

English via Mobiles: Potential M-learners amongst Indian Students and Drivers

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ABSTRACT

Mobile phone penetration in India is currently going through an explosive growth even while growth of internet users is sluggish. Though potential for M-learning is huge, usability research of the technology needs to map the socio-cultural and economic factors for the diverse open user groups. This study uses Depth Interview as a research instrument to study user perceptions about the potential use of mobile phones for learning English. Findings of the study conducted with Students and Drivers indicate the differences that exist between and within occupational groups on areas related to awareness, credibility, choice of delivery methods and flexibility.

Author Keywords

M-learning, India, Students, Drivers, English, Short Messaging Service, Interactive Voice Response

BACKGROUND

According to the Telecom Subscription data of India as on 30th June 2009, the total telephone subscriber base has reached 464.82million out of which wireless subscription is 427.28 million and wire line subscription is 37.54 million (Telecom Regulatory Authority of India[TRAI],2009). While the wireless subscription has seen a remarkable addition of 12.03 million in the single month of June (a growth of rate of 2.63% per month and 48.9% during June 2008- June 2009) wire line subscription during the same period has declined by 0.12 million (TRAI,2009). While mobile telephony has been seeing unprecedented penetration across India, active Internet users in India stands at a figure of 45.3million out of which rural users contribute only 3.3 million(Internet and Mobile Association of India[IAMAI],2009). The annual growth rate of claimed Internet users itself comes to a mere 10 percent (IAMAI, 2009). The relative difference in the growth rates of mobile telephony and internet can be attributed to several reasons. However, the acceptance of mobiles across the length and breadth of India points to the immense opportunity of using this means to make learning possible through mobiles. Though awareness about m-learning and research in the subject is at a very nascent stage, there have been some humble beginnings. IGNOU (Indira Gandhi National Open University) which focuses on Distance Learning has initiated its basic mobile enabled services for all its students spread across the country (Verma, 2008). Nokia has launched a unique initiative called Nokia Life Tools which provides learning opportunities in Agriculture and English. Though such efforts are encouraging, they are still very limited in its spread and working its way towards a viable mobile pedagogy.

PROBLEM STATEMENT

In the Indian scenario where mobile technology is in a rapid growth phase in the semi-urban and rural areas (accounting for the majority of potential English learners), people in general have adopted the wireless technology as a technological tool for their daily need to communicate. However, “widespread acceptance and use of new communication technologies” by Indian populace “does not necessarily point to effectiveness or value in the educational context” (Levy & Kennedy, 2005). The adoption of mobiles as a teaching tool will be a function of “its strengths and limitations both as a technology and as a pedagogical tool, and the social and cultural conditions that surround its use” (Levy & Kennedy, 2005). Dias (as cited in Levy & Kennedy, 2005, p.76) opines that while some users might perceive any use of mobiles for education as unwanted intrusion in their private space, other specific groups of users might welcome it. These indicate the need to conduct research on user perceptions about various aspects of a proposed mobile learning module in India for open user groups.

In this study on user perceptions, ‘Usability’ has been interpreted as the acceptability of the m-learning tool as a reliable, useful, cost effective, and socially compatible platform for learning (Nielsen,1993). The objective was to elicit data that would help in building the basic grounding blocks for an M-learning ecosystem where ‘learning is an engaging experience’ with stress on ‘effectiveness and efficiency’ (Kukluska-Hulme, 2005). It was also to avoid a situation where potential learners reject ‘technologies that are unusable’, drop out of courses and find ‘alternative education and training providers’ (Kukluska-Hulme, 2005).

STUDY OBJECTIVE

This survey was designed to obtain data from open user groups of mobile users falling in the category of students and drivers. The survey was aimed at collecting data on the following areas:

- a. Need for Learning English and reasons behind the need
- b. Awareness about m-learning and prior experience (if any)

- c. Awareness and perceived credibility of learning English through mobile phones.
- d. Willingness to learn English through Mobiles
- e. Choices and opinions about the following different m-learning options for English:
 - 1. SMS
 - 2. SMS + IVR (Interactive Voice Response) for listening
 - 3. SMS + IVR + Live calling for practising speech and testing.
 - 4. Educational Games
- f. Preference about Frequency (Volume and Timing) of SMS, IVR, Live Calling
- g. Comparison of traditional classroom teaching vs. Mobile Learning.
- h. Price Tolerance for an English training module through mobile phones.

RESEARCH METHODOLOGY

Research Instrument

Depth Interview with a set of pre-designed questions and prod questions was the research instrument and documentation of such interviews was carried out through audio-visual recording without any online editing. The primary pre-survey testing with a sample questionnaire revealed that the subject of M-learning is new for the general population and faulty responses came out of misunderstanding the question. Questionnaire as an instrument was therefore found to be unsuitable for this survey. Depth interviews was chosen for its proven ability of exploring new issues and being a better alternative to focus groups while handling individuals who are uncomfortable to speaking in a group.

Sample Profile and Design

Decisions about sampling design were made on the basis of a primary non-documented interaction with members of diverse groups on topics relevant to English learning and mobile usage.

Sample Profile

Two different occupational groups i.e. Students and Drivers (taxis and auto-rickshaws- three wheeler mopeds) were chosen. The rationale behind choosing these two groups out of all possible 'open user groups' was that these two groups represent the two broad ends of the occupational spectrum ranging from the former having relatively lower degree of mobility to the latter having relatively higher degree of mobility. However, both had the commonality in terms of a generic 'need to learn English'.

Sample Size and Location

The survey was conducted with a total sample size of 45 out of which 30 were undergraduate students and 15 were drivers. Out of 30 students, 15 belonged to general stream (arts, commerce and sciences) and 15 belonged to the engineering stream. The sample for undergraduate students was chosen from 4 different educational institutions located in the rural areas in three different districts (Thane, Satara, and Raigad) in the state of Maharashtra, India. This was because the potential need for learning English is higher amongst undergraduate students in the rural settlements of India. However, the resources for such training are extremely scarce. NRS figures (as cited in IAMAI, 2009) show that out of a total rural literate population of 368 million, only 63 million are English-speaking and out of a total urban literate population of 205 million, 77million are English-speaking.

In the case of drivers, random sample was taken from the city of Mumbai (a metro city with population of 11.9 million) and Pune, a metro city with population of 2.5 million (World Gazetteer, n.d.). The reason for selecting drivers from urban background was that Drivers as an occupational class are found in significant numbers in major urban centers and not in the rural settlements. Also, our preliminary interaction revealed that the need for learning English is more visible in the drivers from the urban background as there was a scope for using it with their clients.

METHOD OF ANALYSIS

The responses for questions that were in strict 'Yes' or 'No' were tabulated as Yes and No. Other questions which drew responses that were related to reasoning and explanations were categorized into dominant themes arising out of such responses. The responses and the hypothesized themes were thereafter validated by a team of 5 independent observers who were competent both in the native language of the respondent and English. Any addition or deletion suggested was verified and agreed to by the majority of the observers. Conclusions about the areas mentioned in the research objectives were then drawn from the numerical tabulation of the responses.

FINDINGS

A summary of the findings in the different areas of survey objective is as given below.

Need for English and Prior Experience

- α. Almost all the respondents (93%) across Drivers and Students (only 3 kept silent) were unanimous about the need to learn English. However, there was a clear difference in the reasons for that need. While the dominant reason for learning English amongst students was 'to progress in life' (40%) or 'English is used everywhere' (37%), none of the drivers expressed the reason as 'progress in life'. For the Drivers it was mainly 'good for

business' (47%). However, the reason that 'English is used everywhere' was a dominant theme for both the groups (42%) reflects the overwhelming presence of English in an Indian's life.

- b. Another piece of useful information is that while 30% of the students had prior experience of trying to learn English through self-help books or other means, only 1 out of the 15 drivers had tried to learn English through an individual effort.
- c. The dominant reason for not trying to learn English with a conscious effort was 'No time' for both Students and Drivers.

M-learning: Awareness, Prior Experience and Credibility

57% of the students were confident that mobiles can serve as a teaching device while only 33% of the drivers shared that confidence. This probably came from the fact that 37% of the students had prior experience to some kind of m-learning while none from the drivers had such experience. Amongst the students, the engineering students (73%) were found to be more optimistic about the possibility of M-learning compared to the students from General Stream (40%). This is borne out by the fact that 73% of the engineering students had prior experience of M-learning while none from the general stream of students had any experience. This also probably influenced their relative differences in opting for m-learning if given the choice, as 87% of the Engineering students were very sure about giving it a try while 64% of the general stream students were open about it. However, 100% of the drivers wanted to try it in spite of their lack of prior experience or knowledge about M-learning.

When respondents were asked to suggest ideas on how English can be taught through mobiles (unaided question), 49% suggested SMS and 27% suggested SMS & Live Calls. 22% had no idea to offer. One person suggested only live calls. Within the category of SMS (49%) there were additional ideas of Dictionary, Chatting, Internet Browsers and personal tutors.

Choices about M-learning Options

When respondents were explained the possibility of a English M-Learning module which involved SMS, IVR and Live Calls for Reading, Listening and Speaking respectively, 70% amongst students and 67% amongst Drivers strongly agreed that it would be a better method than just SMS based learning. Though there were no negative responses, the remaining respondents stayed silent which generally bordered to agreement or expressed doubts. The doubts were expressed by 2 respondents through statements like 'It would cost us more to listen and to speak' and 'I think just SMS would be enough and we can do without listening or speaking'. When asked to choose between 'Listening on IVR' and 'Speaking to a Live Caller', 20% opted for Listening and 60% for Speaking. 18% felt that neither of them is necessary and only reading through SMS is enough for their learning.

An interesting aspect about attitude towards educational methodology amongst the general masses in India was revealed when respondents were asked if 'Learning English through educational games in mobiles is possible.' A very strong opposition to the idea was expressed by 47% of the respondents. Only 13% were positively inclined to the idea. Notably, 83% of the positively inclined group was engineering students. 40% of the respondents stayed silent and doubtful. Those who opposed the idea made statements like 'Games are for children...not for adults to learn anything' or 'games are for entertainment and not meant for serious learning'. Those who were optimistic about Educational games expressed ideas like 'learning through games would be interesting and entertaining'.

Preference about Frequency, Volume and Timing of SMS, IVR, Live Calling

SMS

Across both groups (37%), the most preferred volume of SMSs per day is 4-6 SMS. However, the students preferred a higher number of SMSs than the drivers. The most preferred range for the students was 5-6 or above (63% support) and for the drivers was 3-5 (47% support). When asked about the Irritation point for the volume of SMSs, the most common irritation point for 31% of the respondents was for 7-8 SMS.

Preferred time to receive SMSs came in two bands. 43% preferred after 4pm and 26% preferred late evening around 8-9 pm. While the former was mostly the choice for the students the latter was dominated by the choice of the Drivers.

Listening to IVR and Speaking to Live Callers

58% of the respondents who responded to the question on 'how many times in a day they would like to listen to any pre-recorded lessons on IVR' gave a range of 1-3 times. 61% of the respondents who responded to the question on 'how many times they would speak if given the option of speaking to a live caller' indicated a range of 1-3 times.

Taking Tests through mobiles

80% of the respondents said that they would like to take tests over mobile and 9% went against it. 11% stayed silent. 50% preferred to take tests 'once in 7 days', 36% 'once in 15 days' and 14% 'once in 30 days'. There was however a perceptible difference between students and drivers as only 67% of drivers liked the idea of taking tests as against 87% amongst students.

M-learning compared to Classroom learning

20% chose to remain silent on this question. 33% said that Mobile learning would work better for them if they wanted to learn English and they won't miss the classrooms. 47% preferred the classroom training if constraints of time and availability of resources were not there. Responses from individuals who preferred M-learning had 'Anytime anywhere learning' as a recurrent theme along with 'no fear of being ridiculed', 'we are quite responsible' and 'I would concentrate better'. Responses from those who preferred classroom learning made statements like 'Classroom learning is better as the teacher always tells us what to do and will help us if we are stuck somewhere. But in mobile learning the company would send a SMS and if we are unable to understand something then it is up to us to call and find out' or 'reading alone will be boring'. However, only one individual believed that 'm-learning cannot replace classroom learning'.

Price Tolerance

Respondents were asked to indicate the range within which they were willing to spend per month (over and above their current monthly billing) for an English Learning module over mobiles.

27% was ready to spend till Indian Rupees (INR) 100 (approximate US \$ 2), 36% within INR 100-300 (US \$ 2-6), 17% within INR 400-600 (US \$ 8-12) and 11% was ready for spending above INR 600 (US \$ 12).

Limitations of the Research

Constraints of funds and resources forced us to choose a small sample size which might prevent us from drawing broad conclusions about user perceptions on M-learning amongst the two chosen categories. Also, the survey being limited to a particular state of India would limit its scope for conclusions to a particular socio-cultural background in India.

Conclusions and future Research directions

The survey indicates that there is a unanimous demand for learning English amongst 'students in the rural towns of India' and 'Drivers in the metro cities'. However, constraints imposed by one's occupation and available resources expose the limitations of traditional learning and opens up a huge opportunity for m-learning. Irrespective of differences, potential learners accepted the credibility of M-learning and displayed willingness to be an active user of an M-learning module. Issues about learner's 'engagement', 'presence' and 'flexibility' which have been proven as effective criteria for evaluating mobile learning environments (Danaher, Gururajan & Hafeez-Baig, 2009) have been partially addressed. Diversity of responses on potential Frequency of usage for SMSs, preferences regarding listening to IVR, speaking to Live Callers, traditional classroom learning, M-learning and testing options will establish at a primary level that the means of 'engagement', 'presence' and 'flexibility' can be significantly different 'between' and 'within' different occupational categories.

Our ongoing research would strive to validate the above findings with a larger and more representative sample across India. Further research also needs to be done with other occupational categories of open user groups. Responses on attitudes towards educational games create the scope for exploring the prima facie reluctance of Indian adult learners towards accepting educational games as a valid educational tool. The intricacies of designing such games have been earlier displayed by the primary research on designing learning games for Indian children. (Kam et al., 2008).

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