Mobile Internet User Experience in Latin America

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ABSTRACT
Latin American has become a very interesting market for mobile Internet solutions and it is important to understand the socio-cultural differences that influence the user experience. In this paper we give an overview of those differences and start a discussion about services that could be appealing for users in that region.

Keywords
Latin America, developing countries, Internet, mobile Internet, user experience, acceptance.

Categories
K.4.0 [Computers and Society] General. H.5.2 [User Interfaces] Theory and methods, User-centered design.

INTRODUCTION

With 308 million Latin Americans [1] owning a mobile phone, this market is growing strongly and highly interesting for getting involved. For any service to succeed it needs to consider certain aspects that make the Latin American user experience (UX) different. In case of mobile web browsing, these aspects can vary from mobile phone usage patterns to social context.

Unlike the welfare societies in developed countries, there are very big differences between the poorest and the richest in Latin America. The upper stratum of society has a standard of living comparable to the one in Europe or North America while people from the lower stratum have a very different perspective: they work hard at unstable jobs, live from day to day and struggle to pay for education and other commodities [2]. Only a small proportion of the population has Internet access from their homes [3], which is usually associated with intellectual work and a higher economic status. In Colombia for example, "[…] big disparities are kept with respect to educational level and user's economical stratus. While just 22 per cent of the population in stratus one and two say to have access to the Internet, it raises up to 67 per cent for those people in stratus five or six". [4].

With respect to mobile phones, the situation is quite different: due to a rapid increase in the number of cell phone offers and many promotional plans where phones where given away when purchasing some other item, 70 percent of the Latin American population uses cellular phones [5]. In this scenario even beggars have a mobile phone, and robberies have significantly decreased.

It is also important to consider that half of the Latin American economy is driven by activities that are not included in the GDP [6]. This so called "informal economy" is characterized by low technology and simple production processes. Some informal economy activities are e.g. home aid with no salary, unpaid family work, casual labor, street vending or artisan production and craftsmanship. For people involved in these types of businesses, mobile phones may be the only way to connect to the web. [5]

Unfortunately the costs for using mobile phones and especially mobile Internet are still extremely high—almost half the population of Latin America must live with less than 1 USD per day and 0.43 percent of the population is living below the poverty line [7]. Mobile phones are mainly used for calling, producing 93% of the revenue compared to only 7% from other services (i.e. instant messaging) [8]. In Colombia, downloading an average web page (130KB) costs around 0.21 USD compared to 0.83 USD for a liter of milk or 0.50 USD for an inner-city bus ride.

ANALYSIS

Based on the "Characteristics of Mobile Browsing User Experience" by Roto [9] we analyzed unique elements about Latin American society. We merged the device and browser, as the differences are not clear for non-expert users.

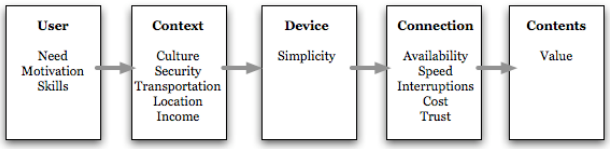

Fig. 1. Characteristics of mobile browsing UX based on Roto [9].

The Context

• **Culture:** The use of products is directly influenced by the culture of the people where they are used. More straightforward than in developed countries, people in Latin America prefer to establish contact with people, listen to music on loudspeakers and avoid being alone. In this sense, mobile solutions for Latin America must focus on entertaining when isolated and inviting to interact with their environment.
• **Language:** It is crucial to remember that the main spoken languages in Latin America are Spanish and Portuguese and speaking any foreign language (mainly English) is very uncommon and even associated with high social status. This means that solutions relying on English will necessarily have acceptance problems.
• **Security:** Clearly less secure than developed countries, using a mobile phone in certain areas can increase the risk of being assaulted. The mobile Internet can increase

security with transportation info to decrease the time waiting on dark and lonely. Location-based solutions to easily report emergencies, to track a person or pet lost or kidnapped could also be interesting.

• **Transportation:** Public transportation is often less comfortable and more crowded, has ill-defined schedules and stops, is noisy, insecure and fare payment is usually done in cash. Real time information faces big technical challenges as systems are owned by different companies and GPS sensors on each and every bus are unrealistic. Furthermore, due to the higher flexibility regarding time it is less important to know the exact time when the next bus will come but rather whether it will arrive at all.

The User

• **Need:** Latin American people are collectivist in nature [11], which makes communication and the flow of information a very important factor. Bringing information and education to the lower stratums of society is a basic need for developing countries. Allowing individuals to produce and publish information helps raising awareness and encouraging discussion about widespread problems such as for example corruption.

• **Motivation:** As mobile phones already have more functionality than most users really want and no proven need for the full Internet on cell phone exist [9], the motivation to seek out simpler solutions for alleviating everyday needs is high. In Latin America prices make the mobile Internet a luxury good so that other solutions are easily preferred. It therefore needs to provide extra value to the user in order to attract customers.

• **Skills:** Latin America has 11% illiteracy, which translates to approximately 39 million adults who cannot read or write [12]. This poses the great challenge to communicate services non-textually or to rely on voice-based interactions. In the long run the improved chances through Internet use may encourage people to learn reading and writing.

The Device

• **Simplicity:** The first contact with the mobile Internet must be very simple and create a positive experience [13]. Phones need to contain installed and configured tools that solve local needs with no set-up configuration required. Those tools must be easy to use and be adapted to the language and literacy needs of the user.

The Connection

• **Availability:** In 1997, over 60% of the people lived in rural areas, yet over 80% of the telephone lines where in urban centers [14]. The wider spread of mobile phones now brings connectivity to rural areas, even if it often is still fragile. The signal coverage can be lost easily when moving and power supply is not always present. Services therefore must be robust to be used online and offline.

• **Cost:** Cost has a significant inhibiting effect on the consumption by the poor. A low volume mobile service basket (25 short calls & 30 SMS per month) makes up more than 5% of the average income of the poor in six key Latin American markets[1]. This explains cost control strategies observed across Latin America: shared use of mobile phones, payphones for outgoing calls and re-sale of lower pre-paid credit [15]. A non-disturbing advertising model may be as interesting as technical server side solutions like Opera Mini [16] to compress web content.

The Contents

Mobile services must provide value to the user, not just a collection of useful features [17]. This value can be based on utility, communication or fun. Looking at the Alexa index [18] for most visited web pages, we see the following services and sites, with a clear distinction between Brazil and the Spanish speaking countries:

- Search engines *(Google, Windows Live, Yahoo!)*
- Online shopping *(Mercadolibre, Deremate, Americanas.com)*
- News and information *(local newspapers, celebrities…)*
- Entertainment *(sports, games, TV content, music, etc. on MSN, Terra and Universo Online, YouTube)*
- Photos and picture rating *(Metroflog, Forolog, Sexyono, Flogao)*
- Communities *(MySpace, hi5, Facebook, Badoo, Orkut)*
- File sharing *(Megaupload, Rapishare)*
- Blogs *(Blogger, Netlog)*

The Internet landscape in Latin America looks different from the one in the developed world. E-banking is not popular, as fear of fraud keeps people from using a system they do not understand, even though banks have been promoting it. Journalists who write online newspapers and blogs, often in their 20's and 30's, are less well respected than their print colleagues and earn less for their work [19]. Entertainment and news sites often hold far more information about employment opportunities, living abroad and migration. The high popularity of picture rating sites can be explained by the collectivist and social nature of the Latin American society.

TOWARDS A SOLUTION

• **Digital Libraries**: Digital libraries are presented by Witten [20] as the killer application for information technology in developing countries. Distributing education and information on politics, health and agriculture or other areas such as disaster relief, indigenous interests or community problems can happen better and cheaper by mobile Internet devices.

• **Getting Things Done**: When paying accounts or presenting papers on banks or governmental offices, it would not be abnormal to have to queue for 30 minutes or more. Facilitating this by using the (mobile) Internet allows users to do something else while queuing. Information on how long one has still left to wait would also improve the experience of those inevitable bureaucratic processes. For this, policies introduced by banks prohibiting cell phones

[1] Argentina, Brazil, Chile, Colombia, Mexico, Peru

for security reasons have to be changed.

• **International Calls**: The high emigration rate of Latin America results in an increased demand for international low-cost phone calls. VoIP provides here the possibility approach the large market with feasible and interesting solutions [21].

• **Football**: Football is the most followed sport throughout the continent. People have a high interest in scores no matter how much there is at stake for their team. Delivering live information on matches could generate a common interest in mobile Internet services.

• **Telenovelas:** Latin-American soap operas are highly popular throughout all ages. They have a strong impact on everyday language by coining terms and expressions. The ability to be kept up-to date on what is happening on one's favorite show could be a driver for the mobile Internet.

• **Location:** Good interactive maps supporting geo-location are still scarce. Providing these is a first step towards location-based services and interactions. The ability to position and track oneself or others may be a touchy topic in terms of privacy but also provide a level of control and security.

CONCLUSIONS

The examples show that in general the requirements for the mobile Internet are not much different in Latin America than anywhere else in the world. People want services that are simple, cheap, and flexible, and provide them with social connectivity, security, and entertainment. The details of these services, however, differ: to appeal to the lower stratum the service must help the users to support themselves and make their lives easier and more secure. Further, it must be localized and accessible to illiterate users. Finally, it must help users to deal with an unreliable infrastructure and must operate in such an environment.

Once these requirements are met, the question of contents for the services can be addressed. Besides the obvious choice of supporting people's lifestyle, there is likely to be a demand for social interaction and entertainment. In the future, topics like recycling and eco-lifestyle may also take their place on the mobile Internet and become an essential part of it. In any case one can assume that the contents broadcast on other media will also boost the mobile Internet, as soon as the user's demands are met by the broadcasting and revenue systems.

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The opinions presented in this paper are not necessarily those of our employers.

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