

Multi-language Websites in a Multi-cultural Country: a South African Perspective.

Jean-Paul Van Belle; Ryan Fellstad; Clinton Steele; Wendy van Bakel

Department of Information Systems
University of Cape Town
South Africa
jvbelle@commerce.uct.ac.za

Abstract

This paper reports on an exploratory study done to assess the demand for multi-language websites by South Africans who do not have English as their home language but speak English proficiently. South Africa makes an interesting case study because, in spite of its eleven official languages, English is used as the default language in most business communications and for websites in particular. The unspoken – and empirically unverified – argument appears to be that most educated South Africans are fluent enough in English not to need non-English sites. This myth is soundly debunked in our exploratory study and it can be conjectured that organisations who will cater for the pent-up demand for native language websites should be able to attract a captive audience. It is suggested that the study is of particular interest to other nations who have multiple official languages but where a single language dominates the internet communications, as appears to be the case in many African and a number of Asian countries.

1. Introduction

South Africa is proud of its cultural diversity, which lends the country its unique character and constitutes one of its many strengths. The South African Constitution aims to protect cultural heritage and promote equity by proclaiming eleven official languages and guaranteeing the right to education and information in one's own language of preference.

However, it seems that there are very few South African websites available in languages other than English. In particular, apart from a small number of government sites, virtually no websites are available in the home languages of significant portions of the population, such as Zulu or Xhosa. South Africa still has, with its roughly 2.5 to 3 million internet users, a very low Internet penetration rate of well below 10%. No conclusive statistics are available on the home language of the internet users, although a large proportion of these users can be assumed to have English as a home language. However, this still leaves a huge number of users with another home language and, in the light of the economic empowerment trends, this number is expected to increase dramatically in the next few years.

A number of technical options exist to implement and maintain websites with multiple-language content, but

these generally involve not insignificant resource investments. [1] [2] (This paper does not explore the various technical approaches for multi-language websites.). It was felt that this situation therefore called for an exploratory study of empirical nature to assess whether there really is a demand by non-native English speakers. The focus is to gauge the demand for non-English websites amongst experienced internet users who have a good command of English and who work or study in a predominantly English language environment, but use a different language at home (hereafter referred to, somewhat misleadingly, as “non-English” web-users).

Interestingly, significant work has already been accomplished in the open source software arena on porting internet browser software to interfaces sporting traditional languages such as Zulu and Xhosa. This work will be extended to the OSS office suite. [3]

It must be noted that the emphasis of this research was on the language of the websites. It is acknowledged that there are many other cultural aspects which need to be given attention in interface design, such as the use and meaning of symbols and icons, colours, layouts. It was felt that many of these non-language cultural issues are still in early stages of research. In addition, it is much more straightforward to investigate language than to deal with the various methodological issues relating to empirical constructs for measuring culture.

2. Previous work relating to multi-language websites.

The internet is a medium that transcends traditional geographical boundaries. It is therefore not surprising that considerable research and development has already been devoted to multi-language sites. Not surprisingly, much of this research has been encouraged by the European Commission, although several US agencies and Asian researchers have also looked into this issue.

It is a disconcerting fact that about 85% of websites are in English, even though the non-English web users outnumber their English-speaking counterparts almost two to one (figure 1). [4]

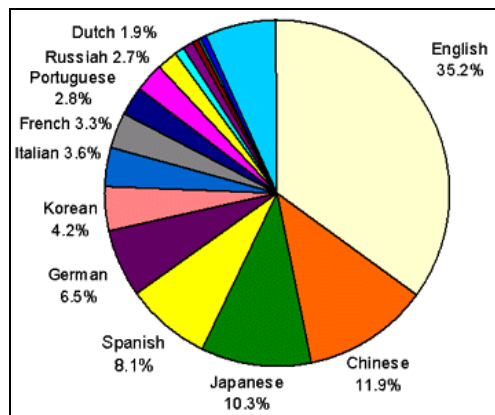


Figure 1: Online Language Populations Mar-03

Designing a site in a language other than English is easy enough. However, there is obviously also an urgent need to investigate the issues related to website design targeting users across different languages i.e. multi-language websites. Three main needs of these users were identified by Van Dijk [5]:

- Users expect the same information and functionality for each of the languages, without a bias towards the dominant language.
- Not only the information but also the instructions for navigating the website should be multi-lingual. The naïve practice of displaying a national flag icon to choose language causes confusion in countries with multiple official languages, such as South Africa.
- The website should be tested by native language speakers to avoid unnecessary language (and sometimes cultural) mistakes.

3. Multi-lingualism in South Africa

Until 1994, South Africa was officially bilingual (English and Afrikaans). Since the formal abolishment of apartheid in 1994, South African language diversity has been guaranteed in the constitution:

“recognising the historically diminished use and status of the indigenous languages of our people, the state must take practical and positive measures to elevate the status and advance the use of these languages”

The aim is clearly to empower all people and not to prejudice people from African origins. So, apart from commercial marketing considerations, there is also a strong moral obligation on South African organisations to establish multilingual websites. On the other hand, it must be recognised that not all of the eleven official languages are spoken equally widely, as shown in figure 2.

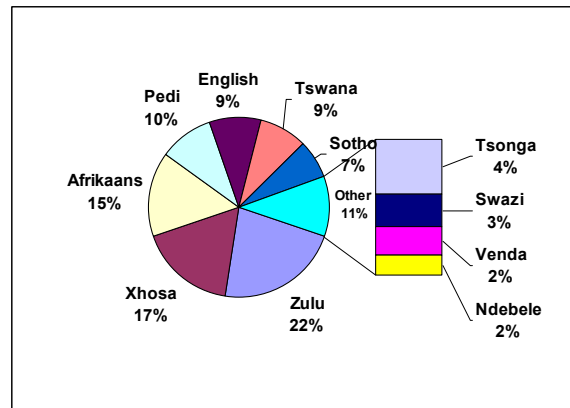


Figure 2: Home language as spoken by % of population

Although the accuracy of these figures is subject to some debate, it can be seen clearly that English is not as dominant a language as it is sometimes perceived to be. Zulu, Xhosa, Afrikaans and Pedi are more predominant as home language than English. [6] [7] It must be reiterated that these figures are not at all representative of the South African internet users. However, apart from any direct commercial advantages, the implementation of multi-language websites in South Africa would stimulate further development of these languages, exploit and promote the multi-cultural diversity of the nation, and ensure more equal access to information and education.

Despite the increased awareness about language and notwithstanding the Constitutional provisions, there is an extreme paucity of indigenous language websites. A non-systematic survey reveals a fair number of Afrikaans-only and mixed Afrikaans/English websites but only a handful websites catering for the other nine official languages. The latter are mainly central and local government sites although a few large parastatal and commercial organisations are beginning to make selected (usually pre-existing static) documents available in other languages. A more systematic census of these websites remains a useful research challenge, although it is probably a fast moving target.

4. Research approach

As seen above, there are strong ethical motivations and public relation aspects to providing multi-language websites in South Africa. However, it is believed that website providers will embark on the development of multi-language website much more readily if actual demand from existing internet users can be demonstrated.

The following research hypothesis was therefore suggested.

H₀: There is a demand for multi-language websites from current internet users whose speak English well but whose home-language is not English.

A proper full-scale survey was beyond the means of a small research effort, but it was felt that a fully representative survey should in any case only be considered after an exploratory survey has demonstrated

at least some initial support for the hypothesis and piloted some of the methodological issues.

It was decided to use a convenience sampling frame and two samples were drawn: one from a life insurance company, Momentum Life, in Cape Town, and the other first-year Information Systems students in the Commerce Faculty of the University of Cape Town (UCT). The language of conduct in both organisations is English. Since the official languages are not symmetrically distributed across provinces, this introduces a definite bias in the sample but it was felt that the exploratory nature of the research justified this pragmatic decision. In the end, 100 questionnaires were distributed in the commercial company Momentum Life and 280 to first year information systems students.

In the end, 48 completed questionnaires were returned from Momentum Life of which 38 were usable, and 97 from UCT, of which 87 were usable. This led to a total of 125 usable responses i.e. a net response rate of just under 33%.

No existing instrument was found so a new instrument was designed. First, a number of issues were identified from the literature survey. These were written down and served as the basis for the formulation of the initial questions. These were supplemented by other relevant questions in a iterative manner. Finally, a focus group session with 10 participants was asked to complete the pilot questionnaire while at the same time discussing their thoughts on various topics raised by the researchers. This resulted in an interactive discussion which was used to finalize the final questionnaire. Considerable effort was made not to give offence by clearly stipulating the ultimate objectives of the research, although native-English speakers were asked not to complete the questionnaire. People who did not use any of the other 10 official languages were, however, not prejudiced and could complete the questionnaire.

Although some of the questions were factual, most of the questions sampled opinions, beliefs and attitudes. No conceptual or theoretical constructs were employed so the questionnaire was not statistically validated. The usual confidentiality principles were observed and the normal reservations about the deficiencies of empirical sampling methods apply.

5. Sample characteristics and representativeness.

Of the 125 respondents, the male-female ratio was 52%/48%. Because 87 usable questionnaires were returned by students, almost two-thirds (63.2%) were between 18 and 25 years of age. Only 8.8% of respondents were above 35% of age. 10% of respondents were foreigners and a further 3% permanent resident non-citizens.

Only 8% of respondents declined to answer the optional race question, despite its sensitive nature. Of those who answered the question, 68% of respondents voluntarily identified themselves as black, 15% as coloured,

15% as white and 3% as Asian.

In order to qualify for the research, respondents had to access the internet at least once a month, although 49% accessed the internet daily and a further 42% at least once or twice per week. Not surprisingly, 90% rated their knowledge of the Internet average or above average.

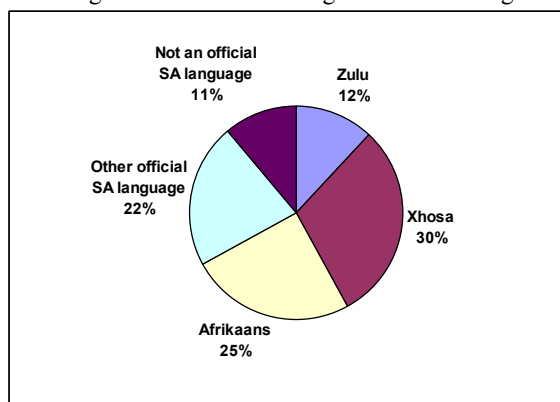


Figure 3: Home Language of Respondents

The three major home languages, comprising a full 77% of the respondents, were Xhosa, Afrikaans and Zulu. 11% of respondents have a home language which is not one of the eleven national South African languages. This is testimony to the fact that some workers and students originate from other African, European or Asian countries. The other 22% represent the 7 remaining national languages, each claiming less than 5%. Because of the predominance of Xhosa and Afrikaans speakers, most results will be presented those two sub-groups as well as for the entire group. It must be noted that especially the “Afrikaans” speakers are not likely to represent a single homogenous cultural group.

Extremely important for this research was the English fluency level of the respondents. 96% of respondents considered themselves fluent English speakers: they rated their own fluency average (34%), above average (30%) or excellent (32%). Two important conclusions can be drawn from this statistic. Firstly, there should not have been a problem with the understanding and interpretation of the questionnaire. Secondly, the understanding of English is sufficient to ensure that respondents can, in principle, navigate English websites.

It is of interest that most of the respondents are, in fact, multilingual. Of all respondents, 42% spoke Afrikaans, 39% spoke Xhosa and 36% Zulu. For instance, of all native Xhosa speakers, 52% also spoke Zulu and 21% spoke Afrikaans in addition to English.

Overall, it appears that the sample is fairly representative of the sampling frame and displays the desired characteristics for purposes of the research. However, it must be borne in mind that the sampling frame is biased in terms of geographical region, which implies a bias towards Xhosa and Afrikaans speakers, as well as exhibiting a bias in terms of the relatively young average age of the respondents.

6. Analysis of Results

6.1 Quality and lack of multi-language websites.

Respondents were asked to indicate which problems they experienced with non-English websites as compared to English websites. Although a very few people ticked specific issues (lack of content, poor usability, language errors, outdated information, poor graphics, poor translation), 78% said they had never tried to access non-English sites. Unfortunately, it is not entirely clear whether the 16% of respondents who experienced “no problems” with non-English sites did in fact access such sites. This points towards a severe dearth of non-English sites and appears to skew the value of some of the questions that follow by replacing actual user experiences with hypothesized opinions.

One particular quality concern in respect of multi-language sites is whether the translated website contains the same information. It appears that, for those multi-language sites that do exist, there appears to be quite a few problems in terms of quality or overall standard, with 25% responding “no” against a 17% responding “yes” (58% didn’t know). Although there is no statistically significant difference between the different language groups, only 9% the Afrikaans group responded “yes”. This may be explained by the fact that some Afrikaans speakers are historically very proud of their language (they have even erected a language monument) and may be quite sensitive about their language in the light of the recent “demotion” of the language from one of two to one of 11 national languages. Although this is speculation, this sensitivity seems to fit differences in the other questions as well.

6.2 Need for multi-language sites.

When asked if they would change the language of a website to their home language, if such an option is/were available, the vast majority of respondents reacted positively i.e. said they did so all the time, sometimes, or would if such an option was possible. However, this large proportion of 53% who would if it were possible, is perhaps the strongest indication of the pent-up demand for multi-language websites.

Table 1: if there’s an option to change the website language – do you do this?

Yes	No	Sometimes	Would if possible
10%	27%	10%	53%

Most interestingly, the proportion of Xhosa speakers who would do so (8%), is far less than that of the Afrikaans speakers, where a full 23% would change to Afrikaans if they could, although this difference is again not statistically significant (when using the χ^2 -test).

Survey participants were asked whether they had experienced any problems surfing the internet due to the fact that websites were predominantly in English and not available in their home language. This appeared to be the case for a full three quarters of the respondents. Overall, one quarter (26%) answered “Yes” and a further half (50%) answered “Sometimes”. Only 24% said that they did not experience such problems.

6.3 Differentiation of multi-language use.

In a society where multiple languages are spoken, the home language cannot always be used for communication. In this case, the Internet must be seen as just another communication channel. Therefore, it is interesting to check to what extent the various media and communication channels are dominated by individual’s home language. Note that it must be borne in mind that in a number of cases, the alternative language used may not necessarily be English. Participants were asked to rank their use of certain communications and media channels in their home language. Figure 4 summarizes the results for those who selected that they performed the given activities in their home language either “Often” or “Always”.

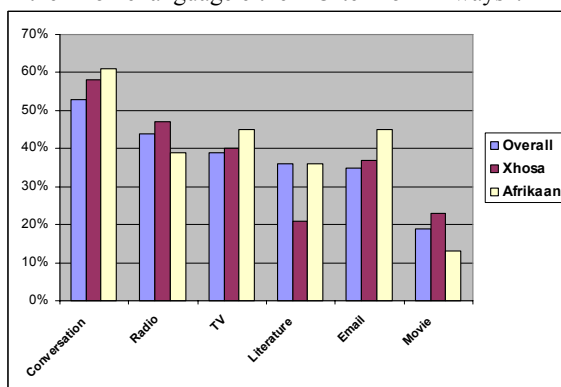


Figure 4: Use of media in home language.

Although, as might be expected, conversation is the highest with 53%, and none of the others are used by more than 50% of the sample. The fact that 47% of respondents only engages in conversation in their home language “sometimes” or even less frequently, testifies to the multi-cultural nature of interactions in South Africa, as well as the dominance of English in the work/study environment.

On the other hand, it is evident that the participants are becoming used to channels being available in their home language. For instance, 47% of the Xhosa speakers indicated that they listened to Xhosa radio stations, despite the fact that English broadcasts outweigh those in Xhosa by a huge margin. Even the least used facility, movies, has just short of 20% of the participants watching in their home language.

6.4 Desired types of home language websites.

From the open-ended feedback, and as anyone who has operated in multi-language environments knows, not all types of information lend themselves equally well for translation or digestion in home language. Financial, technology or work-related information is more likely to be acceptable in English than, say news items. This is reflected in the rankings of which internet facilities respondents would like to see available in their home language (this was a multiple response item).

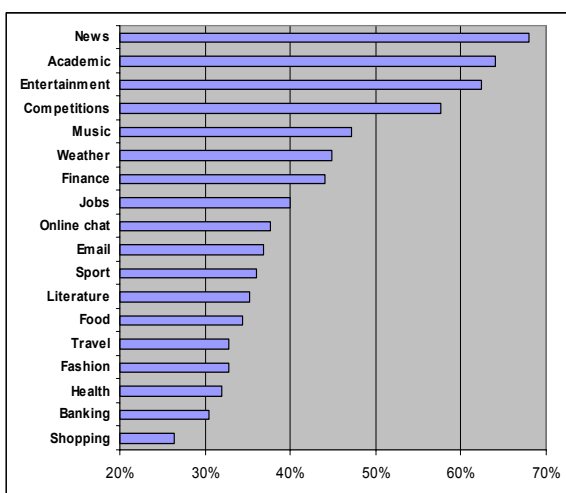


Figure 5: Ranking of internet facilities required in home language.

News was the most popular choice with 68%. Academic was next, but this response is likely to be biased by the large number of students in the sample. However, it does stress the importance of not just making commercial but also educational and informational sites available in multiple languages. Other desired categories were entertainment and competitions. Although it could be expected that finance and jobs would rank lower in importance, it is interesting to note the low weight given to sport and literature. However, the figures given for online chat, email and literature validate the percentages given in the home language use of the various communication media in the previous figure.

As an interesting aside, participants were asked whether they would be willing to pay a subscription charge to have a website made available in their home language. Despite the large percentage of people wanting such websites, 78% of the sample was not willing to pay for such a facility. Again, this figure may be overstated due to the large number of (non-income earning) students in the sample.

When asked about the desirability of banner advertising in one's home language, 43% of the respondents indicated that they would prefer banner advertising in their home language and another quarter didn't care. By contrast, 22% indicated that they wouldn't want such advertising and 8% believed it to be a waste of time. Finally, it appeared as if only 8% of the respondents had received spam (unsolicited commercial e-mail) in a language other than English. In all cases, the other language turned out to be a European language, not one of the other South African languages.

The lack of banner advertising and commercial e-mail in home languages indicate the possibility of exploring less expensive avenues where companies are hesitant of making their entire website available in other languages. Piloting with home language banner adverts – and possibly the use of opt-in mailing lists – would serve as a good feasibility test for companies prior to translating their entire websites.

7. Conclusion and further research.

South Africa is a country with many cultures and languages. The diversity of cultures is widely seen as one of South Africa's strengths, and the right to receive education and information in one of eleven official home language is enshrined in the country's new Constitution. However, unlike in Europe, there is a dearth of multi-language websites catering for the South African official languages. This is also in strong contrast to the other communication and media channels in South Africa, which provide significant home language support.

Exploratory empirical research indicates that there is a very definite demand for websites in languages other than English, even among regular internet users that speak English fluently and access many other communication media in English. 78% of respondents had never used a non-English website even though the majority has experienced language related problems on the web and would like to have a facility to change the language.

Although this demand is fairly strong, not all users see the need for non-English websites. There are also indications that some differences may exist between different cultures and language communities, but the sample was not representative or large enough to confirm these differences statistically. It is also clear that the demand also depends on the type of website: especially news, academic, entertainment and competition websites would benefit most from multi-language capability.

The implication for the researchers is that there is an urgent need to confirm these results with a larger and more representative sample. There is still much uncertainty to what extent specific requirements differ between cultures and language groups. A secondary research objective will be to investigate other cultural-specific but non-language related aspects of websites such as the manner of navigation, use of non-English browsers, symbols and overall site organisation and other underlying design assumptions.

The implications for the site providers is clear: there is a large and pent-up demand – specifically in the areas of education, news, entertainment and competitions – for multi-language websites and there is a great potential for first-mover advantages to be realised in the short term. A less costly entry strategy would be to test the water with home-language banner and e-mail advertising, although this is likely to produce some dissonance when the recipient attempts to access the English website. Finally, it is believed that there are not only a direct value and public relations proposition in providing multi-language websites. The researchers are of the conviction that there is also a strong ethical obligation towards the eradication of historical inequities and the active development of a multi-cultural sense of community as part of the nation-building process in our country by providing these websites. Most appropriately, the central and some local governments as well as some parastatals have taken the lead, albeit in a somewhat modest way. It is hereby hoped

that this research will prompt commercial and educational institutions to adopt a more engaging stance and accord the provision of a multi-language website a high priority.

8. Appendix: Some illustrative comments.

This appendix gives some qualitative responses to the questionnaire. They have been selected to indicate the wide range of emotional attitudes respondents had towards multi-language websites.

The comments of people in favour of multi-language websites range from the political, site navigation (instructions) to the actual content.

- “We need transformation; we need websites in our own languages. This in return will see us growing and going towards the African renaissance.”

- “Other language Internet should be a right, not a privilege.”

- “In the New South Africa, I would expect companies to be offering their services in Xhosa and all of the other official languages.

- “I would love to access the Internet using my own language because many times I find it hard to understand what is required of me. Thanks, God bless you!”

- “I find it extremely difficult to use some websites because their instructions are hard to follow. If they at least gave us some parts in Zulu, it would make it much easier for me.”

- “I would use the Internet for much more if I could do things in Xhosa.”

- “Although my English is improving, it would have been much easier to learn to use the Internet if they had made tutorials in Zulu.”

- “I think school and now university would be much easier if they put information into other languages. I can only ever find information in English.”

- “English is far more difficult to understand than people think. I often avoid going on the Internet because it takes me so long to find information.”

- A sensitive issue is “Afrikaans” whose official status was diluted significantly. Contrast “If Internet sites can be in Afrikaans [...] I feel we have the right to all languages.” with “Afrikaans used to be such a popular language in South Africa (pre 1994), yet there are no

Afrikaans websites available for the Afrikaans speakers.”

However, not everyone would applaud a concerted effort to move to multi-language sites.

- “English is the universal language, so don’t bother changing anything.”

- “Why learn a language that will not provide a job?”

- “I don’t feel it would make a difference if certain websites were in Zulu. [E.g. the] SuperSport website is in English and it would be much harder for me to use if it was in Zulu.”

Still others give a more balanced view:

- “To become globally competitive, English (Internet or other) is imperative since it is the international language of business. However, for entertainment purposes, other languages in SA could be used on the Internet.”

- “I would love to see my language being used, but not in all cases. I prefer English most because we [live] in a modern world.”

References (abbreviated list)

[1] Codogno, M.; Boualem, M. & Vinesse, J. *Multilingual Websites: Best practice, guidelines and architectures*. Eurescom Research Paper P-923 Annexure A Vol 2. (2000). Available <http://www.eurescom.com> [Sep-03].

[2] Almeida et al. *Multilingual Websites: Best practice, guidelines and architectures*. Eurescom Research Paper P-922 Vol 1. Available <http://www.eurescom.com> [Sep-03].

[3] See <http://www.translate.org.za>

[4] Global Reach. *Global Internet Statistics*. Available <http://www.glreach.com/globstats> [Sep-03]

[5] Van Dijk, P. *Multi-language usability*. Unpublished Report, 2001. Available: <http://www.ligal.com>. [May-03]

[6] Kamwangamala N.M. A new language policy, old language practices: status planning for African languages in a multilingual South Africa. *South African Journal of African Languages*, 20 (1): p. 50 (2000).

[7] Mutasa, D.E. Language policy and language use in South Africa: an uneasy marriage. *South African Journal of African Languages*, 20 (1): p. 217 (2000).