

# Patterns of usage of Social Network Sites: The case of YouTube

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## **Abstract**

*Social Networking Sites and social media have become a major part of today's organizations marketing mix, and YouTube is considered to be one of the most important channels of communication with customers. In this paper we examine the ways that consumers use YouTube and how it affects their buying behaviour. Using a structured questionnaire and a sample of 224 respondents, we explore the ways consumers use YouTube to interact with videos in the platform and other users as well. Our results indicate the existence of 5 main patterns of interaction with YouTube. These findings can be used in designing social media marketing campaign for YouTube.*

**Keywords:** Social Networking Sites, YouTube, SNSs usage, Greece.

**JEL classifications:** M30, M390

## **Introduction**

Social Media (SM) and Social Networking Sites (SNSs) have gotten enormous attention during the last decade from marketers and academics, as their prevalent adoption have made them an indispensable part of everyday life for individuals, business and organisations (Constantinides and Romero, 2013; Kavoura and Koziol, 2017). The immense range of applications of SNSs (Mangold and Faulds, 2009; Kwon and Wen, 2010; Kietzman et al., 2011) and their penetration in all socio-demographics segments of the population globally (Hanna et al., 2011; Belch and Belch, 2014), led to the replacement of traditional means of the communication marketing mix (Sakas et al., 2015; Alves et al., 2016; Ha, 2018).

The significance and the explosive growth of adoption of SNSs by firms and organizations, for marketing and business communication with customers and stakeholders, regardless of their industry and size, is also prevalent in Greece (Tsimonis and Dimitriadis, 2014; Vlachvei and Notta, 2014).

One of the most important SNSs, that offers great capabilities to marketers and users alike, is YouTube. Founded in 2005, YouTube is the biggest online video platform worldwide, offering a wide variety of both user-generated and corporate media of various content through channels and video blogs, with a number of online video platform viewers that is forecasted to reach 1.58 billion in 2018 and 1.86 billion in 2021, up from 1.47 billion in 2017 (Statista, 2018). The same stands for Greece as well, since YouTube is the second most popular SNSs after Facebook, especially for music and for sharing

videos in other SNSs (Drosos et al., 2015; Antoniadis et al., 2017; Eltrun, 2017).

As marketers increase their investment in YouTube video advertisements, it is important to understand the ways and reason that motivate consumers to use and interact with videos in YouTube, in order to increase ROI of social media marketing campaigns (Animoto, 2017). Despite the importance of YouTube, little research has been conducted to investigate this issue in Greece. In this paper we investigate the patterns of YouTube usage in Greece following the methodology of relevant research (Haridakis and Hanson, 2009; Brandtzæg and Heim 2011), and extend previous work performed by the authors (Antoniadis et al., 2015;2017) examining Facebook usage. Our findings revealed 5 main patterns of YouTube usage by consumers namely, *entertainment seeking, security considerations, information seeking, thrill seeking, and social interaction*. This paper contributes in the relevant research in further understanding the reasons that lead consumers to use and interact with YouTube, providing insight to both academics and marketers on the implementation of more effective social media marketing campaigns in YouTube in Greece.

The rest of the paper is organized as follows. In the next session the literature review on SNSs usage is discussed. Section 3 presents the methodology of our research and the main characteristics of the examined sample. Section 4 describes the main patterns of YouTube usage in Greece as were derived by the performed factor analysis. The last section concludes the paper offering a brief discussion of our results and recommendations for further research.

## **Literature review**

SNSs, with their growing importance have been a major point of attention by researchers of various disciplines, offering a number of definitions (Kaplan and Haenlein, 2010; Hanna et al., 2011; Kietzman et al., 2011; Alves et al. 2016). Kwon and Wen (2010) considering the ways users interact with them, described SNSs as *"web-based service which is based on certain meaningful and valuable relationships including friendship, kinship, interests, and activities, which allows individuals to network for a variety of purposes including sharing information, building and exploring relationships, and so on"*.

The main characteristics of these platforms enable interaction between individuals or among individuals and organizations (Berthon et al., 2012), establishing them as an essential instrument for creating and enforcing bonds with customers. That is achieved through the dissemination of creative content, that is either firm (brand) or user generated (Stavrianea and Kavoura, 2016). YouTube after its acquisition by Google in 2006 has seen an exponential growth both in users and the possibilities it offers to firms, organizations and ordinary people to create and upload content (Holland, 2016), replacing in multiple occasions traditional media like radio and TV (Ha, 2018). Today it is the second most visited website worldwide and one of the most downloaded apps in both iOS and Android operating systems (Bärtl, 2018).

The role of SNSs and social media marketing and the effect they have in consumer behavior is highlighted by a number of research papers (Kim and Ko, 2012; Vinerean et al., 2013; Tiago and Verissimo, 2014; Stephen, 2016) and their usage by firms and consumers has been a major field of marketing research during the last years (Alves et al., 2016).

In the heart of this interaction is the understanding of the reasons consumers use SNSs, as well as, the ways and patterns they interact between them and with the content (brand or user generated) they come across in SNSs. Kietzman et al., (2011) proposed the honeycomb model of interaction and usage, identifying seven functional blocks of reasons that lead the usage of social media and SNSs. Those seven blocks are identity, conversations, sharing, presence, relationships, reputation, and groups. Brandtzæg and Heim (2011), proposed a model of SNSs usage that moves along two axes, namely participation and frequency of use (low-high), and purpose (informational or recreational).

Based on these models a number of studies has been conducted during the last years examining the reasons and patterns of SNSs usage that mainly focus in Facebook in the USA (Antoniadis et al., 2017), but recently research interest turns to Europe and Asia. Another main characteristic of the relevant research is that it focuses in a specific socio-demographic group namely college and university students since they are supposed to be the main users of the platforms, and an easier segment to study (Saprikis, 2013; Antoniadis et al., 2014). For example, Giannakos et al (2013), found four main reasons that lead people to use Facebook in Greece, and those were social connection, social network surfing, wasting time and using applications. Enjoyment and entertainment are also identified as a very important reasons to use of SNSs (Lin and Lu, 2011), along with network effect, social interaction, communication with friends, and information seeking.

YouTube usage and social interaction have been examined by Haridakis and Hanson (2009) who found that information seeking, entertainment and social interaction were the most important factors for viewing YouTube videos. Drosos et al. (2015) found that security concerns, social interaction, information availability and leisure time passing are important motives that would increase the usage of Facebook and YouTube in Greece. Kandias et al., (2017) also raised security issues concerning SNSs usage, describing the various ways that YouTube usage may breach users' privacy in YouTube.

Information and functionality have also found to be important features of content that lead to higher levels of interaction with content by SNS users (Ashley and Tuten, 2014). Dehghani et al., (2016), also identified entertainment, and information seeking as the attitudes that have positive effect on advertisement value, when they investigated the attitudes of Italian students towards YouTube advertisements, implying that these attitudes are compatible with the reasons of YouTube usage. Schneider et al., (2016) apart from entertainment or passing leisure time as reasons for using YouTube outlined the educational value of the platform for learning goals or for the development of behavioural intentions, such as information seeking.

Moghavvemi et al., (2017) found that YouTube is used by Malaysian students for entertainment, information, academic learning, and product inquiry. Another interesting finding of their research is that 22% of YouTube users they have surveyed, are addicted, and spend more than two hours on YouTube per day. In a previous research concerning Facebook usage by Greek university students the authors identified 4 patterns of usage namely debating, socializing, expression, and entertainment seeking (Antoniadis et al., 2017). Finally, Klobas et al., (2018) examined students from a Malaysian university found that stronger motivation to use YouTube for information seeking and learning is linked with lower compulsive use, while stronger entertainment seeking motives of YouTube usage are associated with higher compulsive use, that not surprisingly affects negatively academic motivation!

Based on the reviewed literature, we can assume that the main factors that describe, and affect SNSs usage are informational, entertainment seeking, social interaction and some security considerations. In the following sections we are going to discover whether those usage patterns are applicable in the case of YouTube users in Greece.

## Research methodology and Sample characteristics

The research was conducted during March-May of 2018. A structured online questionnaire was administered through the internet and social media. The questionnaire included questions regarding YouTube usage, the ways it affects buying behaviour and the attitudes of users towards YouTube advertisement.

**Table 1: Sample Demographics**

<b>Demographics</b>	<b>Frequencies (%)</b>
<i>Gender</i>	<i>Male: 71 (31.7%), Female: 153 (68.3%)</i>
<i>Age</i>	<i>18-25: 62(27.7%), 26-30: 66(29.5%), 31-40: 59(26.3%), &gt;40: 37(16.5%)</i>
<i>Education</i>	<i>High School: 13(5.8%), Secondary School: 61(27.2%) IEK: 32(27.2%), Bachelor: 96(42.9%), Postgraduate: 20(8.9%) PhD: 2 (0.9%)</i>
<i>Occupation</i>	<i>Public Servants: 19(8.5%), Private Employees: 92(41.1%), Freelancers: 41(18.3%), Entrepreneurs: 10(4.5%), Household: 7(3.1%), Unemployed: 55(26.4%)</i>
<i>Income (in '000s €)</i>	<i>&lt;8: 127(59.6%), 8-20: 60(28.2%), 20-40: 21(9.9%), &gt;40: 5(2.2%)</i>

In order to detect the main usage patterns of YouTube we examined 20 questions, measured in a 5-point Likert scale (1=strongly disagree, 5=strongly agree), and analysed them using factor analysis (Aaker et al., 1998; Hair et al., 2010). These questions are in line with the relevant literature (Haridakis and Hansson, 2009; Kwon and Wen, 2010; Brandtzæg and Heim, 2011; Vinerean et al., 2013), and were adapted for

the features of YouTube (Holland, 2016), extending previous work performed by the authors for Facebook (Antoniadis et al., 2017).

The demographics of the examined sample are presented in Table 1. Convenience sampling was used with 71 (31.7%) male respondents and 153 (68.3%) female respondents. The age of the respondents reflects the SNSs usage by younger in age individuals as, 27.7% of them were 18 to 25 years old, 29.5% were 26 to 30 years old, 26.3% were 31 to 40 years old and 16,5% were 40 years older.

The majority of the respondents are private employees (41.1%) while it is worth noting that 26.4% of the sample was unemployed. Almost 60% of the respondents had an income of less than 8,000 €. Finally, as far as the education level of the respondent is concerned 42.9% of them hold a university or college degree, and 27.2% of them has attended some kind of after school tertiary education (IEK). In the following sector the results concerning the ways and the reasons for using YouTube will be presented.

## Empirical Results and discussion

As expected and in line with previous research (Heinrichs et al., 2011; Antoniadis et al., 2017; Ha 2018) the most popular way to access YouTube are smartphones, as 67% of the respondents use the application in Android or iOS to watch videos, and 19.2% use their laptop. The vast majority use primarily WiFi to use YouTube, as it seems that mobile data plans are expensive and inadequate for that kind of SNSs activity, and 47.3% use YouTube for less than an hour a day.

Almost 3 out of 4 (77.7%) answered that they use YouTube often or very often. 47.3% of the respondents said that they are using YouTube less than one hour daily, 32.1% use it 1-3 hours and 14.8% more than 3 hours every day, that constitute an addiction for Moghavvemi et al., (2017). We must consider whether that should be characterised as active or passive usage, i.e. listening to music while doing other things that is a common activity for users in Greece (ELTRUN, 2017).

**Table 2: YouTube interaction - Frequencies (%)**

How often do you ...	Never	Rarely	Sometimes	Often	Very Often
Share videos from YouTube	55 (24.6%)	84 (37.5%)	54 (24.1%)	22 (9.8%)	9 (4.0%)
Subscribe to channels	106 (47.3%)	57 (25.4%)	42 (18.8%)	16 (7.1%)	3 (1.3%)
Comment on videos	170 (75.9%)	41 (18.3%)	11 (4.9%)	1 (0.4%)	1 (0.4%)
Like/Dislike Videos	84 (37.5%)	82 (36.6%)	40 (17.9%)	15 (6.7%)	3 (1.3%)
Save a video in a Playlist	57 (25.4%)	75 (33.5%)	44 (19.6%)	31 (13.8%)	17 (7.6%)
Upload Videos in your channel	173 (77.2%)	33 (14.7%)	10 (4.5%)	6 (2.7%)	2 (0.9%)

In Table 2 the ways that users interact with YouTube are presented. Overall the levels of interaction and engagement with YouTube content seems to be significantly low. Sharing videos from YouTube with friends, contacts and followers in other SNSs and application is the most important way of interaction with 24.1% answering sometimes and 13.8% often and very often. Facebook is the most prevalent SNSs where users share videos from YouTube with 78.6%. Saving a video to a playlist is another popular interaction with more than 28.2% of the respondents doing it some times or more frequently.

**Table 3: Descriptive statistics of the YouTube reasons to use questions**

Q	I use YouTube because ...	Mean	Std. Deviation
1	It is amusing	3.85	.826
2	It is entertaining	3.99	.784
3	It is pleasant	3.92	.757
4	People around me use it	2.46	1.075
5	It exists	2.78	1.130
6	It is an interesting way to pass my time	3.65	.968
7	To pass my time when I'm bored	3.67	1.019
8	I have nothing better to do	2.54	1.128
9	It is exciting	3.05	.960
10	It is emotional	2.57	1.035
11	It is easy to use	3.94	.861
12	It is safe using it	3.33	.936
13	It protects my personal data	2.96	.903
14	It protects my privacy	2.89	.912
15	I can use it any time	3.94	.881
16	I can keep in touch with the activities of my social media friends	2.55	1.040
17	I interact with other users	2.29	.994
18	I seek information on products and services	3.39	1.099
19	I want to get informed	3.52	1.080
20	I want to learn new things	3.57	1.069

The same levels of engagement are observed in liking/disliking a video where 25.9% of the users surveyed, replied that they do it sometimes or more often. The least popular activities are uploading a video in a channel and commenting a video where 77.2% and 75.9%, respectively answered that they never do it. As far as uploading videos in a channel is concerned only 3.6% answered that they upload videos in their channels. These results should be of concern for marketers and vloggers who wish to use their YouTube channels to initiate a dialogue with the online community (Kavoura 2014) and enhance the engagement levels of their content.

After reviewing the ways that users engage and interact with YouTube videos the results of the factor analysis concerning the reasons consumers use YouTube are presented. As mentioned in the previous section we have used 20 questions and reasons suggested by the relevant literature and research. In Table 3 these researched items are presented along with the main descriptive statistics of the replies we have received for each one of it.

Factor analysis was performed in order to attain the factors (patterns) that drive YouTube usage. After testing a number of scenarios we have omitted questions Q4 and Q5 since they do not provide factors that can be interpreted. An explanation for this is the fact that YouTube is now a popular and widely acknowledged SNSs (Holland, 2016; Bärtl, 2018; Ha, 2018), in contrast to the period of time where Haridakis (2009) performed his survey and included these questions to probably test for contagion or curiosity. Furthermore, omitting these two questions yields the best percentage of the total variance is explained in all four scenarios we have examined.

Using the Principal Component Analysis and the Varimax Rotation Method with Kaiser Normalization, we have derived 5 factors that are presented with their relevant loadings for every research item in Table 4. The 5 factors identified, account for a total of 74.03% of the total variance explained. The Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was found to be of a very high value (KMO=0.875) indicating a "meritorious" selection of variables (Sharma, 1996), while the Bartlett's sphericity test provided a value of  $\chi^2(153) = 2,522.871$ , ( $p < 0,001$ ).

The identified factors can be described as:

1. **Entertainment seeking:** Consumers and YouTube users use it as a convenient, pleasant and easy way of entertainment, and leisure time.
2. **Security considerations:** Using YouTube is conceived to be safe and consumers feel that their privacy is respected and their personal data are protected.
3. **Information seeking:** Consumers use YouTube to be informed not only for products and services but also for news and to learn new things and skills.
4. **Thrill seeking:** YouTube can be the source of excitement and moving experiences through unexpected or vivid content that can lead to higher levels of empathy with the viewed content (Ha, 2018).
5. **Social Interaction:** This factor includes the social aspects of YouTube by connecting with friends and interact with other YouTube users.

**Table 4: Rotated Component matrix and factor loadings<sup>1</sup>**

I use YouTube because ...	Component				
	1	2	3	4	5
It is amusing	<b>.804</b>	.192	.221	.172	.023
It is entertaining	<b>.816</b>	.154	.244	.064	-.024
It is pleasant	<b>.834</b>	.110	.266	.129	.025
It is an interesting way to pass my time	<b>.729</b>	.261	.028	.293	.141
To pass my time when I'm bored	<b>.681</b>	.141	.056	.257	.248
I have nothing better to do	.294	-.026	-.138	<b>.635</b>	.347
It is exciting	.235	.348	.364	<b>.668</b>	-.021
It is emotional	.064	.154	.270	<b>.763</b>	.159
It is easy to use	<b>.625</b>	.477	.256	-.053	-.059
It is safe using it	.343	<b>.776</b>	.125	.129	-.059
It protects my personal data	.192	<b>.902</b>	-.026	.117	.136
It protects my privacy	.182	<b>.882</b>	.021	.141	.164
I can use it any time	<b>.596</b>	.370	.364	-.170	.145
I can keep in touch with the activities of my social media friends	.145	.047	.231	.140	<b>.831</b>
I interact with other users	-.002	.144	.176	.157	<b>.831</b>
I seek information on products and services	.139	.024	<b>.797</b>	.018	.278
I want to get informed	.265	.051	<b>.790</b>	.212	.129
I want to learn new things	.331	.057	<b>.740</b>	.165	.072

<sup>1</sup> Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 10 iterations

### Conclusions and suggestions for future research

In this paper we have examined the usage patterns and factors of YouTube in Greece, by examining a sample of 224 individuals of various socio-demographic groups. Our findings are in line with the relevant literature as all 5 factors we have identified are predicted and described by relevant research papers.

Our findings however, provide some interesting insight in the ways Greek YouTube users behave. First of all, it is clear that we are facing a mobile consumer, that heavily uses smartphones and apps to



access SNSs (Heinrichs et al., 2011), and that should be considered by marketers intending to use YouTube as a channel of communication with their customers. A second finding is that users of YouTube in Greece are more passive compared to other SNSs, like Facebook. Therefore, levels of engagement are expected to be low and users' activity is limited to watching. Considering the 5 factors that drive YouTube usage, marketers should create videos and messages in YouTube Channels that will be informative, vivid and exciting, in order to attract viewers, providing them with motives to interact with both the video and their friends or followers in other SNSs as well. Finally, security considerations for marketing and SNSs, are an important factor for SNSs users and its gravity will grow in the light of the recent security issues of data privacy (i.e. Facebook and Oxford Analytics), the growing use of data mining (Kandias et al., 2017), and the EU General Data Protection Regulation (Goddard, 2017).

Notwithstanding, the importance of our results and their relevance to the findings of other researchers on the subject, there are some limitations in our research that should be considered. The sample examined is limited and does not have a specific socio-demographic or spatial focus. Moreover, more attention must be paid to newly emerging issues of user generated content and the ways YouTube users interact with them. However, this is a part of an ongoing research, extending prior work in Facebook, to SNSs usage in YouTube and Instagram.

As SNSs continue to evolve and grow in terms of importance as a way of interaction, further research should focus on using broader and more focused samples that heavily use SNSs, like millennials, and generation Z (Animoto, 2017), exploring the ways that the identified factors and user generated content affect SNSs usage and engagement. This way a more detailed insight will be provided, on the mechanisms that drive consumers to interact more actively with content in YouTube, and other SNSs that are in the rise like Instagram and Snapchat. Finally, other social media marketing issues should be included in future research, such as the interaction of SNSs usage with SNSs advertisement, and the effect YouTube content have on both online and offline purchase decisions, providing marketers with valuable information that would help them formulate and implement innovative social media marketing strategies and campaign in YouTube and other SNSs.

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