



# PhD in URBAN PLANNING, DESIGN, AND POLICY - 38th cycle

**PNRR\_351\_PUBBL\_AMMIN Research Field: THE CONTRIBUTION OF DIGITAL PLATFORMS  
IN A RECOVERY AND RESILIENCE PERSPECTIVE: EXPLORING TERRITORIAL IMPACTS,  
INSPIRING PUBLIC POLICIES**

<b>Monthly net income of PhDscholarship (max 36 months)</b>
<b>€ 1195.5</b>
In case of a change of the welfare rates during the three-year period, the amount could be modified.

<b>Context of the research activity</b>	
<b>Motivation and objectives of the research in this field</b>	<p>Contemporary world is grappling with new forms of economic organization, based on the spread of digital technologies, produced, and managed by a new category of economic actors: Digital Platforms. Their success depends on an energy-intensive use of artificial intelligence techniques while accelerating the creation, storage, transmission, and recovery of georeferenced data from people, machines, devices, and sensors. This production and use of data constitute an unprecedented source of value production through fewer intermediate forms of economic organization, which are progressively replacing the traditional relations between capital, labor, and space. Digital Platforms are transforming value chains and opening new channels for value addition, restructuring the capitalistic accumulation processes. The PNRR assigns Digitalisation a crucial role. Digitalization is defined as "a transversal necessity, as it concerns the continuous and necessary technological updating in production processes; infrastructures as a whole, from energy to transport where monitoring systems with sensors and data platforms represent an innovative archetype of asset quality and safety management (Missions 2 and 3)". Under Mission 1 and 2, the PNRR pays significant attention to the productive sector's innovation and digitization, considering it central to reducing territorial cleavages. Mission 3 supports logistic organization and mobility, focusing on the traditional</p>



	<p>infrastructural gaps of the country and the need to keep the digitalization of logistics. Under this axis, the PNRR foresees the reduction of the emissions produced by logistics through the digitalization of logistic chains and interoperability. Nevertheless, when explaining the expected impacts on the reductions of cleavages and divides, the plan remains vague regarding territorial effects and how public policies shall cope with them. The effects of Digital Platforms Economy on spaces, people and local economic trajectories, and the environment are significant. Digital platforms are based upon new combinations of physical and virtual spaces that challenge the consolidated nexus between cities, territories, and economic development. In its distributed and dispersed nature, the new forms of cyber capital question the traditional effects of spatial agglomeration that characterize urban history and the relationship between the urban dimension and economic development. Digital technologies stress public policies and institutions engaged in producing development frameworks coherent with a logic of equity, redistribution, and sustainability. How can public policies elaborated in a recovery perspective detect and contrast the uneven territorial and environmental impacts of the new logics of capital accumulation adopted by digital platforms?</p>
<p><b>Methods and techniques that will be developed and used to carry out the research</b></p>	<p>Urban studies have started identifying the differentiated typologies (Srnicsek, 2017) and the different roles played by digital platforms in the urban economy. Nevertheless, the logics of <i>cyber-capital</i> are complex and often still little known and visible to society, being new and moving at an accelerated pace. The consolidated disciplinary knowledge, the analysis protocols, and synthesis indicators currently available struggle to encode data to map and measure its impacts and provide valuable indications to decision-makers. While, at the same time, the platform economy produces value starting from the ability to generate and manage new data, which remain only partially accessible to the public and require new forms of artificial intelligence and statistical processing to be used and interpreted. The PhD candidate shall be inspired by a multidisciplinary approach, starting from</p>



	<p>urban studies to dialogue with artificial intelligence studies and innovative data mining, data analysis and innovative statistics. In this direction, this PhD research shall contribute to empowering the capacity of public actors in the design of public policies, both by developing a sound understanding of the dynamics, both by feeding innovative approaches to define policy problems and identify public policy solutions, as well to support policy implementation and evaluation. The Phd candidate shall contribute to fill the gap in the established analytics by developing innovative ways to measure how the platform economy is questioning existing mechanisms of value creation, wealth, and development, generating new forms of inequalities. There is a lack of publicly available data and indicators able to grasp the impact of cyber-capital. The logic of the platform economy misses a scenario-building exercise on its territorial impacts. The PhD candidate shall contribute to support policymakers and decisionmakers in this perspective. The recent establishment of an observatory on the platform economy by the European Commission has highlighted the difficulty that the consolidated indicators have in mapping the role of the platform economy. Three relevant axes are missing. The first regards the effects generated upon the production and transformation of space (which are the platform economy's new geographies and which infrastructures-assets are relevant to them). The second, territorial cohesion and equity (how much platforms extract from /give back to places). The third regards their impact on climate change. The PhD candidate will spend a 6 months (minimum) research period at the partner's premises and a research period of 6 months (minimum) in an international research center/university abroad.</p>
<p><b>Educational objectives</b></p>	<p>The Phd Candidate will first of all be trained to conduct a critical review of innovative datasets to understand how they can contribute to exploring the territorial impacts of the platform economy: in particular he/she will explore how GPS data automatically generated by people using apps can contribute to track new patterns of spatial centrality and peripherality produced by the platform economy supporting the logistics of goods. Data should</p>



	<p>be able to highlight the peculiar reorganization of places in the platform economy. At the same time, he/she will consider the opportunity to track data on e-commerce in order to measuring how digital platforms are restructuring the logistics of production and the production of added value. Finally, both data will be used to estimate the impact on sustainability (socio-spatial. environmental costs: i.e. CO2 produced by trip, number of new jobs/ number of jobs lost; the number of new firms/situations of crisis in logistics and commercial activities). Based on this training, the PhD is expected to develop and test some innovative and experimental analytical methods to validate the potentialities of these datasets and build innovative statistic protocols for mapping and measuring the territorial impacts of the platform economy. Moving from this main objective, the PHD candidate is also expected to develop a policy design approach. On the one hand the results of his/her work should be robustly contributing to the design of a new generation of public policies, able to face the storm produced by Cyber-capital and embrace a logic of equity and socio-spatial justice, as well as overall sustainability. In this direction, he/she will be trained to explore a knowledge co-production methodology, based on tight interaction with decision-makers and stakeholders. On the one hand he/she shall put s the basis for involving Digital platforms in an interactive exchange aimed at exploring their potential for research purposes (and set the conditions of their use, developing specific agreements). On the other he/she will develop a strong dialogue with decision-makers and public actors in order to explore the awareness of the socio-economic-spatial impact of the new logics of capital accumulation on which Cyber-capital works, particularly elaborating new indicators and data able to make its logics and impacts visible, but also the way in which these actors have already started elaborating strategies to react to the logics and socio-economic-environmental and spatial effects of Cyber-capital.</p>
<p><b>Job opportunities</b></p>	<p>According to its international orientation, the PhD program trains highly qualified researchers and professionals in the fields of spatial planning, design and management of</p>



	urban projects and policy, urban studies and urban governance. Researchers with such profile may be employed by Italian and international academic institutions, public bodies and research centres, public and private development agencies, and other private firms.
<b>Composition of the research group</b>	12 Full Professors 11 Associated Professors 1 Assistant Professors 45 PhD Students
<b>Name of the research directors</b>	Valeria Fedeli, Grazia Concilio

<b>Contacts</b>	
<b>Research directors:</b> Prof. Valeria Fedeli, Prof. Grazia Concilio e-mail: <a href="mailto:valeria.fedeli@polimi.it">valeria.fedeli@polimi.it</a> ; <a href="mailto:grazia.concilio@polimi.it">grazia.concilio@polimi.it</a> phone +39/02/2399.5531	
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Further information is available at: Handbook a.y. 2018/2019 of the PhD Program in Urban Planning, Design and Policy (UPDP) in <a href="http://www.dastu.polimi.it/index.php?id=1146">http://www.dastu.polimi.it/index.php?id=1146</a>	

<b>Additional support - Financial aid per PhD student per year (gross amount)</b>	
<b>Housing - Foreign Students</b>	--
<b>Housing - Out-of-town residents (more than 80Km out of Milano)</b>	--

<b>Scholarship Increase for a period abroad</b>
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<b>Amount monthly</b>	834.84 €
<b>By number of months</b>	6

<b>National Operational Program for Research and Innovation</b>	
<b>Company where the candidate will attend the stage (name and brief description)</b>	Fondazione Giangiacomo Feltrinelli
<b>By number of months at the company</b>	6
<b>Institution or company where the candidate will spend the period abroad (name and brief description)</b>	Università o centro di ricerca da identificare in base al profilo e agli specifici interessi del candidato selezionato
<b>By number of months abroad</b>	6

<b>Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information</b>
<p>Financial aid is available as follows to purchase books and material, participation in courses, summer schools, workshops and conferences:</p> <p>1<sup>st</sup> year: max 1.624,30 euros per student                      2nd year: max 1.624,30 euros per student                      3rd year: max 1.624,30 euros per student</p> <p>Total amount: 4.872,90 euros per student</p> <p>There are various forms of financial aid both for research and teaching activities. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.</p>