

Policy Innovations of Local Governments on Civic Participatory Technologies

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Outline

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- Literature Review
 - Organizational Constraints: red tape, routineness, and organizational Centralization
 - External Pressures: external influence and citizen demand
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- Discussion

Introduction

- **Functions of e-government** (Holzer & Manoharan, 2008)
 - Delivering services for citizens (e-services)
 - Encouraging civic engagement (communication tech.)
- **Incentives for adoption of e-government**
 - Adoption of e-services (e-payment system)
 - Reducing transaction costs (Moon & Brestchneider, 2002)
 - Outcomes are measureable and tangible
 - Adoption of communication technologies (ex: videos, facebook, twitter)
 - Ambiguous goals and outcomes

Literature Review

- **Red Tape on Innovation**

- Positive relationship? (Moon & Brestchneider, 2002)
- Negative relationship (Welch & Pandey, 2005)
- H1: Personnel red tape is negatively associated with the adoption of civic participatory technologies

- **Routineness on Innovation**

- Doing same work every day will decrease access of heterogeneous knowledge (Aiken & Hage 1971; Powell, 2006)
- H2: Work routineness will be negatively associated with the adoption of civic participatory technologies.

- **Organizational Centralization**

- A high flexibility of decision-making structure allows individuals to achieve their goals (Damanpour, 1991)
- H3: Organizational centralization is negatively associated with the adoption of civic participatory technologies.

- **External Pressures**

- Stakeholders and citizen demands (Yang & Callahan, 2007)
- H4: External pressures is positively associated with the adoption of civic participatory technologies.

Personnel Red Tape

-

H1

Work Routineness

-

H2

Organizational Centralization

-

H3

External Pressures

+

H4

- External Influence
- Citizen Demand

Innovation Adoption

Civic Participatory Technologies

- Adoption of E-Services
- Adoption of Communication Technologies

Control variables

Sex, education, race, tenure, organization size (logged), types of department, % of employees in department use Internet for work, intranet, separate IT departments

Figure1: Determinants of Civic Participatory Technologies

Research Method

- **Data source:** “Survey of Local Governments: A Study of E-Government and Civic Engagement” (Feeney, Haller, & Welch, 2010).
- **Population:** 5,930 government managers in 1,186 local governments with citizen populations ranging from 25,000 to 250,000.
- **Sampling frame:** limited by 500 cities, in which 2,500 public managers are invited to interview by the web survey in 2010.
- **Completed respondents:** 902 public managers under a 2.6% margin of error at 95% confidence interval.
- **Final response rate:** 31.9%.

Measurements

- **Adoption of E-services: (0-4)**
 - Online payment for services including fees and fines
 - Online delivery of local government records or department information to citizens who request information.
 - Online requests for services that your department is responsible for delivering.
 - Online completion and submission of job applications
- **Adoption of Communicaton Technologies (0-5)**
 - Social networking tools (e.g. Twitter, Facebook, LinkedIn),
 - Text messaging (SMS)
 - Audio webcasts
 - Video webcasts
 - Email

Results

	E-services Adoption		Communication Technologies Adoption	
	Coefficient	Robust Std. Error	Coefficient	Robust Std. Error
Personnel Red Tape	-.063	.022**	-.018	.019
Work Routineness	-.047	.040	-.016	.032
Organizational Centralization	-.118	.036**	-.007	.030
External Influence	.059	.033	.098	.029**
Citizen Demands	.078	.030*	.053	.025*
Controls	Omitted			
N	590		659	
AIC	4827.392		5804.159	
Log pseudo-likelihood	-2394.696		-2883.079	

Discussion

- **Multi-facial innovations**

- Relative advantage (Rogers, 2003)

- e-services: organizational constraints (rational choice)
- communication technologies: external pressures

- **Reconsidering red tape effect**

- Innovation (+) / red tape => red tape (-)/ e-services

- inappropriate self-raking measure of innovation
- flexibility & low stress on rules ->innovation
- clarifying different red tapes for given situations

• **Institutional approach**

- E-services: citizens demands
- Communication technologies: external influence & citizens demands
- Institutional isomorphism (DiMaggio and Powell, 1993)
 - Coercive isomorphism (formal & informal): external influence (e.g. public opinion, business groups) => informal coercive isomorphism
- How do institutional isomorphism influence the adoption of communication technologies

Thanks for your attention!!

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Variable	Questionnaire Items	Response Categories	Cronbach's alpha
Perception of Personnel Red Tape	The formal pay structures and rules make it hard to reward a good employee with higher pay here.	1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree	.652
	Even if a manager is a poor performer, formal rules make it hard to remove him or her from the organization.		
Perception of Work Routineness	One thing people like around here is the variety of work. (Reversed)	1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree	.636
	Most jobs have something new happening every day. (Reversed)		

Variable	Questionnaire Items	Response Categories	Cronbach's alpha
Perception of Organizational Centralization	There can be little action taken here until a supervisor approves a decision.	1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree	.750
	In general, a person who wants to make his own decisions would be quickly discouraged in this agency.		
	Even small matters have to be referred to someone higher up for a final answer.		
External Influence	Business groups	1=no influence 2=mild influence 3=moderate influence 4=strong influence 5=very strong influence	.818
	Advocacy groups		
	Public opinion		
	Media		