

UNeGov.net – Community of Practice for Electronic Governance

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ABSTRACT

The paper presents an initiative by UNU-IIST to build a global Community of Practice interested in developing, sharing and applying concrete solutions for e-Governance – UNeGov.net. We present the rationale for the initiative, along with its mission, objectives and activities. We also describe a novel approach to collaborative problem solving supported by the UNeGov.net Portal. The approach is based on a repository of resources relevant to e-Governance to underpin a process of formulating, exploring, matching and refining abstract problem descriptions into concrete solutions, enriching the repository in the process.

Categories and Subject Descriptors

J.1 [Computer Applications]: Communities of Practice

General Terms

Algorithms, Experimentation, Human Factors, Standardization

Keywords

Community of Practice, Electronic Governance, Cooperative Problem Solving, Knowledge Sharing

1. INTRODUCTION

Governments worldwide are under pressure to address public needs, to support local industries, to deliver high-quality public services, etc. In response, they engage in Public Sector Reform and develop e-Governance - leveraging the use of Information and Communication Technology (ICT) to bring about customer orientation, businesslike management and other public sector reforms [3]. In doing so, they face many challenges [2], e.g. how best to: lead organizational changes despite resistance from civil servants; establish cross-agency projects against hierarchical government structures; build long-lasting technology solutions, while facing technology volatility; rely on the private sector to deliver public services, while avoiding vendor lock-in strategies.

2. INITIATIVE

Alongside the challenges facing public managers responsible for technology and reform initiatives, there is a growing experience on how such challenges can be addressed. UNeGov.net is a forum to share such experiences and develop localized solutions.

The mission of UNeGov.net is to build a Community of Practice [1] focused on developing, sharing and applying concrete solutions for e-Governance through research, development and community collaboration, with emphasis on developing countries.

In line with its mission, UNeGov.net has the following objectives: (1) advance the practice of e-Governance, (2) focus on solutions to concrete problems, (3) build consensus on best practices, (4) consider the challenges facing Developing Countries, (5) facilitate the sharing of experiences and resources and (6) support interactions between practitioners and experts.

UNeGov.net engages in nine kinds of activities:

- 1) *Portal* - A repository of resources for common use across the Community, with support for collaborative problem-solving.
- 2) *Workshops* - Share experiences, identify concrete issues of interest to governments, discuss reusable solutions supported by research and cooperation, and build a Community.
- 3) *Schools* - Organize schools and courses for public IT managers, CIOs and industry leaders, particularly from Developing Countries, on various aspects of e-Governance.
- 4) *Projects* - Jointly apply for funding and execute projects through community-wide cooperation to advance the state of e-Governance in particular countries and globally.
- 5) *Reports* - Document experience of individual countries in Electronic Governance through Country Reports. Document the state-of-the-art globally through Thematic Reports.
- 6) *Surveys* - Carry out a survey on the global state of Electronic Governance through member contributions on individual countries and analysis of existing survey series.
- 7) *Curriculum* - Develop a curriculum for public managers and CIOs and help members adapt, customize and implement it according to the needs of each country.
- 8) *Conference* - Establish a global forum for researchers, practitioners and developers to present the latest findings on the theory and practice of Electronic Governance.
- 9) *Practice* - Create a framework for collaborative problem-solving, complementing the systematic solution-building process with deep learning experience by members.

Figure 1 shows how such activities are mapped into objectives.

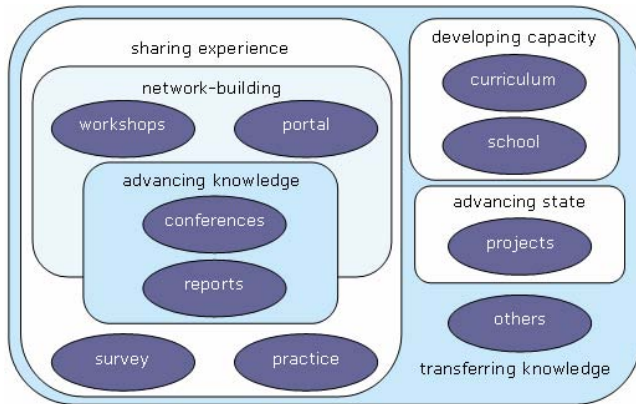


Figure 1. Activities vis-à-vis objectives of UNeGov.net

3. COMMUNITY

The UNeGov.net Community is the centre of all activities – members initiate and execute such activities, resulting in more experience and content, and enlargement of membership.

The Community consists of experts in different fields related to e-Governance: Public Administration, Information Technology, Knowledge Management, Political Sciences, etc. It also comprises practitioners from governments, industry and academia: public managers responsible for technology and reform initiatives, decision makers, CIOs, government service providers, etc.

Figure 2 presents a matrix mapping various relevant areas of specialty (for experts) and affiliations (for practitioners) against different countries the members come from. On this basis, the figure also illustrates the idea of thematic versus country reports.

		Countries:							e-Governance in Argentina: Country Report
		Tunisia	Palestine	Vietnam	Nepal	India	Cameroon	Nigeria	
Experts	Themes:								
		legislation							
		financing							
		organization							
		Change Management for Public Administrations, Thematic Report							
		electronic democracy							
Practitioners		electronic administration							
		government							
		industry							
		academia							
		civil society							

Figure 2. UNeGov.net Community matrix

4. COOPERATIVE PROBLEM SOLVING

The practice activity of UNeGov.net applies a novel technical approach to Cooperative Problem Solving in Virtual Communities of Practice. The approach defines a systematic process of solution-building for a given problem description. The process relies on a repository of various web resources – papers, projects, software, people, problems, solutions, etc.; properties – data about or relationships between resources; and statements – triples of a subject (resource), property and object (resource or data) [4].

Problem solving is carried out in six stages:

- 1) *problem description* – A member describes a problem from its own practice and adds it to the repository as a resource.
- 2) *problem exploration* – By exploring the problem, relevant resources, properties and statements are gradually added.
- 3) *problem matching* – The problem is matched against similar problems, solved or unsolved, described in the repository.
- 4) *solution design* – The first solution is proposed for the problem, including its decomposition into sub-problems, each added to the repository as a standalone problem description.
- 5) *solution refinement* – The solution is refined by adding relevant resources, properties and statements, and integrating sub-problem solutions into solution, once available.
- 6) *solution deployment* – When all sub-problems are solved, add a statement relating abstract problem with concrete solution.

The process can be carried out fully collaboratively since sub-problems can be assigned to different members, who in turn apply the same process for solving them. Figure 3 illustrates the process.

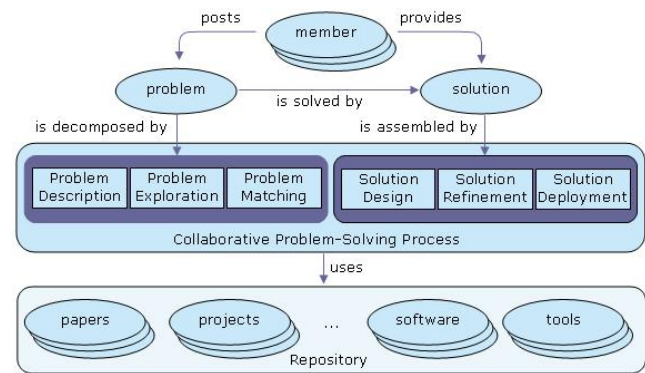


Figure 3: UNeGov.net and Cooperative Problem Solving

5. CONCLUSIONS

UNeGov.net is a newly established initiative of UNU-IIST to build a Community of Practice for e-Governance. This paper highlights the mission, objectives and activities of UNeGov.net, its community and the novel approach to cooperative problem-solving. More information can be found at www.unegov.net.

6. ACKNOWLEDGEMENTS

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7. REFERENCES

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