Building and maintaining partnerships between academia and official statistics - some of our best practices

Partnerships with official statistical agencies: an academic perspective on experimental statistics

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In this talk, I will discuss possible ways in which mutually beneficial relationships may be developed between universities and official statistical agencies. I will use collaborations in the area of experimental statistics as an example. The core area of big data and unstructured forms of data offer much promise to the world of statistical agencies, by addressing the issues of latency in many sources of data, and putting intelligence into all stages of the data lifecycle. Collaborations over sharing of research-level knowledge regarding techniques to capture and analyze such data can be highly beneficial to both parties. Additionally, academic partners can help to develop strategic plans on how the data could be used by the research, policy and business communities, demonstrating the importance of new experimental statistics through examples, and in user testing. I will discuss fruitful connections with the US Census Bureau regarding the Longitudinal Employer-Household Dynamics, and the US Department of Transportation's Bureau of Transportation Statistics on safety data in this context, in addition to my experience being a member of the UK Office of National Statistics Data Science Campus Advisory Board, and a being former member of the scientific program committee of the New Techniques and Technologies for Statistics (NTTS) of Eurostat.

Critical partnerships can occur regarding ongoing training and capacity-building. A multidisciplinary team is required in the production of experimental statistics, consisting not only of expertise in the domain and methodological aspects, but also expertise on data acquisition, sharing, and standards; expertise in governance, ethics, and privacy; expertise on consumer analysts and the ability to assess and understand user needs and market; and finally communications and outreach and knowledge of commercialization and business case development. This last aspect is critical in identifying users of the experimental statistics and in building new user communities.

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