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D2.1 Classification of Web 2.0 Social Media and Stakeholder Characteristics

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EXECUTIVE SUMMARY

The shift from the Internet Web 1.0 to the Web 2.0 era has revealed a great challenge: to exploit the participation of active citizenry in the various types of social media applications and platforms which have emerged and rapidly grow over the last years. People's collaboration and self motivation has rendered Web 2.0 into a repository of content on various topics, including political and public policy related content, which is updated spontaneously on a daily basis, bringing new perspectives in the policy making arena. As NOMAD tries to deliver ways and tools to transform this content into valuable information for policy makers, this deliverable aims to investigate and understand better the underlying content and knowledge of Web 2.0, focusing on the political and public policy related content, and build the foundations for its exploitation in this project.

In this context, in the current deliverable initially the current landscape of Web 2.0 Social Media has been investigated. Having introduced the basic aspects of Web 2.0 philosophy, a categorisation of them has been made based on the activities that people perform in the popular platforms and the content that they contribute. The categorisation, based on the findings of related past projects, was conducted in order to identify the places where public policy related content is created and political discussions take place, from which insights for policy formulation can be extracted. Our analysis revealed that part of the platforms that are used for purposes of Communication, Collaboration, Entertainment and News and Information sharing are used for discussion and content production concerning Policy Making and Public Participation. This is a very positive finding for our project, as it indicates that there is plenty of political and public policy related content produced in many social media, which can be exploited (retrieved and undergo advanced processing in order to draw conclusions and extract knowledge from it) in our project. That is the reason why Policy Making and Public Participation Platforms has been viewed as a separate social media type and analyzed along with all the other already known types of Social Media Platforms.

Also, this deliverable using a variety of published relevant statistical studies examines the extent of use of the Internet and the mobile phones (basic channels for accessing social media), and then the extent of use of the social media, and also the demographics of their users, in order to assess how wide and heterogeneous-pluralistic is the content basis of our project. It has been concluded that (at least in the Europe, the USA and the economically advanced countries in general) there is wide use of the Internet, the mobile phones and social media by the citizens of both genders and various age, education and income groups. This, in combination with the findings mentioned in the previous paragraph, indicates that a large quantity of political and policy related content is generated in the social media, which is not produced by some small groups (e.g. by some young high education and income citizens), but by a wide, heterogeneous and pluralistic range of citizens' groups. So we do not have the risk of collecting and analyzing political content coming from a small, narrow and non-representative group of citizens. This extensive and pluralistic content is worth being exploited by government agencies, so NOMAD can generate significant political value in this direction.

Taking into account the above positive conclusions we proceeded to a more detailed examination of the use of Web 2.0 in politics. The US and European use of the Web 2.0 to these ends in the last 5 years confirms the future potential and trend of electronic social media and networks to influence political communication. Among the most powerful Web 2.0 applications for the above purposes are the blogs, as there is a very large number of political blogs in most western countries, in which extensive political discussion and content generation takes place every day by millions of people. It is evident that political blogs constitute a powerful media tool used by numerous citizens all over the world. Credibility seems to be the main reason why political blogs have grown to dominance. People believe that political blogs are more accurate than traditional news media. While "blog readers still get most of their news from regular news sources, they are concerned that they are not getting the whole side of the story here, as they suspect habitual bias in the traditional news content. The content exposed in popular blogs, in particular those specializing in public deliberation on politics and policy formulation, lends naturally itself to the process developed in NOMAD, which consists in an ontology-based conceptualization of statements over a domain of discourse, of arguments set in defense or support of these statements or in the attempt to `destroy' them and the linguistic realisation of these arguments. For the above reasons blogs, forums and micro-blogs are the main source of data for NOMAD (opinions expressed, arguments made to support opinions). NOMAD will build upon technological advances in knowledge representation and information extraction to index not only opinions and their polarity from forums, blogs and micro-blogs, but also extract the arguments made to support such opinions.

In the final chapter we focused on the three countries, where the pilot applications are going to take place: Greece, Austria and UK. Initially the local conditions concerning the use of Internet and social media are examined, leading to positive conclusions. Then a methodology has been created for selecting the particular social media to be used as sources, from which content will be retrieved in order to be processed, and has been applied to the above three countries for specifying the sources to be used in the three pilots. The core of these sources will be the most popular political blogs of each country, taking into account the conclusions of the previous chapter (that blogs are the social media platforms where most of the political discussion and content generation takes place), but will also be complemented with other social media having political content, according th the conclusions of chapter 2 and 3, such as Facebook and Twitter accounts. The application of the above methodology in these countries revealed an important difference among their blogospheres. In Austria and UK there is a much stronger consolidation and concentration, with a small number of political blogs being among the top 500 country websites. On the contrary, in Greece there is a high fragmentation in this area, with a much bigger number of political blogs being among the top 500 country websites. This shows that the NOMAD process should be adapted to the particular characteristics of each national context it is used for, for instance use different numbers of sources in each country according to the degree of consolidation/concentration or fragmentation of its local blogosphere (100 for Greece,38 for Austria and 55 for UK). In countries where a high fragmentation of blogosphere exists it is necessary to use bigger sets of sources, and probably differentiate the processing of the content retrieved from them.

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1. INTRODUCTION

1.1 Purpose and Scope

Collaboration and crowdsourcing are the realities of today's public Internet. The so-called "Web 2.0" represents a precious repository of thematic information, thanks to the heterogeneous content that is inserted daily and updated spontaneously by its users. In the "Politics 2.0" era, Internet is changing the way that people can participate in an election campaign (e.g. latest US elections), and the whole political communication. Nowadays, voters are no longer simple watchers or passive readers of political news, events and agendas, but more and more active and proactive citizens, who freely and spontaneously formulate and exchange their own opinions (either positive or negative) on a plethora of Internet sites, thus "co-determining" electoral trends in the population as a whole. The objective of this deliverable is to examine the current landscape of web 2.0 applications and tools that people use extensively today in order to fulfil specific needs, i.e. Social Networks, Blogs, Wikis, Forums, Content and News Sharing Platforms, etc.), in order to build the foundations for their exploitation for the purposes of this project. These tools are characterized according to their objectives; the nature of media exchanged, the volume of updated information, the time period of information living. The different categories of Web 2.0 platforms are examined in order to provide a categorization of the underlying group knowledge (content in particular) that citizens create through their engagement in Social Media with the objective to recognize and relate specific content type to the policy making process. Content is characterized either according to the information type – i.e. judgement, suggestion, argument, criticism, or according to its purpose – i.e. news, events, opinions, comments, contributions, votes, polls, bookmarks, etc. The purpose of D2.1 is also to carry out a study on the profiles of the people using Social Medial platforms today. This is achieved by blending the results of relevant studies and reports in international and country level – for the countries represented in the consortium. The objective is to determine whether specific categories of Social Media, based on the characteristics of their users, are more suitable than others to be incorporated in the policy making process.

1.2 Approach for Work Package and Relation to other Work Packages and Deliverables

WP2 aims at determining the needs and conditions to meet for policy making through DRA modelling of public participation. Under this context, WP2 is of major importance, due to the fact that subsequent Work Packages rely on the establishment of well-sound functional requirements, primarily on the types of policy making argumentation and the exploitation of social engagement Web 2.0 tools, used by citizens. The former is essential for WP3 (Policy Modelling) while the latter will contribute at defining key elements that allow for opinion mining and argument extraction from social media. Such requirements are obtained by an in-depth analysis and categorization of the underlying group knowledge and user activities in these Web 2.0 tools. The work is especially focusing on researching the specific social media related issues that contribute to the NOMAD objectives. WP2 encompasses the in-depth analysis tasks that go into determining the needs and conditions to meet for NOMAD objectives. More specifically, WP2 will provide subsequent Work Packages with functional requirements and design objectives as regards the policy making domain and the exploitation of social engagement Web 2.0 applications in the scope of the policy making processes and citizen's feedback. In turn WP3 will develop the conceptual and computational tools necessary in order to author the models for domains, policies, and arguments that are needed in order to extract related opinions. As such D2.1 is related and provides input of subsequent deliverables like D2.2 which reports on User Requirements, D3.1 'Specification for policy argumentation modelling', D3.2 'Policy argumentation data model' and D3.3 'Argumentation modelling environment'.

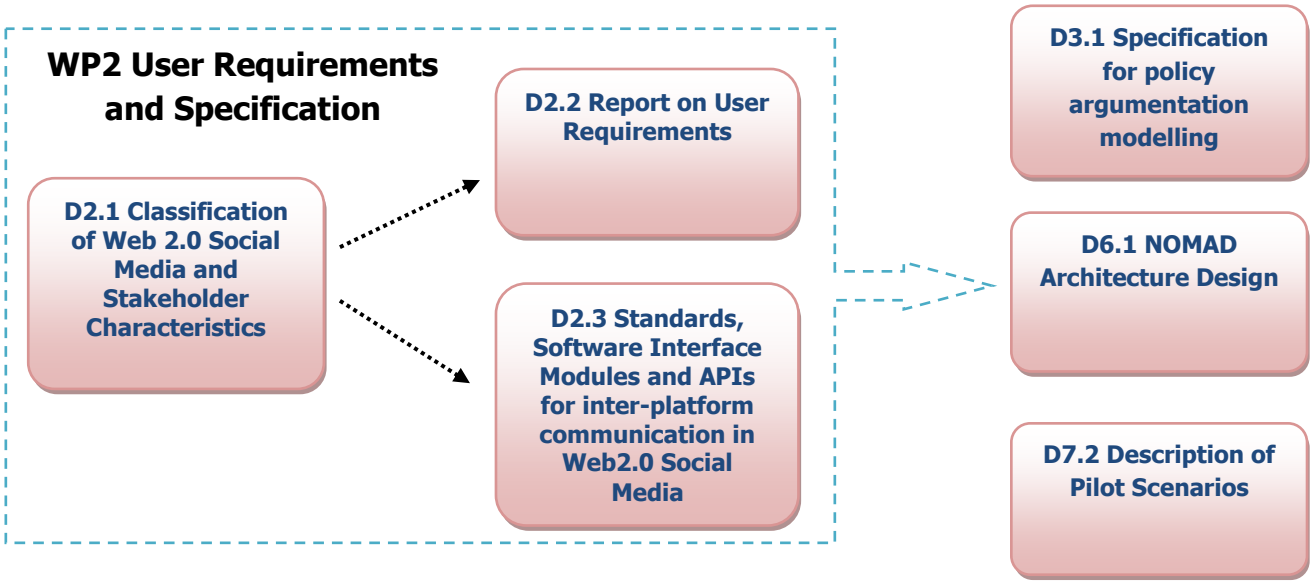


Figure 1-1: Interconnection of D2.1 with other project deliverables

1.3 Methodology and Structure of the Deliverable

In order to achieve the objectives of this deliverable, i.e. to define a map of the landscape in web 2.0 applications and tools that people use extensively today in order to fulfil specific needs, and to carry out a study on the profiles of the people using Social Medial platforms today, we have followed a four stage methodology, which is illustrated in Figure 1-2.

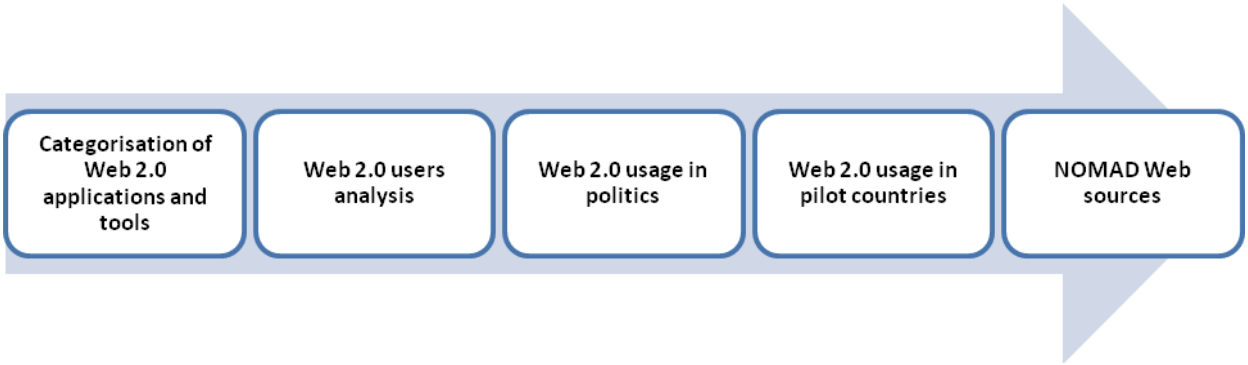


Figure 1-2: Methodological approach of Deliverable 2.1

Initially in chapter 2 'The current landscape of web 2.0' we have identified the basic aspects of Social Networking and provided an initial categorisation of Web 2.0 applications and tools. We began our introduction in the field of Web 2.0 and Social Media, by providing their definitions and some basic aspects about them specifically what they are, why use them and what their characteristics are. We continued with a categorization of the Social Media Platforms according to their type. We concluded that there are 5 types in which Social Media Platforms can be distinguished: Communication/ Collaboration/ Multimedia & Entertainment/ News & Information/ Policy Making and Public Participation.

In the second stage we started with the categorization of the online users and we provided their characteristics. Their basic types are the Influencers, the Communicators, the Networkers, the Knowledge Seekers, the Aspirers and last the Functionals. Also, we depicted what is the connection between behavior and attitude of each type of online users. As such, chapter 3 'Web 2.0 users analysis' provides a statistical report based on the types of online users, the degree in which they use the internet, the mobile technology, the Web and the Social Media Platforms and last their online activities trying to depict their profile. The facts that we mentioned through the whole chapter are based on researches, surveys or reports that are published.

Then, in chapter 4' Web 2.0 and Politics, we emphasize on the Web 2.0 usage in politics, providing the theoretical ground for virtual political communication and the use of electronic social networks to influence political behaviour. We

therefore try to indicate how and why the use of the web is meant to differentiate the methods of strategic political communication set out by candidates and their strategists during election campaigns

During the fourth stage, in chapter 5 'NOMAD web 2.0 sources' we aim to establish the Social Media presence by an analysis of websites in Greece, Austria, and the UK. These sources of political discussion were selected according to the ranking of the system ALEXA since it is the only open source method which can provide a relatively accurate system of website popularity metrics and audience demographics. Initially, all websites from Austria, Greece and the UK which are ranked up to 500th position on ALEXA were investigated. If the websites had political content and allowed political discussion there were added to the NOMAD sources list and analysed. However, ALEXA publishes a list which is limited to the first 500 websites per country. In order to include discussion hubs with lower rankings the sources list includes political blogs and portals which are considered "politically" influential by the major political newspapers of each country.

Finally, in chapter 6 titled 'Conclusions' we present the main conclusions drawn from the above analyses. The methodological approach adopted in the current deliverable is captured in the following figure.

2. THE CURRENT LANDSCAPE OF WEB 2.0

This section defines a map of the landscape in Web 2.0 applications and tools that people use extensively today in order to fulfil specific needs. More precisely, it begins with a small introduction in the field of Web 2.0 and the Social Media Platforms, it continues with the categorization of the Social Media Platforms and their capabilities, making a reference to the most popular of them. Furthermore, it offers a description of the most important Social Media Platforms and finally, it closes with a summary with the main conclusions derived from this section.

2.1 Introduction

Up until the late 1990s the Internet landscape was heavily characterized by a static, one-dimensional nature. The term invented to describe this phenomenon was "Web 1.0". In Web 1.0, users could only view web pages but they were not able to interact dynamically with them. Content creators were few, with the vast majority of users simply acting as consumers of content [1]. At first, users would simply read what others wrote, but over time they decided that they wanted to actively take part into creating the information they shared. This led to a new Internet era, commonly called "Web 2.0".

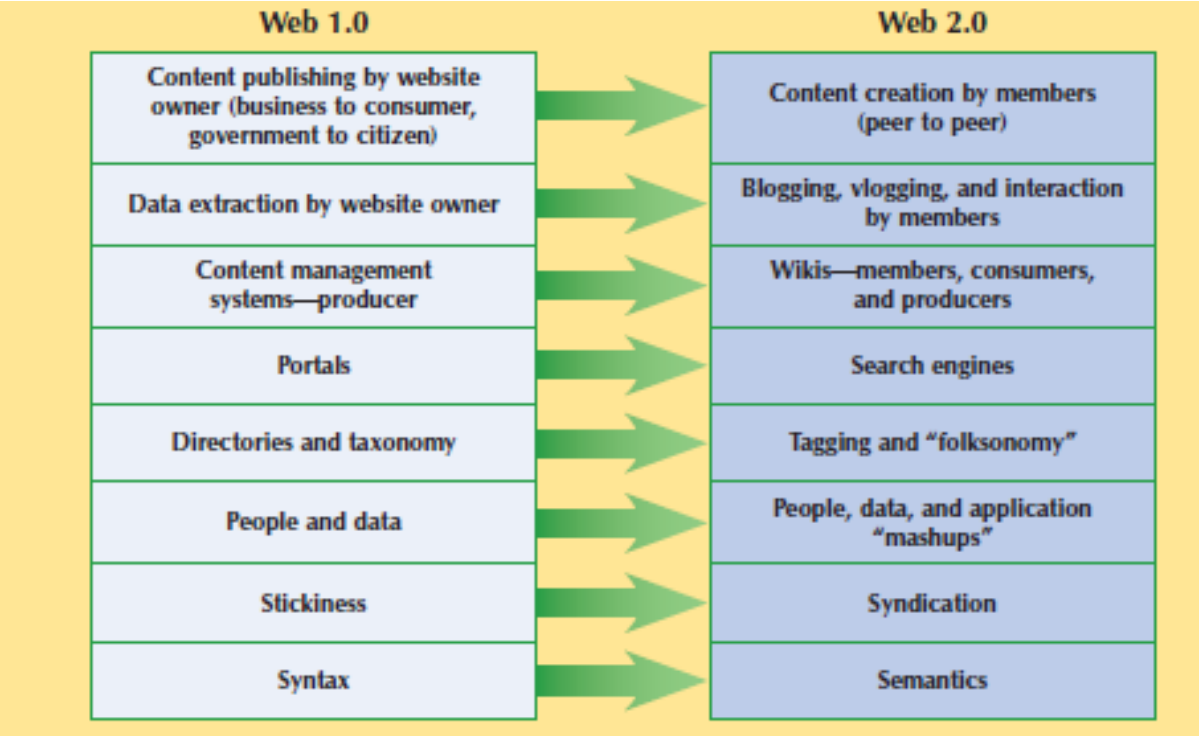


Figure 2-1 Transition from Web 1.0 to Web 2.0 [2]

The term Web 2.0 was coined by O'Reilly Media in 2004 [3]. It is used to describe the set of Internet tools which have interactive and participatory characteristics: social networking sites, wikis, blogging, file-sharing sites, and torrents [4]. In contrast to the previous single-sided Internet status quo, Web 2.0 holds for a fully dynamic, collaborative online environment. Users are not just passive recipients of information anymore but rather; they collect, evaluate and share any kind of information they want with others all over the world. They own multiple social network accounts; actively participate in blogs, fora and chat rooms and comment passionately on anything of interest. The most important thing about Web 2.0 however, is its ability to change the social dynamics.

According to Wesch [5] in today's World Wide Web the focus has shifted from linking information to linking people. Web 2.0 is essentially a network platform that allows high levels of user interactions, which in turn enables rich user

experiences that go much beyond the Web 1.0 era [2]. It is a place where we are all participating for consumption and collaboration that is reshaping nearly every aspect of our human affairs [6].

2.2 Basic concepts of Web 2.0

A question that comes in mind hearing about Web 2.0 is what exactly this term means. Specifically, Web 2.0 refers to web applications that simplify the exchange and sharing of information, the collaboration, the design that focuses on the user and the facilitation of interoperability as well [7]. This term is connected with Dale Dougherty, vice-president of O'Reilly Media and it became official at the O'Reilly Media Web 2.0 Conference in 2004 [8][9]. Although the term Web 2.0 suggests something new, it is not an update to technical specifications. Instead, it refers to an attitude towards the sharing of information, and the cumulative changes of web usage. Tim Berners-Lee, a World Wide Web inventor, named Web 2.0 as a "piece of jargon" because he visualized it as "a place where all could meet and read and write" [10][11].

Although the Web has been a tool for collaboration, only in the last few years software has permitted individuals to use it as a platform for true collaborative activities [12]. Web 2.0 is a group of new Internet tools and technologies that was created according to the concept that people who use the media and the Web and also access the Internet should not absorb passively what is available [13]. Web 2.0 refers to both users and content and not just surfing on the Internet. It's about with what the Internet can provide the creator, the collaborator, the active participant, rather than the passive viewer [12]. With other words, users should be contributors, helping customize media and technology for their own goals and for their communities. Web 2.0 is believed to be a new era in technology promising to help nonprofits operate more efficiently, generating more funding and affecting more the everyday lives. As Web 2.0 tools are considered to be the blogs, social networking applications, RSS, social networking tools, wikis, picture sharing sites, opinion sites [13].

The problem that still remains is the lack of the formulation of a specific definition of Web 2.0. What is certain, of course, is that in a wider perspective, Web 2.0 represents the evolution of the World Wide Web, from a series of simple websites to a general environment in which online software and multimedia applications offer a wider range of information and a tighter interaction between the users. Moreover, in order to understand better the Web 2.0, its characteristics can be summarized in the following ten parts [14].

- *The Web is a platform.* We have passed from the time with the installable software on our PC, to the software-services that we can access online. Online can be found all data and software.
- *The Web is functionality.* The Web helps the exchange of information and services from websites.
- *The Web is simple.* It simplifies the access and usage of web services using user-friendly interfaces.
- *The Web is light.* Both the models of development and business become light. The processes become light as well. The lightness is familiar with the ability to share of information and services easily and made it possible through the implementation of intuitive modular elements.
- *The Web is social.* People create the Web, otherwise "populate the Web", and they succeed it by socializing and gradually moving members into the online world.
- *The Web is flow.* Web 2.0 still remains in "perpetual beta" or else it remains at the beta development stage for an indefinite period of time as long as the users are seen as co-developers.
- *The Web is flexible.* The software considers being on a more advanced level enabling access to previously unavailable digital content. This idea is similar to the Long Tail concept, focusing on the less popular content that couldn't previously be accessed.
- *The Web is mixable.* The expansion of codes in order to modify web applications (like Google does with its Google Maps application) give the ability to individuals, who are not necessarily computer professionals, to mix different applications creating new ones. Additionally, Web 2.0 gets its power through this "mashup" capability.
- *The Web is participatory.* Web 2.0 has adopted a structure of participation? In spite of users keeping it rigid and controlled, they are encouraged to enhance the application while they use it.
- *The Web is in our hands.* Its user-friendly interaction is emphasized by its increased organization and characterization of information through deep linking. Information is always more and more easily available due to phenomena such as social tagging.

A question that may arise is how Web 2.0 can be visualized as a platform. Like many important concepts, Web 2.0 does not have a hard boundary, but a rather gravitational core. The visualization of Web 2.0 can be considered as a set of principles and practices that tie together a veritable solar system of sites demonstrating some or all of those principles, at a varying distance from that core. Figure 2-2 depicts a "meme map" of Web 2.0 that was developed at a conference at O'Reilly Media. It is, in other words, a visualization of Web 2.0 as a Platform showing the many ideas that radiate out from the Web 2.0 core. [9]

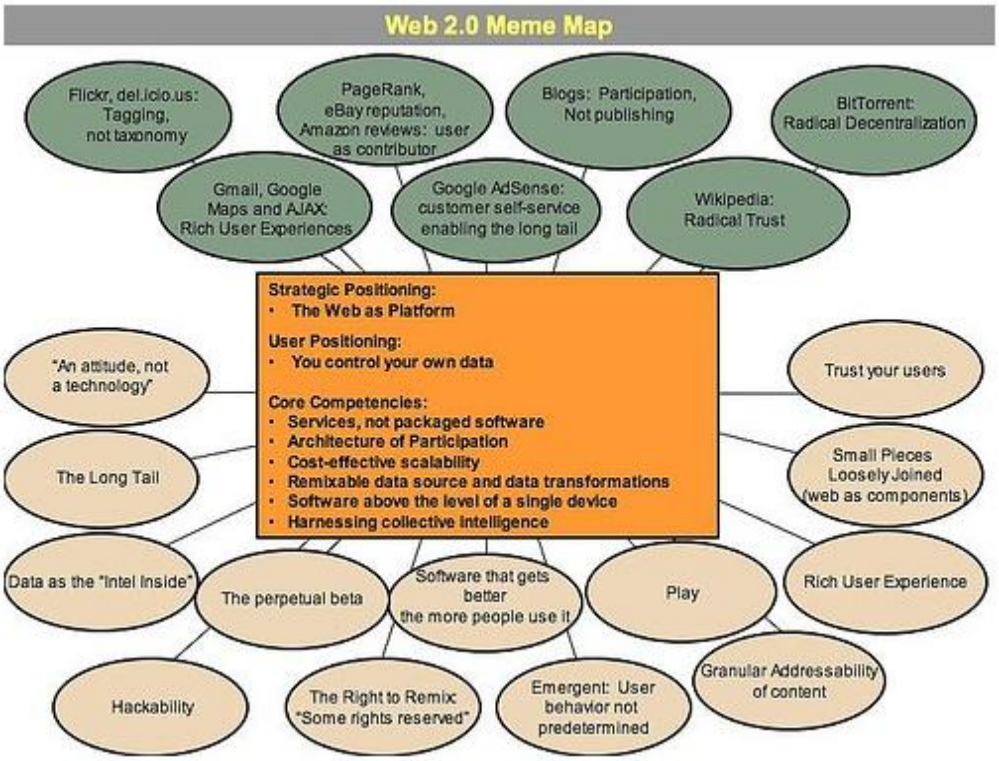


Figure 2-2: Visualization of Web 2.0 as a Platform [9]

Social Media, nowadays, is a very popular word and many times is used, but it can sometimes be difficult to answer the question of what is exactly a Social Media [15]. This happens because media is related to the technology and platforms that enable the interactive web's content creation, collaboration and exchange both by participants and the public. As Social Media can be considered by many users, business executives and the public, the marketing around these networks and the content created on them. There are many different definitions of what is Social Media. According to Riverside Marketing Strategies [16], Social Media are the platforms that enable the interactive web by engaging users to create content, participate in, and comment on as a way of communicating with their social graph, other users and the public [17].

Social Media have the following characteristics [17]:

- Includes a wide variety of content formats like text, video, photographs, audio, PDF and PowerPoint. Many Social Media make use of more than one of these options in content.
- Allows interactions to cross one or more platforms through social sharing, emails and feeds.
- Acquires different levels of user-engagement by participants who can create, comment or lurk on Social Media networks.
- Simplifies enhanced speed and breadth of information dissemination.
- Offers one-to-one, one-to-many and many-to-many communications.
- Enables communication to take place either in real time or asynchronously over time.
- Is device indifferent? The user can utilize for penetrating to a Social Media a computer (including laptops and netbooks), or tablets (including iPads, iTouch and others) or mobile phones (particularly smartphones).

- ❖ Extends engagement in three ways: by creating real-time online events, by extending online interactions offline and last by augmenting live events inline.

2.3 Basic aspects of Social Networking

2.3.1 Early scientific approaches

According to Pierre Mercklé [18], the term "social networks" is attributed to John A. Barnes of the Social Anthropology Dept. of the University of Manchester. A. Barnes [19] in a study of his concerning the social organization and structure of a small community of fishermen in Norway, distinguished three social fields:

- The administrative one, which includes administrative entities and volunteers' organizations.
- The industrial one, corresponding to the industrial system, which is organized mainly around the exercise of the activity (in this case, fishing).
- The social one, vaguely delimitated, which determines all non typical relations (acquaintances, friends, relatives, neighbors).

In his study, Barns uses the term "social network" for defining the third field and ascribes a number of structural properties relative to the "density" of connections to this network of atypical relations. He observes that among the population of the island all the individuals are indirectly interconnected with a "chain" that doesn't exceed the number of four links. Based on this finding, social networks analysis sees itself launched.

Elisabeth Bott [20] further adopts the axiomatic proposition that every family is a system including connections no less between its members than between members and other individuals outside the family system; she purposefully borrows the new term for defining various forms of neighboring in English families. Her researches reach the conclusion that every family is introduced in a relational network that includes connections internal to the family structure, i.e. between family members, as well as between members and non members.

2.3.2 Definitions

Garton, L. Haythornthwaite, C. & Wellman, B. [21] define a social network as a group of individuals, organizations or entities that have social relations founded on friendship, cooperation and the exchange of information.

According to Christakis, N. & Fowler, J.A. [22] "*…a social network is an organized group of individuals consisted by two kinds of elements:* humans *and the connections between them*". As opposed to vertically organized hierarchy groups, the natural social networks aren't imposed "from above" but evolve based on the human property of socialization.

Mark Granovetter [23], dealing with the diffusion of information inside social networks, pointed out the importance of week ties contrasted to strong ones.

Freeman, L.C. [24], on his part, evaluating the quality of a network, acknowledges the determinative nature of the following factors:

- Centrality (referring to the position of a network member through which the largest part of information passes)
- Degree of interconnectivity (referring to the number of individuals that interconnect with a particular individual)
- Independence (referring to the finding that when a network member interconnects with a significant number of other individuals, she manages to evade the dangers of dependence from a single individual).

Alain Degenne and Michel Forsé [25] further explore the perspective suggested by Freeman and examine the centrality of an individual by discerning three levels of analysis:

- Degree Centrality (determining the position of the agent, either strong or peripheral one, which results from the number of her connections)
- Neighboring Centrality (determining the distance of the agent from all of the network members)

- Transitivity Centrality (determining the ability of the agent to be a conductor of information exchange and not operate independently).

The above writers attribute qualitative features to the density of a network, defining it as the quota of the present connections to the contingent ones. As for the inherent complexity of social networks, they also affirm the simultaneity of exploration of a vast typology of relations.

Manuel Castells [26] defines the network as a group of interconnected nodes, a kind of organizational structure familiar to the human species since ancient times. Nowadays it does come back thanks to the web as an information transfer network. For him, the web inherently presents flexibility and adaptability, which enable it to survive and develop in an ever-changing environment.

According to Christakis, N. & Fowler, J.A. [22], caring for the creation of networks is inherent to humans. A central criterion of selecting the participating individuals is fellowship, i.e. they tend to pursue the company of people with whom they share common characteristics.

They also make a distinction between network and web community, by defining the latter as a group of individuals closely connected with each other than with other individuals of the same network; that means that the community is determined on the basis of structural relations and not only of characteristics. They also single out the importance of selecting the networking structure, which is related to:

- The size of the network (referring to the number of individuals that each one selects for the construction of her network)
- The quality of connection (referring to the strong or weak ties through which the individual interconnects with the network participants)
- The centrality of position (referring to the position that the individual chooses to take inside the network).

2.3.3 Connections

Albert-Lásló Barabási [27] returns to the notions of “strong” and “weak” ties of social networks suggested by Mark Granovetter, and holds forth the dominant role of “weak” ties with respect to communication ability and information diffusion.

On this very point, Nobert Bolz [28] distinguishes the following four degrees of intensity for social relations:

- Familiarity,
- Strong ties,
- Weak ties,
- Anonymity.

Whereas Granovetter points out the strength of the so-called “weak ties” with respect to the ability for information diffusion and notes the malleability of social formations under the reign of intimacy (given that networks tend by their nature to redundant condensation), Bolz presents the contemporary society as a network of selective connections, and anonymity as the most “tempting offer” of web communication.

2.3.4 Characteristics

According to Christakis, N. & Fowler, J.A. [22], the inherent characteristics of the social networks are emergence, self-organization and collective intelligence. Emergence refers to new features attributed to the network and resulted by the interplay and the interconnection of its integral parts. Collective intelligence is related to self-organization and self-regulation, i.e. features of atypical groups.

As far as emergence is concerned, Arthur Battram [29] suggested that, in its context and with respect to the form of connections, it is the behavior of the overall network that emerges – most of the times, in a way exactly opposite to the one of its integral parts. He pointed out the potential of self-organization and collective intelligence based on the findings of “boids [30]”, which in a computer simulation environment:

- Kept a minimum distance from other objects and boids,
- Kept the same velocity,
- Moved to the conceived center of the multitude of surrounding boids.

According to Christakis, N. & Fowler, J.A. [22], in spite of the absence of central control, the coordinated effort of the group to avoid obstacles as well as the emerging tendency towards a common path, the one benefiting all members, are key features of networks.

Interconnection and transmission also characterize social networks and refer to their structure and their operation. Interconnectivity refers to the number of connections between two nodes not participating in a common network. Transmission is related to the rate of influence one node may exercise to another. At the very heart of those two characteristics lay the "Small World Hypothesis" and the "Three Degrees of Influence Rule".

2.3.5 Small World Hypothesis

The "Small World Hypothesis" is founded on an experiment conducted by Stanley Miligram in 1967 [31]; according to Alain Degenne [32], Miligram's findings attracted the attention of a great number of researchers.

For the purpose of his experiment, Milgram asked 296 subjects staying in the USA to mail an envelope to a recipient-target in Boston (all residence details were given to senders) by using exclusively go-between people.

From the total of 296 subjects, 217 sent the envelope to some middle person. By the end of the experiment, 64 envelopes had reached their destination. The rest had not, since their "chain" of go-betweens had a "ring" that didn't respond as expected.

From the total of 67 envelopes delivered, 86% correspond to subjects that sent out the envelope to friends or simple acquaintances, whereas 14% were sent to relatives. The average number of "nodes" was 5,2 (middle persons).

This small prerequisite number of go-betweens led to the formulation of the "Small World Hypothesis" or "Six Degrees of Separation". The hypothesis has it that two persons not knowing each other may be interconnected by six intermediate persons.

This Hypothesis was verified in 2002 by Peter Dodds and Roby Muhamad [33], when they had the initial experiment repeated, this time on a global scale and by making use of e-mails. Subjects were asked to send a message to various recipients all over the world via go-betweens who may have some connection to the end-recipients that had been selected randomly from a list of eighteen persons in thirteen countries. The researchers also concluded that six steps (middle persons) were needed – thus verifying Miligram's evaluation.

The Internet growth boosted the interest for this hypothesis as well as for observing the overall structure of networks. Alfred L. Barabási studied the World Wide Web and reached the conclusion that more than 80% of webpages present less than four links, whereas 0.01% more than 1,000 links.

2.3.6 Three Degrees of Influence Rule

The "Three Degrees of Influence Rule" refers to the transmission rate of information inside the networks and to the limit of influence one node can have on another.

Researchers established that influences exercised in a network are either direct or indirect. That is, they can be transmitted to the targeted node with which the communicating node is connected, as well as to nodes with which the end-nodes are connected. According to Christakis, N. & Fowler, J.A. [22], influence beyond those three degrees fades out, loses strength and evaporates.

This limited ability to transmit information and influence is based on three main reasons:

- Inherent weakening; given that information may no longer be credible since it gets to the fourth degree.
- Network instability; given that the network is under constant evolution, connections beyond three degrees become unstable.
- Evolution cause; given the evolution biology background of the human species, human beings have lived and been educated in smaller groups than those formed by four or more degrees of influence.

The above characteristics are core elements for the conception of social networks and determine the strength rate as well as the reactions and behaviors that they are able to transfer as conductors.

2.3.7 Dunbar's number

Networks as forms of social organization are as old as the human species itself. Despite their flexibility and adaptability, they face difficulties in co-ordination when they exceed a certain scale and level of complexity. On this very ground lies the Dunbar's number.

According to Robin Dunber, the maximum of participants in a natural social network cannot be over one hundred and fifty, since beyond that number some kind of hierarchy is direly needed [22] .

2.3.8 Electronic networks

According to Nobert Bolz [28], the advent of new media resulted happily to the mutation of society towards a new type, "*…the organizational neighborhood based on electronic networks*." Thanks to new media, globalization and fragmentation are enhanced and communication inside society gets to be independent from the number of its population.

In the development of electronic networks, Bolz distinguishes the importance of the fact that, apart the augmenting abilities for the diffusion of information, communities are created and further evolving.

For Manuel Castells [26], the web is a crucial conductor for the creation of a new social structure based on the web and supported by three factors:

- The need of the market to be flexible in managing and globalizing capitals.
- The demand of society for personal freedom and open communication.
- The revolution of micro-electronics.

Castells also suggests that the web isn't but a horizontal, uncontrolled and cheap communication channel, operating on either one-to-one or one-to-many basis. It is an ideal medium for preserving weak ties, which in other cases were to be lost, as well as strong ties from a distance, given that the e-mail supports family relations for people lacking interpersonal contact due to geographical or other reasons. The one biggest benefit, he suggests, is the fact that the web helps to the development of a new form of sociality: networked atomism. For Albert-László Barabási [27] the web not only enables the approach and study of social networks, serving just like a map, but also provides ground for evaluating their anatomy as complex systems.

2.3.9 Electronic social networks

Whereas a social network is defined as a group of individuals, organizations or other entities that are connected by social relations, an electronic network, according to Barry Wellman [21], is made social when it connects individuals.

With respect to the webpages of social networks, Boyd and Ellison [34] suggest the following definition: "*We define social networks sites as web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection and view and traverse their list of connections and those made by others within the system. The nature and nomenclature of those connections may vary from site to site….*" [34]

In the web, social network pages can operate in a limited access environment and offer the possibility of a public profile and displaying a list of user which the profile owner is connected with. A basic characteristic of theirs is that connections are made visible and human-oriented.

According to Christakis, N. & Fowler, J. [22], those pages serve as the ground of interactions that occur off-line for the most part, and help to preserve ties (mainly the weak ones); that is, they don't favor the creation of ties between complete strangers.

2.4 Categorisation of Web 2.0 applications and tools

The categorization outlined in the following subsections resulted from the categorization that the analysis conducted within the PADGETS project revealed [122]. However, since PADGETS findings refer to the situation of Web 2.0 two years ago, and as Internet world evolves rapidly, the categorization needed to be updated but keeping the same methodological approach. In addition a new category emerged more relevant with NOMAD objectives that is platforms exclusively dedicated to policy making. The following table summarizes the clustering of Web 2.0 applications in the five main categories emerged from the analysis and are described in detail in the next paragraphs.

Table 2-1: Main categories of Web 2.0 applications

Category	Tools
Communication	Blogs, Micro-Blogging/Presence Applications, Internet Forums/Messages Boards, Social Networking Sites, Event Sites
Collaboration	Wikis, Social Bookmarking, Social News, Opinion Sites
Multimedia and Entertainment	Photo Sharing, Video Sharing, Live Casting, Virtual World Sites
News and Information	News Broadcasting, Institutional Sites, Online Newspapers
Policy Making and Public Participation	Crowdsourcing or ideation, Online contests or competitions, Wikis, Online town halls or chats, Social Media

2.4.1 Communication

The first category of Social Media Platforms which is the Communication Category. Some well-known examples of this category are Blogger, WordPress, Twitter, phpBB, hi5, Google+, Facebook. The Communication category includes the following Platforms:

- Blogs: e.g. Blogger, Drupal, ExpressionEngine, LiveJournal, Open Diary, TypePad, Vox, WordPress, Xanga [35].

A blog or else a web log chronological online diary. Users either as individuals or as small groups can subscribe to a person's blog, which allows them to read it and to write comments in response to blog posts. In other words the user can maintain or add content to the blog. Blogs are often themed on a single subject. Usually, most of the blogs are interactive allowing users to leave a message via GUI widgets and its characteristic is what makes it differ from static websites. Bloggers have the ability through the conversations that are developed from the posts to build social relations with their subscribers. The structure of a typical blog includes texting, images, links to other sources or blogs and web pages. Most of them are textual, other focus on art (art blogs), on photograph (photograph blogs), on videos (video blogging), on music (MP3 blogs) and last others on audio (podcasting) [36].

- Micro-Blogging/Presence Applications: e.g. Dailybooth, FMyLife, Foursquare, Google Buzz, Identi.ca, Jaiku, Nasza-Klasa.pl, Plurk, Posterous, Qaiku, Tumblr, Twitter [35].

Microblogging is another type of blogging. The difference between blogging and microblogging is that in the latter its content is typically smaller than in the former. As content in microblogging is considered being short sentences with the maximum of 140 characters, individual images or video links. Some microblogs are used to promote services or products or even collaboration within an organization. As microblogging services appear to be text messaging, instant messaging, e-mail and digital audio [37].

- Internet Forums/Messages Boards: e.g. phpBB, FUDforum, BulletinBoards.com [35]

An Internet forum or message board is a website for online discussion where online conversations take place in the form of posted messages. What makes Internet forums differ from chat rooms is that in forums the messages are at least temporarily archived. Furthermore, depending on the level of access that the user or the forum set-up has, a posted message might need to be approved by the moderator before it becomes visible. A feature of forums is the conversation that takes place and is called a "thread". The structure of a forum is hierarchical and that means that each forum can contain a number of subforums each one of which has several topics and several discussions. In some forums users have to register and enter in it after a log in. In others users just stay anonymous [38].

- Social Networking Sites: e.g. ASmallWorld, Bebo, Chatter, Cyworld, Diaspora, Facebook, Google+, Hi5, Hyves, IRC, LinkedIn, Mixi, MySpace, Netlog, Ning, Orkut, Plaxo, Tagged, Tuenti, XING, Yammer [35].

A social networking site is a platform that focuses on building social relations among users who have the same interests or activities. A social networking site is considered being an online community allowing users to share ideas, activities and events within their individual group. Each user in order to login to the social networking site makes a profile and has the opportunity to interact with others and make friends through links and a variety of services [39].

- Event Sites: e.g. Eventful, The Hotlist, Meetup.com, Upcoming, Yelp, Inc [35].

Event sites provide users with local upcoming events, things to do, and useful tools. As tools we can mention local events calendar which contains information on nearby concerts, parties, venues, conferences, music performances, singles events, sports, theatre, movies, and weekend events. Also, these sites provide web tools so that the user can create, organize, and launch his local event [40].

2.4.2 Collaboration

We present the second category of Social Media Platforms which is the Collaboration Category. Some of the most well-known are Wikis, Delicious, Digg, Epinions, Wiki answers, Yahoo!Answers. Collaboration includes the following Platforms:

- Wikis: e.g. PBworks, Wetpaint, Wikia, Wikidot, Wikimedisa, Wikispaces, Wikinews [35].

A wiki is a website in which users can add, modify or delete the content with the use of web browser and a markup language. Wikis are often created in collaboration of multiple users. They are also used for a variety of purposes with some to permit control over different functions. For example, editing rights may permit adding or removing material and there are others that may permit access without enforcing access control. Finally, as examples of wikis we could mention community websites, corporate intranets, knowledge management systems and notetaking [41].

- Social Bookmarking: e.g. CiteULike, Delicious, Diigo, Google Reader, StumbleUpon, folkd [35].

Social bookmarking is a method with which Internet users have the ability to organize, store, manage and search for bookmarks of resources online. Since 1996, many online bookmark management services have launched. Some Social Bookmarking Sites have even made popular the terms "social bookmarking" and "tagging" and allow shared lists of user-created Internet bookmarks to be displayed and commented on. Tagging is defined as a significant feature of social bookmarking systems, enabling users to organize their bookmarks by allocating a number of 'tags' to them and develop shared vocabularies known as folksonomies [42].

- Social News: e.g. Digg, Chime.In (or else Mixx), Newsvine, NowPublic, Reddit [35].

Social news is a website full of user-posted stories which are ranked according to their popularity. Users have the ability to comment on the posts and the comments may be ranked as well. This type of sites is used to link different types of information such as news, humor, support, and discussion. Bear in mind that Social news simplifies the online democratic participation [43].

- Opinion Sites: e.g. Customer Lobby, Yelp, Inc., ask.com, Askville, Stack Exchange, WikiAnswers, epinions.com, MouthShut.com, Epinions [35].

There are some sites in which visitors can read reviews about a variety of items in order to help them make a decision if they would buy or not or even join and begin writing reviews. There are also question and answer websites. [44]

2.4.3 Multimedia and Entertainment

We present the third category of Social Media Platforms which is the Multimedia & Entertainment Category. Some of the most well-known are: Flickr, Picasa, YouTube, Vimeo, Skype and Second Life. Multimedia & Entertainment includes the following Platforms:

- Photo Sharing: e.g. Flickr, Photobucket, Picasa [35].

Photo sharing is the ability of the user to publish his digital photos, transfer them online and share them with others. It is provided from websites and applications that facilitate the upload and display of the images. The term Sharing means that the other users can view the photos but they cannot necessarily download them. Users have also the ability to classify photos into albums and add annotations (such as captions or tags) and comments. Basic photo sharing functionality can be found in applications that allow the user to email photos. [45]

- Video Sharing: e.g. Dailymotion, Metacafe, Nico Nico Douga, Openfilm, sevenload, Viddler, Vimeo, YouTube [35].

Video Share is an IP Multimedia System (IMS) enabled service for mobile networks which permits users engaged in a circuit switch voice call to add a unidirectional video streaming session over the packet network during the voice call. A video streaming session can be initiated by any of the parties on the voice call. There is the possibility to take place multiple video streaming sessions during a voice call, and each of these streaming sessions, as it was said before, can be initiated by any of the parties on the voice call. The video source can either be the camera on the phone or a pre-recorded video clip. [46]

- Live Casting: e.g. blip.tv, Justin.tv, Livestream, oovoo, OpenCU, Skype, Stickam, Ustream, YouTube [35].

A Live Casting is a media presentation distributed over the Internet using streaming media technology. With Live Casting a single content source is distributed to many simultaneous listeners or viewers. The media presentation can be distributed either live or on demand. With other words, Live Casting is like “Broadcasting” over the Internet. [47]

- Virtual World Sites: e.g. Active Worlds, Forterra Systems, Second Life, The Slims Online, World of Warcraft, RuneScape [35].

A virtual world is an online community that transforms into a computer-based simulated environment in which users can interact with one another and also create objects. A synonym to virtual world is a 3D virtual environment where the users take the form of avatars. They are generally allowed for multiple users. Virtual worlds are not limited to the field of game sharing but, depending on the degree of immediacy presented, can include computer conferencing and text based chat rooms. Sometimes, users are able to use emoticons or 'smilies' showing their feelings or instant expressions of their faces. Emoticons often have a keyboard shortcut [48].

2.4.4 News and Information

We present the fourth category of Social Media Platforms which is the News & Information Category. Some of the most well-known are Google News, Twitter News,Washington Post, New York Times. News & Information includes the following Platforms:

- News Broadcasting: e.g. Google News, Twitter News Network [35].

News broadcasting is the broadcasting of a variety of news, events and other information via Internet. The content is produced by a broadcast network. As material to the news broadcasting could be sports coverage, traffic reports, weather forecasts and any other is relevant to the audience. The selected and presented information is up-to date. [49]

- Institutional Sites with high numbers of visitors: e.g. Human Rights, WWF, European Information Network [35].

Online Institutional Sites are websites of Institutions that bring together contact details for organizations and individuals either global or by country. They also provide information and advice to the general public, business and the academic community. [50]

- Online Newspapers: e.g. The Wall Street Journal, The Washington Post, USA Today, The New York Times. [35].

An online newspaper, or else a web newspaper, is a newspaper that is created and exists on the Internet either as an online version of a printed periodical or separately. Going online created more opportunities for newspapers, such as competing with broadcast journalism in presenting breaking news in a more timely manner. The credibility and strong brand recognition of well-established newspapers, and the close relationships they have with advertisers, are the two

main reasons of strengthening the chances to survive. An advantage that these newspapers have is that they have decreased costs coming through the printing process. [51]

2.4.5 Policy Making and Public Participation

The last type of Web 2.0 applications is constituted by a portion of tools that belong to the aforementioned categories, but are used for discussions and content production concerning the domain of policy making and public participation. A General idea is that Participatory media can be community media, blogs, wikis, social bookmarking, music-photo-video sharing, mashups, podcasts, participatory video projects and videoblogs, spanning in the rest four classes.Participatory media emphasizing on the governmental collaborative decision making, are Social Media whose value and power derives from the online and active participation of many people-Internet users. Examples of participatory media can be governmental organizations, online forums, blogs and social networking sites. Two well known public participation media are the European Union Forums and the OpenGov.gr [52].

The IBM Center for The Business of Government's 2006 Public Deliberation: A Manager's Guide to Citizen Engagement provides a report adapted from the International Association of Public Participation clarifying the different types of participatory activities in Figure 2-3 [53]:

Inform	Consult	Engage	Collaborate	Empower
Provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	Obtain public feedback of analysis, alternatives, and/or decisions.	Work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	Partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	Place final decision-making authority in the hands of citizens.

Figure 2-3 Different Types of Participatory Activities [53]

Each type of participation has a value and may be called for in a specific situation.

A set of approaches in online public participation is to engage the public with the use of online tools. Many are the organizations or even the governmental agencies that use Social Media tools to inform the public about their programs, build relationships with customers and constituents, and solicit input about their activities. Online public participation is being used to generate new ideas or approaches to solve problems, provide greater public access, educate the public, encourage collaboration, and make it easier to provide formal or informal feedback about plans, policies or programs. [53]

The Types of Online Public Participation are [53]:

- Crowdsourcing or ideation
- Online contests or competitions
- Wikis
- Online town halls or chats
- Social Media

Table 2-2 Types of Online Public Participation [53]

ONLINE PUBLIC PARTICIPATION	
Crowdsourcing or ideation	An open process in which citizens are invited to share and vote on ideas for addressing a specific question or problem

Online contests or competitions	Online contests or challenges offer rewards to those who develop breakthrough solutions to specific problems or challenges
Wikis	Websites that allow visitors to edit existing webpages, post links and documents, and create new interconnected pages. Most often used to aggregate information
Online town halls or chats	Events in which the public submits questions or comments to decision-makers who respond in real time
Social Media	Blogs, Twitter, Facebook, YouTube and other web-based platforms

2.5 Description of the most popular Social Media Platforms

In this section, after listing the 50 most popular Social Media, we provide a description of some of themspecifically 2 for each category: (Communication/Collaboration/Multimedia & Entertainment/Policy Making & Public Participation).

The description of each Social Media includes first of all its Logo and its Uniform Resource Locator (URL). Next is its description with other words what each Social Media is exactly and then the Main Features that characterize each one of them. We continue, with the Type of content (e.g. is it text, videos or photos?) and the Languages in which the Social Media is available. Finally, we present User Engagement, Accessibilty meaning how the user can access the social network and last Political Representation. We mention indicative examples in the part of Political Representation.

2.5.1 List of the most popular Social Media Platforms

Our purpose is to create a "map" with the most famous Social Media and present them through a list with a series of features.

In order to make the list with the 50 most popular Social Media, we searched to find a list with the Social Media Platforms. As a next step, from the list we select these that have up to 1,000,000 users [54][55][56][57]. Additionally, we create a new list with the 50 most popular Social Media and we present the Social Media according to the following characteristics:

- Focus/Description: refers to what a Social Media represents, what is the goal of its creation. For example there are social media used for making friends, others for professional connections, others for entertainment or for information etc.
- Top Popularity: refers to the countries in which the Social Media is most popular according to Alexa.
- Registration: refers to the ability to users to join the Social Media with or without restrictions. For example in some Social Media users must not be under 13 years old to register.
- Number of Users: refers to how many users have registered in the Social Media.
- Multilingual Support: refers to how many languages the Social Media supports.
- Alexa Ranking: finds the rank of the Social Media traffic according to Alexa.
- Political Representation: finds if there is any political content in the Social Media.
- Category: finds the category in which the Social Media refers to. There are 5 categories: communication, collaboration, multimedia & entertainment, news & information, policy making & public participation.

The following table shows the List of the 50 most Popular Social Media.

N.	Name	Focus Description	Top Popularity	Registration	Unique Users	Multilingual Support	Alexa Ranking	Political Representation	Category
1	Facebook	Social Networking Service	Worldwide	Open to people 13 and older	845.000.000	110	2	×	Communication/Policy Making & Public Participation
2	Qzone	Social Networking Service	China	Open	536.000.000	1	10		Communication
3	Youtube	Video sharing	Worldwide	Open	490.000.000	54	3	×	Multimedia & Entertainment/Policy Making & Public Participation
4	Twitter	Social Networking Service/Microblogging	US	Open	380.000.000	27	9	×	Communication/Policy Making & Public Participation
5	Windows Live	Social Networking Service	Worldwide	Open	330.000.000	48	7	×	Communication
6	Wikipedia	Encyclopedia	Worldwide	Open	310.000.000	273	6		Collaboration
7	Blogger	News - Bookmarking	Worldwide	Open	300.000.000	50	43	×	Communication/Policy Making & Public Participation
8	Habbo	Social Networking Service	Worldwide	Open > 13	230.000.000	31	16.810	×	Communication
9	Skype	Voice Calls/Instant Messages	Worldwide	Open	200.000.000	69	157		Multimedia & Entertainment
10	Yahoo!Answers	Question-and-Answer	Worldwide	Open > 13	200.000.000	12	N/A	×	Collaboration/Policy Making & Public Participation
11	Renren	Social Networking Service	China	Open > 18	160.000.000	1	101		Communication
12	Badoo	Social Networking Service	EU (Italy)	Open > 18	121.000.000	15	115		Communication
13	Vkontakte	Social Networking Service	Russia	Open	121.000.000	68	106	×	Communication/Policy Making & Public Participation

14	Bebo	Social Networking Service	Worldwide	Open > 13	117.000.000	14	3734	×	Communication/Policy Making & Public Participation
15	Yahoo!News	News	US	Open > 13	110.000.000	7	N/A	×	News & Information/Policy Making & Public Participation
16	LinkedIn	Professional Social Networking Service	US	Open > 18	100.000.000	10	12	×	Communication
17	Google+	Business Social Networking Service	US	Open > 13	100.000.000	44	5.259.048	×	Communication/Policy Making & Public Participation
18	Myspace	Social Networking Service	Worldwide	Open > 13	100.000.000	15	160	×	Communication/Policy Making & Public Participation
19	Orkut	Social Networking Service	Brazil	Open > 18	100.000.000	48	224	×	Communication/Policy Making & Public Participation
20	Tagged	Social Networking Service	US	Open	100.000.000	7	298		Communication
21	Scribd	Document Sharing	US	Open	100.000.000	3	234		Multimedia & Entertainment/Policy Making & Public Participation
22	Friendster	Social Gaming	Asia	Open > 18	90.000.000	15	10.227	×	Multimedia & Entertainment
23	hi5	Social Networking Service	India	Open > 13	80.000.000	40	1.122	×	Communication
24	CNN	News	US	Open	74.000.000	62	61	×	News & Information
25	MSNBC	News	US	Open	73.000.000	21	N/A	×	News & Information
26	Netlog	Social Networking Service	India	Open > 13	70.000.000	41	402	×	Communication
27	Google News	News	US	Open	65.000.000	28	N/A	×	News & Information
28	Flixster	Social Networking Service	US	Open > 13	63.000.000	2	8.149	×	Communication/Policy Making & Public Participation
29	New York Times	News	US	Open	59.500.000	68	84	×	News & Information/Policy Making & Public

									Participation
30	HuffingtonPost	News/Blogging	US	Open	54.000.000	2	122	×	News & Information/Policy Making & Public Participation
31	MyLife	Social Networking Service	US	Open	51.000.000	1	1.813		Communication
32	Classmates.com	Social Networking Service	US	Open > 18	50.000.000	5	3.229		Communication/Policy Making & Public Participation
33	Douban	Online music, movie and book database	China	Open	46.850.000	1	107		Multimedia & Entertainment
34	Odnoklassniki	Social Networking Service	Russia/Ukraine	Open	45.000.000	2	72		Communication/Policy Making & Public Participation
35	Viadeo	Profeessional Social Networking Service	Worldwide	Open > 18	35.000.000	6	424		Communication
36	Reddit	Social News	Worldwide	Open	34.879.881	17	119	×	News & Information/Policy Making & Public Participation
37	Flickr	Video/Image sharing	Worldwide	Open > 13	32.000.000	49	47		Multimedia & Entertainment/Policy Making & Public Participation
38	Fox News	News	US	Open	32.000.000	35	161	×	News & Information
39	Last.fm	Music	US	Open	30.000.000	39	685	×	Multimedia & Entertainment/Policy Making & Public Participation
40	MyHeritage	Social Networking Service	US	Open	30.000.000	38	3.130		Communication/Policy Making & Public Participation
41	WeeWorld	Virtual World	US	Open > 13	30.000.000	11	18.505		Multimedia & Entertainment
42	Xanga	Blog	US/Hong Kong	Open	27.000.000	2	3.697	×	Communication/Policy Making & Public Participation
43	Digg	News-Bookmarking	Worldwide	Open	25.100.000	29	139	×	Collaboration/Policy Making & Public Participation

44	Washington Post	News	US	Open	25.000.000	45	334	×	News & Information/Policy Making & Public Participation
45	LATimes	News	US	Open	24.900.000	34	374	×	News & Information
46	Mail Online/Daily Mail	News	US/UK	Open	24.800.000	25	146	×	News & Information
47	Mixi	Social Networking Service	Japan	Invite Only	24.323.160	1	222		Communication
48	Reuters	Business and Finances News	US	Open	24.000.000	49	278	×	News & Information/Policy Making & Public Participation
49	Cyworld	Social Networking Service	South Korea/China	Open > 25	24.000.000	11	10.063.392		Communication
50	Gaia Online	Social Gaming	US	Open > 13	23.523.663	14	7.423		Multimedia & Entertainment/Policy Making & Public Participation

2.5.2 Communication

facebook	
URL	https://www.facebook.com/
DESCRIPTION	Facebook is a social networking service operated and owned by Facebook Inc. Facebook is also a tool for public participation.
CONTENT	Text, photos, videos
MAIN FEATURES	▪ Registration is free ▪ User can buy gifts and virtual goods with Facebook Credits ▪ User can add friends or send request for friendship ▪ User can listen to music at the same time with his friends and discuss the tunes through Facebook Chat ▪ User can "like" status updates, comments, photos, and links posted as well as adverts ▪ User can send a message either public or private ▪ User with News Feed see a constantly updated list of his friends' Facebook activity ▪ User's profile can be through privacy settings either public or private ▪ User selects a username ▪ User decides what he lets other see from his profile ▪ User can create a profile ▪ User can add personal information (e.g. age, country, e-mail address, interests) ▪ User can upload photos, videos and "tag" or label people in the photos, or videos ▪ User can poke another user of the platform or receive pokes ▪ User can join groups ▪ User can organize events ▪ User can play games with other friends ▪ User through notifications see friends 'updates ▪ User through timeline organizes his profile through chronological order
LANGUAGES AVAILABLE	110
ACCESSIBILITY	User have access through: ▪ Web browser ▪ Smartphones
USER ENGAGEMENT	▪ Send friend request ▪ Chat with friends ▪ Send or receive messages ▪ Upload his current status, photos, videos ▪ Poke ▪ Label or "tag" ▪ Play games ▪ Send gifts ▪ Organize events ▪ Join groups
POLITICAL REPRESENTATION	Fans of political parties and political leaders have created Facebook pages or even the political leaders: ▪ George Papandreou:

	https://www.facebook.com/george.papandreou.fans ▪ Dora Bakoyiannis: https://www.facebook.com/DoraBakoyannis

twitter	
URL	https://twitter.com/
DESCRIPTION	Twitter is a social networking service and a microblogging service as well that gives to users the ability to send and read text-based posts up to 140 characters, known as "tweets". Twitter is also a tool for public participation.
CONTENT	Text-based messages
MAIN FEATURES	▪ User can send and read other user's updates ▪ Messages are limited to 140 characters ▪ User can send and read updates via the Twitter website, SMS (text messages), RSS (receive only), emails or a third party application ▪ Use third party applications to send tweets (e.g. Tweetie, Twitterrific, Feedalizr) ▪ Send invitations via e-mail ▪ Search for other users by name or username ▪ Import friends from other networks
LANGUAGES AVAILABLE	27
ACCESSIBILITY	User can send and receive messages via: ▪ Twitter website ▪ SMS
USER ENGAGEMENT	▪ Send tweets ▪ Read tweets ▪ Make retweets ▪ Search for other users ▪ Follow other users
POLITICAL REPRESENTATION	Politicians have a Twitter Account: ▪ Barack Obama: https://twitter.com/#!/BarackObama ▪ Mitt Romney: https://twitter.com/#!/MittRomney

2.5.3 Collaboration

YAHOO! ANSWERS	
URL	http://answers.yahoo.com/
DESCRIPTION	Yahoo!Answers is a community-driven question-and-answer site or else a knowledge market launched by Yahoo!
CONTENT	Text
MAIN FEATURES	▪ User can make any question that does not violate Yahoo!Answers community guidelines ▪ Participants with good answers are featured on the Yahoo!Answers Blog

	▪ Service itself is free but the answers' content are owned by the respective users ▪ User creates an account with a Yahoo! ID but he can choose but any name as identification on Yahoo! Answers ▪ User can have a picture from Yahoo! Avatars or an uploaded picture for picture profile ▪ In order to answer a question, a user can search in Yahoo!Answers or Wikipedia ▪ Questions are initially open to answers for four days ▪ In order to ask a question, user must have a Yahoo! account with a positive score balance of five points or more ▪ There is a limitation of spam questions ▪ There are also levels with points giving more access to users ▪ Points do not have real value. Exist only for fun. ▪ User receive ten points for contributing the "Best Answer" ▪ Yahoo! Answers staff may award extra points depending on user's contributions
LANGUAGES AVAILABLE	12
ACCESSIBILITY	User have access through: ▪ Web browser ▪ Mobile phones
USER ENGAGEMENT	▪ Make questions ▪ Answer questions ▪ Rate questions and answers ▪ Make comments ▪ Vote the answers ▪ Search
POLITICAL REPRESENTATION	A question made by a user to others and their answers as well about: "Why is Barack Obama's approval rating high with Democrats and not with Republicans?" : http://answers.yahoo.com/question/index;_ylt=Am5ncv5RuBzWNMIHx.pfaW4jzKIX;_ylv=3?qid=20100528080053AAcMYJj

URL	http://en.wikipedia.org/wiki/Wikipedia
DESCRIPTION	Wikipedia is a free, collaborative, online encyclopedia supported by Wikimedia Foundation. Wikipedia is written in collaboration by hundreds of thousands of contributors
CONTENT	Text, photos
MAIN FEATURES	▪ Create content (e.g. articles) ▪ Read available content ▪ Search for content ▪ Edit content ▪ Upload photos ▪ Create an account ▪ Add gadgets in user's account

	▪ Find worldwide current events or random articles ▪ Join Groups ▪ Learn about Wikipedia's Community
LANGUAGES AVAILABLE	273
ACCESSIBILITY	User have access through: ▪ Web browser ▪ Mobile phones ▪ PDA's
USER ENGAGEMENT	▪ Create content ▪ Read and edit available content ▪ Upload text and photos ▪ Create an account ▪ Join Groups ▪ Learn about Wikipedia's Community
POLITICAL REPRESENTATION	N/A

2.5.4 Multimedia and Entertainment

YouTube	
URL	https://www.youtube.com/
DESCRIPTION	YouTube is a video-sharing website.
CONTENT	Videos (e.g. music, movie, entertainment, science, sports, comedy)
MAIN FEATURES	▪ Registration is permitted for users up to 18 years old ▪ Edit videos directly on YouTube ▪ Use YouTube Disco to listen to great tracks, make mix tapes, queue videos as the user wants to see them ▪ User can share his videos to his friends privately ▪ User can advertise his Youtube channel as much as possible on his own site and on his online Social Media profiles ▪ With TubeChop user can select the part of the video he wants to share with others ▪ Users that register can upload videos. These that are not can only watch them ▪ User's profile is known as "channel" ▪ Videos that have pornographic and criminal content are not allowed to be uploaded
LANGUAGES AVAILABLE	54
ACCESSIBILITY	User have access through: ▪ Web browser ▪ Smartphones
USER ENGAGEMENT	▪ Upload videos ▪ View videos ▪ Share videos ▪ Make comments ▪ Add a "Like" on videos

POLITICAL REPRESENTATION	▪ Barack Obama: "The road we traveled" : https://www.youtube.com/watch?v=2POembdArVo&feature=g-sptl&cid=inp-hs-pol ▪ McCain, Obama Face off in First Debate: https://www.youtube.com/watch?v=nVk5lxfaZP4

URL	http://www.skype.com
DESCRIPTION	Skype is a voice-over-Internet Protocol service and a software application as well owned by Microsoft since 2011
CONTENT	Text, videos, photos
MAIN FEATURES	▪ User can talk to anyone else on Skype, anywhere in the world for free ▪ User can also make a subscription and call mobiles or landlines with small charge using a Skype Credit ▪ User can call a number of a friend and the friend answers on Skype wherever in the world he is ▪ User can add other users ▪ User can make a group of people and talk to them with one call if everyone has Skype ▪ Call international numbers converting the number into a new number with an area code through Skype and dial the new number from the phone ▪ User can talk face-to-face with live video ▪ User can share a video or a photo to his friends with group video ▪ User can share his screen on Skype ▪ User can send or receive messages ▪ User can send photos, documents, presentations ▪ User can send SMS texts to mobile phones ▪ User can connect his account on Facebook with Skype and he can stay in touch with all his online friends
LANGUAGES AVAILABLE	69
ACCESSIBILITY	User have access through: ▪ Native applications for Windows, Linux and Mac Operating Systems ▪ Smartphones' platforms such as Android, iOS, Symbian ▪ Facebook
USER ENGAGEMENT	▪ Online voice calls ▪ Video calling ▪ Screen sharing ▪ Exchange of messages ▪ Exchange of files ▪ Exchange of documents ▪ Exchange of photos ▪ Online number ▪ Skype to go number ▪ Skype-to-skype
POLITICAL REPRESENTATION	N/A

2.5.5 News and Information

URL	http://www.cnn.com/
DESCRIPTION	Cable News Network (CNN) is a U.S. cable news channel. CNN was the first channel to provide 24-hour television news coverage and the first all-news television channel in the United States. CNN is owned by parent company Time Warner. CNN created its news website which attracted growing interest over its first decade and is now one of the most popular news websites in the world.
CONTENT	Text, videos, photos
MAIN FEATURES	▪ User has the ability to use the latest multimedia technologies, from live video streaming to audio packages to searchable archives of news features and background information ▪ User can watch videos without registration ▪ User can read the articles without registration ▪ User needs registration if we wants to make a comment ▪ User at any time can log on and watch a live stream of whatever is on television at the moment ▪ Users can watch full videos from the page or a clip as a quick way to get news fast in video format ▪ User registers via an online registration form to create a user account ▪ With the registration user accesses and uses CNNMoney.com ▪ CNNMoney.com may contain comments sections, discussion forums, bulletin boards, or other interactive features in which user may post or upload comments such as video, photos, messages, other materials or items ▪ Users are not allowed to upload post or otherwise transmit any User Content that violates or infringes in any way upon the rights of other users or of the Community. ▪ User can enter in the Viewer Comment Page and make comments of what he thinks about CNN's shows, anchors and hot topics for the day
LANGUAGES AVAILABLE	62
ACCESSIBILITY	User have access through: ▪ Web browser ▪ Smartphones with CNN mobile services
USER ENGAGEMENT	▪ Read articles about news and receive information ▪ Watch videos ▪ See statistical graphs for news articles according to their popularity ▪ Share news articles through Facebook and Twitter ▪ Make comments ▪ Search ▪ Make marketing partnership with CNN Partner Hotels for powerful value-added promotional benefits
POLITICAL REPRESENTATION	▪ "Political Group hits Obama during American energy swing" : http://politicalticker.blogs.cnn.com/2012/03/21/conservative-group-hits-obama-during-american-energy-swing/ ▪ "Will high gas price be Obama's Achilles' heel?" : http://www.cnn.com/2012/03/21/opinion/oconnell-gas-price/index.html

msnbc.com	
URL	http://www.msnbc.msn.com/
DESCRIPTION	MSNBC is a cable news channel based in the US. Its name is derived from the most common abbreviations for Microsoft and the National Broadcasting Company.
CONTENT	Text, videos, photos
MAIN FEATURES	▪ User can register providing an e-mail address ▪ When the user makes the log in he can have expanded or mini site preferences ▪ User can get notifications when people respond to his comments ▪ User has the ability to use multimedia technologies ▪ User can watch videos without registration ▪ User can read the articles without registration ▪ User needs registration if we wants to make a comment ▪ User can also subscribe to the newsletter in order to get the continuous updates of the news website
LANGUAGES AVAILABLE	21
ACCESSIBILITY	User have access through: ▪ Web browser ▪ Smartphones
USER ENGAGEMENT	▪ Read articles about news and receive information ▪ Watch videos ▪ Share news articles through Facebook and Twitter ▪ Make comments ▪ Vote others' comments ▪ Search ▪ Get notifications ▪ Read the most popular articles according to the number of votes ▪ Watch a playlist with the Most Viewed Videos and the Top Videos as well
POLITICAL REPRESENTATION	▪ "Senior Santorum adviser asks Gingrich to drop out" : http://video.msnbc.msn.com/mitchell-reports/46810789#46810789 ▪ "Is an Obama/Romney showdown likely?" : http://video.msnbc.msn.com/mitchell-reports/46810607#46810607

2.5.6 Policy making and Public Participation

EU-forums.com	
URL	http://www.eu-forums.com/
DESCRIPTION	European Union Forums is the largest forum in Europe to discuss hot topics, EU issues, consumer rights, environment, business, travel health and politics. European Union Forums is a Social Media platform of policy making and public

	participation.
CONTENT	Text, photos
MAIN FEATURES	▪ Registration is required and is free ▪ There are typed or users: administrators, moderators, usergroup leaders, users ▪ Board administration have the ability to grant additional permissions to registered users ▪ User is not allowed to post any vulgar, threatening, criminal, sexually-oriented, offensive material that violates any laws of the user's country or the country where European Union Forums is hosted or International Law ▪ User has the ability along with his username to post an image as well ▪ User can join different groups ▪ User can become a usergroup leader ▪ User can send private messages ▪ Administrator of the forum has the ability to disable private messages in an entire board or prevent a user from sending messages ▪ In general, administrators are members with the highest level of control over the entire board. They can control setting permissions, banning users, etc. ▪ Moderators are individuals or groups that look after the forum every day. They can delete, edit posts or lock, unlock, move, delete topics and generally prevent users from posting offensive material ▪ User can have a friends list helping him send private messages, see their online status and their posts ▪ User can add or remove friends from his list ▪ User can upload an attachment if the administrator allows him to ▪ User can edit or delete his own posts ▪ User can create polls clicking the "Poll Creation" tab
LANGUAGES AVAILABLE	47
ACCESSIBILITY	User have access through: ▪ Web browser ▪ Smartphones
USER ENGAGEMENT	▪ Read the topics that are discussed ▪ Search ▪ Write comments known as "posts" ▪ Read the other users' posts and make a post reply ▪ Register with his own username or a nickname ▪ View the list with the registered members ▪ Make a question to the forum and wait from the administrator of the forum to get an answer ▪ Upload an attachment ▪ Add or delete friends from list ▪ Add or delete his own posts ▪ Send private messages ▪ See friends' online status and posts
POLITICAL REPRESENTATION	▪ "Is politics in the classroom considered a civil right?" : http://www.eu-forums.com/political-debates/is-politics-in-the-classroom-considered-a-civil-right-t9881.html#p44040

	▪ "How does power and authority relate to politics and the economy? " : http://www.eu-forums.com/political-debates/how-does-power-and-authority-relate-to-politics-and-the-economy-t9885.html

	OpenGov.gr
URL	http://www.opengov.gr/home/
DESCRIPTION	The OpenGov.gr combines political and technological characteristics. OpenGov.gr is based on policy framework principles such as transparency, consultation, accountability and decentralization. In terms of technology, it leverages applications and open source tools. The aim is to create best practices that will be established as a way of governance. At the heart of open government are the citizens' needs for information, for merit and participation in decision-making process. OpenGov.gr is a Social Media platform for policy making and public participation.
CONTENT	Text, videos
MAIN FEATURES	▪ Unit of Innovation in collaboration with partners of each Ministry prepare the site and the material of the consultation ▪ Once approved, the consultation is published and open to comment ▪ The responsible ministry partners each read and approve the publication of incoming comments ▪ The responsible ministry partners actively participate in by publishing comments and views ▪ When the deadline for consultation passes, the Ministry process users' comments and they draft a report on the public consultation ▪ When the law and the report of the results of the consultation will be posted, then the consultation is complete ▪ User should document what they write with references, references to other documents, or to relevant content ▪ If comments are inappropriate they will be removed ▪ The content posted in the site cannot be offensive to the rights of others or to the OpenGov.gr ▪ User must avoid personal confrontations with others ▪ Posts that are referred to other sites' advertisements will not be published ▪
LANGUAGES AVAILABLE	1
ACCESSIBILITY	User have access through: ▪ Web browser ▪ Smartphones
USER ENGAGEMENT	▪ Read the topics that are discussed ▪ Search ▪ Write comments known as "posts" and provide hiperlinks ▪ Read the other users' posts ▪ Register providing a name and an e-mail address

	▪ Make a question ▪ Formulate suggestions directly related to the issue under consulatation ▪ Send a message by filling in a form and clicking "Submit" ▪ View statistics over the consultation discussion ▪ Share a post in Facebook or Twitter ▪ Receive information on public consultations and actions taken under the OpenGov.gr ▪ Watch videos related to issues under consultation in http://blip.tv/opengov
POLITICAL REPRESENTATION	▪ "Dialogue for a fair and efficient tax system" : http://www.opengov.gr/minfin/ ▪ "Public consultation on the "Framework for Electronic Government Services" " : http://www.opengov.gr/minreform/?p=129

2.6 Categorisation of the Web 2.0 content

In conjuction with the insights of the aforementionted categorization, Social media can be characterized according to the type of content that is exhibited within their platforms. This section presents a twofold classification of the content that people produce through their engagement with Web 2.0 Social Media, with the view to relate the underlying group knowledge to the project objectives. The first aspect of the categorization refers to the information type of the provided content, while the second refers to the purpose that the contribution of the particular content meets.

According to [123], Social Media success depends on the content development. As a first level of categorization three types of content have been identified [121]:

1. News Content that refers to stories published based on events, happenings and fact. News can be distributed either as information by the original creator or shared from others sources.
2. Entertainment Content is content that relies on personal opinions and is submitted to attract attraction and trigger amusement. This type of content may include multimedia files, rankings and
3. Educational Content is based on resources that represent professional opinions, scientific results, conclusions drawn from research and so forth. That kind of information is usually bookmarked via the Web 2.0 capabilities.

Form the patterns distinguished in the above types of content, particular information types arise such as fact, judgement, suggestion, argument, critisim, etc. according to the contributor's viewpoint. All these information types are valuable in the policy making process and will be modelled in further work of the project.

The purpose of the Social Media content correlates with the activities that users perform in the corresponding web environments. According to the PADGETS Categorization of underlying knowledge[122] activities that the majority of internet users perform and lead to content creation include writing text material, sharing photos, ranking and reviewing products and services, tagging content, posting comments, status updating, blogs and websites creation, aggregation of multiple content, etc. Based on these activities taking place mainly in certain classes of Web 2.0, platforms purpose of content can be characterised the following categories:

- News in News and Information Media
- Events in Event Sites or Microbogging sites
- Articles in Blogs
- Opinions and Reviews in Opinion sites
- Comments in Blogs and Forums
- Collaboration and Contribution in Wikis and Social Bookmarking sites
- Bookmarks in Social Bookmarking sites

- Entertainment in media sharing sites
- Votes and Polls in Social Networking sites
- Aggregation of content in various levels
- Linking and Tagging data in Social Networking Sites
- Participation in policy making and political representation

However there may be overlap among the purposes of the conent, for instance the statement of news information is often accompanied with simultaneous commentation by the content creator. In addition what shoud be notified is that all aforementionted purposes are often adopted under a common perspective, which is to strengthen Social Media presence and growth of audience through the various networking activities.

As a conclusion from the categorization of the underlying knowledge within Social Media users engagement, is that there are types of content that form public opinion through the expression of users criticism, opinions, argument, etc. The availability of these types of content will be analysed in detail in Chapter 4 that relates the role of Web 2.0 in politics and policy making process and will be validated in Chapter 5 as criteria of the particular sources.

2.7 Summary

In this chapter, initially, we created a map of the landscape of Web 2.0 applications and tools that people use extensively today in order to fulfill specific needs. In this way, we tried to gain a greater understanding of them, and of the degree of their use for political and policy related discussions by citizens.

What is important to mention as a general feeling, is that NOMAD should completely understand the role that social media play in users' everyday life and the frequency with which they are used together with the main activities users perform in social madia. Through the use of social media NOMAD' s primary goal is to create a two-way dialogue between citizens and government and empower citizens' role by increasing their participation in governmental decision making.

We began our introduction in the field of Web 2.0 and Social Media, by providing their definitions and some basic aspects about them specifically what they are, why use them and what their characteristics are. We continued with a categorization of the Social Media Platforms according to their type. We concluded that there are four main types in which Social Media Platforms can be distinguished: Communication/ Collaboration/ Multimedia & Entertainment/ News & Information. Since NOMAD aims at introducing new dimensions in the policy making process, we examined these four social media types, as to the degree of their use for politics, policy making and pubic participation discussions, and found out that a very big number of them are heavily used for this purpose. This is a very positive finding for our project, as it indicates that there is plenty of political and public policy related content produced in social media, which can be exploited (retrieved and undergo advanced processing in order to draw conclusions and extract knowledge from it) in our project. That is the reason why Policy Making and Public Participation Platforms has been viewed as a separate social media type and analyzed alnong with all the other already known types of Social Media Platforms.

We should mention, at this point, that participatory media are Social Media whose value and power derives from the online and active participation of many citizens-Internet users. We could mention as examples of such participatory media the numerous governmental organizations', online forums, blogs and social networking sites..

In order to make strong and evidence based conclusions in the above direction we made a list with the 50 most popular Social Media Platforms, and also made a more detailed examination of the 2 most popular in each category from the above perspectives. A first fascinating conclusion in this analysis is that the 15 top Social Media Platforms have more than 100.000.000 unique users making evident first the rapid adoption of Social Media Platforms by citizens, and second how they make it much easier it for governments to get closer and interact with citizens, providing huge opportunities for enhancing public participation in government policy making. Moreover, what is evident is that government in general and political parties with their leaders, more precisely, try to use Social Media in a very effective way attracting as many users-possible supporters as they can.

A second quite interesting conclusion is shown in Figure 2-4: Distribution of the most famous platforms in the categorisation, which shows the distribution of the above 50 most popular social media platforms in the above types/categories: 14 of 50 Social Media have online registered users worldwide while the rest of them have in specific regions or countries. From the 50 Social Media platforms that were examined, 26 of them are referred to the

Communication category, 26 of them also to Policy Making & Public Participation category, 9 of them to the News & Information category, 9 of them also to the Multimedia & Entertainment category and 3 of them to the Collaboration category. Of course, some of them belong to more than one category.

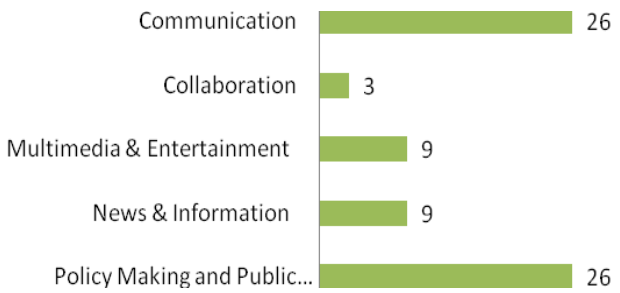


Figure 2-4: Distribution of the most famous platforms in the categorisation

Finally, what is underlined from that list is that the Social Media Platforms with the highest number of users are actually used for Public Participation and Policy Making. Such Platforms are Facebook, Twitter, YouTube, Blogger, Yahoo!Answers. Specifically, 30 of 50 Social Media have some type of political content (political representation).

The meaning behind this observation, and the last conclusion with which we close this section, is that there are indeed many Platforms in which citizens interact with others, exchange information and express their views and opinions on a variety of topics, some of which refer to politics. Just imagine how many users discuss with others, how many political topics can become the focal point of conversations and the most important imagine the vast amount of opinions that can be posted in so many Social Media Platform. The vital issue is to use these Social Media Platforms as effectively and directly as possible in order to achieve the goals that NOMAD (draw conclusions and extract knowledge from them, as to which are the main issues, problems and needs that people discuss concerning a specific topic, and which are the corresponding sentiments of citizens, positive or negative, for each of them).

Therefore it is necessary in the following chapters to focus on and investigate in more detail the political use of web 2.0 social media (Chapter 4), and then to become more specific and define the particular social media that will be used as sources of political and public policy related content in the three pilots of our projects that will take place in Greece, Austria and United Kingdom (Chapter 5). Also, the composition of the user bases of these social media from a demographics persective is a critical question that needs investigation (Chapter 3).

3. WEB 2.0 USERS ANALYSIS

3.1 Introduction

In this chapter, based on the previous one that includes the examination and the analysis of Social Media Platforms, we continue our analysis on the profile of the Web 2.0 users. Initially, we analyze the types of the users that exist, their connection with the internet many years ago and nowadays, their online activities using the Social Media Platforms. Also, through the whole chapter, we provide demographic statistics including age, gender, education, income and other demographic characteristics focusing on the users' profile. Last, we close this chapter providing some main conclusions derived from this analysis.

3.2 Basic user types

In order to make users' analysis first of all we have to describe the basic types of users. According to Digital Life there are 6 types of users [58] (shown together with their symbols in Figure 3-1 **Basic Types of Online Users [58]**).

- *Influencers:* The Internet is integral part of their lives. The users are young. They have internet access everywhere they move all the time. They have even a mobile internet connection. Such a person is usually a Blogger or a Social Networker with many friends. He/she is also an online shopper that buys a big amount of products.
- *Communicators:* they express themselves either face to face with other users, or through a mobile phone call, or chatting in social networking sites. They prefer the online communication than the offline. They are smartphone users and connect to theInternet when they are at home, at work, at college via his mobile device.
- *Knowledge Seekers:* They use Internet to gain knowledge, information and to educate theirselves about the world. They are not interested in social networking and they want to make purchase decisions without any help from third-parties.
- *Networkers:* The internet for them is that they desire to establish and maintain relationships. They have a busy life and they use social networking to keep in touch with people that wouldn't have time to otherwise. They are open people ready for getting a promotion and talking to big brands. They don't express their opinion online.
- *Aspirers:* They are looking to create a personal space online. They are quite new to the internet and they access it via a mobile but most of the time from home. They are not great at using the social networks online but they hope to become better and use the social media more effectively.
- *Functionals:* they are generally not interested in anything new like social networking and are constantly worried about privacy and security. They are of older age and they use internet for a long time.

Figure 3-1 Basic Types of Online Users [58]

Through the description that we mentioned above, each type of online users has high or low involvement and high or low consumption. Influencers and Communicators as well as Aspirers deal with the social media in a great degree and they desire to use them as much as they can, having high involvement according to their behavior. In contrast, Networkers, Knowledge Seekers and Functionals do not want to use social media a lot and that is the reason why they have low involvement. Due to their attitude, Influencers, Communicators and Networkers access most of their time the social media platforms either for shopping or blogging or chatting even when they are at home, at work, or anywhere else they are in contrast to Aspirers, Functionals leaving Knowledge Seekers somewhere in the middle. [58]

Figure 3-2 shows the Behavior and Attitude of each Type of Online Users. What we observe is that behavior and attitude do not have a linear relationship [58]

Figure 3-2 Relationship between Behavior and Attitude of Online Users [58]

3.3 Internet usage analysis

The internet nowadays has become an important tool in our daily life, education, work and participation in society. A large majority of households and individuals make use of it today. Nevertheless, there are significant differences in access and usage between socio-economic groups and countries around the world.

3.3.1 Global Internet usage

As a first step, we consider presenting reports and statistical results depicting the internet usage of people around the world.

International Telecommunication Union published a report presenting how the World of Internet has become in 2011. Figure 3-3 depicts the Access of Information and Communication Technologies in households in the year of 2011 [59].

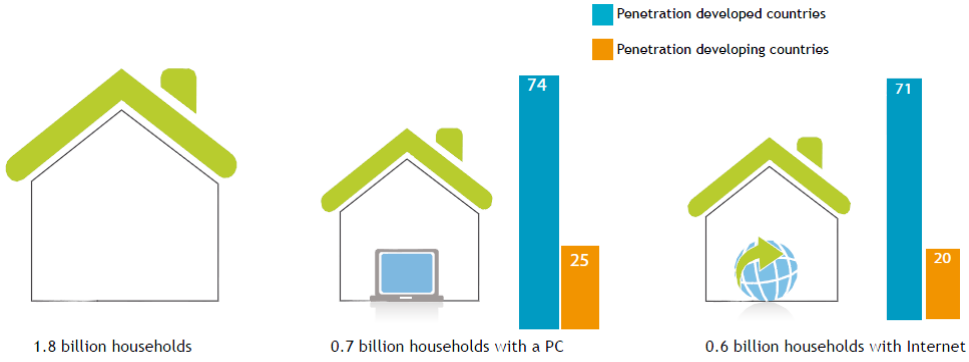


Figure 3-3 Home ICT Access in 2011 [59]

What we notice from Figure 3-3 is that from the 1.8 billion of households that exists worldwide, one third of them has Internet access. In developing countries, the 25% of homes have a computer and the 20% has Internet access [59].

Nielsen Online, the International Telecommunications Union, GfK, local Regulators and other reliable sources published another important report based on World Internet Usage and Population Statistics for the year of 2011. Demographic numbers are based on data from the US Census Bureau and the local census agencies. [60] Table 3-1 shows the percentage of people that use the internet around the world according to the population of each continent [60].

Table 3-1 World Internet Usage & Population Statistics [60]

World Regions	Population (2011 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000-2011	Users % of Table
Africa	1,037,524,058	4,514,400	139,875,242	13.5 %	2,988.4 %	6.2 %
Asia	3,879,740,877	114,304,000	1,016,799,076	26.2 %	789.6 %	44.8 %
Europe	816,426,346	105,096,093	500,723,686	61.3 %	376.4 %	22.1 %
Middle East	216,258,843	3,284,800	77,020,995	35.6 %	2,244.8 %	3.4 %
North America	347,394,870	108,096,800	273,067,546	78.6 %	152.6 %	12.0 %
Latin America / Carib.	597,283,165	18,068,919	235,819,740	39.5 %	1,205.1 %	10.4 %
Oceania / Australia	35,426,995	7,620,480	23,927,457	67.5 %	214.0 %	1.1 %
WORLD TOTAL	6,930,055,154	360,985,492	2,267,233,742	32.7 %	528.1 %	100.0 %

In order to getter a better understanding of Internet Usage Distribution around the World we can observe Figure 3-4. Asia holds the greatest percentage of internet users (44.8%) and Europe follows with 22.1% which is the half of the Asia's percentage. The rest continents have lower percentages of internet users always according to their population [60].

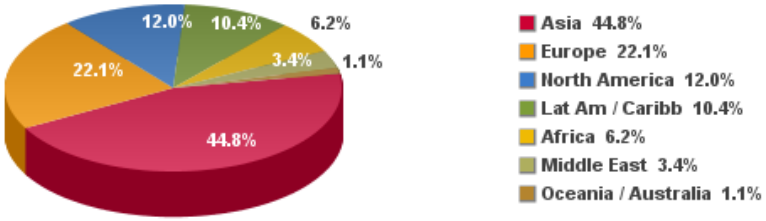


Figure 3-4 Internet Usage Distribution in the World [37]

According to the comScore 2010 European Digital Year in Review which provides an overview of the digital landscape in Europe, we present in Figure 3-5 the Distribution of Internet Users by Age [61]. The dataset is a continuous collection of consumer behavior information. Using proprietary data collection methods, comScore surveys nationally representative samples of subscribers of older than 13 years in each country creating demographic profiles for age and gender [61].

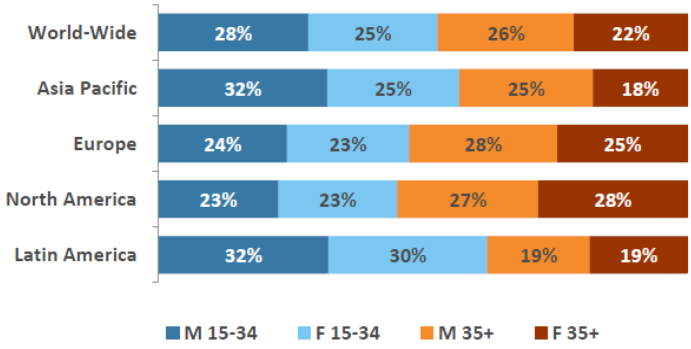


Figure 3-5 Distribution of Internet Users [61]

Relative to the emerging markets of Asia Pacific and Latin America, as they are shown in Figure 3-5, Europe's typical digital user is older, with more than half of them belong above the age of 35. Of the more than 360 million online consumers in Europe, females represent a slightly larger percentage (48%) as compared to the worldwide average (46%) [61].

Furthermore, if we wanted to measure the usage of Internet based on the users' age in 2011 in the world generally and in the developed and the developing countries we could make as a conclusion that younger people tend to be more online than the older ones in both developed and developing countries. Specifically, in the developing countries the 30% of people with age under the 25 years use the internet in comparison with the 23% of those that are older than 25 years. Moreover, the 70% of users under the age of 25 years are not online yet. Figure 3-6 depicts the Internet Users in the world by age [59].

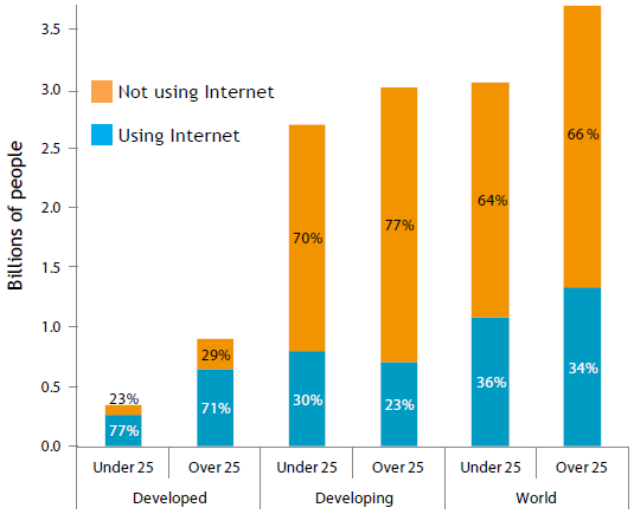


Figure 3-6 Internet Users by age in the world [59]

There are also users that connect to the internet via a mobile device. Based on the report of the International Telecommunication Union we depict the growth of mobile subscriptions from 2006 till today in 2011 in Figure 3-7. From the total of 6 billion mobile-cellular subscriptions, the global penetration arises to 87%. Mobile-broadband subscriptions have grown 45% from 2006 till now and there are twice as many mobile-broadband as fixed-broadband subscriptions [59].

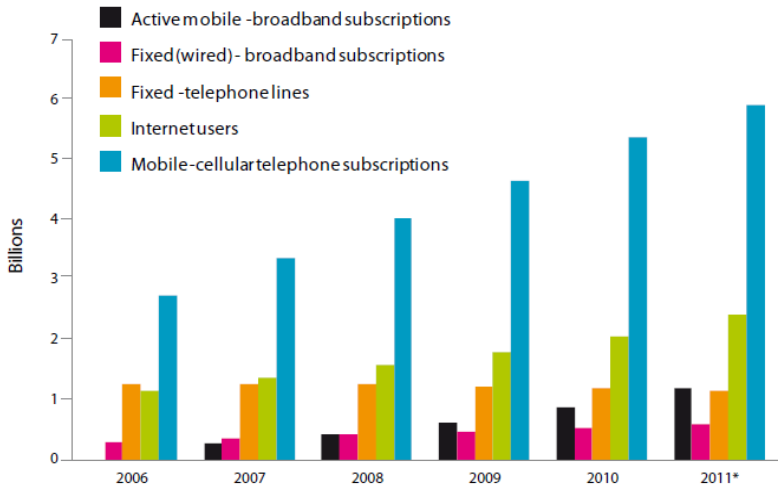


Figure 3-7 Growth of Mobile subscriptions over the years [59]

3.3.2 Internet Usage in USA

The 2011 Social Habit report, released by Edison Research and Arbitron, provides useful demographics about the internet and the social media usage by USA citizens. The report is derived from the 19th Edison/Arbitron Internet and Multimedia Research Series [62]. What we notice from Figure 3-8 is that 9 to 10 Americans have Internet Access and a conclusion that derives is that the internet has become a standard of communication.

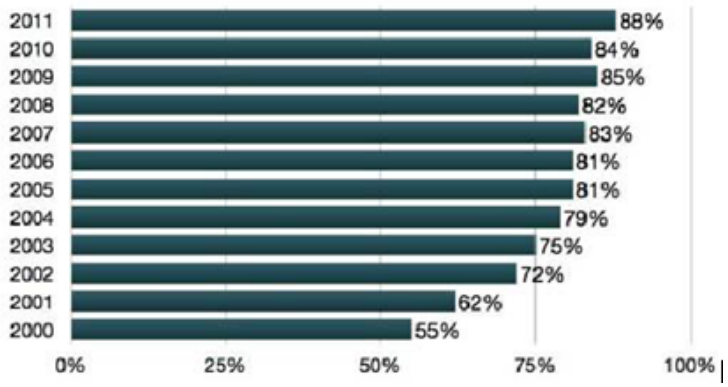


Figure 3-8 Internet Usage in USA [62]

3.3.3 Internet Usage in Europe

What interests us most is to present reports and demographics about the European Internet Users. In this way, we are able to draw more specific conclusions about the Internet penetration in the European users, the percentage of internet users in Europe, the countries that have the majority of internet users as well as other important facts and elements that help us.

After the examination of countries and regions around the world that belong to all continents, the Internet Users of Europe account for 22.1% of all users worldwide [60] in the year of 2011. Figure 3-9 illustrates schematically this analogy:

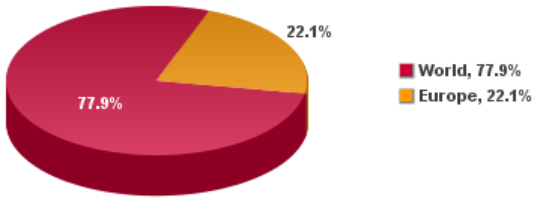


Figure 3-9 European Internet Users in 2011 [37]

The same report provides also facts about the Internet penetration in Europe in relation to the Internet penetration worldwide in 2011. An important, we can say, conclusion that derives from that is the high percentage of Europe which reaches the 61.3% leaving behind the rest of the world with 28.9% clearly much lower than Europe's. Figure 3-10 depicts Internet penetration in Europe with that in the rest of the world. [60]

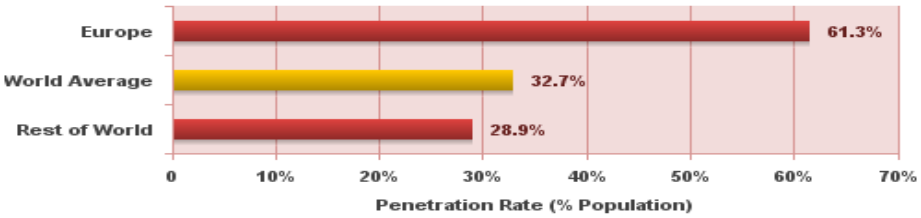


Figure 3-10 Internet Penetration in Europe in 2011 [60]

After examining 53 countries and regions that belong in Europe, statistical reports show that the countries with the highest percentage of internet usage in 2011 are first in rank Germany with 67.4%, second Russia with 61.5 and UK follows with 52.7%. The rest European countries have a lower internet usage but the Top 10 Countries are depicted in Figure 3-11. [60]

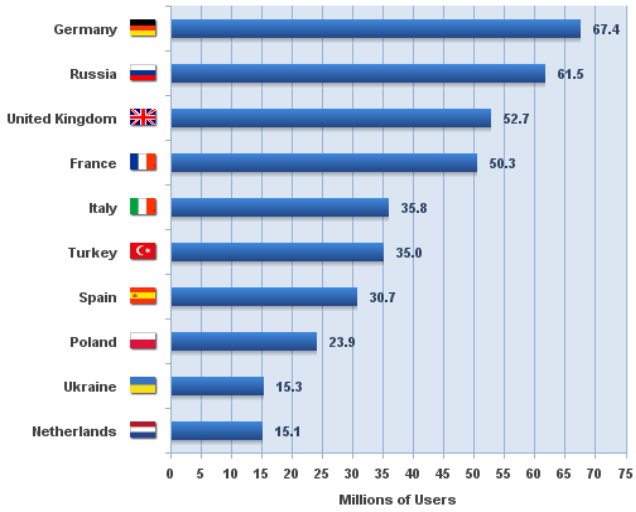


Figure 3-11 Top 10 Internet Countries in Europe in 2011 [60]

A European survey was based on Information and Communication Technologies usage in households and by individuals. The dataset referred to facts and elements of the countries for the year 2011. The survey concerns households with at least one person at the age of 16-74, and individuals between the ages of 16-74. Households were asked about internet access at home, individuals were asked about activities they had carried out online, the place of use, the frequency and if they also used mobile connection to get to the internet. [63]

In the question to European individuals about the frequency of the internet use for the year of 2011 the answer was that more than half of the individuals (56%) used the internet everyday or almost every day. Two out of three European individuals used the internet at least once a week representing the 68%. The part of individuals that used the internet regularly exceeds the 80% in six European Countries: Denmark, Luxembourg, the Netherlands, Finland, Sweden and the United Kingdom. The part of individuals that used the internet in a lower degree is below 60% in seven European Countries: Bulgaria, Greece, Italy, Cyprus, Poland, Portugal and Romania. [63] Figure 3-12 presents the frequency of internet users in 2011 from European Individuals:

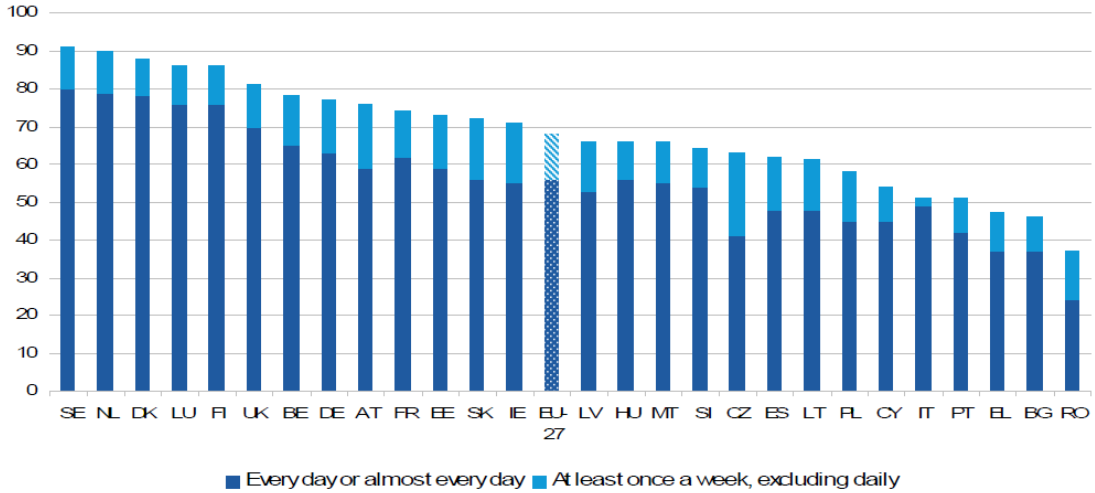


Figure 3-12 Frequency of Internet Usage by European Individuals in 2011 [63]

According to the same survey the proportion of households in the European Countries with access to the internet reached 73% in 2011. Compared to 2006, the proportion of households with internet access has increased 24 percentage points in 2011 [63].

Broadband internet access enables higher speed when a user performs activities on the internet. In 2011, more than two thirds of households in the European Countries had used broadband connections representing the 68%. Today, most households with internet access have broadband. The share of internet access above 90% of households was reached in the Netherlands, Luxembourg, Sweden and Denmark. The 50% and below belonged to Bulgaria, Romania and Greece. [63][64] Figure 3-13 and Table 3-2 illustrate this analogy:

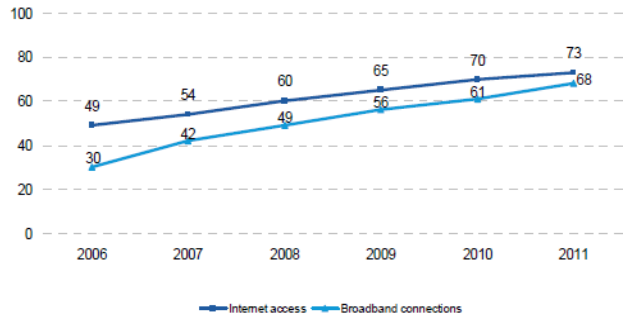


Figure 3-13 Internet Access and Broadband Internet Connection in Households in 2011 [63][64]

Table 3-2 Internet Access and Broadband Internet Connection in Households in 2011 [63][64]

	Internet connections in households			Broadband internet connections		
	2007	2009	2011	2007	2009	2011
EU-27	54	65	73	42	56	68
BE	60	67	77	56	63	74
BG	19	30	45	15	26	40
CZ	35	54	67	28	49	63
DK	78	83	90	70	76	84
DE	71	79	83	50	65	78
EE	53	63	71	48	62	66
IE	57	67	78	31	54	65
EL	25	38	50	7	33	45
ES	45	54	64	39	51	62
FR	49	63	76	43	57	70
IT	43	53	62	25	39	52
CY	39	53	57	20	47	56
LV	51	58	64	32	50	59
LT	44	60	62	34	50	57
LU	75	87	91	58	71	68
HU	38	55	65	33	51	61
MT	54	64	75	44	63	75
NL	83	90	94	74	77	83
AT	60	70	75	46	58	72
PL	41	59	67	30	51	61
PT	40	48	58	30	46	57
RO	22	38	47	8	24	31
SI	58	64	73	44	56	67
SK	46	62	71	27	42	55
FI	69	78	84	63	74	81
SE	79	86	91	67	79	86
UK[1]	67	77	85	57	69	83
IS	84	90	93	76	87	93
NO	78	86	92	67	78	80
HR	41	50	61	23	39	56
MK	:	42	:	:	34	:
TR	20	30	43	17	26	39
RS	26	37	:	7	23	:

[1]UK data for 2009 and 2011 include estimates for Northern Ireland

The percentage of regular internet users among younger persons between the ages of 16-24 was 91% while for the age group of 55-74 years it was only 40%. The percentage of the internet users with high formal education was twice the percentage of internet users with a low level of education. Differences between men and women were relatively small. The 70% of men and 65% of women used the internet regularly. Figure 3-14 depicts the individual internet users by age, by gender and by education [63].

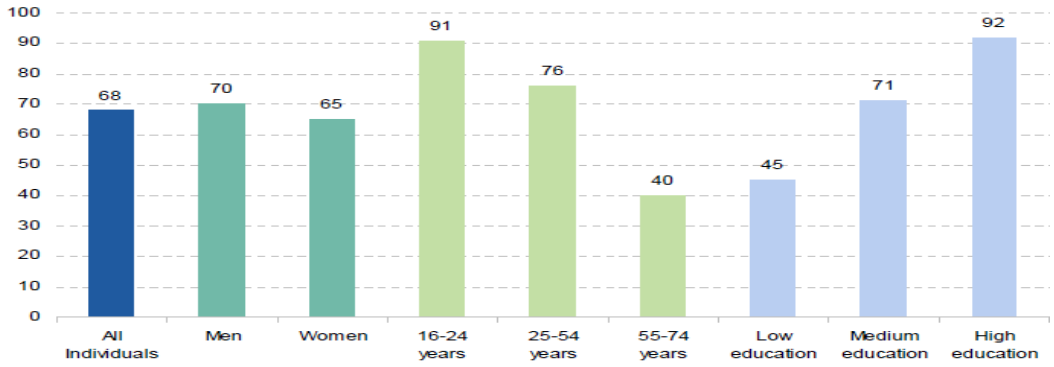


Figure 3-14 Individual Internet Users by Age, Gender, Education [63]

Europe, according to statistics, leads in broadband connectivity, with fixed and mobile broadband penetration reaching 26% and 54%, respectively. A number of developing countries have been able to leverage mobile-broadband technologies to overcome infrastructure barriers and provide high-speed Internet services to previously unconnected areas. In Africa, mobile-broadband penetration has reached 4%, compared with less than 1% for fixed-broadband penetration [59]. Figure 3-15 depicts the broadband connectivity around the world:

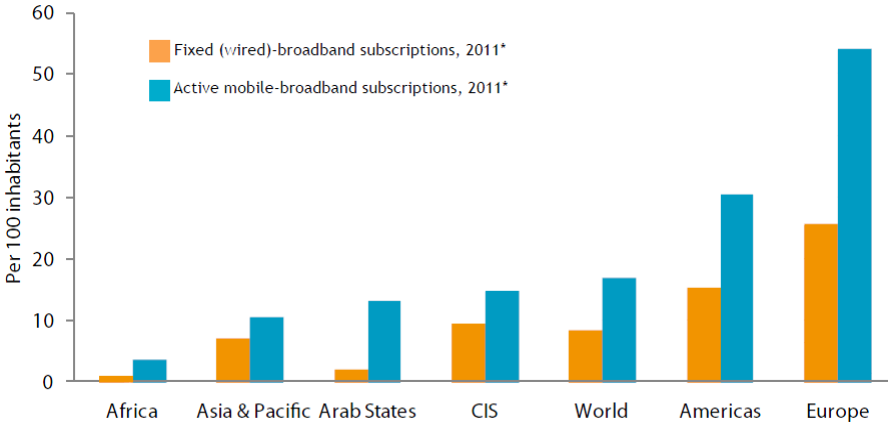


Figure 3-15 Europe leads broadband connectivity [59]

3.3.4 Mobile Usage in Europe and USA

Accorrding to comScore survey, the statistics show that smartphones continue to become an increasingly important segment of the European mobile phone landscape. Smartphone penetration in the United Kingdom, France, Germany, Spain, and Italy in the year 2010 increased by 9.5 percentage points reaching 31.1%, placing it higher than the US with smartphone penetration increase in 10.2 percentage points reaching 27% [61]. Figure 3-16 illustrates this analogy:

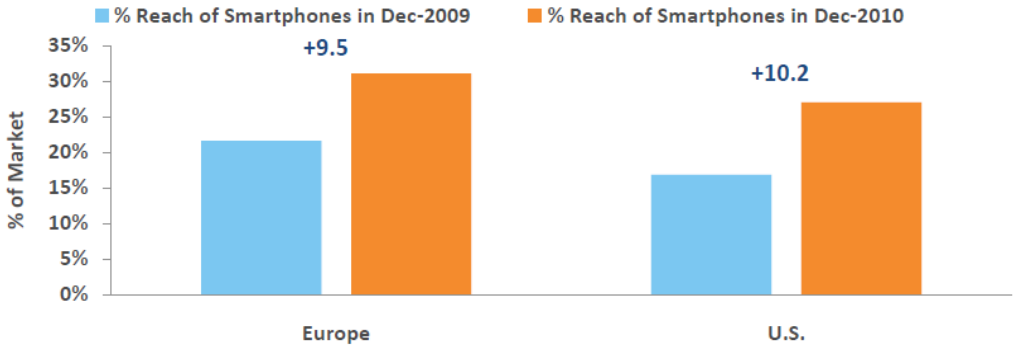


Figure 3-16 Mobile Usage in Europe and USA [61]

An analysis of the growth in smartphone usage in United Kingdom, France, Germany, Spain, and Italy reveals a dramatic increase in the adoption of Google and Apple smartphone operating systems (OS) in the year 2010. Google Android, which experiences a 951% gain in the use of Android OS, reaches the 8.7 million subscribers. Meanwhile, Apple experiences a 115% increase with 14.5 million subscribers. Although Symbian continues to lead the smartphone OS market, the growth in Google and Apple OS usage reflects an increasing popularity for both platforms continuing their

growth in 2011 [61]. Figure 3-17 presents the Smartphone Users in 5 European Countries (United Kingdom, France, Germany, Spain, and Italy):

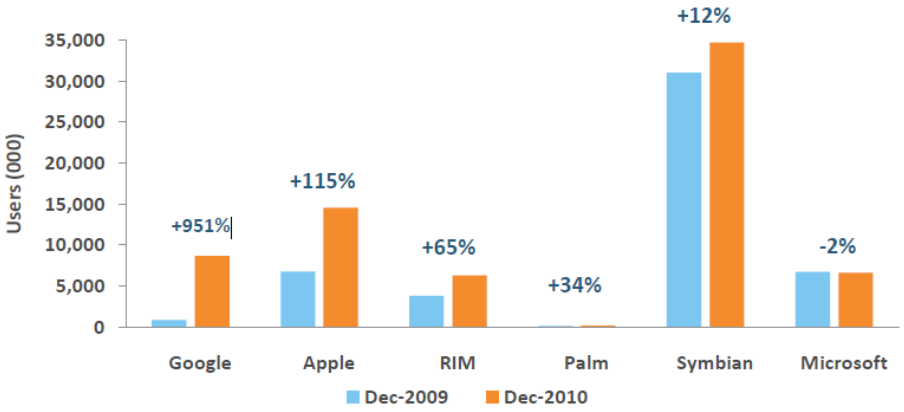


Figure 3-17 Smartphone Users in 5 European Countries [61]

The continued increase in penetration of 3G device ownership, unlimited data plan subscription, and smartphone ownership in the 5 European Countries that we mentioned above lead to the overall growth in the use of mobile media. Specifically, smartphone ownership increases 9.5 percentage points reaching 31.1%, while 3G device ownership grows 5.4 percentage points reaching 47.1% penetration, and unlimited data plan subscriptions 2.5 percentage points reaching 7.5% penetration as we see in Figure 3-18. [61]

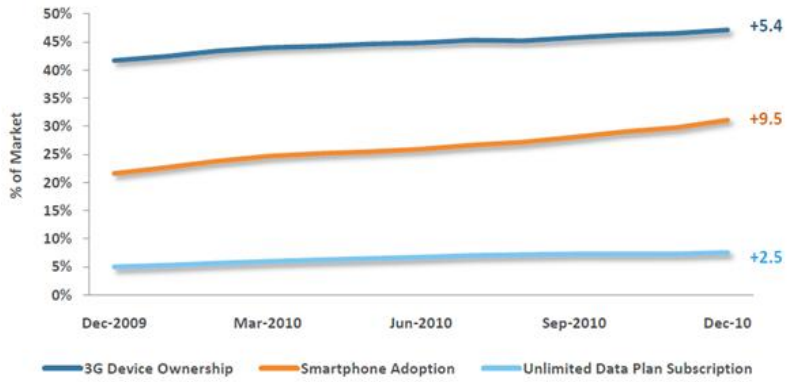


Figure 3-18 Growth of Mobile Usage [61]

3.4 Web 2.0 Social Media usage analysis

In the beginning of this chapter we started with the analysis on the basic types of existing users. We continue firstly with the internet usage analysis, secondly with the mobile usage analysis and as a third step we proceed with the Web 2.0 usage analysis which includes the online activities that take place during social networking, the users' profile based on the use of social media and the demographic analysis on 4 most popular social media.

3.4.1 Social Networking and Online Activities

It is true that social media popularity continues to grow, connecting people around the world and social networking has become indeed a global phenomenon. The influence of social media on users constantly grows because people are being driven to social media. It is crucial to understand how social media users use and share content. [65]

Pew Research Center conducted an important survey on the use of social networking for the year of 2011. The survey results are based on samples of each country and the dataset are taken from IMF World Economic Outlook. The percentage of people using social networking sites is affected by the prevalence of internet use, which is more connected to a country's wealth. Figure 3-19 shows the positive relationship between GDP (Gross Domestic Product) per capita (PPP) in the country and the level of social networking. GDP is the value of final goods and services produced in a country in a year divided by the average population for the same year. The U.S., which has the highest per capita GDP among the countries that have taken part in the survey, is also among the countries with the highest percentage of people using

social networking sites, while Pakistan and India have two of the lowest per capita GDPs and the lowest levels of social networking. [66]

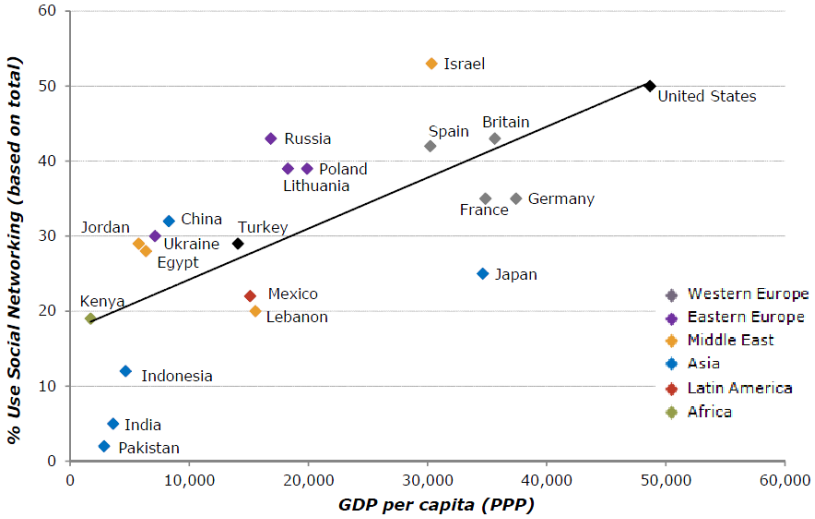


Figure 3-19 GDP per Capita and Use of Social Networking in 2011 [66]

Before presenting users' online activities in Europe, it would be useful to mention first how much is the average time of European users that spent being online. According to the survey that was published by comScore in 2010 [61], Europeans spend the equivalent of one day a month online (24:20 hours) with the Netherlands first (31:39 hours) and United Kingdom (30:38 hours) second to exceed further this trend. Users in Italy (16:02 hours) and Austria (13:11 hours), spend nearly half as much time online as users in Holland and the UK. Figure 3-20 illustrates this analogy:

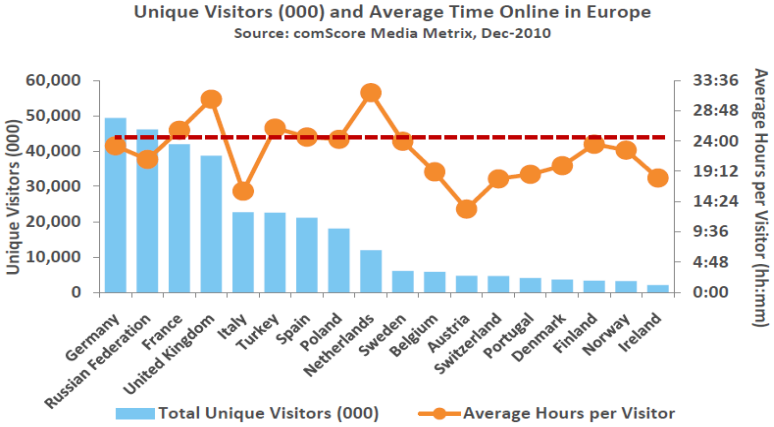


Figure 3-20 Unique Visitors and Average Time Online in Europe [61]

As for the users' online activities, many social networking sites own the top ranking in Europe, turning social networking and navigation be the most popular online activities on the web. Users enjoy sharing photos, experiences and updates in order to stay connected. Instant messaging is no longer popular with a decline of 8.3 percentage points comparing to 2009. Auction sites are also proving less popular [61]. Figure 3-21 shows the top online activities in Europe in 2010:

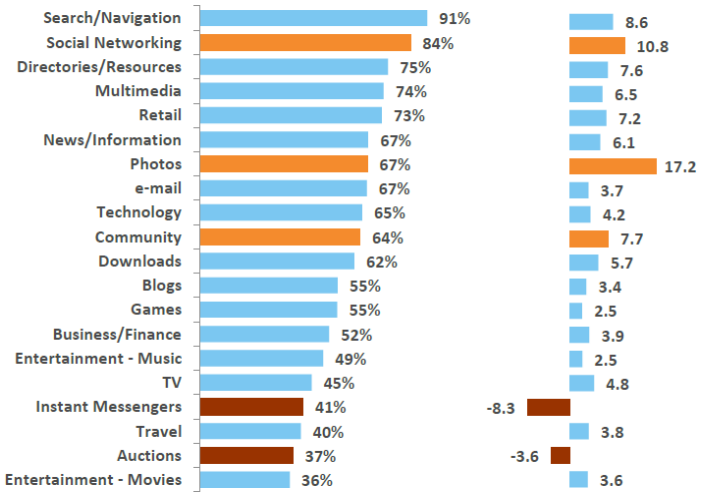


Figure 3-21 Top Online Activities in Europe in 2010 [61]

A further analysis for web email, Instant Messengers, Portals and Social Networking sites show, in Figure 3-22, that there are slight differences between age groups. Users between the ages of 15-34 shift towards social networking reaching 32% while the older population, above the 35 years, uses in a lower degree social networking but in a greater extent the web email reaching 6% [61].

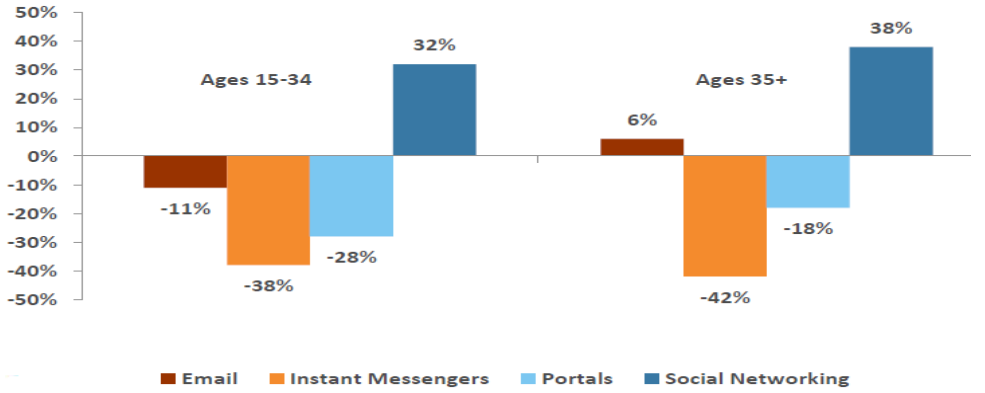


Figure 3-22 Time Spent Online in Europe in 2009-2010 [61]

An analysis on the users and the time spent on watching online videos in 2010, shows that viewers from Germany, UK and Spain spent more time watching online videos than those in the US, consuming 18.0, 17.0, and 16.2 hours respectively. Viewers in France consume 12.2 hours of video and viewers in Italy only 10.4 hours. On average, the time viewers spent on online videos (14.8 hours) in the 5 EU Countries is an hour shorter than the average of US viewers (15.8 hours) [61]. Figure 3-23 depicts schematically this analogy:

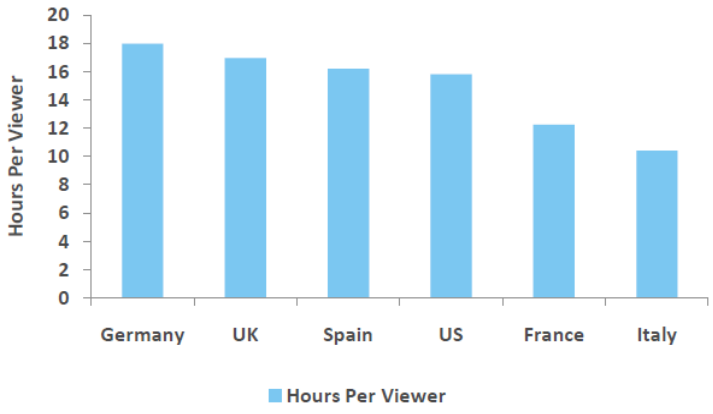


Figure 3-23 Time Spent Watching Online Videos [61]

According to the Eurostat survey [63] nearly 80% of online users search for information about goods and services for private purposes. More than half of internet users in the first quarter of 2011 read news online reaching 56%, use services related to travel or travel related accommodation owing 54% or look for health related information reaching 54%.

Furthermore, the 40% of online users search for information about education, training or course offers. Looking at the use of such information services over the tears 2009-2011 the use of the internet for searching product information and about travel and accommodation remained relatively stable. More visible increases are observed for reading online news and using information about health, education and training. Figure 3-24 presents the online activities in Europe in 2011:

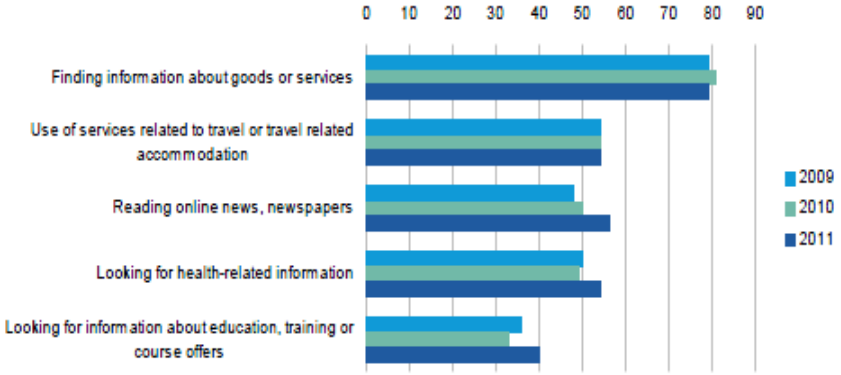


Figure 3-24 Online Activities in Europe in 2011 [63]

Eurostat in the survey also examines other reasons for people to use the web in Europe in 2011 [63]. More than half of internet users owing 53% participate in social networks. The share of internet users that participate in professional networks owns 10%. More than half of internet users reaching 54% consult wikis on any subject. One in five internet users read and post opinions on civic or political issues. Last but not least, one in ten internet users take part in online consultations or voting. Figure 3-25 shows other activities of online users:

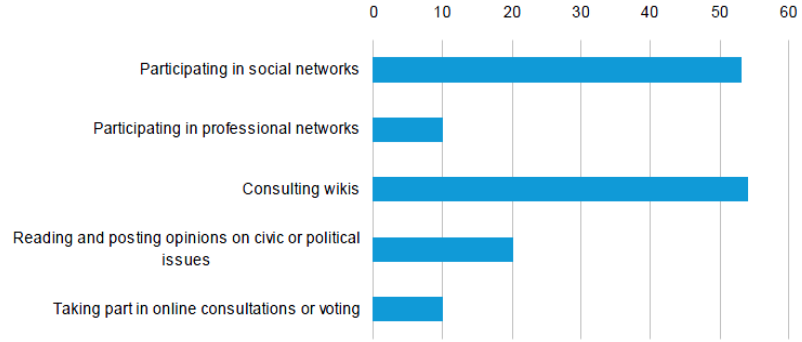


Figure 3-25 Other Activities of Online Users in Europe in 2011 [63]

3.4.2 Social Media Users' Profile

Social media have changed the way people communicate with each other in their personal lives, in how they do business, how they shop and even how they network with people across the world. In order to get a better understanding on how social media influence online users' lives, we mention a survey from RAMA (Retail Advertising and Marketing Association), which focuses on the habits of online users [67].

In the question what of the following possible answers triggers a user to start an online search, social media users showed that are more influenced by blogs, email, internet advertising and instant messaging than average adults. It is interesting, though, that while social media users seem to pay more attention to email owing 26.7% and internet advertising with 28.3% than the average adult which has 23.4% and 23.1% respectively, face-to-face communication still prevails among both groups as the biggest influence of online searches. Four out of ten or else 41.4% social media users and 36.1% of other adults rank personal recommendations or conversation as the main reason why they go online and search for certain products, events, locations, restaurants, etc. [67]. Figure 3-26 presents the results of the question:

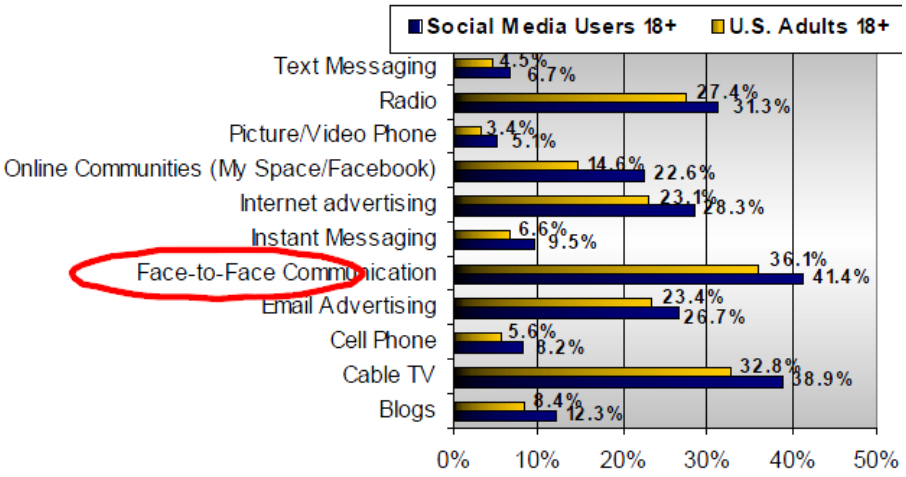


Figure 3-26 What triggers a user to start an online search? [67]

If we want to separate the online users by gender, then in the same question as above but using only the online options, men are much more likely than women to be influenced by internet advertising holding the 32.8% contrary to women with 24.1%, by instant messaging reaching 12.0% in contrast to women with 7.2% and last by blogs owing the 14.3% unlike women owing the 10.4%. Nevertheless, the influence of e-mail advertising and online communities is almost identical between genders [67]. Figure 3-27 illustrates the results of the same question as above:

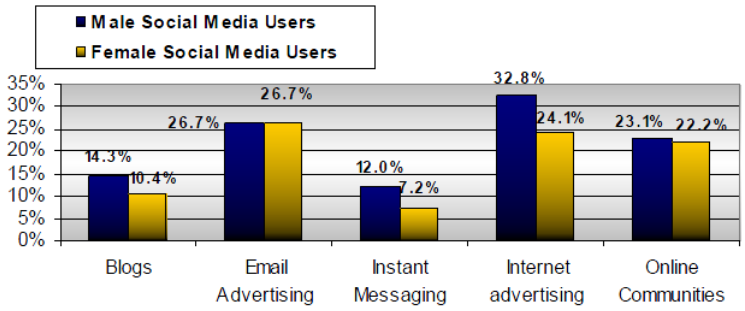


Figure 3-27 What triggers a user to start an online search by gender? [67]

If we want to separate the online users by age, then in the same question as above, many of today's young adults are more technologically advanced than their ancestors. Survey results indicate that young adults between the ages of 18-34 are more compelled by online tools like Facebook, blogs, instant messaging and text messaging than older adults [67]. Figure 3-28 shows the result based on the age of online users:

	Social Media Users 18-34	Social Media Users 35-54	Social Media Users 55+
Blogs	17.6%	8.6%	6.7%
Online Communities (e.g. My Space/Facebook)	28.4%	19.2%	15.3%
Instant Messaging	16.4%	4.7%	2.5%
Internet advertising	31.9%	26.7%	22.4%
Cable TV	46.4%	35.7%	26.4%
TV / Broadcast	37.8%	44.0%	44.9%
Cell Phone	14.4%	4.1%	1.1%
Text Messaging	11.6%	3.2%	1.5%
Radio	32.7%	32.0%	25.9%
Face-to-Face Communication	**43.6%**	**41.0%**	**36.6%**

Figure 3-28 What triggers a user to start an online search by age? [67]

According to the same survey, one in five social media users say they regularly seek advice from others when they search to buy products or services representing the 20.6%, which is a little higher than other adults with 17.1%. Furthermore, more than one-third of social media users say that they give advice about products or services representing the 34.7%, compared to 28.4% of all adults [67]. Figure 3-29 shows the Purchase-related advice online.

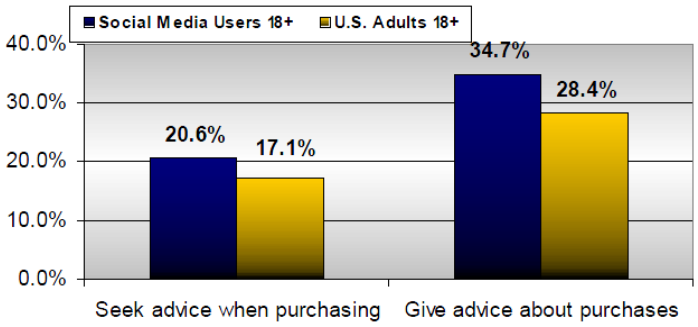


Figure 3-29 Purchase-related Advice [67]

A demographic analysis of comScore [61] on social networking users in Europe presents that women are leaders in terms of engagement. Specifically, women spent 24.3% of their online time on social networking sites. Unlike men spent only 16.8% of their time on these sites [61] Figure 3-30 depicts the percentage of Time Spent on Social Networking Sites by Gender in Europe in 2009-2010:

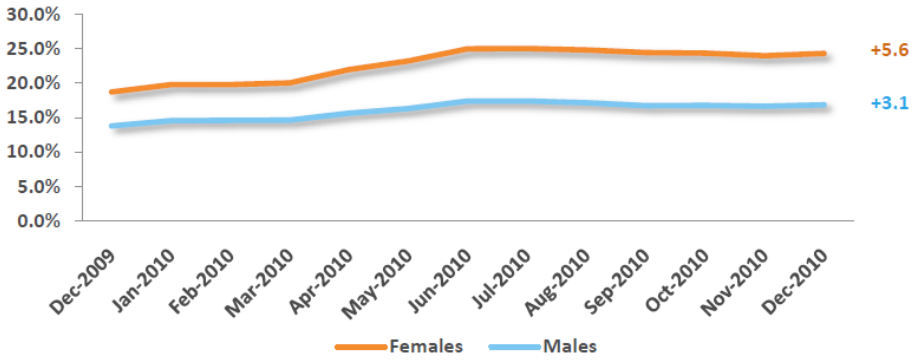


Figure 3-30 Time Spent on Social Networking Sites by gender in Europe [61]

The profile of social networking users in Europe also reveals two categories: those between the ages of 15-24 years representing the 25.3% of users and those between the ages of 25-34 years owing the 24.3% of users. While the breakdown of European visitors to Facebook and Twitter mirrors that of social networking site users in general, LinkedIn has an older age profile. Only 10.4% of its visitors are under the age of 25 years, while half of the site's audience is between the ages of 35-54. This older age profile is understandable because LinkedIn is a professional networking site [61]. Figure 3-31 shows the Share of European Visitors to Facebook, Twitter and LinkedIn.

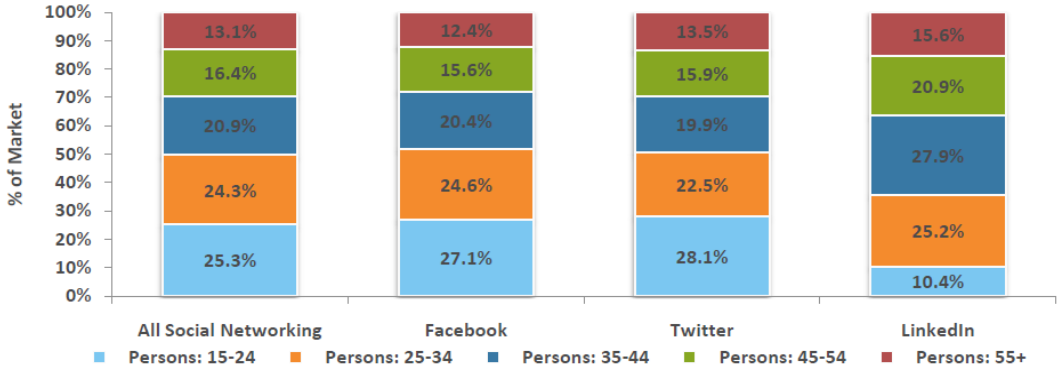


Figure 3-31 Share of European Visitors to Facebook, Twitter, LinkedIn [61]

3.4.3 Demographics on Social Media Platforms

We selected 4 Social Media Platforms which are most popular in online users and according to ignite [68] we present demographic analysis on each of the 4 Platforms. The selected Platforms are Facebook, Twitter, YouTube and LinkedIn.

3.4.3.1 Facebook

Facebook is the most popular social media platform with 845.000.000 unique users. Figure 3-32 depicts demographic characteristics based on Facebook users that refer to the gender, the age, the education and the income of the users. Facebook's continued growth worldwide has led to become the de facto source for social networking.

According to ignite [68] women that use Facebook are the leaders, leaving men behind. More precisely, women users of Facebook represent the 61% of the users. By contrast, men own the 38% of Facebook users. The age of Facebook users varies. Most users are between the ages of 45-54 reaching the 25% of users, but close enough are also users between the ages of 25-34 with 24% and the ages 34-44 with 22% of users. Of course, what is interesting, however, is that members of Facebook are users of all ages but most of Facebook users are between the ages 25-54. As for the education, users who have finished college hold the 55%, above the average, leaving with a lower percentage those that have a Bachelor degree, only 16% of users. Furthermore, most of them have a low or good income owing the higher percentages of income. Users with very good income have a lower percentage.

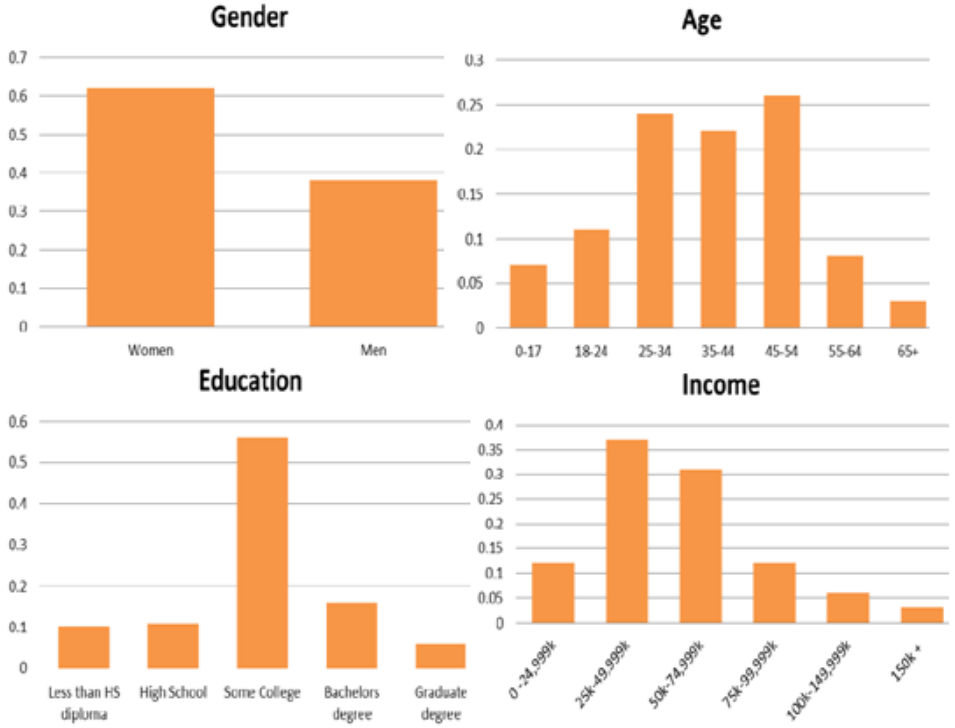


Figure 3-32 Demographics of Facebook Users [68]

3.4.3.2 Twitter

Twitter is one of the most popular social media platforms with 380.000.000 unique users. Figure 3-33 depicts demographic characteristics based on Twitter users that refer to the gender, the age, the education and the income of the users.

According to Ignite [68] just like Facebook users, women that use Twitter as a social networking site occupy the largest percentage of Twitter users reaching the 58% of users, above the average in contrary to men that hold the 42% of users. The age of Twitter users varies. Most users are between the ages of 35-44 reaching the 28% of users, but close enough are also users between the ages of 25-34 with 26%. What is interesting, though, is that members of Twitter are users of all ages but most of Twitter users are between the ages 25-35. As for the education, users who have finished college hold the 53%, above the average, leaving with a lower percentage those that have a Bachelor degree, only 25% of users, almost the half of those that have finished college. Furthermore, most of them have a low or good income owing the higher percentages of income. Users with very good income have a lower percentage.

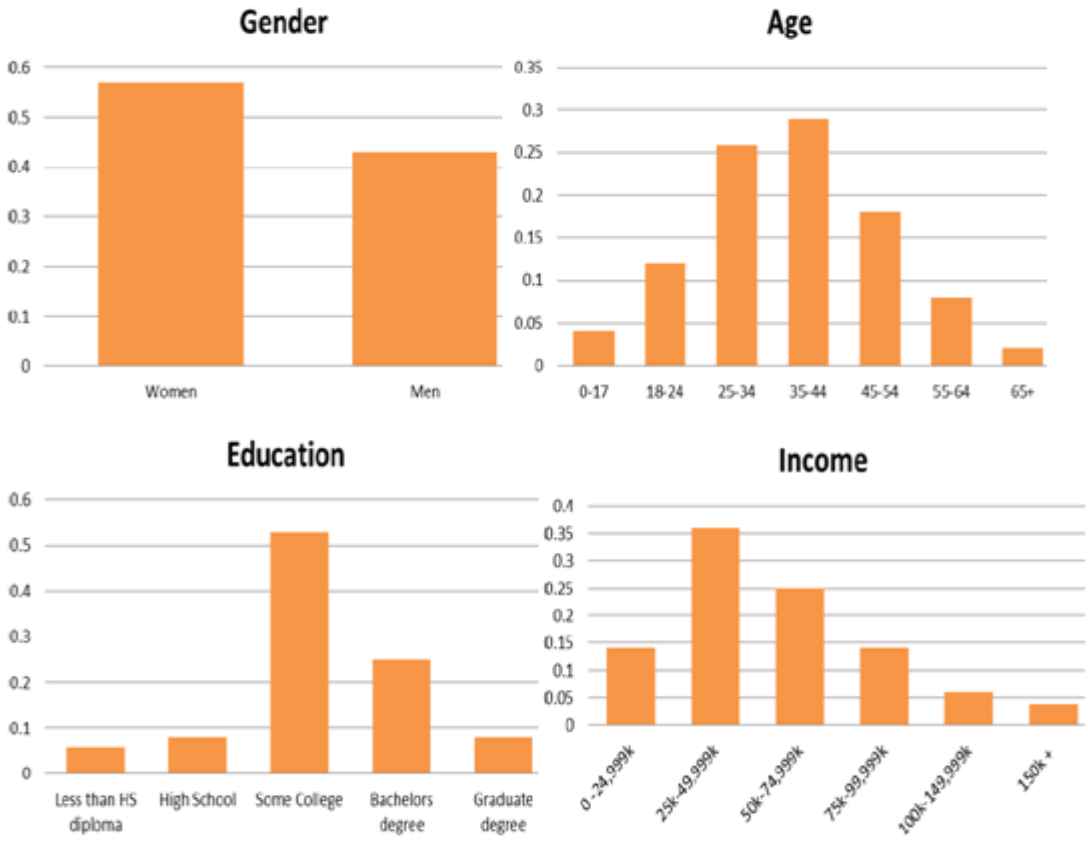


Figure 3-33 Demographics on Twitter Users [68]

3.4.3.3 YouTube

YouTube is one of the most popular social media platforms with 490.000.000 unique users. Figure 3-34 depicts demographic characteristics based on YouTube users that refer to the gender, the age, the education and the income of the users.

According to Ignite [68] just like Facebook and Twitter users, women that use YouTube hold the largest percentage of YouTube users reaching the 52% of users, above the average, in contrary to men that hold the 48% of users. The age of YouTube users varies. Most users are between the ages of 25-34 and 35-44 occupy the same percentage, 23% users, but close enough are also users between the ages of 45-54 with 22%. What is interesting, though, is that members of YouTube are users of all ages but most of YouTube users are between the ages 25-54, which is a wide range of users. As for the education, users who have finished college hold the 51%, above the average, leaving with a much lower percentage those that have a Bachelor degree, only 18% of users. Furthermore, most of them have a low or good income owing the higher percentages of income. Users with very good income have a lower percentage.

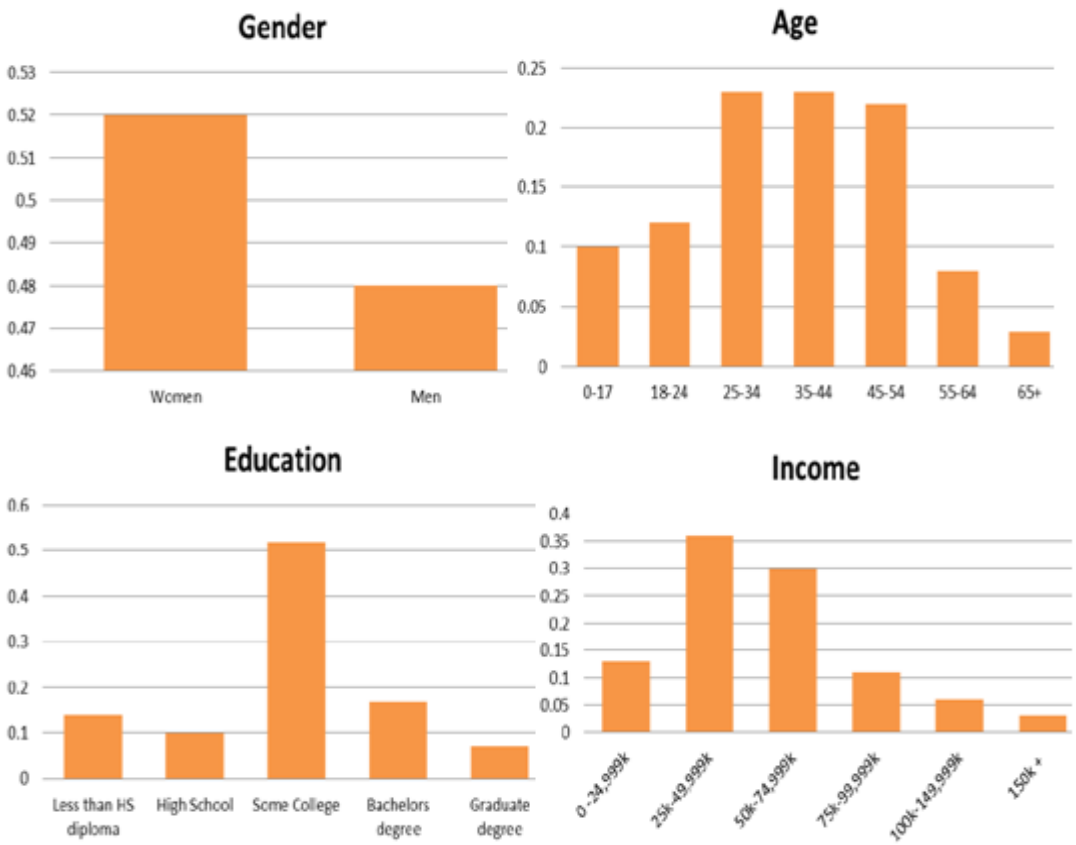


Figure 3-34 Demographics on YouTube Users [68]

3.4.3.4 LinkedIn

LinkedIn is one of the most popular social media platforms with 100.000.000 unique users but focused more on the professional social networking. Figure 3-35 depicts demographic characteristics based on LinkedIn users that refer to the gender, the age, the education and the income of the users.

According to Ignite [68] unlike Facebook, Twitter and YouTube users, in Linked men have the largest percentage holding the 55% of users, while women own the 45% of users. The age of YouTube users varies. Most users are between the ages of 35-44 reaching 34% of users, but close enough are also users between the ages of 45-54 with 27%. Generally speaking, members of YouTube are users of all ages but most of YouTube users are between the ages 35-54. As for the education, it is remarkable that users who have finished a Bachelor Degree own the 41% leaving with a much lower percentage those that have finished college with 33% of users. Furthermore, unlike Facebook, Twitter and YouTube users, most of them in LinkedIn have a very good income owing the higher percentages of income. The difference in the demographic characteristics of LinkedIn users compared with the Facebook, Twitter and YouTube users, lies in the fact that LinkedIn is a professional social networking site in which users are highly educated.

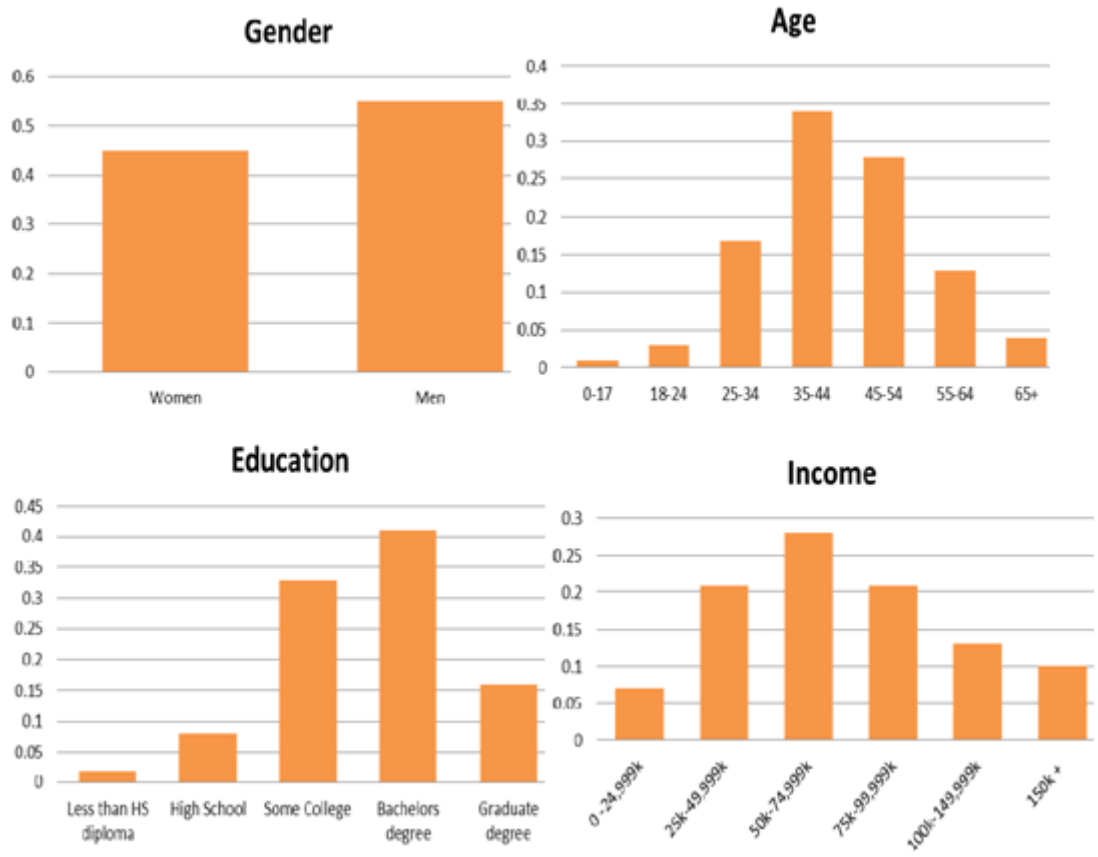


Figure 3-35 Demographics on LinkedIn Users [68]

3.5 Summary

In this chapter we provided some data, based on a variety of published statistical studies and report, concerning the use of Internet, and the mobile phones technology (as they are the basic channels for accessing social media) as also the Social Media Platforms, and then the demographics of the users of the most popular of them (Facebook, Twitter, YouTube and LinkedIn). These data allow an assessment of how wide and heterogeneous-pluralistic is the content basis of our project. We started with the categorization of the online users and we provided their characteristics. Their basic types that can be distingusihed are the Influencers, the Communicators, the Networkers, the Knowledge Seekers, the Aspirers and last the Functionals, which differ in the degree of involvement and the degree of content consumption.

We continued with an overview of the Internet use, first worldwide and then separately in USA and in Europe so that we have a spherical view of things. It is evident, through the analysis, that the Internet plays an important role in users' lives. A large majority of households and individuals make use of it today. Nevertheless, there are significant differences in access and usage between socio-economic groups and countries around the world. What fascinated us was that from the 1.8 billion of households that exists worldwide, one third of them has Internet access. Internet penetration in Europe reaches the 61.3% leaving behind the rest of the world. In developing countries, the 25% of homes have a computer and the 20% has Internet access. Also, the percentage of regular Internet users among younger persons between the ages of 16-24 was 91% while for the age group of 55-74 years it was only 40%. The percentage of the Internet users with high formal education was twice the percentage of internet users with a low level of education. Between men and women users, the 70% of men and 65% of women used the Internet regularly. The main conclusion derived from these statistical results is that the influence of Internet to citizens is growing day by day rapidly, attracting in a greater percentage the highly educated citizens.

Making one step forward, we continued with the analysis on the mobile usage. An analysis of the growth in smartphone usage shows a dramatic increase in the adoption of Google and Apple smartphone operating systems. Smartphone penetration in the United Kingdom, France, Germany, Spain, and Italy has increased by 9.5 percentage points reaching 31.1%, placing it higher than the US with smartphone penetration increase in 10.2 percentage points reaching 27%. What is more, smartphone ownership reaches 31.1%, while 3G device ownership owns the 47.1% and unlimited data plan

subscriptions holds the 7.5% of penetration showing the main conclusion which is that all these lead to the overall growth in the use of mobile media. This dramatic increase of the mobile usage especially of smartphones shows that citizens use their mobiles not only for communicating with others using their telephone contacts, but also for communicating with other users online sending online text messages in the Social Media Platforms that they use. Today, smartphones give to users the ability to install in them an application of a Social Media Platform, which makes a connection with the specific platform possible, and in this way the user has the opportunity to log in and socialize without the need of a computer.

An important conclusion that outlines users' profile is that social networking, sharing photos, reading online news, online consultations and post opinions are the online activities in which they are interested in. What is more, statistics showed that online users tend to use the Internet to make their lives easier and the Social Media Platforms to connect with others, make friends, join groups, participate in discussions, and express their opinions on different topics.

Young adults have witnessed and have been the first to use some of the most exciting technological advances we've seen in the last decade. Facebook, Twitter, YouTube which are the most popular Social Media Platforms as well as other have fundamentally changed the way in which different age groups communicate. Surveys have shown that young adults between the ages of 18-34 are more compelled by online tools like Facebook, blogs, instant messaging and text messaging than older adults. Even though young adults are the first to embrace Social Media Platforms, they are not the only age group that takes advantage of new ways to communicate with each other, with their favorite brands, or with complete strangers. What is remarkable is that women spent more time online with 24.3% leaving men behind with only 16.8%.

These statistics really show that already Social Media Platforms have entered drastically in our lives and people use them constantly. The fact that online users read online news, post their opinions and discuss with others make more possible for governments to strengthen their relations with citizens and start getting closer.

One last but vital conclusion refers to the four most popular Social Media Platforms, Facebook, Twitter, YouTube, LinkedIn and the demographic characteristics of their users. We analyzed the online users of each one by gender, age, education and income. The general conclusion that derives from their analysis is that in Facebook, Twitter and YouTube most members are women, with low to medium income and younger than the members of LinkedIn that are mostly men with medium to high income and highly educated. The difference in all demographics of LinkedIn in relation to the other Social Media Platforms is that by nature it is a professional social network unlike the rest that are more communication Platforms.

The findings of this chapter and the conclusions we have reached are closely related to the aims and the goals of the NOMAD project. Most notably:

- The dramatic increase in the usage of social media and the web 2.0 tools in everyday life, emphatically underlines the importance of the goals targeted by NOMAD. The wide use of the social media by the citizens of of both sexes and various age, education and income groups, in combination with the findings of the previous chapter (that in many social media political discussions and content production takes place), indicates that a substantial amount of political and policy related content is generated in the social media, which is not produced by some small groups (e.g. by some young high education and income citizens), but by a wide range of citizens' groups. So we do not face the risk of collecting and analyzing political content coming from a small and non-representative group of citizens. This pluralistic content is worth being exploited by government agencies, so NOMAD can generate significant political value in this direction.
- The analysis of the online users characteristics in this Chapter, emphasizes the need for taking into account the various types of online users in the processing and mining of user-generated content for identifying structural and semantic similarities in the various arguments expressed in support or against policies (WP4), as well as in the visualisation of the results provided to the policy makers (WP5).
- With respect to our last conclusion, the demographics of the users of the social media platforms that will be exploited in our project (which differ among the platforms) towards designing the content-mining process of our project.

4. WEB 2.0 AND POLITICS

4.1 Introduction

According to Jürgen Habermas [69], publicity in contemporary society needs to be organized, constructed and be made communal, since it doesn't exist per se. With respect to politics, this publicity can be of influence only once it persuades that it enjoys some kind of popular support and, possibly, some willingness to consent.

Nobert Bolz [28], tackling the importance that Barabási acknowledges to network "hubs" which a great number of links refers to, presents us with the concept of "popularity": "*whoever doesn't not conquer the social status of star will take place on the long tail of that distribution curve that Pareto discovered, which today is discussed under the name power law*". Popular in the Internet, Bolz suggests, is the greatly visible node; and visibility directly depends on the number of links that refer to one node. It's worth noting that, for the writer, the success of a product today is determined by its social added value, and this value lies in the center of marketing strategies and literally serves as the node (i.e. common point) of communications. That means that the web is related to success via linking value. From the perspective of Mark Granovetter's theory of weak ties [23], the diffusion of information is favored by and amplified in nodes that possess many weak ties and not strong ones. The reason is that weak ties represent gaps (holes) in the structure, which would attract the emergence of new elements. Therefore, the creation of large networks is favored by the attraction of loosened contacts and weak ties, since they offer opportune ground for the interconnection of various groups. It is the structural holes that, for Bolz, would allow for innovation to proliferate, since in each and any of them larks a competitive advantage to be taken.

During communication on social network webpages, the Three Degrees of Influence rule is a key factor. It is interesting to observe the failure of the Friendester website, which tried to extend this influence by one degree: the site's creators chose to escalate the visibility of profile by four steps, in order to enable access to distanced parts of the Web. This venture of trespassing the natural social horizon and the fact that a great part of the connections failed to correspond to the ones of the real world led the site to lose its popularity.

4.2 Political communication

4.2.1 Definitions

According to Robert E. Denton and Gary C. Woodward [70], cited by Brian McNair [71], political communication is defined as "*pure* discussion *for the allocation of public resources (revenues), the official authority (who is given the power to make legal, legislative and executive decision), and official sanctions (what the state rewards and punishes)*".

Dominique Wolton [72] suggests that political communication, being as old as politics itself, is the product of the first communication among people over issues related to the organization of their polis. Although there are Greek and Latin orators who glorified political communication with their art, only very recently the latter emerges. For Wolton, political communication, after having passed by various stages and determined various forms of public communication, covers the study of the role of communication in political life in general, including mass media, polls, political marketing and advertising, with a certain stress on pre-election periods.

Nikos Demertzis [73] holds for the multidimensional nature of the term: "*Political Communication is not only a multi-disciplinary theoretical and research field where communication studies, political science, sociology, history, psychology and moral philosophy converge. It takes place simultaneously on three different levels of analysis: the individual one (e.g. the influence of mass media on voters' choices and preferences), the institutional one (e.g. the structural influence of electronic news media on the internal operation of political parties, relations of political representation and reconfiguration of the public sphere) and the systemic one (e.g. the contribution of Media, old and new, with regard to the constitution of the political culture of a society as a whole or a social group)…*"

4.2.2 From the studies on propaganda to political science

According to Demertzis [73], the mother of political propaganda is that older body of studies on propaganda conducted by Lasswell in the 1920's. Fuel for those studies was the deep concern of eminent intellectuals over the support of the Press to the then President Woodrow Wilson, for the purpose of having the United States engaged in the 1st World War.

As Demertzis points out, in the history of the birth of political science it's worth mentioning the foundation of the Institute of Propaganda Analysis by Edward Filene.

This foundation greatly contributed to the firm response to propagandas by the Nazi Germany, the Ku Klux Klan, and other blossoming pro-Nazi movements in the United States at the time.

That very period saw the proposition of the so-called hypodermic-syringe model, according to which mass media purposefully manipulate their audiences, by means of direct and coordinated influence.

With the goal of encountering the propaganda of Nazism, social psychologist Carl Howland conducted researches on the possibility of reversing the opinion of a person by having her receive messages from credible sources: that problematic led to the "Source-Message-Channel-Recepient" communication model.

The analysis of propaganda was a pioneer venture in a field soon to be covered by scientists studying political communication, especially the work by Smith, B.L., Laswell, H. and Casey, R. [74], who collected every material produced in USA and related to propaganda.

The fact that the term "propaganda" had been linked to practices of Nazi Germany with which the USA were then at war, as well as the harsh critiques that were opposed to the "hypodermic syringe" theory, led to a shift in the term's semantics (it initially meant a practice of persuasion) and its dejection from a widely accepted vocabulary proper to the democratic perception of things. In an effort of defining the notion of persuasion, instead of "propaganda", "communication" was proposed as a harmless term.

However, Jowett, G.S. [75] and Edelstein, A. [76] established that the term remained in use even after the end of the Cold War. O Edelstein, A. [76] refers to the "old propaganda" (produced by traditional political discourses) and the "new propaganda" (emerging in the postmodern culture).

4.2.3 Application

The application field of political communication, according to Brian McNair [71], extends to:

- Any form of communication realized by politicians for attaining particular goals.
- The communication of non political agents (voters, journalists etc.) with politicians.
- The communication related to political personalities and their activities, as registered in the mass media (news, articles etc.).

4.2.4 Agents

McNair also proposes the following agents of political communication [71]:

- Political Organizations, groups of individuals who aim at influencing the process of decision-making by organized institutional formations.
- Political Parties, groups of individuals who share common opinions and participate in entities organized for attaining their goals.
- Public organizations, any kind of organized entities (unions, professional associations, consumers groups etc.) which proceed to limited or full scale interventions.
- Pressure Groups, more or less institutionalized entities, which pursue political goals.
- Terrorist Organizations, groups that employ violent practices for attaining political goals.
- The audience, the public, targeted as recipient of all political messages.

- News Media, which operate as emitters as well as transmitters of political messages.
- The International Scene, a field full of promising expectations given that a political message may very well resonate in and be endorsed by the global public opinion.

Finally, we should underline the fact that every one of the above agents has a unique role to play and a proper *raison d'être* in normal governance systems and democratic regimes.

4.2.5 Virtual communication

The emergence of the cyberspace resulted, according to Pierre Lévy [77], to the drastic change in reasoning about the formation of public opinion, and the diffusion of messages. It brought about a media mutation analyzed along the following lines:

- The fall of the local character of message diffusion media and their growing dependence on virtual communities.
- The convergence of all media, which used to operate as message diffusion conductors.
- The assuming of diffusion process by all of the social agents. This fact is dubbed by the writer as the emergence of "automedia" (automédia).

According to Manuel Castells [78], communication is the diffusion of messages by means of information exchange. The communication process is determined by technology, the characteristics of the communicating entity and the information receiver, cultural reference points, protocols etc. Meanings can be perceived only in the context of social relations within which both information and communication take place.

Communication can have either an interpersonal character or a social one. In the past, a message transmitter and a message receiver were deemed as its sole factors. Later on, communication saw the possibility of spreading across society in general, a process that Castells calls "mass communication".

It's worth noting that, whereas interpersonal communication is interactive, mass communication can be either interactive or mono-directional.

The advent of the web led to the emergence of a new form of interactive communication, characterized by the possibility of sending messages to various recipients, in real time or not. Castells call that new form "mass-self communication"; it is mass communication since it can possibly have a big number of receivers (e.g. YouTube videos, multiple-recipient e-mails); it is self-communication since message production and recipient selection are initiated by one individual. Furthermore, content retrieval from the web and the electronic communication networks isn't but a personal choice.

The aforesaid forms of communication (interpersonal, mass, and self-mass) are not interchangeable but coexist, interact and complement each other. Nonetheless, there is a historically newly presented fact bearing consequences for the social organization: those forms of communication are articulated in a complicated digital hypertext, which includes the full scale of cultural expressions brought up by human interaction.

This convergence took place after the advent of a great number of transformations in each end every level of the communication process. Those transformations set up the scene of the so-called "Revolution in Communication". According to Manuell Castells [78], there are three crucial factors:

- Progress in technology, founded on the digitalization of communication, the electronic networking, software breakthroughs etc.
- Transformation in the organizational and institutional structure of communication, so that transmitters and recipients of messages turn into media themselves, whereas their "audience" is acknowledged as "media consumer".

  This shift took place during the last two decades, because of:

  - The extended commercialization of media in a global scale.

  - Categorization, customization and variation of media, oriented to the cultural identity of the public.

- Convergence of companies (telecommunications, Internet, of PCs and media) with respect to the market share. The formation of those globalized networks of multimedia companies has been realized thanks to governmental policies and institutional changes; their main characteristics were privatizations and controlled market liberalizations in a national and international environment.

- Emphasis on the cultural dimension of this multi-faceted transformation of communication, which can be summed up in a juxtaposition of tendencies that are contradictive yet compatible:

  - The boost of a globalized culture being parallel to the blossoming of various cultural identities.

  - The rise of individualism being parallel to the rise of communalism, posing themselves as equivalent yet opposing models for the world that we live in.

Therefore, Castells suggests, that the possibility of communication between two subjects of different communication processes is determined by their ability or not to produce a pertinent protocol. Social agents as well as single citizens use the new possibilities of communication networking for the purpose of pursuing their goals, defending their interests, proposing and imposing their own values.

Nowadays, the new communication field arises from a process of multidimensional change. It sees itself specified by contradistinctive viewpoints resulted by the contradictive structure of interests and values. This kind of mosaic isn't but the key characteristic of our society.

4.2.6 Virtual political communication

The advent of the Internet is about to radically change practices in news diffusion and political communication; it will also radically transform political discourse as well as the strategic planning of election campaigns.

The Internet as a platform of news consumption is presently bearing expectations for a revival of the public space and a deeper engagement of citizens in public affairs and collective actions.

According to Thierry Vedel [79], this very notion results from the fact that the Net is being perceived not as a communication medium among others but as a totally different medium given its technical specifications that enable it to practically deliver an infinite number of data.

This quantitative shift can lead to a qualitative boost of participation in public affairs, since citizens are able to access the raw material of political discourse or political programs and evaluate them in absence of intermediating third parties.

The Internet also contributed to well-grounded transparency in political activities given that it enables one to be aware of her rights and control the actions of elective decision makers and of public servants.

The Net also gives to independent or alternative candidates the chance to address the public and elaborate their own political views. Given the fact that they usually lack opportunities to gain access to mass media and financially support the much elevated costs of a contemporary election campaign, the Net presents itself as an almost ideal medium for a low budget reaching out to the electoral body.

4.2.7 Social network webpages and political communication

Social network webpages become all the more popular among politicians, who use them as a medium of:

- Diffusing messages and information
- Accessing interests and needs of voters
- Fundraising
- Creating support networks.

With respect to the content of those webpages, it can refer to questions related to the political status and program or the candidate's personal life. Christine B. Williams and Girish J. "Jeff" Gulati [80] held forth that the social network webpages are platforms of communication and interaction between the politician and the users or between users themselves, as opposed to "official" webpages of a candidature where the candidate has absolute power over its content.

Whereas, in the past, polls were the sole source of feedback, the advent of social network pages enable voters to express preferences and interests and play their own part in defining the political arena.

The use of the web was meant to differentiate the methods of strategic political communication set out by candidates and their strategists during election campaigns. Thanks to the new ways of planning, for Maria Mercanti-Guerin [81], the candidate:

- Presents herself more authentic and accessible.
- Has the opportunity to read ideas, reactions and observations by the public.
- Becomes a catalyst to the expression of admiration by her electoral base.

Beyond that, the use of social networks in political marketing offers the possibility of:

- Reviewing power and hierarchy structures thanks to the spontaneous creation of groups, to decentralization and self-organization.
- Speech by marginal or excluded social groups (e.g. students).
- Collecting financial and other resources.
- Expression in local activities.
- Replacing traditional structures (centers) that used to support candidatures.

The deepening engagement of networks in politics gives rise, according to Maria Mercanti - Guerin [81], to two conflicting tendencies:

- Spontaneity and freedom coexist in the creation of a network and dis-empower the candidate as far as the control of communication is concerned.
- Professionalism and know-how emerging with respect to network use and social connection (social cohesion) via mass communication hinder every non controllable feature that a network may have.

Mercanti-Guerin also suggests that the qualitative characteristics of an online social network related to political communication are the convergence of three variables:

- The form of the network.
- The number of connections.
- The quality of participation.

The network form and the number of connections can be evaluated from the following points of view:

- The level of structure. It refers to determining the whole as well as the integral parts inside the system itself.
- The level of relations. It refers to studying specific groups that can be restructured depending on the degree of cohesion or the density of connections between agents.
- The level of the individual. It refers to determining the centrality or popularity of an agent (or a group) and the possibility of influence or information diffusion inside a group (based on size, number of friends, number of groups that she belongs to, number of affiliated groups etc.).

The quality of participation is related, for Mercanti-Guerin, to content production and publication in every form. The content itself is related to news delivering as well as to interaction: the former is related to postings of any kind (events, multimedia presence, photos etc.), whereas the possibility of the latter is related to the number of participants in discussion forums, messages posted on the so-called Wall etc.

4.3 Related Projects on Policy-Making and Intelligengt Content analysis

What is evident, nowadays, is that as on the one hand, Governments are trying to understand the upcoming complex world and its needs, citizens on the other hand, demand more openness, transparency and commitment to results.

Furthermore, citizens increasingly seek to express their views or opinions and influence policy decisions, through the new media. In front of this evolution, plans are made to be implemented in the field of ICT for Governance and Policy Modelling in order to create a more participative and open data governance and channels for engaging citizens as well. To this direction European Union has been funding a plethora of projects in the same context of NOMAD, which aim at achieving the goal of improving public decision-making and turning the policy-making cycle into more effective, each one with its own way. NOMAD aims to utilize the results obtain from the associated research conducted within these projects. Therefore, the ones that present strong relevance with NOMAD are presented below.

[1] considers that the opinions expressed on public issues are communicated to mass audiences only through the news media. The development of the internet has provided to every citizen-Internet user an inexpensive channel for broadcasting information to large audiences. That is the reason why SYNC3 focuses in the analysis of weblogs (blogs) and the commentaries of blog users on issues that are presented in the news media. The content extracted from the blogosphere is very important for the collective formation of the public opinion. The problem that arises, though, is that blogosphere unlike news portals is unstructured and this project aims at structuring the information of personal blogs to combine them with news information. NOMAD like Sync3 aims at analyzing the opinions expressed on the Web but also classifying them. What is more, focuses only on the blogosphere. NOMAD considers of course the blogosphere as an important field for extracting content but also other social media platforms that offer collaboration, communication and information sharing as we have mentioned above (SNS, wikis, event sites, video sharing sites, etc). Furthermore, as for the target user group, Sync3 project focuses on creating a news analysis tool customised to the needs only of professional and citizen journalists unlike NOMAD that involves a wider target user group including MPs, people from Parliament, citizens, NGOs, Businesses, organizations, scientists and media.

[2] focuses on the information management of the Web. In this digital era, every day users of the Web are overwhelmed with too much information which most of it is free. Social media play an important role as well, because through them users exchange information, send suggestions to others about what they see or hear and that leads to discover what everyone else is learning usually from others that share the same tastes with them. RENDER aims at discovering, managing and representing information on the Web through diversity-aware algorithms. In order to do so, it has first to analyze the context provided by articles published in social media such as news sites, blogs, forums and social networking sites. What is more, the project identifies as dimensions across which diversity can be mined, the opinions expressed by entities in text, the sentiment of the article and the knowledge produced from the content extraction. NOMAD like RENDER focuses on the platforms of communication, collaboration and information sharing as data sources but is able to find the sentiment of users' opinions through fully automated techniques. Moreover, NOMAD like RENDER provides a demographic analysis including age, gender, education, income in order to identify users' profile. Users' analysis is presented in the next chapter.

[3] aims at defining and demonstrating a new approach to policy modelling combined with e-governance tools and techniques, and advanced ICT technologies. With other words, the project wants to create an ICT-based environment using practical techniques and stakeholder participation in order to formulate and monitor social policies to be adopted at several levels of government. Specifically, 2 policy cases are selected. OCOPOMO identifies the stakeholders by investigating their specific needs and requirements as well as process requirements for an e-participation

[1] http://www.sync3.eu/
[2] http://render-project.eu/
[3] http://www.ocopomo.eu/

platform to enable open collaboration in the policy processes. NOMAD like OCOPOMO introduces new dimensions into the field of policy making considering collaboration and crowdsourcing to be the realities of today's public Internet. It also aims at connecting citizens opinions with government decisions.

+Spaces[4] aims at creating policy making in popular online communities. The project uses existing social media spaces like Facebook and Twitter alongside virtual worlds like Open Wonderland as the societal sandbox for modelling real world behavior. With other words, +Spaces focuses on engaging citizens in the policy modelling process using new and innovative ICTs in order to allow people to share the democratic process by giving their opinion about a specific initiative. +Spaces regards virtual spaces as places where people interact online, environments that allow users to socialize under a technological frame that implements a specific context. These environments are classified into two types: 3D online virtual words and Online Social Networking Platforms. NOMAD like +Spaces aims to provide citizens new ICT tools for analyzing and classifying opinions extracted from the Web but the classification of Social Media Platforms does not contain only Social Networking Platforms and online virtual words. The Social Media Platforms in NOMAD are classified into five types: 1) communication, 2) collaboration, 3) multimedia & entertainment, 4) news & information, 5) public participation & policy making. Last but not least, the target user group in +Spaces is limited to Policy Makers, Public Servants and Virtual World Users unlike NOMAD that refers to a wider target user group as we have mentioned before.

IMPACT[5] aims at developing and integrating formal, computational models of policy and arguments about policy, facilitating deliberations about policy at a conceptual, language-independent level. These models will be used to develop and evaluate a prototype of an innovative argumentation toolbox for supporting open, inclusive and transparent deliberations about public policy. IMPACT has as primary goal through the use of its tools to enhance existing practices of policy making but also to open new ways of “empowering” citizens and strengthening their role. NOMAD like IMPACT follows the same philosophy. Also, IMPACT takes into account that citizens use new “social” media to voice their opinions on public policy issues and inform themselves about new policy initiatives. NOMAD like IMPACT understands the role that social media play in users’ life and to what extent nowadays are being used. Furthermore, NOMAD indulges in the use of social media and targets in increasing the public awareness on policy issues and users’ participation in governmental decision making.

Cockpit[6] aims at implementing the idea of embodying the opinion of citizens tracked in Web 2.0 social media for public services into public service design and delivery. COCKPIT will take advantage of Web 2.0 social media by developing suitable tools that track sources of data on public services written by citizens. The content from the social media will be evaluated and trends and needs on public services will be extracted through opinion mining. The extracted opinion of citizens will be taken into account for improving and upgrading already existing public services or designing new ones. NOMAD like COCKPIT focuses on analyzing users’ opinions extracted from social media and aims at engaging and empowering citizens in the decision making process. In addition, COCKPIT’ data sources are blogs, forums, newsgroups, video sharing sites and excludes sites that require membership or authorization. NOMAD’ data sources, on the other hand, are not only social media platforms like blogs and forums and sites for multimedia & entertainment but also social networking sites, sites for communication, for collaboration, for news and finally sites for participation as they are described, analyzed and classified above in previous subchapters.

[4] http://www.positivespaces.eu/
[5] http://www.policy-impact.eu/
[6] http://www.cockpit-project.eu/

padgets[7] aims at designing, developing and deploying a prototype toolset that will allow policy makers to graphically create web applications that will be deployed in the environment of underlying knowledge in Web 2.0 media. Padgets introduces the concept of Policy Gadget (Padget) which represents a micro web application that combines a policy message with underlying group knowledge in social media through content and user activities and interacts with end users in popular locations like social networks, blogs, forums, news sites, etc. in order to get and convey their input to policy makers. In order to find out which are the most popular social media that can use, Padgets focuses on the analysis of the current landscape of Web 2.0 platforms that people everyday use. More precisely, it starts with a categorization of social media into different types of platforms examining how social engagement in these platforms can be re-used in the scope of policy making process. Based on this examination, it continues with a presentation of social media platforms' capabilities providing some examples in each type of platforms and a small description of them. Padgets, also, offers a stakeholder analysis including an analysis of a general categorization of users' profiles in social media. NOMAD moves in the same pattern with Padgets. More specifically, NOMAD like Padgets makes a categorization of social media platforms from which can extract users' opinions and also provides a stakeholders' analysis with statistical results describing users' profiles but NOMAD offers an updated version of information about these two crucial parts of research.

wegov[8] aims at developing a toolset that allows full advantage to be taken of a wide range of existing and well established social networking sites to engage citizens in two-way dialogs as part of governance and policy-making process. The tools will make it possible to detect, track and mine opinions and discussions on policy oriented topics. Also, WeGov will develop three scenarios for use of the toolbox and will analyze legal and ethical issues that may be raised. Furthermore, as for the target user group it contains MPs, IT staff from Parliament, citizens, NGOs, Businesses, International organizations, scientific community and media. NOMAD like WeGov follows the same philosophy. NOMAD perceiving the rapid growth and use of social media tries to leverage the huge amount of user generated content for supporting governments in their political decisions. With other words, NOMAD focuses on enhancing existing practices of policy making but also opening new paths of "empowering" citizens and strengthening their role. NOMAD like WeGov moves at the same target user group. In general, WeGov is a project that promises a lot and must be very careful during the next phase. NOMAD aims to provide automated solutions to decision makers deepening on the areas of content search, categorization and visualization.

The following table summarizes the relative projects in policy making illustrating their results that can be exploited during the NOMAD lifecycle.

[7] http://www.padgets.eu/

[8] http://www.wegov-project.eu/

Table 4-1. List of relative projects

Project Title	Aim	Status	Relation to NOMAD	Related Results delivered
Sync3	SYNC3 provides an intelligent framework for making more accessible the vast quantity of user comments on news issues. The project structures the part of blogosphere that refers to running news stories, rendering it accessible, manageable and reusable. The SYNC3 ontology, in particular, extends established conceptual foundations with modalities and uncertainty.	Finished	SYNC3 platform, crawls the blogosphere to perform Opinion mining and Sentiment analysis in user generated content, like the NOMAD approach. SYNC can provide its technological infrastructures to be exploited by NOMAD. In addition, the list of NOMAD sources can be enriched with some of the SYNC sources like news portals and blogs.	SYNC has delivered a platform that integrates techniques towards content acquisition, news and comments structuring, opinion mining and blog annotation. In addition SYNC3 ontology is a valuable resource for the adaptation of new ontologism.
Render	RENDER will provide a comprehensive conceptual framework and technological infrastructure for enabling, supporting, managing and exploiting information diversity in Web-based environments. RENDER aims to embrace that diversity in information management is essential for enhancing state-of-the-art technology in this field with novel paradigms, models, and methods and techniques for searching, selecting, ranking, aggregating, clustering and presenting information purposefully to users, thus alleviating critical aspects of information overload.	The project approaches the first half of its implementation	RENDER will develop concepts, methods, techniques and technology in the field of information management that can enhance NOMAD tools in crawling, gathering, structuring and enriching its information sources:	Render has already delivered the Knowledge Diversity Ontology, models for diversity-rich information and initial insights for collection of data and corpora and opinion mining modules.
Ocopomo	The core objective of OCOPOMO is to demonstrate that, with appropriate ICT, the integration of formal policy modelling, scenario generation and open and widespread collaboration is not only possible but essential at all levels of policy formation whether local, regional, national or global.	Ocopomo is in the middle of its last year.	NOMAD can utilize the insights in the area of Policy Modelling, in terms of conceptual modelling and transformation support towards formal policy models Also OCOCPOMO provides experience in methods to engage stakeholders in policy development	Ocopomo has delivered up to now a conceptual model of a policy case (Consistent Conceptual Description) and a study on the stakeholder identification and requirements for

			which is necessary for the adoption of the NOMAD tools.	scenario process and policy modelling.
+Spaces	+Spaces aim to act as a mediator between government applications and Virtual Worlds platforms. +Spaces deliver: an API, a middleware to resolve platform independent development and a toolset to practically support eGovernance service development. All these three artifacts comprise the +Spaces framework. When applications are developed and deployed in the Virtual Worlds, the governmental agencies will be able to monitor and interpret relevant results.	Towards the end of the project, a poll is deployed via the first prototype, in various virtual spaces that collects information from citizens.	NOMAD should exploit the knowledge in interoperability between virtual spaces that +Spaces provides to integrate data mining, recommender and reputation systems.	The first prototype of +Spaces already running provides an e- infrastructure for deploying polls in multiple virtual spaces such as Facebook and Twitter, and presenting recommendations or streams of information from the other spaces.
Impact	IMPACT is conducting original research to develop and integrate formal, computational models of policy and arguments about policy, to facilitate deliberations about policy at a conceptual, language-independent level. These models will be used to develop and evaluate a prototype of an innovative argumentation toolbox for supporting open, inclusive and transparent deliberations about public policy.	IMPACT will be finished in the end of this year.	The work conducted in argumentation schemes within Impact can be exploited in the project's WP3 related with the Policy Argumentation Modelling.	Impact has conducted research on tools enabling stakeholders to simulate the legal effects of policy proposals in real and hypothetical cases is being conducted, using the Web Ontology Language (OWL) and the Legal Knowledge Interchange Format (LKIF) to model policies. Among its reusable output is the Argumentation Toolbox and the Policy Modelling Tool.
Cockpit	The COCKPIT Project adopts a highly synergetic approach towards the definition of a new governance model for the next generation public service delivery decision making process. This Next Generation Governance model combines the research areas of citizens' opinion mining in the context of web 2.0, Service Science Management and Engineering in the context of the public sector, and deliberative engagement of	Cockpit will be completed on December 2012.	COCKPIT proposes an innovative ICT-driven approach which engages citizens in the public service delivery decision making process and, hence, enables governments to better understand and address the citizens' needs during public service conceptualization and design while contributing	The key, up to today, findings of the COCKPIT Project include: • A Next Generation Governance Model for Public Service Delivery, that can as accurately as possible estimate public service

	citizens in order to promote discussions and a collaborative approach on public services' delivery issues.		to the services' adoption. In this context, COCKPIT implements an Opinion Mining Tool, which is based on an ontology-based extraction and a sentiment analysis module which is an approach endorsed by NOMAD as well under a more generic scope than concentrating in public services delivery.	delivery costs and provide user-friendly simulation and visualization of examined public service scenarios. • A Supportive ICT Integrated Toolkit that consists of a number of separately developed components: Opinion Mining Tool, Policy and Law Retrieval Tool, Citizens' Deliberative Engagement Platform, Service Engineering Tool, Cost and Value Estimation Tool, and Service Simulation and Visualisation Tool.
PADGETS	PADGETS uses publicly available APIs for interconnecting, publishing and retrieving content from underlying social media platforms. The information and user activities that are collected in a privacy-preserving manner and used by policy gadgets are categorized using semantic tags in order to help the policy maker form an opinion about what the users think about relevant issues and policies.	Currently is the final period of the project, ending December 2012.	NOMAD Requirements is based on the categorisation of Web 2.0 platforms conducted within PADGETS and can utilise the finding of the Interoperability analysis for the inter-connection of the Web 2.0 platforms that will be supported by the NOMAD infrastructures. In addition the usage of tools can be evaluated adopting the PADGETS evaluation framework.	PADGETS platform is already delivered, offering capabilities such as: • Integration of multiple Social networking platforms • Opinion mining modules in Web 2.0 user-generated content. • Policy modelling and simulation techniques
WeGov	The aim of WeGov project is to improve the engagement between government policy makers and citizens via popular social networking sites. Thus, WeGov toolbox is developed as a site, which includes tools that support	The project is In the final stage. Several releases of the WeGov toolbox have taken place. The project is	WeGov toolbox can assist NOMAD in searching and monitoring political discussions in social networking sites to find appropriate streams of discussion on certain	WeGov has delivered a toolbox comprising of the following components: • Topic Analysis tool that reorganizes comments

	decision-makers in the analysis of social networks. In terms of methodology, WeGov relies on the participation of potential users (e.g. policy makers, communities, NGOs, etc.) in the development process of the software (WeGov field trials). WeGov has developed three alternative analytical approaches that are currently tested and improved, as a basis for a later integration in the policy maker's daily workflow.	currently in the evaluation phase through the field trials that are running this period.	topics. Search parameters of NOMAD interest may include networks, geographical location, keywords defining the theme of query.	according to concept groups. The idea here is to identify areas of discussion that arise within a discussion. • Discussion Activity Analysis that aims to predict which posts and users will generate more attention. • User Behaviour Analysis tool that classifies users according to their behaviour and interactions within the SNS.

Among the projects examined here, PAGDETS and SYNC3 exhibit the maximum linkage with NOMAD. WeGov is also close enough to the NOMAD objectives implementing crowdsourcing through Social Media, similar with COCKPIT objectives although limited to the public services policy making. Findings from the rest should be exploited as well, such as Render in the information management domain, OCOPOMO and IMPACT in the policy modelling domain and +Spaces in the interoperability field. The second chapter of the current deliverable already integrates insights of the PADGETS project and it is excepted that similar knowledge from the rest will be incorporated to the continuation of the project as a to provide a solution for policy making integrating all the approaches described above.

4.4 The current situation in Web 2.0 usage and Politics

4.4.1 WEB 2.0 and Government

Political participation is arguably the domain where the impact of Web 2.0 is now visible and mature [82]. The application of Web 2.0 on the level of governance could imply a shift of control over its output (policies, laws; public services) from the established authorities (political institutions, parties, departments) to its citizenry [83]. While citizens are not eager to visit the websites of the governments; they tend to use Web 2.0 sites such as Facebook and YouTube, in order to engage in political activity. They seem to be interested in the public sphere but discuss issues in digital places that they are familiar with; rather than visit government websites [84].

In general, public participation is defined as the contact between government and citizens, in which bi-directional information flows take place, with the government providing information on its current and future activity (services, programs, regulations) and the citizens provide feedback on this information and also information of their needs and problems that have to be addressed by government. Nevertheless, many important forms of public participation take place among citizens who use Web 2.0 tools as their means of interaction. From a traditional point of view one may ignore these practices since there is no direct relation with government. From a governance perspective, however, it is immediately clear that a focus on these practices is crucial for understanding the needs and problems of the society and for steering the public sector [85].

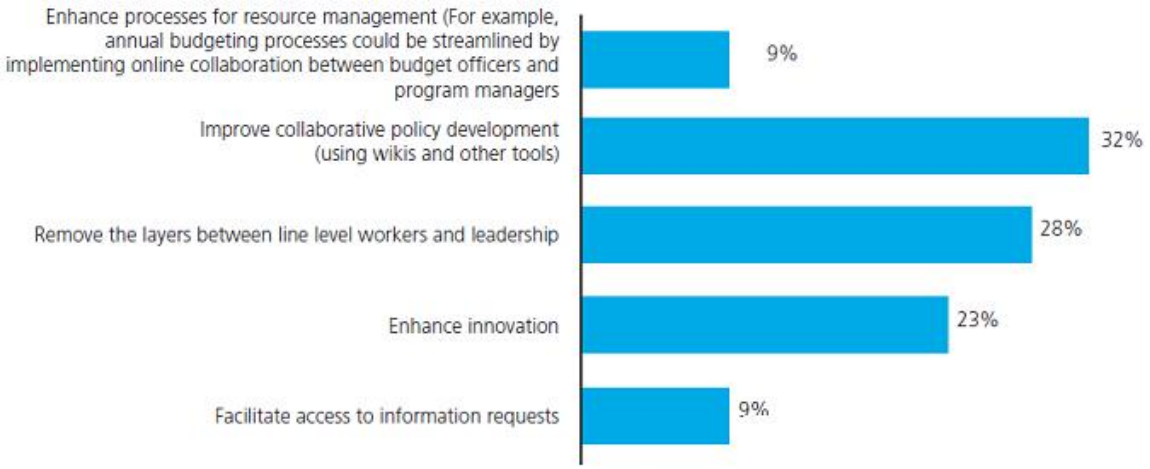


Figure 4-1 Impact of Web 2.0 on public sectors [86]

The collaborative, autodidact, and self-regulatory patterns that can be observed on the established Web 2.0 platform could hereby similarly increase the quality and performance of governance [86]. A digital 'thermometer' can be used by politicians to get a better feeling of how citizens care and think about what goes on in the public sector. Especially when it comes to groups of citizens that are difficult to reach, such as drug users or visitors, a digital thermometer may enhance the sensibility of governments to society and thus enhance the governments' legitimacy [85].

However, the impact of Web 2.0 on government is not limited just to that. From the citizens' standpoint, they take up a more active role in their engagements with governments. David Osimo [87] uses the following figure to describe how citizens use effectively the Web 2.0 to interact with governments.

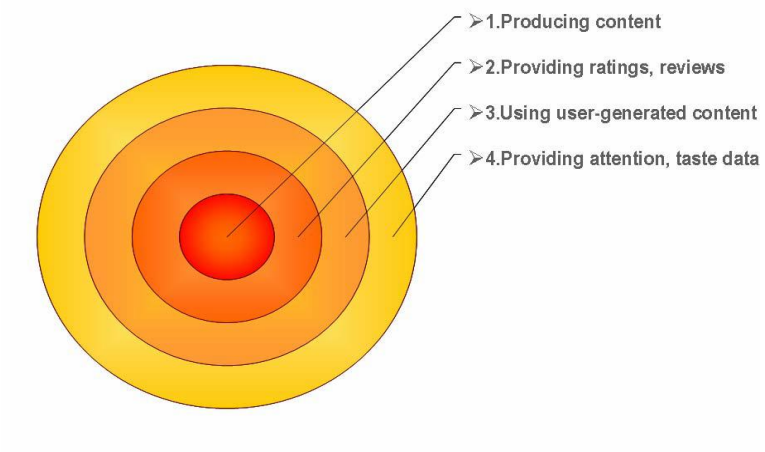


Figure 4-2 Ways citizens use Web 2.0 to interact with governments [87]

Starting from the center and expanding outwards each cycle presents the different types of actions a citizen can take by using Web 2.0. As we move to the outer parts of the figure the number of users involved increases. The first cycle, labeled "Producing content", consists of those users who actually produce content by using Web 2.0 tools. For example, users of that category create a blog where people can post problems or comments regarding a government agency. In the second cycle, the number of citizens (users) involved increases. Here, people provide ratings and reviews on the content generated in the previous phase. Their contribution is vital because with their input they ensure the credibility and the strength of the content. The third cycle represents the citizens who use the content of these Web 2.0 tools. An example of this is the citizens who use the aforementioned blog to read the comments or problems about a government agency posted by others. Finally, the last cycle is about all the Internet users. This cycle consists of the majority of users who provide attention and test data simply by using an online service. An example of this would be the "most read articles" page in online newspapers.

It is evident that Web 2.0 tools provide a two-way communications between governments and citizens. Thus far the importance of the Web 2.0 platform both from the government's and the citizens' point of view has been established. In the next section we will analyze the presence of a Web 2.0 tool, the social networks, in the political sphere.

4.4.2 Social Media and Politics

As concluded in the previous sections Social Media target audiences vary as to their type and purpose. In general, social networks are user-oriented, free, and mirror the structures of our societies [88]. In contrast to other advancements in Information and Communication Technologies (ICT) they allow for a two way interaction between people, organizations and governments. As a result of the above social media are widely used by myriads of people all over the world. In their study Fisch, McLeod and Brennman [89] stated that the penetration rate of social media has by far exceeded that of previous technologies. More particularly, it took radio 38 years to reach an audience of 50 million, television 13 years, internet 4 years whereas Facebook reached that milestone within 2 years of existence.

European Usage of Social Networking Sites – Selected Countries
Ranked by Total Unique Visitors Age 15+
August 2007
Source: comScore World Metrix

Territory	Total Unique Visitors (000)	% Reach of Country's Total Online Population	Average Hours per User	Average Pages per User	Average Visits per User
Europe	127,297	56.4	3.0	523	15.8
U.K.	24,857	77.9	5.8	839	23.3
Germany	15,475	46.9	3.1	423	13.8
France	13,332	49.6	2.0	476	16.8
Spain	8,828	61.5	1.8	251	14.9
Italy	8,736	49.3	1.8	346	12.6

Figure 4-3 European Usage of Social Networking Sites [90]

Social networks gives a public voice to individuals and allows them to engage in ways not previously possible [91]. In a political environment this means that citizens can connect and interact with political figures through the use of online social media and tools. According to a study conducted by the Pew Research Center, the people that use social networks are more likely to be politically active [92]. This happens because people who use social networks are kept apprise of political developments because of those in their networks who are politically active. Therefore, social media act as a "social sharing machine" that increases the visibility of issues and "speed up that collective action model" [91].

4.4.3 Political Blogging

Admittedly among the most powerful Web 2.0 applications, identified in the communication category (Chapter 2), are the blogs. Since the first use of the term in 1997 the blogosphere has grown at an astronomical rate. In 1999, the number of blogs was estimated at fewer than 50; at the end of 2000, estimates ranged into the thousands and as of 2011, there were over 156 million public blogs in the world [93][94].

Although the term "blog" was used in 1997 to describe a personal web site consisting of discrete entries, political blogging is a more recent phenomenon [95]. The first accounts of political blogging date back to September, 2001 where people turned to blogs to express their feelings about the terrorist attacks in America. Since then, political blogging has rose to popularity and according to a recent survey; is one of the most common topics people all over the world blog about [96].

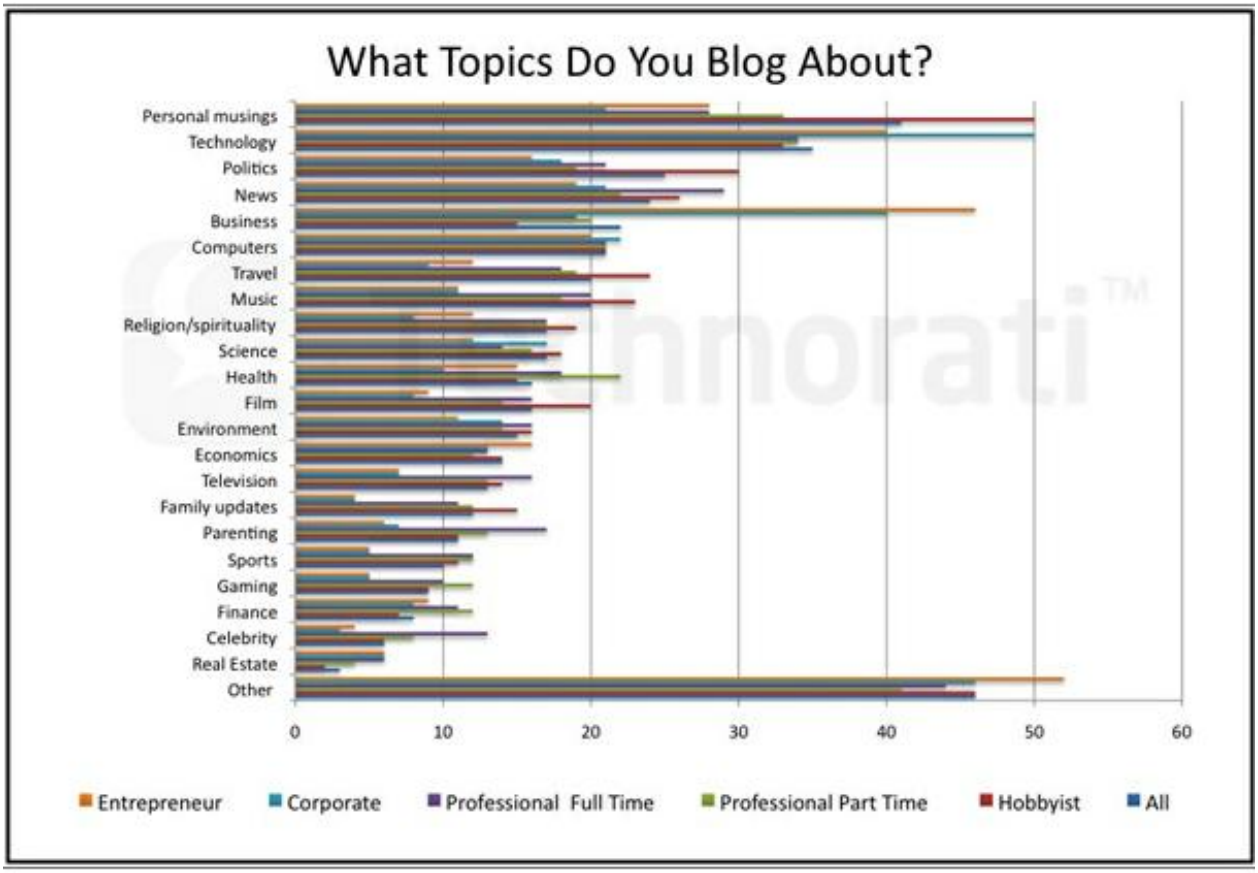


Figure 4-4 What topics do people blog about [96]

Credibility seems to be the main reason why political blogs have grown to dominance. People believe that political blogs are more accurate than traditional news media. According to a research [97], 30 percent of readers seem to trust political blogs to be more accurate than traditional news organizations, while 40 percent said they are about equal. While "blog readers still get most of their news from regular news sources, they are concerned that they are not getting the whole side of the story there. They suspect habitual bias in the traditional news content".

On the other hand, blogs are not just tools for people to express their political beliefs. They are designed to influence the political world by shaping the attitudes and behaviours of blog readers [98]. Therefore, the challenge that arises is integration and responsiveness of all the political blogs, which requires that the mechanism exists to manage the process, analyze inputs, respond to them and feed them into the policy process [99].

Taking all the above elements into consideration, it is evident that political blogs constitute a powerful media tool used by millions of people all over the world. In the next chapter, we will present and analyze the state of the political blogosphere in the three countries that the NOMAD pilots will be executed, namely UK, Greece and Austria.

4.4.4 Internet and election campaigning in USA and Europe

The use of the Internet for political campaigning was launched in the USA in 1996 as an experiment by political strategists, who saw it as a collateral communication medium. Its real adoption as a full-blown political medium took place in the elections of 1998. According to Denis Monière [100], candidates' sites preferred an affirmative stance, displaying and elaborating their own views rather than denigrating opponents.

In the beginning, the Internet was used as a kind of innovative decorative element; very quickly, though, political planners realized its potential for news spreading, advertising, enhancing supporters' identification, volunteers' mobilization and fundraising. They perceived that by means of the Web, candidates, parties and all sorts of political formations can succeed in partially disrupting the strings of dependency from mass media (Press, radio and of course TV), which filter and purposefully select messages to be presented to their audiences.

They also perceived that the Internet's most significant innovation is the fact that it allows for interaction, given that virtual political communication is a bidirectional, even a multi-directional one.

European politicians just followed their American colleagues lacking in audacity and innovative spirit. According to Monière [100], European parties contended, at least in an early stage, to copy/paste each other's sites, showing introversion in handling possible interactions and observing a top-down format in transmitted messages.

As for the use of this medium for promoting candidatures, the early ventures focused on posting the candidate's curriculum vitae, various press releases and opinion articles, i.e. a kind of material that was not differentiated from the one meant for traditional media. Researchers also suggest that in this early phase the electorate base had no influence on campaigning headquarters and decision-makers.

In particular in Greece, early efforts to use the Internet for political causes took place in a rather amateur way, according to Nektarios Sartzetakis [102], by members of the local conservative party; candidates of the Left only followed. The first official party webpage was launched in 1999 by PASOK in a time when Internet users already exceeded 300,000. This site was created for the purpose of systematic use of the Internet as a medium of news spreading and political communication with citizens. We should stress that this venture enjoyed a generous portraying by the mass media. Although a small number of politicians had taken care of creating their own personal webpages, a generalized usage of the Web was noted in the 1999 Elections for the European Parliament. According to Sartzetakis [102], Greek users were easily adapted to the use of the medium for political purposes. At the time, many candidates received a large number or emails by citizens; their webpages received heavy traffic even after the official election campaign period was ended. The writer evaluates the web presence of candidates as largely opportunistic, given that their pages were created for the sole purpose of the coming elections and a small window of a few months afterwards.

Moses Boudourides, Olga Kioufenzi and Leandros Nikos [103] conducted a research on the Internet use by candidates during the 2004 Parliamentary Elections and reached to the following conclusions:

- The "logic of brochure" was reigning in the candidates' sites.
- The candidates of the traditional political parties preferred "old" ways of campaigning and seemed to hesitate before triggering interaction possibilities, which Internet use profusely provides.

The Internet played a key role in communication strategies during the 2000 elections in the USA. This was, in part, due to the fact that users were significantly multiplied and already "addicted" to receive information from this medium. Yet again, the Internet continued to be viewed as an "auxiliary" instrument since its contribution in fundraising was relatively negligible and strategists underestimated its promotion potential so that, in reverse, they chose to dispense a large part of their budget in TV advertising.

It's worth noting that, according to Pippa Norris [101], parties and candidates' sites in the USA promoted the cause of participatory democracy through their pluralistic content, whereas in Europe they promoted interaction, tending towards Direct or Pure Democracy. Large political parties, he suggests, adopted a top-down approach to voters, further mobilizing the already mobilized ones, whereas smaller formations used a bottom-up and interactive approach, pursuing the activation of the non-activated ones.

Finally, since 2000 and before Barack Obama's election, the experience from election processes for the presidency of the USA has shown that, for the largest part, the Internet use by political strategists was intended for fundraising; the conversion of visitors to active supporters of a candidature was only secondary.

4.5 Future trends in the use of Web2.0 policy making and politics

4.5.1 Electronic social networks and political behavior

In a simulation context, Nicholas Christakis [22] studied political behavior in the Internet by enabling human "hubs" to influence those interconnected; he reached to the following conclusions:

- Influence is spread in a large, mostly unexpected degree (up to 100 individuals per hub, although each hub was connected to three or four others).
- Influence was exercised in a local level, a fact that confirmed the so-called Three Degrees of Influence Rule.

Furthermore, he founded that escalations are stronger when they take place in a group of middle transitivity (whose members know each other); and that those individuals likeliest to be politically influenced are those scoring nearly 0.5 in transitivity (i.e. whose half friends are also friends with each other).

In real life situations and with respect to the use of electronic social networks in political communication and influence, President Obama's election campaign (where electronic social networks were heavily used) affirmed that anything circulating in those networks tends to proliferate.

4.5.2 Social networks strategy (grassroot networking)

Barack Obama's election campaign took place from August 8 to November 11, 2008 and attracted remarks and analyses for its organization as well as its political strategy in communication. For the first time in the American political history, a candidate used almost exclusively the web as the field of developing his election strategy and as a tool of mobilizing people and raising funds. Barack Obama managed something almost unexpected: to trigger the interest of Americans in politics by orientating them to engage in political issues and ultimately vote for him. But, if his strategy succeeded in mass participation of citizens, it is due to the fact that he put into use the rhetoric and traits of a social movement, and that he disregarded classical methods of conducting an election campaign. The rhetoric adopted set the goal of managing people's lack of interest in politics, whereas his strategy (grassroot networking) pursued the networking of single citizens and mobilized them for his own benefit. Grassroot networking, according to Adeline Vasquez-Para [104], is defined by a top-down process meant for mobilizing citizens in an individual basis. This mobilization was realized by articulating a political discourse similar in dynamics and intensity to the discourse of political movements: engagement in social change, salvation and vision for a better world.

Christakis, N. & Fowler, J.A [22] report that, if in all the election campaigns that took place in 2008 the web was a key element of political strategists, Barack Obama managed to take advantage of the power of electronic social networks and social communication media, while lacking a strong and solid electoral base. The webpage myBarackObama.com was the central axis of networking of citizens and the number of its users reached almost the 1.5 million people. Virginie Picquet [105] considers that the massive mobilization of citizens became possible thanks to the exhaustive use of the web by the candidate's strategy planners and that this campaign was the first one that did "turn its back" on the traditional promotion media. His team of advisors took advantage of the social media dynamics, created a network of pro-Democrats and used email addresses all over the States. This network was mobilized in view of fundraising for his campaign and managed to turn like-minded citizens into participants in the electoral process, given that the abstention rates until the elections in question were very high in America. It's worth noting the fact that this process saw a great number of citizens taking part for the first time, mostly young people and minorities. It was thanks to this social network, the writer suggests, that the "war of the image" was won. Blogs reproduced YouTube videos posted by amateurs, which were then re-transmitted by the rest of the media.

Manuel Castells [78] refers to the fact that Democrats overtly prevailed in the use of electronic social networking, given that 36% of them had their own profile, a figure to be read against a 21% of Republicans and a 28% of independent candidatures. He also thinks that Obama's acceptance by citizens is to be attributed to the possibilities of online interaction offered by social network webpages. Furthermore, 40% of profile owners affiliated to the Democrat party is equivalent to the 10% of the adult national electoral base; all of those people were involved in some kind of political activity, mainly by probing personal friends and politically like-minded acquaintances.

The heavy usage of Internet potential in his electoral campaign led to appropriating possible younger voters (up to 50 years of age), who were more capable in using web tools.

4.6 Summary

The communication process is determined by technology, the characteristics of the communicating entity and the information receiver, cultural reference points, protocols etc. Meanings can be perceived only in the context of social relations within which both information and communication take place. Communication can have either an interpersonal character or a social one. In the past, a message transmitter and a message receiver were deemed as its sole factors. Today the web gives to independent or alternative candidates the chance to address the public and elaborate their own political views. Given the fact that they usually lack opportunities to gain access to mass media and financially support the

much elevated costs of a contemporary election campaign, the web presents itself as an almost ideal medium for a low budget reaching out to the electoral body. Politicians use social network webpages as a medium of diffusing messages and information, accessing interests and needs of voters, fundraising, and creating support networks. Therefore the use of the web is meant to differentiate the methods of strategic political communication set out by candidates and their strategists during election campaigns. The US and European use of the web to these ends confirm the future trend of electronic social networks influencing political communication and the resulting effects.

Admittedly among the most powerful Web 2.0 applications, identified in the communication category, are blogs. Blogs, in particular when they are so heavily used for political communication and argument generation, constitute a valuable field for conducting research on argument extraction through content mining. The content exposed in popular blogs, in particular those specializing in public deliberation on politics and policy formulation, lends naturally itself to the process developed in NOMAD: the project implements an ontology-based conceptualization of statements over a domain of discourse, of arguments set in defense or support of statements or in the attempt to `destroy' them and the linguistic realisation of these arguments. NOMAD focuses on policy making, yet the approach will be general enough to be exploited in other interesting arenas, such as citizen journalism.

Credibility seems to be the main reason why political blogs have grown to dominance. People believe that political blogs are more accurate than traditional news media. While "blog readers still get most of their news from regular news sources, they are concerned that they are not getting the whole side of the story here. They suspect habitual bias in the traditional news content". It is evident that political blogs constitute a powerful media tool used by millions of people all over the world. For this reason blogs, micro-blogs and forums are the main source of data for NOMAD (opinions expressed, arguments made to support opinions). NOMAD will build upon technological advances in knowledge representation and information extraction to index not only opinions and their polarity from forums, blogs and micro-blogs, but also extract the arguments made to support such opinions. In the next chapter, we will focus on and analyze the state of the political blogosphere in the three countries where the NOMAD pilots will be executed, namely UK, Greece and Austria.

5. NOMAD WEB 2.0 SOURCES

5.1 Introduction

The purpose of this chapter is to define an initial list of data sources to provide input in the NOMAD crawling machine that will be designed in a later stage of the project. The list includes a number of Web 2.0 platforms that will be crawled by the NOMAD tools in order to provide content for the services that the final system will offer. The selection of the input streams was targeted on the countries of the pilot cases and consequently the three languages supported. Therefore, initially a presentation on the Internet landscape of Greece, Austria and United Kingdom is provided. Then based on the insights of the previous analysis a methodology for the identification of data sources is developed. Adopting the aforementioned methodology the catalogues of Web sources for each country are constructed, illustrating indicative examples of them. Finally in the last section an analysis on the selected Web platforms characteristics for each country individually is performed, including user demographics and statistics.

5.2 Internet Landscape in Greece

5.2.1 Internet Usage

In the past 10 years Greece has witnessed a major increase regarding the number of Internet users. Citizens use the Web for a variety of reasons. From searching for any kind of information, to online purchasing and from logging in their personal social network accounts to paying their utilities bills online; it is evident that Internet has become an integral part of the Greeks' everyday life.

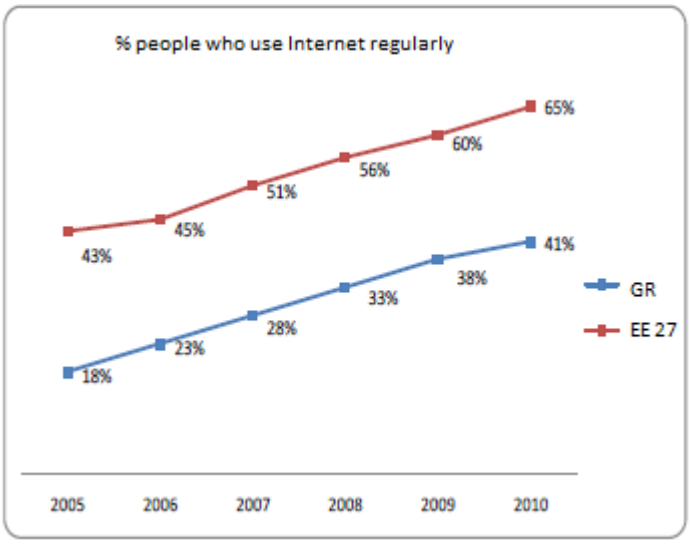


Figure 5-1: Percentage of Greek people who use Internet regularly [106]

According to a research [106] conducted by the Greek Observatory for Digital Greece , the number of active Internet users in Greece has increased by more than 20 percent. More specifically, the number of people who were using the Internet in 2005 was 18 percent. Over a 5 year span this number has increased dramatically and in 2010 active Internet users were accounted for the 41 percent of the Greek population. However this number is a lot smaller compared to the total of people who use the Internet in the European Union (65 percent).

In Greece internet usage varies by gender. Men seem to use Internet more regularly (at least once a week) than women do [106]. According to Table 1, forty-six percent of the men that reside in Greece used the Web at least once a week in 2010, as opposed to 36 percent of women.

- The age group that uses internet more heavily is that of 16 to 24 year olds followed by the 25 to 54 demographic for both genders.

- In the young people of age 16-24, the majority of both men and women use the internet (81 and 80 percent respectively) as opposed to 2008 where there was a 10 percent difference between them.
- In 25-54 year olds men lead women in internet usage by 10 percent and in 55-74 scale the percent of regular users are significantly low.

Education is another important factor that forms the internet usage landscape in Greece. As stated in the same research the usage of internet by one is depended on his or hers educational background. In Figure 5-2 we see that men are represented by bigger percentages in all forms of education than women are. However their lead is relatively small as far as low (primary education graduates) and high (secondary education graduates) educational levels are concerned, both in Europe and Greece. Also, it is worth mentioning that, for men and women, the deviation between Greece and Europe decreases as the educational level increases.

Table 5-1: Regular internet users per gender and age (% population, 2008-10) [106]

	Women			Men		
	2008	2009	2010	2008	2009	2010
16-24	67	74	80	76	78	81
25-54	32	40	44	43	50	53
55-74	4	4	5	9	10	13
Total	28	33	36	38	43	46

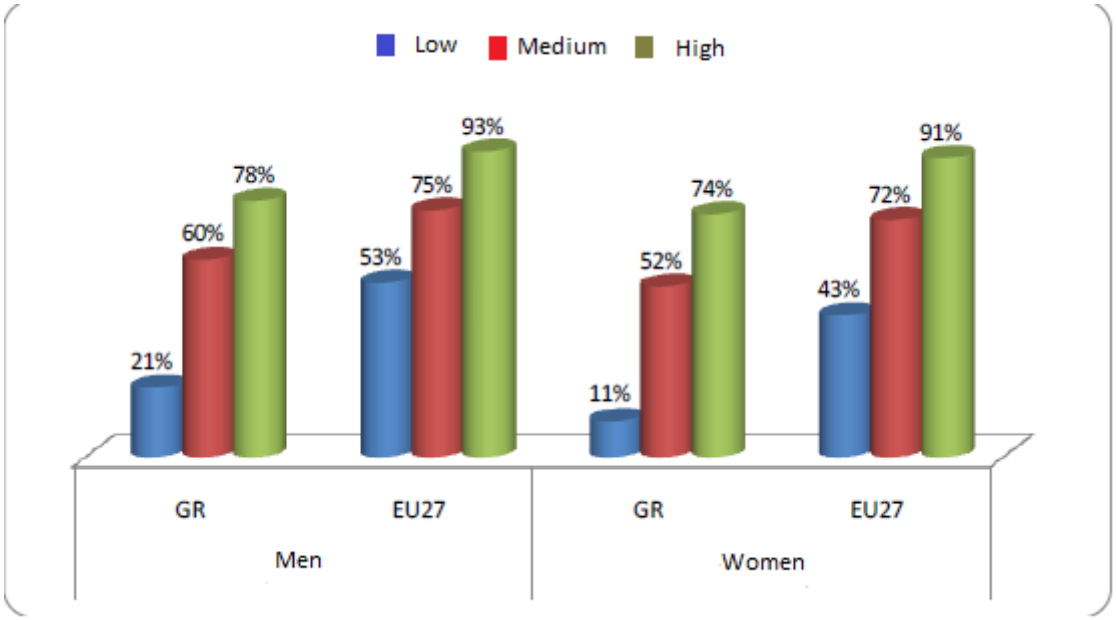


Figure 5-2: Use of Internet per gender and educational level (2010) [106]

5.2.2 Internet Activities

The majority of Greek citizens [106] use the Web for menial tasks such as searching for information on products and services or sending/receiving emails (81 percent and 73 percent, respectively). However according to the research for Internet usage in Europe [107]; Greeks also use the Web in the context of e-government. During 2010 and 2011, more than 40 percent of Greek internet users have interacted with public authorities by obtaining information from websites

and more than 20 percent have downloaded/submitted online forms, such as sending tax declarations online. As it becomes evident from Figure 5-3 all these indexes are very close to the EU27 median.

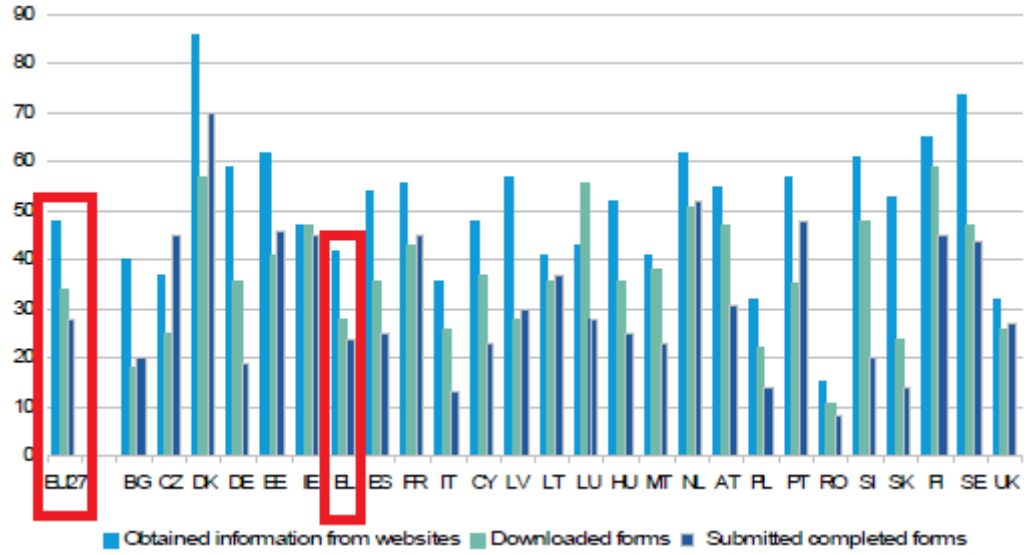


Figure 5-3: Internet users who interact with public authorities in the last 12 months, 2011. [107]

5.2.3 Internet Connectivity

In broader terms, 50 percent of Greek households have an Internet connection as opposed to 73 percent in European Union in 2011 [107]. Nevertheless, as it is apparent from the table that follows there has been a major increase in this index too. In 2007 only one quarter of the Greek population had an Internet connection in their house and in four years this number has doubled.

The increase in Greek household Internet connectivity is vastly more if broadband Internet connections are taken into consideration [107]. The number of the broadband connections was accounted for just the 7 percent of the Greek population in 2007. This number was far more less than the European baseline at the time (42 percent). Nevertheless, in 2011 the broadband connections in Greece quickly rocketed penetrating 45 percent of the Greek population- a 38 percent increase from 2007.

Table 5-2: Percentage of Internet access and broadband Internet connections in households [107]

	Internet connections in households			Broadband internet connections		
	2007	2009	2011	2007	2009	2011
EU-27	54	65	73	42	56	68
BE	60	67	77	56	63	74
BG	19	30	45	15	26	40
CZ	35	54	67	28	49	63
DK	78	83	90	70	76	84
DE	71	79	83	50	65	78
EE	53	63	71	48	62	66
IE	57	67	78	31	54	65
EL	25	38	50	7	33	45
ES	45	54	64	39	51	62
FR	49	63	76	43	57	70
IT	43	53	62	25	39	52
CY	39	53	57	20	47	56
LV	51	58	64	32	50	59
LT	44	60	62	34	50	57
LU	75	87	91	58	71	68
HU	38	55	65	33	51	61
MT	54	64	75	44	63	75
NL	83	90	94	74	77	83
AT	60	70	75	46	58	72
PL	41	59	67	30	51	61
PT	40	48	58	30	46	57
RO	22	38	47	8	24	31
SI	58	64	73	44	56	67
SK	46	62	71	27	42	55
FI	69	78	84	63	74	81
SE	79	86	91	67	79	86
UK[1]	67	77	85	57	69	83
IS	84	90	93	76	87	93
NO	78	86	92	67	78	80
HR	41	50	61	23	39	56
MK	:	42	:	:	34	:
TR	20	30	43	17	26	39
RS	26	37	:	7	23	:

[1]UK data for 2009 and 2011 include estimates for Northern Ireland

5.2.4 Social Media Presence

The emergence of social networks at the beginning of the decade did not leave Greece unaffected. From Facebook to Twitter and from Blogger to LinkedIn Greeks own multiple social network accounts. According to [108], in a research conducted in a randomly selected body of 1022 Greek citizens; 72 percent owned a Facebook account followed by 36 percent who own a You Tube account and 18 percent who have a Twitter account (Figure 5-4).

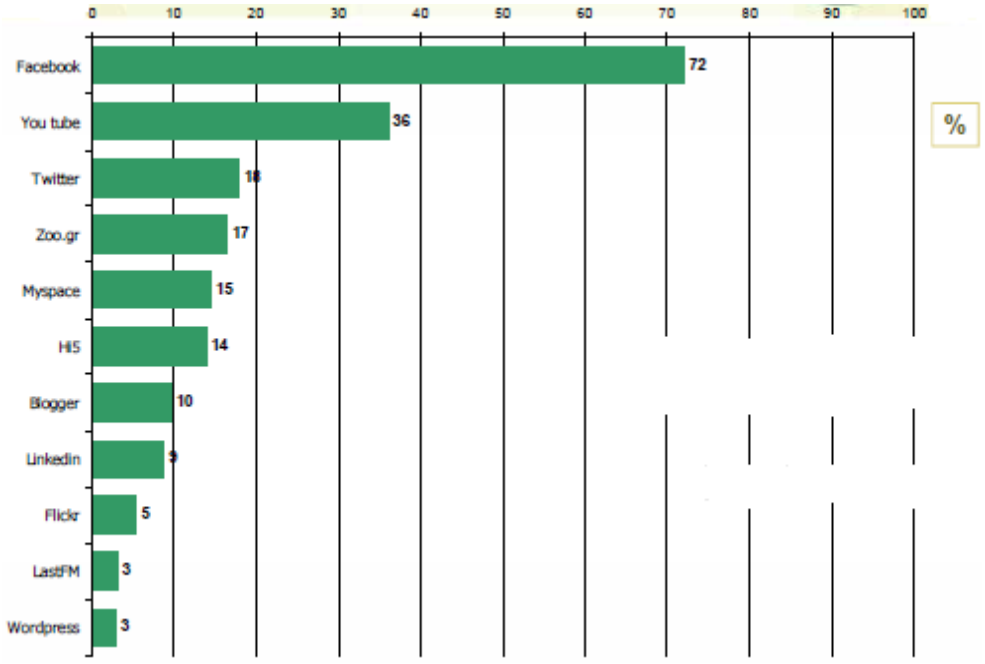


Figure 5-4: Social networking sites where they own accounts [108]

Greek users do not have social media accounts just for the sake of it. They actively use them by updating their status, sharing messages, uploading videos et cetera. The majority of them logs in their social media accounts every day or at least once a week. Fewer people do it monthly and only a minority of people signs in less than once a month (Figure 5-5). On the other hand, many people questioned stated that they do not use their accounts anymore. This is more striking with the people who have Hi5, zoo.gr (a Greek web gaming portal) and MySpace. The advent of more popular websites, such as Facebook and twitter, have rendered their services rather outdated and this is why a large amount of people do not use these accounts anymore.

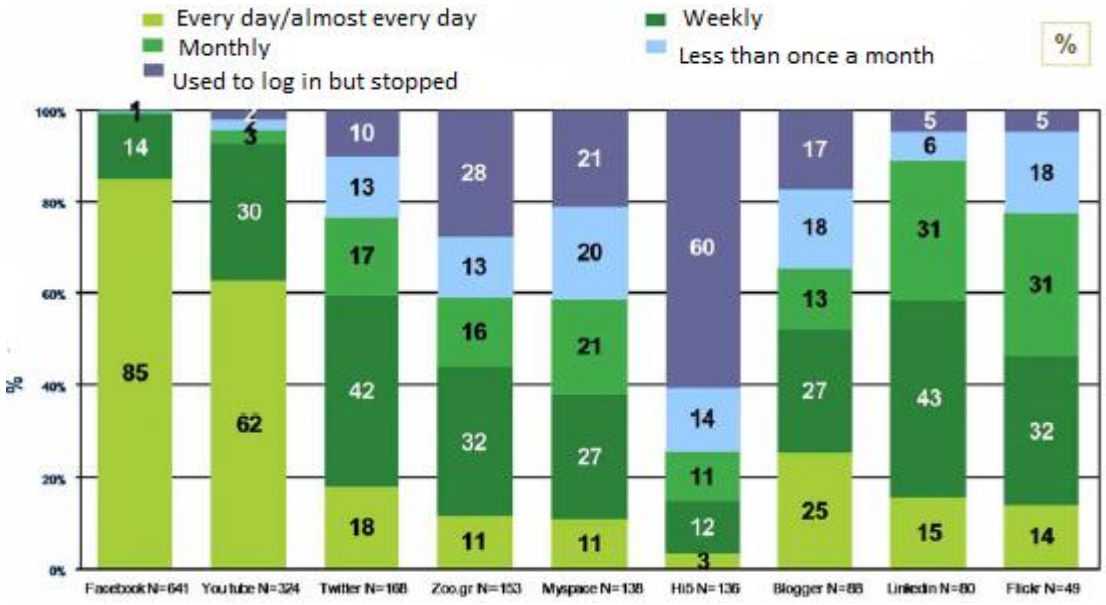


Figure 5-5: Social networking sites where Greeks own accounts – Usage Percentages [108]

For the Greek citizens, social media and politics are intertwined. In the same research 63 percent of people believe that social media has changed drastically the way people protest (Figure 5-6). At this point we have to consider that this

research took place in December 2010, and since then the Greek political landscape has changed with the economic recession reaching its peak. It is now more obvious than ever that the aforementioned percentage stands to reason. Almost, every form of protest is launched and coordinated via a social media platform. A current example of the way social networks have transformed the way people protest is the Greek indignados. The Greek indignados are ordinary people who use their social media accounts to communicate with each other and set up peaceful demonstrations all over Greece.

In the same figure, one can see that 61 percent of the citizens questioned assert that social networks will soon be having a bigger role in forming political opinions than traditional media will. On the other hand, only 26 percent of people hold that social media increase government transparency while 45 percent think that social networking sites do not count for an honest interaction between citizens and politicians.

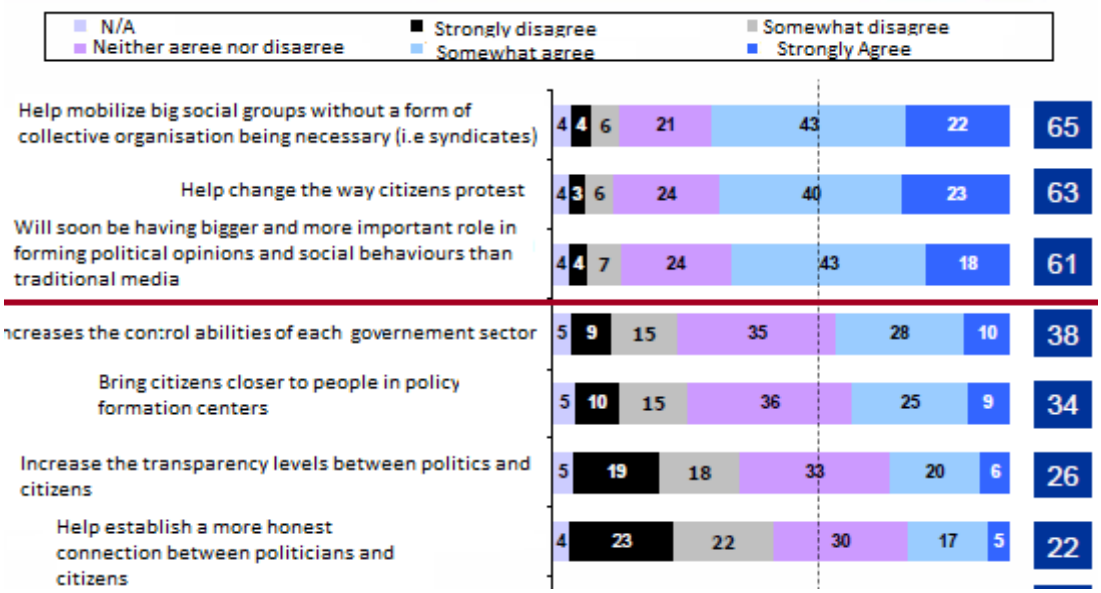


Figure 5-6: Social Media. Politics and Activism [108]

Lastly, it is rather useful to delineate the Greek social media landscape from a neutral standpoint. The internet users who interact with blogs have been put into 3 categories [108]:

- Creators: People, who start, create and manage blogs. They upload audiovisual files (i.e. Podcast).
- Actives: They post comments on blogs/sites, take part in forums and update their social networking profiles.
- Spectators: They visit/read blogs and their friends' social media profiles. They download files, such as Podcasts, and subscribe to RSS feeds.

As outlined by Figure 5-7, in 2008 the Actives were accounted for 57 percent of the people questioned. In 2010 there was a 16 percent increase and the figure soared to 73 percent. In the meantime the Spectators and the generally inactive citizens' percentages steeply declined. Therefore, we witness that people shift from being passive visitors of a social media platform to being actively involved with it.

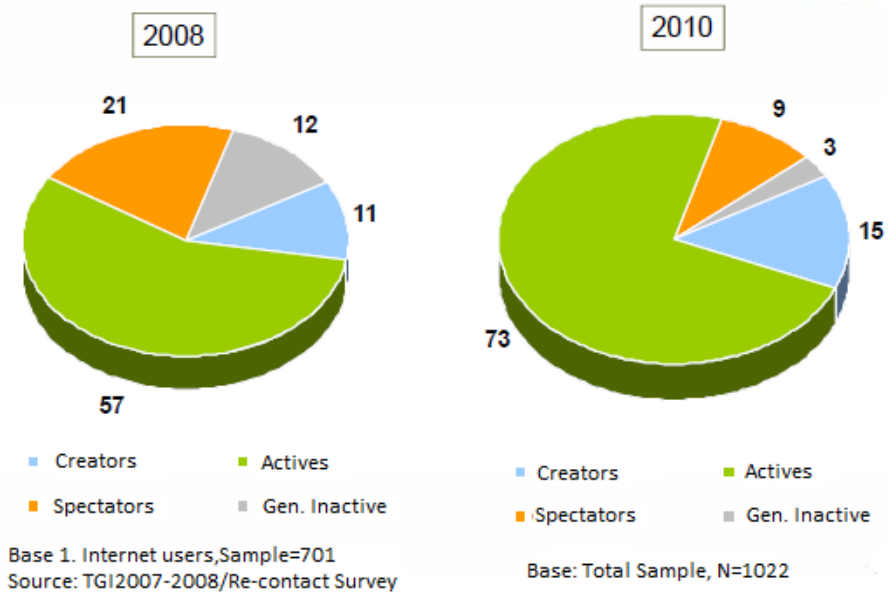


Figure 5-7: Graphical presentation of the three user social media groups [108]

Taking demographic indexes into account (gender, age, location and occupation), important conclusions are reached (Table 5-3):

- Greek male citizens tend to be creators (65.3 percent) whereas women tend to be spectators (50 percent).
- Young people are actively involved in creation and active use of social media (38 and 39.4 percent respectively) and only a minority of them is inactive. However, in ages 25-44 the situation is overturned. In that scale, the vast majority of people are just spectators followed by the generally inactive people (57.7 percent).
- Location-wise, Athens has the majority of citizens questioned involved in social media. It is worth noting though, that people who do not reside neither in Athens nor in Salonika fall mostly into the Spectators group (35.3 percent).
- Most of the employees are generally inactive (73.2 percent). On the other hand, students have a clearly more active social media presence. The majority of them (31.2 percent) are actives followed by creators. It is a foregone conclusion that students are more actively engaged with the social media.

Table 5-3: The three user social media groups. Demographics vs. Segments. [108]

%	Total	SEGMENTS			
		Creators	Actives	Spectators	Gen.Inact.
N=	1022	149	749	92	32
GENDER					
MALE	57,6	65,3	57,1	50	55,6
FEMALE	42,4	34,7	42,9	50	44,4
AGE					
15-24	36,4	38	39,4	18	9,9
25-44	49,7	47,6	48,1	63,8	57,7
45+	13,6	14,4	12,1	18,2	32,4
LOCATION					
ATHENS	52,9	53	52,4	54,6	57,2
SALONICA	17,3	16,8	18,3	10,2	16,4
REST OF GR	29,8	30,2	29,2	35,3	26,3
OCCUPATION					
EMPLOYED	55,7	65	51,8	66	73,2
NON-EMPLOYED	16,3	12,4	16,3	19	26,8
STUDENTS	27,3	21,4	31,2	14,3	0

5.2.5 Blogs

- **Owner Perspective**

Blogs appear to play an increasingly important role as a forum of public debate. In Greece where the ratio of Internet users is relatively small, there is nonetheless an expanding portion of bloggers who comment regularly and have the power under certain circumstances to trigger political movements [109].

According to [110] Greek blogging started to boom over the period of 2002-2003. The average Greek blogger is around 30, with college education. She/he uses DSL connection. Blogs receive less than 100 visits daily and they discuss multiple subjects. The majority of bloggers are male (64 percent). The main subjects involve around personal interests (58 percent) and arts/culture (55 percent). Politics is a less common subject for Greek bloggers (~ 40 percent) [111].

The number of people who have started their own blog has significantly improved over time [108]. In 2008 only a 14 percent of people had a blog while an enormous 86 percent have never owned one. Nonetheless, two years later there has been a 16 percent increase in people who have a blog while the percentage of those who do not has gradually declined to 69 percent (Figure 5-8).

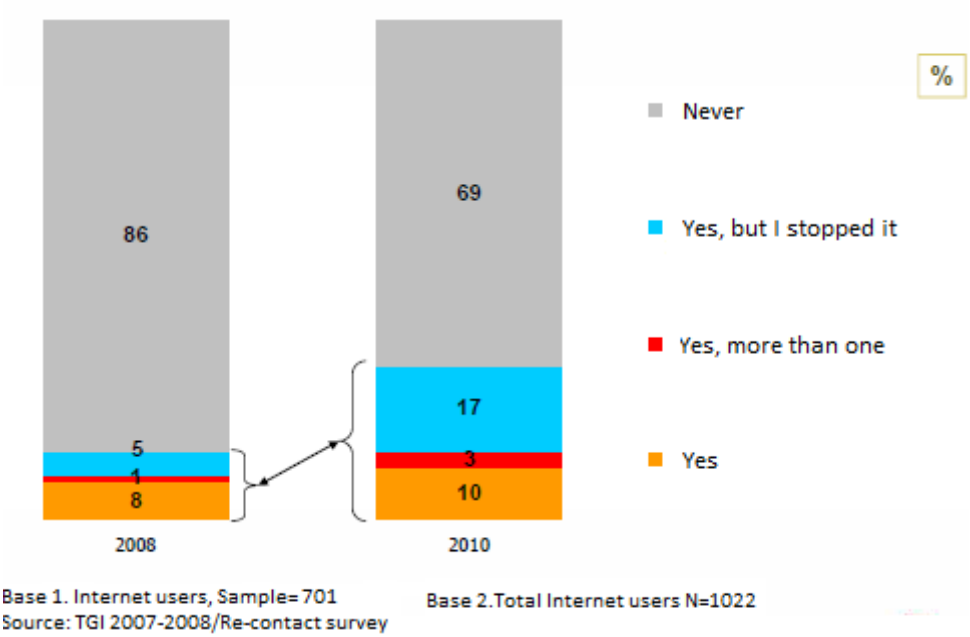


Figure 5-8: Percentages of Greek people, who have started, created, published, and managed their own blog [108]

- **Blogs- User Perspective**

According to the same research, Greek citizens have always been avid blog users. In 2008, 63 percent visited a blog at least once a month and in 2010 this number increased sharply to 95 percent (Figure 5-9). Only a minor portion, 5 percent, does not read any blogs at all. The majority of blogs visited are news blogs and blogs concerning matters of everyday life, with political blogs coming third (45 percent). Despite this fact, the majority of Greeks post comments on political blogs rather than on news blogs (Figure 5-10). This fact designates that many Greek people prefer blogs to post their opinions and interact with others via their comments.

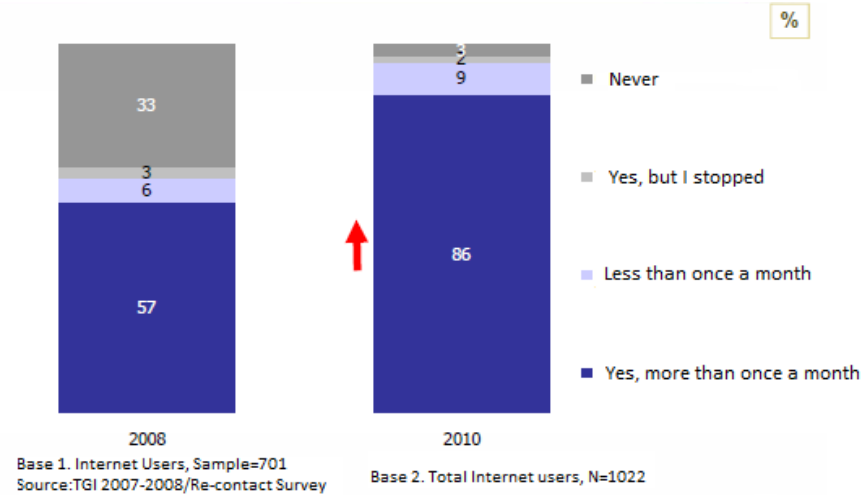


Figure 5-9: Percentages of Greek who visit/read blogs [108]

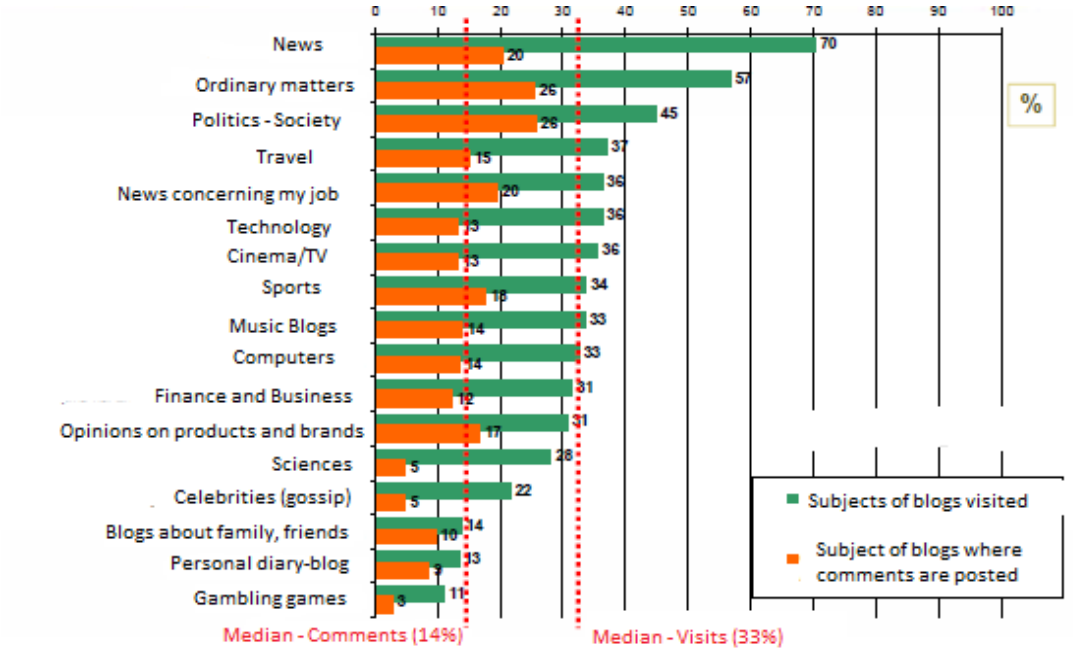


Figure 5-10: Subjects of blogs where users mostly visit/post comments [108]

5.3 Internet Landscape in Austria

5.3.1 Internet Usage

For the Austrian user, the Internet has become an integral part of their life. The primary reasons Austrians use the Internet involve, but are not limited to, activities such as online banking, online shopping and administrative procedures. According to a survey conducted by GFK in the Austrian population 14 years and older, no other medium has experienced such a dynamic development in such a short period of time, neither in Austria nor anywhere else in the world. The extreme growth at the beginning of the 2000's was followed by a lower but continuous increase [112]. Almost all Austrian citizens use the Internet rendering it universal medium of the country.

According to the same research, 79 percent of Austrians are active Internet users (Figure 5-11). One of the highest percentages in European Union, Internet usage in Austria surpasses by far the European median which is approximately 65 percent [107].

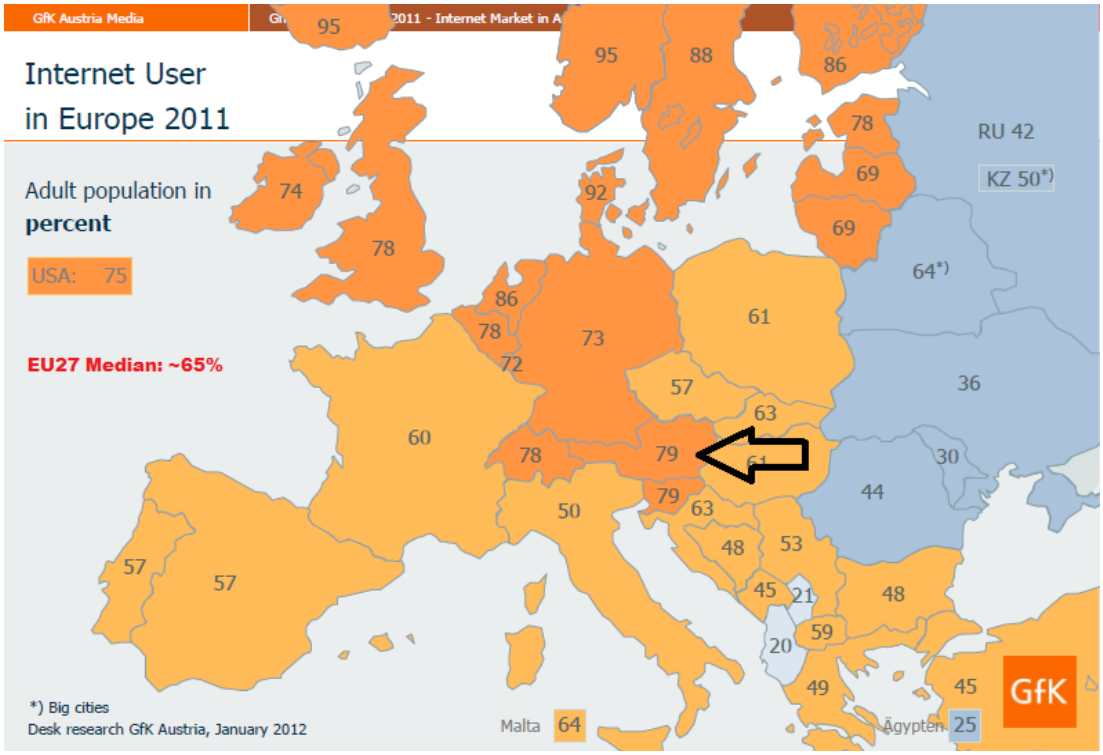


Figure 5-11: Austrian Internet User in Europe 2011 [112]

It is useful to examine how the Austrian Internet landscape has evolved over the years. Figure 5-12 shows the development of the Austrian Internet market from 1996 to 2011.

In 2001 only 47 percent of the Austrian population used the Web at least occasionally. Over a 10 year period this number increased dramatically and active Internet users were accounted for the 79 percent of the Austrian population. In numerical figures, this means that 5.6 million persons out of a total of 7.1 million were actively using the Internet in 2011. Another useful conclusion that can be drawn by the following graph is the ratio of Internet users to Internet access.

If we take into consideration the percentage of Internet access, alongside the percentage of Internet users for each year we see that the ratio is approaching 1. For example, in 2000 this ratio is 40/46 which yields approximately 0.945. Practically this means that given the people who had Internet access almost all of them used it, even though at the early stages Internet was not as useful as it is today [112].

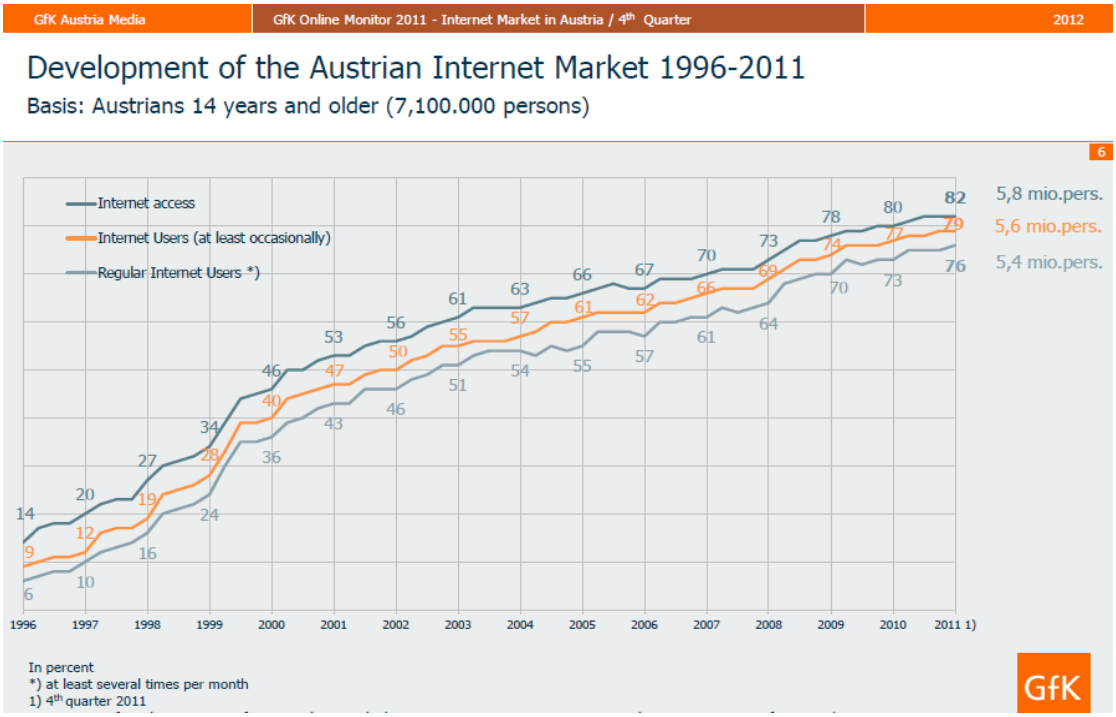


Figure 5-12: Development of the Austrian Internet Market 1996-2011 [112]

Depending on gender, Austrians make use of the Internet on a different basis. Men seem to use Internet more regularly. According to Figure 5-13, 83 percent of Austrian men used the Web in 2011, as opposed to 75 percent of women. Importance should be paid in the increase of Internet usage from 2000 to 2011. Therefore, there was a 66 increase in percent in the use of Internet by men compared to 2000 and an enormous 142 percent increase in women. This reinforces the fact that Austrian women took up on Internet as years went by.

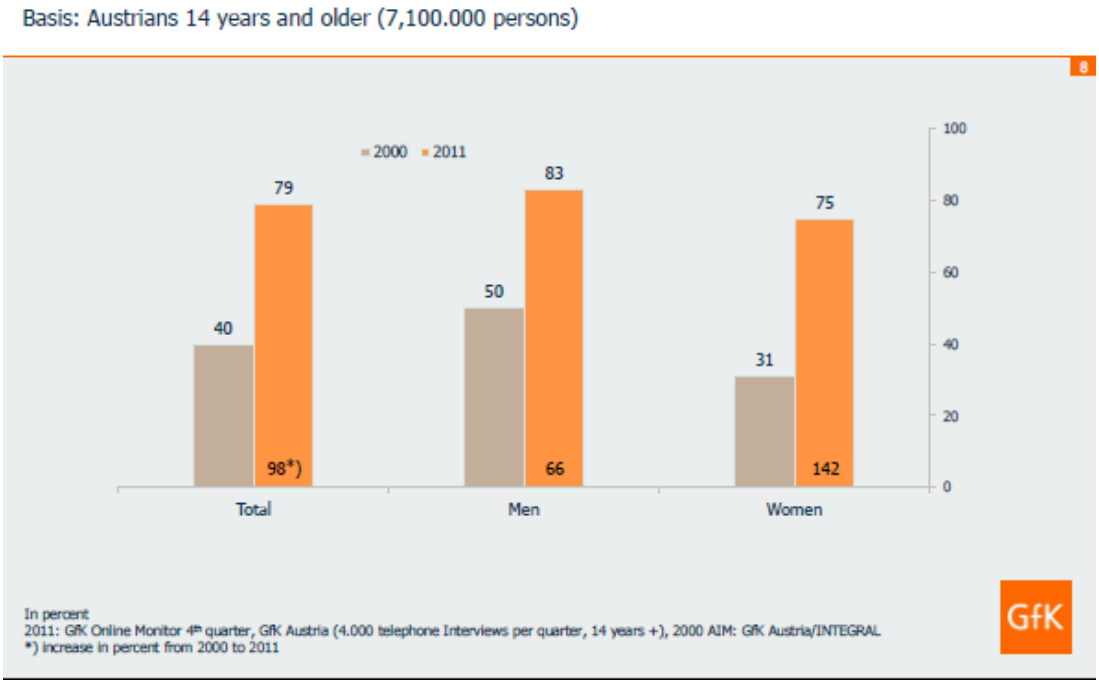


Figure 5-13: Total Internet Use by sex, Austria 2000 vs. 2011 [112]

Finally, in the last part of this section two tables with the structure of internet users are presented with regards to age, education and income [112].

- Regarding education the Internet landscape has not changed considerably from 2000. Professional school graduates are more likely to be using the internet, although there has been a downward shift, in usage terms, for high school/university graduates.
- Income wise, it seems that Austrian citizens who earn more than 2.200 Euros are more likely to use the Internet (Table 5-4).
- The age group that uses Internet more heavily is that of 40 to 49 year olds (22 percent) followed closely by the 30 to 39 demographic (19 percent).
- In contrast to the past we see that there has been a shift towards older people being the major core of users. In 2000 the majority of users were of 20 to 29 years old of age whereas now 40 to 49s are the most frequent users. (Table 5-5).

Table 5-4 Structure of Austrian Internet Users 2000 [112]

GfK Austria Media | GfK Online Monitor 2011 - Internet Market in Austria / 4th Quarter | 2012

Structure of Internet Users: 2000 vs. 2011

13

	Total Population	Internet User 4th quarter 2000	Internet User 4th quarter 2011
Education			
Elementary School	23	22	21
Professional School	52	39	48
Highschool/University	25	37	31
HH-Net Income			
Up to € 1.500,--	18	- *)	12
Up to € 2.200,--	21	-	20
Over € 2.200,--	42	-	50
n.a.	18	-	18

In percent, *) no comparable data

GfK

Table 5-5 Structure of Austrian Internet Users 2011 [112]

Age			
14 - 19 years	8	17	13
20 - 29 years	15	29	14
30 - 39 years	16	25	19
40 - 49 years	20	18	22
50 - 59 years	15	9	16
60 - 69 years	13	2*)	10
70 years +	13		5

In percent, *) 2000: "60 years +"

GfK

5.3.2 Internet Activities

Regarding Internet Activities, most Austrian citizens use the Web for everyday tasks such as, online shopping and sending/receiving emails. Among the potential uses, what is stands out though is that Austrians seem to use Internet as a form of interaction with public authorities. According to the research for Internet usage in Europe conducted by Eurostat [107], more than 50 percent of Austrian internet users have interacted with public authorities by obtaining information from websites and more than 40 percent have downloaded/submitted online forms, such as sending tax declarations online. Figure 5-14 sums up the points mentioned here.

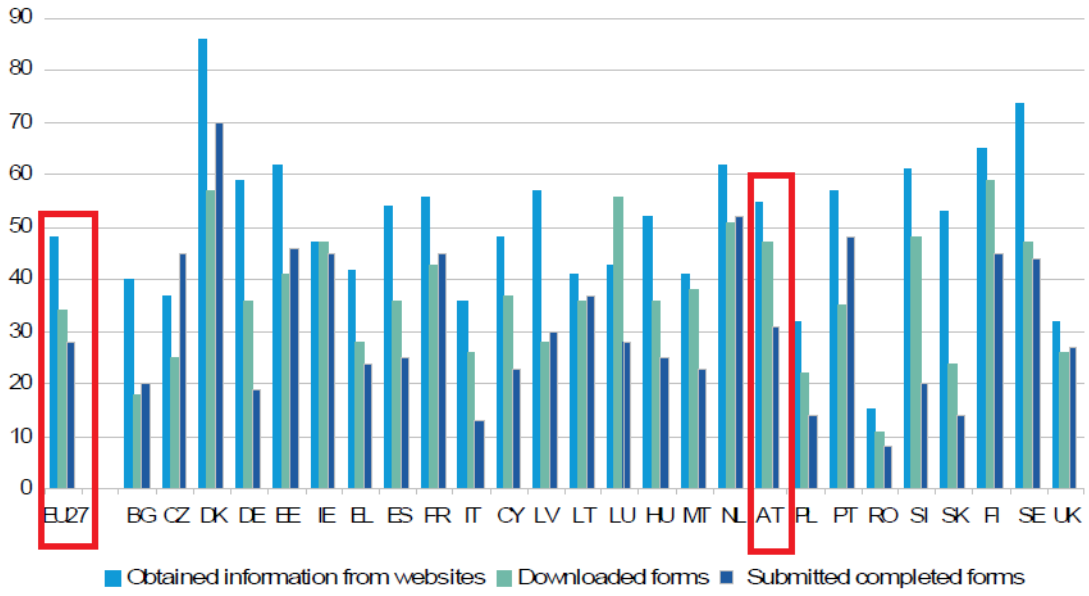


Figure 5-14 Internet users who interact with public authorities in the last 12 months, 2011 [107]

5.3.3 Internet Connectivity

In broader terms, 75 percent of Austrian households have an Internet connection [107]. However, if broadband connections are taken into account this percentage drops slightly, 72 percent, which leads us to believe that many Austrian households have older type of Internet connections (i.e. dial-up). Although it does not deviate much from the European Union median, 73 percent, it is worth noting how this percentage breaks down depending on the type of household.

As seen in Table 5-6 and 5-7, the majority of households which have an active Internet connection is either those where 3 or more adults reside or those with children. On the other hand, households with 2 or fewer adults are less likely to have an Internet connection. Generally, it seems that houses with 3 or more persons are more likely to have an Internet connection whereas houses with 1 or 2 persons residing, are the minority of the sample.

Table 5-6 Households with Internet access 2002 to 2011 [113]

Characteristics	Households[1]) with Internet access									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	in % of all households									
Total	**33.5**	**37.4**	**44.6**	**46.7**	**52.3**	**59.6**	**68.9**	**69.8**	**72.9**	**75.4**
Type of households										
1 adult[2])	24.4	24.5	31.0	32.7	37.6	43.3	55.3	50.7	54.0	58.5
2 adults	26.0	30.2	38.2	38.4	44.6	52.9	60.9	61.6	66.3	69.3
3 and more adults	43.2	52.0	50.8	59.1	68.4	74.1	84.5	86.8	89.5	90.0
1 adult and child(ren)[3])	33.1	32.4	51.0	49.4	48.1	63.3	72.4	83.7	84.3	90.4
2 adults and child(ren)	44.8	51.3	63.3	64.6	69.0	78.3	84.6	91.6	94.1	95.9
3 and more adults and child(ren)	46.8	55.1	61.5	66.2	71.0	77.9	86.7	94.1	96.4	97.4
Number of household members										
1 person	24.4	24.5	31.0	32.7	37.6	43.3	55.3	50.7	54.0	58.5
2 persons	26.1	30.4	38.7	39.5	44.5	53.4	61.6	62.6	66.9	70.3
3 persons	41.2	46.3	52.9	60.7	66.1	74.2	82.2	85.9	89.5	90.3
4 persons	48.0	57.5	64.0	64.7	72.3	79.1	87.0	93.7	95.0	95.0
5 and more persons	45.1	52.0	59.3	62.0	68.9	76.7	86.1	92.8	95.8	98.2

Table 5-7 Percentages of Internet access and broadband Internet connections in Austrian households [107]

	2007	2009	2011	2007	2009	2011
EU-27	**54**	**65**	**73**	**42**	**56**	**68**
BE	60	67	77	56	63	74
BG	19	30	45	15	26	40
CZ	35	54	67	28	49	63
DK	78	83	90	70	76	84
DE	71	79	83	50	65	78
EE	53	63	71	48	62	66
IE	57	67	78	31	54	65
EL	25	38	50	7	33	45
ES	45	54	64	39	51	62
FR	49	63	76	43	57	70
IT	43	53	62	25	39	52
CY	39	53	57	20	47	56
LV	51	58	64	32	50	59
LT	44	60	62	34	50	57
LU	75	87	91	58	71	68
HU	38	55	65	33	51	61
MT	54	64	75	44	63	75
NL	83	90	94	74	77	83
AT	60	70	75	46	58	72
PL	41	59	67	30	51	61
PT	40	48	58	30	46	57
RO	22	38	47	8	24	31
SI	58	64	73	44	56	67
SK	46	62	71	27	42	55
FI	69	78	84	63	74	81

5.3.4 Social Media Presence

Austria seems to be a bit behind in its use of social networking sites (SNS). In the beginning of the last decade, when social media basically emerged, Austrian online social world was underdeveloped. It was not until 2008 when people became more and more involved with SNS like Facebook and Twitter.

According to a recent survey by the website "Online Marketing Trends [114]" (Figure 5-15) in a total audience of 4.7 million people, 86.5 percent of them visit social networks. People of both genders aging from 15 to 44 seem to be using social networks much, whereas people of 55 years old of age and above use them far less (71.5 percent of men and 77.9 percent of women).

On average, Austrian citizens spent 3.9 hours on social networking, although this number varies by age. Overall, younger Austrians (15-24) are more actively involved with online social media; however as age increases the average engagement with social networking drops sharply.

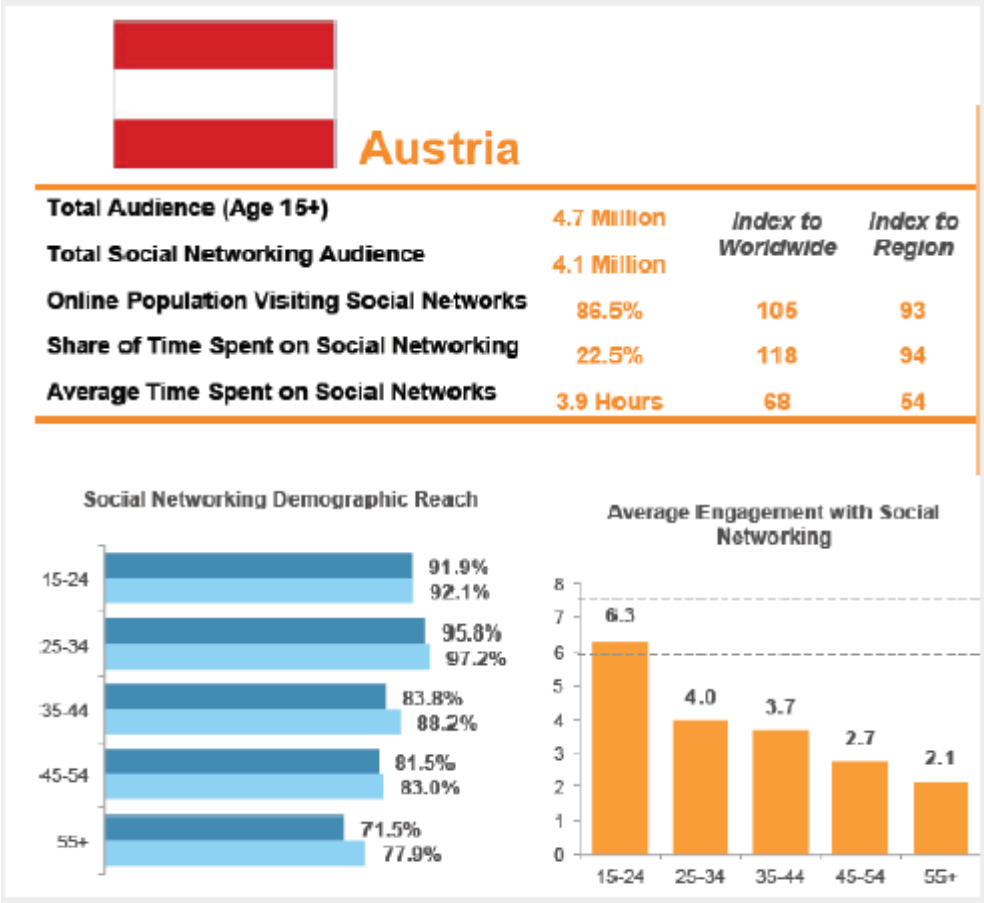


Figure 5-15 Austrians and Social Networking [114]

According to the online social media tool, Social Media Radar Austria [115], approximately 3 million Austrians have a Facebook account in contrast to only 77 thousands who have a Twitter profile. Facebook is mostly used by men (51.24 percent) and people of younger age, 13-29 demographics. Twitter is much less used in Austria with only 37 thousand accounts out of 77 thousands being active. Only 28 thousand Austrians actually Tweet, whereas approximately 8 thousand of them use their Twitter accounts for read-only purposes (Figures 5-16, 5-17).

Figure 5-16: Austrian demographics for Facebook [115]

Figure 5-17:Total Twitter users and accounts analysis in Austria [115]

It is notable that there is an absence of a description of the blogosphere and its stakeholders in Austira in the current section like the one above concerning Greece. The same holds for United Kingdom as well, and is due to the fact that the phenomenon of extensive usage of blogs is only observed in Greece. In particular, blogging is adopted by different type of Greek stakeholders, including journalists, politicians and ordinary citizens as means of news dissemination that meets the correspondence of the general public.This fact will be confirmed later in the examination of the most popular web sources, where blogs are found in a very lower proportion in the two countries rathen than Greece.

5.4 Internet Landscape in the United Kingdom

5.4.1 Internet Usage

According to the research for Internet usage in Europe [107] conducted by Eurostat, citizens of the United Kingdom use the Internet heavily. Figure 5-18 shows that 70 percent of the British use the Web every day or almost every day. That percentage is well above the European median which is approximately 55 percent and places UK, in the top 30 percent of countries as far as Internet usage is concerned.

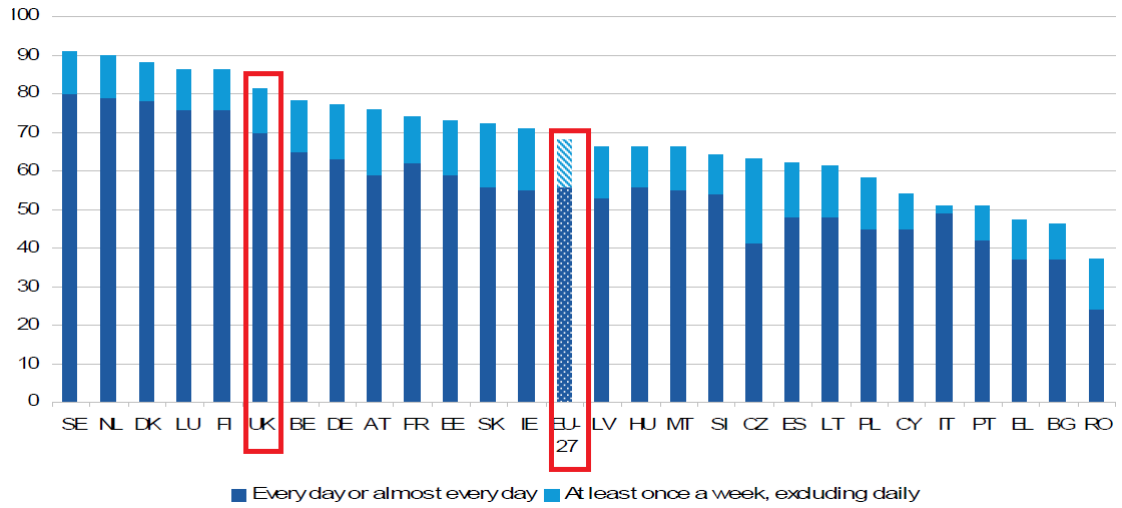


Figure 5-18: Individuals who used the Internet as least once a week, UK, 2011 (%) [107]

The latest marketing report by Ofcom revealed that different demographic criteria shape up the Internet usage landscape in the UK. Age-wise Internet take-up is highest among 25-24 (88 percent) year olds and 35-54 year olds (87 percent) [116]. Citizens aged 65 and above are less likely to have home Internet access. However, over the course of 3 years this percentage gradually rose. Men seem to be the predominant gender when it comes to Internet access with 77 percent of them being able to use the Internet by home while women follow closely behind in Internet access with 76 percent (Figure 5-19).

Another important conclusion that can be drawn by Figure 5-19 is the correlation between the socio-economic group (SEG) one belongs into and Internet access. According to [116] the population is divided into 6 SEGs:

- Higher managerial, administrative, professional citizens (i.e. senior civil servant, surgeon).
- Intermediate managerial, administrative citizens (i.e. bank manager).
- C1-Supervisory, junior managerial citizens (i.e. bank clerk, sales person).
- C2- Skilled manual workers (i.e. plumber).
- Semi-skilled and unskilled manual workers (i.e. messengers).
- Pensioners, unemployed citizens.

Almost every British citizen that falls into one of the first two SEGs has Internet access in his home (90 percent). As we move from the AB SEGs to the rest of the groups, Internet take-up declines sharply reaching 56 percent. Nevertheless, for every one of these SEGs the Internet take up percentage has inclined compared to the years above; an element that partially outlines the Internet penetration in the UK.

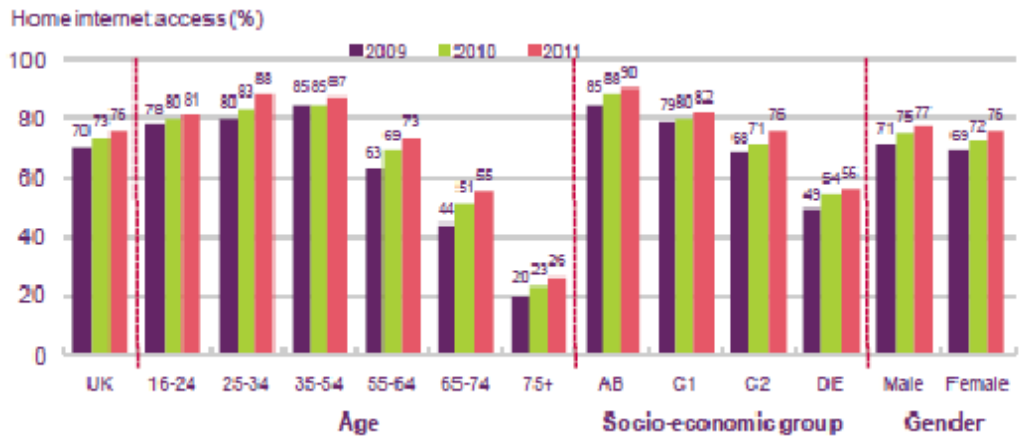
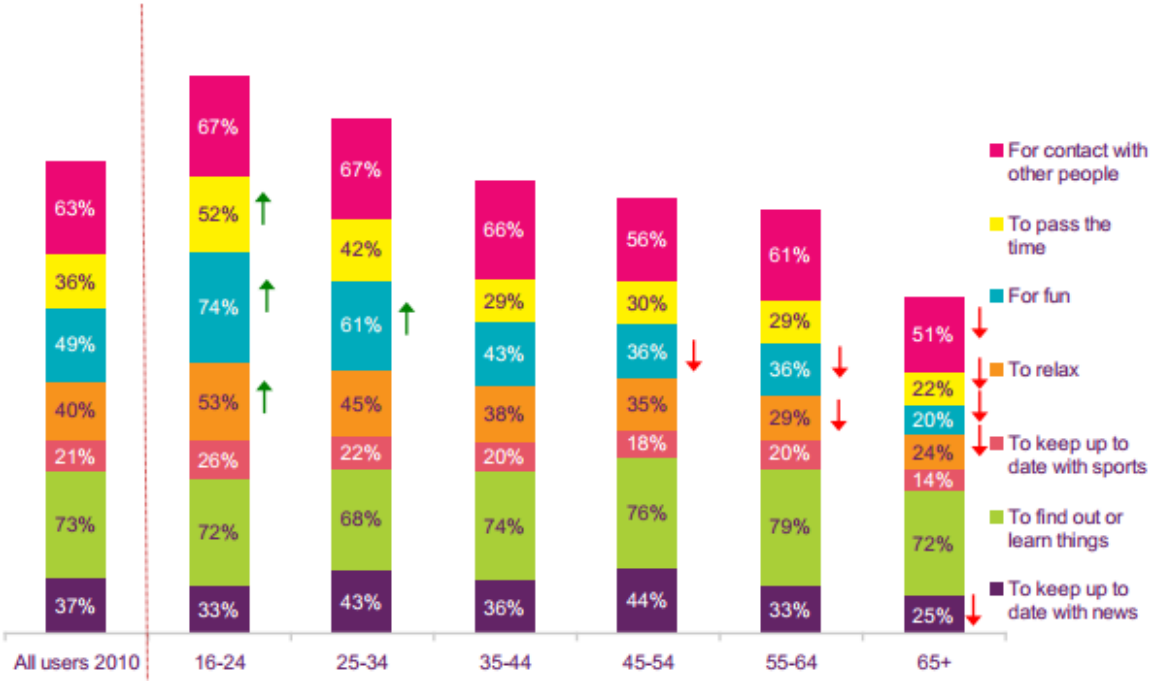


Figure 5-19: Home Internet access, by age, SEG and gender, UK [116]

According to [116] the reasons for using the Internet vary by age. Different age groups use the Internet for a variety of reasons. For example, 74% of 16-24 year olds say they use the internet 'for fun', while the majority of the elder people use the Web to 'find out or learn things' (72 percent of over 65 years old).

Gender seems to play an important role as to what the motives of using the Internet are. Men are more likely to use the Web 'to keep up to date with news' than women are (42 percent compared to 31 percent of women). However, women use the Internet a little more usual (64 percent compared to 62 percent of men) than men in order to contact other people. Figure 5-20 sums up all the aforementioned points.



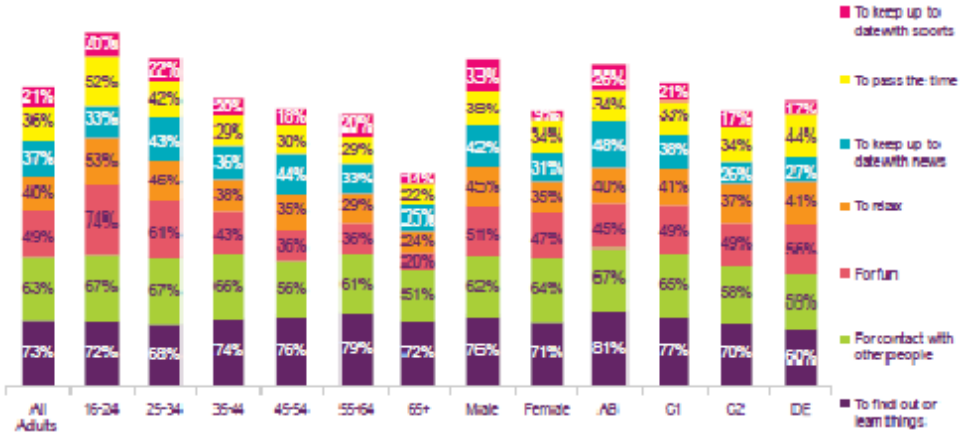


Figure 5-20: Why UK citizens use the Internet SEGs [116]

Finally, another index worth analyzing is the time Britons spend online. The research conducted by Ofcom revealed that "British internet users spend around 50 hours a month online at home – this rises to 65 hours a month, or more than two hours a day, among 25-34 year-old men" [116]. Women follow closely behind with 56 monthly hours online (Figure 5-21).

We should also note that the findings outlined in the following Figure support the data presented above. Figure 5-21 clearly shows that British men, across all the demographic sections, spend more hours online than women do; something that was indirectly concluded from Figure 5-19.

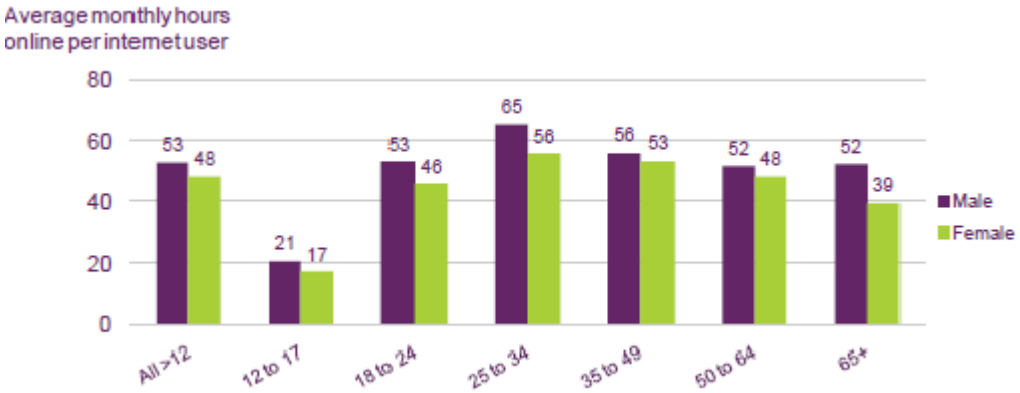


Figure 5-21: Average time spent on the fixed-line internet by age and gender, UK [116]

In addition to British citizens using the Web from a fixed –line connection, many of them favor mobile connections too. According to a survey by Enders Analysis [117], the proportion of British mobile users browsing news and information rises sharply over the years. For example, in 2008 only 3 percent of people would use their mobile phones daily to browse for news, in contrast to 2011 where 23 percent of them would use them (Figure 5-22). The gap increases if we examine mobile use per month, as shown in the left part of the following graph.

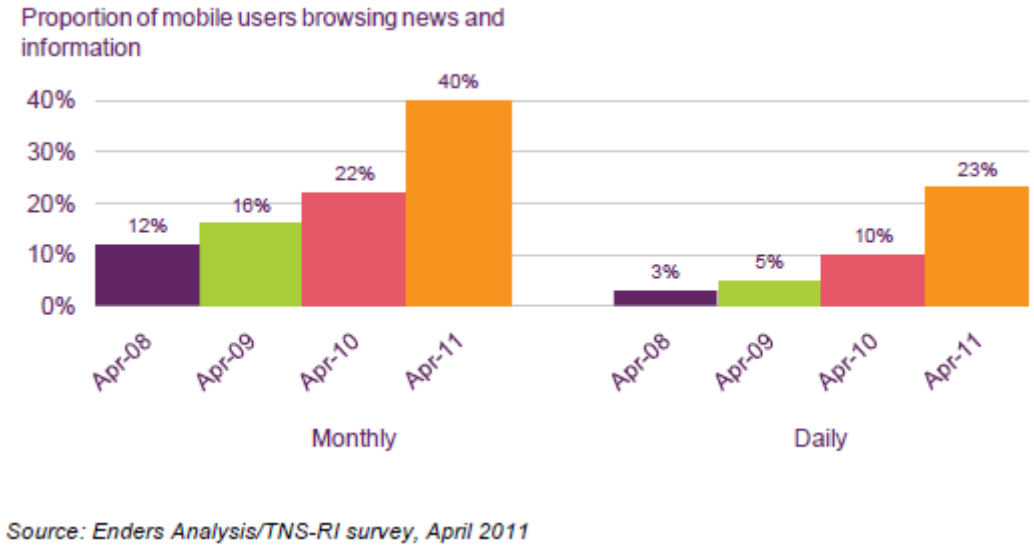


Figure 5-22: Average time spent on the fixed-line internet by age and gender, UK [116]

At this point it would be useful to somewhat analyze the citizens who use internet on their mobile phones. Starting off by age, younger users (15 to 34 years old) tend to take advantage of their mobile phones' internet capabilities. In contrast, it comes as no surprise that people of older age are not that familiar with internet on their phones (13 percent for the 55-64s and 2 percent for the 65+s). It is interesting to point out that over 1 year period, 2010-2012, there has been a sharp 15 percent increase on the 25-34s' percentage. This may happen because in that period the boom of smartphone sales were bigger than ever.

Finally, as far as the two other demographic indexes are concerned the results are somewhat expected. It is worth mentioning, though, that the people who belong to the DE Group seem to be using the internet on their mobiles rather frequent. This proves that the penetration of the smartphones and their ease of use appeal to British citizens from all over the SEG spectrum. Figure 5-23 figure sums up all the aforementioned points.

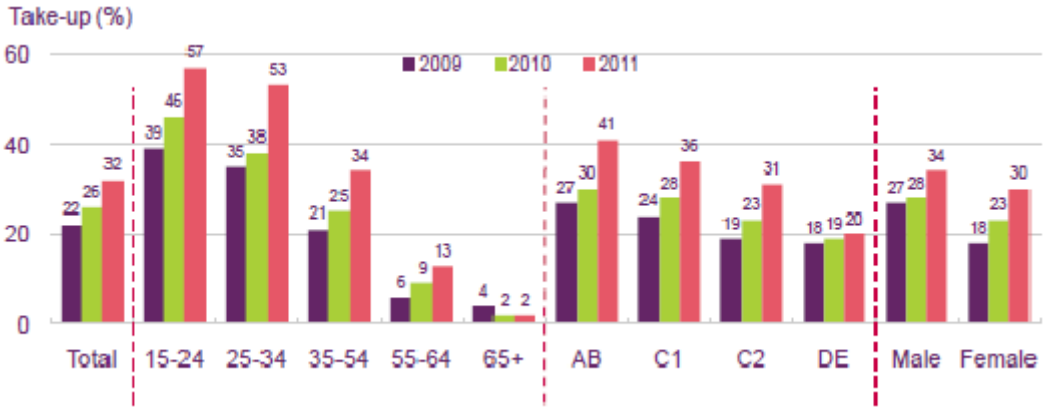


Figure 5-23: Use of internet on mobile phones, UK [116]

To conclude the mobile analysis, a comparative chart is presented (Figure 5-24). In this it is shown a comparative analysis on the use of Internet by Personal Computers (PC) and mobile users. It is proved by the chart that mobiles have not taken over PCs as far as using the internet is concerned. Still PC users are more likely to use all the types of services than mobile users. Whereas on PCs the most commonly used internet services are search engines and email, the most commonly used internet service accessed on mobile phones is social networking, used by 57% of mobile internet users [116].

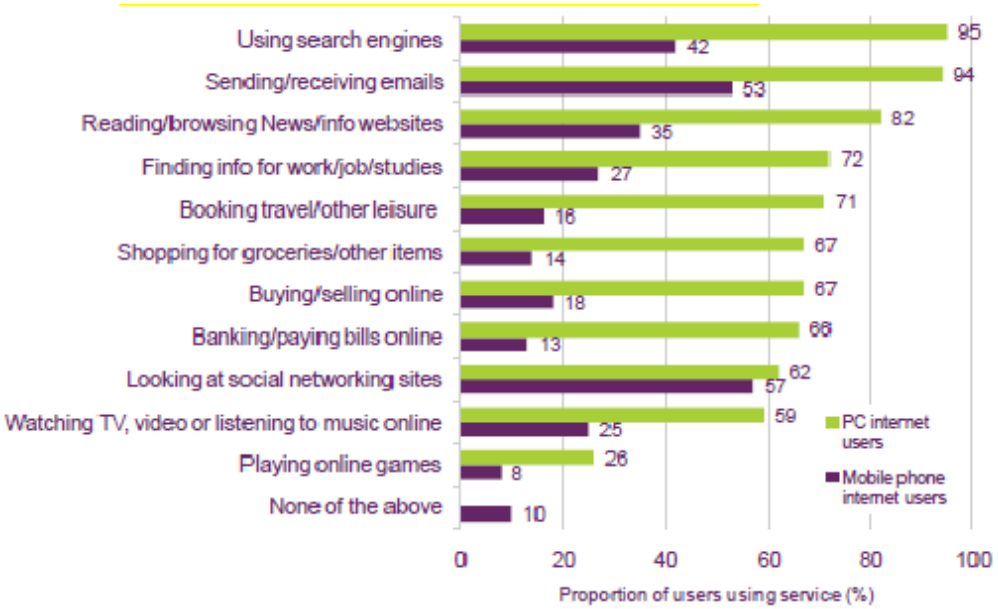


Figure 5-24: Comparative use of Internet by PC and mobile users [116]

5.4.2 Internet Activities

The majority of British citizens use the Internet for a variety of activities including using social networking sites, e-banking and playing online games [116]. As Figure 5-25 shows, the majority of Britons use the Web in order to send or receive emails (89 percent) trailed by general surfing/browsing of sites (88 percent) and purchasing goods or services (72 percent). In the far right of the figure we can see the percentage points of increase for those services. Generally, most of them show a relatively small growth except for 'watching video clips/webcasts' (up five percentage points), 'use of social networking' (up four percentage points), and 'using local council/government websites' (up three percentage points).

Elaborating on the last piece of data, one would expect that British citizens would actively interact with public authorities through the use of government websites. However, in Figure 5-26 is outlined that only (approximately) 30 percent of British internet users have interacted with public authorities by obtaining information from websites and only a 25 percent have downloaded/submitted online forms. Both those indexes are way below the EU27 median.

An example of this phenomenon is present in many websites of the Members of Parliament (MPs) [118]. According to the authors, a reason of this happening is that many of the 'local council/government websites' do not seem to ask for direct feedback from visitors. In their study, they analyzed the websites/blogs/social networking sites of MPs and concluded that very few of these government sites provided tools in order for visitors to give feedback. As they hold "interaction is more likely to be with or within the site, not with the actual MP".

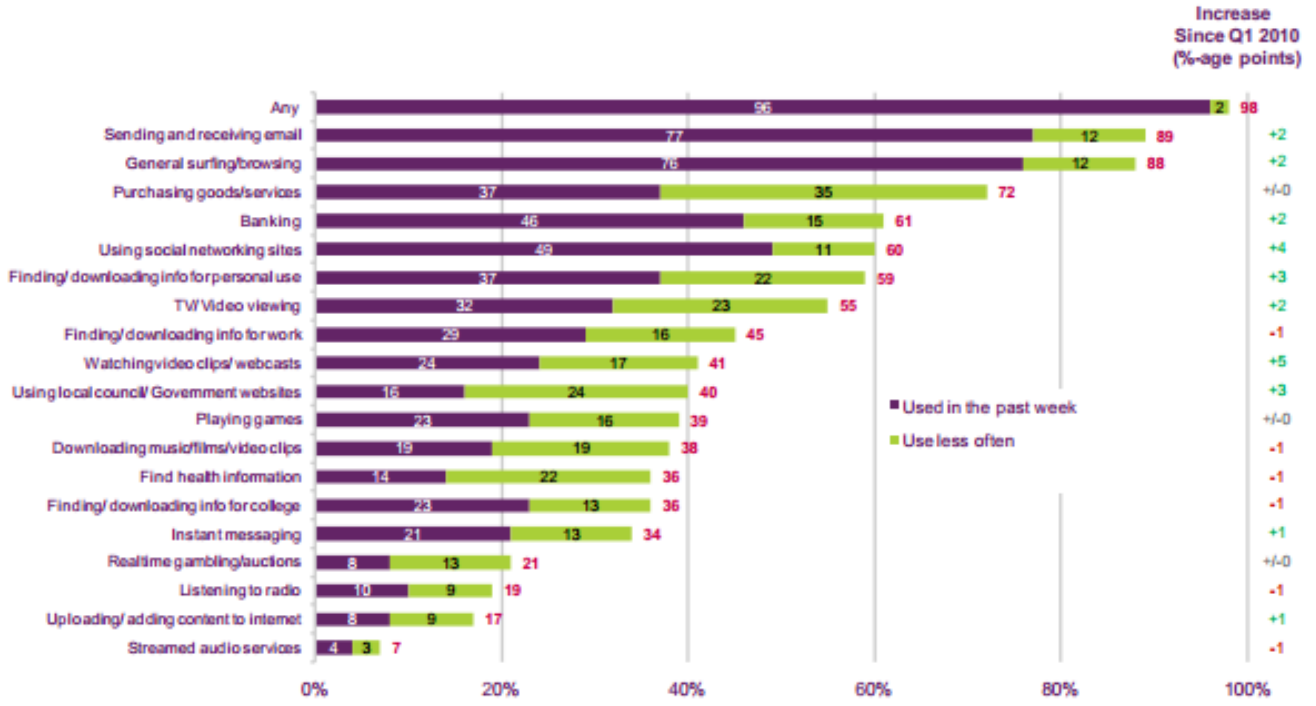


Figure 5-25: Claimed use of the Internet for selected activities, UK [116]

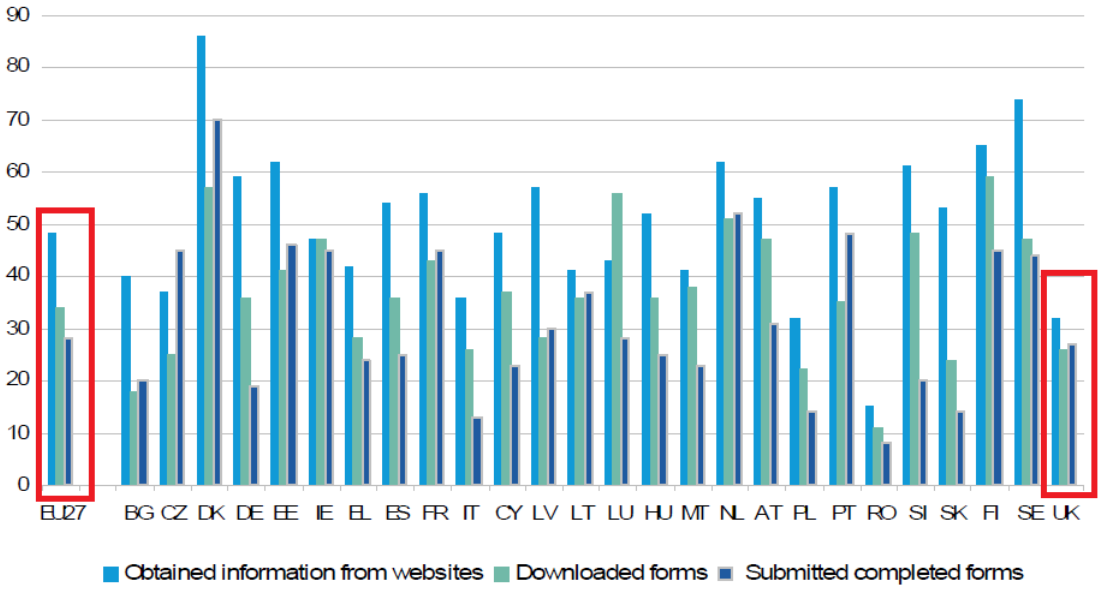


Figure 5-26: UK users who interact with public authorities online in the last 12 months, 2011 [107]

5.4.3 Internet Connectivity

Regarding Internet connectivity in the UK, 85 percent of British households owned an Internet connection in 2011 [107]. The median average of this index for EU27 is 73 percent and therefore it is foregone that UK is above average in this area. In addition, with a closer look at Table 5-27 it is drawn that the UK is one of the few countries in the European Union that surpassed the EU27 median in all 3 years (2007-2009-2011) thus being one of the best-connected nations in Europe.

The indexes of UK household Internet connectivity are somewhat the same if broadband Internet connections are taken into consideration [107]. The number of the broadband connections was very close to that of basic Internet connection (83 percent) for 2011.This number was by far more less than the European baseline at the time (68 percent). Once again,

it is drawn from the table that the UK is one of the few countries in the European Union that surpassed the EU27 median for broadband connectivity in all the years of the survey.

	Internet connections in households			Broadband internet connections		
	2007	2009	2011	2007	2009	2011
EU-27	54	65	73	42	56	68
BE	60	67	77	56	63	74
BG	19	30	45	15	26	40
CZ	35	54	67	28	49	63
DK	78	83	90	70	76	84
DE	71	79	83	60	65	78
EE	53	63	71	48	62	66
IE	57	67	78	31	54	65
EL	25	38	50	7	33	45
ES	45	54	64	39	51	62
FR	49	63	76	43	57	70
IT	43	53	62	25	39	52
CY	39	53	57	20	47	56
LV	51	58	64	32	50	59
LT	44	60	62	34	50	57
LU	75	87	91	58	71	68
HU	38	55	65	33	51	61
MT	54	64	75	44	63	75
NL	83	90	94	74	77	83
AT	60	70	75	46	58	72
PL	41	59	67	30	51	61
PT	40	48	58	30	46	57
RO	22	38	47	8	24	31
SI	58	64	73	44	56	67
SK	46	62	71	27	42	55
FI	69	78	84	63	74	81
SE	79	86	91	67	79	86
UK[1]	67	77	85	57	69	83
IS	94	90	93	76	87	93
NO	78	86	92	67	78	80
HR	41	50	61	23	39	56
MK	:	42	:	:	34	:
TR	20	30	43	17	26	39
RS	26	37	:	7	23	:

[1]UK data for 2009 and 2011 include estimates for Northern Ireland

Figure 5-27: Percentages of Internet UK access and broadband Internet connections in households [107]

5.4.4 Social Media Presence

People in the UK are very active, when it comes to social networking sites (SNS). According to a global social media study by InSites Consulting [119], 73 percent of British Internet users use SNS. Numerically, this percentage translates to 37 million people. However, the UK's social network usage is slightly below the European average (73 percent). Facebook is

the most popular site with 64 percent, followed by a 24 percent of British people who own a Twitter account and a 21 percent who use LinkedIn (Figure 5-28).

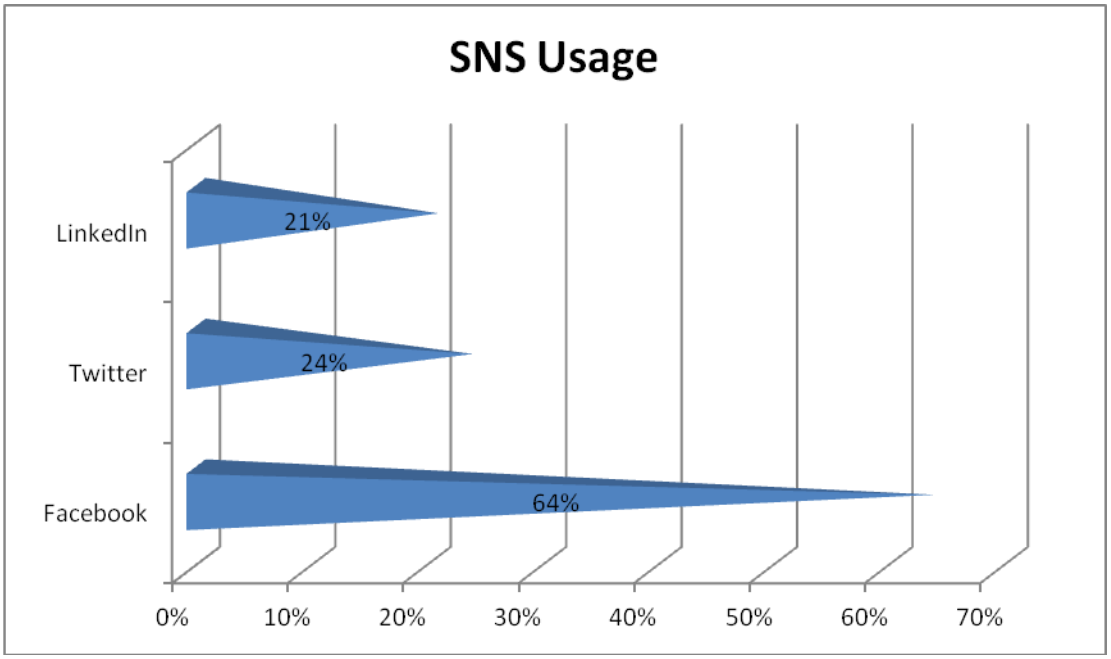


Figure 5-28: Percentage of UK citizens who use Social Networking Sites [119]

Facebook seems to have the most active audience for both UK men and women citizens, according to [120] (Figure 5-29). In numbers, those percentages are in accordance with the findings presented on the previous graph; with Facebook claiming the top spot as the most 'user-active' SNS with approximately 37 millions. YouTube comes in second with 32.1 million active users (although for the purpose of the research people with no YouTube account were included) and Twitter is third with 15.5 million.

A useful finding from this survey is that both men and women seem to use the "next best thing" in online social media - location based SNS. As evident from the following infographic, 17 percent of men and 14 percent of women use foursquare to connect with their peers depending on their current location. Finally, regarding age, Facebook is still the most active SNS but one can see that as age increases among UK citizens the use of social media decreases (Figure 5-29).

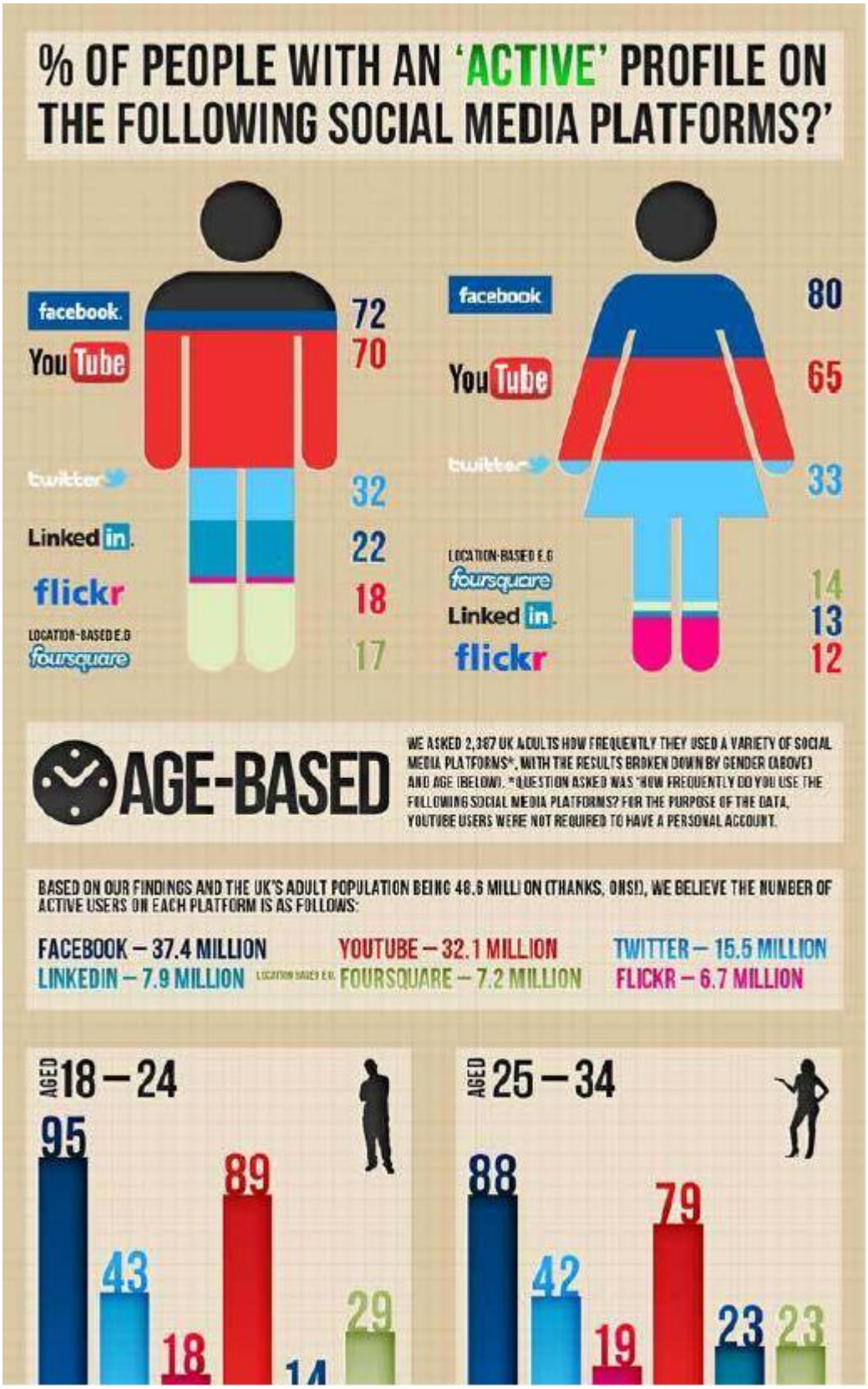


Figure 5-29: Percentages of UK people with an active social media profile [120]

Even though UK citizens are, in general, active users of social networking sites they do not seem to spend much time on them on a regular basis. This means that they may use a SNS heavily for a period of time, but then stay off of it. With the exception of Facebook where UK users clock in, on average (April 2011) 6 hours and 23 minutes on the site; the average use for all the other leading social networking sites was less than half an hour [116].

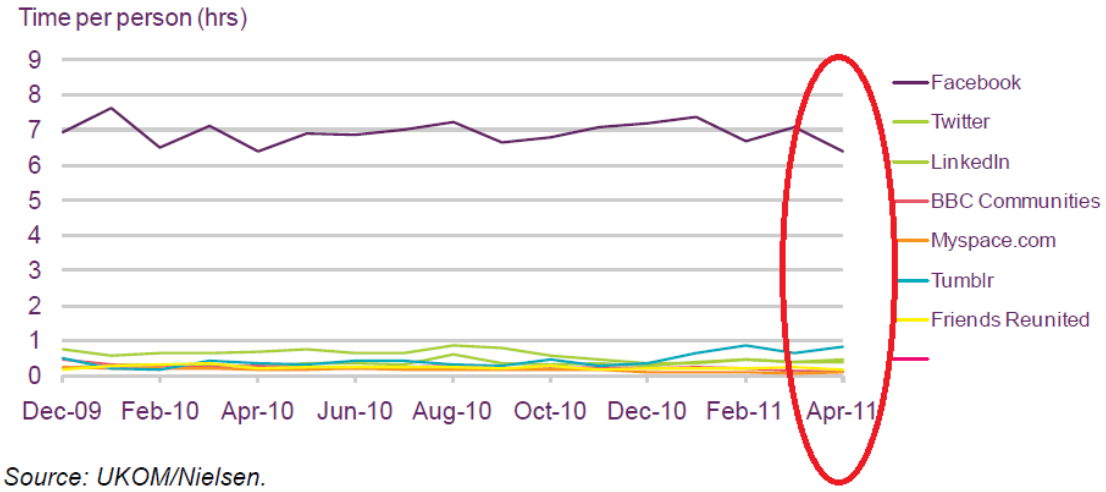


Figure 5-30: Time per user per month spent on selected social networking sites [116]

Nevertheless, despite the fact that UK citizens use most social media platforms sporadically they are avid content creators. The popularity of user-generated content (UCG) in the UK, as a means of communicating, is rather big as the majority of the Internet users have published something on the Web. The most common way in which this is done is through setting up a social networking page or profile, which 54% of UK users surveyed in 2010, said they had done [116]. By taking a look at the chart below two important results stand out.

First of all, over a period of 3 years there has been 10 percent acceleration on the comments posted on weblogs or blogs. Apart from the creation of new SNS accounts, this increase is the biggest among the ones presented and shows that UK citizens are more willing to be actively involved with the blogosphere than they were before. Secondly, a considerable growth is noted in the number of people who have uploaded short videos to websites. This coincided with the increasing take-up of mobile/smart phones which make video uploading simple [116].

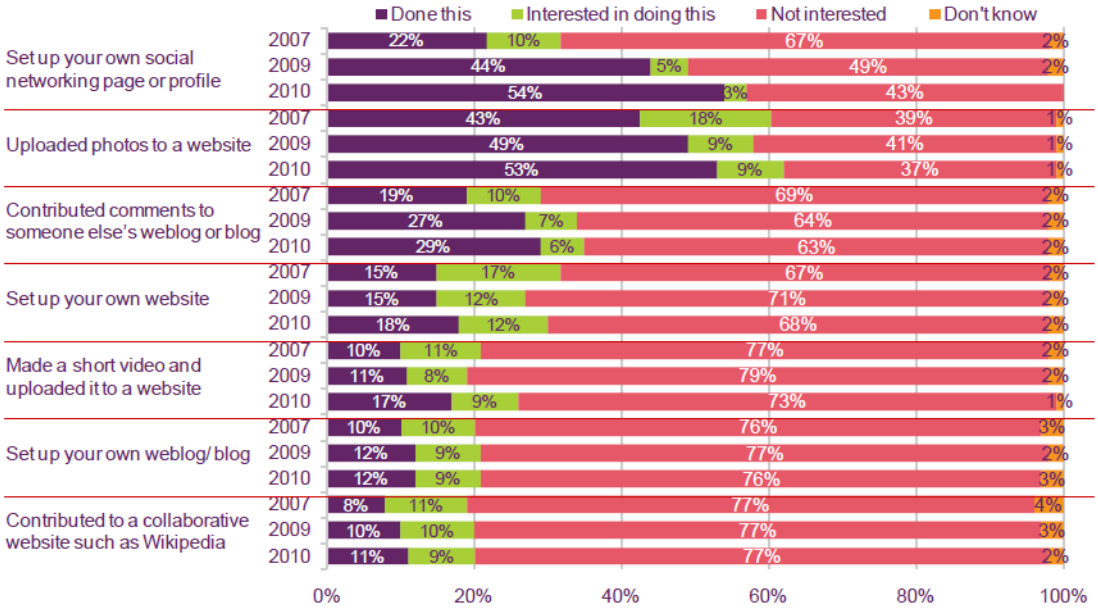


Figure 5-31: Experience of and interest in, content creation, UK (Source Ofcom research, fieldwork carried out by Saville Rossiter-Base in April to May and September to October 2010) [116]

Finally, in the last part of the section a chart about time spent on UGC sites is presented. The sites in question include not only major audiovisual oriented sites like YouTube, Wikipedia and Photobucket but also two of the biggest blogging

platforms; Blogger and WordPress.com. In the figure 5-32 it is obvious that You Tube is the most active site, on terms of time spent on it, as UK users spent on average 1 hour and 10 minutes on YouTube in April 2011 [116]. On the other hand, time spent on the rest of the UCG sites was concentrated around the 15 minute mark.

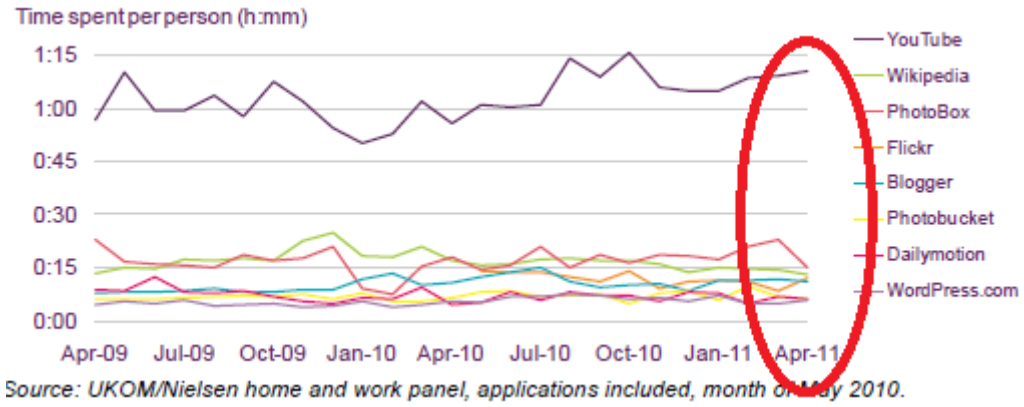


Figure 5-32: Time spent on selected user-generated content sites, UK [116]

At this point it is imperative to point out that the political blogosphere in the UK is not as developed as it is in the other countries. Political blogs are limited to the ones owned by Members of Parliament (MPs) or political figures in general. Consequently, when citizens want to comment on issues of political interest they do so, in the comment sections of bigger political/news sites such as the BBC or the Independent. The following section contains an analysis of 55 of these sites.

5.5 Methodology for Sources Selection

While NOMAD seeks for the places on web, where public deliberation occurs, the analysis conducted in the previous sub-sections illustrated that in the three countries where Web usage stands in high level we can find numerous websites and platforms where political discussions is triggered. In order to select which streams of political content will be crawled, a methodology oriented on the NOMAD use case scenarios, is adopted. Therefore, the methodology tries to answer four fundamental questions for the project implementation:

a) what type of content is needed as input for the NOMAD tools,

b) how much content is needed and

c) which originators of this content consist target groups for the project

According to these questions, a number of criteria that the NOMAD Web sources should meet were specified.

The starting point for the selection of the sources was their popularity as a metric that indicates their potential to continuously feed the NOMAD system with user generated content. The popularity of the sources was accrued by the ranking of the system ALEXA since it is the only open source method which can provide a relatively accurate system of website popularity metrics and audience demographics. ALEXA, a free, global web metrics provider, ranks sites based on tracking information of users of its ALEXA Toolbar and the number of links to a website, which are visible to the analysis page of each web domain. The rank observed, was based on the last 3 months data. Although not entirely accurate it is considered as the best ranking system when no exact statistics are available.

Initially, all websites from Austria, Greece and the UK which are ranked up to 500th position on ALEXA were investigated. Following the results of the surveys in Greece, Austria, United Kingdom it was decided to focus on blogs and news sites as places where citizens' comments on policy areas, are accumulated in a great extent. The aforementioned were filtered based on whether they may provide content valuable for policy formulation and were added to the NOMAD sources list, to be analysed later. However, ALEXA publishes a list which is limited to the first 500 websites per country. In order to

include discussion hubs with lower rankings the sources list includes political blogs and portals which are considered "politically" influential by the major political newspapers of each country.

After producing this initial list of sources, a number of features were attributed to each web source. The specific attributes can provide useful insights both for the continuation of the project and the usage of the tools. For example, as a prerequisite for each website to be included is the fact that its content is in one or more of the languages that NOMAD will support. Since all sources use mainly the corresponding native language, other language indicates the potential of this source to be included in foreign discussion topics. Tracking of demographics can provide to the user a view on analytics when searching citizens' voices and the factor of anonymity may concern the user for the origination of the media. Furthermore and for the sake of crowdsourcing a flag indicating the user – generated content allowed only in the Social Media presence of this source is used. Finally, the type of each media (Wordpress/Blogger/Rss syndication) was tracked, in order to be exploited later in the description of technical requirements. The set of attributes that characterise each source of content is analytically described in Table 5-8.

Complementary with the core web platform, their Facebook and Twitter profiles were included in the list that was recognised as the two most popular Social Media in all three countries. The study resulted in a catalogue composed of 100 Greek streams, 38 Austrian and 55 from the United Kingdom, all listed along with their features in Annex I of the deliverable. This variation is caused by the dispersion of the existence of these kinds of platforms in each country. While in Greece high level of fragmentation is observed, in the other two countries information is handled in a more consolidated manner.

5.5.1 Data Sources

Table 5-8 shows the description of each field of the site analysis on the sources list and an example using the Greek website "PITSIRIKOS.NET"

Table 5-8 Description of NOMAD sources attributes

Field	Description	Example (PITSIRIKOS.NET)
Title	The name of the website	PITSIRIKOS
URL	The web address of the website	http://pitsirikos.net/
Categorization	If the website is formally owned by a person or company then it is described as "Named". If the owner prefers to be anonymous – like several blogs – then it is described as "N-name"	N-name (The owner and author is anonymous)
Feed	If the site is based on BlogSpot and Wordpress platforms or it uses RSS	RSS
Other Language supported	If the website presents its content (or parts of it) in other languages.	-
Popularity (Alexa # national)	The ranking of the website in the country of origin according to ALEXA	371 in Greece
Popularity (Alexa # worldwide)	The ranking of the website in the global internet according to ALEXA	43159 Globally
Reputation (#sites linking in)	How many sites link to the examined website according to ALEXA. Higher numbers are an indication of more influential websites.	900
Age Category 1 (Most)	The dominant age category of the visitors of the website according to ALEXA	35-44 yo

Age Category 2 (Most)	The secondary age category of the primary visitors of the website according to ALEXA	25-34 yo
Age Category 1 (Less)	The dominant age category of those least possible to visit the website according to ALEXA	55-65+ yo
Age Category 2 (Less)	The secondary age category of those least possible to visit the website the website according to ALEXA	45-54
Gender	If most of the visitors are Male or Female according to ALEXA	M
Education (Most)	Education level of the most frequent visitors of the website according to ALEXA	College
Education (Less)	Education level of those least possible to visit the website the website according to ALEXA	No College
Type of Content	The websites of the sources list always have political content. If the website also publishes general content (ie. lifestyle, sports etc) is described as "General content". Most newspapers publish general content even though their main articles are political.	Political
News	If the website publishes news on politics	N
Articles	If the website publishes opinion articles on political issues	Y
User generated content	If the website allows comments and/or publishes political opinions of its visitors. A website may not allow comments in its pages and use Facebook pages for the political discussion with its visitors.	N
Polls	If the website includes polls on political issues. It should be noted that polls are easily removed or added to a website.	N
Comments	Important comments about the website	-
Political orientation	The political orientation of the website if it is known and constant	Left
Twitter account	The twitter account of the website	http://twitter.com/#!/pitsirikos
Facebook account	The Facebook account (page, group or user) of the website.	https://www.facebook.com/pitsirikos.official

Brief summary of the example website's data

PITSIRIKOS is a popular political website in Greece. It publishes articles of an anonymous author of left ideology. Its main audience constitutes of young males with college education. The website does not allow comments in its pages but the political discussion takes place in the Facebook page of the author.

5.5.2 Analysis of Greek sources

5.5.2.1 Demographics

Starting off, we analyze the correlation between the ages of the visitors of the sites and how frequent they tend to visit them. As outlined in Figure 5-33 the most frequent users of the aforementioned web sites are found in ages of 35-44, followed by people who are between 25 and 34 years old. The analysis using the Alexa web tools rendered that 88 out of 100 sites are heavily frequented by people of the 35-44 demographic group. In contrast, we see that the majority of people of the two opposite poles (18-24 and 45-54) tend to visit these web sites rather rarely.

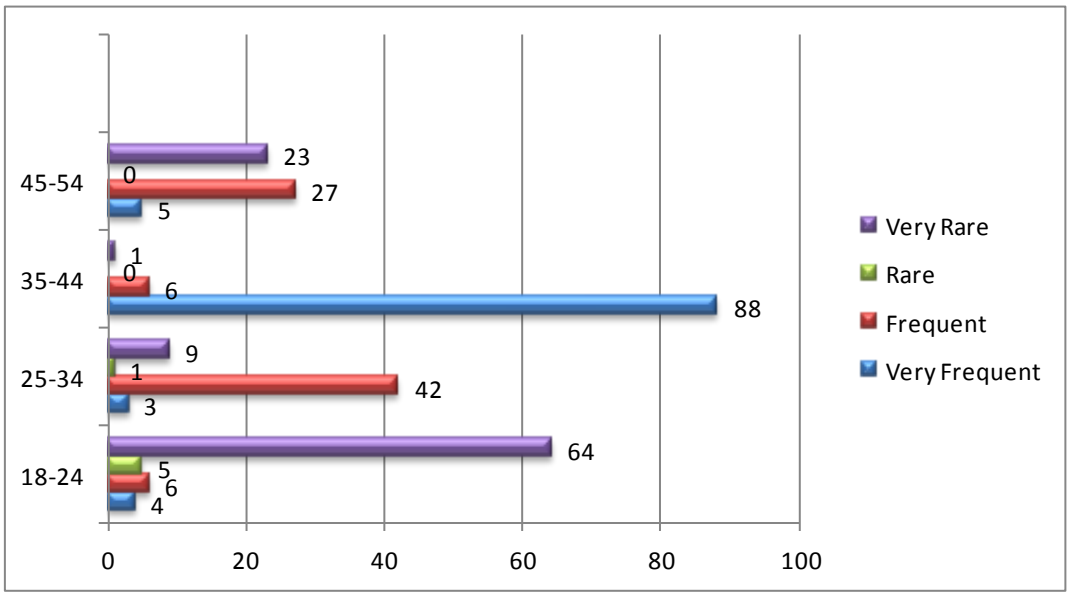


Figure 5-33 How frequent people of each age group visit the websites

As seen from the two figures that follow 5-34 and 5-35, the web sites of the research receive traffic from people of different educational background. The majority of the sites (81 out of 100) are usually visited by citizens who are graduates of a college followed by users who have been to a graduate school (12 out of 100 sites).

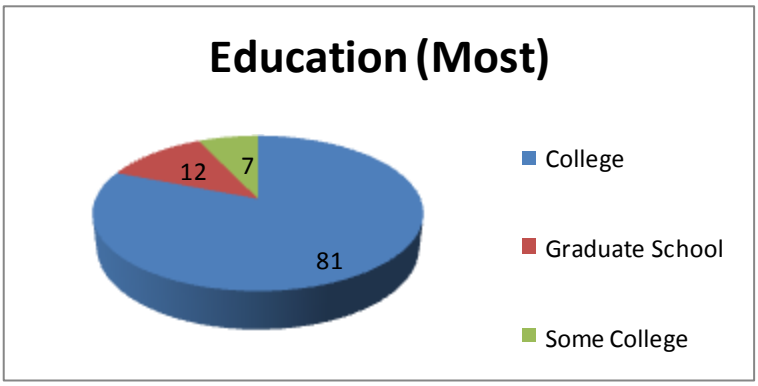


Figure 5-34 Educational backgrounds of the Greek visitors

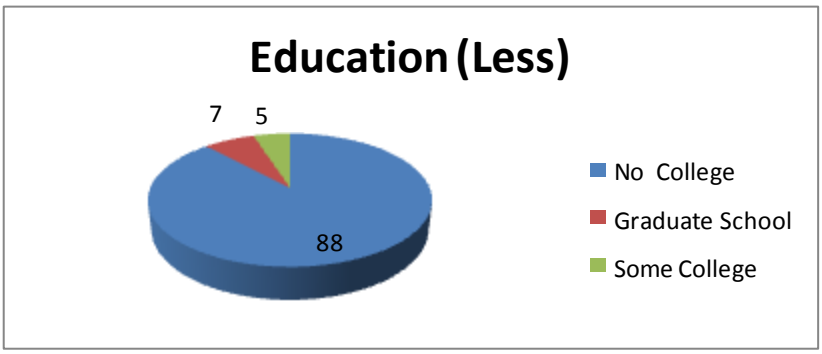


Figure 5-35 Educational backgrounds of the Greek visitors

Finally, male is the predominant gender as far as visitors are concerned. The vast majority of the sites are visited by men, while the percentage of the women visitors is very small (Figure 5-36).

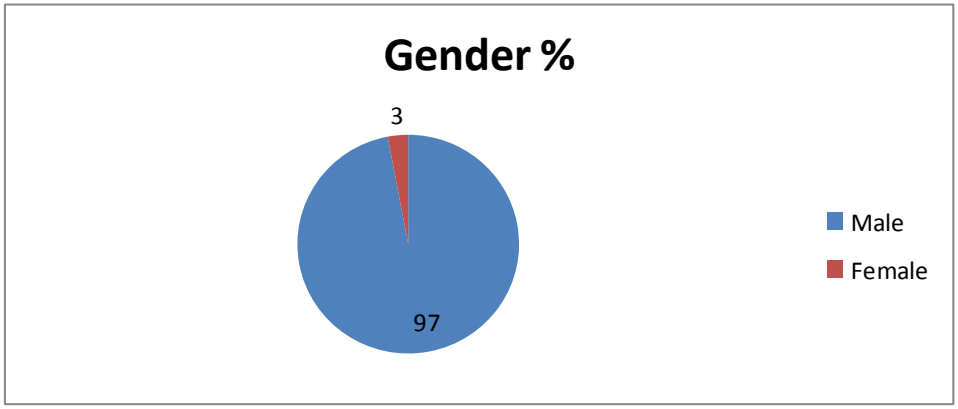


Figure 5-36 Percentage of Greek visitors per gender

5.5.2.2 Popularity / Reputation

As far as popularity is concerned the research yielded two interesting results of great importance. First of all, 83 of the web sites examined in the research are placed among the top 500 most popular Greek sites according to the Alexa national popularity index. Since all of those sites involve around either political or news subjects this phenomenon shows the importance Greek citizens place on those websites/blogs on being the source of their information.

Moreover, Greek websites seem to be somewhat reputable. Reputation is measured by counting the number of sites that link in the website of question. Figure 5-37 shows the reputation of the sites. The x-axis shows the number of other sites linking in while the y-axis shows the percentage of the sites researched. More than half of the websites of the sample (51 percent) have between 0 and 1000 sites linking in, trailed by 39 percent of sites with 1001-3000 other sites linking in. There are also, 3 websites (www.in.gr , www.tovima.gr , www.kathimerini.gr) who are very reputable having more than 5000 connections.

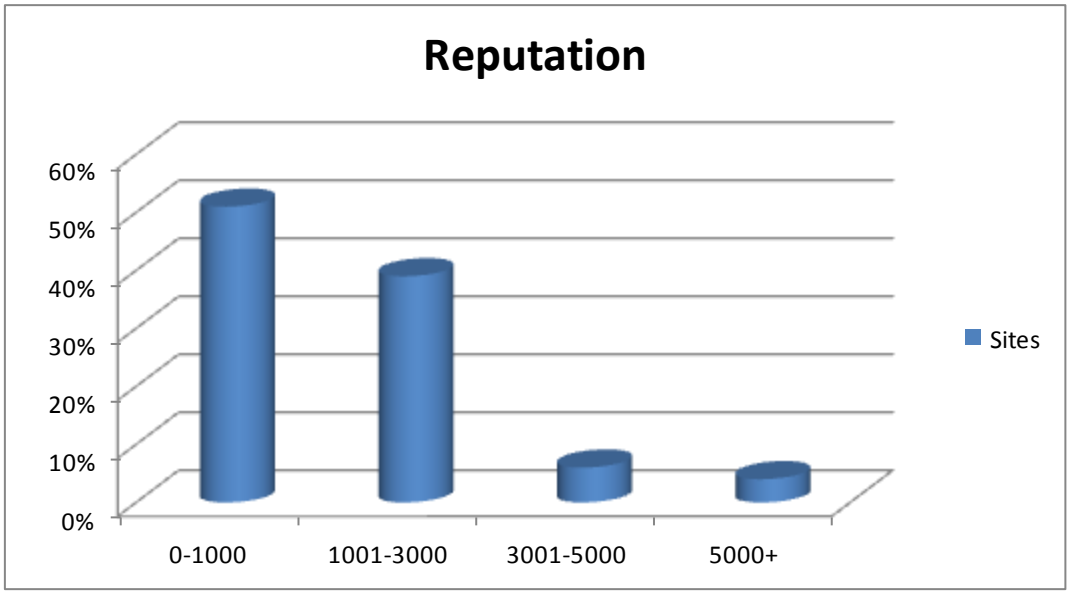


Figure 5-37 Reputation of the Greek sites

5.5.2.3 Content

Lastly, we analyze the sites by content. As Figure 5-38 shows the majority of the websites, 48 percent, are of general/news content. Exclusively political websites account for the 27 percent of the total, followed by a 13 percent of sites who involve around political/financial matters. The minority of the sites involve around a mixture of political, cultural ecological and other subjects.

The last pie chart (5-39) shows the percentage of the websites that have user generated content. Seventy-six percent of them consist of user generated content. An example of this would be users posting comments on a political blog via their social media account. This figure is in accordance with the previous studies discussed in this report; that suggested Greek Internet users are actively involved in the launch and creation of content.

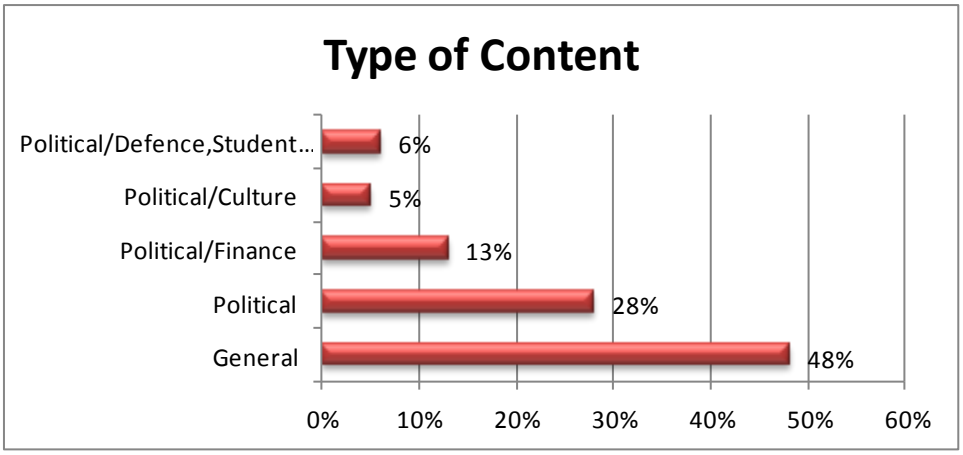


Figure 5-38 Sites categorized by type of content

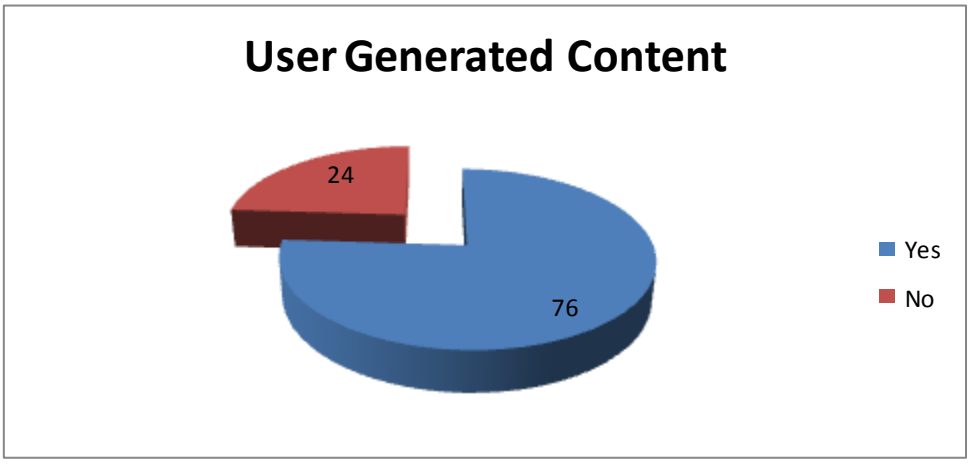


Figure 5-39 Percentages of Greek sites with User Generated Content

5.5.3 Website examples

5.5.3.1 PROTO THEMA

Protothema.gr is the web portal of the Greek newspaper PROTO THEMA. It is ranked #19 in Greece from ALEXA and #3704 in the global internet. Protothema.gr publishes mainly political content, in the form of news and political opinions; however, it also includes sections for lifestyle, sports and technology news. The visitors can express their opinions by commenting in the articles, both in the pages of the portal and on the Facebook page of the website. User participation varies according to the subject and some articles reach over 200 comments. Protothema.gr publishes the most important news and articles in English. Its main audience are males 25-44 years old, of college education. Protothema.gr appears to be politically neutral.

5.5.3.2 CAPITAL

Capital.gr is one of the leading financial portals in Greece. It is #30 in Greece from ALEXA and #5831in the global internet. Capital.gr publishes mainly financial news and the major political developments that could affect the Greek economy. The visitors can express their opinions by commenting in the articles in the pages of the portal and many articles reach over 100 comments. Although there is a Facebook page, user participation is low. Capital has an English section with the major financial developments in Greece. Its main audience are males 25-44 years old, of college education. Capital appears to be politically neutral.

5.5.4 Analysis of Austrian Sources

5.5.4.1 Demographics

Starting off, we analyze the correlation between the ages of the visitors of the sites and how frequent they tend to visit them. As outlined in Figure 5-40 the most frequent users of the aforementioned web sites are found in ages of 35-44 (34.2 percent), followed by people who are between 45 and 54 years old. In contrast, we see that the majority of people of the two opposite poles (18-24 and 55-65+) tend to visit these web sites rather rarely.

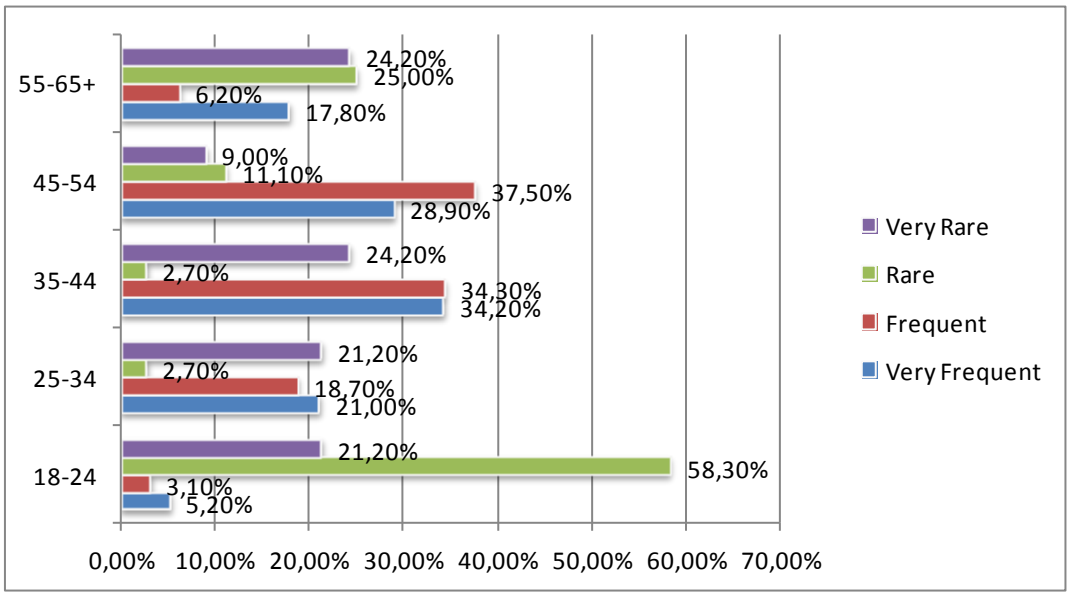


Figure 5-40 How frequent Austrians of each age group visit the websites

The majority of the sites (31 out of 38) are usually visited by citizens who have graduated out of a graduate school. Austrian citizens who have graduated out of college or they have not attended no college at all have the remaining percentages shared equally (Figure 5-41).

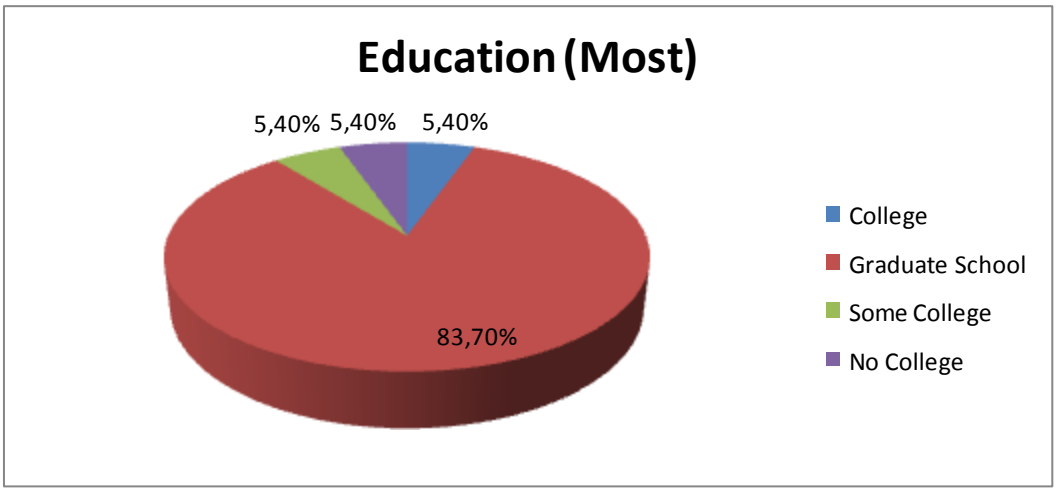


Figure 5-41 Educational backgrounds of the visitors

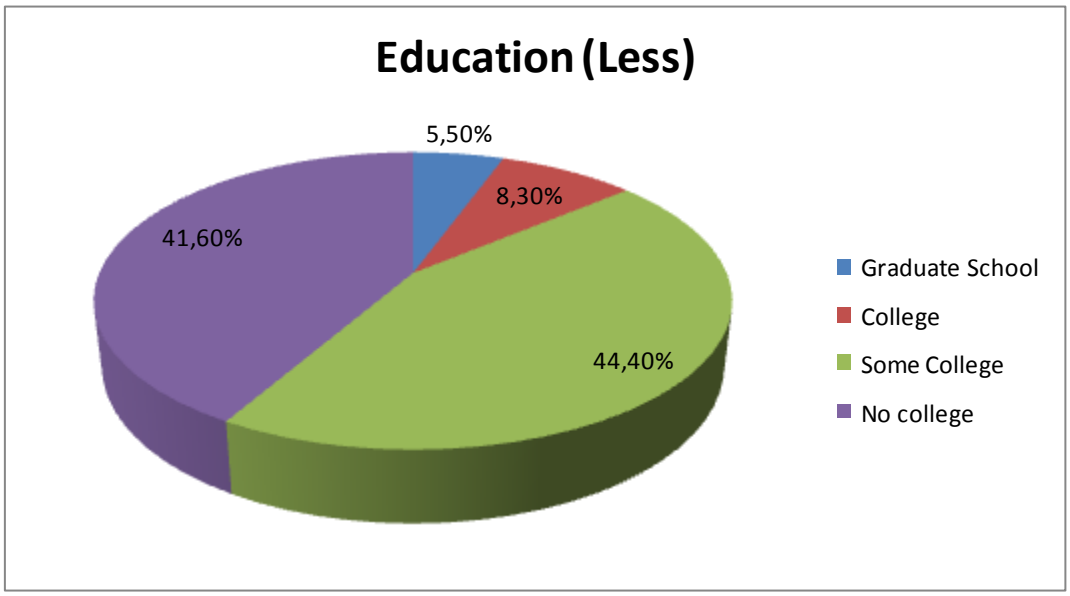


Figure 5-42 Educational backgrounds of the visitors

Finally, male is the predominant gender as far as visitors are concerned. However, the gap between men and women is not that vast. Approximately, 59.4 percent of men visit the websites in contrast to 40.6 of women.

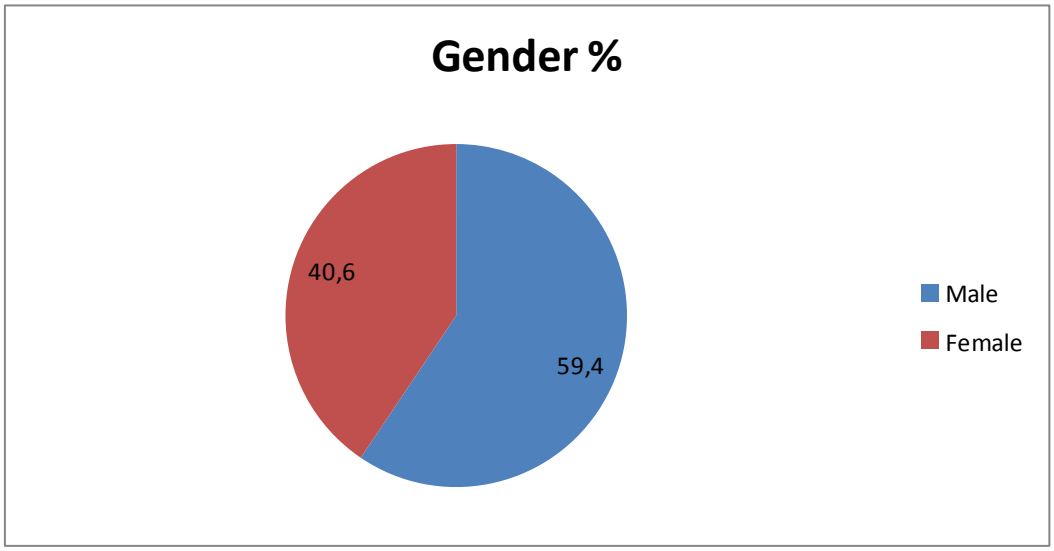


Figure 5-43 Percentage of Austrian visitors per gender

5.5.4.2 Popularity / Reputation

The Austrian websites seem to have a low popularity index. Only 19 of those surveyed are in the national top 500 most popular sites. Moreover, the Austrian websites are not that reputable either.

Reputation is measured by counting the number of sites that link in the website of question. Figure 5-44 shows the reputation of the sites. The x-axis shows the number of other sites linking in while the y-axis shows the percentage of the sites researched. The majority of the samples (47.3 percent) have between 0 and 1000 sites linking in, followed by 21 percent of sites which have 1001-3000 other sites linking in.

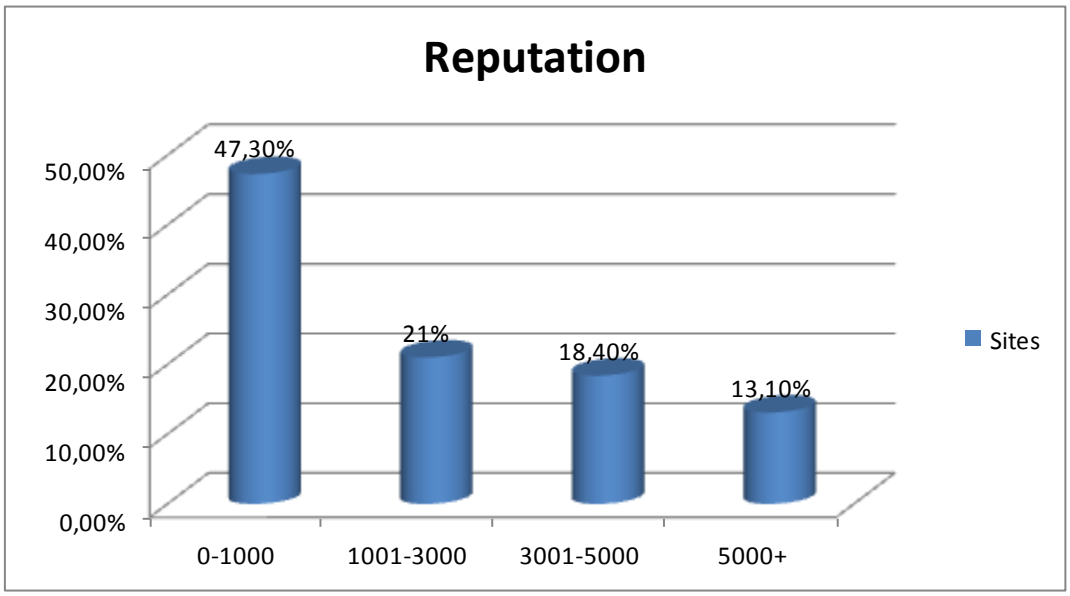


Figure 5-44 Reputation of the Austrian sites

5.5.4.3 Content

Lastly, we analyze the sites by content. The density of the sites, as far as content per day is concerned, is mostly medium (Figure 5-45). The survey yielded that 14 out of the 38 websites publish average content per day, while the remaining sites publish low or medium amount of content, equally. Nevertheless, all the websites favor user generated content (37 out of 38 websites).

Furthermore, the type of content of each website is examined (Figure 5-46). Overall most websites (57.8 percent) are of general nature. Following that, 5 websites out of 38 (13.1 percent) involve around general/entertainment news and only a 10.5 percent are political websites.

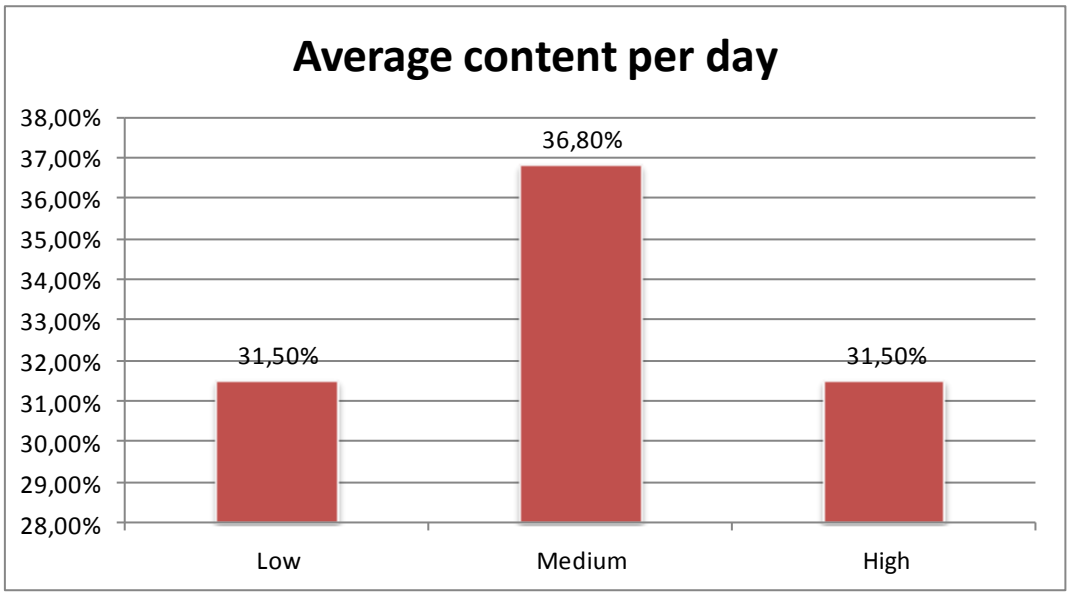


Figure 5-45 Average content per day in Austrian sites

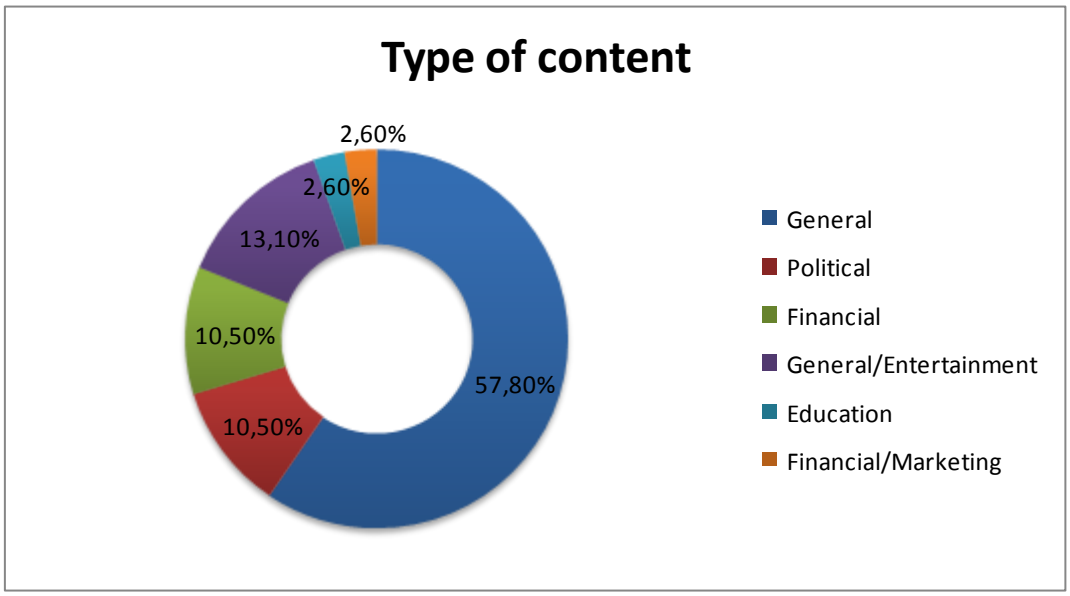
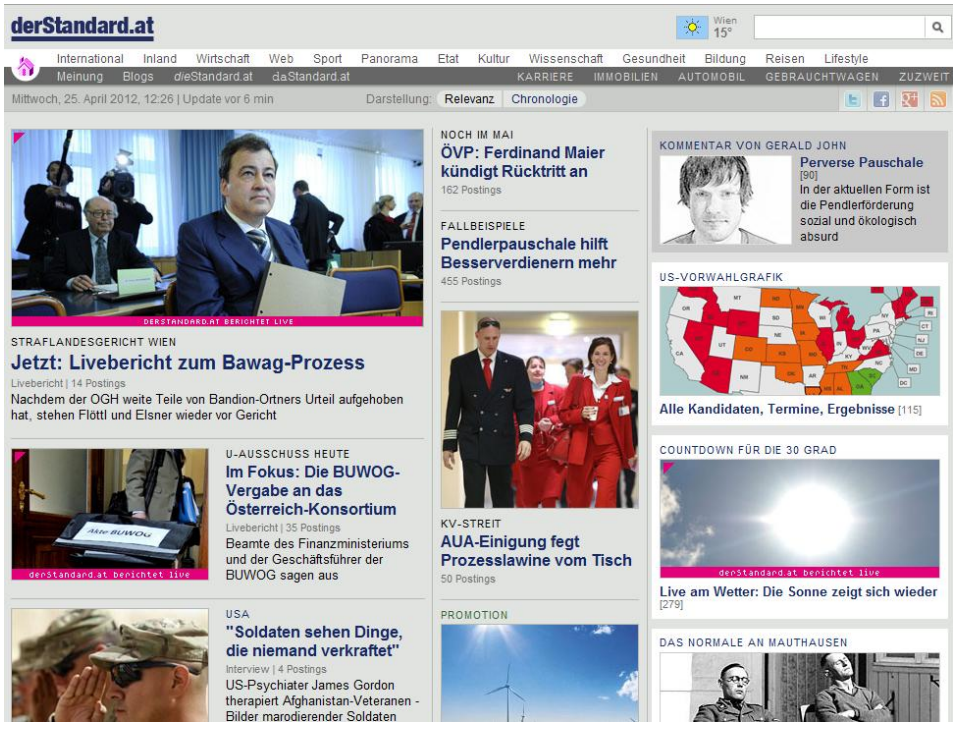


Figure 5-46 Austrian sites categorized by type of content

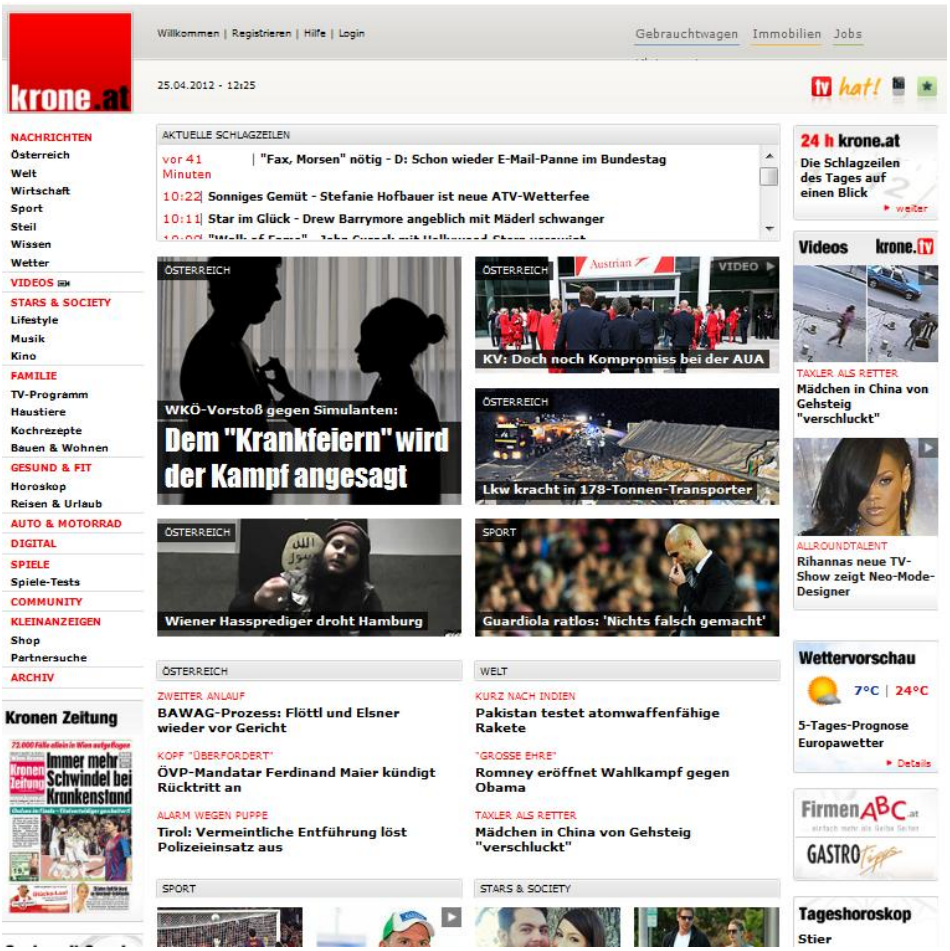
5.5.5 Website examples

5.5.5.1 DERSTANDART.AT



Derstandart.at is the web portal of the Austrian newspaper Der Standart. It is ranked #8 in Austria from ALEXA and #1554 in the global internet. Derstandart.at publishes mainly political content, in the form of news and political opinions; however, it also includes sections for lifestyle, sports and technology news. The visitors can express their opinions by commenting in the articles, both in the pages of the portal and on the Facebook page of the website. Its main audience are males 35-54 yo, of post graduate education. Its political positioning is social-liberal.

5.5.5.2 KRONE.AT



Krone.at is the web portal of Austria's largest newspaper Kronen Zeitung. It is ranked #32 in Austria from ALEXA and #6806 in the global internet. Krone.at publishes general content including political news and articles. The visitors can express their opinions by commenting in the articles, both in the pages of the portal and on the Facebook page of the website. Its main audience are males 35-54 yo, of post graduate education. Its political positioning is social right wing and economic left wing.

5.5.6 Analysis of UK Sources

5.5.6.1 Demographics

Starting off, we analyze the correlation between the ages of the visitors of the sites and how frequent they to tend to visit them. As outlined in Figure 5-47 the most frequent users of the aforementioned web sites are found in ages of 55-65+ (41.8 percent), followed closely by people who are between 45 and 54 years old (20 percent). On the other hand, people from the demographic groups of 25-34 and 35-44 visit these web sites rather rarely.

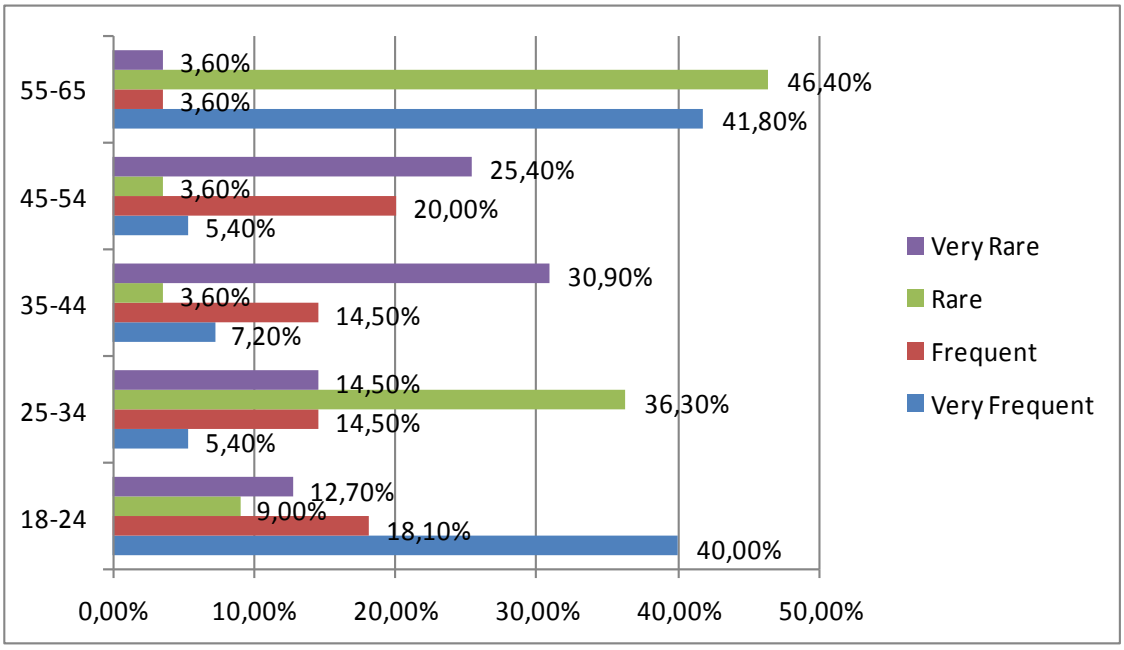


Figure 5-47 How frequent UK people of each age group visit the websites

However, one can note that 55-65+ seem to be visiting the websites rarely which comes in contrast with the previous conclusion. This paradox reveals that 55-65s+ may visit the websites frequently when there is something of global, major interest (i.e. London riots) and the rest of the time they visit these websites more scarcely.

As seen from the two figures that follow (5-48, 5-49), the web sites of the research receive traffic from people of different educational background. The majority of the sites (90.9 percent) are usually visited by citizens who have been to a graduate school followed by users who are graduates of a college.

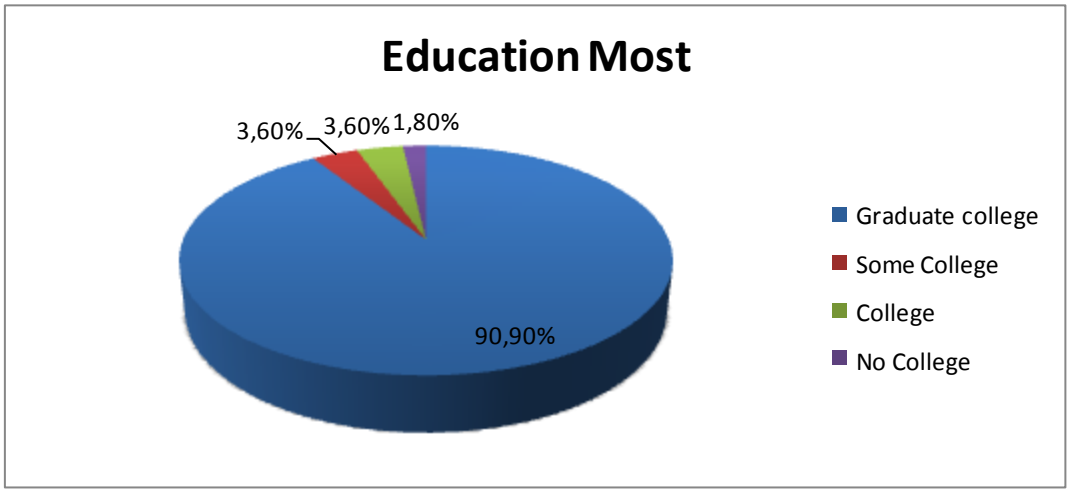


Figure 5-48 Educational backgrounds of the UK visitors

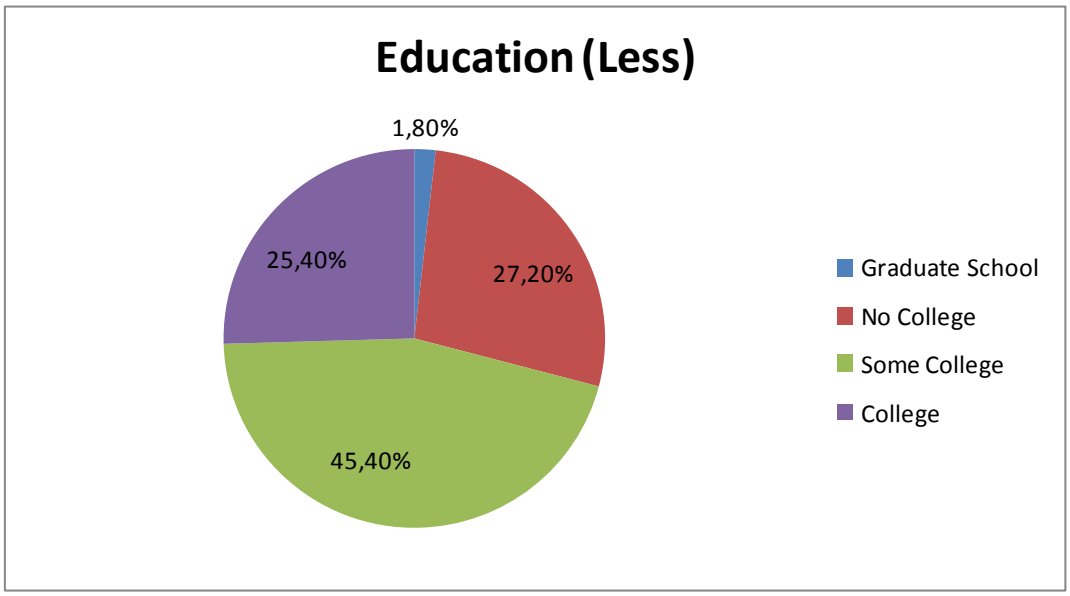


Figure 5-49 Educational backgrounds of the UK visitors

Gender-wise men are the most frequent users. According to the results yielded from the Alexa website 47 out of 55 websites are visited mostly by men.

5.5.6.2 Popularity / Reputation

As far as popularity is concerned we can note two things. First, 18 of the web sites examined in the research are placed among the top 500 most popular UK sites according to the Alexa national popularity index. Secondly, on a global level 6 websites are placed among the top 1000 in the world. Compared to other countries these sites are wildly popular mainly because they aggregate news from around the globe.

Moreover, UK websites seem to be very reputable. Reputation is measured by counting the number of sites that link in the website of question. Figure 5-50 shows the reputation of the sites. The x-axis shows the number of other sites linking in while the y-axis shows the percentage of the sites researched. The majority of the websites of the sample (45.4 percent) have between 0 and 5000 sites linking in, trailed by 25.4 percent of sites with 10001-50000 other sites linking in. There are also, 9 websites which are highly reputable having more than 50000 connections.

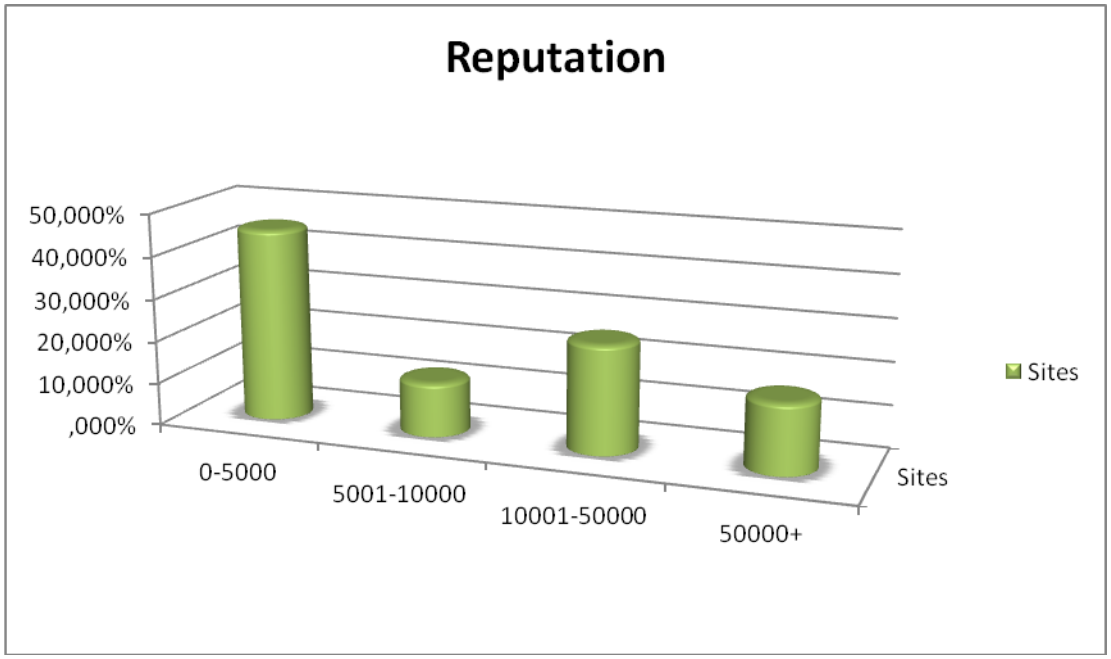


Figure 5-50 Reputation of the UK sites

5.5.6.3 Content

Lastly, we analyze the sites by content. As Figure 5-51 shows that more than half of the websites in the survey, 56.3 percent, are of general/news content. Exclusively political websites account for the 32.7 percent of the total, followed by a 7.2 percent of sites who involve around political/financial matters. A 3.6 percent of the sites discuss technological and general political subjects.

Regarding whether or not those websites favor user generated content, the research suggested that all of them provide a technological platform for users to generate/share content with the rest of the world. An example of this would be users uploading a picture to a news site of a major political event taking place in their location. The fact that all of these web-pages encourage user generated content reveals that sites embrace the fact that UK citizens are thriving content creators, as discussed in a previous section.

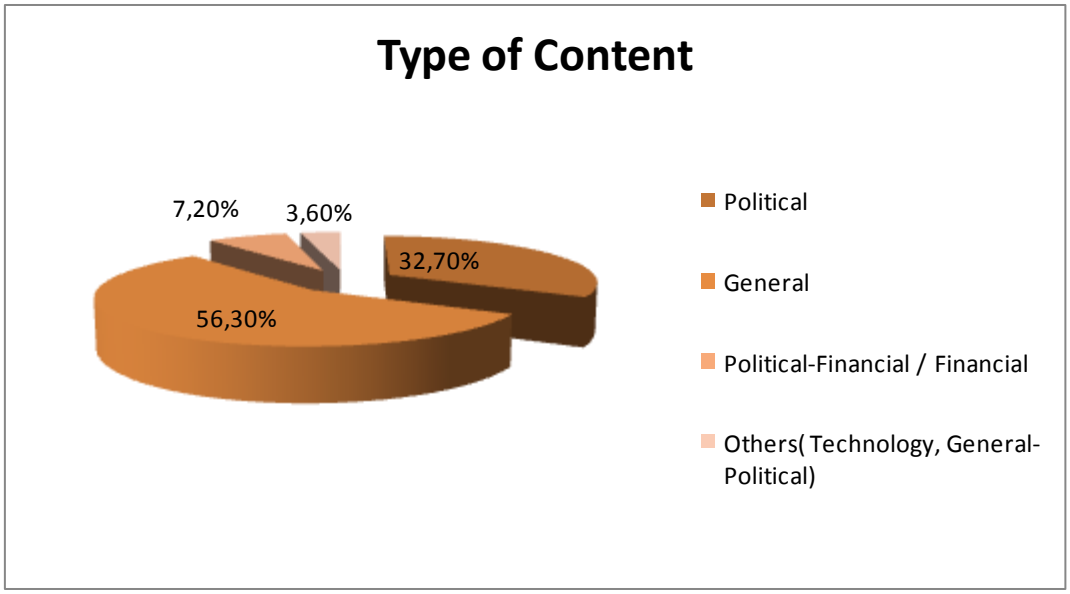
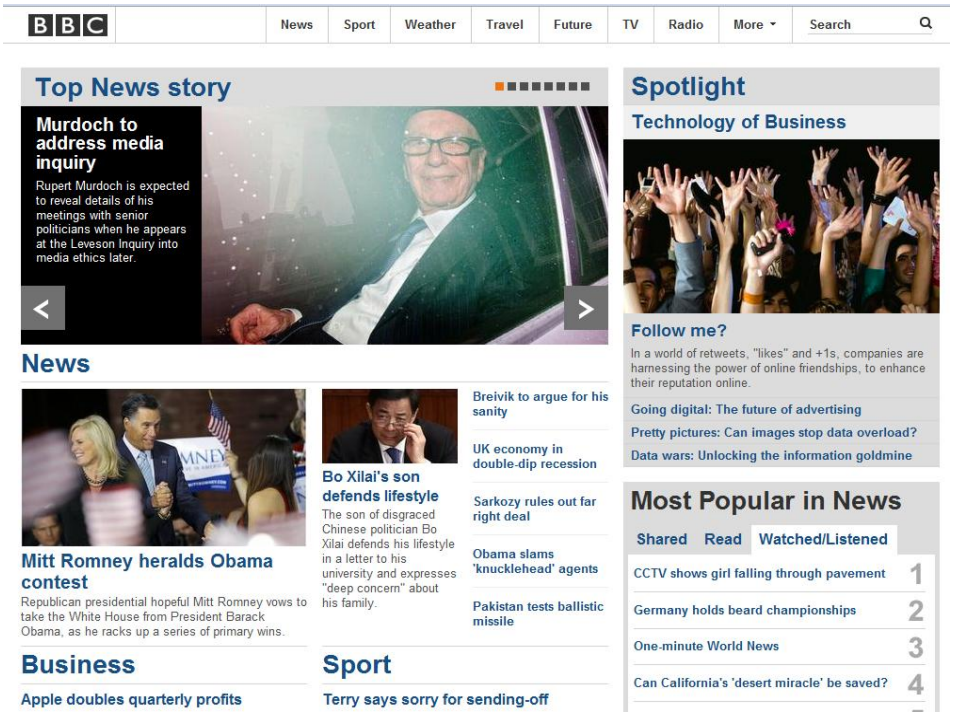


Figure 5-51 UK Sites categorized by type of content

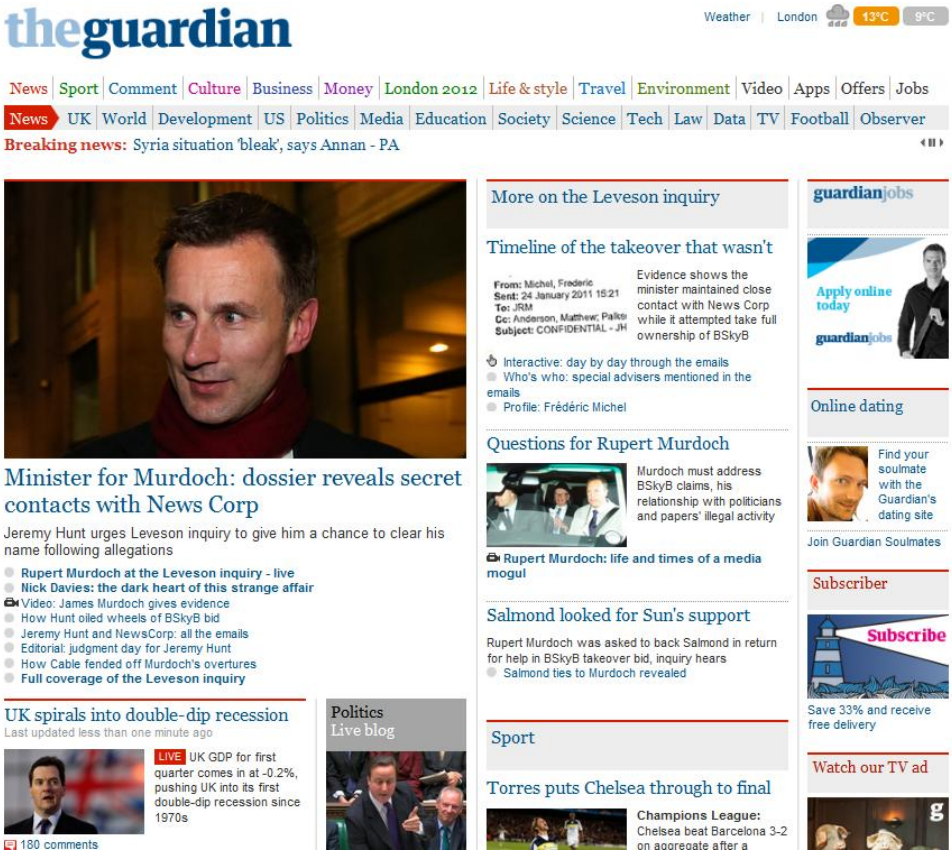
5.5.7 Website examples

5.5.7.1 BBC.CO.UK



Bbc.co.uk is the web portal of the British public service broadcaster BBC. It is ranked #5 in the UK from ALEXA and #47 in the global internet. Bbc.co.uk publishes general content but focuses on political issues both in the UK and internationally. The portal does not allow comments on all of its content and the discussion mainly takes place in the opinion articles which are published by editors and experts as well as on the Facebook page of the website. According to ALEXA, Its main audience constitutes of both older and younger males, ie: 55-65+ yo and 18-24 yo of post graduate education. BBC appears to be politically neutral.

5.5.7.2 THE GUARDIAN



Guardian.co.uk is the web portal of the British newspaper The Guardian. It is ranked #16 in the UK from ALEXA and #177 in the global internet. Guardian.co.uk publishes mainly political content, in the form of news and political opinions; however, it also includes sections for society, sports and technology news. The portal does not allow comments on all of its content and the discussion mainly takes place in the opinion articles which are published by editors and experts as well as on the Facebook page of the website. Its main audience are males 18-34 yo, of post graduate education. Guardian.co.uk identifies politically with the ideas of centre-left liberalism.

5.6 Conclusions

In this last chapter we focus on the three countries, where the pilot applications are going to take place: Greece, Austria and UK. Initially the local conditions concerning the use of Internet and Social media are examined, leading to positive conclusions. Also this chapter leads the 'top – down' analysis conducted in the previous chapters of this deliverable to the most valuable part for the implementation of the project: the creation of a methodology for selecting the particular Social media to be used as sources, from which content will be retrieved in order to be processed, and the application of it for the above three countries for specifying the sources to be used in the three pilots. The useful insights extracted from the analyses presented in the previous chapters, combined with the NOMAD objectives, lead to the formulation of this concrete methodology to select a number of appropriate for our purposes Web 2.0 platforms. The core of these sources will be the most popular political blogs of each country, taking into account the conclusions of the previous chapter (that blogs are the Social media platforms where most of the political discussion and content generation takes place), but will also be complemented with other Social media having political content, according th the conclusions of chapter 2 and 3, such as Facebook and Twitter accounts. By applying this methodology the list of NOMAD sources emerged, which is presented in Appendix I. Indeed, these consist a critical output of this deliverable to be used as input in the subsequent ones, as they will form the input streams for the NOMAD tools. However the list of sources developed in this chapter should be enriched in a next phase of the project when the user requirements and the pilot specification is completed. What should be also noted is that herein the identification is limited in specific type of Web 2.0 (blogs, Facebook, Twitter, news portals). Other type of streams where citizens are more active, including twitter hashtags, Social media users,

Facebook / Linked groups, YouTube channels etc. should be determined later in order to be contemporary and in line with the topics of the pilot cases.

It should be noted that the application of the above methodology in these countries revealed an important difference among their blogospheres. In Austria and UK there is a much stronger consolidation and concentration, with a small number of political blogs being among the top 500 country websites. On the contrary, in Greece there is a high fragmentation in this area, with a much bigger number of political blogs being among the top 500 country websites. This shows that the NOMAD process should be adapted to the particular characteristics of each national context it is used for, for instance use different numbers of sources in each country according to the degree of consolidation/concentration or fragmentation of its local blogosphere (100 for Greece,38 for Austria and 55 for UK). In countries where a high fragmentation of blogosphere exists it is necessary to use bigger sets of sources, and probably differentiate the processing of the content retrieved from them.

Finally, in the last sections of the current chapter a statistical processing of the the sources selected is performed,with respect to various characteristics of them. The findings of this analysis offer a great opportunity to make interesting conclusions concerning the blogosphere of each country, and validate that the selection of sources reflects to the respective general stakeholder analysis.

6. CONCLUSIONS

It is important for NOMAD to completely understand the role that social media play in users' everyday life. It is through the use of social media that NOMAD' attempts to create a two-way dialogue between citizens and government and empower citizens' role by increasing their participation in governmental decision making. As NOMAD tries to deliver ways and tools to transform political content produced in social media into valuable information for policy makers, this deliverable aims to investigate and understand better the underlying content and knowledge of Web 2.0 social media, focusing on the political and public policy related content and knowledge, and build the foundations for its exploitation in this project.

Initially in chapter 2 the current landscape of Web 2.0 Social Media has been investigated. We concluded that there are four types of Social Media Platforms used respectively for Communication/ Collaboration/ Multimedia & Entertainment/ News & Information. A list with the 50 most popular of them were provided and various features of them were examined. Furthermore, after the categorization of Social Media Platforms, we also presented in a fully detailed way their capabilities, providing some examples of them in each category. Only the top 15 Social Media Platforms have more than 100.000.000 unique users, making evident the rapid adoption of Social Media Platforms by citizens and also the huge capabilities they can offer to governments in order to get closer and interact with citizens. From this analysis useful conclusions have been drawn. From the 50 Social Media platforms that were examined, 26 of them are referred to the Communication category, 9 of them to the News & Information category, 9 of them to the Multimedia & Entertainment category and 3 of them to the Collaboration category. At the same time 26 of them are used also for political discussions and political content generation, which lead us to view and process them as a separate Policy Making & Public Participation category, taking into account that NOMAD aims at introducing new dimensions in the policy making process. This is a very positive finding for our project, as it indicates that there is plenty of political and public policy related content produced in social media, which can be exploited (retrieved and undergo advanced processing in order to draw conclusions and extract knowledge from it) in our project. We should mention, at this point, that these 'participatory media' are Social Media whose value and power derives from the online and active participation of many citizens-Internet users.

In chapter 3 using a variety of published relevant statistical studies, we examine the use the Internet, the mobile technology, the Web (basic channels for accessing social media) and the Social Media Platforms and also users' online activities trying to depict their profile. Also, we examined the demogpahics of the most popular social media. It is evident, through the analysis based on relevant researches, surveys and reports, that Internet plays an important role in users' lives. The main purpose of this analysis was to assess how wide and heterogeneous-pluralistic is the content basis of our project.

It has been concluded that a large majority of households and individuals make use of it today. Nevertheless, there are significant differences in access and usage between socio-economic groups and countries around the world. What fascinated us was that from the 1.8 billion of households that exists worldwide, one third of them has Internet access. Internet penetration in Europe reaches the 61.3% leaving behind the rest of the world. In developing countries, the 25% of homes have a computer and the 20% has Internet access. Also, the percentage of regular internet users among younger persons between the ages of 16-24 was 91% while for the age group of 55-74 years it was only 40%. The percentage of the internet users with high formal education was twice the percentage of internet users with a low level of education. Between men and women users, the 70% of men and 65% of women used the internet regularly. The main conclusion that derives from these statistical results is that the influence of Internet to citizens is growing day by day rapidly, attracting in a greater percentage the highly educated citizens.

Making one step forward, we continued with the analysis on the mobile usage. An analysis of the growth in smart phone usage shows a dramatic increase in the adoption of Google and Apple smart phone operating systems. Smart phone penetration in the United Kingdom, France, Germany, Spain, and Italy has increased by 9.5 percentage points reaching 31.1%, placing it higher than the US with smart phone penetration increase in 10.2 percentage points reaching 27%. What is more, smart phone ownership reaches 31.1%, while 3G device ownership owns the 47.1% and unlimited data plan subscriptions holds the 7.5% of penetration showing that all these lead to the overall growth in the use of mobile media. This dramatic increase of the mobile usage especially of smart phones show that citizens use their mobiles not only for

communicating with others using their telephone contacts but also communicating with other users online sending online text messages in the Social Media Platforms that they use. Today, smart phones give to users the ability to install in them an application of a Social Media Platform and in this way the user has the opportunity to log in and socialize without the need of a computer. An important conclusion that outlines users' profile is that social networking, sharing photos, reading online news, online consultations and post opinions are the online activities in which they are interested in. What is more, statistics showed that online users tend to use the internet to make their lives easier and the Social Media Platforms to connect with others, make friends, join groups, participate in discussions, and express their opinions on different topics.

Young adults have witnessed and have been the first to use some of the most exciting technological advances we've seen in the last decade. Facebook, Twitter, YouTube which are the most popular Social Media Platforms as well as other have fundamentally changed the way in which different age groups communicate. Surveys have shown that young adults between the ages of 18-34 are more compelled by online tools like Facebook, blogs, instant messaging and text messaging than older adults. Even though young adults are the first to embrace Social Media Platforms, they are not the only age group that takes advantage of new ways to communicate with each other, with their favorite brands, or with complete strangers. What is remarkable is that women spent more time online with 24.3% leaving men behind with only 16.8%. These statistics really show that already Social Media Platforms have entered drastically in our lives and people use them constantly. The fact that online users read online news, post their opinions and discuss with others make more possible for governments to strengthen their relations with citizens and start getting closer.

One last but vital conclusion refers to the 4 most popular Social Media Platforms, Facebook, Twitter, YouTube, LinkedIn and their demographic characteristics. We analyzed the online users of each one by gender, age, education and income. The general conclusion that derives from their analysis is that in Facebook, Twitter and YouTube most members are women, with low to medium income and younger than the members of LinkedIn that are mostly men with medium to high income and highly educated. The difference in all demographics of LinkedIn in relation to the other Social Media Platforms is that by nature it is a professional social network unlike the rest that are more communication Platforms. The overall conclusion of this chapter is that (at least in the Europe, the USA and the economically advanced countries in general) there is wide use of the Internet, the mobile phones and social media by the citizens of both genders and various age, education and income groups. This, in combination with the findings of the previous chapter, indicates that a large quantity of political and policy related content is generated in the social media, which is not produced by some small groups (e.g. by some young high education and income citizens), but by a wide range of citizens' groups. So we do not have the risk of collecting and analyzing political content coming from a small and non-representative group of citizens. This pluralistic content is worth being exploited by government agencies, so NOMAD can generate significant political value in this direction.

In chapter 4 we proceeded in a more detailed examination of the use of web 2.0 in politics. It has been concluded that the communication process is determined by technology, the characteristics of the communicating entity, the information receiver, and the common cultural reference points. Meanings can be perceived only in the context of social relations within which both information and communication take place. Internet and Social media inceasingly influences all these elements. The US and European use of the Web 2.0 to these ends in the last 5 years confirms the future trend and potential of electronic social networks to influence political communication. The web initially gave to independent or alternative candidates the chance to address the public and elaborate their own political views. Politicians use social network webpages as a medium of diffusing messages and information, accessing interests and needs of voters, fundraising, and creating support networks. Therefore the use of the web gradually differentiates the methods of strategic political communication set out by candidates and their strategists during election campaigns. Today Internet and social media in particular are extensively used by various political actors, not only in pre-electional campaigns, but on a continuous base..

Among the most powerful Web 2.0 applications for the above purposes are the blogs, as there is a very large number of blogs in most western countries, in which extensive political discussion and content generation takes place every day by thousands of people. It is evident that political blogs constitute a powerful media tool used by millions of people all over the world. Credibility seems to be the main reason why political blogs have grown to dominance. People believe that political blogs are more accurate than traditional news media. According to a recent relevant research [97], 30 percent of readers seem to trust political blogs to be more accurate than traditional news organizations, while 40 percent said they

are of equal reliability. While “blog readers still get most of their news from regular news sources, they are concerned that they are not getting the whole side of the story here. They suspect habitual bias in the traditional news content”.

Finally, in chapter 5, we focused on the three countries, where the pilot applications are going to take place: Greece, Austria and UK. Initially the local conditions concerning the use of Internet and social media are examined, leading to positive conclusions. Also , a methodology has been created for selecting the particular social media to be used as sources, from which content will be retrieved in order to be processed, and applied to the above three countries for specifying the sources to be used in the three pilots. The core of these sources will be the most popular political blogs of each country, taking into account the conclusions of the previous chapter (that blogs are the social media platforms where most of the political discussion and content generation takes place), but will also be complemented with other social media having political content, according th the conclusions of chapter 2 and 3, such as Facebook and Twitter accounts. In particular, the sources of political discussion were selected according to the ranking of the system ALEXA since it is the only open source method which can provide a relatively accurate system of website popularity metrics and audience demographics. Initially, all websites from Austria, Greece and the UK which are ranked up to 500th position on ALEXA were investigated. If the websites had political content and allowed political discussion there were added to the NOMAD sources list and analysed. In order to include discussion hubs with lower rankings the sources list includes political blogs and portals which are considered “politically” influential by recent relevant recent articles of major political newspapers of each country. Finally, using the above methodology the state of the political blogosphere in the three countries was analysed. This revealed an important difference among their blogospheres. In Austria and UK there is a much stronger consolidation and concentration, with a small number of political blogs being among the top 500 country websites. On the contrary, in Greece there is a high fragmentation in this area, with a much bigger number of political blogs being among the top 500 country websites. This shows that the NOMAD process should be adapted to the particular characteristics of each national context it is used for, for instance use different numbers of sources in each country according to the degree of consolidation/concentration or fragmentation of its local blogosphere (100 for Greece,38 for Austria and 55 for UK). In countries where a high fragmentation of blogosphere exists it is necessary to use bigger sets of sources, and probably differentiate the processing of the content retrieved from them.

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8. APPENDIX I: List of Web 2.0 Sources

8.1 Greek Sources

Title	Url	Categorization	Feed	Other Language supported	Popularity (Alexa # national)	Popularity (Alexa # worldwide)	Reputation (#sites linking in)	Age Category 1 (Most)	Age Category 2 (Most)	Age Category 1 (Less)	Age Category 2 (Less)	Gender	Education (Most)	Education (Less)	Type of Content	News	Articles	User generated content	Polls	Comments	Political orientation	Twitter account	Facebook account
IN.GR	http://www.in.gr/	Named	Rss	-	11	2539	7403	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	N	N		Neutral	http://twitter.com/#!/in_gr	http://www.facebook.com/www.in.gr
NEWSIT	http://www.newsit.gr/	Named	Rss	English	12	2958	2286	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	Y		Neutral	http://twitter.com/#!/newsitfeed	http://www.facebook.com/pages/NewsIt/170069547711
JUNGLE	http://www.zougla.gr/	Named	Rss	-	16	3025	3801	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/zougla_online	http://www.facebook.com/www.zougla.gr
NEWSBEAST	http://www.newsbeast.gr/	Named	Rss	-	17	3673	2688	35-44	25-34	55-65+	45-54	M	College	No College	General	Y	N	Y	N		Neutral	http://twitter.com/#!/newsbeast	http://www.facebook.com/newsbeast.gr
PROTO THEMA	http://www.protothema.gr/	Named	Rss	English	19	3704	2855	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	https://twitter.com/#!/protothema	http://www.facebook.com/pages/httpwwwprotothemagr/117072912198
NEWS247	http://news247.gr/	Named	Rss	English	20	3999	2602	35-44	25-34	55-65+	45-54	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/news247gr	http://www.facebook.com/news247
TRO-MA-KTIKO	http://tro-ma-ktiko.bl	N-name	Blo	-	28	5637	2006	25-34	35-44	55-65+	45-54	M	College	No College	General	Y	Y	Y	Y		Neutral	http://twitter.com/#!/tromaktiko_blog	http://www.facebook.com/tromaktiko

	ogspot.com/		gspot																			
NEWSBOMB	http://www.newsbomb.gr/	Named	Rss	-	29	6145	1818	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/newsbombgr	http://www.facebook.com/newsbombgr
CAPITAL	http://capital.gr/	Named	Rss	English	30	5831	2399	35-44	25-34	55-65+	18-24	M	College	No College	Political - Financial	Y	Y	Y	N		Neutral	http://twitter.com/#!/CapitalgrNews	http://www.facebook.com/pages/Capitalgr/11219596427
TO VIMA	http://www.tovima.gr/	Named	Rss	-	32	5425	5015	35-44	-	55-65+	18-24	M	College	No College	General	Y	Y	Y	Y		Neutral	http://twitter.com/#!/tovimagr	http://www.facebook.com/www.tovima.gr
SKAI	http://www.skai.gr/	Named	Rss	English	33	4636	3706	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/skaigr	http://www.facebook.com/skaigr
NAFTEMPORIKI	http://www.naftemporiki.gr/	Named	Rss	-	35	6640	3512	35-44	45-54	55-65+	18-24	M	College	No College	Political - Financial	Y	Y	Y	N		Neutral	http://twitter.com/#!/naftemporiki	-
ETHNOS	http://www.ethnos.gr/	Named	Rss	-	44	7483	3972	35-44	45-54	55-65+	18-24	M	College	No College	General	Y	Y	N	N		Neutral	-	-
REAL NEWS	http://www.real.gr	Named	Rss	-	46	8545	1493	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	N	N		Neutral	http://twitter.com/#!/Real_gr	http://www.facebook.com/pages/Realgr/160366887316375
DEFENCE NET	http://www.defencenet.gr/defence/index.php	Named	Rss	-	49	8734	2173	35-44	25-34	55-65+	18-24	M	College	No College	Political - Defence	Y	Y	Y	N		Right	https://twitter.com/#!/defencenetgr	http://www.facebook.com/DefenceNet.gr
TA NEA	http://www.tanea.gr/	Named	Rss	-	50	6944	4533	35-44	-	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/ta_nea	http://www.facebook.com/pages/TA-NEA/105109546186973
ENIKOS	http://www.enikos.gr/	Named	Rss	-	51	13337	456	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N	This is a new portal which rapidly	Neutral	http://twitter.com/#!/enikos_gr	http://www.facebook.com/enikosgr

																			became popular			
KATHIMERINI	http://www.kathimerini.gr/	Named	Rss	English	53	7472	5777	35-44	-	55-65+	18-24	M	College - Graduate School	No College	Political - Financial	Y	Y	N	N		Neutral	http://twitter.com/#!/kathimerini_gr	http://www.facebook.com/pages/%CE%97-%CE%9A%CE%91%CE%98%CE%97%CE%9C%CE%95%CE%A1%CE%99%CE%9D%CE%97-%CE%95%CF%80%CE%AF%CF%83%CE%B7%CE%BC%CE%B7-%CF%83%CE%B5%CE%BB%CE%AF%CE%B4%CE%B1/134821969948251
MEGA TV	http://www.megatv.com/default.asp	Named	Rss	-	58	8632	1637	25-34	35-44	55-65+	45-54	M	College	No College	General	Y	Y	N	N		Neutral	http://twitter.com/#!/megamou	http://www.facebook.com/tvmega
FIMOTRO	http://fimotro.blogspot.com/	Named	Blogspot	-	61	9142	1272	35-44	-	55-65+	18-24	M	College	No College	Political	N	Y	N	N		Neutral	-	http://www.facebook.com/pages/Fimotro-fimotroblog/252802351449705
TSANTIRI	http://www.tsantiri.gr/	N-name	Rss	-	79	12404	1301	35-44	-	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/tsantiriinews	http://www.facebook.com/tsantiri
LIAKO.GR	http://www.liako.gr/intro/	Named	Rss	-	85	13518	504	35-44	-	55-65+	18-24	M	Some College	Graduate School	Political - Defence	Y	Y	Y	N	Specializing in conspiracy theories	Right	-	http://www.facebook.com/liakopoulos
LIFO	http://www.lifo.gr/	Named	Rss	-	93	16635	1555	35-44	25-34	55-65+	45-54	M	College	No College	General	Y	Y	Y	N		Neutral - Left	http://twitter.com/#!/lifomag	http://www.facebook.com/lifo.mag?sk=wall

OLYMPIA	http://olympia.gr/	N-name	Rss	-	98	16841	1674	35-44	45-54	55-65+	18-24	M	College	No College	Political	N	Y	Y	N		Right	http://twitter.com/#!/olympiada	http://www.facebook.com/pages/Olympiagr/278119172215855
IMERISIA	http://www.imerisia.gr	Named	Rss	-	113	17434	2089	35-44	45-54	55-65+	18-24	M	College	No College	Political - Financial	Y	Y	N	Y		Neutral	http://twitter.com/#!/imerisia	-
IEFIMERIDA	http://www.iefimerida.gr/	Named	Rss	-	116	20118	1072	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/iefimerida	http://www.facebook.com/iefimerida
NEWSPOST	http://newpost.gr/	Named	Rss	-	120	18502	1038	35-44	-	55-65+	18-24	M	College	No College	General	Y	Y	N	N		Neutral	http://twitter.com/#!/newpostgr	http://www.facebook.com/newpostgr
FIMES	http://www.fimes.gr/	N-name	Rss	-	124	22802	631	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	Y		Neutral	http://twitter.com/#!/fimesgr	http://www.facebook.com/fimesgr
ERT	http://www.ert.gr/	Named	Rss	English, Arabic, Polish, Albanian, Spanish, Russian, Romanian, Deutsch	126	19367	3684	35-44	25-34	55-65+	18-24	M	Graduate School	No College	General	Y	Y	N	N		Neutral	http://twitter.com/#!/ertsocial	http://www.facebook.com/ERTSocial
TVXS	http://tvxs.gr/	Named	Rss	-	127	16908	2632	35-44	-	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	https://twitter.com/#!/tvxs	http://www.facebook.com/tvxs.gr
NOOZ	http://www.nooz.gr/	Named	Rss	-	128	19568	1169	35-44	25-34	55-65+	18-24	M	Graduate School	No College	General	Y	Y	Y	N		Neutral	-	http://www.facebook.com/nooz.gr
PROTAGON	http://www.protagon.gr/	Named	Rss	-	130	17509	1706	35-44	-	55-65+	18-24	M	College	No College	Political - Culture	N	Y	Y	N		Neutral	http://twitter.com/#!/protagongr	http://www.facebook.com/protagongr
TROKTIKO.EU	http://troktiko.eu/	N-name	Rss	-	134	17982	663	35-44	-	55-65+	-	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/troktikoeu	http://www.facebook.com/troktikoeu
PARAPOLITIKA	http://www.parapolitika.gr/	Named	Rss	-	136	24155	693	35-44	-	55-65+	18-24	M	College	No College	Political	Y	Y	N	Y	It has all the politicians twitter	Neutral - Right	http://twitter.com/#!/parapolitika	http://www.facebook.com/pages/Parapolitika/126247947396176

																			accounts			
MADATA	http://madata.gr/	Named	Rss	-	142	20223	1710	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/madata	http://www.facebook.com/pages/MadataGR/112544235115
NONEWS NEWS	http://nonews-news.blogspot.com/	N-name	Blogspot	-	171	25912	623	35-44	45-54	18-24	55-65+	M	College	No College	Political	Y	Y	N	N		Neutral	-	-
24WRO	http://24wro.blogspot.com/	N-name	Blogspot	-	176	24236	717	18-24	25-34	55-65+	45-54	M	College	Graduate School	General	Y	Y	N	N		Neutral	http://twitter.com/#!/24wro	http://www.facebook.com/pages/24%CF%89%CF%81%CE%BF/102534189831640
ONALERT	http://www.onalert.gr/	Named	Rss	-	179	26411	769	35-44	-	55-65+	18-24	M	College	No College	Political - Defence	Y	Y	Y	N		Right	https://twitter.com/#!/OnAlertfeed	http://www.facebook.com/pages/OnAlertgr/169622579719516
ANTINEWS	http://www.antinews.gr/	N-name	Rss	-	181	24299	1577	35-44	45-54	55-65+	18-24	M	College	No College	Political	N	Y	Y	N	Attached to New Democracy	Right	http://twitter.com/#!/antinewsgr	http://el-gr.facebook.com/antinews.gr
BEST NEWS	http://thebest.gr/	Named	Rss	-	183	26943	872	35-44	25-34	55-65+	45-54	M	College	No College	General	Y	Y	Y	N	Local portal of Patras	Neutral	http://twitter.com/#!/thebestportal	http://el-gr.facebook.com/thebest.gr
AMNA	http://www.amna.gr	Named	Rss	English, French, Russian, Chinese, Albanian	184	29721	358	35-44	-	55-65+	18-24	F	College	No College	General	Y	N	N	N	Official Greeek news agency	Neutral	http://twitter.com/#!/amna_news	http://www.facebook.com/ampanewsgr
TRELO KOUNELI	http://www.trelokou	N-name	Rss	-	185	25503	1213	35-44	25-34	55-65+	45-54	M	College	Graduate School	General	Y	Y	Y	N	Political satire	Neutral	https://twitter.com/#!/TreloKouneli	http://www.facebook.com/pages/TreloKou

	neli.gr/																					neli/321728086912
INDYMEDIA ATHENS	http://athens.indymedia.org/	Named	Rss	-	188	7628	29342	35-44	25-34	55-65+	45-54	M	Graduate School	No College	Political	N	Y	Y	N	The reputation and the demographics are for indymedia.org	Left - Anarchy	-	-
ANT-NTP	anti-ntp.blogspot.com	N-name	Blogspot	-	191	28626	871	35-44	45-54	55-65+	18-24	M	Some College	No College	Political	Y	Y	Y	N	Specializing in conspiracy theories	Right		http://www.facebook.com/pages/anti-ntpnet/22806 9703932211
EXPRESS	http://express.gr/	Named	Rss	-	195	27620	1385	35-44	25-34	55-65+	18-24	M	College	No College	Political - Financial	Y	Y	N	Y		Neutral	http://twitter.com/#!/ExpressGR	-
EURO2DAY	http://www.euro2day.gr/	Named	Rss	The FT articles are in English	196	29860	1155	35-44	25-34	55-65+	18-24	M	Graduate School	No College	Political - Financial	Y	Y	Y	Y		Neutral	http://twitter.com/#!/euro2day_gr	http://www.facebook.com/euro2day
KOURDISTO PORTOKALI	http://kourdistoportocali.com/	Named	Rss	-	211	30671	694	35-44	45-54	55-65+	18-24	M	College	No College	Political	N	Y	N	N		Neutral	https://twitter.com/#!/billnews	-
KSIPNISTERE	http://ksipnistere.blogspot.com/	N-name	Blogspot	-	213	29539	1561	35-44	45-54	55-65+	25-34	M	College	No College	Political	N	Y	Y	N		Neutral	http://twitter.com/#!/KSIPNISTERE	http://www.facebook.com/pages/Ksipnistere/122742127 773788
TAXALIA	http://taxalia.blogspot.com/	N-name	Blogspot	-	217	31899	1529	35-44	45-54	55-65+	18-24	M	College	No College	Political	N	Y	Y	Y		Neutral	http://twitter.com/#!/taxalia	http://www.facebook.com/taxalia

PRIONOKORDELA	http://www.prionokordela.gr/	Named	Rss	-	227	27899	833	35-44	25-34	55-65+	45-54	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/Prionokordelagr	http://www.facebook.com/prionokordela
E-GO	http://www.e-go.gr/	Named	Rss	-	229	31932	1165	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	-	-
BANKING NEWS	http://www.bankingnews.gr/index.php	Named	Rss	-	251	39840	377	35-44	45-54	18-24	55-65+	M	Graduate School	No College	Political - Financial	Y	Y	Y	Y		Neutral	http://twitter.com/#!/bankingnewsgr	http://www.facebook.com/bankingnewsgr
ATHENS VOICE	http://athensvoice.gr/	Named	Rss	-	254	32012	1184	35-44	25-34	55-65+	45-54	F	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/AthensVoice	http://www.facebook.com/AthensVoice
CRETA LIVE	http://cretalive.gr/	Named	Rss	-	259	39803	687	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	N	N		Neutral	http://twitter.com/#!/cretalive	https://www.facebook.com/pages/Cretalivegr/136239276386619
KATOHIKA NEA	http://www.katohika.gr/	Named	Rss	-	269	40726	570	45-54	35-44	55-65+	25-34	M	Some College	Graduate School	Political	N	Y	Y	Y	Specializing in conspiracy theories	Right	http://twitter.com/#!/katohikanea	http://www.facebook.com/pages/%CE%9A%CE%B1%CF%84%CE%BF%CF%87%CE%B7%CE%BA%CE%AC-%CE%9D%CE%AD%CE%B1/136835261758443
AGELIOFOROS	http://www.ageliforos.gr/	Named	Rss	-	270	40783	1402	35-44	45-54	55-65+	18-24	M	College	No College	General	Y	Y	Y	Y		Neutral	http://twitter.com/#!/ageliforosgr	http://www.facebook.com/pages/Ageliforosgr/365635595007
PONTIKI	http://topontiki.gr/	Named	Rss	-	304	43904	1227	35-44	45-54	55-65+	18-24	M	College	No College	Political - Financial	Y	Y	Y	N		Neutral - Left	http://twitter.com/#!/topontiki	http://www.facebook.com/topontiki
ONNEWS	http://www.on-news.gr/	N-name	Rss	-	319	40945	483	18-24	25-34	55-65+	45-54	M	College	Graduate School	General	Y	Y	N	N		Neutral	http://twitter.com/#!/Onnewsgr	https://www.facebook.com/onNews
KOUTI TIS PANDORAS	http://www.koutipan	Named	Rss	-	324	42396	1078	35-44	25-34	55-65+	18-24	M	College	No College	Political - Culture	N	Y	Y	Y		Neutral	http://twitter.com/#!/kouti_pandoras	-

	doras.gr/																					
MAKELIO	http://makeleio.gr/	Named	Rss	-	326	113090	165	35-44	45-54	18-24	25-34	M	Some College	Graduate School	Political	Y	Y	Y	N		Neutral	-	http://www.facebook.com/makeleio.gr
PENTAPOSTAGMA	http://www.pentapostagma.gr/	N-name	Rss	-	335	52738	884	45-54	35-44	55-65+	18-24	M	Some College	No College	Political - Culture	N	Y	Y	N		Neutral - Right	http://twitter.com/#!/pentapostagma	http://www.facebook.com/pentapostagmagr
PRESS-GR	http://press-gr.blogspot.com/	Named	Blogspot	-	339	51132	1371	35-44	45-54	55-65+	18-24	M	Graduate School	No College	Political	N	Y	Y	Y		Neutral	-	http://www.facebook.com/pages/PRESS-GRblogspotcom/103143459767616
THESTIVAL	http://www.thestival.gr/	Named	Rss	-	344	56408	337	35-44	18-24	55-65+	25-34	M	College	No College	General	Y	Y	Y	N		Neutral	https://twitter.com/#!/thestival	http://www.facebook.com/thestival.gr
MARKETBEAST	http://marketbeast.gr/	Named	Rss	-	348	59213	187	35-44	45-54	55-65+	18-24	M	College	No College	Political - Financial	Y	Y	Y	N		Neutral	-	http://www.facebook.com/pages/marketbeastgr/174463392594473
24H	http://www.24h.gr/	Named	Rss	-	353	56236	495	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	https://twitter.com/#!/24hgr	http://el-gr.facebook.com/24h.gr?sk=wall&filter=2
LOGOS PELLAS	http://logospellas.gr/	Named	Rss	-	356	61717	142	35-44	25-34	18-24	45-54	M	Graduate School	Some College	General	Y	Y	Y	N	Local portal of Pella	Neutral	https://twitter.com/#!/logospellas	-
LAMIA REPORTS	http://www.lamiareport.gr/	Named	Rss	-	370	63438	362	45-54	18-24	55-65+	35-44	M	College	Some College	General	Y	Y	Y	N	Local portal of Lamia	Neutral	http://twitter.com/#!/lamiareportgr	http://www.facebook.com/pages/LamiaReportgr/120830027937234
PITSIRIKOS	http://pitsirikos.net/	N-name	Rss	-	371	43159	900	35-44	25-34	55-65+	45-54	M	College	No College	Political	N	Y	N	N		Left	http://twitter.com/#!/pitsirikos	https://www.facebook.com/pitsirikos.official
XRYSH AVGH	http://xryshaygh.wordpress.com/	Named	Wordpre	-	372	71864	405	35-44	18-24	55-65+	45-54	M	College	No College	Political	Y	Y	N	N	Official blog of the Greek NeoNazi Party	Extreme Right	http://twitter.com/#!/xryshaygh	-

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ELLINOFRENEIA	http://ellinofreneia.net/	Named	Rss	-	375	55022	466	25-34	18-24	55-65+	45-54	M	Graduate School	No College	Political	N	Y	Y	N	Political satire	Neutral - Left	http://twitter.com/#!/Ellinofreneia	http://www.facebook.com/Ellenofreneia
NEOLAIA	http://www.neolaia.gr/	Named	Rss	-	381	54604	734	18-24	25-34	55-65+	45-54	M	College	No College	Political - Student issues	Y	Y	Y	N	Dedicated to student issues	Neutral	https://twitter.com/#!/neolaia	http://www.facebook.com/neolaiagr
ENIMEROSI24	http://www.enimerosi24.gr	Named	Rss	-	440	77254	322	35-44	25-34	55-65+	18-24	M	College	No College	General	Y	Y	N	N		Neutral	-	-
RIZOSPASTIS	http://www1.rizospastis.gr/	Named	Rss	-	453	66908	1825	35-44	45-54	55-65+	18-24	M	College	No College	Political	Y	Y	N	N	Official portal of the Greek Communist Party	Left	-	-
PARAPOLITIKI	http://www.parapolitiki.com/	N-name	Rss	-	457	69470	501	35-44	45-54	55-65+	18-24	M	Graduate School	Some College	Political	Y	Y	Y	N		Neutral	http://twitter.com/#!/Parapolitiki	http://www.facebook.com/parapolitiki
ALTER THESS	http://www.alterthess.gr/	Named	Rss	-	458	101788	362	35-44	18-24	55-65+	45-54	M	College	No College	General	Y	Y	Y	N	Local portal of Thessaloniki	Neutral	http://twitter.com/#!/alterthess	http://www.facebook.com/people/Alter-Thess/100001579001728
PREZA TV	http://prezatv.blogspot.com/	N-name	Blogspot	-	462	61747	1210	35-44	-	55-65+	45-54	M	College	No College	Political	N	Y	Y	Y		Left	http://twitter.com/#!/prezatv	-
EGLIMATIKOTITA	http://www.eglimatikotita.gr/	N-name	Rss	-	471	71525	936	35-44	25-34	55-65+	18-24	M	College	No College	Political - Crime news	N	Y	Y	N		Neutral	https://twitter.com/#!/eglimatikotita	http://www.facebook.com/pages/eglimatikotitagr/102682089836346
KAFENEIO - GR	http://kafeneio-gr.blogs	N-name	Blog	-	481	73027	1285	45-54	35-44	55-65+	25-34	M	Graduate School	No College	Political	N	Y	Y	N		Neutral	http://twitter.com/#!/kafeneiogr	http://www.facebook.com/pages/kafeneio-grblogspotcom

	pot.com/		spot																			/105123799536950
MEDIASOUP	http://mediasoup.gr/	Named	Rss	-	482	66007	615	35-44	25-34	55-65+	45-54	F	College	No College	Political - Culture	N	Y	Y	Y		Neutral	http://twitter.com/#!/mediasouptv	http://www.facebook.com/pages/MEDIASOUP/75303537092
EPIKAIRA	http://epikaira.gr/home.html	Named	Rss	-	491	73136	751	35-44	45-54	55-65+	18-24	M	College	No College	Political	Y	Y	Y	N		Neutral	http://twitter.com/#!/epikaira	http://www.facebook.com/pages/epikairagr/136057533115442
VORIA	http://voria.gr/	Named	Rss	-	493	80655	481	35-44	45-54	55-65+	18-24	M	College	No College	General	Y	Y	Y	N	Local portal of Thessaloniki	Neutral	http://twitter.com/#!/voriagr	http://www.facebook.com/pages/Voriagr/155142474548448
NEWSCODE	http://www.newscode.gr/	Named	Rss	-	494	62101	660	35-44	25-34	55-65+	18-24	M	College	No College	Political - Financial	Y	Y	N	Y		Neutral	http://twitter.com/#!/newscodegr	http://www.facebook.com/newscode
SELEO	http://www.seleo.gr/	Named	Rss	-	497	82305	363	35-44	18-24	55-65+	25-34	M	College	No College	General	Y	Y	Y	N	Local portal of Northern Greece	Neutral	https://twitter.com/#!/seleogr	https://www.facebook.com/Seleo.gr
SOFOKLEOUS10	http://www.sofokleous10.gr	Named	Rss	English	506	81131	686	35-44	45-54	55-65+	18-24	M	College	No College	Political - Financial	Y	Y	Y	Y			http://twitter.com/#!/sofokleous10	http://www.facebook.com/sofokleous10
ECO NEWS	http://www.econews.gr/	Named	Rss	-	533	85229	1128	35-44	25-34	55-65+	18-24	M	College	No College	Political - Ecology	N	Y	Y	N	Specialized ecological portal	Neutral	http://twitter.com/#!/econews_gr	http://www.facebook.com/econews
AIXMI	http://www.aixmi.gr/	Named	Rss	-	539	72556	610	35-44	25-34	55-65+	18-24	M	College	No College	General	N	Y	Y	N		Left	http://twitter.com/#!/aixmigr	http://www.facebook.com/aixmigr
LOGIOS HERMES	http://logioshermes.blogspot.com/	N-name	Blogspot	English	563	92856	564	35-44	45-54	55-65+	25-34	M	Some College	Graduate School	Political - Culture	N	Y	Y	N		Right	http://twitter.com/#!/logioshermes	http://www.facebook.com/Logios.Ermis

AS MILISOUME EPITELOUS	http://kostasxan.blogspot.com/	Named	Blogspot	-	589	82521	1095	45-54	35-44	55-65+	25-34	M	Some College	No College	Political	N	Y	Y	N		Right	https://twitter.com/#!/kostasxan	-
HELLAS ORTHODOXY	http://hellas-orthodoxy.blogspot.com/	N-name	Blogspot	-	614	105313	562	35-44	-	55-65+	18-24	M	College	No College	Political	N	Y	Y	N		Extreme Right	http://twitter.com/#!/hellasorthodoxy	http://el-gr.facebook.com/pages/HELLAS-ORTHODOXY-Blog/131453916879570
THE INSIDER	http://www.theinsider.gr/	Named	Rss	-	630	72652	528	35-44	25-34	55-65+	45-54	M	College	No College	General	N	Y	Y	N		Neutral	http://twitter.com/#!/TheInsidergr	http://www.facebook.com/pages/The-Insider/332005545587
NATIONAL ISSUES	http://greeknation.blogspot.com/	N-name	Blogspot	-	634	106036	601	35-44	45-54	55-65+	18-24	M	College	No College	Political	N	Y	N	N		Right	-	-
REPORTER	http://www.reporter.gr/	Named	Rss	English	653	94372	693	35-44	45-54	55-65+	18-24	M	Graduate School	No College	Political - Financial	Y	Y	N	Y		Neutral	https://twitter.com/#!/reportergr	http://www.facebook.com/Reportersite
ALEXIPTOTO	http://www.alexiptoto.com/	N-name	Rss	-	686	240188	243	18-24	25-34	25-34	45-54	M	College	Some College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/Alexiptwto	-
ISOTIMIA	http://www.isotimia.gr/	Named	Rss	-	806	126407	820	35-44	45-54	55-65+	18-24	M	College	Some College	Political - Financial	Y	Y	Y	N		Neutral	http://twitter.com/#!/isotimia	-
CITYPRESS	http://www.citypress.gr/	Named	Rss	-	812	130637	596	35-44	-	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/citypress_gr	http://www.facebook.com/citypress.gr
MAKEDONIA	http://www.makthes.gr/	Named	Rss	-	839	145166	1051	35-44	45-54	55-65+	18-24	M	College	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/makthes	http://www.facebook.com/makthes

IN THE MIND OF HARRY KLYNN	http://harrykllynn.blogspot.com/	Named	Blogspot	-	867	146870	383	35-44	45-54	18-24	25-34	M	College	No College	Political	N	Y	Y	N		Left	http://twitter.com/#!/harrykllynn	-
INFOGNOMON	http://infognomonpolitics.blogspot.com/	Named	Blogspot	-	887	147895	875	35-44	45-54	55-65+	18-24	M	College	No College	Political	N	Y	Y	N		Right	http://twitter.com/#!/InfognomonPolit	-
PAPAIOANNOU	http://papaioannou.wordpress.com/	Named	Wordpress	-	912	135345	515	35-44	-	55-65+	18-24	M	College	No College	Political	N	Y	Y	N		Neutral	https://twitter.com/#!/Papaioannou_J	-
OPEN GOV	http://www.opengov.gr/home/	Named	Rss	-	1198	152787	1329	35-44	45-54	55-65+	18-24	M	Graduate School	No College	Political	N	N	Y	N	Official open - government site of the Greek State. It presents proposed laws and requests the comments of the citizens	Neutral	-	-

8.2 Austrian Sources

Title	Url	Categorization	Feed	Other Language supported	Popularity (Alexa # national)	Popularity (Alexa # worldwide)	Reputation (#sites linking in)	Age Category 1 (Most)	Age Category 2 (Most)	Age Category 1 (Less)	Age Category 2 (Less)	Gender	Education (Most)	Education (Less)	Type of Content	News	Articles	User generated content	Polls	Comments	Political orientation	Twitter account	Facebook account
ÖSTERREICHISCHER RUNDFUNK	http://orf.at/	Named	Rss		5	867	22520	35-44	45-54	18-24	55-65+	M	Graduate School	No College	General	Y	N	N	N	ORF is the Austrian national public service broadcaster.	Neutral	http://twitter.com/#!/ORF	-
DER STANDARD	http://derstandard.at/	Named	Rss		8	1554	15249	35-44	45-54	55-65+	18-24	M	Graduate School	Some College	General	Y	Y	Y	N	Online portal of national daily newspaper "Der Standard". Social liberal political alignment.	Neutral - Left	http://twitter.com/#!/derStandardat	https://www.facebook.com/derStandardat
DIE PRESSE	http://diepresse.com/	Named	Rss		25	4778	9677	45-54	35-44	55-65+	18-24	M	Graduate School	Some College	General	Y	Y	Y	N	Online portal of national daily newspaper	Neutral - Right	https://twitter.com/#!/DiePresseCom	https://www.facebook.com/DiePressecom

																			"Die Presse". Centre-right, liberal political alignment.		
KURIER	http://kurier.at/	Named	Rss		31	6079	6464	35-44	45-54	18-24	25-34	M	Graduate School	No College	General	Y	Y	Y	Y	Online portal of national daily newspaper "Kurier". Centre-right, liberal political alignment.	Neutral - Right	http://twitter.com/#!/KURIERat	https://www.facebook.com/www.KURIER.at
KRONE	http://www.krone.at/	Named	Rss		32	6806	4998	45-54	35-44	18-24	25-34	M	Graduate School	Some College	General - Entertainment	Y	Y	Y	N	Online portal of national daily newspaper "Krone n Zeitung". Populist, Eurosceptic, social right-wing, economic left-wing.	Neutral	http://twitter.com/#!/krone_at	http://www.krone.at/
OE24	http://www.oe24.at/	Named	Rss		38	8086	3526	35-44	45-54	55-65+	18-24	F	Graduate School	Some College	General	Y	Y	Y	N	Online portal of national daily	Neutral	http://twitter.com/#!/Oe24at	https://www.facebook.com/oe24.at

																			newspaper "Österreich". Populist, tabloid.			
NEWS AT	http://www.news.at/	Named	Rss		54	11764	2455	35-44	45-54	18-24	55-65+	F	Graduate School	Some College	General - Entertainment	Y	Y	Y	N	Online portal of weekly magazine "News"	Neutral	http://twitter.com/#!/NEWS	https://www.facebook.com/NEWS.at
KLEINE ZEITUNG	http://www.kleinezeitung.at/	Named	Rss		55	10059	5485	35-44	45-54	55-65+	18-24	M	Graduate School	Some College	General	Y	Y	Y	N	Covers national issues, but also has local focus on Styria	Neutral	http://twitter.com/#!/kleinezeitung	https://www.facebook.com/kleinestmk
VORALBERG ONLINE	http://www.vol.at/	Named	Rss		75	14220	3895	35-44	45-54	18-24	-	F	Graduate School	No College	General	Y	N	Y	N	Online local scope portal with focus on Voralberg. Member of "Voralberger Medienhaus"	Neutral	-	https://www.facebook.com/VorarlbergOnline
TIROLER TAGESZEITUNG	http://www.tt.com/Nachrichten/index.csp	Named	Rss		113	21094	2279	45-54	35-44	55-65+	18-24	M	Graduate School	Some College	General	Y	N	Y	N	Online portal of regional daily newspaper "Tiroler Tageszeitung". Local scope, with	Neutral	http://twitter.com/#!/ttnewsline	http://www.facebook.com/TirolerTageszeitung

																			focus on Tyrol			
VIENNA ONLINE	http://www.vienna.at/	Named	Rss		131	30116	2609	35-44	45-54	55-65+	18-24	F	Graduate School	No College	General	Y	N	Y	N	Member of "Voralberger Medienhaus", along with "Voralberg Online"	Neutral	http://twitter.com/#!/viennaonline	http://www.facebook.com/vienna.at
OBERÖSTERREICHISCHE NACHRICHTEN	http://www.nachrichten.at/	Named	Rss		156	27142	3984	45-54	35-44	18-24	25-34	F	Graduate School	No College	General	Y	Y	Y	N	Online portal of regional daily Newspaper "Oberösterreich Nachrichten". National scope with regional focus on Oberösterreich.	Neutral	http://twitter.com/#!/nachrichten_at	http://www.facebook.com/nachrichten.at
HEUTE.AT	http://www.heute.at	Named	Rss		180	33968	1250	35-44	25-34	55-65+	45-54	F	Graduate School	No College	General - Entertainment	Y	N	Y	N	Online portal of free daily press "Heute". Reportedly centre-left alignment.	Neutral - Left	http://twitter.com/#!/heute_at	http://www.facebook.com/heute
WIRTSCHAFTSBLATT	http://www.wirtschaf	Named	Rss		182	27551	3115	35-44	45-54	18-24	25-34	M	Graduate School	Some College	Financial	Y	Y	Y	Y	Online portal of daily	Neutral - Liberal	http://twitter.com/#!/wiblatt	http://www.facebook.com/wirtschaftsblatt

	tsblatt.at/																		financial newspaper "Wirtschaftsblatt"			
SALZBURGER NACHRICHTEN	http://www.salzburg.com/	Named	Rss		203	33693	4056	55-65+	35-44	18-24	25-34	M	Graduate School	No College	General	Y	Y	Y	N	Online poral of daily newspaper "Salzburger Nachrichten". National scope, regional focus on Salzburg. Catholic orientation.	Neutral	http://twitter.com/#!/salzburg_com	http://www.facebook.com/salzburger.nachrichten
MEINBEZIRK.AT	http://meinbezirk.at/	Named	Rss		278	45559	1015	45-54	35-44	18-24	55-65+	F	Graduate School	Some College	General	N	Y	Y	Y	Online portal with gateways to the 8 different regions of Austria and a national gateway. For Styria and Karinthia, it leads to the portal "Woche".	Neutral	-	-

																			Exclusively user generated content with mostly regional focus.			
UNZENSURIERT.AT	http://unzensuriert.at/	Named	Rss		311	67165	476	45-54	35-44	18-24	55-65+	M	Graduate School	No College	General	Y	Y	Y	Y	Established by extreme right politician Martin Graf, member of FPÖ	Right	http://twitter.com/#!/unzensuriert	http://www.facebook.com/unzensuriert
ATV.AT	http://atv.at/	Named	Rss		320	67514	791	25-34	-	55-65+	18-24	F	Graduate School	No College	General - Entertainment	N	Y	Y	Y	Polls are organised through facebook pages	Neutral	http://twitter.com/#!/ATV	http://de-de.facebook.com/ATV.at
WIENER ZEITUNG	http://www.wienerzeitung.at/	Named	Rss		344	46895	4550	45-54	35-44	18-24	25-34	M	Graduate School	No College	General	Y	Y	Y	N		Conservative	http://twitter.com/#!/WienerZeitung	http://www.facebook.com/WienerZeitung
PROFIL	http://www.profil.at/	Named	Rss		538	89869	1507	55-65+	45-54	18-24	35-44	M	Graduate School	No College	General	Y	Y	Y	N	It isconsidered the Austrian counterpart to "Der Spiegel"	Neutral	http://twitter.com/#!/profilonline/	http://www.facebook.com/profilonline
ANDREAS-UNTERBERGER.AT	http://www.andreas-unterbe	Named	Rss		908	159679	228	25-34	35-44	18-24	-	M	Graduate School	College	Political	N	Y	Y	N		Neutral	http://twitter.com/#!/a_unterberger	http://www.facebook.com/unterbergers.tagebuch

	rger.at/																					
NIEDERÖSTERREICHISCHE NACHRICHTEN	http://www.noen.at/	Named	Rss		1078	191349	1119	35-44	25-34	18-24	55-65+	M	Graduate School	No College	General	Y	Y	Y	Y	Christian world view	Neutral - Conservative	http://twitter.com/#!/noen_online	http://www.facebook.com/noenat
FORMAT.AT	http://www.format.at/	Named	-		1183	205862	550	55-65+	45-54	18-24	35-44	M	Graduate School	Some College	Financial	Y	Y	Y	N		Neutral - Liberal	-	-
ZEITWORT	http://zeitwort.at/	Named	-		1217	186810	249	45-54	55-65+	18-24	25-34	M	No College	Some College	Financial	N	N	Y	N	Political forum	Neutral	-	-
SALZI.AT	http://www.salzi.at/	Named	Rss		1314	210793	271	45-54	55-65+	25-34	35-44	F	Graduate School	Some College	General	Y	N	Y	N	Regional scope and focus.	Neutral	-	http://www.facebook.com/salzi.at
MEDIANET.AT	http://www.medianet.at/	Named	Rss		1412	203344	485	35-44	25-34	45-54	55-65+	F	Graduate School	No College	Financial - Marketing	Y	Y	Y	N	Online portal of daily financial newspaper "Medianet"	Neutral	-	-
AUSTRIA.COM	http://www.austria.com/	Named	Rss		1820	197196	704	25-34	45-54	18-24	55-65+	F	Graduate School	Some College	General Entertainment	Y	N	Y	N	News portal	General	http://twitter.com/#!/wwwaustriacom	http://www.facebook.com/AustriaCom
ORTNER ONLINE	http://www.ortneronline.at/	Named	Rss		2397	293238	172	45-54	25-34	18-24	35-44	M	No College	Some College	Political	N	Y	Y	Y	Political blog	Neutral - Liberal	http://twitter.com/#!/ortneronline	-
AUSTRIAN TIMES	http://www.austriantimes.at/news/	Named	Rss		2467	163363	1338	18-24	35-44	45-54	55-65+	M	Some College	No College	General	Y	N	Y	N	Internet-only Austrian daily English-language online	Neutral	http://twitter.com/#!/AustrianTimesAt	http://www.facebook.com/Austrian.Times
INFOGRAZ.AT	http://www.info-graz.at/	Named	Rss		3977	385088	279	35-44	-	18-24	45-54	F	Graduate School	College	General	Y	Y	Y	N	City portal/ informations platform for Graz with	Neutral - Left	http://twitter.com/#!/INFOGRAZ	http://www.facebook.com/INFOGRAZ

																			section on politics and discussion			
BURGENLÄNDISCHE VOLKSZEITUNG	http://www.bvz.at	Named	Rss		5064	461283	391	45-54	25-34	18-24	35-44	M	College	Graduate School	General	Y	Y	Y	Y	Online portal of weekly regional newspaper "Burgenländische Volkszeitung". National scope with regional focus.	Neutral	http://twitter.com/#!/bvz_online	http://www.facebook.com/bvzat
BIBER	http://www.dasbiber.at	Named	Rss		5546	360961	261	25-34	-	55-65+	35-44	F	College	No College	General	N	Y	Y	N	Vienna-based free press with a focus on multi-culturalism	Neutral - Left	-	http://www.facebook.com/mitscharf
PAROLI MAGAZIN	http://www.paroli-magazin.at/paroli-magazin/	Named	-		9373	602103	35	25-34	-	-	-	F	Graduate School	College	General	N	Y	Y	N		Neutral - Left	http://twitter.com/#!/wir_sind_paroli	-
ÖSTERREICHISCHE HOCHSCHÜLERINNENSCHAFT BUNDESVERTRETUNG	http://www.oeh.ac.at/	Named	Rss		11043	923847	643	25-34	-	45-54	35-44	F	Graduate School	Some College	Education	Y	N	Y	N	Website of the Federation of High School Students with	Neutral - Left	http://twitter.com/#!/BundesOeH	http://www.facebook.com/OesterreichischeHochschuelerInnenschaft

																			blog section			
ZUR POLITIK	http://zurpolitik.com/	Named	Rss		16833	1528452	287	25-34	35-44	18-24	-	M	Graduate School	-	Political	N	Y	Y	N		Neutral	http://twitter.com/#!/schaffertom	http://www.facebook.com/zurpolitik
POLITIK-FORUM	http://www.politik-forum.at/	Named	-		19252	902990	167	25-34	18-24	35-44	45-54	M	Some College	Graduate School	Political	N	N	Y	N	Political forum	Neutral	-	-
DIE FURCHE	http://www.furche.at/system/	Named	-		20562	2363515	222									Y	Y	Y	N	Christian world view	Neutral - Conservative	-	-
ECONOMY AUSTRIA	http://www.economyaustria.at/	Named	Rss		26605	706158	150	18-24	25-34	45-54	35-44	M	Graduate School	Some College	Financial	Y	Y	Y	N		Neutral	http://twitter.com/#!/economyat	http://www.facebook.com/EconomyAustria

8.3 UK Sources

Title	Url	Categorization	Feed	Other Language supported	Popularity (Alexa # national)	Popularity (Alexa # worldwide)	Reputation (#sites linking in)	Age Category 1 (Most)	Age Category 2 (Most)	Age Category 1 (Less)	Age Category 2 (Less)	Gender	Education (Most)	Education (Less)	Type of Content	News	Articles	User generated content	Polls	Comments	Political orientation	Twitter account	Facebook account
BBC	http://www.bbc.co.uk/	Named	Rss	Most languages	5	47	428414	55-65+	18-24	45-55	35-44	M	Graduate School	No College	General	Y	Y	Y	Y	Several social media accounts per issue	Neutral	http://twitter.com/#!/BBCNEWS	http://www.facebook.com/bbcnews
THE DAILY MAIL	http://www.dailymail.co.uk	Named	Rss		14	123	131367	18-24	25-34	55-65+	35-44	F	College	No College	General	Y	Y	Y	N	Several social media accounts per issue	Neutral	http://twitter.com/#!/mailonline	http://www.facebook.com/TheDailyMail
THE GUARDIAN	http://www.guardian.co.uk/	Named	Rss		16	177	241704	18-24	25-34	55-65+	35-44	M	Graduate School	No College	General	Y	Y	Y	N		Centre-left liberalism	http://twitter.com/#!/guardian	http://www.facebook.com/theguardian
THE TELEGRAPH	http://www.telegraph.co.uk/	Named	Rss		24	256	153776	18-24	-	25-34	35-44	M	Graduate School	No College	General	Y	Y	Y	N		Neutral - Right	http://twitter.com/#!/telegraph	http://www.facebook.com/TELEGRAPH.CO.UK
SKY.COM	http://www.sky.com/	Named	Rss		33	850	31957	35-44	-	55-65+	18-24	M	Graduate School	College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/skynews	http://www.facebook.com/sky
THE SUN	http://www.thesun.co	Named	Rss		42	558	40278	18-24	25-34	55-65+	35-44	M	Graduate School	College	General	Y	Y	Y	Y	Tabloid	Labour	https://twitter.com/#!/TheSunNewspap	http://www.facebook.com/thesun

	.uk																				er	
CHANNEL 4	http://www.channel4.com	Named	Rss		75	2211	30434	18-24	25-34	55-65+	45-54	F	Graduate School	College	General	Y	Y	Y	N	Several social media accounts per issue	Neutral	http://twitter.com/#!/channel4news	http://www.facebook.com/Channel4News
THE INDEPENDENT	http://www.independent.co.uk/	Named	Rss		91	1266	84668	18-24	-	25-34	35-44	M	Graduate School	No College	General - Political	Y	Y	Y	N		Neutral - Left	http://twitter.com/#!/TheIndyNews	http://www.facebook.com/TheIndependentOnline
ORANGE NEWS	http://web.orange.co.uk/p/news/home	Named	Rss		95	2592	10325	18-24	-	55-65+	45-54	M	Graduate School	College	General	Y	N	Y	N	The news portal of the telecom provider Orange	Neutral	http://twitter.com/#!/orangeuknews	http://www.facebook.com/OrangeUK
FINANCIAL TIMES	http://www.ft.com/home/uk	Named	Rss		200	970	77344	55-65+	45-54	18-24	25-34	M	Graduate School	Some College	Political - Financial	Y	Y	Y	N	2010 - Supported the positions of the Labour Party. Subscription required	Neutral	http://twitter.com/#!/financialtimes	http://www.facebook.com/financialtimes
HUFFINGTON POST UK	http://www.huffingtonpost.co.uk/	Named	Rss		216	2768	7613	55-65+	-	25-34	-	F	Graduate School	No College	General	Y	Y	Y	N	Jon Bekken, journalism professor at Suffolk University, has cited the	Neutral	https://twitter.com/#!/HuffPostUK	http://www.facebook.com/HuffPostUK

																				Huffington Post as an example of an "advocacy newspaper."			
REUTERS UK	http://uk.reuters.com/	Named	Rss		217	233	183797	55-65+	45-54	18-24	25-34	M	Graduate School	No College	General	Y	Y	Y	N	Demographics are for Reuters International	Neutral	http://twitter.com/#!/reuters_co_uk	http://www.facebook.com/ReutersUK
METRO	http://www.metro.co.uk/home/	Named	Rss		219	3500	20584	18-24	25-34	55-65+	45-54	M	Graduate School	Some College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/MetroUK	http://www.facebook.com/MetroUK
THIS IS SOUTH WALES	http://www.thisissouthwales.co.uk/home	Named	Rss		225	5565	18851	45-54	35-44	55-65+	25-34	M	Graduate School	College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/thisiswales	http://www.facebook.com/thisissouthwales
THE DAILY MIRROR	http://www.mirror.co.uk/	Named	Rss		257	2645	30150	18-24	-	55-65+	45-54	F	Graduate School	Some College	General	Y	Y	Y	N	Tabloid. Traditionally backed the Labour Party	Neutral - Left	http://twitter.com/#!/dailymirror	http://www.facebook.com/dailymirror
THE REGISTER	http://www.theregister.co.uk/	Named	Rss		276	2718	41664	18-24	25-34	55-65+	45-54	M	Graduate School	Some College	Technology	Y	Y	Y	N	Limited political discussion on technology issues	Neutral	http://twitter.com/#!/regvulture	http://www.facebook.com/VultureCentral
THIS IS MONEY	http://www.thisismoney.co.u	Named	Rss		402	10806	5707	35-44	-	18-24	55-65+	M	Graduate School	No College	Financial	N	Y	Y	N		Neutral	http://twitter.com/#!/thisismoney	http://www.facebook.com/pages/This-is-

	k/money/index.html																					Money/310555847252
LONDON EVENING STANDARD	http://www.thisislondon.co.uk/news/	Named	Rss		441	7692	21592	18-24	-	55-65+	45-54	F	Graduate School	Some College	General	Y	Y	Y	N	Mostly news about the City of London	Neutral	https://twitter.com/#!/standardnews	http://www.facebook.com/eveningstandard
MARKETING WEEK	http://www.marketingweek.co.uk/	Named	Rss		523	9362	11031	25-34	18-24	55-65+	45-54	F	Graduate School	Some College	Financial	N	Y	Y	N	Limited political discussion on business issues	Neutral	http://twitter.com/#!/marketingweeked	http://www.facebook.com/MarketingWeekEd
THE TIMES	http://www.thetimes.co.uk/tto/news/	Named	Rss		610	8173	84055	18-24	-	55-65+	45-54	F	Graduate School	Some College	General	Y	Y	Y	N	Subscription required	Neutral	-	-
THE SCOTSMAN	http://www.scotsman.com/the-scotsman	Named	Rss		649	14005	22531	55-65+	45-54	25-34	18-24	M	Graduate School	Some College	General	Y	Y	Y	N		Neutral	http://www.facebook.com/scotsmanonline	http://twitter.com/#!/scotsmandotcom
THE ECONOMIST	http://www.economist.com/	Named	Rss		679	1626	69523	25-34	18-24	55-65+	45-54	M	Graduate School	No College	Political - Financial	Y	Y	Y	N		Neutral	http://twitter.com/#!/TheEconomist	http://www.facebook.com/TheEconomist
THE BELFAST TELEGRAPH	http://www.belfasttelegraph.co.uk/	Named	Rss		698	13274	10499	18-24	-	55-65+	45-54	M	Graduate School	No College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/BelTel	http://www.facebook.com/belfasttelegraph
THE DAILY EXPRESS	http://www.express.co.uk/home	Named	Rss		763	13144	12659	55-65+	45-54	25-34	18-24	F	Graduate School	College	General	Y	Y	Y	N	Tabloid	Right	http://twitter.com/#!/daily_express	http://www.facebook.com/DailyExpress
THE DAILY STAR	http://www.dailystar.co.uk/la	Named	Rss		1188	19744	5691	18-24	25-34	55-65+	35-44	M	Graduate School	No College	General	Y	Y	Y	N	Tabloid	Neutral	http://twitter.com/#!/daily_star	http://www.facebook.com/thedailystar

	testnews/																					
WALES ONLINE	http://www.walesonline.co.uk/	Named	Rss		1361	22447	7172	55-65+	45-54	25-34	18-24	M	Graduate School	College	General	Y	Y	Y	Y		Neutral	https://twitter.com/#!/walesonline	http://www.facebook.com/walesonline.co.uk
GUIDO FAWKES BLOG	http://order-order.com/	Named	Rss		1490	43376	2127	55-65+	45-54	25-34	18-24	M	Graduate School	Some College	Political	N	Y	Y	N	Rumors - conspiracies	Left	http://twitter.com/#!/guidofawkes	-
HERALD SCOTLAND	http://www.heraldscotland.com/	Named	Rss		1822	39024	5665	55-65+	45-54	18-24	25-34	M	Graduate School	Some College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/heraldscotland	http://www.facebook.com/heraldscotland
EXPRESS AND STAR	http://www.expressandstar.com/	Named	Rss		4637	107463	2085	45-54	35-44	55-65+	-	M	Graduate School	Some College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/expressandstar	http://www.facebook.com/ExpressandStar
NEW STATESMAN	http://newstatesman.com/	Named	Rss		2452	31524	10745	55-65+	18-24	25-34	35-44	M	Graduate School	Some College	Political	N	Y	Y	Y		Left	http://twitter.com/#!/NewStatesman	http://www.facebook.com/NewStatesman
SPECTATOR	http://www.spectator.co.uk/	Named	Rss		2118	50403	7466	55-65+	45-54	25-34	18-24	M	Graduate School	No College	General	N	Y	Y	N		Right	http://twitter.com/#!/spectatorlive	http://www.facebook.com/OfficialSpectator
THE WEEK	http://www.theweek.co.uk/	Named	Rss		4521	42479	1021	18-24	55-65+	25-34	35-44	M	Graduate School	No College	General	N	Y	Y	N		Neutral	http://twitter.com/#!/theweekuk	http://www.facebook.com/theweekuk
UK POLLING REPORT	http://ukpollingreport.co.uk/	Named	Rss		4572	130176	806	18-24	55-65+	25-34	35-44	M	Graduate School	College	Political	N	Y	Y	N	The site examines the results of polls	Neutral	-	-
THE STAR	http://www.thestar.co.uk/	Named	Rss		4637	107463	2085	45-54	35-44	55-65+	-	M	Graduate School	Some College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/SheffieldStar	http://www.facebook.com/sheffieldstar

HARRY'S PLACE	http://hurryupharry.org/	Named	Rss		5690	116594	1474	55-65+	18-24	25-34	35-44	M	Graduate School	No College	Political	N	Y	Y	N		Neutral	-	-
PEOPLE	http://www.people.co.uk/	Named	Rss		6552	89038	2306	18-24	25-34	55-65+	35-44	M	Graduate School	College	General	Y	Y	Y	N	Tabloid	Neutral		-
OPEN DEMOCRACY	http://www.opendemocracy.net/	Named	Rss		7075	51910	6951	55-65+	-	25-34	45-54	M	Graduate School	Some College	Political	N	Y	Y	N	Opinion articles from established academics and journalists	Neutral	http://twitter.com/#!/opendemocracy	http://www.facebook.com/openDemocracy
POLITICS HOME	http://politicshome.com/	Named	Rss		11227	145108	870	55-65+	35-44	25-34	45-54	M	Graduate School	Some College	Political	Y	Y	Y	N		Neutral	http://twitter.com/#!/politicshomeuk	http://www.facebook.com/PoliticsHomeUK
YORKSHIRE EVENING POST	http://www.yorkshireeveningpost.co.uk/	Named	Rss		2472	46820	2237	55-65+	45-54	25-34	35-44	M	Graduate School	College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/leedsnews	http://www.facebook.com/pages/Yorkshire-Evening-Post/134335183511
DARLINGTONE NORTHERN ECHO	http://www.thenortherneecho.co.uk/	Named	Rss		4353	107226	2422	55-65+	-	25-34	-	M	Graduate School	College	General	Y	Y	Y	N		Neutral	https://twitter.com/#!/TheNorthernEcho	http://www.facebook.com/pages/The-Northern-Echo/96783637568
GAZETTE LIVE	http://www.gazettelive.co.uk/	Named	Rss		4342	94711	1470	55-65+	-	35-44	-	M	No College	College	General	Y	Y	Y	Y		Neutral	http://twitter.com/#!/EveningGazette/	http://www.facebook.com/evening.gazette
CHRONICLE LIVE	http://www.chroniclelive.co.uk/	Named	Rss		2316	54428	1732	18-24	45-54	55-65+	35-44	M	Graduate School	Some College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/eveningchronicle	https://www.facebook.com/eveningchronicle
SUNDERLAND ECHO	http://www.sunderla	Named	Rss		2824	82779	1154	25-34	18-24	55-65+	35-44	M	Some College	College	General	Y	Y	Y	N		Neutral	http://twitter.com/#!/sunderlandecho	http://www.facebook.com/sunderlande

	ndecho.com/																					choonline
POLITICS UK	http://politics.co.uk/	Named	Rss		18235	245018	2075	55-65+	18-24	25-34	35-44	M	Graduate School	Some College	Political	Y	Y	Y	N		Neutral	http://twitter.com/#!/politics_co_uk	http://www.facebook.com/pages/Politicscouk/124189634323190
TOTAL POLITICS	http://www.totalpolitics.com/	Named	Rss		23192	459790	804	55-65+	18-24	45-54	25-34	M	Graduate School	Some College	Political	N	Y	Y	N		Neutral	http://twitter.com/#!/totalpolitics	http://www.facebook.com/totalpolitics
CONSERVATIVE HOME	http://conservativehome.blogs.com/	Named	Rss		3250	108271	2304	55-65+	35-44	25-34	-	M	Graduate School	Some College	Political	Y	Y	Y	N		Conservative	http://twitter.com/#!/conhome	-
JOHN REDWOOD	http://johnredwoodsdiary.com/	Named	Rss		28236	656328	520	55-65+	-	35-44	25-34	M	Some College	Graduate School	Political	N	Y	Y	N		Conservative	http://twitter.com/#!/johnredwood	http://www.facebook.com/john.redwood.official
LEFT FOOT FORWARD	http://www.leftfootforward.org/	Named	Rss		22471	287384	1807	18-24	-	55-65+	25-34	M	Graduate School	Some College	Political	N	Y	Y	N		Left	http://twitter.com/#!/leftfootfwd/	http://www.facebook.com/pages/Left-Foot-Forward/119855314479
LABOUR LIST	http://labourlist.org/	Named	Rss		11856	215697	1093	35-44	18-24	55-65+	45-54	M	Graduate School	Some College	Political	N	Y	Y	N		Labours	http://twitter.com/#!/LabourList	http://www.facebook.com/LabourList
POLITICAL SCRAPBOOK	http://politicalscrapbook.net/	Named	Rss		13387	189045	682	18-24	35-44	55-65+	45-54	M	Graduate School	Some College	Political	N	Y	Y	N		Left	https://twitter.com/#!/PSbook	http://www.facebook.com/PoliticalScrapbook
LIBERAL CONSPIRACY	http://liberalconspiracy.org/	Named	Rss		6298	130173	2016	18-24	35-44	45-54	55-65+	M	Graduate School	Some College	Political	N	Y	Y	N		Left	http://twitter.com/#!/libcon	http://www.facebook.com/liberalconspiracy
LABOUR UNCUT	http://labour-uncut.co.uk/	Named	Rss		26444	908270	412	35-44	-	55-65+	18-24	M	College	No College	Political	N	Y	Y	N		Labours	http://twitter.com/#!/LabourUncut	http://www.facebook.com/pages/Labour-Uncut/102213933159810
THE SLOG	http://hat4uk.wordpres	Named	Wor		10123	116092	686	55-65+	35-44	18-24	25-34	M	Graduate School	Some College	Political	N	Y	Y	N		Left	http://twitter.com/#!/nbyward	-

	s.com/		d p r e s s																			
THE COMMENTATOR	http://www.thecommentator.com/	Named	R s s		7586	189348	536	55-65+	18-24	25-34	35-44	M	Graduate School	Some College	Political	N	Y	Y	Y		Conservative	https://twitter.com/#!/TheCommentator	http://www.facebook.com/thecommentatorcom
ADAM SMITH INSTITUTE	http://www.adamsmith.org/blog	Named	R s s		21451	268933	2123	18-24	45-54	25-34	-	M	Graduate School	College	Political	N	Y	Y	N		Right	http://twitter.com/#!/asi	www.facebook.com/AdamSmithInstitute