

What are the browsing preferences of world online population:

An examination of the differences among top-ranking e-business websites from different countries

Dr. Bruce W.N. Lo & Baterdene Lkhagvadorj • IS Department • University of Wisconsin-Eau Claire



Abstract

World Wide Web has experienced explosive growth during the past two decades. One reason for this wide acceptance is because the Internet allows individuals to reach out to the entire world beyond their localities. As a result two opposing forces are at work in the cyberspace. On the one hand the Internet enables individuals or regional groups to express their cultural uniqueness to the rest of the world more easily, but at the same time it also creates a unifying influence on all online audience regardless of their country of origin. To understand the relative strength of this homogenizing and diversifying influence, this paper examines the top-ranking websites from different regions of the world to discover to what extent online audiences from different regions of the world shows common and/or distinctive browsing preferences.

What countries are included in this study?

Table 1 summarizes the 18 different countries included in this study. The list of top-100 websites was obtained from the web traffic provided www.Alexa.com (which is a subsidiary of www.Amazon.com) for each country. (Please note that this poster reports the preliminary findings for these 18 countries, which is part of a larger study that encompasses 47 countries.)

United States	Germany	Egypt	Thailand
Mexico	France	United Arab Emirates	Malaysia
India	China	Brazil	Russia
Pakistan	Japan	Argentina	Ukraine
Indonesia	Saudi Arabia		

Basic assumptions:

The underlying assumption of this study is that online audiences from different countries are likely to exhibit their browsing preferences influenced not only by their unique regional culture but also the global cyber culture. Therefore by examining the top-100 website lists from different countries, we may be able to discern the relative strengths of the diversifying and homogenizing forces.

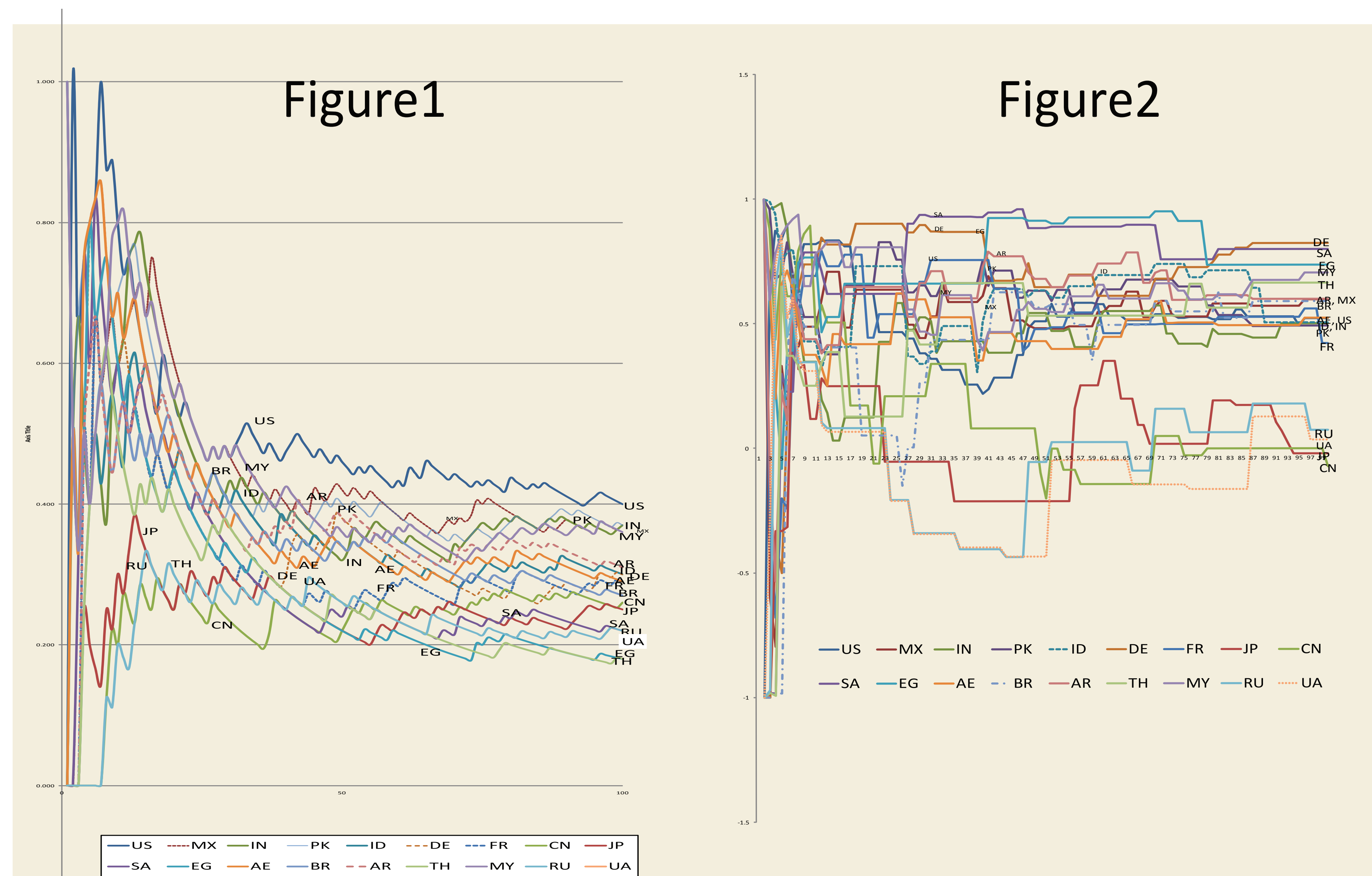


How are the ranking lists compared?

We use the “global” ranking list as the basis of comparison. The “global” ranking list is the list of top-100 websites for the entire sample of web audience surveyed by the ranking provider, Alexa. This includes anyone in the world who had installed an Alexa toolbar on their browsers. Each of the country-based lists is then compared with the global list in two ways:

1. **Membership commonality:** What percentage of the websites are common to both top-n lists, where $n = 1, \dots, 100$? For example let's consider the top-30 list from Brazil. We are asking what percentage of the sites in the Brazilian list may be found in the “global” top-30 list?
2. **Rank correlation Index:** In the “common” lists between the two countries under consideration, how do the rank positions of the website correlate to each other? Here we compute the Pearson's correlation coefficient of the rank position of the websites in

The results of computation are shown in Figure 1 and Figure 2:



Membership Commonality Graph

1. For small list size, the commonality value appears to be higher. This means the membership are more similar the top-n list when n is small. This signifies a unifying influence by the Internet on the global audience.
2. Consider the clustering on the right-hand side of the graph. The first impression appears to be that the different countries fall into one of 5 groupings shown in Table 2:

Group #	Countries	Characteristics
Group 1	USA	Highly similar to the global list, as the US is probably the dominant influence on Internet behavior, commonality > 40%
Group 2	India, Pakistan, Mexico, Malaysia	Very similar to the global list probably due to the dominant of English language, commonality ~ upper 30%
Group 3	Argentina, Indonesia, Germany, UAE, France, Brazil, China, Japan	Moderately similar to the global list, country language is not English, commonality around 30% mark
Group 4	Saudi Arabia, Russia, Ukraine	Different from the global list, around 20% commonality
Group 5	Egypt, Thailand	Very different from the global list, less than 20% commonality



3. From the findings, it appears that, a major factor to browsing preference is “language”.
4. In group 3, China and Japan, seem to be separated from the rest. Not only did both have a lower commonality, we note that for smaller m, the commonality value comes from below rather than decreases from higher values as are the case for the other countries

Rank correlation Index

While membership comparison looks at what are included in the two lists, rank comparison is more discriminating, in the sense that we are now interested in seeing if the two countries have similar ranking preferences.

1. Figure 2 shows two distinct clusters. There is a group of 14 countries that show high correlation of ranking with the global list. Germany lies on the top while France at the bottom of this cluster. The other “less correlated” cluster consists of 4 countries: Russia, Ukraine, China and Japan.
2. It is interesting to observe that US is actually in the middle of the first cluster, with a correlation coefficient of about 0.5

Final conclusion

Our preliminary findings indicate that online audiences from different parts of the world do exhibit different browsing preferences. Yet the globalizing influences of the Internet in shaping a more homogenizing cyber culture cannot be over-looked either.