Data Science in Regional economic studies

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Regional economic studies between macro and microeconomic studies

- Regional economic studies as part of complex regional studies
- Meso-level studies and regional approach
- Regional (social and) economic systems

Data and Data Science

Data would mean (details for) facts and statistics collected together for reference or analysis. And not only…

Database would mean an organized collection of structured information, or data, stored in computer memory. It's designed to be easily accessed, managed, modified, updated, controlled, and organized.

Database rules (also called constraints) define the specifics and relations of the data in a database in a way to ensure data integrity, consistency, and accuracy.

Data and Data Science

Big data - too big to be nice for our PC! If raw material makes traditional computer systems helpless, there is no doubt it is big data.

Data Science may be defined as a general interdisciplinary field which uses scientific methods, algorithms, combined with programming to extract new knowledge from data. It combines knowledge, approaches, tools from various disciplines like computer science, statistics, and **domain expertise** *to analyze large datasets to draw reasonable predictions.*

Data Science and Regional economic studies

Why do we apply Data Science in these studies? Short answer is **because it is possible.**

First of all, we have computers and browsers. (Google Chrome - it's suitable for everything)

Second, there are too many large datasets on regional topics. (Wonderful example

https://www.kaggle.com/datasets/talhabu/us-regional-sales-data)

Third, there are free user-friendly tools and documentation. Yes, there are short videos with instructions on how to do some simple things as well. (Why not – **Jupyter Notebook**).

In their own words…

https://github.com/patonov/Jupyter-Notebook-Mastery-December-2023/blob/main/PopulationAndGrossRegionalProductRegression.ipynb

https://github.com/patonov/Jupyter-Notebook-Mastery-December-2023/blob/main/PopulationAndGrpInMachineLearningModel.ipynb

https://github.com/patonov/Jupyter-Notebook-Mastery-December-2023/blob/main/SimpleLinearRegression.ipynb

https://github.com/patonov/Data_Science-July_2024/blob/main/new_study/Untitled.ipynb

Thank you for your attention!