Challenges and Strategies of Mobile Advertising in India

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Abstract

Advertising is paid communication through a medium in which the sponsor is identified and the message is controlled. Every major medium is used to deliver these messages, including: television, radio, movies, magazines, newspapers, the Internet and today's growing mobile advertising. Advertisements can also be seen on the seats of grocery carts, on the walls of an airport walkway, on the sides of buses, heard in telephone hold messages and in-store PA systems but get paid for reading SMS on our mobile phones .It is the new way of marketing strategy for reaching subscribers. Mobile advertising is the business of encouraging people to buy products and services using the mobile channel as the medium to deliver the advertisement message and innovate the customer centric approach to reach promising customers that includes in the form of Short Message Service, Multimedia Message and Mobile Alerts. In India the growing revolution of mobile advertising has changed the new services which provide to the subscribers from the service providers. It is cost effective way to promote and inform the target customers. It becomes the integral part of the marketing mix. Mobile phone users are rapidly increasing in India, India ranked 3rd in terms of mobile users. Mobile advertising market reaches $ 4 billion in 2008, with 25% growth rate. Apart from these benefits, there are some challenges with the growing revolution of mobile advertising such as reach is not compared to other conventional tools of advertising, message content is limited, visual display is not impactful as TV advertising, language and illiteracy are the major challenges for inter cultural communication in India through mobile advertising. This paper discusses the challenges like languages and illiteracy and also makes strategies for promoting mobile in India.

Keywords: Mobile Phone, Value Added Services, Literacy, Language, English.

1. Introduction

Mobile advertising is the business of encouraging people to buy products and services using the mobile channel as the medium to deliver the advertisement message. In other words we can say, it is an innovative and customer centric approach to reach Indian customers. It includes advertising such as short massage services, multimedia message, games, video and mobile alerts. Mobile advertising can be categorized into two parts. One is push advertising in which customers give their concern for silicate advertisements like news alerts, cricket scores and job alerts while in pull advertising, customers request for daily horoscopes and content of response/reply for the services. In the era of globalization, it is relatively young industry, however it has the potential to revolutionize the way consumer receives and respond the advertising. In a country, mobile phone has been transforms a simple communication device into the many cases and small handled computers. Once Steve Ballmer, Microsoft said "mobile phone has unsurpassed the power of computers as the remote control of our lives".

In developing nations like India, the growing revolution of mobile advertising has changed the new services which provide to the subscribers from the service providers. TRAI estimates India becomes the second largest wireless network in the world,

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overtaking the United States and second only to China, with addition of eight billion subscribers every month. In the recent times, it is cost effective way to promote and inform the target customers. It becomes the integral part of the marketing mix. It is the latest buzz in the field of advertising. Mobile phone users are rapidly increasing in India and it is ranked 3rd mobile users. Mobile advertising market reaches $ 4 billion in 2008, with 25% growth rate. India is in the middle of mobile revolution as the number of mobile subscribers is growing almost 100% every year not only covered in cities but also includes urban, semi urban and rural subscribers are sharing large chunk in its growth. Even top mobile companies like Reliance, Tata, Airtel tapping the low income group people recently FMCG giant Hindustan Lever Limited launched an advertisement campaign of "Fair and Lovely scholarship for women", using short code and instance voice on Reliance Mobile phone network.

2. Mobile Advertising Today

In today's mobile advertising which are additional means of cost subsidization for developing regions, mobile marketers companies use to produce advertisements over mobile screen these are touting the global cell phone market as the new "wild west" for major brands looking to off-set declining returns on print and TV advertising.

Division of Information and media estimates mobile phone advertisements spending in 2007 to more than double from 2006 levels to $1.5 billion. By 2011, market research projects spending of more than $11 billion (Blaut, 2007). As network bandwidth increases and consumer data services proliferate, studies indicate major brands will allocate increased percentages of their ad budgets to mobile marketing programs.

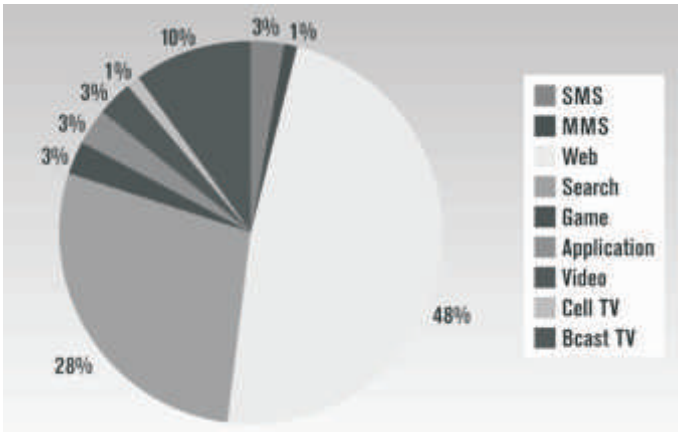
Although mobile ad click-through rates are three to four times that of traditional online banner ads. It is widely understood that mobile customers, even those new to cell phone use, regard their handset as intensely "personal" and do not take well to anything resembling of the various ad delivery models studies indicate the best received are programs wherein end users receive content we can say like games for viewing brief rolling/banner ad spots. As a result, carriers and advertisers alike are looking for improved means to segment and target mobile user demographics, especially in countries with rapidly growing populations like India and China.

Perhaps the single greatest challenge to mobile marketers is determining 'who's on the other end" of a product or service purchase. This problem is offering only traditional content such as ring-tones, games downloads, as few require customer information beyond a service subscription or credit card number. However, unlike traditional content, language instruction programs (if properly designed) can offer valuable insight into the "back-end demographics" of a mobile customer. Statistics indicate that a consumer who downloads a situation-specific phrase kit, e.g., "On the Jobsite," likely shares certain key personal demographics let us say between 18-40 year old male as others who download the same package. In addition, an advertiser may surmise from the language instruction path (base to secondary), what the end-user's native language might be, while the mobile number itself and inherent GPS capability contained within most handsets lends into ascertaining current location and base market. Thus a properly developed language assistance program might provide the four "golden demographics" to a potential advertiser: gender, age, language, and location.

3. The Mobile Advertising Market Opportunity

In business, most mobile advertising takes the form of text messages. But telecoms firms are also beginning to deliver advertisements to handsets alongside video clips, web pages, and music and game downloads, through mobiles that are nifty enough to permit such things. Informal forecasts that annual expenditure will reach $11.4 billion by 2011. Other analysts predict the market will be as big as $20 billion by then. With nearly 3 billion cell phone users in the world, more than 200 million of whom are in the U.S., it's clear that mobile advertising represents a huge opportunity.

Fig 1 : Global Mobile Advertisements Spend Forecast for 2011

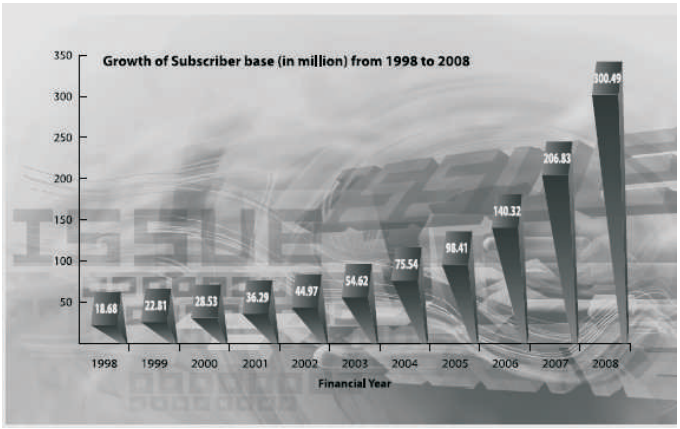


Source: Strategy Analytics

4. Mobile Phones in India

The developments taken place during the year in terms of growth of various kinds of services have been incorporated in this figure to give a flavour of the telecom sector. The total subscriber base (both wireless and wire line) of telecom sector in India during the financial year 2007-08 crossed 300 million mark with 300.49 million scriber as on 31st March 2008. During the

Fig 2 : Growth of Indian Subscribers



Source: *TRAI (Telephone Regulatory Authority of India).

period, India became the second largest wireless network in the world after China by overtaking USA. The growth of subscriber base during the past decade (1998-2008) is indicated below in a figure.

5. Value Added Services

Telecommunications had traditionally been a voice communication service. The services today have moved beyond their fundamental role of voice communications to a spectrum of non-core services, which in telecommunication parlance is called Value-added Service VAS).VAS are provided either directly by the telecom operators themselves or by a third party Value Added Service Provider (VASP). VASP connects to the core equipment of telecom operators through interworking units using protocols like short message peer-to-peer protocol (SMPP), connecting either directly to the short message service centre (SMSC) or to an essaying gateway that allows the telecom operators to have control of the content. Unlike the core or basic services, the VAS has unique characteristics and they relate to other services indifferent ways. They also provide benefits which the core services cannot provide. basically, there are two types of Value Added Services – (I) Value Added Services that stand alone from operational perspective and (ii) Value Added Services provided as an optional service along it voice service. Non-Voice services like SMS are examples of standalone value added services. The Value Added Services presently being provided by the telecom operators are in the following areas:

Table 1 : Different types of VAS

Sl. No.	Type of Value Added Service	Description
1.	News	National, International, Business, Entertainment, Sports News
2.	Finance	Stocks (NSE, BSE, NASDAQ), Forex
3.	Entertainment	Games, Mobile TV and Jokes
4.	Travel	Railways, Airlines
5.	Downloads	Logos, Ringtones, Caller tones etc.
6.	Astrology service	Personal Horoscope / Personalized prediction
7.	Cricket	Cricket scores, Match clippings, cricket commentary
8.	Missed call alters	Subscriber to get a SMS alert of incoming calls when the subscriber's mobile phone is switched off / not reachable and busy
9.	E-mail	E-mail through SMS
10.	Music on demand	Dial a song
11.	Contest	Reality shows
12.	GPRS / WAP	Mobile Internet, Mobile Chat, Mobile TV
13.	MMS	Picture messages, picture clippings
14.	Health	Health tips, Beauty tips
15.	M-commerce	Transactions based services with multiple payment modes and support in multiple domains like WAP, GPRS, SMS, IVR and Web
16.	Miscellaneous	Devotional, Movies & Music, Fun, Navigation etc.

Source : TRAI

Mobile Advertisement Content

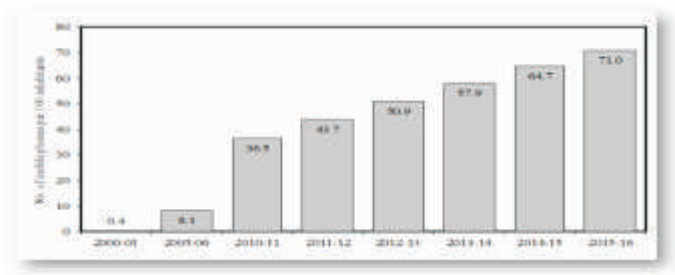
One of the main attractions of any media source is its contents whether contents relating to print as well as electronic, in electronic like the internet is used for broad range of purpose all which can be identification as personal relationship all can be use and can be applied to mobile media and content. By fulfilling all the sections of content are an s provides from mobile can establish as audience of consumer who will be ready to prepare to their services. Games however is small part of a vast download landscape than allows the mobile owner to improve better quality of their handsets and personalise suits to the taste and choice for mobile advertising to be success in business, but they must strive to provide the consumer with the broad range of quality content for advertisements to ensure that all stakeholders can easily benefit from them.

6. Mobile Advertising in India and China

Mobile advertising seems to be an industry that's beginning to explode, chasing the billion subscribers. Some of those in the burgeoning mobile advertising industry, which has been making money mostly through text-driven ads, expect advances in networks and advertising capabilities to reach the hugely exploding mobiles user base in all countries especially India and China where minimum 8 million subscribers are adding every month. Like internet ads, mobile ads work best when they are relevant and useful to the user and created for that particular device. As the most personal electronics device most consumers own, and rarely leave home without, the mobile phone offers the potential for both the greatest choice and greatest convenience in media consumption. The forms that Mobile Advertising takes are in many cases similar to online advertising. There are display units such as text links, banners, and video ads. There are search models that enable text ads to be shown in response to keywords entered on user queries. There is a messaging medium that is much more instantaneous and personal than email.

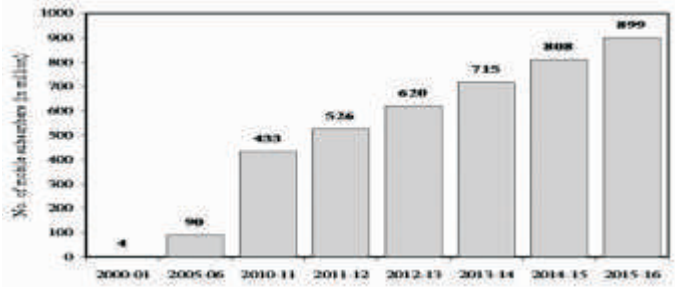
India is widely regarded as the major market for mobile phone growth having over one billion population after China. Less than 40 percent of the country's total area is covered by mobile networks, and fewer than 14 percent of all Indians use mobiles, compared with China's 34 percent. A lack of investment in traditional landline infrastructure translates to only 50 million fixed lines (Info Shop, 2006).

Fig 3 : Growth of mobile density in India



Source: TRAI

Fig 4 : Future Mobile Subscriber Base in India



Source :TRAI

Report of TRAI reveals that the inflection point (the maximum growth rate point) of the curve will occur between 2011-12 and 2012-13 (when mobile-density will be around 45). During the year 2015-16, there will be 71 mobile phones for 100 people in the country. Analysis show that the no. of mobile phones will exceed the no. of people in the country by 2022-23.while It is projected that almost 350 million new mobile subscribers will be added between 2005-06 and 2010-11 and more than 450 million will be added between 2010-11 and 2015-16.

7. Mobile Literacy

In the words of United Nations, illiteracy as a 'person who cannot with understanding both read and write a short simple statement on their everyday life'. It estimates that total number of illiterate adults to be 799 million worldwide, 270 million of which are located in India alone although there are many ways to define literacy as task-literacy can be the ability to complete a particular task, computer-literacy the ability to make basic use of a computer. Indeed non-literacy is not caused by lack of ability but rather by lack of opportunities for learning.

In Indian, markets have limited formal education and consequently lower levels of literacy and numeracy. In the pace of information technology and communication manufacturers of mobile phone who wish to address the communication needs of this potential customer base is: How does the inability to read and write affect the ability of mobile phone users to make effective use of mobile phones?

In India the sole purpose of having mobile phone is to be a status symbol, then holding it up to one's ear and pretending to speak to a remote someone is enough to show off the phone and send a signal to others that you can afford to own a phone and make a call, no textual literacy is required. However the primary benefits of the mobile phone as a tool for personal and convenient synchronous and asynchronous communication, and secondary benefits such as contact management, time keeping, time planning, alarm clock can be extremely challenging for someone with limited mastery of words and numbers and their meanings. Numbers of are ways to learn how to use a device or complete a task. A useful distinction is to think about structured and unstructured means. Unstructured learning includes visual feedback - how it looks; observation - how it behaves and how other people interact with it in the world around them; tactile - how it feels; and aural - how it sounds suppose a farmer from village may never have picked up a mobile phone, but based on advertising and television alone would be able to ascertain the right way to orientate the device to the face. The user may be literate or semi-literate in a language that the phone user interface does not support. In India for example, many people speak languages that are not yet supported by mobile companies like Nokia, Motorola, Samsung, Sony Ericsson etc. language packs. Or the device itself may well have been bought used and is mechanically unreliable, perhaps continuously repaired by one of the many street-repair services. Buttons may be worn out. Alternatively, if the network coverage is weak and oversubscribed to, multiple attempts to call must be made before a connection is made. Calls may be frequently dropped. Whilst each of these factors may not present an insurmountable inconvenience by itself, consider the difficulty in learning how to use something when the experience itself is unpredictable. Therefore, illiteracy and different regional languages are the challenges if, as in India, structured learning and consequently levels of literacy and numeracy are low. In the study of mobile giant had observed that non-literate users lead more predictable lives than more literate counterparts from their studies. There are many reasons, one being is that textually non-literate participants had limited disposable income since they were largely only able to obtain entry level manual work which paid relatively little. Disposable income provides options increasing the range of what is on offer. The second reason can explained by thinking about the acceptable amount of effort required to complete a given task. Choosing a dish from a restaurant menu requires asking the restaurant staff or literate fellow diners what is on offer. Sometimes this is fine, but multiply this task for every time literacy is a barrier and it soon begins to grate on the person to the point where it is easier to simply make the same choices time and again. In a world of words and numbers literacy opens up a world of easier options.

Secondly, textually non-literate users can complete tasks requiring a degree of textual literacy, but these tasks typically take considerably longer to complete. Being asked to fill in a form at work may take a literate person five minutes - whereas for a textually non-literate person it becomes an overnight task involving the availability of a literate relative or friendly neighbour. This is sometimes called 'proximate literacy' - the ability to rely on others who either are sufficiently competent in using the device, or are literate and can take the user through the steps requiring textual understanding. For example, one participant in India sent text messages via her literate daughter and required her daughter to understand the responses. Families or even whole villages may share the use of a single mobile phone. The obvious reason for this is the cost of ownership and use, but also because in societies where fixed line penetration is limited the mobile phone is the first phone available to them.

Thirdly, with sufficient application of intellect and memory, rote learning can be used to memorize the steps needed to carry out most tasks. However, rote learning is not understanding, and when things go wrong, understanding is often required to solve the problem. Remember that the used/shared mobile phone and network may be less reliable, and problems are more likely to arise. It is cleared that non-literate mobile phone users can call, but cannot message or use the address book.

Two basic tasks were easy for almost all our participants to complete: turning on the phone and answering an incoming call. Beyond this, there were various degrees of success. Dialling a local phone number is relatively easy, but problems can occur when there are variations such as dialling a national or international number, or using IP telephone prefixes. Dialling an incorrect number may require starting from the beginning of the task since the cancel button is not always understood.

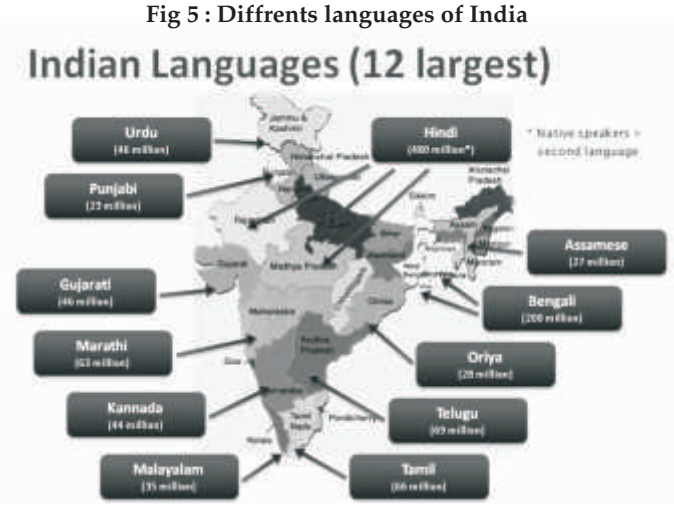
In this paper tried to attempt that once the non-literate user has learned how to make and receive phone calls to their close circle of contacts, their primary reason for owning a mobile phone has largely been met. There is, therefore, less motivation to spend additional time rote learning other features on the phone, unless someone can proactively demonstrate the worth of the features, and spends the time to teach them the steps required to complete the task. So the ability of the mobile advertiser to put contact

information into the most appropriate format significantly supports the user's ability to gather it in one convenient place.

8. Indian Languages use in Mobile Marketing

India population is over one billion India has different regions and cultures where different languages use including english, hindi, bengali, telugu, tamil, urdu etc. Approximately 4% of the population speaks English, representing 35 million persons so it is very important to focus on language solutions for mobile devices.

Fig 5 : Diffrents languages of India



Source: www.google.com/indianlanguages

wireless technology usage in low-income/high-density regions of the world like India that offer reasons as to why mobile language instruction products, subsidized by context-relevant advertising, would proven effective means to off-set traditional costs associated with deploying wireless infrastructure, handset and mobile content. We need to study in this paper why language is a major constraint and plays important role and uses in mobile advertising in India a few would deny English as the language of world commerce, the state of wireless technology. Recently some mobile companies launched some models in language modules and fonts like V-rocs core for text rendering of complex script, V-roc bind –bi directional which support for Urdu and Arabic languages, so these mobile devices are especially designed in font rendering, display solutions as well as understanding of input and output of languages which are useful for mobile advertisers in business

9. Mobile Learning Trends

In India, mobile learning trends with underlying reasons why mobile advertising programs, especially those geared to lower per-capita income customers would help carriers gain traction in developing world markets. There are currently some 2.5 billion mobile users around the world in which India as the second biggest market in the world by 2010. By 2010, analysts predict 90% of the world's population, over 5 billion people, will have mobile phone coverage (Textually, 2006). Most of this growth will occur emerging markets like India and China. As the population in these areas tends to be low-income, high-density in nature with agrarian roots and overall low per capita income, traditional wireless technology (towers, handsets, content) tends to be cost-prohibitive.

9.1 English as global language in Marketing

Over 6,800 languages are currently spoken in the world's 228 countries, with 95% of languages spoken by less than 4%of the world's population (Skutnabb-Kangas, 2002). Interestingly enough, less than 380 million persons speak English as a first language. English is important, however, not for how many people speak it, but for what it is used. English is the major language of international business, diplomacy, and science. English is the official language of most international organizations including UNOs and is the standard for business and government communication, even in countries where it is a minority language. English is the language of maritime communication and international air traffic control, and over eighty percent of computer data is processed and stored in English. Five thousand newspapers (more than half of the newspapers published in the world) are published in English. Important as English may be, it is the world's non-English speaking population that is growing most rapidly. Mandarin Chinese is spoken by over 900 million people, Spanish by nearly 350 million, and variations of Hindi by approximately360 million persons around the world. Based on explosive growth of the Internet, American popular culture primarily movies, music--carries the English language to overseas markets. As a result, North America and Western Europe have (to date) exerted a significant degree of influence over both communications technology and world media on the whole.

At the same time, increased national gross domestic product output within developing nations like India and China has resulted in greater individual per capita income, which in turn leads to increased penetration rates for information and telecommunications technology. Essential to maintaining this high rate of growth is a country's ability to capture, maintain and grow foreign markets for their goods. A primary success factor in this equation is the ability to leverage technology to facilitate improved communication with customers, in particular overseas customers, the majority of which speak English as a shared language of marketing.

Every developing nations like India need to learn English as the global language of marketing. English is a global language used by at least 1.5 billion people in more than 170 countries. Fluency in English opens the door to continuing education, better-paying occupations with multinational corporations or the civil service, improves access to government, health and legal services and of course helpful in business particularly in marketing. These benefits also foster a stronger sense of self esteem and social status. Unfortunately, the school systems in underdeveloped regions face many difficulties, especially with teaching English as a Second Language , secondly significant obstacles stand out: irregular school attendance due to the need for students to work in the fields, homes, etc., and disinterest in schoolwork due to the perceived opportunity costs or lack of benefits of formal schooling (Kam, 2005). Affordable mobile technology, as a delivery medium for English language instruction, might address the above challenges.

The mobile advertising (ads to cell phone users) market is slated to reach $860 million in 2007 and nearly $11 billion by 2009

(Informal, 2006). As network bandwidth increases and consumer data services proliferate, media experts predict major brands will allocate increased percentages of their ad budgets to mobile marketing programs. Although sensitive to consumer backlash against anything other than subscription or opt-in advertising, carriers and advertisers alike are looking for improved means to segment and target mobile user demographics, especially in countries with rapidly growing populations like India. This convergence of growing demand for wireless services, commonality of need for English language capabilities, and a ready supply of global advertisers eager for third screen branding makes for a compelling case as to why wireless carriers and content providers should consider offering mobile language instruction services (subsidized by relevant advertising) as a means to off-set high costs of wireless technology deployment.

10. Identified areas for improvement in mobile advertising

10.1 Improving the phone

A simple mobile phone with a minimal feature set is the short answer. In practice, this means supporting incoming and outgoing calls with a call log adapted for use as an address book. Contact management and text messaging features could be settings that the user has to activate before they appear in the menus (a task that would require a literate person to complete). Menus could have additional iconic support, and hardware buttons other than soft keys should as much as possible be reserved to one button for one task. A two-way rocker button can confuse and may be perceived as one button.

Wherever possible, phone settings should be automated to avoid the need for editing - for example, by default setting the time and date on the phone from the network.

Successful outcomes can be reinforced with audio feedback including for example playing back the number that was dialled prior to calling. Another option is spoken menus, though again this is a non-trivial undertaking given the scale of languages and dialects to support. One radical approach could be to replace the digital contact management tool with a physical/digital hybrid that the user could annotate by pen/pencil.

There are different ways of bringing the benefits of asynchronous communication to non-literate users through services such as Short Audio Messaging or simply leaving a message on an answering machine. For all these solutions, however, accessing in-coming communication is unlikely to be a problem, compared to the complexities of saving, editing, deleting, and replying.

To avoid the social stigma associated with textual non-literacy, the phone should not be noticeably different to other products on the market.

10.2 Improving the ecosystem

The best possible solution is one that raises the population's general level of literacy and numeracy, and the mobile phone may have a role play in this regard. Beyond this - classes on how to use the phone, and creating an environment for risk-free exploration can also raise device competency levels. Low tech solutions can suffice - for example, a poster showing the flow and outcomes of keys tasks may familiarize users with the user interface to the point where they may feel comfortable to explore beyond what they already know. It may also be possible to nurture commercial services that overcome textual barriers such as one for entering contacts into an address book and assigning photos to entries. Solutions such as this can build upon the rich social face to face interaction that already exists.

10.3 Improving the infrastructure

A simple alternative to managing contacts is to press a button and then speak to an operator who connects you to whomever you want to speak to. The same principal applies with messaging and managing personal information. Since Caller ID is already used as an ad-hoc relational contact management tool, why not extend the information that is sent with caller ID, including a photo and auto-build the address book? Although it would be the target of spammers and advertisers, it may be possible to auto-generate phone address book entries.

Personal, convenient, synchronous and asynchronous communication has the potential to benefit everyone. Two features of mobile phones that many users take for granted - text messaging and contact management - present significant but not insurmountable hurdles for textually non-literate users. Solutions to support these users have been proposed on the phone, in the communications ecosystem, and on the carrier network.

11. Conclusions

The intention of this paper was to explore the challenges that face mobile advertising in India although still in its infancy, is growing quickly as global brands begin to grasp the uniquely personal nature of mobile phones as compared to electronic and print media. The wireless technology in developing regions of the world is a function of social and economic infrastructure. A majority of the population in the world's largest countries like India and China. In India Telephone Regulatory Authority of Indias estimated that there will be 71 mobile phones per 100 inhabitants in India at the end of year 2015-16. The number of mobile phones will exceed the number of people in the country by 2022-23. Total mobile phone demand is projected to increase from 90 million in 2005-06 to 433 million in 2010-11 and nearly 900 million in 2015-16 whereas economic challenged people cannot afford traditional desktop computing and Internet access, hence will be largely dependent upon the mobile Web to obtain information and conduct business. Inherent to the mobile advertising business model is language itself: sellers must be able to communicate to buyers in their native tongue and vice-versa in order to close transactions.

It is obvious to know: what better means to enable socially "decentralized" buyers in rural areas to understand a global product offering than by teaching them to communicate in a highly "centralized" language as English as a global language of marketing if they once enabled, this process takes on a decidedly positive, self perpetuating effect: economically challenged people learn to speak English over mobile phone and as a means to advertisers in which buyers can read about new products via advertisements and make purchases with increasing disposable income.

12. References

1. *Base, Kaushik. India's economic report card (July 3, 2006). Internet version*
2. *Mahesh, B. Mobile Advertising 2007 Internet Version*
3. *Gartner (August 24, 2006) Gartner Says Worldwide Mobile Phone Sales Grew 18 percent in the Second Quarter of 2006.*
4. *Hakimzadeh, Shirin (September 27, 2006). 41.9 Million and Counting: A Statistical View of Hispanics at Mid-Decade. Internet version*
5. *Hohenthal, Annika (1994) English in India -- and Who Speaks English to Whom and When? Department of English, University of Turku, Finland. Internet version*
6. *Info Shop (January 2006) India Mobile Market Statistics 2006.*
7. *Mobile-market-india.html Informal Telecoms & Media (September 7, 2006). Press release: Advertisers turn to mobile channel.3*
8. *Internet World Statistics (April 27, 2006). Demographics and Growth of Hispanic Internet Usage in United States.*
9. *Online Publishers Association (March 2007). Going Mobile: An International Study of Content Use and Advertising*
10. *Salaberry, M.R. (2001). The use of technology for second language learning and teaching: A retrospective. The Modern Language Journal,*
11. *Understanding Non Literacy as a barrier to mobile phone communication .Internet Version*
12. *Samuels, J. (2003, August 15). Wireless and handheld devices for language learning. Proceedings of the 19th Annual Conference on Distance Teaching and Learning,*
13. *Textually.Org (October 17, 2006). Up to 90 percent of the world to have mobile phone coverage. Internet version*
14. *Willis, J. 1996. A Framework for Task-Based Learning. Edinburgh, UK: Longman.*
15. *Annual Report of Telephone Regulatory Authority of India 2007-2008.*
16. *Sanjay, K. Singh The diffusion of mobile phone in India/presentation*
17. *www.infoworld.com/article*
18. *www.gartner.com/it/page.jsp*
19. *www.the-infoshop.com*
20. *www.internetworldstats.com*
21. *www.bloomberg.com*
22. *www.news.com.com*
23. *www.trai.gov.in/annualreport*
24. *www.journals.cambridge.org*
25. *www.economist.com/research/articles*
26. *www.nokia.com*
27. *www.economicstimes.com*