MODELING AND SIMULATION OF THE IMPACT OF PUBLIC POLICIES ON SMES

SEVENTH FRAMEWORK PROGRAMME

PROJECT OVERVIEW

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MOSIPS general information

Modelling and Simulation of the Impact of Public Policies on SMEs

- EU Project of the European Commission 7th Framework Programme **FP7-ICT-2011-7**, **Objective 5.6** "*ICT Solutions for governance and policy modelling*"
- Partners are **9 legal entities** from **6 European Countries**
- Budget 3.443.130 €
- Requested EU Contribution 2.718.497 €
- Duration 36 months

History and project overview

MOSIPS main goals

- The aim of the project is to develop a **user-friendly policy simulation system** allowing **forecasting and visualization** of the socio-economic potential impact of **public policies**
- This simulation system will **allow policy makers to make experiments** with different socio-economics designs, with the **participation of citizens** and potentially impacted stakeholders, before the settlement of a public policy
- The combination of suitable data, models, artificial intelligence and interactive tools will deliver a ***policy wind tunnel***

History and project overview

Current situation

Currently there are three mainstream approaches to the impact assessment of public interventions:

- Expert judgment-based analysis
- Fully deterministic computable econometric models
- Multi-agent simulations

Due to the complexity of the simulation models involved, the **lack of reliable data** and the **poor theoretic computational models** re human behaviour, the current solutions do not fully satisfy the prediction needs of all the stakeholders.

Future needs

MOSIPS endeavours to contribute to the Multi-agent simulators **encouraging an integral approach** through the combination of all the three current technological trends.

It foresees the use of **econometrics and applied psychology** to define individual actors in the model (agents) and **microeconomics and applied social sciences** to devise relations and interaction rules between themselves.

Furthermore it will allow a **direct involvement of different stakeholders** in the simulation process, though including inputs that are hardly codifiable in a MAS.

History and project overview

MOSIPS Output

MOSIPS will deliver a multi-agent based simulator for policy impact assessment and validation with features that advance the state-of-the-art in the field:

- It will be **specifically dedicated to public policies evaluation;** flexibly adaptable to particular needs of given policy domains
- It will form **self-contained and reusable web components** that will be available for further reuse and exploitation
- It will **allow a direct involvement of different stakeholders** in the simulation process
- It will use for its simulation **public data resources**
- It will rely on **Open Data Models** in order to ensure the reusability of results of simulation and continuous improvement of models and practices
- It will provide a **Visualization Interactive Module** allowing a highly intuitive and usable graphical illustration of simulation results facilitating interpretation, learning and drawing conclusions as well as supporting real-time interactions

The Consortium

N.	Member name	Short Name	Type	Country
1	**Anova IT Consulting**	**Anova**	**SME**	**Spain**
2	University of Alcálá	UAH	HEI	Spain
3	Research Studio Austria Forschungsgesellschaft	RSA	RTD	Austria
4	University of Reading	UoR	HEI	UK
5	Opera21	OPERA21	LE	Italy
6	University of Konstanz	KONSTANZ	HEI	Germany
7	European Institute of Interdisciplinary Research	EIIR	RTD	France
8	Ayuntamiento de Madrid	MADRID	End User	Spain
9	Comune di Verona	VERONA	End User	Italy

The Consortium

MOSIPS Work Plan

The Work Packages

- **WP1** – Requirements definition (EIIR)
- **WP2** - Data extraction and analysis and Data Input Module (Opera 21)
- **WP3** – Modeling (Universidad de Alcalá)
- **WP4** – Creation of the multi-agents SFE (University of Reading)
- **WP5** - Visual Analysis & Interaction Module (Konstanz University)
- **WP6** - System integration, testing and validation (Anova IT Consulting)
- **WP7** - Exploitation and Dissemination Management (Anova IT Consulting)
- **WP8** - Project Coordination and Management (Anova IT Consulting)

Policy domains of MOSIPS model

Macroeconomic environment

Innovation

Labour market

Environment

Entrepreneurial activity

Internal managing

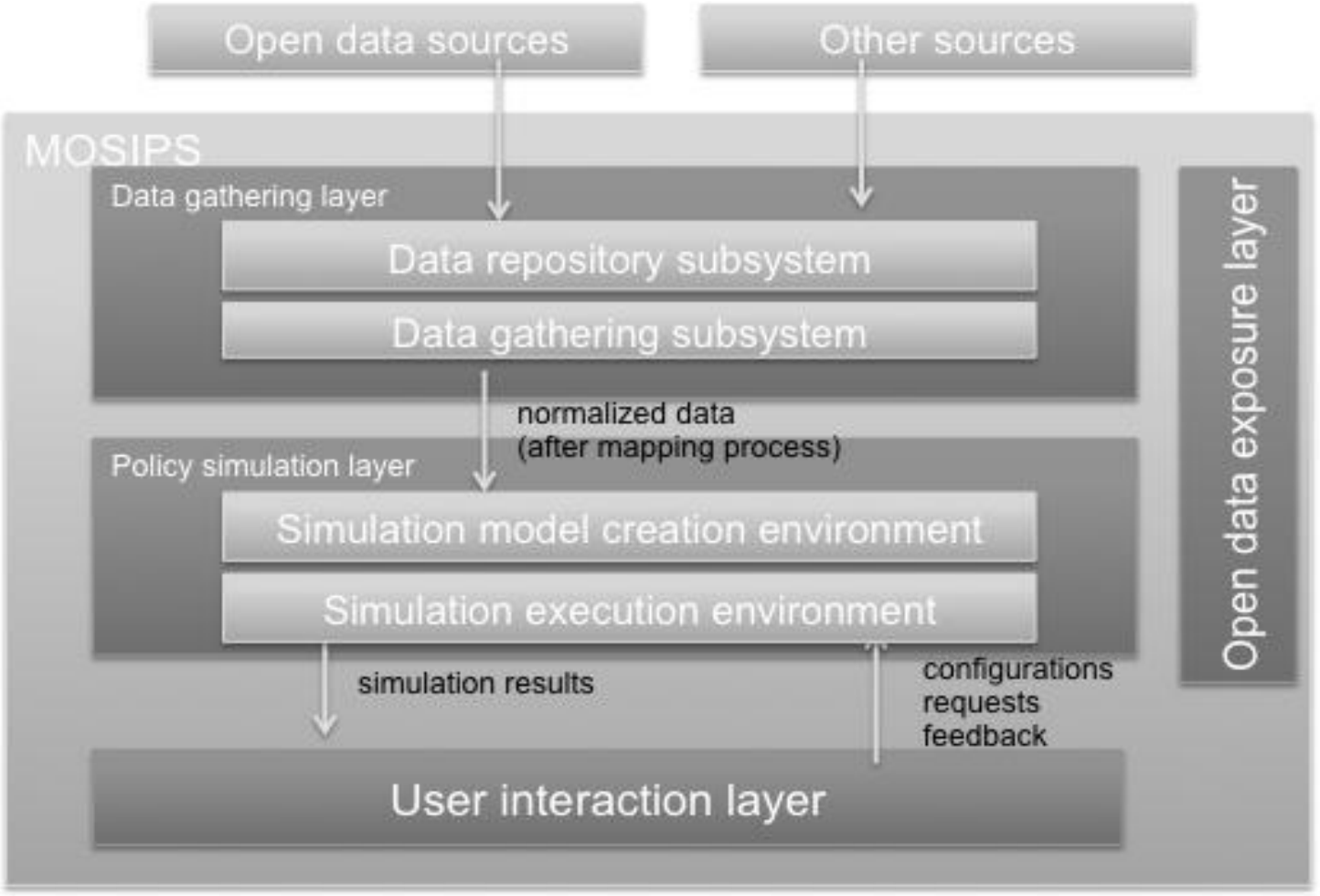
Financing

Infrastructure

Inter-firm relations

Relations with the administration *red tape*

MOSIPS System Concept



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OF THE IMPACT OF PUBLIC POLICIES ON SMES

anova Consulting Technology Innovation

Universidad de Alcalá

EIIR European Institute of Interdisciplinary Research

¡MADRID!

Universität Konstanz

OPERA21

University of Reading

Comune di Verona

r|s|a Research Studios Austria Forschungsgesellschaft mbH