

METHODOLOGY FOR THE IMPLEMENTATION OF SOCIAL INNMÓTIC TO IMPROVE PUBLIC BUILDINGS (PROJECT EFIPUBLIC)

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Inefficiency of many of the public buildings built, currently in operation, is a worrying reality. Among other consequences, there is waste of energy resources, situations of great discomfort, inefficiency of HVAC systems, wasted space, or inappropriate uses and habits [1], [2], [3]. The in-depth study of a large teaching building: School of Technology in Cáceres (Extremadura University), through Efixpublic project (Social Inmotoc for the improvement of public buildings 2017-2020), is enabling the design and placement of sensorization and control devices, as well as the open and public data monitoring and its subsequent analysis. The collected data are analysed later, and therefore the deficiencies detected are analysed, and improvement actions are proposed according to them. Water, electricity, and gas consumption, air quality, thermal comfort, occupation, energy provided by renewable sources, equipment turned on during off hours... were some of the variables sensed and analysed. In this way Efixpublic project is allowing to implement reforms in the building, awareness campaigns, changes in use, etc. [5], [6]. Working together with the teaching staff: students and teachers, as well as administration and service staff, or with the building management and maintenance team [7],, can guarantee the continuity of the progress made over time. In this paper the designed methodology, currently under experimentation, is developed. First of all, the realization of an inventory of construction systems, equipments and HVAC, as well as consumption ratios through invoices. Then an analysis and experimentation with the ICTs media available as sensors, data storage or visualization systems, and communications [8], [9]. Thirdly, data tracking is developed. Fourthly and finally, solutions are design to address the detected problems. In this case it is being demonstrated that the detailed work with the building and its users through social inmotoc allows to generate solutions that address the improvement of the constructed buildings [10].

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