DELIVERABLE

Dissemination of workshop results, scientific paper and policy brief

Deliverable Information

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Disseminating deliverables

BIGPROD project has actively disseminating all outcomes from the project. The strategy has been to openly share as much of the work products and underlying data as possible. The main avenues of disseminating the data have been the project website, a Dataverse repository and a ResearchGate project page set up for the project. By using these three sites to disseminate the outcomes, the project has created a persistent repository of the project results that will stay online regardless of e.g. project website shutting down.

Workshop results

In line with the European Commission's Open Access Policy, the workshop results have been shared in three ways. First, the workshop data and its analysis files have been openly shared in the project Dataverse.[1] This includes Jupyter Notebook and Parquet data file to accompany the BIGPROD data release.[2] The disseminated code is a replication of the analysis process used in the project. The code example goes through all the steps of accessing the data, pre-processing and subsequent analysis. Disseminating the Jupyter Notebooks will allow stakeholders to quickly access and leverage the analysis done in the project.

In addition to the data and code, the recording of the interactive learning workshop is publicly available on Dataverse.[3] The recording includes the tutorial section of the interactive learning workshop where the project researchers discussed the challenges of leveraging policy analytics and the analysis of the data. The idea of the video recording is to offer an easy-to-follow tutorial to complement the data, code and analysis files.

Finally the workshop results were incorporated with a working paper on three cases researched during the project. This write-up was shared as a validation effort in an expert session, and also served in the workshop as a tool to indicate the different types of analysis that can be carried out from the data and code shared.

The session materials were all shared using the hashtag "BIGPROD" in social media. This was done in an effort to engage with a bigger audience than the participants of the public workshop. Using Twitter (Figure 1) the results were disseminated in a thread linking the materials (code and recording) and by highlighting the European Union + UK digitalization score as a policy relevant measure calculated from the BIGPROD web scraped data. The same information was disseminated via LinkedIn using the hashtag "H2020" (Figure 2)

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[1] Project Dataverse repository: https://dataverse.nl/dataverse/BIGPROD_Data_Sample

[2] Ashouri, Sajad, 2022, "Jupyter Notebook and Parquet data file to accompany the BIGPROD Interactive Learning Workshop", https://doi.org/10.34894/V7EIW5, DataverseNL, V1 https://dataverse.nl/dataset.xhtml?persistentId=doi:10.34894/V7EIW5

[3] Suominen, Arho; Ashouri, Sajad; Hajikhani, Arash, 2022, "The BIGPROD Interactive Learning Workshop", https://doi.org/10.34894/9DSWVT, DataverseNL, V1; recording-20220411_110920-Meeting Recording.mp4 [fileName] https://dataverse.nl/dataset.xhtml?persistentId=doi:10.34894/9DSWVT
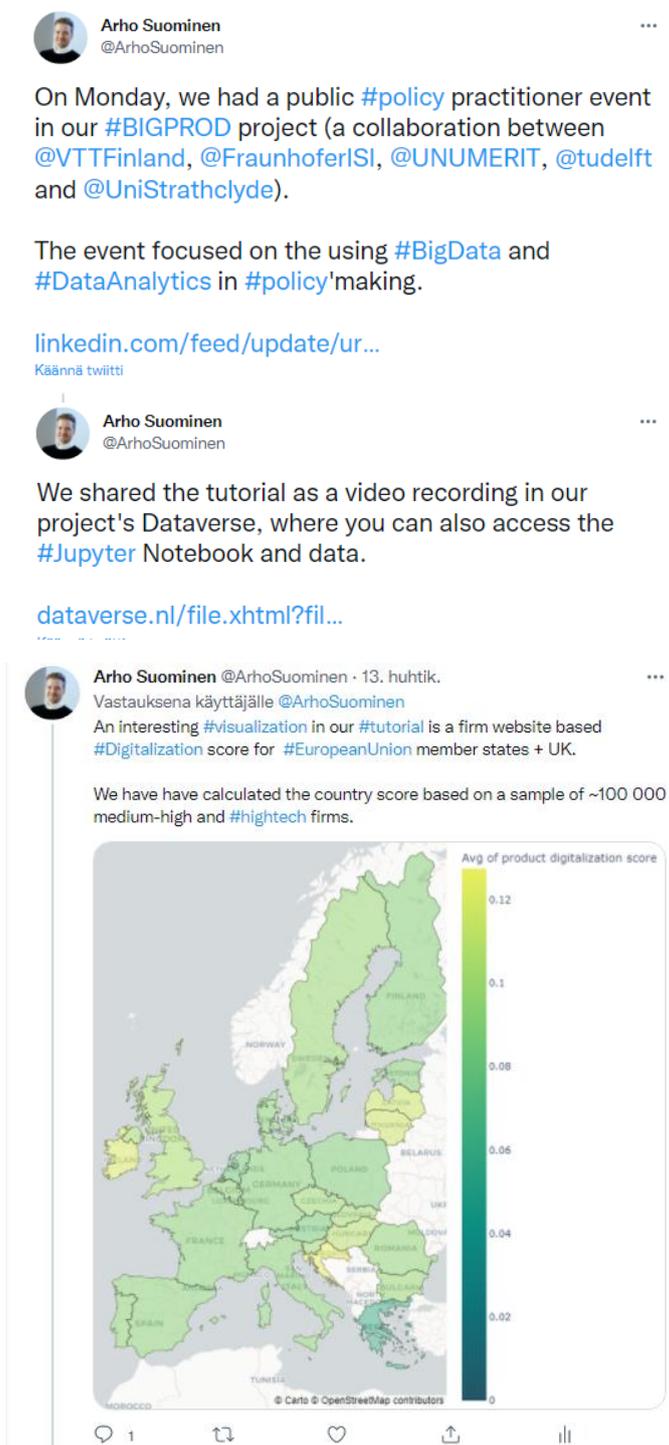
Figure 1 Twitter post disseminating the results of the workshop using the hashtag BIGPROD. Accessed https://twitter.com/ArhoSuominen/status/1514201600457424903

Figure 2 LinkedIn post disseminating the workshop results using the hashtag #H2020. Accessed https://www.linkedin.com/feed/update/urn:li:activity:6924248235934920705/

Scientific paper

The scientific publication "Productivity effects of process vs. product digitalization" was published in pre-print format.[4] The publication focuses on analyzing digitalization and disentangle the phenomenon into the digitalization of processes and the digitalization of product offerings. The scientific paper leverages the novel web scraped digitalization score calculated for each of the sample firms at a company and product level.

The decision to publish in pre-print format was taken to elicit comments from key stakeholders, but also to maneuver around the long lead times in journals. The pre-print was shared to key stakeholders interacted with during the project. This was done via personal emails directly to the stakeholders (mainly economists and policymakers).

The pre-print was also uploaded to the project Dataverse page. This allows the pre-print to get a Digital Object Identifier (DOI) and subsequent citation by scholars. The Dataverse link also allowed for the deliverable to be communicated via Twitter and LinkedIn using the hashtags BIGPROD and H2020 to maximize reaching the correct audience.

Policy brief

The policy brief "Can web scraped data inform innovation policy" offered a vantage point to the key policy outcomes from the project. The policy brief reflected on the fact that while there has been an increase in policy analytics has not been widely adopted. We discussed if this was a result of a mismatch with expectations and capabilities.

The most policy-relevant findings from the project included discussion of mechanisms for continued leveraging of data platforms created in projects like BIGPROD We also highlighted a number of elements concerning the data and its use, such as invisible communities and representative samples. Even despite all the challenges remaining, policymakers were encouraged to embrace the novel vantage points offered by access to big data. Finally, the policy brief emphasis the importance of open access material.Based on the findings, the project made several recommendations. The main concrete suggestions are to make sure that we enable the continued operation of the BIGPROD data platform. We also emphasize the continued engagement with policymakers to ensure adoption of the tools developed.

This policy brief was shared with the policymaker participants of the workshop via email. In addition, the policy brief was shared on the project's Dataverse page.[5] The material was also shared via Twitter and LinkedIn with a post highlighting the main findings. The social media activity in regard to the policy brief was reported separately in deliverable 28.

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[4] Schubert, Torben; Jäger, Angela; Visentin, Fabiana; Türkeli, Serdar; Deschryvere, Mathias; Suominen, Arho, 2022, "Productivity, digitalization and innovation : 2nd Expert session supporting D4 & D5", https://doi.org/10.34894/8GACJV, DataverseNL, V1 https://doi.org/10.34894/8GA

[5] Suominen, Arho; Ashouri, Sajad; Hajikhani, Arash, 2022, "Can web scraped data inform innovation policy? : The BIG-PROD Interactive Learning Workshop and the D14 Policy Brief", https://doi.org/10.34894/9DSWVT, DataverseNL, V2 https://doi.org/10.34894/9DSWVT

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About BIGPROD

BIGPROD is a research project focusing on Big Data based analysis of productivity using webscraped data. This project has received funding from the European Un-ion's Horizon 2020 research and innovation programme under grant agreement No 870822.

The project partners in the project are Quantitative Science and Technology Studies team, Foresight-driven Business Strategies, 1) VTT Technical Research Centre of Finland, Competence Center Innovation and Knowledge Economy (Coordinator), 2) Fraunhofer ISI, Economics of Knowledge and Innovation team, 3) UNU-MERIT, Maastricht University, 4) Public Policy and Management Institute, 5) Economics of Technology and Innovations, Faculty of Technology, Policy and Management, Delft University of Technology, 6) Department of Politics, School of Government and Public Policy, Faculty of Humanities and Social Sciences, University of Strathclyde

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