EXECUTIVE SUMMARY

M.Sc. ICT in Business - Research Seminar – June 2007

And the winner is…: Developing a scale and ranking for wireless cities

By

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PROBLEM

More and more, nowadays people are exposed to the hype of the emerging wireless networks. Many cities around the world are building wireless infrastructures in order to provide their citizens with ubiquitous network coverage. *But, did the wireless architects ever think about asking people what do they really want and what it would be useful for them, or they just follow some technical standards that are of no worth to the users?*

OBJECTIVES

- *To identify the ideal criteria that define the quality of a city's wireless infrastructure taking into consideration only what the users' perspective.*

- *In accordance with these criteria to develop a ranking of the wireless cities using as a test case the city of Leiden*

METHODOLOGY

Initially, a *blank questionnaire* will be used in which the users will enumerate the most important characteristics that a wireless network should have. This blank questionnaire will be performed in an interview format and its objective is to enable users to state their wishes without being biased by a well-structured questionnaire.

Moreover, this research will utilize an *appropriate questionnaire* that takes into account the results of the blank questionnaire. The second's questionnaire purpose is to elicit congruent results from the preferences of different demographical groups worldwide.

The places that have been specified by the users' preferences will be tested for the city of Leiden and according to the results a rank will be given to the city of Leiden

RESULTS

The ideal criteria to define the quality of a city's wireless infrastructure, taking into consideration only the perspective of the users, are related to the following: Locations at which the users can have wireless access to the internet, ability to use mail services, ease of use while connecting, security of data transmissions, network bandwidth, cost of using the wireless service, ability to use the wireless network for VoIP (Voice over IP) services, ability to use messaging services, network availability and range, and finally, access to wireless services while being in the means of public and private transportation

The city of Leiden could not stand to the ideal criteria as they emerged from the questionnaire and therefore, the ranking of the city had to be based on a simplistic algorithm.