

# ITC IMPLEMENTATION IN ROMANIAN LOCAL PUBLIC ENTITIES

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## **Abstract:**

*The paper aims to identify the usefulness of the ITC in local public entities in order to get it closer to the civil society needs. The main objectives of the paper are the following: 1. to identify what kind of public financial and social information is useful for civil society; 2. to demonstrate in what extent the ITC development and e-disclosure is useful for the civil society. The main problem of the Romanian civil society is the lack of information access. The research uses an empirical approach through a quantitative methodology, based on surveys, to test the usefulness of the ITC implementation in local public entities for civil society. The methods choose in this paper are reliable for this empirical study that tries to identify at a national level the problems that could be solved with a better connection between local public entities and civil society through the medium of ITC. The results of the paper present the identification of civil society disclosure needs; measure the ITC usefulness for civil society needs. The key contribution of the paper is to identify the civil society needs regarding e-disclosure by the local public entities using a complete database of all the local public entities that have a site on the internet. Taking care of the civil society needs, the local public administration could develop a more efficient interface designed for the civil society through the medium of ITC.*

**Key words:** *electronic innovation, local public sector, ITC usefulness*

**JEL classification:** M15

## **INTRODUCTION**

ICT has played an important role in local public administration reforms in many countries. It changes the way the government performs its functions and helps reduce operational costs through the efficiency of government services increased. ICT is one of the key instruments that support good governance by transparency and accountability: this will eventually help reduce corruption opportunities. ICT empowers the general public to actively participate in policy formulation and help ensure transparent use of public funds.

The main objectives of the paper are the following:

1. to identify what kind of public financial and social information is useful for civil society;
2. to demonstrate in what extent the ITC development and e-disclosure is useful for the civil society.

The study hypothesises a correlation among e-service disclosure content quality, technological complexity of web sites, and the application of criteria for assessing efficiency, effectiveness, and transparency through organisational re-engineering induced by e-service.

The proposed approach should allow managers operating in public-service organisations to develop useful operational frameworks for e-service quality-control systems – based on an analysis of the interactions and transactions made available to their stakeholders.

This paper addresses the increasing demand for transparency, efficiency, and effectiveness in e-service provision in the local public administration sector. It provides

a framework for understanding how the e-service is provided, how it can be evaluated, and how to assess e-service quality in terms of the content of the developed web sites.

## **LITERATURE REVIEW**

There are several constraints that limit the use of ICT in public sector reforms in Romania: lack of political will to change, lack of financial resources, lack of government officials' ICT skills, lack of buy-in from the general public, and lack of support from the private sector.

A. Ancarani, 2005 in his paper addresses the increasing demand for transparency, efficiency, and effectiveness in e-service provision in the local public administration sector. It provides a framework for understanding how the e-service is provided, how it can be evaluated, and how to assess e-service quality in terms of the content of the developed web sites.

Also many other articles (E. W. Welch, C. C. Hinnant & M. J. Moon (2005) asks how Internet use, citizen satisfaction with e-government, and citizen trust in government are interrelated.

Reducing corruption and improving citizen satisfaction are important aims of government, yet the link between these two policy aims has rarely been explored. Park H. & Blenkinsopp J. (2011) reports a study into the roles played by transparency and trust in the relationship between governmental corruption and citizen satisfaction with public services. The study was based on data gathered in South Korea to evaluate a specific initiative that had sought to reduce corruption and increase citizen satisfaction with public works programmes. The data indicated that the relationship between corruption and satisfaction was moderated by transparency and partially mediated by trust.

Shirley-Ann Hazlett, Frances Hill, (2003) examines how electronic government is being used in the delivery and improvement of public services in the UK, and the actual and potential problems inherent in this. Although there have been examples of very creative use of electronic government in the public sector, there have also been numerous spectacular failures. The paper highlights a number of problematic issues surrounding its use. These include the fact that government's two central aims, namely high quality customer service and value-for-money, could potentially be in conflict; and the lack of evidence to support the claim that the use of technology in service delivery results in less bureaucracy and increased quality. Clearly these tensions and issues need to be much more fully explored so that a "government for people" can be created. The paper concludes by posing the question: Can e-government produce truly innovative, responsive public services, or merely exacerbate electronically, existing shortcomings? Many other studies measured the internet disclosure index LPA using an item-based approach, following the models of Buzby (1975) and Cooke (1989) that were the first to have developed the concept of "disclosure index." Many other authors that have used this kind of index in their research (e.g., Chavent et al., 2006).

The main problem of the Romanian civil society is the lack of information access. The research uses an empirical approach through a quantitative methodology, based on surveys, to test the usefulness of the ITC implementation in local public entities for civil society. The methods choose in this paper are reliable for this empirical study that tries to identify at a national level the problems that could be solved with a better connection between local public entities and civil society through the medium of ITC.

The paper develops the prior author's research regarding the information disclosed by local public administration in municipalities with a population over 40 thousand inhabitants by reviewing the literature and exploring how radical information technologies may work to alter the production or maintenance of trust. After that, the

paper develops hypotheses about how citizens' experience with e-government, satisfaction with e-government and government Web sites, and trust in government are interrelated. Moreover, the model for e-government and Web site satisfaction incorporates citizen perspectives on electronic transaction, transparency, and interactivity. Using data collected from questionnaires, we then develop and test a two-stage multiple-equation model that simultaneously predicts experience, satisfaction, and trust.

## ANALYSIS & DATA PROCESSING

The research uses an empirical approach to identify what kind of public financial and social information is useful for civil society and to demonstrate in what extent the ITC development and e-disclosure is useful for the civil society.

The research use a quantitative methodology, based on surveys and author's observations and 1635 questionnaire data processing using SPSS. The following null hypotheses were selected:

1. Hypothesis 1.

There is no usefulness for civil society to disclose financial and social information through the medium of ITC

2. Hypothesis 2.

There is no information needed to be electronically disclosed by local public administration

Performing the multiple comparisons using Scheffe option from One-way ANOVA test, the paper demonstrates these hypotheses.

One-way ANOVA test F conducted shows that the mean answer of the four group of civil society are significantly different, most of them pointing out that most part of civil society consider useful to disclose the financial and social information through the medium of ITC.

The sample population was divided in:

1. Personal with a management role in a local public administration;
2. Personal which works in local public administration;
3. Juridical persons;
4. Phisical persons.

## ANOVA

Utilitate

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19,080	3	6,360	66,622	,000
Within Groups	155,699	1631	,095		
Total	174,779	1634			

## Multiple Comparisons

Dependent Variable: Utilitate

Scheffe

(I) Tip	(J) Tip	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
		Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1	2	-,001	,022	1,000	-,06		,06
	3	,121(*)	,022	,000	,06		,18

2	4	,258(*)	,022	,000	,20	,32
	1	,001	,022	1,000	-,06	,06
	3	,123(*)	,021	,000	,06	,18
3	4	,259(*)	,021	,000	,20	,32
	1	-,121(*)	,022	,000	-,18	-,06
	2	-,123(*)	,021	,000	-,18	-,06
4	4	,137(*)	,021	,000	,08	,20
	1	-,258(*)	,022	,000	-,32	-,20
	2	-,259(*)	,021	,000	-,32	-,20
	3	-,137(*)	,021	,000	-,20	-,08

\* The mean difference is significant at the .05 level.

### Utilitate

Scheffe

Tip	N	Subset for alpha = .05		
	1	2	3	1
4	439	,72		
3	411		,86	
1	356			,98
2	429			,98
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 406,051.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Finally the null hypothesis is not confirmed, the test pointing out that civil society consider useful to disclose the financial and social information through the medium of ITC.

As regards the second hypothesis, another One-way ANOVA test was performed.

### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
All financial statements disclosure	Between	7,486	3	2,495	10,246	,000
	Groups					
	Within	397,201	1631	,244		
	Groups					
Total	404,687	1634				
Budget and budgetary execution disclosure	Between	14,747	3	4,916	29,007	,000
	Groups					
	Within	276,399	1631	,169		
	Groups					
Total	291,146	1634				
contact info, e-mail	Between	2,744	3	,915	4,164	,006
	Groups					
	Within	358,226	1631	,220		
	Groups					

public interest regulations and documents	Total	360,970	1634			
	Between Groups	1,245	3	,415	2,421	,064
	Within Groups	279,489	1631	,171		
reports in .doc, .pdf, html, video, audio records, online participation at council meetings	Total	280,734	1634			
	Between Groups	1,245	3	,415	2,421	,064
	Within Groups	279,489	1631	,171		
multilingual website	Total	280,734	1634			
	Between Groups	1,245	3	,415	2,421	,064
	Within Groups	279,489	1631	,171		
	Total	280,734	1634			

### Multiple Comparisons

Scheffe

Dependent Variable	(I) Tip	(J) Tip	Mean	Std. Error	Sig.	95% Confidence Interval	
			Difference (I-J)				
All financial statements disclosure	1	2	-,006	,035	,999	-,10	,09
		3	,074	,036	,229	-,03	,17
		4	,159(*)	,035	,000	,06	,26
	2	1	,006	,035	,999	-,09	,10
		3	,080	,034	,137	-,02	,18
		4	,164(*)	,034	,000	,07	,26
	3	1	-,074	,036	,229	-,17	,03
		2	-,080	,034	,137	-,18	,02
		4	,084	,034	,103	-,01	,18
	4	1	-,159(*)	,035	,000	-,26	-,06
		2	-,164(*)	,034	,000	-,26	-,07
		3	-,084	,034	,103	-,18	,01
Budget and budgetary execution disclosure	1	2	,001	,030	1,000	-,08	,08
		3	,107(*)	,030	,005	,02	,19
		4	,228(*)	,029	,000	,15	,31
	2	1	-,001	,030	1,000	-,08	,08
		3	,106(*)	,028	,003	,03	,19
		4	,227(*)	,028	,000	,15	,30
	3	1	-,107(*)	,030	,005	-,19	-,02
		2	-,106(*)	,028	,003	-,19	-,03
		4	,121(*)	,028	,000	,04	,20
	4	1	-,228(*)	,029	,000	-,31	-,15
		2	-,227(*)	,028	,000	-,30	-,15

contact info, e-mail	1	3	-,121(*)	,028	,000	-,20	-,04	
		2	,002	,034	1,000	-,09	,10	
		3	,047	,034	,593	-,05	,14	
	2	4	,099(*)	,033	,032	,01	,19	
		1	-,002	,034	1,000	-,10	,09	
		3	,045	,032	,590	-,05	,14	
	3	4	,097(*)	,032	,026	,01	,19	
		1	-,047	,034	,593	-,14	,05	
		2	-,045	,032	,590	-,14	,05	
	4	4	,052	,032	,449	-,04	,14	
		1	-,099(*)	,033	,032	-,19	-,01	
		2	-,097(*)	,032	,026	-,19	-,01	
public interest regulations and documents	1	3	-,052	,032	,449	-,14	,04	
		2	-,003	,030	1,000	-,09	,08	
		3	,030	,030	,796	-,05	,11	
	2	4	,064	,030	,191	-,02	,15	
		1	,003	,030	1,000	-,08	,09	
		3	,033	,029	,722	-,05	,11	
	3	4	,067	,028	,127	-,01	,15	
		1	-,030	,030	,796	-,11	,05	
		2	-,033	,029	,722	-,11	,05	
	4	4	,034	,028	,695	-,05	,11	
		1	-,064	,030	,191	-,15	,02	
		2	-,067	,028	,127	-,15	,01	
reports in .doc, .pdf, html , video, audio records, online participation at council meetings	1	3	-,034	,028	,695	-,11	,05	
		2	-,003	,030	1,000	-,09	,08	
		3	,030	,030	,796	-,05	,11	
	2	4	,064	,030	,191	-,02	,15	
		1	,003	,030	1,000	-,08	,09	
		3	,033	,029	,722	-,05	,11	
	3	4	,067	,028	,127	-,01	,15	
		1	-,030	,030	,796	-,11	,05	
		2	-,033	,029	,722	-,11	,05	
	4	4	,034	,028	,695	-,05	,11	
		1	-,064	,030	,191	-,15	,02	
		2	-,067	,028	,127	-,15	,01	
multilingual website	1	3	-,034	,028	,695	-,11	,05	
		2	-,003	,030	1,000	-,09	,08	
		3	,030	,030	,796	-,05	,11	
	2	4	,064	,030	,191	-,02	,15	
		1	,003	,030	1,000	-,08	,09	
		3	,033	,029	,722	-,05	,11	
	3	4	,067	,028	,127	-,01	,15	
		1	-,030	,030	,796	-,11	,05	
		2	-,033	,029	,722	-,11	,05	
			4	,034	,028	,695	-,05	,11

4	1	-,064	,030	,191	-,15	,02
	2	-,067	,028	,127	-,15	,01
	3	-,034	,028	,695	-,11	,05

\* The mean difference is significant at the .05 level.

### Statistics

	All financial statements disclosure	Budget and budgetary execution disclosure	contact info, e-mail	public interest regulations and documents	multilingual website	reports in .doc, .pdf, html , video, audio records, online participation at council meetings
N Valid	1635	1635	1635	1635	1635	1635
Missing	0	0	0	0	0	0
Mean	,55	,77	,33	,22	,22	,22
Std. Deviation	,498	,422	,470	,414	,414	,414
Variance	,248	,178	,221	,172	,172	,172

Also in this case the null hypothesis was not confirmed, pointing out the information needed to be electronically disclosed by local public administration is the following: All financial statements disclosure, budget and budgetary execution disclosure, contact info, e-mail, public interest regulations and documents, reports in .doc, .pdf, html , video, audio records, online participation at council meetings, multilingual website.

### CONCLUSIONS

The results of the paper present the identification of civil society disclosure needs; measure the ITC usefulness for civil society needs. The key contribution of the paper is to identify the civil society needs regarding e-disclosure by the local public entities using a complete database of all the local public entities that have a site on the internet. Taking care of the civil society needs, the local public administration could develop a more efficient interface designed for the civil society through the medium of ITC.

The limits of this research are the extinction of the dependent variables. In future research it will be developed a more complex model taking into account other qualitative variables that could improve the model.

The study will have implications for policy makers, management and practitioners from local public administration and will identify a model that could improve the approach of performance in public sector.

The paper has implications for the development research in the specific public sector accounting, management control and administration field through the exposure of the main problems of the public sector: the performance measurement and its impact. Findings indicate that while citizens are generally satisfied with the electronic provision of information (transparency), there is some dissatisfaction with the transaction and interactivity of Web sites. We conclude that electronic government strategies—transaction, transparency, and interactivity—are important factors that directly affect e-government satisfaction and indirectly affect trust. Individuals who use government Web sites are not only critical consumers but also demanding citizens.

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