# Performance measurement and management systems and smart working in public administrations

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#### **Research project abstract**

Public administrations (PAs) are fully and deeply plunged in processes like globalisation, dematerialization, and digitalisation. Processes that are contributing to drive/influence the reform that has invested PAs during the last decades calling for their managerilisation. In this environment, smart working (SW) could represent an opportunity for PAs to play their role more efficiently and effectively, that is, better for their citizens and the other stakeholders. SW is essentially based on two principles: greater discretion and responsibility in working activities. This implies the need to manage PAs' resources appropriately to make possible the deployment and institutionalization of these principles and to move from "hell/purgatory" to "paradise" situations. To this end, the research project (RP) focuses on the relationships between SW and the most relevant resources/capitals in PAs: the human, the structural/organizational, and the relational. In particular, based on the theoretical perspective of the intellectual capital the RP aims at:

• analysing the main factors that may impact the implementation of SW in PAs and their impact on individual and organizational performance;

• identifying policies and change management models and actions for SW implementation in PAs;

• defining tools for measuring and managing performance from planning to control/evaluation of individual and organizational performance in PAs, whether financial and non-financial (e.g. self-esteem, employee satisfaction, gender equality, citizens satisfaction);

• establishing an inter-universities laboratory focused on researching SW policies and practices in PAs. A laboratory open to the participation of PAs and their representative bodies, associations of PAs' stakeholders, and research institutions.

To pursue these objectives, the RP adopts an interpretativist approach as it is the most appropriate for enhancing the understanding of "how" SW impacts PAs' intellectual capitals and PAs' performance and value creation processes. The research method that will be used is primarily qualitative, i.e. case studies developed through interviews and focus groups. Afterwards, a quantitative methodology will be applied to confirm the results coming from the qualitative methodology adopted also to increase their external validity. In particular, a two steps survey will be realised. First, as a pilot, in the PAs selected as case studies, then, at the national level on a statistical representative sample stratified on the basis of size and location of PAs. The local level of PAs, specifically the municipalities, will be analysed as the governmental level is the closest to citizens, providing different kinds of public services and one of the PAs with the highest number of employees.

# Performance measurement and management systems and smart working in public administrations

### 1 - State of the art

In the last decades, in a globalised world there has been a ubiquitous process of dematerialisation of society which has transformed societal values and subjects' roles and ways of acting (Giddens, 1990). In this respect, a phenomenon worthy of attention is smart working (SW), especially in public administrations (PAs) (Decastri et al., 2020). As a new management philosophy based on spatio-temporal flexibility and employee autonomy and responsibility for results, SW has recently found its place in Italian PAs (Law 81/2017). As established by the art. 18 paragraph 1, SW should "increase competitiveness and facilitate the reconciliation of life and work times", but only recently it has been widely implemented in PAs to contrast COVID-19. Now it is thought of as an irreversible change.

SW in PAs aims at creating public value through better work-life balance and greater job satisfaction leading to greater individual efficiency and productivity (Stavrou, 2005); at the organizational level, especially through lowering costs (Mazzucchelli, 2017); and at the societal level thanks to the provision of a higher number of and better-quality public services and environmental benefits, e.g. reduction of CO2 emissions and populations' well-being (Yu et al., 2019).

Organisational changes are necessary to achieve these benefits through the implementation of SW. The implementation process must be systemic and affect both organisational culture, managerial and operational practices. Implementing SW cannot and must not be understood as a process that only affects the technological aspects of an organization, as it is happened especially focusing on smart cities. The whole intellectual capital (human, structural/organisational, and relational) of PAs' must be managed (Ruggiero, 2007; Lomardi & Dumay, 2017). It is through the management of all these capitals and of their interaction that an organization "exists" and operates efficiently and effectively. Manage the impact of SW on intellectual capitals and their relationships become fundamental to dominate the future development of PAs and their socio-economic realms.

Therefore, a multidimensional analysis of SW in PAs can provide important practical contributions. One contribution, based on a human/social perspective, regards the aspects related to alternative working environments. In this regard, the study of SW could focus on public employees' competencies and social well-being in smart working environments with the aim of analysing aspects such as the impact of flexible work on work-life balance, employees' satisfaction, public service motivation, relationship with internal/external users' of services and politicians (Chung & Van der Lippe, 2020), leadership (Kellis & Ran, 2013).

Secondly, from a structural/organisational perspective, another contribution regards the identification of the driver to develop proper performance measurement and management systems for public managers and employees operating in a smart working environment. SW acts as an antidote to labour turnover and absenteeism problems (Stavrou, 2005; Berkery et al., 2017) improving organizational performance through proper control systems and techniques (Padovani et al, 2010). Other positive effects are related to productivity (Berkery et al., 2017), profitability (Dutcher, 2012) and sustainability (Guthrie et al., 2017). To this end, ICTs play an important role in securing workers' autonomy, stimulating creativity, and facilitating work. ICTs can improve organisations' stability and allow effective and efficient interaction among employees, encouraging the sharing of information and ideas. To facilitate employees' communication and task-accomplishment also in the future (Kim et al., 2018), specific ICTs such as storage clouds, instant messaging, VoIP, project/task management software or business collaboration and conferencing software, could be implemented. These structural/organisational changes need to be analysed to better understand the possibility and the ways for being implemented efficiently and effectively in PAs. Finally, from a relational perspective, the implementation of SW in PAs makes analysing the effects produced on employees' relations necessary. Externally with users of public services and internally with politicians. Relationships with users are fundamental because of their impact on the (co)production of services, the possibility to better understand users' needs (Brandsen, et al., 2018; Monfardini, 2010), and consequently to define and provide public services useful and customised (Bovaird & Loeffler, 2012).

Internally, in a SW environment the analysis of the relationship between employees and politicians is fundamental for appropriately driving PAs to the implementation of feasible strategies (Joensuu & Niiranen, 2018) and to understand if and how politicians can influence personnel behaviour (Bellò & Spano, 2015).

#### 3 - Methodology

To pursue the research objectives of the project, the interpretative paradigm is the most appropriate to use, given that the aim of this project is to enhance the understanding of "how" SW impacts the dynamics and interactions among PAs' intellectual capitals and consequently PAs' implementation processes of SW itself (Collis and Hussey, 2014).

Coherently with the ontological and epistemological position adopted, the methods that will be implemented are primarily of qualitative nature, also to define a model of investigation. Afterward, a quantitative methodology will be applied to confirm the results coming from the qualitative methodology adopted also to increase their external validity.

Qualitative research methods allow a thorough and in-depth analysis of the phenomenon under investigation rather than merely quantifying it. Moreover, given that the research aims at understanding the institutionalization of SW in PAs, qualitative research proves to be useful in investigating the interaction of various actors and structures. The quantitative methodology will be used to analyse data collected through the qualitative methodology and to provide generally applicable guidelines to draft policies for implementing SW in PAs.

In particular, the initial qualitative approach to the research will be based on a multiple case study (Yin, 2017). This methodology is most appropriate to investigate a contemporary phenomenon in depth and within its real-world context. In particular, a convenient sampling approach (Royse et al., 2010) will be adopted. The municipalities that will be investigated are selected because: 1) they are in different areas of Italy (mainly in the area where each research unit is located; the municipalities selected are Bologna, Cagliari, Siena, Formia); 2) they represent municipalities of different size in terms of population and employees; 3) the researchers have direct and personal contacts with the top management of the municipalities and with politicians. To develop a case study means to make a deeper analysis of the object analysed. In our case, the existence of personal relationships with the subjects operating within municipalities can guarantee the possibility to carry out the analysis appropriately. The development of multiple cases has been chosen to mitigate the problem of external validity usually referred to the case study method. In addition, to overcome construct validity issues, multiple sources will be used. In this regard, three different types of sources will be triangulated.

Initially, interviews to employees working in at least two areas in charge of public services will be carried out (at least one area providing services mainly internally – e.g. accounting – and another area providing services externally – e.g. social services), afterward a survey to all employees of each municipality and document analysis will be realised. To overcome internal validity problems data is analysed using explanation building. This technique tries to analyse case study data by building an explanation about the case. Moreover, if connected to a strong theoretical proposition, this technique allows to establish casual interferences from the case study analysis and may reflect critical insights into the social theory adopted. In this manner, major contributions can be provided to the theory implemented by augmenting the knowledge available about the theory used and the topic

investigated. A protocol will be developed to increase results' comparability and mitigate problems of reliability.

After the end of the analysis of the municipalities selected, a national survey will be carried out. This analysis will give higher reliability to the results of the research and at the same time will provide the possibility to customize policies for implementing SW, e.g. according to PAs' size, services, etc

## 4 – Phases of the project

The above methodology will be deployed in five phases as described below:

1) Multiple case study (months 1-2).

In the first phase, the researcher will prepare a list of questions regarding the most relevant aspects resulting from the literature review already prepared by the other researchers working on the project. These questions will be used to draft a list to be included in a questionnaire for the interviews. This questionnaire will be tested before administering it and will be used as an outline during the interviews and make them as comparable as possible. Staff and politicians working in the areas selected to develop the first part of the analysis will be interviews, will be discussed through focus groups.

2) Local surveys (2-5 months)

The data from the interviews, focus groups and document analysis will be analysed. The consequent results will be used to elaborate a questionnaire to administer through a survey to submit to all the politicians and employees working within the municipalities analyzed in the previous phase. 3) National survey (4-9 months)

In the fourth phase, based on the results of the local surveys, the questionnaire used for the local survey will be fine-tuned and submitted to a statistically representative sample of Italian municipalities. The sample will be a stratified sample based on location and size.

4) Elaboration of the national survey data (months 9-10)

In the fifth phase, the data coming from the national survey will be statistically elaborated and then discussed in the light of the literature review and accordingly to the theoretical perspective adopted. 5) Finalisation of the project (months 10-12)

In the last phase, the research units will finalise the main results of the project by identifying policies, change management models, guidelines and tools for supporting PAs in implementing SW.

### **5 - Training programme**

The training programme of this project is based on:

- ✓ Strengthening competencies on performance measurement system and smart working of services delivered locally. This training objective will be measured by a strict process of supervision based on an assessment of written works and discussion of research with the supervisor and other research units, reports by the supervisor on research progress and the quality of formal presentations.
- ✓ Enhancing qualitative and quantitative skills of analysis.
- ✓ Close interactions with members of the other research units, namely the University of Siena, the University of Rome La Sapienza and the University of Cagliari.
- $\checkmark$  Establishing research connections with other scholars and institutes with a similar focus.

- ✓ Participation in activities and workshops of the project, also coordinated by the tutor of this project.
- ✓ Development of joint papers with the tutor and other members of the research team as training to develop abilities to publish in international journals.
- ✓ Opportunities to present at international workshops and conferences.