

Econ 899: Assignment 2

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DRAFT

[Some stats about increasing use of cell phones]

While it is not surprising that an increase in the usage of mobile devices would also result in an increase in internet traffic to these devices, this increase is usually just described as an aggregate number. The purpose of my paper is to analyse how the share of mobile traffic relative to “traditional” traffic has developed and how different circumstances might affect this transition.

Some specific (preliminary) questions are:

- What is the (current) growth rate of the share? (not just linear since this share $\in [0, 1]$)
- Is the share different for different countries? (this only works for languages that are used mostly within one country (or countries sufficiently homogeneous))
- Does the share depend on the time of day? (only works for languages used mostly within one time zone)
- Does the share depend on the day of the week? (e.g. people might be more likely to use their cell phones over the weekend or during some holidays)

I will use hourly Wikipedia page traffic data reaching back to 2008¹. The data provides the number of hits for each Wikipedia article and differentiates by type (regular or mobile) and language of the article. The total is about 2.5 TB of compressed data (≈ 15 TB uncompressed).

¹Source: <https://dumps.wikimedia.org/other/pagecounts-raw/>