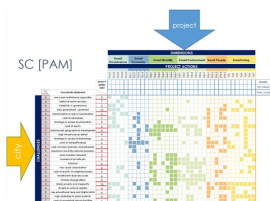


ASCIMER

Smart city projects suited to each city. Evaluation tool for verifying the suitability of smart city projects for individual cities, whatever their needs may be.



Contact information

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Technological Offers type

Technological solutions

Research and innovation areas

- Climate, Energy and Mobility
- Digital Technologies, Artificial Intelligence, Cybersecurity, 5G, Robotics

ODS



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Where?

[Transport Research Centre](#)

Keywords: | [smart city](#)

Brief description of the solution and the added value it delivers

ASCIMER is a tool to help with decision-making in smart city projects. It is intended for city councils and international financial institutions (IFIs) seeking to ensure that the projects they are going to carry out are likely to achieve their specific objectives in each city.

Smart city projects can vary in scale and affect very different areas (governance, the environment, mobility, services, the economy, etc.), making their assessment extremely complex. This tool can subdivide projects in a way that allows a great variety of proposals to be analysed using a single solution. It contextualises solutions and matches them to the specific needs of each city quickly and systematically, saving time in the evaluation process.

It is a highly scalable tool on account of its ability to adapt to different contexts. The development and presentation of the solution is transparent, which also makes it easier to propose improvements to the smart city projects assessed. It was developed in collaboration with city councils and IFIs and has been tested in real-world case studies.

Description of the technological basis

The solution consists of a tool which takes users through a several-step process to assess the suitability of smart city projects in different cities. This tool is designed for use by city councils and IFIs. The use model could be licensing (IFIs) or consultancy (city councils and IFIs).

The technological basis is open-source software based on interconnected spreadsheets. What differentiates it from other evaluation products is that it is capable of assessing the viability of projects in a short period of time, regardless of their size or the areas they affect. Plus, it also assesses the suitability of solutions for specific contexts in a clear and systematic manner, which means that it can be used to introduce improvements as well.

'A tool for selecting smart city projects that are genuinely suited to the needs of each city, vis-à-vis their implementation and financing'

Business needs / application

Local authorities

Large and medium-sized local authorities are faced with a lack of technical capacity or projects that are excessively complex. Smart city projects are novel, heterogeneous, cross-cutting and particularly complex. Obtaining funding from IFIs requires the quality of the project to be demonstrated objectively and its objectives to be aligned with impacts.

- Lack of technical skills to attract funding in developing regions
- Lack of awareness of objective needs
- Lack of awareness of solution types and their impacts
- Medium-sized city councils in Spain (143 municipalities with more than 50,000 inhabitants) and in other developed countries.
- Medium-sized and large city councils in developing countries for which no specific tools exist: HIGH-DEGREE OF REPLICABILITY,

on account of its flexibility.

International financial institutions (IFIs)

IFIs seek to generate a development impact with their investments. There is a great deal of demand for smart city projects. The experience and resources necessary to assess the complexity of smart city projects are lacking and the existing tools are not suitable.

- Need to justify the social impact of investments
- Need to prioritise financing the best projects
- Lack of time on the part of those assessing the projects
- EIB, World Bank, Inter-American Development Bank, African Development Bank, Asian Development Bank, etc.
- Infrastructure investment funds with sustainability criteria.

'It is a highly scalable tool on account of its ability to adapt to different contexts'

Competitive advantages

- Specific tool.
- Improves efficiency in terms of evaluation times.
- Objective justification of technical decisions.
- Objectivity in decision-making relating to prioritisation.
- Flexibility to assess the specific needs of each city under consideration, in any region. Flexibility to analyse both small and large projects in different areas (mobility, the environment, governance, services, etc.).
- Clearly structured process.
- Possibility of participation by interested parties.
- Possibility of dynamic learning.
- Developed and tested by experts using real cases.

References

- Tool piloted together with the European Investment Bank (EIB) on four real smart city projects, two previously financed by the EIB and two at the evaluation stage.
- Three international workshops with city councils and IFIs, as well as several field visits, have been carried out to develop the tool.
- The team is made up of Victoria Fernández, urban architect specialising in governance in smart city projects; Guillermo Velázquez, civil engineer specialising in smart mobility; and Andrés Monzón, director of UPM's Transport Research Centre (TRANSyT), who are supported by an extensive team of UPM and international experts.

Stage of development

- Concept
- Research
- **Lab prototype**
- Industrial prototype
- Production

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