

Title: Exercise of the administrative function through algorithms and artificial intelligence systems

Description: Public administrations have started using algorithms in administrative procedures, exploiting the computational and processing potential of Information and Communication Technologies (ICT).

The ability of the algorithms to carry out automated operations able to replace human activity and supplant entire procedural stages, raises doubts as to their compatibility with the fundamental principles established by the Law and the Italian Constitution about public powers.

The Phd research aims to:

- verify the areas where it is concretely possible to introduce the algorithms and machine learning;
- identify the limits where their use is possible and correct;
- investigate the coherence of the administrative acts made through algorithms in respect to the principles of administrative action;
- study the legal protection for citizens.

The research is part of the themes identified by art. 8 lett a) of DM 351/2022.

The research results will have a significant impact especially in the topic of the digital transformation process in public administration.

The PhD student will implement an interdisciplinary approach to an in-depth study of all aspects of the theme of administrative action.

The research involves a period of internship in a public structure in order to verify the concrete problems and possible solutions related to the digital transition of public administration.

Furthermore, in order to investigate the international and EU aspects, another period will be spent by the PhD student in a non-Italian University.

Dissemination of scientific results meetings will be planned.

The dissemination activities will be shared in the academic and scientific fields but also in open contexts according to the "Open Science" and "Fair Data" principles.

Title: Administrative efficiency, performance measurement and digital transition

Efficiency is a fundamental value that all public administrations should pursue.

The most recent research on the topic has shown that a high level of efficiency in public administration can be achieved only if there is good organization and an efficient control system. For this reason performance measurement tools applicable to the public sector and suitable for stimulating improvement actions and strategies should be implemented.

The topic arises within the more general theme of management controls which aim to build a system of constant monitoring of the relationship between objectives and results.

Through management controls, each public administration should be able to identify and remove the criticisms of its internal organization by improving its performance.

The research aims to:

- study the context of the rules;
- identify the implications of the principle of transparency and efficiency in relation to the rule of law;
- investigate the relation between efficiency policies and protection citizens;
- investigate the relevance that the implementation of ICT can assume on the performance policies;
- identify the best way to measure the level of performance of public administrations.

The research is part of the theme identified by art. 8 lett a) of DM 351/2022.

The research results will have a significant impact with respect to the factor of accelerating digital transformation processes.

The PhD student will implement an interdisciplinary approach to an in-depth study of all aspects of the theme of efficiency and functioning of public administration.

The research involves a period of internship in a public structure in order to verify the concrete problems and possible solutions related to the digital transition of the public administration.

Furthermore, in order to investigate the international and EU aspects, another period will be spent by the PhD student in a non-Italian University.

Dissemination of scientific results meetings will be planned.

The dissemination activities will be shared in the academic and scientific fields but also in open contexts according to the "Open Science" and "Fair Data" principles.