sustenance for informal workers as well as profits for big companies and illegal groups. Obtaining the right to work in a fixed location on a busy street can mean years of struggle and persistence among competitors, public space officials, and illegal groups that charge "protection fees."

The local government issues a limited number of permits for street sellers to keep in balance the rights to work and to move freely. However, the number of street sellers is so high that authorities resort to police operations to confiscate the merchandise and clear streets. According to public space officials, there are 25,000 Public Space Permits but, during the last ten years, the number of street sellers could have doubled.<sup>8</sup> For this reason, a Public Space Permit has a value comparable to commercial real estate or exploitation rights that can be exchanged or traded in the informal market. For example, one street seller stated that he could sell "his place" for about US\$ 2500, while another was offered US\$ 7500 for his permit. None of the subjects with a legal permit would consider selling it for fear of losing their clients and sources of income. They are well aware of the value and protect those permits and places as a means to ensure their livelihoods.

Some established companies have capitalized on the street sellers' ability to reach clients in public spaces. They provide





carts, uniforms, and product training. Street sellers receive an inventory in the morning and return unsold goods, profits, and carts at the end of day. As a street seller mentioned, he has to pay for dry ice and melted popsicles that go unsold. If he loses or damages the cart, the company charges him US\$ 250. He has no health insurance or benefits from the company because he is not an employee.

Regardless of the economic value in the informal market, a Public Space Permit says a lot about its owner: work history, commitment to an activity, established commercial relationships, permanence in a community, and an estimated income. Paradoxically, the lack of documentation to prove those facts prevents informal workers from gaining access to formal services.



### 6 Negotiating complexity to achieve inclusion

KEY CONCEPTS: Simplicity Legitimacy Access Transparency Representation

he growing complexity of urban practices and services can confuse and overwhelm informal workers who, lacking resources and education, give up on resources.

Just obtaining a card for accessing basic healthcare services requires documentation, lines, forms, home visits, and other procedures that are challenging for many people. Applying for state subsidies requires even more processing, sometimes lawsuits. These subsidies do not come regularly or, often times, are suspended without notice. Besides the difficulties in completing the paperwork, users feel poorly treated by state officials and find the state's inefficacy so overwhelming that they often prefer to go without services.

For instance, we encountered an elderly woman who does not know why she stopped receiving a subsidy for the elderly, a single mother who has never heard of state-sponsored child assistance, and two displacement victims who survive without any support from the state. One of the latter sells ice cream from a well-known company that provides him with a cart and a uniform. He supports his family from the sales' commission, but gets no insurance or benefits. This is not an isolated case. In fact, there are a number of established



companies that can take advantage of street sellers through legal means. Such companies make great savings in distribution costs and







offer no protection to informal sellers. Thus not only do informal workers face difficulty negotiating with the formal sector, but also they lack protection, knowledge, or means to defend their rights.

These examples show the need for simplifying processes, facilitating access to information, and providing channels better suited to the means and possibilities of the users. If the state and formal institutions do not provide basic social protection, it is unlikely that informal workers will trust services such as banking or finance since



their experience indicates that these entities are not reliable. Moreover, as soon as a banking and credit institutions ask them to bring forms and documents, informal workers lose hope and start looking for other options: namely, game operators for remittances and payday loans for financing.



## Design Guidelines

he findings presented in the previous section allowed us to structure a set of concepts which, based on the needs and values of informal workers, can serve as guidelines for designing and developing new applications aimed to promote financial inclusion. We have organized these concepts are organized in four categories:

# **1** Creditworthiness

**Build a transaction history as an alternative to a credit history.** Services should provide a summary report that groups and quantifies payments, purchases, and transfers without compromising the privacy of the user. Thus, people who lack a credit history could demonstrate economic or commercial relationships over time.

**Minimize requirements to use services.** Since remittances and credit services are the core needs for informal workers, eligibility and affiliation become





important issues. Therefore, transaction services should not be conditioned to having a bank account. For remittances, game networks only require senders and receivers to provide identification cards and contact information. Game networks allow sending only small amounts, thus eliminating the need to fill out forms for preventing money laundering and terrorism. Although mobile phones can serve as transaction channels, it is important not to limit a service to a particular channel or a device. That way, users who do not feel comfortable using a mobile phone can still make transactions.

**Privilege speed over amounts.** Having immediate access to resources or benefits is key for people with scarce and irregular



income. Unforeseen events, such as a serious illness or even a few days without good sales create financial challenges that cannot wait week-long processes at a credit institution. In those cases, speed becomes an eligibility issue. By focusing on smaller loans, financial services may be able to serve the needs of informal workers more quickly. Likewise, smaller-amount remittances have less legal requirements and paperwork.



# 2 Access

Leverage existing kiosks and point of sales as exchange nodes. For informal workers, especially street sellers, being able to easily exchange and switch between digital value and cash would be crucial for adopting mobile money services. Since existing kiosks and shops usually collect money as part of their services, they would also be ideal places for cashing and receiving payments without having to visit a bank office. This creates an additional benefit because kiosks and shops put the collected money back in circulation, reducing the need to pay for armored transportation.

Offer multiple channels. In a context such as Colombia, a mobile phone is not a strictly personal device and many users change numbers frequently because they buy preloaded SIM cards from whichever network offers lower prices. These reasons, combined with a high mobile phone theft rate, make it difficult to succeed by offering transaction services limited to mobile channels. From this perspective, the main advantage of a service would hinge on using technology as a means to make services available through a variety of channels. A user can then choose to use whichever channel (mobile phone, kiosk, POS terminal) better suits his or her needs according to the situation.

### Keep a clear and transparent fee

structure. Hidden costs, fees, and multiple conditions can confuse and cause distrust among users. To promote the adoption of mobile money services, the fee structure needs to allow easy recall, calculation, and verification of charges. Furthermore, payment and saving features should never be charged because users would simply opt for cash.





# **3** Value

### Develop services based on short cycles.

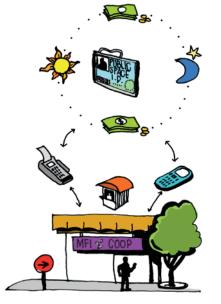
Nowadays, remittances are the most dynamic complementary service offered by game networks. Nonetheless, access to small loans is the most critical need of informal workers. In collaboration with micro-finance institutions, it would be possible to offer short-cycle credit services that would be very useful to informal workers. Kiosks could facilitate both disbursing and paying these loans. This option would provide many advantages over "payday" loans if the application process is simplified. These services would address those critical needs of the poor that informal loans normally target.

**Create out-of-sight saving opportunities.** Even though informal workers do not find real benefits in banking accounts, they do set money aside and try to save small amounts to cover emergencies and unforeseen needs. A service or feature that allows users to set aside and save, for example, the option to save the change after a purchase, a reload, or part of remittance, can be a helpful alternative to bank accounts. Instead of offering interest rates, as banks do, this type of service can offer other incentives for reaching or keeping savings levels. While the users keep the value out of sight but ready to access

and use, the network can count on those unforeseen future transactions.

### Adapt payments to income cycles. To facilitate the payment of monthly obligations, a transaction network could

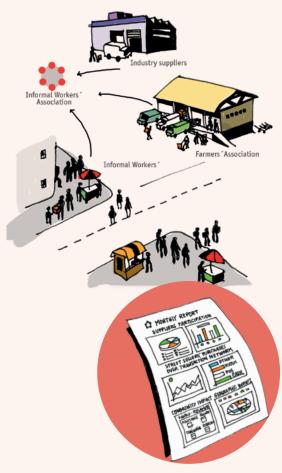
offer advanced partial payments toward future monthly bills. It would work as a provisioning service. For example, a user could make small partial payments towards utilities or rent. By allowing provisions for specific payments, users can get better control over cash and soften the economic impact when the bill arrives. Service providers could also use these provisions or advance payments to offer incentives and rewards for positive behavior.





Serve user groups with shared services.

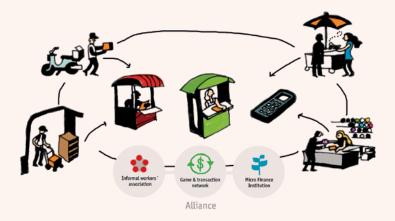
Since most families manage income and expenses as a group, services should allow users to contribute, redistribute, and exchange value among members. As an example, a mother could use contributions recently made by her sons to pay the rent to the landlord. User groups could have some privileges over individual users, such as bigger loans and reduced costs per transferring value.



# 4 Reach

Legitimate informal workers' contribution to the community. Because cash transactions are not usually recorded or tracked, it is difficult to estimate and value the economic role of informal workers in a community. If street sellers' associations had more precise information, they could better visualize the quild's contribution, the number of families that depend on their activity, as well as the relationships with other industries that benefit from informal workers. A digital transactions' network could provide information tools to guilds or associations that would help them gain recognition before the state and the private sector. In addition, these tools could help to develop more targeted programs and measure the success of those initiatives overtime.

Facilitate transactions for joint programs between the community, the state and the private industry. Currently, inclusion programs are limited to providing Public



Space Permits and offer entrepreneurship credits, as long as informal workers have good credit reports and are willing to leave their places of work. These programs do not account for the informal workers' lack of the means to manage entrepreneurial projects that could provide something more than a precarious income. Also, they do not take into consideration the families that depend on a street seller's income. Instead of relocating sellers with individual projects, state programs should focus on promoting work opportunities with their families and the help from the private sector. Thus, initiatives could have a greater impact in the community and provide better work opportunities for the poor. As an example, hot-dog sellers could buy bread and ingredients from small suppliers owned or operated by street seller's families. At the same time, private companies could help structure those supplier's businesses as part of the social responsibility programs. In collaboration with micro-finance institutions, a transaction network could offer specific tools to manage and track transactions among members or affiliated suppliers and sellers. The advantage of these services is that they coordinate and facilitate transactions outside the formal banking system.

## Final thoughts

G ame networks have challenged the traditional banking system in Colombia by offering financial transactions to the poor through alternate channels. Despite the fact that remittances and payments are their main services, game networks are better positioned than banks to develop saving and credit services that fit the needs of informal workers. By developing alliances with micro-finance institutions, game networks could create a complete range of financial and transaction services accessible via kiosks, POS terminals, and mobile phones.

Mobile money services and digital transaction networks could make a significant contribution to financial inclusion in Colombia as long as access is not limited to the use of mobile phones. Places where people can exchange money and get quick assistance with services are still key to ensure the wide adoption of services.

Without a consistent follow-up from the State and appropriate regulations that foster financial inclusion, mobile money services cannot be more nor less inclusive than ATM machines. The dominant position that banks and telecommunication companies can reach in the domestic market can negatively affect the development and availability of financial services to the poor. It is necessary to ensure that regulations allow multiple operators and service providers can compete and offer targeted services to specific groups, especially the poor because they have a limited access to traditional banking and credit resources.

If the regulatory environment becomes more conducive to mobile services, game networks could transform into digital transaction networks that could leverage mobile phone technology, kiosks, and POS terminals to facilitate transactions without depending on the banking sector.

### References

<sup>1</sup>"En Colombia hay 47,8 millones de líneas de celular." Revista Dinero. Noviembre 11, 2011. http://www.dinero.com/negocios/articulo/ en-colombia-478-millones-lineas-celular/140143

<sup>2</sup> "De la Banca a la Titular." Portafolio. Sección: Bancarización. Colombia. Septiembre 16, 2011.

<sup>3</sup> "Giros nacionales casi igualan a remesas; transacciones mueven al año unos 7,2 billones de pesos." *Portafolio*. Sección: Economía. Marzo 2, 2011.

<sup>4</sup> Informe de Inclusión Financiera, junio 2011. Asociación Bancaria y de Entidades Financieras, Asobancaria. Colombia. Octubre, 2011.

<sup>5</sup> "Gobierno busca formalizar a 5,5 millones de trabajadores." Portafolio. Sección: Economía. Octubre 18, 2012. http://www.portafolio.co/economia/ gobierno-busca-formalizar-55-millones-trabaiadores

<sup>6</sup> Ordóñez, Alejandro. 2012. Trabajo digno y decente en Colombia: seguimiento y control preventivo a las políticas públicas. Bogotá: Procuraduría General de la Nación. http:// www.procuraduria.gov.co/portal/media/file/Trabajo digno y decente en Colombia\_ Seguimiento y control preventivo a las políticas públicas(1).pdf

<sup>7</sup> Gómez, Gómez y Borráez, "Apuntes sobre la Economía Informal, Caso Medellín." Semestre Económico, vol. 8, número 15. Enero-junio, 2005, pp. 31-46. Universidad de Medellín. Colombia.

<sup>8</sup> "Disputa por el espacio público." Periferia Prensa. Octubre, 2012. http://www.periferiaprensa.org/index.php/edicion-actual/1080-disputa-por-el-espacio-publico. Authors Ana María Echeverry Villa IMTFI Research Fellow. Research lead, Toca LLC. Master in design planning. Illinois Institute of Technology. Chicago, USA Email: anamariaev@gmail.com

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