eGovPoliNet

The Policy Community

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A Collaborative Approach to Study Policy Modelling Research and Practice from Different Disciplines

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Objective 5.6 ICT solutions for Governance and Policy Modelling

Agenda

- eGovPoliNet facts and mission statement
- Setting grounds
- Assessing collaborations across disciplines
- Insights from assessment

eGovPoliNet facts

- Co-funded by the European Commission within FP 7, international support action
- Main objective:
  Building an international multidisciplinary policy community facilitated with innovative ICT solutions for policy modelling and public governance
- Duration: 08/2011 – 02/2015
- Consortium: 17 partners from 14 countries:
  - Canada, Australia, Macao, New Zealand, Russian Federation, Ukraine, USA
  - EU: Belgium, German, Greece, Italy, Netherlands, Slovakia, UK
- Project website at http://www.policy-community.eu/

eGovPoliNet mission statement and value propositions

Mission statement:

"Our mission is to be the recognised leader in bringing together researchers from different disciplines to share knowledge, expertise and best practice supporting policy analysis, modelling and governance"

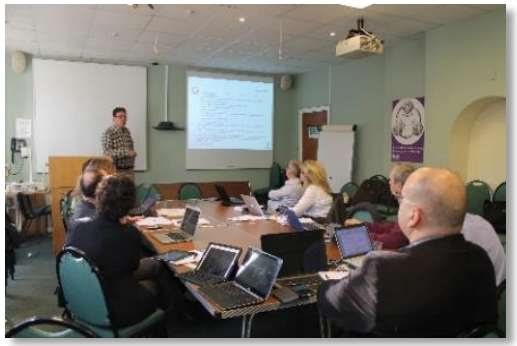
Policy modelling – setting grounds

- Policy modelling is "supported by the use of different theories as well as quantitative or qualitative models and techniques to analytically evaluate the past (causes) and future (effects) of any policy on society, anywhere and anytime" (Estrada, 2011)
  - Complexity
- Multidisciplinary nature of the field
  - Contributions necessary from various disciplines such as political, economic, social, technical disciplines
- Problem: existing fragmentation across different research disciplines in policy modelling
  - Disciplines develop theories, concepts and solutions almost independently from each other

SEVENTH FRAMEWORK PROGRAMME

Need for collaboration across disciplines in policy modelling

- Multidisciplinary approaches needed where researchers from different disciplines collaborate to study the approaches toward policy modelling
  - Developing a common understanding out of single disciplinary fields
  - Sharing best practices and experiences
  - Bring forward joint solutions that incorporate aspects at focus in single disciplines, including the use of innovative ICT solutions
  - Driving the evolution in the field co-jointly



SEVENTH FRAMEWORK PROGRAMME

eGovPoliNet's contributions towards collaboration across disciplines

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- Community building activities
  - …
- Developing a knowledge base
  - Glossary of common understanding
  - Comparative analyses of relevant research themes across disciplines
  - Future scenarios and grand challenges of research

- This research investigates the success of the multidisciplinary collaborations along comparative analyses in the project

SEVENTH FRAMEWORK PROGRAMME

eGovPoliNet's approach to a comparative analysis

- Investigate, structure, compare and formalise existing concepts, approaches and solutions, including ICT support, in the field of policy modelling
- Based on a structured multi-criteria approach of comparison
  - A set of criteria for evaluating and comparing knowledge assets in the relevant themes
  - General metadata and particular conceptual aspects
  - Each deriving recommendations for policy modelling research and practice
- Selection of nine relevant themes up till now

Comparative analysis performed so far

- Nine comparative analyses developed as white papers
  - Theories of policy modelling
  - Modelling frameworks
  - Simulation models of different modelling methods
  - Conceptual and domain models
  - Emerging tools and technologies
  - Technical frameworks and tools
  - Policies and programs framing policy making
  - Projects / cases implementing policy
  - Stakeholder engagement in policy development

* These white papers have matured to become book chapters

Assessing collaboration across disciplines in comparative analysis

- Assessing research collaborations along the following parameters
  - Indicators for co-authors of papers
  - Professions of team members (researchers, students, practitioners)
  - Disciplinary background of the authors
  - Geographical spread of the institutions involved
  - Organisational setup of collaborations in comparative analysis

SEVENTH FRAMEWORK PROGRAMME

Indicators for co-authors of papers

- P (total number of papers): 9
- N (total number of authors): 27
- Collaborative index CI (mean number of authors per comparative analysis): 3.9
- Degree of collaboration DC (a proportion of multi-authored and single-authored papers): 0.78 (0 = all papers single-authored; 1 = all papers multi-authored)
- Modified collaboration coefficient MCC: 0.6 (0 = only single-authored papers, 1 = all authors co-authoring all papers)

$$MCC = \frac{N}{N-1} * \left(1 - \frac{\sum_{j=1}^{N} \frac{1}{j} * f_j}{P} \right)$$

f_j is number of papers having j authors

[for indicators see …]

Disciplinary background of the authors

Paper number	1	2	3	4	5	6	7	8	9	
Total of authors per paper	1	3	5	4	7	2	1	5	7	**35**
Disciplines										No of people per discipline*
Information Systems	1		1	4	6			4	1	**13**
Computer science		1	1		1	1				**3**
Social sciences			1						1	**2**
Sociology			2							**2**
e-government & e-participation		3	1	3	6	2		1	6	**15**
Public administration sciences									2	**2**
Economics								1		**1**
Organisational and management sciences		2				1	1		2	**3**

Authors arguing to be „multidisciplinary“, i.e. affiliated with different disciplines

* multiple instances possible

Geographical spread of the institutions involved

- Institutions involved: 13
- Countries involved: 11
  - Europe: 7
  - North America: 2
  - Asia: 1
  - Oceania: 1

Rename Discipline to „Institutions involved

Country	Discipline	Performed comparative analysis								
		1	2	3	4	5	6	7	8	9
Germany	E-Government Research Group in a Faculty of Computer Science	■		■				■	■	
	Technology Assessment Institute			■						
Slovakia	Economics Faculty								■	
The Netherlands	Technology and Policy Management Faculty									■
Greece	Technology Management Group				■	■				
United Kingdom	Information Systems School								■	
	ICT industry (SME)					■				
Belgium	Public Policy Institute		■				■	■		■
Ireland	Data Analytics Group					■				
Canada	Information Systems Institute		■				■			
USA	Technology in Government Centre									■
New Zealand	Social Sciences and Sociology Centre			■						■
China	Information Systems and E-Government Institute									■

Insights from the assessment of collaborations in comparative analysis

- Benefits and value add of multidisciplinary collaborations
  - Sharing approaches and insights into literature across disciplines
  - Better understanding of what is important and rigorous in a discipline
  - Increased awareness that a multidisciplinary approach helps to overcoming the current fragmentation in the field of policy modelling
- Challenges of multidisciplinary collaborations
  - Difficulties in meeting at the same time due to different time zones and different scheduling of conferences across different communities
  - Reaching a common understanding of key terms and concepts
  - Differences in cultures of carrying out research due to different disciplines and differences across global regions (e.g. European vs. “Russian” cultures)
  - Willingness of individuals to accept different approaches and understandings from other disciplines

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http://www.linkedin.com/groups?gid=4165795

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Thank you for your attention!

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university of groningen

UNITED NATIONS UNIVERSITY

UNU-IIST International Institute for Software Technology

INNOVA Technology Transfer & Valorisation

Institute for European Studies Vrije Universiteit Brussel

UNIVERSITÉ LAVAL Institut Technologies de l'information et Sociétés

Center for Technology in Government

TU Delft Technische Universiteit Delft

CERTH/ITI

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Comparative analysis

Reflected lessons learned and basic principles	
Comparative analysis of theories	➢ Combinations of theories can contribute the most benefits for the research and provide a compensation for the shortcomings of individual theories
Comparative analysis of frameworks	➢ A rising need to develop categorisation criteria to classify frameworks for policy modelling
Comparative analysis of simulation models	➢ Combination of different simulation modelling theories is a necessary next step in the evolution of simulation modelling
Comparative analysis of conceptual and domain models	➢ Research on domain and conceptual models is immature and requires further investigation
Comparative analysis of stakeholder engagement	➢ Necessary to match selection of stakeholders and engagement methods to the goals of policy process
…	…