Dec 20 2013

Economic health of the internet ecosystem: briefing from CAIDA's 2013 workshop

Blog Editor





Last week, the Cooperative Association of Internet Data Analysis [CAIDA] and the Massachusetts Institute of Technology (MIT) held its 4th invitation-only workshop on internet economics on the theme "Economic Health of the Internet Ecosystem". LSE Tech's Silvia Elaluf-Calderwood and Jonathan Liebenau presented ongoing work on internet measurements. In this blog, they provide a general overview of the event, which is regarded as a highly valuable effort to integrate findings for understanding the future of the internet.

Although beautiful San Diego, California was slightly cooler than usual, the twenty <u>invited participants</u> from business and academe enjoyed the venue and the University of California's generous hospitality. The LSE Tech team presented on "<u>Measuring what might be regulated</u>; <u>regulating what might be measured in the internet</u>" and contributed to discussions throughout the two days of debate and analysis.



The workshop included a wide spectrum of presentations from leading researchers at institutions such as MIT, U Penn, UC Irvine, Northwestern, UC Santa Barbara, CAIDA/UCSD, U Minnesota. There was also participation by industrial representatives from Comcast, Microsoft, BT Research and Innovation, and Verizon. This group includes a large number of people who have served or are currently serving on governance bodies including the Federal Communications Commission, the Internet Society, ICANN, and the US National Academy of Sciences internet committees.

The agenda was diverse and covered many topics, including:

- the cost of content delivery,
- incentives for efficient delivery,
- who pays?
- the health of the advertising revenue stream,
- could the "free" Internet experience (i.e. supported by advertising) run out of money?
- the quality of the user experience (QoE, not QoS),
- the rise of specialized services,
- what are the implications of IP networks beyond the Internet: a driver of investment or a threat to OTT innovation?
- new models for regulatory analysis.
- regulation as a driver of a healthy ecosystem,
- US vs. EU comparisons,
- the role of data: theory vs. empirical framings.

The presentations from industry (BT and Verizon) were especially interesting and important to understand the scope and limitations of the current approaches to assess the business models applied to the internet. Of special interest is the economic analysis Professor Greenstein from Northwestern U. and Harvard Business School on the economic aspects of platform differentiation with an application to mobile. This work owes something to work on platforms by collaborators in the LSE-Tech group.

Looking forward

The <u>LSE presentation</u> is the starting point for further integrative work on internet metrics for economic analysis. This generated a in-depth debate on what needs to be done to understand the links between internet network metrics, economic variables and business models. The importance of this debate was summarised in the contributions by many participants on specific requirements for what ought to be included in the metrics of the internet. The LSE team will continue the work on this area with upcoming paper submissions to relevant conferences and journals.

The general feeling at the end of the workshop was that <u>CAIDA's measurement tools</u> are more relevant than ever and more work is required to integrate results and coherent views on the future of the internet. All participants to the workshop were

registered – based on their ISP – for a raffle to take home a Raspberry-Pi and contribute to the <u>Ark project monitoring</u>. The minutes of the meeting will be published shortly at the main website and there are plans for a similar event next year.

Photo credit: Leandro's World Tour via photopin cc

This article gives the views of the authors, and not the position of the London School of Economics.

We welcome your comments! Please take a look at our comments policy

About the authors



Silvia Elaluf-Calderwood – LSE Management Department

Dr Silvia Elaluf-Calderwood is a Research Fellow at the LSE Department of Management. She holds wide experience in the telecommunications industry in the UK and the Netherlands, and has a technical and managerial background in the Internet and Telecoms business.



Jonathan Liebenau – LSE Management Department

Dr Jonathan Liebenau is a Reader in Technology Management, LSE. He Specializes in fundamental concepts of information, and the problems and prospects of ICT in economic development. Previously worked in academic administration, technology policy, and the economic history of science-based industry, all positions in which he has emphasised the use of information in organizations. He is the author or editor of a dozen books and over 70 other major

publications. He has provided consultancy services to leading companies and strategic government agencies, including Dell, BT, IBM, Microsoft, TCS, Nortel, EDS, Lloyd Thompson, and in the UK Government, the Office of Science and Innovation, the Department of Trade and Industry and the Home Office.

This entry was posted in broadband, business models, CAIDA, convergence, innovation, internet, internet economics, internet governance, Jonathan Liebenau, LSE Tech, MIT, Research, Silvia Elaluf-Calderwood. Bookmark the permalink.