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THE CASE OF THE LOCAL INFORMATION SOCIETY OF E-TRIKALA

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Abstract

The European Commission considers e-City initiatives a valuable tool in the establishment of inclusive Information Societies. Nevertheless, in many cases citizens seem not to participate. Many researchers suggest that the techno-economic perception of digital divide that possesses these initiatives impedes the formation of participative local Information Societies. This paper examines this supposition in the case of the local Information Society of e-Trikala. Based on a part of a critical theory that explores the interactions between the social sphere of society and on in-depth interviews with e-Trikala's main stakeholders, it is concluded that for the formation of a more inclusive e-Trikala a social perception of digital divide is necessary.

Keywords: *Digital Divide, Information Society, Digital Communities, e-Trikala*

1 INTRODUCTION

Many scholars, seduced by the inauguration of the "Information Age", announce the emergence of a new form of society, the Information Society, and place the problem of digital divide at the centre of its notion. The European Commission, perceiving the establishment of a European Information Society as an integral component of the modern world, believes that digital community initiatives are a valuable tool in that direction. Nevertheless, despite these numerous transformative initiatives, people seem to be reluctant in using them. This phenomenon manifests that a techno-economic perception of digital divide, which dominates these initiatives, fails to resolve the problem of digital exclusion and results in exclusive local, and thus national and European Information Societies.

This essay explores a local case of an e-City initiative named e-Trikala that aims to transform Trikala from a traditional agricultural community into a modern Information Society. Although it is a very interesting and challenging attempt to redefine the role of the local community in the new "Information Age", empirical evidence shows that the local population doesn't participate, resulting in this way in an exclusive local Information Society. The analysis of the e-Trikala initiative, based on a critical theory that examines the interaction of ICTs with society and on in-depth interviews with the main stakeholders of e-Trikala, suggests that a social scope of digital divide that sheds light on the profound contributors that bring about digital exclusion, is necessary in the formation of a more inclusive local Information Society, such as e-Trikala.

The first section of this paper provides the case study of the e-trikala digital city. The second section reviews the concepts of Information Society, digital divide, digital communities. The third section regards the part of the critical theory upon which the case study is analysed. The fourth reports briefly on methodological issues. Finally, the last part, under the influence of the theoretical background and the research findings, discusses the case of e-Trikala.

2 CASE STUDY

Trikala, located at the centre of the Greek mainland, is one of the oldest regions in Greece. It is built around the fertile plain of Thessaly and the river of Lithaios. Trikala is a middle size prefecture that has 51,862 inhabitants, and whose local economy is mainly supported by agriculture and the third sector. The advantages of Trikala prefecture are: the strategically important geographical position; the University of Thessaly; and the increased agricultural income and tourism. Whereas the drawbacks are the lack of necessary entrepreneurial infrastructures and the absence of an airport (Trikala's Strategic

Action Plan, 2003). The fact that Trikala is a divisive society is manifested in the demographical profile of the area. The differences in income, professions, age and education contribute to the non-participation of citizens in communal public spheres (Trikala's Strategic Action Plan, 2003) and render the problems of unemployment and social exclusion as the most dominant of Trikala city.

The municipality, in an attempt to exploit its benefits and to resolve its drawbacks, took up an Information Society initiative, transforming Trikala into the first digital city of Greece. The e-Trikala project, initiated in 2004, was awarded the Greek ICT Award in 2007. Furthermore, e-Trikala is a member of the Network of e-Communities (<http://www.i-nec.nl>), while it presides over the 1st Greek Digital Community, comprised of seven municipalities¹⁶¹, four financial corporations and information science and telecommunication companies.

The "vision" of this initiative is the establishment of a digitalised context that, though the serving of local needs, would improve local development, competitiveness and relegate the problem of the society's exclusiveness (Anthopoulos, 2006). The local needs are classified as economy/development, governance, culture and education/learning needs.

The local needs of the community shaped the considerations of the initiative's development process, distinguished by social, technical, informational, ethical and financial considerations. Social considerations included the provision of infrastructure for public use to relegate digital divide and to establish a participative society. The technological and informational considerations comprised the use of mobile and interoperable technology, in order to effectively manage information and semantics and to provide services. The ethical considerations included technical means to ensure privacy, security and people's perception of e-Trikala as a trusted third party. The final consideration is financial.

The developmental cost of e-Trikala was completely covered by the 3rd Operational Information Society Framework, while the operational cost is subsidised by the minimal charge of the involved agencies and by private companies that cooperate with e-Trikala, with the motivation to offer social benefit and not to generate profit.

The development process of e-Trikala, was a top-down approach that was relied on the perception that modern "...ICT contribute to the manipulation of local needs...Local needs are dynamically transformed in this new environment –the digital city- and new ones arise" (Anthopoulos, 2006). The development process, as presented by Anthopoulos (2006) includes three stages. The first was the design stage which was a bottom-up procedure where e-Trikala experts were supported by an organised group of citizens. The second was the implementation stage, which aimed at the establishment of the necessary infrastructure, and finally was the maintenance-growth stage that targeted the preservation and the further deployment of existing projects. This development process resulted in a digitalised community comprised by set of services which are depicted in figure one.

However, despite the implementation of numerous projects, people are not participating massively in e-Trikala. This is depicted in e-Trikala's online poll where 62 people participated, of whom 25% expressed a negative opinion for the initiative (<http://www.e-trikala.gr/modules/polls>). It is also highlighted in the low rate of connections, despite the provision of free wireless internet access. From the 20000 households, 5000 accounts have been activated, of which 400 of them are used on a daily basis. Furthermore, it is also manifested in the participation to Demosthenes and e-dialogos programmes. Trikala's citizens, during the period 16/09/2006 to 31/01/2008 admitted 5205 complaints, of which the majorities were "change of public lambs". Finally, in the first stage of e-dialogos, 122 citizens participated; in the second stage 759 participated while the third stage is still in process (e-Trikala Viability Study, 2007).

Despite e-Trikala managed to transform a traditionally agricultural community to a modern digital city, all the above empirical data brings to the fore an exclusive e-Trikala. However, the fact that Trikala is a

¹⁶ Karditsa, Lamia, Larissa, Katerini, Volos, Nea Ionia, Grevena

socially divisive and exclusive society proves the need of a social and not a techno-economic approach of the local intense problem of digital divide.

Features and Services	Implementation Status
Free wireless access to internet for all citizens	Implemented
16Mbitare distributed to 14 access points to provide free wireless internet access to households, local entrepreneurs and visitors.	
Intelligent Transport System	
The project's objective is the traffic management in the area of Trikala and the provision of instant information to inhabitants about mass transportation by using AVL and RDS systems.	
Tele-care system	
A service centre to provide distant non-stop support to elderly and to frail groups of citizens. The centre has installed video-phone equipment in-house to allow 100 citizens to communicate with it. Additionally, it offers a portable device to monitor patients as they move around the city.	
"Demosthenis"	
Demosthenes is an integrated citizen care system, handling all complaints, inquiries and appeals concerning the Municipality of Trikala.	
"Dialogos" (e-democracy)	
Dialogos is an e- democracy project that aims at the introduction of public participation and consultation in local decision making.	
e-Marketplace	To Be Implemented
An electronic marketplace for local enterprises	
MAN (Metropolitan Area Network for the Municipality of Trikala)	
The network will interlink municipal authorities' buildings .	
Hot zone (Ag. Moni)	
Ag. Moni is a small village that will be transformed into a fully wireless covered area comprising e-learning, IP TV's and free wireless connection.	
Metropolitan ERP System	To Be Implemented
The project refers to the development of an ERP system that will integrate all the municipal departments in the management of financial information.	

Figure 15. e-Trikala's features and services.

3 LITERATURE REVIEW

3.1 Information Society

Information Society is a notion with a long history and a great influence on the globalised contemporary world. Therefore, many academics attempted to frame it through their personal scientific lens. This is manifested in Webster (2002) who distinguishes Information Society's definitions in the following categories: technological (Freeman, 1987), economic (Jonscher, 1999; Porat, 1977), occupational (Bell, 1976), spatial (Castell, 1996; Mulgan1991), cultural and knowledge oriented definitions. All these definitions shed light on different aspects of the Information Society, revealing a multidimensional and complex phenomenon which is impossible to describe with a single all embracing definition.

During the post-war period, many scholars, showed a flowering interest in this concept, signalling the emergence of a “New Era”. The power that mobilises the Information Society is considered to be modern technology. The ICTs, the networks, the flexible infrastructures and the technological mobility are considered the “track” that will lead humanity to the inauguration of a new virtual society. On the opposite side of this prolific literature that announces the “Information Society” as a result of a “paradigm change” (Freeman, 2001; Castells, 1998; Bell, 1976) exist the scholars who state that is not something innovative but rather the continuation of long-held capitalistic principles and status quo relationships in a digitalised context (Webster, 2002; Garnham, 2000; Giddens, 1998; Schiller, 1996; Habermas, 1979). This literature emphasises that ICTs in Information Society intensify the divide between those who participate and those who do not, bringing about inequality and exclusion.

3.2 Digital Divide

Many academics place the problem of digital divide at the centre of today’s exclusive and unequal Information Society, since it is considered the main contributor to non-participation. Digital divide is extremely difficult to define, because it is a fluid, diversified and unclear notion the content of which depends heavily on its environment. However, numerous scholars have attempted to give substance to this concept. Some researchers approach it as the gap between those who have access to modern technologies and those who have not, making a strict dichotomy in the “haves” and the “have-nots”. Others, avoiding a polarised perspective, view it as a digital exclusion or an uneven access to technology (Cammaerts, 2003) which is distinguished in global, social and democratic divide (Norris, 2001).

The above elaborate perspectives, however, reveal that a range of interdependent exclusions are hidden behind the notion of digital divide. These exclusions prevent segments of the global society from exploiting the offered potentials of the new ICTs (OECD, 2000), reinforcing these “interlocking” divides even more. Nevertheless, despite the contribution of ICTs to cultural, democratic, economic and social exclusion, at the same time ICTs are perceived as valuable tools for the formation of an inclusive Information Society (Cammaerts, 2003, OECD, 2000, OECD, 2001, OECD, 2002). These arguments demonstrate the recursive relationship between digital and other divides, manifesting that the goal is not to alleviate digital divide itself but to make digital communities, such as Information Societies, more inclusive¹⁷ and participative. Therefore, a social perception of digital divide could be more helpful to digital exclusion alleviation (Warschauer, 2004).

4 THEORY

There are numerous reasons for choosing the “Oxford Handbook of Information Communication Technologies” to discuss the issue of exclusive digital communities. Grand and contemporary theories such as Diffusion Theory are inadequate to cover the multidimensional phenomena of Information Societies (Webster, 2002). This theory, however, emphasises the influence of the context and proposes a situated approach for the study of the ICT-Information Society relationship. It provides a critical approach which it perceives power, inequality and exclusion as integral features of the ICTs, it reacts at the continuation of a divisive community and aims at the emancipation of people through the formation of an inclusive Information Society.

The “Oxford Handbook of Information Communication Technologies” (2007) provides a valuable critical theory that explores the interaction of modern ICTs and communities and indicates the factors that bring about exclusive Information Societies. The examination of this relationship reveals that digital divide intervenes between the social spheres of the community (economy, organisational change governance and society) and ICTs, resulting in digital exclusion. However, this paper, due to space

¹⁷The term inclusion describes persons' different degrees of integration and participation in the modern Information Society (Xiberras, 1996). It is a multifaceted phenomenon that occurs in various social spheres such as work, culture, governance and so on (Stichweh, 1997).

restrictions, examines only the part of the critical theory that examines the interactions of ICTs and the social sphere of Society. This stream of the theory is of the opinion that the recursive relationship between technology and community is the most significant one, since it determines the interactions of ICT's with all the rest social spheres of the society. Whilst, it argues that the analysis of factors such as the dynamics of the real community, the "disadvantaged" social groups, New Media, Information Society literacy and their impact on digital divide is imperative in order to lead to a more social perception of digital divide and thus to less divisive Information Societies.

The dynamics of the real community is considered an important parameter because it is not technology but other factors such as economic, political, social resources that determine how modern ICTs are used (Jung et al., 2007). Communities, which "function" successfully, in reality, are in a better position to exploit the available technology in more creative, productive and participative ways than "dysfunctional" ones.

Sophisticated governmental policies and regulations, also, have a great influence on "imperfections" such as digital divide when they are taking place in a society (David, 2007). InfoSoc and competition policies that eliminate supply-driven and oligopolistic markets are important to enhance participation in digital communities (Greenstein & Prince, 2007).

New Media is an additional factor that this stream of theory conceives it a deterrent to citizens' participation to Information Society. Orgad (2007) examined the connection between on-line and off-line activities and emphasized the need to comprehend this relationship and the materiality of its inscribed power in order to reduce digital exclusion.

Furthermore, the consideration of the "disadvantaged" social groups and persons affect significantly the phenomenon of digital divide. While it is suggested that ICTs contribute to the participation and emancipation of socially excluded persons, it also advocated that power and interest issues result in strategies and designs that intensify the pre-existing social inequalities. Nevertheless, it concluded that the socially excluded and the avoidance of judgments like "who is worth it and who is not" (Manshell, 2000) are imperative for the formation of a less divisive Information Society. Wajcman (2007) in particular, proposed that a sociological and historical analysis of the long held socially excluded groups is helpful in the attempt to face the problem of digital divide.

Finally, it is underlined the importance of Information Society literacy parameter. It is advocated that literacy is not only the acquisition of relevant technical skills, but rather the ability to use technology in a "socially and culturally coherent and productive way". Information Society literacy is a multidimensional concept which is comprised by the ability to find, absorb, manage and use resources, the competence to be involved in a technology sophisticated discourse and finally the capability to communicate, make sense and reach conclusions from a vague 'universe' of confusing and contradictive signals and symbols. The development of these skills requires both political and pedagogical support, but ultimately it resides on the capacity and the desire of the user to enhance these skills and participate in the Information Society (Graham & Goodrum, 2007).

5 METHODOLOGY

This paper studies the contemporary phenomenon of digital divide and attempts to shed light on the factors that bring about exclusive Information Societies. For that matter, the specification of an adequate research methodology which supports a social research of the phenomenon is considered an absolute requirement. The research lies upon the assumptions that Information Society is not announcing the emergence of a new revolutionary information age and economy, but rather the continuation of long established capitalistic principles and relationships. Secondly, the recursive and mutual interaction between technology and humans requires a social and not a techno-economic study as many researchers and the European Commission suggest. And thirdly that technology is an enabler inscribed with both benefits and potential dangers. For the above reasons, this paper is a qualitative analysis based on a part of a critical theory and a case study. A case study research was preferred

because it facilitates the exploration of the contemporary phenomena such as digital exclusion, even in circumstances where the boundaries between the phenomenon and the context are blurred (Yin, 2003). In this case, e-Trikala, the first digital city of Greece, provides a valuable example of an exclusive local Information Society.

This research is underpinned by the textual analysis of gathered material such as relevant literature and of secondary data provided by the Greek Information Society Observatory, the e-Trikala Inc, the municipality of Trikala and the University of Thessaly. Most importantly, it is supported by primary data that was gathered from in-depth, semi-structured, individual interviews of e-Trikala’s stakeholders. As figure two shows, eleven interviews have been conducted with e-Trikala’s actors and they are classified in three interview categories.

Interview sample expertise	Interview Perspective		
	Top Down	Scope	Bottom up
National Authority			
Advisor to the Special Secretary for Digital Planning	✓		
Local Authorities	Top Down	Scope	Bottom up
Member of ANENT’s board (Trikala Prefecture Development Company)	✓		
General Manager of DEKOMET (Municipal Company of Trikala’s Social Provisions)	✓		
e-Trikala Inc	Top Down	Scope	Bottom up
e-Trikala’s executive officer		✓	
e-Trikala’s Supervisor of R&D		✓	
Associate of teleponia		✓	✓
e-Trikala’s reporter		✓	✓
e-dialogos’ operator		✓	✓
Citizens	Top Down	Scope	Bottom up
Private Company Employee			✓
Farmer			✓

Figure 16. Research Interviews.

The above interview categories include the experts in the e-Trikala initiative and allow the study to examine issues of interest from more than one perspective. In more detail, the “top-down” interviews highlight the official voices of the Trikala authorities and the Greek Information Society. The “scope” interviews represent the perspective of the e-Trikala Inc, while the “bottom-up” interviews raise the voices of the local citizens. These interviews lasted from 15 to 80 minutes, and while they were open, they were mainly focused on the factors that act and deter people from participating in the local digital society. To summarise, although this research provided a helpful insight into the reasons that prevent people from becoming a part of this modern digitalised Information Society, its conduction was difficult due to the fact that information illiteracy, digital divide and a-social perceptions of technology possess, not only the local population, but also the local authorities. The factors of trust, politics, subjective interpretations and interpersonal relationships regularly intervened in the research, proving its significance and the fact that they cannot be taken light-heartedly.

6 DISCUSSION

Despite e-Trikala’s objective to establish an inclusive local Information Society, people did not participate massively. This is illuminated, not only in the secondary data presented in the case study section, but also in the remarks of initiative stakeholders.

“The use (of e-Trikala) is still very low, we haven’t observed any significant changes...The interest is focused on the attraction of subsidizers to provide the infrastructures and the services”

Special Secretary’s Advisor

“e-Trikala is more known outside Trikala than in the local society... even those citizens that know its existence ,perceive it as the municipal provision of free broadband Internet”

e-Trikala’s Supervisor of R&D

“I wasn’t aware of the initiative before I started working here six months ago”

e-dialogos operator

“I am not sure how e-Trikala could support us, apart from the provision of really fast internet access”

Member of ANTEP’s board

“e-Trikala? What e-Trikala?”

Farmer

“Do you mean the free fast internet connection?Well I don’t know much,I am not really using it”

Private Company Employee

All these remarks manifest that digital divide dominates the local community of Trikala. Therefore, the exploration of the interaction between the ICTs and the society social sphere as well as the detection of the elements that intervene in this interaction are considered significant, so as to improve e-Trikala’s participation.

6.1 Community’s Dynamics

e-Trikala has established sophisticated infrastructure and modern ICTs to cover the whole prefecture of Trikala. As e-Trikala’s executive noted:*“Trikala under the provision of the 3rd OPIS established the necessary infrastructure for the construction of the first Greek digital city and facilitated the access to a digital environment not only to the city centre but also to its periphery”*. However, local citizen’s seems to be unwilling to participate to this initiative, revealing society’s imperfections due to local economic, political, social resources.

6.2 Policy

A factor that intervenes to the ICT’s and Trikala’s Society social sphere interactions, revealing an asocial perception of digital divide, is the Information Societies policies. As highlighted in the words of the Special Secretary’s Advisor the European Commission has contributed significantly to the formation of the Greek Information Society policies. *“... Till one point which I place it in 2006, policy was emanated not from a specific plan but rather from the provision of money. In 2000, the European Union said to the state that we have money to give you for technology and the state thought “oh, let’s formulate a relevant policy”. Moreover, till 2006, policies were dominated by the supplier power which was a mistake, a European mistake and consequently a Greek one. The notion “build and they will come” proved unsuccessful. Nonetheless, this ideology, was incorporated, inherited and perpetuated in the Greek InfoSoc Policy, something that we expect to change with the Digital Strategy 2006-2013”*.

However, this last assumption has been proved wrong. Digital Strategy 2006-2013 is once more pervaded by the supplier’s ideology and by a techno-economic perception of Information Society, since it proposes technology rationalistic measures to alleviate digital divide *“Digital strategy doesn’t aim at the establishment of infrastructures, but at the provision of digital services to the public ...Moreover, it prioritises the familiarisation of the Greek society with technology by promoting the teaching of IT operational skills, while it measures digital divide not only with technical indexes that the European Commission proposes but also with social ones such as “the average time that a citizen saves by transacting digitally”*. *With this strategy we want to comply with the European Commission’s guidance to ensure its support, but at the same time we are trying to perceive digital divide from a wider perspective” (Special Secretary’s Advisor)*.

The above prove not only the European Commission's but also the Greek Government¹⁸'s impact on policy formation. The Greek State, under pressure to comply with European Directives³, liberalised the telecommunication industry without succeeding to bridge digital divide. This event implies that Information Society initiatives are actually serving market goals, trade and not social equity and participation. Policies and regulation should make clear whether they are based on consumer's interests or on citizen's needs for inclusion and participation.

Therefore, this paper argues that the «sociology of policy and regulation» is necessary to formulate socially accountable policies that acknowledge the different needs and distinctiveness of different social groups of a digital society. In order, however, to result in more inclusive Information Societies, these regulations must be accompanied by awareness campaigns (Sivlerstone & Haddon, 1997). *“Every new policy must be accompanied by an awareness campaign for the citizens and a training module for the public servants, there is no other way ...but this, however, means nothing in Europe and Greece ...”* (Special Secretary's Advisor).

6.3 Relations of on-line and off-line activities

Despite the Mayor's perception that e-Trikala is an initiative aimed at underpinning the society of Trikala and therefore the consideration of social issues during the development was a priority, research proved that the only social problem, detected by the expert group of e-Trikala, derived from an a-social perspective of technology. As the executive officer remarked *“...free time created by the use of technology mustn't be consumed to operate a computer, but rather to improve community's daily life. Women, for example should dedicate this free time to their family, to cook food and not waste it on googling and e-baying in Internet. This is what we try to prevent but we are not afraid ...we hope that technology will not lead to addiction but just to its operational use”*. Nevertheless, in contrast to the above, as e-Trikala's Supervisor of R&D emphasised the necessity for citizens to understand the dual interaction of on and offline activities and to perceive them as supplementary to one another and not self-existent entities which could seduce them to an electronic a-social realm is imperative in order for Trikala's citizens to participate more to the municipality's project.

6.4 Excluded social groups

A significant component of a digitally divided Information Society is the socially excluded members of the society, comprising all those people who have unequal access to the technological facilities due to socio-economic impurities and informational gaps. The socially excluded can be illiterates, unemployed, elderly, the sick, and the addicted. In the case of e-Trikala, these people are an important part of the local population, but they are hardly taken into consideration. The health telematics programme is the only application that actually makes a contribution to socially disadvantaged, but since it is still at a pilot stage it offers services to 30 people. This negligence toward the socially excluded creates scepticism on whether e-Trikala actually fulfils the needs of the local society (Avgerou&Madon, 2006). This is also highlighted by the words of e-Trikala's reporter *“The real problems or needs of the community as revealed by the visits to our site (trikala.gr) and my personal experience are: unemployment,... 200 persons visit new or even old ASEP's calls manifesting the problem of high unemployment.... Drugs, drugs have become an open wound for our community and finally subculture, a Karra's concert is always much more popular than a well-directed play”*.

Moreover, another group of socially excluded is the one that suffers from informational gaps. Many researchers have argued that apart from socioeconomic circumstances, there are other elements that

¹⁸ OECD in its reports (2001, 2002) argued that the obsolete public administration, the supposedly independent regulatory process, the tight control of the economy, and the resistance of protected groups to change, impede the establishment of the Greek Information Society.

result in the citizens' abstention (Chen, 2002). The daily routine, deficiency of free time, limited sociability, day-care provision for children and the lack of previous ICT experience are major barriers to the formation of a participative digital community. However, e-Trikala has not taken into consideration these factors. When the e-Trikala's executive officer was asked, how they intended to motivate people who experience informational gaps problems to participate, he replied: *"We count a lot on the young; a child will show to its parents how for example they can transact with the municipality by distance... Moreover, we intend to succeed, by communicating to people technology's benefits,...if we explain to the parents how much time can be saved through the use of modern ICTs, they will be convinced of their utility and use them ,despite the barriers that you mentioned"*.

This perception reveals that the socially excluded groups have not been acknowledged by the projects stakeholders. Thus, a series of measures should be foreseen in order to motivate these groups to participate more to e-Trikala.

6.5 Lack of collaboration between public organisations

Social exclusion makes apparent another problem that hunts Trikala and Greece. The lack of collaboration between public organisations to support public InfoSoc policies manifests once more that Information Society initiatives aim at market goals and profit and not at social inclusiveness and equity. The following words are indicative:

"...It is not our responsibility to support the socially excluded...what does this have to do with technology? Socially excluder's protection is public policies' work, not ours",

(Special Secretary's Advisor).

"What do you mean by "have you collaborated for the development of the local area? ...yes we have, we constructed together the Internet's access points"

(Member of ANENT's board)

"We have collaborated with e-Trikala, but only for the provision of e-health telematics; but nothing more than that"

(General Manager of DEKOMET).

Therefore, further cooperation of local public organisations is imperative in the attempt to establish a participative e-Trikala.

6.6 Mass Media

Furthermore, the mass media both in Trikala and Greece, articulate a negative image of modern technology, contributing to an intensification of the already existent technophobic culture. *"Mass media are indifferent to technology potentials..., they keep emphasizing that Internet is pornography and crookery and they never publish the press releases that we are sending them; not even the newspapers"* (Special Secretary's Advisor). Therefore, as e-Trikala's reporter suggested, a multidimensional presentation of the ICT consequences by the Media could alleviate this environment of prejudice. Nevertheless, in Trikala the most effective way to face local technophobia is by mouth to mouth. *"...As you understand in a small city like ours, the practise of mouth to mouth is common. So, apart from seminars and other promotional means, we are trying to facilitate interpersonal communication since it is proved to be the most efficient way to encourage participation"*(executive officer).

6.7 Information Society literacy

Finally, all the interviewees argued that the one of the most important elements to Information Society citizens participation is literacy. e-Trikala's executive officer explained: *"we haven't educated anyone yet. We have only organised some events where scientists explained the utility of technologies such as*

the GIS and the telematic. The only training programme that we have taken up is the education of all mayors and town councillors in Greece in order to make them aware of the concept of the digital city and the technological capabilities. "Now that we have ensured, thanks to the support of the 3rd OPIS, infrastructures and accessible applications to all of our citizens, it is time to educate them...We will do it in the usual way, we will build classes and teach them how to use technology". This viewpoint, however, reveals a narrow perception of literacy, that of computer skills, and omits the significance of a wider education that is imperative, so that people can navigate and function in an Information Society. This is also manifested in the Special Secretary's Advisor view regarding the requirements in order to become Information Society literate. *"What is required is computer literacy and that's what we will offer to them with the digital strategy. I acknowledge the importance of a wider education in the Information Society, but this is a personal issue of each citizen. We cannot provide them with anything else and it's not our responsibility ...education depends on a person's will to learn and we cannot intervene in this personal decision".* Nevertheless, this paper argues that the provision of public "Information Society" education is crucial for the formation of a participative e-Trikala and "e-Greece" in general

7 CONCLUSION

This paper explored the attempt of Trikala's municipality to transform a traditional agricultural community into a modern Information Society, through the establishment of an e-City initiative. Nevertheless, despite this effort to digitalise the society, the local population seems to abstain. The research on e-Trikala revealed that a social approach of digital divide is imperative to create a more inclusive local Information Society.

The analysis of the e-Trikala initiative illuminated factors that bring about digital divide and it suggested solutions to alleviate it. In more detail, it highlighted that the "dysfunctional" dynamics of the community, the techno-economic nature of European and Greek policies, the technophobic culture, and the lack of Information Society literacy prevent people from participating to the local Information Society. Whereas, a more social approach of digital divide acknowledge the importance of sociology of policy ,local authorities' collaboration, proper pedagogical system, and stakeholder's provision of care towards the establishment of an inclusive digital community.

This paper, due to space restrictions, focused solely to the society social sphere and the ICTs interaction and omitted the relations between the rest social spheres (knowledge economy, organisation change, governance) and ICTs. Nevertheless, these relations are equally important and thus further research should be conducted to examine them and form a more completed idea of what causes digital divide and how could be alleviated. Furthermore, this analysis offered an insight into the social problem of digital divide that is helpful for an inductive suggestion. A social and situated approach of digital divide could contribute to more inclusive and participative Information Societies. Therefore, further research of local Information Society initiatives must be carried out to capture the various factors that result in digital divide and thus to exclusive Information Societies. Finally this paper examined inclusiveness of the Information Society, only in terms of digital divide, thus it is argued that more research should be realised to detect other issues that trigger exclusiveness.

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