Measuring Technology Platforms impact with search data and web scraping

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Abstract

In recent years, European research policies and priorities in the agricultural sector have been developed through industry-based partnerships sponsored by the European Commission (EC). In 2004, the EC regulated a form of partnership called European Technology Platform (ETP) with the aim to define research agendas that would attract private investment.

Monitoring the impact and performance of public policies, such as the implementation of ETPs, is basic for policy-makers. However, assessing the performance of ETPs frequently result into costly efforts given the current lack of indicators to monitor their variety of activities. In addition, since most ETPs have been set up recently it is difficult to assess their results, which are typically revealed after some time and take a considerable amount of time to be captured and processed with traditional methods such as surveys.

In this study, we propose to assess the dynamics of ETPs through measures based on online information, given that it is fresh, available in real-time and is a publicly reflect of the activities of organizations. We firstly consider an ETP as an innovation intermediary and define its functions according to innovation literature. Then, we enumerate the particular activities within each function in which the ETP may be involved. To monitor such functions and activities, some indicators based on online data are proposed.

This conceptual basis has been put into practice with a particular case study based on the agri-food technology platform "TP Organics". Preliminary results show that the online-based indicators are able to measure the level of activity of the platform, if its scope is expanding or reducing, and how the importance of the different functions has evolved over time.

Keywords: European Technology Platform; agri-food sector; online data; data mining techniques; search engines; TP Organics