

Policy indicators from private online platforms

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Abstract

The information collected by private online platforms is very relevant for policy design and evaluation. Big data technologies and applications can unlock the potential of these increasing data volumes and analysis requirements for decision-makers in industry and policy and make them usable. However, the use of big data to inform public policy decision-making is still scarce. To contribute to fill this gap, this paper proposes and discusses some relevant examples of policy indicators that could be obtained from selected and reliable online private gamified and non-gamified platforms. The proposed indicators are SMART indicators that are relevant for policy-making, in particular construction sustainability and territorial policies. Proposed indicators can be computed using one of a combination of the following strategies:

- *Point-process estimation, to be obtained just by aggregating the value of a variable.*
- *Distance-based estimation: the value of the indicator is obtained as the aggregation of a pre-defined distance measure: geodesic distance, shortest driving/walking/public transportation distance, etc*
- *Area estimation. Supervised machine learning algorithms can be used to identify and measure the percentage of an area with a given relevant feature.*
- *Neighbourhood structure estimation: Graph theory can be applied to the definition of connection indicators of geographical units.*
- *Gamification of configuration or recommendation private platforms. Information downloaded from gamified private environments can be used as an alternative to more resource demanding economic experiments in order to define behavioural policy indicators.*

Keywords: *policy indicators; big data; gamification; private online platforms.*
