

# **BBC JANALA MOBILE SERVICE: A RESPONSE TO CONTEXT AND USER EXPERIENCE**

Tanya Cotter & Tanim Ashraf (BBC Media Action, Bangladesh)

October 2012

## **Introduction**

The BBC Janala English language learning mobile service launched in Bangladesh in November 2009. In the first three months after launch, there were approximately one million calls to the service and at the end of August 2012 there were around 6.4 million users<sup>1</sup>. Does the success of the BBC Janala mobile service simply lie in understanding the huge demand for English language learning in Bangladesh and recognising that a mobile phone service could fill a gap in the market or do other factors come into play? If so, what are the factors? What lessons have been learned over its life time and what are the implications for similar projects? Finally, what does the future of the BBC Janala mobile service look like in terms of moving to the next level and sustainability? These are the questions this paper will attempt to answer using research collected by BBC Media Action from the initial research/design phase in 2009 to the end of September 2012.

## **English in Action**

English in Action (EIA) is a nine-year programme, launched in 2008, aiming to raise the English language skills of 25 million people in Bangladesh by 2017, enabling them to participate more effectively in economic and social activities. EIA is funded by the UK government and involves a consortium of partners including BMB Mott MacDonald, BBC Media Action (formerly BBC World Service Trust), Open University UK and two national NGOs – Underprivileged Children's Educational Programme (UCEP) and Friends in Village Development Bangladesh (FIVDB). These partners are working together to implement the programme by initiating innovative ways of teaching, learning and using communicative English for different sectors of society, including primary and secondary students, teachers and adult learners.

## **BBC Media Action and BBC Janala**

BBC Media Action is responsible for EIA's adult learning initiative for which the target audience is adults aged 15-45 from the lower socioeconomic classes (with a focus on SEC D)<sup>2</sup> who may or may not

---

<sup>1</sup> BBC Janala Call Details Record from 1 November 2009 to 31 August 2012. Here, user is defined as 'unique cell phone number' which means each unique cell phone number in the record is counted as a user.

<sup>2</sup> Socio-economic class is defined by the profession/occupation and education of the chief wage earner of a household. SEC A (at the top end) through to SEC E.

be in formal education. In 2009, a nationwide baseline survey of 8,300 cable and satellite viewers/mobile phone users revealed (BBC Media Action, 2009):

- 84% of those surveyed viewed learning English as a top priority for the future with 99% reporting that they wanted their children to learn English.
- 64% felt embarrassed to speak English.
- 47% considered English to be too expensive to learn.
- 44% felt that English was difficult to learn.
- 38% felt that learning English is only available to those able to afford it.
- 28% felt unable to learn English.

BBC Media Action harnesses the latest communications and multimedia technology to reduce barriers to learning English by providing the target audience with accessible and affordable English language learning opportunities. In addition, it aims to change perceptions of learning English (e.g. English is difficult to learn) and to support the development of an English language media sector through the innovative use of television, radio, mobile and other platforms. BBC Media Action has been providing English language learning resources under the umbrella brand of BBC Janala on television, mobile and web since November 2009. In May 2010, lessons also started being published in a leading Bangla medium newspaper three times a week and in December 2010, the first of four CDs was launched. In December 2011, the first book of archived newspaper lessons was published and a second book will be launched in October 2012. A programme for community radio has also recently been developed and will be piloted in late 2012.

For all its media outputs, BBC Media Action researchers draw on a wide range of quantitative and qualitative research methods to undertake data collection and analysis. These include:

- formative research into needs and context to guide development.
- pre-testing and piloting of media products to understand audience responses.
- monitoring audience reactions.
- evaluating impact.

The aforementioned nationwide baseline survey carried out in 2009 confirmed that there was a considerable demand for learning English amongst the adult population of Bangladesh. At that time, mobile was the second most accessible media platform, after television. Further research revealed that learning English through a mobile phone in Bangladesh was feasible and had the potential to be a

convenient, affordable and accessible way to learn to English. Today, mobile is the most accessible media with 95.528 million mobile phone subscribers in Bangladesh at the end of August 2012 (BTRC, 2012).

In the initial design phase of the mobile phone service, telecommunications industry experts suggested the fact that an easy to remember short code<sup>3</sup> increases accessibility to a service. The Bangladesh Telecommunications Regulatory Commission (BTRC) approves all services using a short code and it was therefore necessary to approach and explain the purpose of the service to the Commission to get approval. For the service to be accessible to as many people as possible regardless of geographical location, it was also necessary for all six mobile phone operators to agree to provide the service on the same short code and, in order to make it affordable to all, it needed to be offered by all the operators at the same reduced tariff. Discussions with the BTRC and the mobile phone operators resulted in the BBC Janala mobile service being provided by the six mobile phone operators on the same short code at the reduced tariff of 1 taka (0.008 GBP) per minute plus VAT. In October 2010, the mobile phone operators agreed to reduce the tariff by a further 50% to 50 paisa (0.004 GBP) per minute + VAT.

### **The BBC Janala brand and communications**

In order for a new kind of self-directed English language learning service to enter the Bangladeshi market a distinctive brand was needed. With this vision, the project outputs had to attract and provide the target audience with ways and means to access a new kind of learning experience. However, it would be necessary to change perceptions that:

- English is difficult to learn.
- English is expensive to learn.
- English is only for the elite.
- English learning involves the rather joyless task of rote learning and grammar translation (for many rooted in the educational culture of English language learning).

Communications with the target audience had to open up new horizons and new hopes, carrying the brand essence of ‘a life changing experience’. In the design phase of the project, research carried out by BBC Media Action revealed that the target audience for the media outputs was rooted in tradition, but at the same time, had aspirations for a better life (“roots and wings”). Several one to one interviews were held with representatives of the core target audience in order to establish a brand for the English language learning outputs on television, mobile and web. It was found that while there was already an association of the BBC brand with values such as trust and quality, the respondents felt ‘BBC’ needed to be

---

<sup>3</sup> A phone number comprised of only a few digits.

combined with a Bangla word which reflected their own values. Eventually, the audience came up with BBC Janala - 'janala' meaning 'window', and 'jana' also meaning 'to know'. BBC Janala became the brand linking all the media outputs and offering audiences the opportunity to open up their own window on the world. The brand is now well-established in the market and is continuing its journey with the aim of enriching lives through innovative English learning services. A 2012 brand equity study revealed that there are associations of trust, progressiveness and opportunity amongst the regular users and triers of BBC Janala (Quantum Consumer Solutions Ltd. Bangladesh, 2012).

Potential users of any service need to be aware of its existence and that awareness needs to be subsequently converted into action. In the case of the BBC Janala mobile phone service, action means remembering and dialing a given number. The only way this can be achieved is through promotion of the service which for the BBC Janala mobile service has been achieved through television commercials, press layouts, push SMS<sup>4</sup>/ balance check promotions<sup>5</sup> and cross promotion of the mobile service with the television, web, newspaper and other BBC Janala platforms. Once users have dialed the service, it is then necessary for them to be able to access content and want to come back again. Although the BBC Janala mobile service is provided at a significantly reduced tariff, it requires a financial commitment from the low income groups it is trying to target. Therefore, it is crucial that the users can navigate their way to the content and be sufficiently engaged by it to want to make a further financial commitment by returning. Developing an English language learning mobile phone service which matches the target users' behavior and experience and which meets the core target audience's needs is of utmost importance.

### **Usability and functionality**

The method of testing the usability and functionality of the BBC Janala mobile phone service has evolved over time. Four factors have played a key role in finding out the right functionality and ensuring usability of the service for the core target audience. These include:

- knowledge and experience of industry experts.
- rigorous one to one interactions with potential users.
- innovative prototype testing.
- continuous tracking of data.

---

<sup>4</sup> A push SMS is an SMS text message sent by a mobile operator to all its subscribers to give information or promote a service.

<sup>5</sup> Mobile subscribers can dial a given number in order to check their balance. The information requested is sent from the operator and flashes on the subscriber's mobile phone screen. There is also space after the requested information for mobile operators to promote a service, which is a balance check promotion.

During the development stage of the mobile phone service, there was very little secondary data available on the preference of service types, handsets, value added services (VAS)<sup>6</sup>, expenditure pattern on VAS and other facts and figures related to mobile usability and functionality. Therefore, while developing the service, knowledge and expertise from telecommunications industry experts and rigorous one to one interactions with potential users played a significant role.

Smart phones<sup>7</sup> and touch phones were not popular in Bangladesh at that time and the price was too high for people from the lower socioeconomic groups to afford. Feature phones<sup>8</sup> with keypads were what people from the lower socioeconomic classes owned or had to access to. With these handsets, making voice calls and sending/receiving SMS text messages were possible and, as a result, a platform had to be chosen which was accessible from even the most basic phone with only voice call and/or SMS features. Due to its accessibility from any handset and network, an interactive voice response (IVR) platform<sup>9</sup> was chosen. In terms of functionality, IVR was prioritized over SMS for the following reasons:

- People from lower socioeconomic groups in Bangladesh are not text savvy.
- Very few handsets support Bangla SMS. Therefore, SMS needs to be sent through English or through Bangla phonetic English for which there is no standard.
- IVR supports audio recording.
- IVR complements the audio content designed for people from lower SEC through rigorous research.
- SMS is bound by 159 characters and thus a very limited amount of content can be delivered through it.

Telecommunications industry experts suggested that an easy to remember short code increases accessibility to a service. One to one interviews revealed that of the vacant short codes respondents found ‘3000’ the easiest to remember. BBC Janala is an IVR based service and one of the key features of this

---

<sup>6</sup> Value added services (VAS) are “offered by a network or its resellers; generates additional revenue by offering increased benefits to subscribers. Total VAS revenue is calculated from the total of SMS, data-over-cellular and information-service revenue. All other VAS revenue is considered transparent and is included with call charges or subscription revenue” (Gartner, 2012, p.1).

<sup>7</sup> A smart phone has advanced functionality (e.g. the ability to display photos, access the internet and receive/send emails). More modern smart phones (e.g. iPhone and Android based phones) can run third party applications thus providing even more extensive functionality.

<sup>8</sup> A feature phone is enabled with features such as the ability to store and play music or play games, but has less advanced functionality than smart phones.

<sup>9</sup> Users dial a number and listen to pre-recorded prompts which offer different options (IVR menu). Users interact with the keypad of their handsets to select their preferred option in order to access pre-recorded content which may or may not require further interaction with the keypad.

kind of service is the IVR menu. When users dial '3000', they hear an instructional IVR prompt which is a pre-recorded prompt requesting users to press a specific button on their keypads to listen to specific content. In one to one interviews conducted with users from lower socioeconomic classes, it was found that people tend to interact with prompts which are spoken at a slower speed than usual in a low pitch female voice. Additional one to one interviews with potential users revealed that they did not feel comfortable navigating through an IVR menu which meant that an option for directly dialing to content by adding one or two numbers to the short code '3000' was kept in the service.

When BBC Janala was soft launched on 23 October 2009, the '3000' short code was promoted, but it was found that 50% of the callers were dropping during the IVR menu, meaning that only 50% of the callers were actually accessing the learning content. From one to one interviews, there was an indication that users were not comfortable navigating through an IVR menu by pressing buttons and, as a result, the communication of short codes was changed. As there were two content series available through the mobile service at that time, two separate short codes were promoted and thus users were able to access content directly by dialing the specific short code for that series of lessons. The short code '300011' was promoted for the Essential English lesson series and '300012' for the Pronunciation lesson series. Although, users were more likely to remember '3000' and thus the call rate on this short code was much higher, the call access rate was much higher for users directly dialing the short code '300011' or '300012'.

Development of the BBC Janala *Amar Engreji Course* ("My English Course"), which launched in March 2012, brought a new angle to the discovery of usability and functionality of mobile services for people from lower socioeconomic groups. This English course is a one of a kind service; a complete course on a mobile IVR platform which incorporates three-minute pre-recorded bilingual audio lessons with self-evaluation IVR quizzes and SMS summaries. The course is comprised of 24 chapters with each chapter made up of four audio lessons (conversation, vocabulary, grammar and pronunciation), an end of chapter IVR quiz and an optional SMS summary of the learning content for the chapter. It is progressive and has an automatic bookmark feature which remembers a user's last completed lesson and allows them to start from the next lesson when they come back after disconnecting. The idea of a course with such a bookmark feature came from research into audience reactions to the service and was suggested by users.

Initially, three things were tested for the course. Firstly, a prototype registration feature was tested on the actual system. Users successfully handled the registration module and it was found that users were able to handle one question or one issue at a time with the same findings being revealed when the quizzes were

tested. The registration option was later dropped since not only would it have been a barrier for people to go through a registration process before accessing the content, but also because of financial and time constraints.

Secondly, the concept of the course was tested. Instructional prompts and mock lessons were preloaded onto a mobile handset and a playlist was created in such a way that the user would be able to understand how the course worked and how it sounded. From this test, it was found that users wanted to repeat lessons and for this reason an instructional prompt to repeat a lesson before moving on to the next lesson was given. However, at the same time, it was also evident that users would have difficulty in remembering long prompts.

The instructional prompts were refined and tested in another set of one to one interviews. Again, instructional prompts and mock lessons were preloaded onto a mobile phone and a playlist was created so that users could simulate using the course. From this test, three key factors regarding instructional prompts emerged:

- Instructional prompts need to be as precise/concise as possible. For example, press 1 to repeat or press 2 to progress.
- People tend to listen, remember and react to earlier options in an IVR menu. For example, if there are four options in an IVR menu, people either press the first button they are instructed to or remember the first two options only.
- Even if the instructional prompts are repetitive, it takes time for a user to get used to them. From previous one to one interviews with users and from analysis of call records, it was noticed that people tend to drop out when there is too much on the menu to handle. Therefore, an option of automatically taking the user forward when no button is pressed was introduced. However, in order to play the quizzes, users have to press buttons and no solution can be found to resolve this.

Three months before the launch of the course, a pilot was carried with the actual course on 24 representatives of the core target audience and it was found that most of the respondents were comfortable handling the whole package. It can thus be seen that usability and functionality of a service depends on the target users' behavior and the available technology in the market, but this is just one part of a big jigsaw puzzle.

## **Content development**

Developing the content for the BBC Janala mobile service has been just as challenging as designing and developing the functionality and usability. In the same way as functionality testing, the method of testing the content for the BBC Janala mobile service has evolved over time. Factors which have played a key role in developing appropriate and relevant content for people from lower socioeconomic classes in Bangladesh include:

- knowledge and experience of both ELT experts familiar with Bangladeshi learners and the local context and of experts in Mass Communications (Bangla).
- rigorous one to one interactions with potential users.
- innovative prototype testing.
- continuous tracking of data.

One to one interviews with representatives from the core target audience in the initial phase revealed that there were problems with the content which needed addressing. There were issues with regards to:

- the length of the lessons. Individual lessons were too long and one to one interviews identified a preferred duration of 2.5 to 3 minutes due to both cost for the user and ability to recall the lesson.
- the amount of English learning content. This was too great and needed to be reduced. For example, when testing vocabulary lessons, one to one interviews revealed that most users could recall and produce either accurately or partially a short two-line dialogue plus an additional three vocabulary items only.
- the level of the English learning content. This was too high and, as a result, the level of the content was lowered with the majority of lessons now at beginner, elementary and pre-intermediate levels.
- the topics. At times, users were unable to relate to the topics of the lessons and requested content which more closely reflected their daily lives (e.g. the village fair, Bangladeshi festivals and cricket).
- the accents for the delivering the target language. These were originally native speaker British accents, but were unfamiliar to users and were causing problems with comprehension. Moreover, the target audience was more likely to need to communicate in English with non-native speakers of English (especially from neighbouring Asian countries) than with native speakers. For this reason, fluent Bangladeshi speakers of English with accents more familiar to users were introduced.
- the style and tone of the Bangla. This was initially too 'bookish' and not widely accessible resulting in users not being able to follow the lessons and misunderstanding instructions. Copywriters and copyeditors experienced in Bangla for mass communications were brought on

board to develop a style of Bangla more widely accessible to people from the lower socioeconomic classes and in line with brand guidelines.

Over time pre-testing of new content and monitoring audience reactions has evolved into not only testing all the above features of the lessons, but also testing:

- reactions to the voice of the presenter and the characters.
- amount of repetition.
- speed of delivery of both the Bangla and the English.
- ability to recall the target language.
- level of engagement.
- language of encouragement used.
- relevance of the language.
- ability to understand the context in which the language is set.
- level of interaction (e.g. to what extent users answer questions aloud or repeat aloud when requested to do so).

The main challenge in creating a user friendly mobile service is to create a synergy of all components of an m-learning service – brand, functionality, usability and content. The biggest challenge is to integrate all of these into one user friendly package and, at the same time, continue to monitor the service and find out users’ reactions and opinions. The BBC Janala *Amar Engregi Course* was developed directly in response to feedback from users who, rather than lesson series which focused on one aspect of language (e.g. vocabulary) or on different contexts whereby language is used (e.g. English for Work), wanted a complete course package which:

- covered different aspects of language (conversation, vocabulary, grammar and pronunciation).
- included both general English and English for work.
- had an entry and exit point.
- enabled them to move through lessons with clear progression.
- had an in-built tool for self-evaluation and tracking of progress.
- offered some kind of end of course reward (hence the end of course report on completion of all lessons and quizzes).

In a country, where feature phones and voice calls dominate the lower SEC market and where people ‘talk’ more than ‘type’, it is not an easy task to take users through a course as they need to occasionally press buttons in order to repeat lessons, request SMS lesson summaries or complete quizzes. Despite

rigorous pre-testing of the course, from recent telephone interviews conducted on actual users of the mobile course after launch, it was discovered that people want more freedom and interaction in choosing the right content for them. In other words, they want to skip lessons with language they already know or miss out lessons which they do not find relevant to their daily lives and move straight to the quiz. However, this requires more complicated IVR navigation that users are not always comfortable handling. Therefore, even though the service has been refined and modified in response to continuous research into audience reactions and feedback, there are still obstacles to overcome.

### **Additional challenges**

Technology moves quickly and in a nine-year programme, there are bound to be many changes to the kind of technology the core target audience has access to and how users interact with that technology. From BBC Media Action's own research, an IVR based service is still the most appropriate way to deliver content to its core target audience, but this may change in the future. A recent GSMA survey on young people in Ghana, India, Morocco and Uganda identified a similar situation to that of Bangladesh in that "although smart phones and data enabled devices are beginning to make an impact in emerging markets, voice calls remain the most used and favoured service: 85% of young mobile users made voice calls every day, and 67% of respondents believe that calls would be the most desirable method for receiving content such as educational information" (GSMA, 2012, p.5).

Another challenge is to assess to what extent English language competency is actually improving as a result of interaction with the mobile phone service. Research from panel studies (BBC Media Action, 2011) suggests that English skills are being developed, but more comprehensive studies involving greater numbers of users are needed. Following a large scale baseline competency testing of 1,700 viewers of the BBC Janala television game show, *Mojay Mojay Shekha* ("Learning with Fun"), a large scale baseline testing for users of the BBC Janala *Amar Engregi Course* on mobile is now being designed and is due to be carried out at the end of 2012/beginning of 2013.

The BBC Janala mobile phone service is currently donor funded, but the issue of sustainability when funding ends also needs addressing. Recent research into the digital English language teaching (ELT) market in Asia reports that by 2016 ELT digital products could potentially gross \$1.4 billion with mobile operators being major ELT content distributors (Ambient Insight Research, 2012). As the project proceeds, it will be necessary to develop partnerships which will enable BBC Media Action to pass the mobile service to a commercial entity, whilst retaining a focus on the broadest target audience possible.

It can thus be seen that the challenges the BBC mobile phone service faces now and in the future include:

- giving users the freedom they want they without compromising the ease of usability. As mobile technology becomes increasingly more familiar to users and technological skills improve amongst people from lower socioeconomic classes this dilemma may resolve itself.
- monitoring and keeping up to date with the target users' behavior and technology adoption by tapping into industry expertise and knowledge and continuing to interact with users, test prototypes and track data. As users adopt more sophisticated mobile technology (e.g. data enabled devices) and become more familiar with handling mobile technology, the kind of service and content BBC Janala provides will have to respond to this.
- persuading users to keep coming back to the service.
- continuing to monitor why people drop out.
- sustainability of the service when funding ends.

## **Conclusion**

To sum up, in the case of the BBC Janala, there have been many key factors which have contributed towards the success of the service including:

- availability of funds supporting the initial business model.
- formative research which identified a demand to learn English in Bangladesh.
- formative research into the feasibility of a mobile service to satisfy some of the demand.
- developing a strong brand which reflects the values of the core target audience and positioning the brand in the marketplace.
- promotion and cross promotion of the service.
- ongoing relationships with the regulatory commission, mobile operators and experts in the telecommunications sector in Bangladesh.
- rigorous one to one interactions with potential users to test usability, functionality and content and innovative prototype / content testing.
- continuous monitoring of audience reactions and continuous tracking of data.

Sector expertise, strong relationships with the local telecommunications industry, extensive up to date knowledge of the target audience, rigorous user testing and continuous monitoring and tracking of data should be essential ingredients for any mobile service, but especially for services aiming to deliver educational, health or other kinds of content to people from the lower socioeconomic groups of a developing country.

## REFERENCES

- Ambient Insight Research. (2012). Retrieved 3 October 2012 from <http://www.ambientinsight.com/News/Ambient-Insight-2011-2016-Asia-Digital-English-Market.aspx>
- Bangladesh Telecommunication Regulatory Committee (BTRC). (2012). Retrieved 15 September 2012 from <http://www.btrc.gov.bd/index.php/telco-news-archive/509-mobile-phone-subscribers-in-bangladesh-january-2012>
- BBC Media Action (formerly World Service Trust). (2009). *English in Action BBC Janala baseline research synthesis*. Dhaka: BBC Media Action.
- BBC Media Action (formerly World Service Trust). (2010). *BBC Janala mobile content user testing report*. Dhaka: BBC Media Action.
- BBC Media Action (formerly World Service Trust). (2010). *BBC Janala mobile usability and functionality user testing report*. Dhaka: BBC Media Action.
- BBC Media Action (formerly World Service Trust). (2011). *BBC Janala mobile content user testing report*. Dhaka: BBC Media Action.
- BBC Media Action (formerly World Service Trust). (2011). *BBC Janala mobile usability and functionality user testing report*. Dhaka: BBC Media Action.
- BBC Media Action (formerly World Service Trust). (2011). *BBC Janala Mobile Phone Learners Panel Report: How effective is the mobile phone as a tool to learning English?* Dhaka: BBC Media Action.
- BBC Media Action (formerly World Service Trust). (2012). *The impact of English in Action media products: midline survey report*. Dhaka: BBC Media Action.
- Gartner. (2012). Retrieved 3 October 2012 from <http://www.gartner.com/it-glossary/vas-value-added-service/>
- GSMA Development Fund (2012). *Shaping the future: Realising the potential of informal learning through mobile*. London: GSMA.
- Quantum Consumer Solutions Ltd. Bangladesh. (2012). *BBC Janala Brand Equity Study*. Dhaka: Quantum Consumer Solutions Ltd. Bangladesh commissioned by BBC Media Action.