4. e-Planning Seminar at MIT (2003)

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MIT-DUSP Seminar / Speaker Series on e-Planning: Fall 2003

with an International Conference on Public Participation and Information Technologies

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18 June 2003

1. Introduction

DUSP Seminars on Technology and the City have contributed to understanding the urban planning implications of modern information and communication technologies (ICT). The current proposal for a new Seminar / Speaker Series builds on this experience and focuses on the new challenges and opportunities for 'e-planning' as the reach of ICT extends far beyond the automation of traditional tasks.

In the last few years, e-government efforts have become fashionable both in the US and abroad. Initially, we saw a multitude of independent initiatives towards improving the use of ICT in public services and public administration, mostly focused on using the Internet to facilitate information access and automation of services.

More recently, the trend has been toward centralization and consolidation of e-government efforts and, in some cases, a restructuring of the agencies involved. We are now beginning to observe the emergence of central plans and central authorities, or even multi-national regional plans and agencies, which reach far beyond the traditional government IT branches, and are developing e-government strategies and policies touching all sectors in society and all branches of government.

Examples of this are: the "e-Government Task Force for Ibero-American Countries", created at the level of central ministries at the VII Ministry Summit of the 21 Ibero-American countries (September 2002); the "e-Europe" initiative, launched by the European Commission in 1999, and adopted as policy by the European Council Summit in Lisbon, March 2000, requiring "public administration at all levels to use new technology to give public access to information for all citizens, promoting, at the same time, on-line interaction among citizens and public administration" (e-Europe 2002 Update, 2000).

In the USA, there are no less significant investments, reflected for instance in the NSFfunded "Digital Government" program and the US Federal governement's restructuring efforts (the Vice President Gore's 'Reinventing Government' project and the 'E-Government Initiatives' of the current Office of Management and Budget).

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As expected, these "e-Government" efforts are impacting planning and setting the agenda for what might be called 'e-Planning'. Such a trend is forcing planners to look beyond the (relatively) simple and obvious examples of service automation or public access to government information. One leading example is the "e-planning Group" fostered by Scottish Executive (September 2001).

In his document "e-Planning: Turning the Organization Inside Out", Peter Thorpe writes:

"The 'Modernizing Government' Agenda has set a target for Planning Departments, like other Government organizations, to ensure that 100% of their dealings with the public are capable of being undertaken electronically by 2005. This places the onus on Planning Authorities to rethink the way that their services are organized and delivered" (Thorpe, P. University of Exeter, Planning Summer School 2001, UK)

In effect, will the centralized services move beyond efficient publishing and broadcasting in ways that promote meaningful dialogue among citizens and public/private interests? Shouldn't e-planning differ from e-government in that improved planning processes might involve many partners and less government?

This evolution raises many new questions that go beyond re-shaping services.

The trend towards a more central role of technology in Government and in Planning has come, somewhat paradoxically, as the technologies have greatly enhanced the prospects for disaggregated, spatial analyses and decentralized, community level planning. Reduced cost and improved technology has stimulated the rapid expansion of detailed, disaggregated data about land use and ownership, geography, infrastructure, environmental conditions, etc. along with new, sophisticated analytical tools and visualization techniques to make the best use of them.

This dual trend poses new intellectual challenges at community/neighborhood as well as city/global levels, and it raises research questions on a breadth of issues, with emphasis on Public Participation, Privacy, Security and Freedoms, Institutional reform, and Environmental Planning. Furthermore, its study requires considerable knowledge and understanding of ICT's potential, not only of hardware and software, but also of powerful analytical tools, data mining, and communication strategies.

Technology is bringing to the table a new wealth of data and parameters, at multiple levels, that were not available to planners before. Besides the well known issues of data filtering and evaluation, how does this data availability impact planning processes, levels and scope? How does it relate to the emergence of "neighborhood planning"? Can ICT facilitate decentralization of urban revitalization and development efforts? Will it enable new forms of measuring the "performance" of a City, and of City Plans? Will these measures benefit 'outside' regulators and funders or 'inside' residents and community organizations?

Technology is also the focus of attention in a world troubled with increased levels of insecurity and conflict / competition. How can Planning and IT contribute to a better grasp of the trade-offs among issues of security, human rights and freedoms? What are the new threats to privacy posed by the level of detail and accuracy of data collected in planning procedures and policy implementation?

Technology is facilitating citizen access to information at levels never experimented before. But this new trend towards government centrality, and IT business consolidation, may inform citizens without empowering them. What forms of public participation in decision-making are sought, enabled or deterred by the new policies? Are current technology development policies favoring citizen participatory models, or pushing back citizens to a consumer role?

Technology is rapidly changing the public administration landscape. How is it impacting institutions and regulations? Is the new technology challenging the current institutional and regulatory framework for plan-making and urban development? What are adequate paths towards institutional and regulatory reform?

New challenges in Planning, with or without an "e", cannot be understood separated from the challenges faced by the people that embody it. What is the role of a planner in this new scheme, between e-Government oriented policies and increased citizen pressure towards interactive planning? What new technology and analytical skills and competencies are required for the new generation of planners? How can we improve our current school curricula to correspond to these new requirements?

The MIT Department of Urban Studies and Planning has been at the forefront of the new thinking concerning the use of technology by planners and the impacts of technology on planning. Examples include our research on GIS web services, neighborhood information systems, and collaborative planning tools, and our use of these technologies to study urban spatial structure, community development, social capital formation, digital divide issues, and urban design methods. We must continue to provide leadership by fostering a research agenda on the next generation of problems facing "e-Planning".

One goal for this Speaker Series Seminar is to advance the research on Planning and ICT at DUSP. The topic has long been the focus of the Planning Support Systems research cluster. But the expanded ICT use and the far reaching implications of ICT choices and strategies have brought one or another aspect of ICT onto the agenda of all groups across DUSP.

The seminars are intended to facilitate dialogue across a broad cross-section of the department about some of the shared issues, methods, and implications of "e-planning". By doing so, we also hope to stimulate debate about an e-planning research agenda among an international community of our peers, not only in Planning but also in closely-associated fields.

Hence the planned Book as a result of the Series, incorporating MIT-DUSP contribution to the new intellectual challenges we face today, and the proposed International Conference component attached to the Speaker Series.

This Speaker Series proposal takes in consideration input from Larry Vale, Karen Polenske, John De Monchaux, Ralph Gakenheimer, Ceasar McDowell, Martin Rein, Annette Kim, Eric Klopfer and Mel King; and also feedback on related issues from Lorlene Hoyt, Keith Hampton, Bish Sanyal, Judith Tendler, Duncan Kincaid and Aaron Fleisher.

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2. Speaker Series Topics:

Schedule:

Fridays, lunch hour, 12 September 2003 to 5 December 2003

Title for the Series: "e-Planning"

Alternative proposals for the Book (open to suggestions from contributors):

a) e-Planning

b) e-Planning: with and without e-government

c) e-Planning: challenges, promises and pitfalls

d) e-Planning: the road ahead

Session Topics

A- Breadth

1) Community level: e-Community Planning

Neighborhood Information Systems Community Statistical Systems E-Neighborhoods Community Empowerment

2) City level: Enhancing City Performance

City Knowledge and Meta-Knowledge Measuring and Monitoring City Activity and Performance Learning about Cities through IT The IT infrastructure for City-level e-Government / e-Planning

3) Global level: The Fading Borders between Regional, National and Local Planning

e-Government and e-Planning: new inter-dependencies between national, regional and local plans

e-Planning in a world with a variable geometry of development and unbalanced globalization e-social movements and multi-level impacts

Informal governance and challenges to land-based sovereignty

B - Issues

1) Public Participation

Technologies of Communication for citizen empowerment Technologies of Knowledge for responsible citizen participation New citizen responsibility with de-regulation New role of the planner in governance

2) Privacy, Security and freedoms in the e-World

Planning, IT and the trade-off between security and freedom e-data vulnerability and free flow of information New e-manipulation and metadata standards Location-based services and data access: (Big-brother vs. efficient monitoring) Preserving individual rights

(free circulation of information vs. protection from bad uses of that information, safety in travel and accessing city space vs. citizen mobility, privacy in communications - Internet, voice, etc.).

3) Urban Modeling and Urban Design

The implications of transparent models and increasingly 'sensed' urban spaces The changing economics of place Who benefits from GIS and spatial analysis The geography of change in the e-World New spatial relationships (e.g., e-abutters) Facilitating the sharing of planning models and data

4) Environmental Planning

Citizen participation with new IT in Evironmental Impact Analysis e-planning for new energy and transportation policies after Kyoto The impacts of EnviroMapper as a public information strategy Spatial analysis and environmental justice

5) Institutional Reform (the emergence of new frameworks with real impact in planning and governance, both formal and informal).

Planning in the knowledge-based society e-Accountability Shifts of decision centers in e-Government IT challenges to hierarchy paradigms in public administration

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This Speaker Series on e-Planning, is organized to amplify exposure of these issues within DUSP, and MIT at-large. The model, is to associate to each guest speaker, one or more "discussants" among DUSP faculty. We welcome tough questioning and debate.

Speaker Series Plan:

"Introduction to e-Planning"
Pedro Ferraz de Abreu discussants:
Joseph Ferreira Jr., Ceasar McDowell, David Laws, Jane Fountain, John de Monchaux, Larry Vale

• "Local Institutional Innovation and e-Planning" Thomas Kingsley discussants: Charlotte Kahn, Joseph Ferreira Jr.

• "e-Planning for urban and regional transportation: examples from France, US and China" Peter Cook discussants: John de Monchaux

• "e-Democracy: enabling, engaging, empowering" Ann Macintosh, UK discussants: Phillip Thompson, Jane Fountain

 "From Neighborhood Knowledge to a National Community Information Infrastructure: Examining Emerging Planning Tools"
 Neal Richman discussants: Lorlene Hoyt, Ceasar McDowell, Mel King

 "From Border-Busting to Ubiquitous Computing: Some Social, Cultural and Policy Implications of Recent Changes in Information Technology" Gary Marx discussants: Diane Davis, Keith Hampton

• "e-Planning: Qvo vadis, MIT-DUSP?" Diane Davis, Jane Fountain, Phillip Thompson, Joseph Ferreira Jr., John de Monchaux, Zhong-Ren Peng, moderated by Pedro Ferraz de Abreu discussants: Students

• "The Multiplier Effect: Using GIS to Build Planning Capacity" Christian Jacqz discussants: Terry Szold, David Laws, Ralph Gakenheimer "International Conference on Public participation and Information Technologies" ICPPIT03, co-organized by DUSP and CITIDEP Location: MIT 66-110 14 November 2003

• "e-Planning and citizen participation : limits, illusions and potential" Bernard Marchand, France discussants: Bish Sanyal, Langley Keys

 "Managing Complexity, or the Information Needs of Adaptive Co-Management: The Durham NC air quality case"
 Kathi Beratan discussants:
 David Laws, Herman Karl

 "Multimedia and Public Participation: Using New Information Technologies in Urban Regeneration" (Co-sponsored with SPURS)
 Mike Batty, UK discussants:
 Denis Frenchman, Anne Spirn, Ralph Gakenheimer

"e-Planning in a world embattled by war and poverty: Why should planners study and influence the information technology revolution?"
Pedro Ferraz de Abreu discussants:
Bish Sanyal, David Laws, Judith Tendler

• "e-Planning Synthesis and Review: Where to go from here?" Pedro Ferraz de Abreu, Joseph Ferreira Jr, et al.

We are grateful to our guest speakers, and to our faculty members who accepted the role of *discussants*.

3. Book:

We target the publication of a coherent book, with a significant contribution from MIT and DUSP to the field, together with a selected body of major researchers from other institutions.

This model implies that we must chose between 8 to 12 contributors, according to a focused theme. At the same time, this does not leave much room for promoting opportunities for young researchers with interesting and innovative approaches to play a more visible role in the process, since it is important to choose more senior researchers. This is why it is very useful to complement the Speaker Series, targeting a focused Book, with an International Conference, with an open call for papers (with referee selection nevertheless), targeting a specific "Conference Proceedings" publication.

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Given the success of the overlapping theme of the CITIDEP-organized 1999 International Conference on "Public Participation and Information Technologies" (ICPPIT - see the corresponding book), we propose to call this ICPPIT 2003.

While the first program reflected its association with a Dept. of Environment Sciences and Engineering (DCEA-FCT-UNL, co-organizer with CITIDEP of ICPPIT99), with an important component of environmental-related communications, ICPPIT03 program should reflect its association with MIT and DUSP, with an important component of planning-related communications.

Summarizing, the proposed model is a combination of the Speaker Series (Fall 2003) with ICPPI03, that will take place during 3 days of one of the Speaker Series weeks, thus intersecting at that week. The Speaker Series, and corresponding book, are an MIT-DUSP endeavor; ICPPIT03 (with corresponding proceedings publication) will be a joint MIT-DUSP and CITIDEP edition.

4. International Conference Topics:

International Conference on Public Participation and Information Technologies - 2003 Dates: 10, 11 and 12 November 2003, 2 and 1/2 -day sessions, MIT

Topics for call for papers

(PP-IT - Public Participation and Information Technologies)

T1) PP-IT and Globalization (e.g., PP-IT in security vs. freedoms/human rights tradeoff; emigration, mobility and development policies; global climate and environmental change; IT development strategies in a global market with near-monopoly dominance in key ITCs, public interest and public role in alternative IT development/business models, open source movement);

T2) PP-IT in e-Government (e.g., PP-IT in citizen governance vs government service automation strategies, new threats to privacy and freedom of choice, new democratic models and expressions, e-democracy, role of NGOs, use of IT by grassroots, IT and social exclusion);

T3) PP-IT in e-Planning (PP-IT in urban and neighborhood planning, natural resource management, environmental impact assessment and monitoring, stakeholder-based processes, at regional and local levels);

T4) Public access to information, its production and broadcast (e.g., citizen as consumer and as producer; technologies of knowledge and access, human-computer interfacing; metadata and public standards; rights and costs; info-exclusion);

T5) PP-IT in Teaching, Education and the Arts (e.g., PP-IT in distance learning, informal education, education for foreign/migrant communities, new tools and methodologies, participatory science, participatory learning of citizenship; PP-IT in social sciences and humanities).

REFERENCE:

Book "Public Participation and Information Technologies 1999", CITIDEP - UNL-FCT, Ferraz de Abreu, P. and Joanaz de Melo, J. (eds), 2000, 599 pages.

MIT-DUSP web url: http://dusp.mit.edu/

CITIDEP web url: http://www.citidep.net/

ICPPIT03 web url: http://web.mit.edu/uis/icppit03/ http://www.citidep.pt/icppit03/

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Urban Information Systems

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about us

people

education research

Faculty

Joseph Ferreira, Jr. Mike Flaxman Lorlene M. Hovt Eran Ben-Joseph Fabio Carrera Pedro Ferraz de Abreu Lynn Fisher Dennis Frenchman David Geltner Annette Kim Eric Klopfer Frank Levy Caesar McDowell William J. Mitchell John de Monchaux Thomas J. Piper Karen Polenske Carlo Ratti Rhonda Ryznar Raj Singh **Bill Wheaton** Chris Zegras

Support staff

Sue Delaney Duncan Kincaid Philip Thompson A number of faculty and staff throughout the Department of Urban Studies and Planning participate in the cross-cutting work of the Urban Information Systems group through research projects and publications, teaching classes involving extensive applications of computing in planning, and advising students whose thesis work extends our understanding of the urban and regional planning implications of information and communication technologies.



Faculty and staff

Joseph Ferreira, Jr.

Professor of Urban Planning and Operations Research Head, Urban Information Systems

Professor Ferreira was the founding director of the Planning Department's Computer Resource Lab and is now head of Urban Information Systems. Professor Ferreira teaches analytical methods and computer-based modeling for planning and urban management. His current research interests focus on spatial data infrastructure, interactive spatial analysis tools, and geographic information systems for land use planning, urban modeling, and risk management. He is the principal investigator for a number of research projects at UIS, including those involving the MIT ortho-browser, 'Urban Respiration', the Boston office market, and the revitalization of Beirut. Both Prof. Ferreira's undergraduate degree (in electrical engineering) and his PhD degree (in operations research) are from MIT. Currently, he is active in a number of professional and academic organizations including serving as President of the Urban and Regional Information Systems Association (URISA), an interdisciplinary organization that is the oldest professional association focused on the use of information systems to improve our urban and regional areas. More.

