

## **Section 7 – Amministrazione e Politiche Pubbliche**

**Chairs: Maria Stella Righettini, Federico Toth**

### **Panel 7.4 Digital innovations, Science and Public Policies: Managing Technological Change in the Public Sector**

The panel aims at exploring the wide implications of technological change within two broad areas of investigation such as a) public policy dynamics and governance, and b) public sector organizations.

The first theme looks at policy processes or at specific stages such as agenda setting and policy design, decision making, implementation or evaluation. Here, the focus will be on the role of digitization and technological innovations in shaping and influencing actors' interaction in specific policy fields.

For example, the role of experts' knowledge in policy design and implementation, based on the capacity of technology use (e.g. big data, ICT implementation, etc.), is an emerging issue which the workshop ideally aims to address, with particular attention on policy learning literature. Other contributions might build on the multi-level governance perspective to explore the implications that multi-layered policy arenas do have on policy outcomes (e.g. to what extent complex implementation structures represent a hurdle for technological innovation policies or, conversely, whether effective change is more likely to be developed from the bottom up is nowadays a crucial research dilemma).

The second one concerns the way in which the adoption of ICT solutions reshapes the structure of bureaucracies, the centralizing and decentralizing strategies of national states and how they cope with sub-national governmental actors.

The panel looks for both theoretical and empirical papers which focus on the impact of digitization and ICT technologies. First of all, decision-making processes regarding public sector modernization involve experts and policy makers; these relations between the two communities are often difficult, because of the different rationalities and interests. The characteristics of the learning processes, i.e. the capacity of experts to influence actors in policies with a technological content, are at the center of a relevant debate and it is a relevant focus of this workshop. Moreover, there are questions regarding the role of technologies and big data in decision-making processes.

Other sectorial themes regard the transformation of the design, implementation and delivering of public services. The E-government agenda is often associated to the re-shaping of government-to-citizen relations especially in the phase of services delivery, but now under the lenses are even the relations that characterize the stages of problem setting and policy design. Moreover, it also represents a prism through which intra- and inter-governmental relations and bureaucratic politics can be analyzed, as the Digital government debate is underlining.

This might lead to re-consider issues concerning the design and implementation of interventions based on ICT instruments; here the engagement of implementers and the compliance of beneficiaries, two factors that often undermines the effectiveness of policies, stand out as major research themes.

Another research field considers Metropolitan areas and the Smart city/ Smart communities'

policies, aimed at improving existing services with the help of ICT solutions, in order to make them more efficient and responsive to citizens' needs.

Last but not least, cyber-security is emerging as a policy domain in which national states are called to give an innovative response to issues which are at the crossroad between, security, industrial and trade policies.

In this incomplete list, we consider also the rise of Big Data constitutes per se a topic with uncountable

implications for policy studies. In the agenda setting and policy design processes, in particular, big data are acquiring centrality to introduce more rationality in decision making processes and to improve the policy effectiveness. It is relevant to detect the policy sectors more affected by the use of big data and the uncovered ones. At the same time, it is of value to analyze the impact of big data in influencing decision makers and policy learning. Finally, the big data turn introduces methodological questions in the evidence-based policy making debate, because of the different basis of the predictive analytics in respect to the traditional research instruments.

**Chairs:** Maria Stella Righettini, Giancarlo Vecchi