Enrico Quaglia 21/06/2025

PhD research activity

Training Activities:

Courses Completed During the First Year and a Half of My PhD Programme

Since the start of my PhD in November 2023 within the SRV PhD Programme, I have successfully completed a number of courses across three main areas: core courses, cross-disciplinary courses, and soft skills development. Below is a summary of the courses I have followed:

Core Courses

- *Quantitative Research for Business Studies* – Leoni & Mizzu (Dec 2023, 4 CFU)
- *Organization Theory and Design* – Gasparre, Mizzau & Torre (May–June 2024, 1 CFU)
- *Business Ethics and CSR* – Spinelli (June–Aug 2024, 1 CFU)
- *Banking and Finance* – Francesca Querci (June 2024, 1 CFU)
- *Accounting and Accountability* – Francesco Avallone (Oct 2024, 1 CFU)

Cross-Courses

- *Research Design and Comparative Methods* – Coticchia (Dec 2023–Jan 2024, 3 CFU)
- *Risk Management and Performance* – Nieri (May–Sept 2024, 2 CFU)
- *Fundamentals of Network Analysis* – Ribaudo (July 2024, 3 CFU)
- *A Gateway Course to Modelling Complex Systems* – Mara Baudena (Apr–May 2024, 2 CFU)

Soft Skills Course

- *Research Toolbox* – Leoni & Mizzau (Dec 2023–Apr 2024, 6 CFU)

PhD first year research activity:

During the first year of my PhD, and throughout the beginning of the second, which is currently ongoing, I conducted research on urban dashboards under the supervision of Prof. Renata Paola Dameri, with a particular focus on their use in supporting decision-making processes by public administrations.
I began working for ETT in February 2023, participating in a series of European projects within the company's Smart City department. Subsequently, I was offered the opportunity to undertake a PhD program co-funded by the university and the company, which I officially started in November 2023.
The first research project I undertook during the PhD began as a literature review aimed at exploring the existing academic debate on urban dashboards as tools to support public administration in territorial management. As I delved deeper into the material, the review evolved into the development of a structured taxonomy. This taxonomy allowed me to categorize and synthesize the main goals, end-users, and application domains of urban dashboards identified in the literature, providing a clearer understanding of the field and laying the groundwork for future empirical studies.
My research investigates how cities are governed and managed through urban dashboards—digital tools that aggregate, visualize, and process large-scale urban data to support decision-making and strategic planning. Despite the widespread adoption of these dashboards in smart city governance, there is no comprehensive classification of their types, functions, users, or application domains. To address this gap, I conducted a systematic literature review, analyzing 86 urban dashboards—including conceptual models, proposed frameworks, and actual applications—

through a structured taxonomy of goals, user groups, and thematic domains. This research identifies dominant patterns—such as the predominance of dashboards aimed at public administrators for decision-making—and reveals critical deficiencies, especially in domains like health, economic development, and citizen engagement. The study, not published yet, aims to contribute to the field by offering a framework to better understand the diversity of urban dashboards and by highlighting areas for innovation, inclusivity, and cross-domain integration in urban data governance.
For my second article, building on the conceptual taxonomy developed in my first study, I contributed to a research project led by my supervisor that evaluated the real-world effectiveness of urban dashboards for local public administration. This study, submitted to the conference of ITAIS 2025 and currently in review, developed a 19-feature analytical framework across four key dimensions—architecture, tools, data, and scope—and applied it to a sample of 21 dashboards, including 13 from academic literature and 8 recognized international best practices (e.g., OECD, UN, World Bank).
The analysis revealed that most dashboards are top-down, theoretically grounded, and data-rich, but often lack citizen involvement, transparency, and advanced features like AI, benchmarking, and historical depth. The research highlights a disconnect between theoretical design and practical use, particularly in terms of user engagement and support for participatory governance.

In addition, I assisted my supervisor by identifying relevant indicators and datasets from Eurostat and OECD portals across various thematic domains to explore potential similarities with the indicators of Controllo Dynamico system developed by Prof. Dameri for the Municipality of Genoa. This preliminary work was carried out with a view in line with the municipality's objectives to eventually developing a framework for comparing the city's performance with that of other EU cities.

Extra Activities:

Support as tutor and participation to the course Progettazione della Smart City (UNIGE):

I had the opportunity to work as a tutor and participate as a student in the advanced course Progettazione della Smart City at the University of Genoa, 2024 edition. This course, organized into 8 theoretical modules, concluded with a project work laboratory. My role involved actively assisting students throughout the duration of the course and understanding concepts of smart urban planning and sustainable technologies, providing support during lessons and the final group work. For the final group work, I also assisted my supervisor Professor Renata Paola Dameri and Monica Bruzzone in the final evaluation of projects that the students developed across the course, which included the definition of a business proposal utilizing the SWOT analysis and the business and value proposition model canvas.
This experience not only enriched my professional background but also provided me with theoretical knowledge on the state of the art of smart cities, allowing me to expand my expertise in tools supporting public administration for decision-making.

Research activity – ETT (research activity):

During my PhD, since its inception, I have played an active role within ETT, participating in various research and project management activities. One of my main areas of involvement has been the coordination and management of general activities related to SPOKE 1 of the RAISE project (NextGenerationEU). For SPOKE 1 of RAISE, ETT is involved in 4 project tasks, each requiring distinct activities that contribute to the objectives of the SPOKE. While my activity as support in project management implies a continuous active contribution in the various activities ETT S.p.A. is involved in, the main activity I am following is the development of a web-app for citizens to access open data and sensor-derived data from partners, and development of a mobile app for reporting anomalous urban conditions (participatory urban monitoring system);

In addition to supporting the general management of the project, I developed the project's deliverables, ensuring compliance with deadlines and set objectives.
Simultaneously, I worked on drafting five deliverables for two research projects, **Culturgame** and **Suggestus** (PON), developed by ETT. These deliverables covered various phases of the project life cycle, from initial planning to evaluation of the results achieved. In the context of the Culturgame project, I organized and coordinated the tests of the developed solutions, contributing to their validation and collecting the necessary feedback to improve the applications.
I also drafted the project proposal for the **INEST** call (NextGenerationEU), helping define the objectives, activities, and resources needed for an urban regeneration project in the Piedicastello neighborhood of Trento through the use of virtual reality technologies.
I also conducted preliminary research for the launch of the **Simcity** (FESR 2021-2027) project, focusing on analyzing utility companies affiliated with the Municipality of Genoa. My research centered on municipally-owned and associated utility companies in Italy, with the aim of providing a comprehensive state-of-the-art analysis. This research supported the project's objective to develop a centralized multi-utility service for the city of Genoa.