MACHINE LEARNING FOR OFFICIAL STATISTICS

How to advance the use of machine learning (ML) for the production of official statistics?

Here are the key messages from UNECE HLG-MOS Machine Learning Project Report for ML to be accepted and further facilitated in statistical organisation.

For the full report, visit UNECE Statistics wiki: https://statswiki.unece.org/x/wg4AEQ

KEY FOR ACCEPTANCE

ALIGNMENT WITH BUSINESS NEEDS

ML is a means to an end, focus on what it can do to better address business needs



DEMONSTRATION OF ADDED VALUE

Look to ML to first improve existing operations, not to replace them



RESPECT OF ETHICAL AND LEGAL CONSIDERATION

ML models can have a significant impact on the life of individuals

ROBUST PERFORMANCE OVER TIME

ML must be maintained to improve as it continues to learn



DEVELOPMENT ON SOLID SCIENTIFIC GROUNDS

ML relies on many scientific, technical and operational disciplines

GUIDANCE FROM QUALITY FRAMEWORK

ML must contribute betterquality results towards fulfilling business needs



KEY FOR FACILITATION

FROM ALL EMPLOYEES

Employees in all functions and levels play a role in advancing the use of ML



RESEARCH AND DEVELOPMENT

R&D is essential to address business needs and drive innovation strategies



COMBINATION OF MULTIDISCIPLINARY SKILLS

The success of ML strongly relies on a team effort

SENIOR MANAGEMENT SUPPORT

ML feeds on corporate-wide modernisation and innovation strategies

SHARING AND COLLABORATION

Organisations working together will efficiently advance ML and avoid pitfalls



COMPUTING INFRASTRUCTURE

ML must be included in corporate digitalisation strategies

