

Online Communities: The Case of Immigrants in Greece

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Abstract. Immigrants in Greece are an increasing population, very often threatened by poverty and social exclusion. At the same time Greek government has no formal policy concerning their assimilation in Greek society and this situation generates multiple problems in both immigrants and native population. In this work we suggest that new technology can alleviate these effects and we present specific tools and methodologies adopted by ANCE, in order to support online communities and specifically immigrant communities in Greece. This approach has the potential to support immigrant communities' in terms of the organization of personal data, communication, and provision of a working space for dedicated use. The Information System's operational features are also presented, along with other characteristics and state-of-the-art features in order to propose a general direction to the design of online communities' mechanisms.

Keywords: Online Communities, Taxonomies, Social Networking frameworks, collaboration and decision support tools.

1 Introduction

Immigration as a form of social relation and as a process is an independent phenomenon that arises in the context of a specific historic and social framework. Immigration in Greece starts taking place in the early 1970s [1, 2]. Up until 1989 there was no official immigration policy. The first programme that legalised immigrants was introduced in 1998 [3]. The motivation behind immigration is affected by multiple factors, with desirable and in many cases unforeseen consequences, for the immigrants themselves. The Greek participation in the EU, the collapse of the regimes in Eastern Europe, the disintegration of the republic of Yugoslavia and the subsequent economic and social circumstances in these states constitute some of the major factors behind immigration. Currently, Greece is a place of permanent residence and intermediate destination for hundreds of thousands of immigrants [4].

In this work we present an approach adopted by a non-government, non-profit, organization, Athens Network of Collaborative Experts (ANCE) [5], that attempts the

creation of the first online community in Greece devoted to the needs of immigrants. It is a multilingual, open sociotechnical network that will inform, expose and offer services related to the problems of immigrants. Moreover, we present and discuss a number of proposed technologies and web-based tools aiming to support multilevel participation.

The term “online community” has no widely accepted definition and many authors reach the conclusion that the term means different things to different people. Some authors stress the social aspects of online communities, while others stress the technical issues related to this phenomenon. According to sociologists there are many attributes which define a community, such as boundaries, population etc. On this paper we focus on the relationships which link together the members of a certain immigrants’ community, especially the “weak-tie” relationships that serves communication and social needs.

The ultimate goal of the proposed approach is to help immigrants to communicate with other people of the same ethnic minority, to present them solutions to their common problems and to facilitate their interaction with their representatives and their governments. In addition, immigrants will have the ability to require information about legal and institutional issues and medical care. This attempt could offer support to fellow sufferers and significantly improve the immigrants’ sociability [18].

2 The ANCE Approach to the Creation of an Online Community

In general, ANCE adopts a bidirectional approach for the analysis of the immigration phenomenon. The first direction focuses on the problems that immigrants face in their transactions with Greek government and society, while the second one deals with the problems that immigration causes. The complexity is very high because the analysis extends in the ethnicities, the cultural, political and religious identities of the immigrants as well as their social role and activities. What characterises both directions and makes ANCE’s effort important is that immigrants never constitute a unified political entity that expresses common views at an individual and collective level. The limited social presence of immigrants happens either through social networks that form around one individual, typically with little activity, or through organisations that are dynamic in space and time even if they are often not visible. Typically at the heart of the first type of networks are activists, while in the second type of networks the central role is played by embassies of countries of descent, friendship communities etc. Both these types of networks constitute an entire “parallel” reality formed by the social relations, views, initiatives and strategies for the social embodiment of immigrants that fuels, and at the same time is fuelled by the constant interaction with the external environment, the state agencies and the local authorities. The existence of these networks affects the architecture, the design and the implementation of the proposed online community.

The aim is for participants to avoid consuming their efforts in resolving secondary problems and demands, and focus their resources in order to exploit the existing social and economic potential to achieve a set of goals. These goals include, but not limited, a) the recognition and establishment of the right of immigrants to access, representation and active participation in online community, b) the cultural alienation

and establishment of their basic rights, c) the participation in collective activities in a global labour force concept, d) the development of interpersonal relationships, e) the development of innovative information and solidarity services that affect positively the working and living conditions for immigrants, f) the discovery of new democratic processes, collaborations and ways of transferring good practices from other online communities, g) the establishment of new communication and collaboration routes within the aforementioned networks, h) the independency of place, time and reason of participation in the online community and i) the identification of their comparative advantages and disadvantages.

Some of these goals can be fulfilled through the use of purpose-built information systems which are designed to support the online communities. These systems should have the following special features:

- The systems should be multilingual in order to serve the special needs of immigrants, which constitute a diverse set of users, in order to avoid the digital exclusion.
- The users of the online communities should collaborate and communicate both in synchronous and asynchronous way, according to their availability to use the systems.
- The systems should be easy to use, which means that special usability criteria should be met.
- The systems should be compatible with different operational systems and different devices (PCs, Pocket Pcs, Mobile phones etc.).
- The systems should contain trustworthy mechanisms to control the access and ensure the integrity of communications.
- The systems should contain mechanisms to organize and manage the online communities and the relations of their members.
- System's users, including users with special needs, elder or disabled, must be able to access the system in a equal basis, as it is described by the WAI and EU standards [6].

A detailed presentation of such a system, proposed by ANCE, is described in section 4 of current work.

3 Supporting Tools and Technologies

Towards the creation and the support of an online community, we first focused on the proposition of the appropriate suite of tools that can provide all the required functionality derived from the needs of immigrants. However, the choice of the most appropriate tools for the particular case is not an easy task due to several difficulties, such as the large number of the available tools, the absence of a complete set of requirements and specifications, the low level of ICT awareness of the immigrants, the overall cost of the entire approach, etc. In this context, the research is focusing on the following two critical issues: a) the study of the existing approaches of the classification of the available tools for supporting group and communities and b) the choice of the appropriate set of tools that meet most of the requirements.

3.1 Classification Criteria for Groupware Tools

A number of different taxonomies have been proposed in the last twenty years. These concern the classification of groupware technologies and their functions and they are based on different perspectives. Taxonomies such as the DeSanctis and Gallupe’s matrix of time and space [7] have been adopted or revisited by several authors [8][9][10]. Other taxonomies that are based on shared information or functional criteria were also considered in the classification. However, this study is taking into consideration those taxonomies in which the classifiers selectively integrate space and time criteria, accordingly proposing new classification schemas:

Reinhard et al. [11] classified Computer Supported Cooperative Work (CSCW) systems having in mind a set of application, functional and technical criteria (Table 1). The term ‘application criteria’ is used to describe a system that can provide generic and/or specific tools. Functional criteria are used to describe social aspects of teamwork, such as interaction, distribution, coordination, user specific reactions, visualization and data hiding. Technical criteria are dealing with hardware, software and network support. The architecture of the software components can be centralized, distributed or replicated.

Table 1. Reinhard et al’s classification criteria

Application Criteria		Generic	Generic and Specific Tools
Functional Criteria	Interaction	Synchronous	Asynchronous
		Implicit	Explicit
		Formal	Informal
	Distribution	Same place	Different Place
	Coordination	Free	System based
User specific reactions	Provided	Collaboration transparent	
	Visualization	Different levels of WYSIWIS	
	Data hiding	Different levels of granularity	
Technical Criteria	Input	Centralized	Replicated
	Output	Centralized	Replicated
	Application	Centralized	Replicated
	Data	Centralized	Replicated

From Coleman’s perspective [12] the development of the groupware taxonomy is based on functional criteria and is presented below:

Finally, a classification of community-oriented technologies was published by Étienne Wenger [13]. Wenger selected a variety of technologies to include in a survey by considering the needs of Communities of Practice (CoP). He focused his categorization on shared repertoires of resources within a community of practice such as experiences, tools or stories within a CoP. On his study it has been pointed out that the **typical features** useful to a community would be:

Table 2. Coleman's classification criteria

Collaborative Content Management Systems	Learning Content Management Systems
Tacit Knowledge and Intellectual Capital Management	Storage, indexing, valuation and search of information
Real Time Collaboration Tools: Audio/video/data conferencing, virtual classrooms, online presentations	Virtual Team Tools: distributed project management, virtual workplaces and process-oriented tools
Collaborative Customer Resource Management	Application of human agents to commerce through the use of real time collaboration technologies
Portals and Online Communities	Yahoo-groups, Google-groups
Unified and Wireless messaging infrastructures for collaboration:	Wireless collaboration, e-mail-based-services, peer-2-peer, IM/Chat, bulletin boards

- a) a homepage (to communicate its existence and activities),
- b) a conversation space (to discuss topics related to its domain),
- c) an area for floating questions within the community,
- d) a directory of members' expertise in the domain,
- e) a shared workspace (for eventual synchronous collaboration or meetings),
- f) a document repository (for their knowledge base),
- g) a search engine (to retrieve what they need in their knowledge base),
- h) some community management tools (to monitor members' activity and documents) and
- i) a function allowing the creation of sub-communities.

The Wenger's categorization seems the most appropriate for ANCE because the author builds his categorization by putting technology in the context of community needs. Wenger believes that the optimal tools to support the complex activities in a community have to comply with the principle of strategic intent of the technology [13]. This means that both the tools and technologies must support needs such as knowledge exchange, social exchange, conversation - information, and instruction's work.

3.2 Tools and Technologies for Communities: What to Choose?

By looking the existing tools and technologies that can fit all the aforementioned Wenger's typical features, it becomes clear that there is neither a tool nor a framework on the web that can offer the entire set of functionalities. Moreover, it is also obvious that the selection of a specific set of appropriate tools is not the optimal solution either. A particular tool selection may be suitable for a current situation but it is not certain that in future this will be the most appropriate one.

For example, tools such as **mails** and **chats** are absolutely useful and easy to be used· however, the produced knowledge is not obvious and the information retrieval is difficult. **Web Forums** are the most common and widely accepted discussion places. Most of the users are already familiar with such tools while many of these

have multilingual support. On the other hand, forums usually require organized communities since they are operating under a strict set of predefined user rules. Moreover they cannot be actually helpful in case of large content (information overdose). **Wikis and Blogs** are the representative tools of the social software. They can support knowledge generation and asynchronous collaboration in an open set of potential users. Both tools require from users, to have reach a high level of maturity concerning both participation and collaboration. **Social Network Frameworks** such as Facebook [14], Myspace [15] etc, are high technology web applications that support networks of people and can integrate with an open set of external applications. These tools are very popular but they are used more by individuals than by predefined online communities. **Online Meeting Software** such as Flashmeeting [16] are very useful in cases of synchronous meetings from distance. They only require bandwidth and some registered free accounts. However, such tools require sufficient meeting experience along with ICT awareness. Finally, **collaboration and decision support tools** such as CoPe_it! [17] can assist users to collaborate in workspaces and support the process of decision taking, although these innovative tools require enough practice and cannot be used by fully unaware users.

While the selection of a set of tools that can cover most of the community's requirements seems a promising solution, we believe that the critical point of the entire procedure is to focus on the framework in which these tools will be integrated than on the tools by themselves. In this context, the question "what tools to select" is now transformed to "how can we integrate an open set of tools and provide services in a very friendly and easy to use way"? Before we answer to this question we have to take into consideration issues that concern the dynamic changing of community's needs, the familiarization of the new community members with the entire systems environment, and finally, the adoption of commonly accepted standards for integration and interoperations with other tools.

Concerning the community's needs, it is a fact that as long as the state of immigrants' life is not stable, their needs will be dynamically changed. Consequently, this will result to new requirements for the functionalities of the whole framework. This means that a flexible system with significant potential for customization have to be designed.

Moreover, the provision of services able to welcome, help and familiarize recently joined members with the community's procedures and environment is also very critical to the success of the attempt. Furthermore, the framework should provide all the required functionality to a specific set of community moderators (or persons with specific roles) in order to aim the new members through both synchronous and asynchronous communication and through the explanation of the individual roles in the community.

From a technical side of view, it is important for the evolution of the whole system (considering cost issues) to be based on common adopted standardized technologies and protocols such as eXtended Markup Language (XML), portal components, web services (WS), Single-Sign-On (SSO), Friend of a Friend Protocol (FOAF) etc. in order to be able to integrate other tools as well as to provide services to external application. Thus, the overall cost of interoperation with other tools will remain low.

4 The Proposed Technical Approach

Considering the above, ANCEs approach aims to the design and implementation of an integrated web-based application framework that can provide the required functionality, and can also be extendable and interoperable with other tools or software modules. This framework will initially encourage potential users to organize their personal data, help them to communicate with other users, and provide them the necessary working space for keeping and publishing personal or public information to others. In this phase all users will be assisted and informed by both system and humans. At a second level, they will be able to participate in collaboration activities, by using “friendly” web-tools, in order to establish a satisfactory level of participation. Collaboration may occurs in both synchronous an asynchronous forms while the appropriate collaboration tools will vary from some commonly used tools to more intelligent ones in the context of web 2.0 technology. The final target of the entire system is to become an active user-driven application that can meet the existing requirements of the on-line community of immigrants and at the same time to be adaptable enough so as to support future user needs

Technically speaking, the framework will be based on a multilingual web-based portal and is going to be integrated with additional functionality (web 2.0 services), focusing on introducing innovative collaboration tools. The main target is to provide novice ways for enhancing participation, knowledge creation and sharing. Having in mind that both customization and dynamic integration with other technologies are very crucial requirements in the particular approach, the selection of the appropriate portal skeleton will be limited to open source platforms that support integration with custom components (portlets, widgets etc) along with fully user interface customization.

The following table presents the initial settings of the proposed approach in correspondence with Wenger’s typical features discussed in the previous paragraph, aiming at the provision of a complete set of functionalities.

Table 3. The proposed solution related to Wenger’s typical features

Wenger’s Typical Features	Proposed Solution
A homepage	The proposed portal
A conversation space	Chat, Messaging, Forum
An area for floating questions within the community	A Blog tool
A directory of members' expertise in the domain	Service for classifying members according to their domain of expertise.
A shared workspace	FlashMeeting and CoPe_it!
A document repository	Wiki and portal
A search engine	Integration with a search engine
Community management tools	Provided or integrated with portal: User and Role modeling component
A function allowing the creation of subcommunities	Provided by portal

Apart from the above, a set of particular specifications will be also taken into consideration during the “design” stage. These specifications involve the enhancement of XML schemas and Web Services, visual integration via portlets, mobile integration, security, privacy, Single-Sign-On and Multilingualism.

Crucial factors for the success of the proposed framework are also simplicity and extendibility. Simplicity will enable usage and participation while extendibility will ensure the necessary follow-up to immigrants’ dynamic environment of needs and problems.

Additionally, targeting to keep the cost of the provided framework low - another important success factor - the usage of Open Source software and web tools is considered important.

Finally, a remarkable effort should be given to the initialization of the entire system and the encouragement of the potential users to join the proposed community. The most “drugging” information that can be provided is a throughout database of the legal and institutional framework for immigration in Greece. The key factor is to involve all the appropriate information regarding official immigration policy. In addition, certain divisions of the Greek government, involved in the policy-making for immigrants, should be represented and be reachable, through the portal.

5 Conclusions and Future Work

In this work, we propose a set of technical specifications in the context of a development approach aiming at supporting the changing needs of specific groups of people: immigrants from diverse ethnic origins who live in Greece. Immigrants can play a significant role to the social and economic development of each nation because represent a flexible and cheap workforce and also contribute to the formation of a multi-cultural and multi-national society [19]. The way they are absorbed and became a “wheel” of each country’s production and development chain is a sign of its democracy and civilization level. At present, immigrants in Greece constitute a significant proportion of the local population, but very often, they are excluded from the social life. The utilization of new technologies for this purpose, could alleviate the social isolation, and become a “vehicle” for the minorities to identify their needs and to produce solutions to their common problems. Ethnographic and sociological research is needed for recognizing their special characteristics in order to design a customized IT system. Because of a lack of these data, more common tools and technologies are used in a special combination, so as to support the ANCE’s efforts.

Through the proposed approach, immigrants can find a step of communication and participation, being able to work on common problems and concerns. The integration with the Greek legal framework and immigrant-division authorities provides the necessary workspace for further development of the bonds of trust between immigrants and the Greek government.

In the future, this framework can be used as the starting node of an online “work-flow” system which will be able to provide e-government services to immigrants. Based on web 2.0 technologies, the system can provide data to governmental online information systems and create the infrastructure for the provision of lever 4, e-Government services. The existence of appropriate data about the immigrants’ characteristics is the

critical factor for linking immigrants' needs with government services. These data can be gathered and retrieved by the proposed system in a significant degree and also can help immigrants to work collectively as a unified political entity.

ANCE, as an organization that continuously attempt to improve the living conditions of specific communities, can play a significant role towards this direction, by providing its human force in order to disseminate the benefits of the framework use, to engage the end-users of the proposed framework and finally to support the immigrants during the operational period of the system.

References

1. Iosifides, T., King, R.: Socio-Spatial Dynamics and Exclusion of Three Immigrant Groups in the Athens Conurbation. *J. of South European Society and Politics* 3, 205–227 (2000)
2. Marvakis, A., Parsanoglou, M.P.: *Immigrants in Greece*, Ellinika Grammata (2001)
3. Elpianna Emmanouilidi: *Greek Immigration and Asylum Policy*, European Migration Network - EMN (2003)
4. Lianos, T., Kanelopoulos, K., Gregou, M., Gemi, E., Papakonstantinou, P.: *Estimation of the Volume of Immigrants that live Permanent in Greece*, Institute of Immigration Policy, Greece (2008)
5. Ance Hellas, <http://www.ance-hellas.org>
6. Web Accessibility Initiative, <http://www.w3.org/WAI/>
7. DeSanctis, G., Gallupe, B.: A Foundation for the Study of Group Decision Support Systems. *Management Science* 33(5), 589–609 (1987)
8. Ellis, L., Gibbs, S.J., Rein, G.L.: Groupware: Some Issues and Experiences. *Communications of the ACM* 34(1), 38–58 (1991)
9. Grudin, J.: CSCW: History and Focus. *IEEE Computer* 27(5), 19–26 (1994)
10. Dix, A., Finlay, J., Abowd, G., Beale, R.: *Human-Computer Interaction*, 2nd edn. Prentice Hall Europe, Englewood Cliffs (1998)
11. Reinhard, W., Schweitzer, J., Völksen, G., Weber, M.: *CSCW Tools: Concepts and Architectures*. *IEEE Computer* 27(5) (1994)
12. Coleman, D.: Levels of Collaboration. *Collaborative Strategies* March 2002 Editorial (2002), http://www.collaborate.com/publication/newsletter/publications_newsletter_march02.html (latest visit July 2006)
13. Wenger, E.: *Supporting Communities of Practice, A Survey of Community-Oriented Technologies*, Version 1.03 (2001)
14. Facebook, <http://www.facebook.com>
15. Myspace, <http://www.myspace.com/>
16. FlashMeeting, <http://flashmeeting.e2bn.net>
17. CoPe_it!, <http://copeit.cti.gr>
18. Preece, J.: Sociability and usability in online communities: Determining and measuring success. *Behavior and Information Technology Journal* 20(5), 347–356 (2001)
19. Fakiolas, R., Maratou-Alipanti, L.: Foreign female immigrants in Greece Papers. *Sociologia* (2000)