

Bachelor Thesis: Data Analysis of Techno-Economics of the Mobile Market

Background

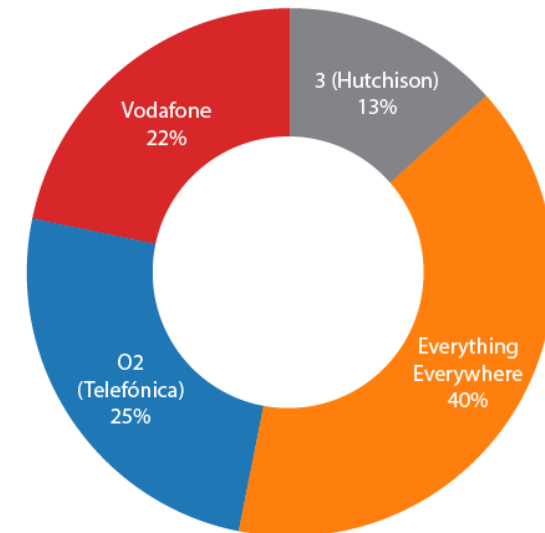
Analyzing and predicting the evolution of the mobile communications market is one of the most important challenges in the mobile industry. This task demands tools from at least three different disciplines: mobile networks, economics, and data analysis. The goal of this thesis is to perform a systematic study of the evolution of major mobile markets during the last years, interpreting and analyzing key trends using tools from the above disciplines.

Tasks

Initially, you will study the statistics and annual reports of the last 10 years for key Mobile Network Operators (MNO) in some major countries. The goal is to create a database of key performance indicators (KPI) for each MNO, e.g., market share, capital expenditure, operating expenses, etc. Then, you will use tools from machine learning to analyze the mobile market. Based on the student's interests, we will tailor the content of the thesis. The topic can be adjusted to be more in data analysis or economical analysis side. Hence, the student would either work more on finding trends and technical relations, or work like analysts in the major operators studying cost-benefit-technology tradeoffs.

Additional Information

During this thesis, you will be contributing to our ongoing network economics research program. This is highly relevant interdisciplinary research that interest both academia and industry. Some programming skills in Matlab or R are desirable, but not absolutely necessary. Students with background on economics are also encouraged to contact us. We expect that the student will be interested in developing his/her skills in statistical analysis during the thesis.



Source: <https://www.gsmaintelligence.com/research/2012/08/uk-fires-4g-starting-gun/348/>

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