TITLE OF THE PROJECT: Changing cities and quality of life. Trends, obstacles and results in innovation and competitiveness of the urban space in Barcelona

ACRONYM: CITY&QUALYNNOVA

KEY WORDS:
Economic Geography, Quality of Life, Competitivity, Public Services, Biodiversity, Mobility, Third sector economy, Clusters, Big Data,Cities

SUMMARY:
To build a more inclusive space, social change is at the frontiers of social innovation that brings together economic innovation and welfare growth; but, in order to do so, it should be taken into consideration the discussion of the best ways to build a more inclusive society; taking into account the causes of social inequalities and the approaches and programs that are creating a more just world, from economic, social and spatial views. These changes affect the quality of life. This consequence implies a major challenge for cities, but also an opportunity for renewal that requires new strategies to redefine terms of sustainable development, equity and civic awareness.

This research focuses on two major issues, quality of life and economic competitiveness of urban spaces, centered basically in Barcelona. Therefore, the structural idea focuses on understanding the determinants of competitiveness of urban spaces; but also to study and analyze the needs and requirements of all people with different incomes. Thus this research acquires a social responsibility inserted in an unequal society that requires working towards a practice of social justice.

Therefore a holistic approach to advance quality of life and competitiveness includes specific objectives, which are organized from seven structural pillars (1) quality of life, to do an epistemological analysis of the literature on how to improve on a more egalitarian development. (2) To study the provision of services to population (parks, health services, school facilities) through P-Median models, coverage analysis, using GIS, ArcGIS Network Analyst. (3) The analysis of the third sector, economic clusters, and spatial patterns through Big Data. (4) To analyze sustainable mobility: non-motorized transport means, public space and mobility, and car culture in sustainable urban mobility. (5) In urban biodiversity, to understand the metabolic relation with nature through the appropriation, production, circulation, processing, consumption and disposal of products, materials, energy and water is studied, taking as a case study Barcelona metropolitan area, using GIS and contrast methods. (6) To interpret health and urban space, sunlight and natural ventilation in relation to urban planning, in addition the effects of biodiversity on health are also analyzed. (7) Finally, methodological advances are proposed in quantitative analysis of spatial patterns of urban population, based on Big Data and GIS; and in qualitative and quantitative analysis new forms of social interaction of the third sector economy are proposed and factors for improving quality of life; and methods of spatial analysis, GIS and spatial statistics for health and urban space are analyzed.