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# RESULTS OF NETWORK TERRITORIAL STRATEGY FOR SOCIODIGITAL INCLUSION IN ANDALUSIA

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### I. INTRODUCTION

The science and technology *advancements* of the late twentieth century have yielded important relationships and social commitments in the general framework of the information society. The citizens of Andalusia (Spain) have experienced a growing digital immersion through the use and development of the so called information and communication technologies (ICT) in the last three decades, as reflected in various studies, statistics and reports consulted. However, these sources have revealed the existence of social segments detached from the advantages and opportunities offered by these technologies. Against this, in 2002, the Andalusian Regional Government prompted a corrective initiative of the digital divide based on the experimental opening of 26 centres of public Internet access in municipalities characterized by their geographic isolation and poor conditions of socioeconomic development. The results motivated the progressive extension of a network of facilities -network Guadalinfo- in 2004, which covered up much of the Andalusian territory in 2012, relying on a program of dynamic actions and sociodigital inclusion that reached its maturity with the boost of the *Plan Estratégico Guadalinfo (PEG)* designed for 2009-2012.

The research on public policies for the digital inclusion in Andalusia, conducted between 2010 and 2012, is mainly focused on verifying the validity of the Guadalinfo strategic action in terms of its design and territorial equity as a result of the implementation and operation of such a network of digital access and revitalization centres. From the hypothesis and initial objectives definition, a identification of the theoretical and methodological framework is made, which leads to the exposition of the main results of the study and its final conclusions.

## II. INITIAL ASSUMPTIONS AND OBJECTIVES

The examination of the design and territorial implementation of the socio-digital integration policy that makes up the Guadalinfo network is based on two initial hypotheses related to a working plan whose formulation has been fitted to various objectives.

The first hypothesis gives the Guadalinfo experience a strategic design which is coherent with the promoted policies and strategies boosted in the political-administrative and territorial context in which the Autonomous Community of Andalusia (Spain and the European Union) is integrated, though far from an updated diagnosis of situation which may define the planning agenda.

A second hypothesis states the process of implementation and development of this network as obeying some already surpassed initial expectations, which does not guarantee an equity in the digital inclusion action applied in Andalusia.

For a better development of the above hypotheses, a deeper knowledge of the existing policy of the sociodigital integration and revitalization in Andalusia is aimed, driven through the Guadalinfo network and its inclusive action. This goal is achievable through two secondary objectives:

- Determination of the existing rationality and consistency of the Guadalinfo strategy design. This goal draws on the PEG 2009-2012, checking its suitability as a response to the circumstances of the digital divide detected in Andalusia, assuming the integrative action philosophy of its immediate political and administrative environment, as well as the adequacy of its intervention lines to the objectives that support them.
- 2. Equity verification of the network socio-territorial reach. Revealing how the centres network attached to the Guadalinfo experience presents an appropriate distribution in Andalusia, in terms of socio-digital integration needs. To do this, different stages of implementation are considered, as well as the population in need of access to the centres in the municipalities of this region.

In addition to the results obtained, the validity of the assumptions and the fulfilment of the objectives set above are listed in the final conclusions of this research.

# III. METHODOLOGY APPLIED

In line with the hypotheses, objectives and theoretical support initially contemplated, the research methodology followed in this work is grouped into two distinct analytical blocks, in terms of coverage in the strategic design of sociodigital inclusion undertaken by the Andalusian Regional Government, and in terms of the determination of the socio-territorial reach of the Guadalinfo network:

On the one hand, the strategic design analysis begins with a thorough review of the PEG 2009-2012. This work is based on a conceptual model of assessment or the theoretical and methodological approach to the Logical Framework Approach (LFA), action by strategic design objectives set. Initially, this evaluation will depend on a proper identification of needs and problems posed by the digital divide in Andalusia. In this case, the unit of analysis considered coincides with the figure of the PEG, in terms of content, structure and schedule. Thus, the causal link established by the LFA according to its general application scheme turns out to be the source of reference for the assessment mentioned above, strengthening the possibility of raising fundamental questions and evaluating existing weaknesses.

Moreover, determining the socio-territorial scope of the Guadalinfo network strategy pays attention to the determination of the impact produced on the population and territory. To do this, the identification of the target profile and the logic of its social and territorial coverage through a case study in eight selected counties are considered. Specifically, the coverage adequacy of the Internet public access centers for people with access needs is faced, as well as the use of these technological resources under deployment on this network in Andalusia, taking into consideration the social needs and social aspirations and the geographical distribution of the target population.

Therefore, a comparative analysis of four advanced or dynamic areas under a socio-economical development perspective arises, in addition to four more territories that the Regional Administration aims to "revitalize", constituting a classic study that attempts to verify the consistency of the Guadalinfo network coverage model, linking the different needs of use of the socio-digital integration centres to the socio-economic conditions detected in the territories where they serve:

- a) Territories to be revitalized: Campo de Tabernas (Almería); Guadix (Granada); Andévalo Occidental (Huelva); Sierra Norte de Sevilla (Sevilla).
- b) Dinamic territories: Costa Noroeste de Cádiz (Cádiz); Medio Guadalquivir (Córdoba); Área Metropolitana de Jaén (Jaén); Área Metropolitana de Málaga (Málaga).

Among the (direct and indirect) information sources used in this work, it mainly turns out an opinion poll designed for the resident population in the territories mentioned above. This has been developed over 1,000 personal interviews supported by a questionnaire, in order to determine the profile of the population in need of access to the Guadalinfo network centres and the impact produced by that network, along with its implementation logic.

In addition to the documentary contents available for assessing the PEG design, the collection of enough relevant information on the socio-territorial imprint of the centres network has allowed a proper treatment and analysis (statistical and mapping), broken down according to thematic areas and geographical valuation for a subsequent interpretation of results and conclusions setting.

To understand the design examination and socio-territorial imprint of this network of centres, it is clear that its configuration obeys an evolution of the remedial policies concerning the digital divide in Andalusia, which has been implemented at the normative, strategic and territorial levels:

- From a regulatory perspective, a regulation of periodic incentives designed to ensure homogeneity conditions in the centres network operation is perceived. Similarly, it fixes the rules of cooperation with various partners (either public or private institutions), and provides spatial categories for the centres of public access to the Internet, by population, in municipalities with fewer than 20,000 residents, with the exception of disadvantaged neighbourhoods or areas at risk of social exclusion.
- Strategically, we have identified a linear process of digital inclusion linked to the various figures of planning driven by the Autonomous Administration in Andalusia,

- ranging from the *Programa Regional de Acciones Innovadoras –PRAI Guadalinfo*-(2002), to the PEG 2009-2012, characterized by a steady growth of resources and services offered to the population.
- The territorial dimension of the Guadalinfo network has grown since 2002, with the aforementioned experimental opening of 26 citizen service centres located in municipalities of Andalusia's eight provinces. The finding of positive results at reducing the digital divide was a gradual expansion since 2004 until the present in much of the town's conglomerate of Andalusia.

However, the limited implementation of this network in the territory has kept notable gaps in terms of coverage in a few municipalities that are valued taking into account the analysis of the existing socio-territorial inequality.

# IV. CONCLUSIONS

The overall present study is defined by the desire to increase the existing theoretical knowledge on the digital divide phenomenon emerged. In particular, there have been interesting contributions in terms of procedures and appropriate methods to address the arising inequities. In fact, this research is particularly useful for the construction of a theoretical and methodological framework of contextualization about admitting its use as a open and revisable reference from geography and other disciplines preferably related to the regional science.

A look into the strategic design of the digital inclusion actions and the socio-territorial expression of the Guadalinfo network has allowed a deeper knowledge and understanding of its configuration, identifying the main gaps (mainly methodological in terms of planning and management). Similarly, there have been opportunities to improve the equity of their actions on the beneficiary population, according to their characteristics and needs.

Although planning experience Guadalinfo meets criteria of globally acceptable quality, it lacks of an initial diagnosis to guide the supply of goals and strategies for digital inclusion. Furthermore, we see the need to avoid jumps and inconsistencies in the causal chain that makes up the ideal scheduling scheme adopted in this study, according to the LFA. These ideas are also related to the construction of a map of actors (managers) that provides higher levels of collaboration and coordination, ensuring more equitable institutional relations, which, in the case of slums and deprived urban areas, depends on an increase in the strength of resources and commitments of associations.

Following a thorough examination, it has been verified the existence of an affinity between the objectives and strategic actions implemented in the political- territorial levels of the European Union, Spain and Andalusia, providing a consistent supply of resources and convergence in the digital divide for these scales of action.

Confirmed the lack of effect of the initial implementation criteria of the Guadalinfo experience, it is paradoxical that cities and municipalities with over 20,000 inhabitants limit their coverage of centres to neighbourhoods or areas considered disadvantaged, which respond to a reality or characterization of parallel social marginalization or triggering the detected digital exclusion. This does not find a clear justification that differentiates

or exclude its population from the public service, given the deficiencies or aspirations of access to and use of ICT and the Internet shown through the opinion poll carried out.

Likewise, using a method to check the uneven distribution of this integrated network, –comparing territorial ratios of coverage–, has demonstrated the existence of gaps in provision and significant deficits of public assistance to the citizens, regardless of wealth or socio-economic dynamics of each territory and municipal public resources or population size of urban areas. Delving into the new scenario of detected needs and potentials, there has been a general increase in users in areas declared to be revitalized by the Administration itself, what accentuates the differences with the remaining territories. In other cases, it has been striking the presence of significant pockets of potential beneficiaries, no members of this network, in large towns and cities with partial or no coverage. These incidents undermine the positive action taken, advising a strategic and methodological reflection on the design and functionality of the Guadalinfo reality.

The findings and conclusions expressed above verify the validity of the initial hypotheses of this investigation, given the positive consistency of this network design with the external strategic context, in contrast to the lack of connection of its objectives and strategic lines with a few problems and well-defined needs. Also, the expiration of a few reasons of implantation overtaken by new realities and inequities is confirmed. As far as the orientation of this study is concerned, the achievement of its primary purpose can be confirmed, all of it through the interpretation of the strategic and territorial configuration process of the centres network and through the demonstration of a deficient coverage that hinders its digital divide corrective action.