Effective social media marketing strategy: Facebook as an opportunity for universities

ABSTRACT

Purpose
This study investigates the usage of university Facebook groups and sites by undergraduate students seeking information about their departments and the ways these pages could be used to acquire students. Factors that can intensify the Facebook group activities of a University are examined as well as how Facebook can be used as a marketing tool to improve marketing campaigns.

Design/methodology/approach
The study investigates and compares two Universities: the University of Novisad of the Republic of Serbia and the Technological Educational Institute of Western Macedonia, Greece. A structured questionnaire was used with samples of 343 and 300 students gathered in this survey.

Findings
An enhanced TAM oriented towards Facebook is presented and it is the conceptual background of the paper. Student demographics and behavioral characteristics of the Facebook group they enrolled on were determined. Common behavioral patterns of the usage tension of the Facebook group are also identified. Additionally, five factors were determined that can be used by university marketers to intensify engagement with the Facebook group.

Research limitations/implications (if applicable)
Larger samples should be used for future research.

Practical implications (if applicable)

Originality/value
The paper proposes a marketing strategy a higher education institution should follow to more effectively use Social Networking Sites as a marketing tool.

Keywords:

Social Media Marketing, Social Networking Sites, Marketing, Facebook, Universities, Higher Education, Greece, Republic of Serbia

Introduction
During the past 10 years Social Networking Sites (SNSs) have become increasingly important and now form a key area of academic research (Constantinides et al., 2013; Kaplan and Haenlein, 2010). The explosive growth of users and new platforms, along with increased internet access capabilities offered by mobile devices, affects the behavior and life of people from almost every socio-demographic group around the world. This new medium has dramatically transformed the marketing world and makes social media marketing a significant challenge for the private and public

sectors (Belch and Belch, 2014).

Social networking sites provide digital infrastructures, allowing users to present their beliefs, interests, and points of view, while connecting with other people who share similar interests. Users can therefore be considered as social instruments of communication, as they interact with others who have also shared their personal information. These interactions can be highly complex and the digital platforms used to facilitate this social interaction can be considered as "multi-sided platforms" (Yablonski 2016). The importance of SNSs for young consumers is considerable as they are the main users of social media and are becoming increasingly dependent on it for entertainment, socializing, and information seeking. In order to respond to this challenge, marketers reconsidered the marketing mix and traditional media strategies by reassessing the influence media has on the consumer decision-making process. In order to more effectively communicate with consumers in the new digital age, changes had to be made to organizations' Integrated Marketing strategies, at the expense of traditional media (Constantinides and Stagno, 2012).

Social networking sites are being used by universities as alternative spaces where students can adapt to university life by interacting online with their peers and faculty (Yu et al., 2010). Many universities now maintain profiles and groups on social networking sites, allowing students to interact with the faculty to share resources and to express the learner voice. Attracting prospective students is a critical success factor for educational institutions and marketing can support this activity (Brown, 1984). However, the variation in cultural, societal, regulatory and economic aspects of educational institutions poses a number of issues and challenges for marketing managers. In their effort to implement a coherent marketing plan that will identify the right segment, institutions must develop marketing strategies targeted at the correct customer segment.

Constantinides and Stagno (2012) investigated the engagement of social media applications in the marketing strategy of a university. They found that although young people increasingly use SNSs, they ranked social media last in the list of the channels to inform their decision about their future university studies. The research by Nyangua and Bado (2012) also identified that higher education institutions were using social media for recruitment and admissions purposes. However, their findings were unclear as to whether the content on university social media pages influenced the prospective students' decision to attend a particular university. These studies suggest that although SNSs are a dynamic marketing tool it is not fully understood or exploited by university marketing departments.

It is therefore of a major importance to investigate whether social media applications are accepted by students and prospective students. The adoption of high technology products has become an important area of research during the past two decades. Many studies have used the Technology Acceptance Model (TAM) as theoretical framework to understand the acceptance of technology.. Hence, before investigating SNSs as a marketing tool to determine its value, it is important to determine whether it is accepted by students, otherwise its usage would be ephemeral.

This study therefore examines a variation of the TAM for SNSs Facebook to establish the theoretical background of Facebook usage as a marketing tool for universities. It then investigates how undergraduate students use university Facebook groups to find information about their departments and how they could be used to inform prospective students on the opportunities offered. It aims to identify common patterns of usage with Facebook groups and to offer advice on the marketing strategy higher education institutions could use them more effectively targeting prospective

students. The three emerging aims are: 1) to investigate the demographic and behavioral characteristics of those students who engage with university Facebook groups; 2) to determine the factors that can intensify engagement with a university's Facebook group; and 3) to determine how Facebook can be used as a marketing tool to improve marketing campaigns. To achieve these objectives the study examines two universities: The University of Novisad of the Republic of Serbia and the Technological Educational Institute (TEI) of Western Macedonia, Greece. Two samples of almost 300 students participated in this survey. The following section reviews the importance of SNSs usage in education and marketing. The methodology is then presented to outline how this research was conducted. Following this, the results are analyzed and discussed to understand the factors that can intensify Facebook Group activities. Finally, the paper concludes with a discussion of the implications, limitations, and areas for future.

Literature review

Social Networking Sites

Social Networking Sites are defined by Boyd and Ellison (2010) as "*web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system*". They are applications that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other. These personal profiles can include photos, video, audio files, and blogs (Kaplan and Haenlein, 2010). Murray & Waller (2007) claim that SNSs are virtual communities, allowing people to connect and interact with each other on a particular subject or to just 'hang out' together. Kietzman et al. (2011) identified seven blocks that constitute the structural characteristics of SNSs. These characteristics form a honeycomb like structure with seven building blocks: identity, conversations, sharing, presence, relationships, reputation, and group participation that affects and drives users in their behavior.

In recent years Social media has become a major factor in influencing various aspects of consumer behavior including awareness, information acquisition, opinions, attitudes, purchasing behavior, and post-purchase communication and evaluation (Mangold and Faulds, 2009). According to these authors, social media encompasses a wide range of online, word-of-mouth forums, company sponsored discussion boards and chat rooms, consumer-to-consumer e-mail, consumer product or service ratings websites and forums, internet discussion boards and forums, moblogs (sites containing digital audio, images, movies, or photographs), and social networking sites (e.g. Facebook, Twitter, LinkedIn).

Faculties may adopt a technology if they perceive it as a way to facilitate communication with students (Roblyer et al., 2010). As a social networking site, Facebook has features which function primarily as communication tools. Facebook is a prominent player in the SNSs. According to its first quarter 2016 earnings announcement, it revealed that it has 1.65 billion monthly active users and 1.51 billion mobile users. Facebook now has 1.09 billion daily active users and 989 million mobile daily active users (venturebeat.com). Facebook followed by YouTube are the top two web sites that attract the most visitors all around the world, with Facebook responsible for the 40% of all referral traffic surpassing even Google. According to

Gemmill and Peterson (2006), socializing via the internet has become a relevant mode of communication for young adults. Their research shows that the heaviest internet users are adolescents and young adults who are using it to finish school tasks, to send e-mails, to instant message, and to play games.

Social Networking Sites and Higher Education
Social Networking Sites are extremely popular in Greece and among Greek students. It is important to note the high rates of penetration of Social media in the 17-24 age group, with almost 63% of users accessing Facebook through the mobile device. Facebook is also found to be the main choice of college students (Antoniadis et al., 2015) with a penetration rate of 94.7% in the students of TEI of Western Macedonia. That should not be a surprise given Facebook was originally created for college students (Ellison et al., 2006). This trend is identified in various studies and this millennial generation is defined as the 'always connected generation' because of their deep involvement with digital technology, the internet, and SNSs. This also explains the plethora of studies exploring the patterns of SNSs usage by teenagers and undergraduate students.

This always connected generation poses considerable challenges and opportunities to higher education institutions which are used to doing business according to traditional rules (Barnes and Lescault, 2011). Understanding the reasons that motivate students to use SNSs is therefore crucial for the academic community and admission officers, as these communication platforms exhibit an important impact on students' choices and motivation to learn (Mazer et al., 2007). Students' choices regarding the institution they will study are influenced by a number of tangible and intangible factors (Khan, 2013). Tangible factors include the physical facilities, staff profiles and the housing and catering services that are offered to students, while intangible include the reputation of the institution, the opportunities offered in the place that is located, the quality and relevance of the courses that they offer, and the reputation of the educators at those institutions. These factors also influence parents and friends of the prospective students and they can have a significant effect on the final decision of the candidate.

Facebook has become the main medium for students, affecting their life satisfaction, social trust, civic participation and political engagement (Valenzuela et al., 2008). Park et al. (2009) conducted a factor analysis to identify the main reasons that drive students to use and participate in Facebook groups: socializing, entertainment, self-status seeking and information retrieval. According to (Cheung et al., 2011) students also use Facebook to instantly communicate and connect with their friends (social related factors), and participation in Groups has a significant influence on the way they use the medium. However, they stress the fact that being a member of several groups blurs the social identity a person may have due to the membership of that group. DeAndrea et al. (2012) also point out the importance of social media for improving students' adjustment to college, especially for the period before enrollment, and first semester. Nkhoma et al. (2016) develop a model of student motivation in learning that is based on four main Facebook characteristics, namely, interaction, communication, social relationships and participation in groups and community, highlighting the benefits a university can derive in terms of teaching.

Nowadays, students are unfamiliar with how the world looks without the internet. In higher education the presence of social media is crucial if universities want to maintain connections with their students. For these reasons, many universities have profiles on different social networks for the purpose of facilitating the interaction

between faculty and students sharing resources, and expressing "learner's voice". Moreover, it is stressed in the literature that shared community spaces and inter-group communications present a massive part of what excites young people and therefore should contribute to their persistence and motivation to learn (Mason and Rennie, 2007).

The growing relevance of social media in higher education has additionally been proved due to the fact that members of the internet generation use the web differently, network differently, and consequently learn differently. Therefore, the numerous teaching techniques that have been used for decades must be adapted for new types of learning (Selwyn, 2012). There are polarized opinions in academia when it comes to social media usage in terms of higher education. On the one hand, the use of social media implies that learners should be 'active co-producers' of knowledge rather than 'passive consumers' of content. On the other hand, it is believed that the assumption of ubiquity of internet access and its usage are often taken for granted. Namely, digital inequalities do exist and are determined by socio-economic status, social class, race, gender, geography, age and educational background. Therefore, divisions are true for younger generations of university students as they are for older generations of university staff (Selwyn, 2012).

Social Networking Sites as a Marketing Tool

The results of the study conducted by Cheung, Chiu and Lee (2011) show that social presence has the strongest impact on students' intentions to use Facebook. This supports the fact that most people use Facebook for instant communication and connection with their friends. Group norms also have a significant influence on intentions to use Facebook. When users realize the similarity of their values with their groups, they will have a greater tendency towards the intention to use Facebook. However, social identity does not have any significant relationships with intention. It is claimed that this may be due to the number of communities the users have joined. If a user joins too many communities, it is hard for them to create a sense of belonging to a specific group. Social related factors (maintaining interpersonal interconnectivity and social enhancement) and entertainment values are found to be the most significant.

The Faculty which sees teaching as establishing a relationship with students may view Facebook-like technologies as an efficient, even business-like way to accomplish that connection (Roblyer et al., 2010).Though recent experiences of some educators and students have demonstrated the problems that this kind of activity can acquire (Young, 2009) many educational institutions like the idea of communicating with students in this way. They have their own Facebook pages and actively seek to link with those of their students. Among others, the tension of Facebook group usage is investigated below.

From a marketing point of view SNSs and social media offer a number of advantages regarding usage, access and cost. They are easily accessed by an ever-growing number of people through different platforms on a 24/7 basis and are demanding less financial resources providing magnified results through their viral nature. Along with the interactive communication they offer it makes SNSs one of the richest mediums available for marketers (Khan, 2013). The importance of marketing as a key for success in the education industry has been mentioned by Brown (1984).

This suggests that SNSs might prove be an effective tool to inform and attract new students by providing information about the institution, the enrollment procedure, and the activities that take place in the university. With this opportunity, many schools,

colleges and universities now turn to social media to effectively communicate with current members of the academic community who want to contact alumni and, more interestingly from an educational marketing point of view, to attract prospective students. Nyangau and Bado (2012) reviewed the literature in the application of Social Media Marketing in higher education and they found that it was not clear whether content on official university social media pages influences the choices of prospective students. However, prospective students turned to university social media channels for advice and consultation after they have taken their decision concerning their studies. Belanger et al. (2014) found that in Canada Facebook is the main SNS that universities use to communicate campus events and activities, but Twitter is more popular to carry out online discussions and to answer questions.

Undergraduate students in Turkey were also found to use Facebook primarily for social activities and entertainment and rarely for educational reasons (Akyildiz and Argan, 2012). They also found that male students are more engaged compared to female students. Fuciu and Gorski (2013) investigation of high school students in Romania found that although all students had Facebook accounts, they showed little interest in searching for information through Social media and Facebook. Nevertheless, students in this research were influenced more by advertisements on the SNSs than by electronic word of mouth. It has been also found that the Facebook group run in FTS university in Serbia is being used in order to recruit prospective students. Antoniadis et al. 2015 examined a sample of 535 students of TEI of Western Macedonia and identified 4 main patterns of social media usage by college students. A common characteristic of all the above studies is that they do not focus on unofficial groups and accounts run by student communities. It would therefore be interesting to investigate how SNSs and particularly Facebook is used for educational reasons or as a marketing tool for universities. It would also be useful to fill a gap in the literature by identifying factors that can intensify Facebook activities in order to attract the interest of their students or prospective students.

SNS's and their acceptance by students
There are several theoretical frameworks used to investigate the nature and determinants of information technology (IT) acceptance and adoption. The seminal work of Davis ((1989) and Davis et al. (1989) outlined the Technology Acceptance Model (TAM) which emerged from the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975). TAM and its variations have been used as the theoretical framework for many empirical studies predicting consumers' behavior towards technology (Lee et al., 2009; Lu and Su, 2009; Park and Chen, 2007; Chen at al., 2010; Chen at al., 2011). The TAM considers technology from a user perspective and the ease of use and perceived usefulness affecting their intention to accept a technology. System's perceived as easy to use and useful creates a positive attitude toward the system which in turn increases their intention to use it. A cumulative result of the numerous studies adopting TAM provides an indicator for predicting user acceptance of IT (Chen et al., 2010). Hence, this study employs a variation of TAM focused on blogs and SNS's (Hsu and Lin, 2008). This model is verified using several hypotheses. The variables are perceived usefulness, ease of use and perceived enjoyment to determine intention of Facebook usage, which affects actual usage. The latter is also determined by social influence and social identification variables. In light of this, the next section proposes an enhanced TAM and formulates hypotheses to explain the motivations and factors that influence students' actual usage of Facebook.

The model is tested and verified over the inter-institutional samples available in the framework of this study.

Conceptual model and Hypotheses formulation

Facebook (FB) is used by people wanting to expand their network of friends by finding old friends or making new friends with similar interests quickly and effectively. It can also be used to find information on specific topics and interests. "Perceived Usefulness" is therefore defined within this framework. Similarly, "Perceived ease of use" can be defined as the degree to which a person using a SNS such as Facebook needs minimum effort. Finally, perceived enjoyment is also used as an influential factor to the "intention to use Facebook". When the usage of a technological instrument creates positive emotions it increases the intention to use it.

The more the intention to use a SNS is increased the greater the probability of actual use of the SNS. Nevertheless, actual use has been proved in the literature to be dependent on variables such as social influence and "intrinsic variables" of the people such as social identification (Assimakopoulos et al. 2013). The conceptual model is depicted in Figure 1 and the relevant hypotheses are formulated below based on the notions developed above:

H_1. Perceived usefulness of the FB SNS affects positively students' intention to use it.

H_2. Perceived ease of use of the FB SNS affects positively students' intention to use it.

H_3. Perceived enjoyment of the FB SNS affects positively students' intention to use it.

H_4. Students' intention to use FB SNS affects positively students' actual use.

H_5. Students' actual use of the FB SNS is affected positively by social influence.

H_6. Students' actual use of the FB SNS is affected positively by social identification.

Insert figure 1 here

Research methodology

Samples

Most research on technology adoption has focused on countries with a high economic and technological development (Zhu and Thatcher, 2010). Nevertheless, the worldwide growth of digital adoption has shown the need to extend this research to other, understudied countries, with different characteristics. Li and Xie (2012) claim that a region's contextual factors and unique national characteristics influence digital adoption. We therefore investigate users' attitudes and behaviors in two different countries. As previous studies have shown, there are differences in IT usage and market shares between "East" and "West" countries. Thus, a "West" country (Greece) and an "East" country (Serbia) were chosen. They have sized similar populations so equivalent samples may be used.

The population under study consists of all students that have SNS experience and particularly with their University Facebook web page/blog.It is not feasible to attain a large sample of all institutions in a country. However, examining "representative" Universities is feasible. Therefore students from two universities (Technological Educational Institute (TEI) of Western Macedonia, Greece and University of Novisad, Serbia) were chosen. TEI (previously named TEI Kozanis) is a state University, the

tenth largest when measured by the student population. The University of Novisad is also a state University and is the second largest in Serbia in terms of student population. Hence, each one can give an insight of its corresponding country of origin and the joint study the regional inherent possible variations depending of their economical background.

An effort was made to select representative samples from the two universities. The members of the samples were therefore chosen by systematic sampling. After editing responses, some of the questionnaires were rejected. Data was collected through personal interviews conducted by the authors of the aforementioned institutions.

The first sample group after questionnaire purification consisted of 343 students from The University of Novisad, Serbia and the second consisted of 300 students from TEI of Western Macedonia. For the research in Novisad, questionnaires were distributed to 2440 students through the Facebook group which had a response rate of 14%. The sampling method was also electronical regarding the Greek part of the research with a response rate of 37%. The following section outlines the descriptive statistics for the questions regarding the way that respondents use Facebook and their attitudes towards the Facebook group run by the students. It also outlines the factor analysis which reveals factors that can intensify Facebook Group activities of a University.

Questionnaire

In order to identify the patterns of usage on the institution's official Facebook groups, a structured questionnaire was constructed using measures from the literature and developing new variables in order to accomplish the research. The questionnaire consists of four parts: firstly, questions aiming to understand the demographics of the interviewee; secondly, questions investigating the tension of the Faculty's website usage while measuring technical characteristics of the latter as well as the resulted satisfaction; thirdly, questions regarding the Facebook usage of the interviewee; finally, questions regarding the Facebook group of the corresponding university. Additionally, parts two, three, and four include five-level Likert-scaled measures of the students' attitude towards some well-known variables of the Technology Acceptance Model (Davis, 1989): shifted and adapted to Facebook, treated as a technology mean to loom a faculty to potential students. A total of 71 variables were measured. Moreover, some variables that lead to the successful usage of the University's Facebook Group in order to attract students are determined. Additionally, statistical tests such as chi-square, Mann-Whitney and one-way ANOVA were used to analyze any statistically significant relationships among variables.

Regarding the conceptual model, from the initial set of 6 items that consist Davis's "Usefulness" definition, the dimensions of "useful", "making job easier", "productivity" and "effectiveness" are used in this study (Cronbach's Alpha 0,726). Similarly, the "perceived easy to use" dimension of the conceptual model is measured using three items out of the six items of the Davis's initial model: "easy to learn", "clear and understandable environment" and "easy to use" variables that are pursued here using appropriate questions (Cronbach's Alpha 0,784). Perceived enjoyment is directly measured in our questionnaire. Actual use is measured using three items which measures directly students' activity in Facebook for information retrieval (Cronbach's Alpha 0,719).Their intention to use Facebook in the future is also directly asked. Moreover, social identification is measured by asking how respectful people are when using SNSs or how impressed the interviewee is when seeing others connected to SNSs. Social influence is originated by relatives, close friends and broad

social environment. Hence, three questions including these three social segments are included in the questionnaire (Cronbach's Alpha 0,760). All these items are Likert scaled. Pilot data gathering took place in both institutions before the initialization of the main research campaigns.

Results

Demographics of the samples and SNSs engagement

Three hundred undergraduate students filled out our questionnaire from the Kozani campus of the TEI of Western Macedonia and 343 were completed by the respondents of the University of Novisad. The profile of the two samples regarding the demographics can be seen in Figure 2

Inset Figure 2 here

The samples have a slight deviation of 4% comparing the two genders. In TEI KOZANIS males are almost 4% more compared to NOVISAD and hence females are 4% less. Deviations also exist with the composition of the ages. The Serbian sample is mostly gathered from the first semester of the study programs whereas the Greek sample consists of people originating from all semesters of the study programs not equally but more smoothly distributed. The profile of the two samples is considerably different among the Universities of the two countries.

Hypotheses verification

Table 1(a) and (b) depicts the correlations and the significance at 0,05 level. As can be seen usefulness, ease of use and enjoyment affects intention to use Facebook positively ($p<0,001$). In both samples "usefulness" has a stronger effect on "intention to use" compared to the other two variables. Similarly, "actual use" of FB is affected positively by "intention to use", "social identification" and "social influence". However, the correlations in the Novisad sample are looser when compared to the Greek sample. Hence, hypotheses H_1 to H_6 are verified.

Insert Table 1(a) and (b) here

Tension of FB activity

Figure 3 shows how often students visit their university website. It shows that Serbs are more active visiting the university website, demonstrating a tendency to an increased Internet usage of the students of the corresponding University from Novisad. It should be kept in mind that a specific website can have an increased number of visits due to special services the website offers and cannot be interpreted as a tendency of the population to be more "e-services oriented". Here it is depicted that more than 1/3 of the sample in Greece visits the university website often or very often and more than ½ of the sample in Serbia visits the university website often or very often.

Insert Figure 3 here

The nature of SNSs is quite different from ordinary websites. Social media are platforms for building relationships with people and most importantly interacting regularly with the SNS community through a variety of multimedia content. That kind of everyday communications can become informal to such a degree that friendships and personal relationships can be formed (Lewis et al., 2008). A comparison of the

student behavior regarding tension of visiting a website and the tension of visiting SNSs cannot be fair due to the nature of the SNSs. The interaction is an advantage and determines the frequency of visits. On the other hand SNS and the more relaxed or informal nature "allows" even hesitant or distant internet users to prefer visiting an SNS than the official website of a university. Hence, measuring the frequency (or tension) of students visiting Facebook is important. That is what Figure 4 presents. It shows that the majority of the students of Novisad spend up to 1 hour on Facebook every day whereas the overwhelming majority of the students of TEI Kozanis spend more than 2 hours on Facebook every day. By comparing Figures 3 and 4 it reveals that the nature of internet surfing determines the tension.

Before determining how the usage of Facebook as a marketing tool can be improved for the marketing campaign of a University, it is essential to investigate what kind of student activity is registered in the Facebook Website (FBW) of a university. Therefore Figures 5-7 shows the activities of the students regarding the FBW. There are three kinds of activities measured: posting, commenting and participation to discussions are the activities measured. The FBW has a large number of activities but those 3 are more representative.

Insert Figure 4 here

Insert Figure 5 here

Insert Figure 6 here

Insert Figure 7 here

Although there are deviations to the percentages of the samples figures 5-7 depict that qualitatively speaking the "form" of the columns are almost the same. Minorities are accumulated to the "often" and "very often" answers whereas "sometimes" is literally the same percentage to all figures for both samples. Finally, "rarely" and "never" assemble the majorities in both samples. This is an interesting result that reveals that both student communities are immature in involving to FBW of universities.

In the survey questionnaire there was a direct question asking the interviewee to rank 13 reasons that influenced their decision to enroll on the university program they chose. Interestingly, social environment like parents, relatives and friends occupies the three most influential positions whereas FBW of the university takes positions 8 and 10 respectively out of 13. The official website of the university (not the SNS) is 2 positions lower (10-12 out of 13). The effect the SNSs of the universities under study as a communication channel (or even more considered as a marketing channel) that have on the choice of university program is proved to be deprived. The analysis shows that prospect students rank the SNS at the lowest positions in a list of influential factors when students have to make a choice of a program study and university. This finding is the opposite with what one would expect considering the high involvement of young people to the social media. The authors feel that can assume and present a number of possible explanations that can form a basis of a number of hypotheses for further research. A possible justification for the low significance of social media as a source of influence for prospective students could be the poor relevant content the SNS of the university might have. It is the responsibility of universities to activate SNSs for public relations and direct marketing tools by

enriching them and stimulating interactions with prospective students (users). Most internet users expect to see links with corporate Facebook, Twitter, YouTube, on the web pages they visit. A large majority of universities do not provide online visitors with such rich options on their home pages and some universities do not pay attention to social networks like Facebook and Twitter at all. The lack of excitement and innovative applications, but also insufficient forms of social media like online communities, blogs, forums, and bulletin boards, make it difficult to connect with future students.

Factors that intensify a university Facebook group usage
In order to identify some broad determinants of the intense of the two universities Facebook website activity, a set of eighteen items were constructed based on common activities that the Facebook user acts on. The variables are Likert scaled sentences. Factor analysis was utilized on this scale for both samples separately. The Kaiser-Meyer-Olkin measure for sampling adequacy was of an acceptable magnitude (KMO 0,780) and Bartlett's sphericity test gave a significance level of 0.000 regarding the Serbian sample. The parameters for the Greek sample was found to be 0,784 and 0.000 respectively. Hence, all assumptions for carrying out factor analysis were met. The extraction technique chosen was principal components and the rotation method was varimax. The analysis converged after six iterations.

Five factors were extracted out of the 16 sentences in both cases. These factors explain 58.5% of the total variance in the first sample and 59,2% of the total variance in the other. The cut-off point for accepting sufficient loadings was 0.5 (Table 1). The factors are named as follows: Factor 1 is named '*Administrators' contribution*', including activities undertaken (posts, file sharing etc.) by the administrators that increase the engagement and number of visits by Facebook group members. This is the most important factor explaining the greatest percentage of the total variance. In fact, the expectations that the members of a Facebook group have from the administrators are high and are decisive to the number of group visits. The administrator's willingness to give answers, in short term and the confidence they inspire are very important to the success of a university Facebook group. Factor 2 is labeled as '*Members' contribution*' and concerns the activities of the members of the group and how much they trust the information they acquire through the group. The next factor named '*Group usage*' describes the way students use the group and interact with the content administrators share and upload. It entails the notions of Facebook group activity as a habit. This is inherent to the group members and it is a characteristic originating from the group members themselves rather than affected by the administrators of the group. Factor 4 describes the '*Information seeking*' aspect of the group, where students use the group when they are searching for information or when they are notified for the existence of new information. It entails activities that "alert" students to visit Facebook group and gather information. Notifications, new uploads and generally frequent activity arise members' interest and thus, increase visits. Finally, the last identified factor is labeled as '*Members' interests and engagement*' involving the engagement and activities the member of the group undertakes. It must be noted that the engagement in this group is rather passive, and members prefer to be informed by administrators rather than being engaged in conversations. This factor entails somehow the notion that the Customer Relationship Management (CRM) philosophy adopts; "The individualization of the potential customers". When a Facebook group focuses on students' personal needs it enhances the importance of the Facebook group and surely increases visits and general activity.

Hence, adaptation to the individual student's needs is undoubtedly the key point to intensify FB group activity.

Insert Table 2 here

Discussion

This paper's aim was to investigate Facebook as a potential information source and/or communication tool by prospective higher education students. The paper also investigates the effect of SNSs on the choice of a study program of a higher education institution. The ultimate target is to find out whether SNSs can become the basis of a student recruitment strategy in the framework of a synergistic marketing plan. Although higher education institutions are already using social media as marketing tools, the number of studies on SNSs effectiveness are still limited, and very little is known about the suitability of social media as platforms for higher education marketing. Despite the efforts of universities to engage the SNSs as part of their recruitment activities, it is not possible to talk about robust social media marketing strategies for the time being. An attempt to evaluate these activities has been made in this paper. The study provides university marketers a better understanding of potential student behavior as the basis for developing more effective social media marketing strategies for higher education institutions. The method followed in this paper is based on data collected in Greece and Serbia. Hence, two separate samples were processed analyzed allowing for comparisons of the extracted results. Surprisingly, although the samples had different demographic profiles and originated from different cultural environments the outcomes are similar to each other, allowing a qualitative interpretation of the results.

Nevertheless, before suggesting SNS as a marketing tool, it should be investigated whether SNSs are adopted/accepted by students for information retrieval regarding their studies. The answer cannot be given unless a conceptual model exists. This model has been verified in the previous sections of the paper and it is the starting point for someone seeking to understand whether a SNS such as Facebook could be used as a tool by marketing departments of Universities (see figure 8). The adoption of the particular social network makes it more auspicious. Then, this opportune can be investigated in order to intensify its usage for marketing in higher education. The variables of the model in this paper are based on a combination of the notions explored in the literature (Davis, 1989 and Hsu and Lin, 2008). The initial TAM proposal is enhanced with the variables of Hsu and Lin and all of them shifted to be adapted to Facebook inherent reasons of usage (see appendix). The hypotheses verification establishes a solid basis. The model becomes more interesting since it is tested in a joint research using two samples originating from countries with typically different social environment like the so-called "ex-East" and "West" economic and social environments. . The results are encouraging, but there is a long way to go before generalizations can be made. Under this point of view, the rest of the outcomes of the paper acquire a remarkable potential.

Insert Figure 8 here

One of the paper's objective was to investigate the two University students' demographics and behavioral characteristics of the Facebook Group they are enrolled. Common behavioral patterns of the usage tension of the FBW of the university students were identified. Usage tension measurement was made in terms of the

frequency in participating to discussions through FBW of the university, comments, uploads and posts. The latter indicated the existence of possibly common patterns of students Facebook groups across different countries.

Another objective of the paper was to determine how the usage of Facebook as a marketing tool can be improved for the marketing campaign of the University. A common outcome here was the low ranking that FBW as a student recruitment tool among the "influential factors" that lead prospective students to a university program choice. The authors suggest the enrichment of the SNSs of the universities in order to become more interactive and hence attract the attention of the students.

Finally, five factors were determined that can intensify the Facebook Group activities of a University. Part of them is closely related to the students ("consumers of the service") but others can be manipulated by the administrators and here exists a terrain where marketing departments should enhance its role. This last outcome along with the existence of the TAM in the background can be exploited to increase the ranking that FB has for students' recruitment.

Conclusions

Social media has a significant role to play in the creation of the brand experience on the Internet for both firms and education institutions (Kavoura, 2014). Facebook can be an effective marketing tool to promote research and educational activities within and outside classes and spreading them using viral marketing techniques to affect the intangible factors influencing the choice of prospective students (Khan, 2013). In other words, adoption of social media seems to be ad hoc and unsystematic, without prior development of coherent marketing strategies or clear goals (Spraggon, 2011), which is true in our case.

Social media however should not be considered to be a panacea. Visits and aiming at parents and relatives should be the first weapon of choice for the marketing department of a university (Constantinides and Stagno, 2012). During these activities, prospective students should be redirected to both the official social media of the university and the student operated groups, where current students can provide advice and their experiences, becoming in this way the ambassadors of the institution and informal admission officers. In that way social media and SNSs groups like the ones operated in Facebook, would be integrated in a clearly planned and designed marketing strategy of the institution taking under consideration the Integrated Marketing Communications approach combining both modern and traditional media (Belch and Belch, 2014).

There are however some limitations in this study. A bigger sample and a more focused one only in first year students would shed more light in the ways prospective students use social media to acquire information about their future studies. Additionally, the samples should be stratified to several other characteristics not only age and gender. Moreover, other countries that are more mature to SNS marketing like UK might be interesting to investigate. Also, other social media and SNSs, that are currently very popular in other countries such as SnapChat, Instagram and Twitter should be included in a future study. Finally, a background model as a basis must be constructed.

Appendix

Part of the Questionnaire regarding TAM

Social influence

Members of my family are using social media sites

My close friends are using social media sites

A lot of my friends are using Facebook in their daily activities

Perceived enjoyment
Using Facebook is fun and interesting

Social identification
When I am in the place where other people are using social media sites, I am impressed.
I respect people who are using social media sites.

Ease of use
Using Facebook is easy for me
It is easy to learn new Facebook services
I have no problem to understand how to use Facebook and navigate

Usefulness
Using Facebook is useful for connecting with people I know
Using Facebook is useful for making new friends
Using Facebook is useful for connecting with people who have similar interests as I have
Using Facebook is productive when searching for specific information

Intention to use
In the future, I will continue with using Facebook

Actual use
When I need some special information related to my University, I am always asking the group
When I need some special information, I am always searching the group
Using Facebook is important for getting information about Faculty

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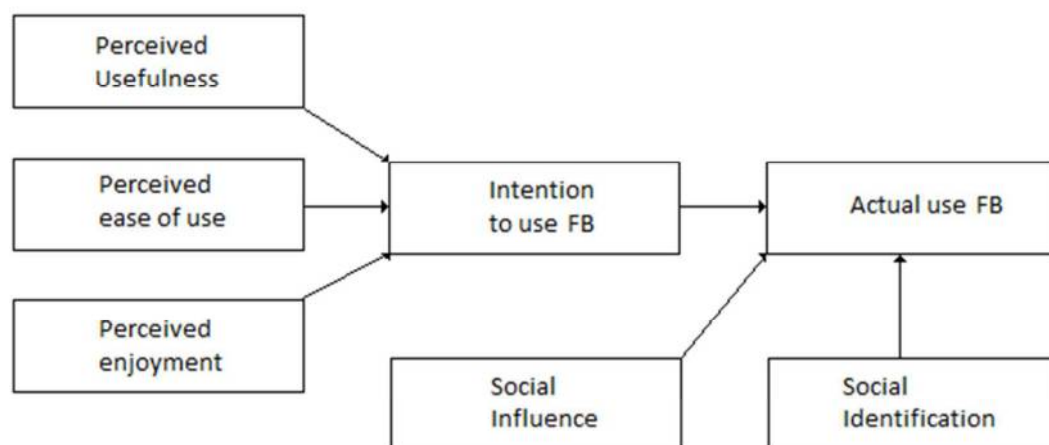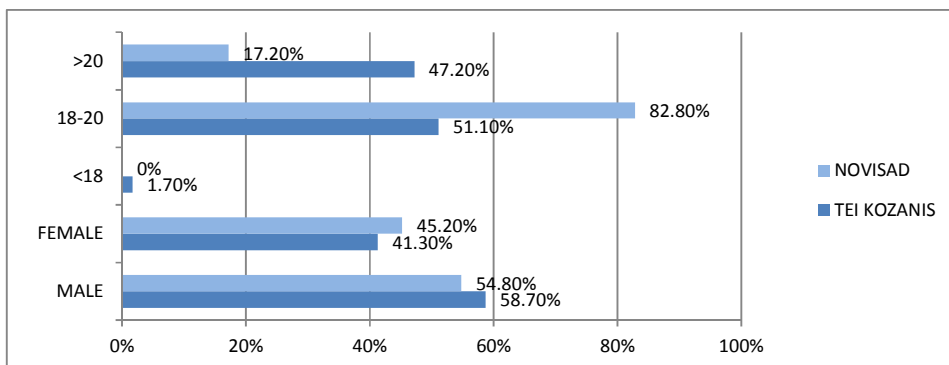
Figures and Tables

Figure 1: Conceptual model

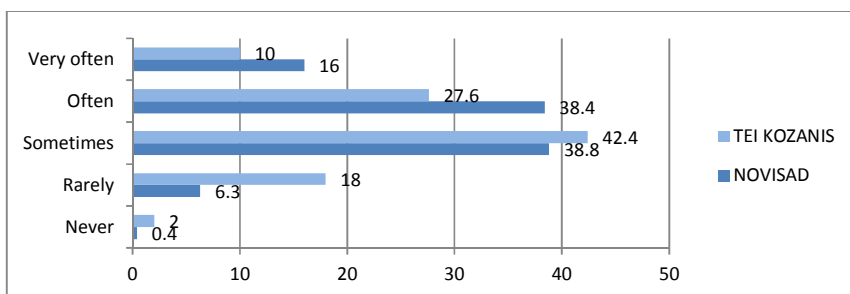Figure 2: Demographic profile of the users of the samples under study

Figure 3: Frequency that a student visits the website of the University he/she is enrolled (in percentages)
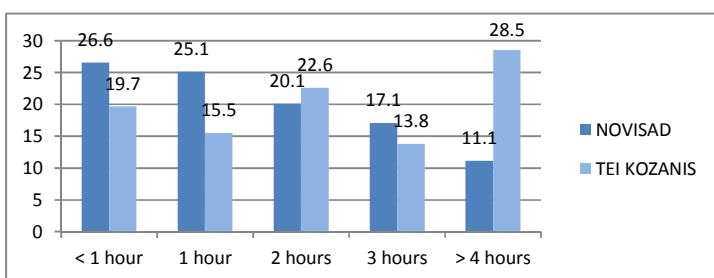

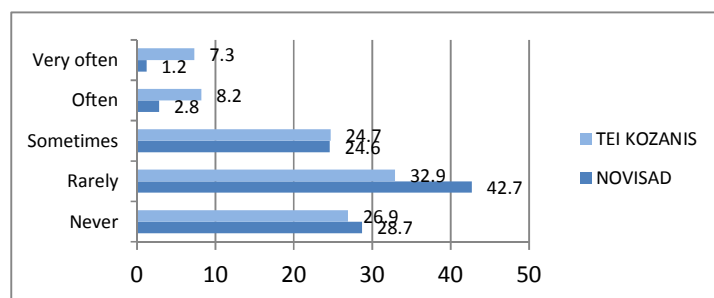Figure 4: How many hours a day are spend on FB (in percentages)

Figure 5: How often students write posts on the Facebook web of the university
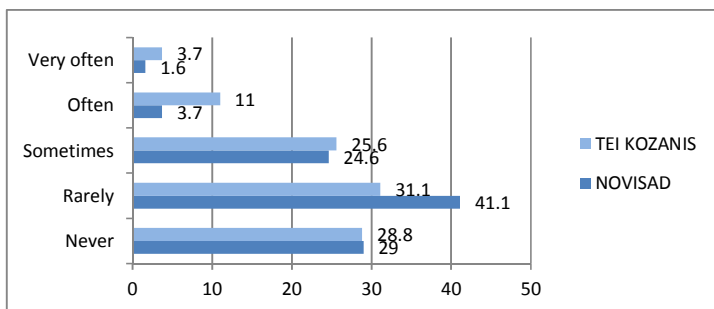
Figure 6: How often students make comments on the Facebook web of the university
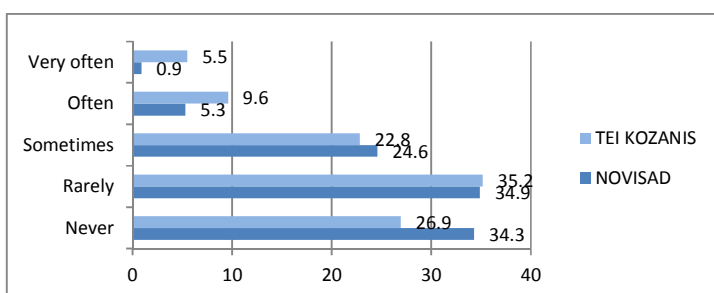

Figure 7. How often students participate to discussions on the Facebook web of the university
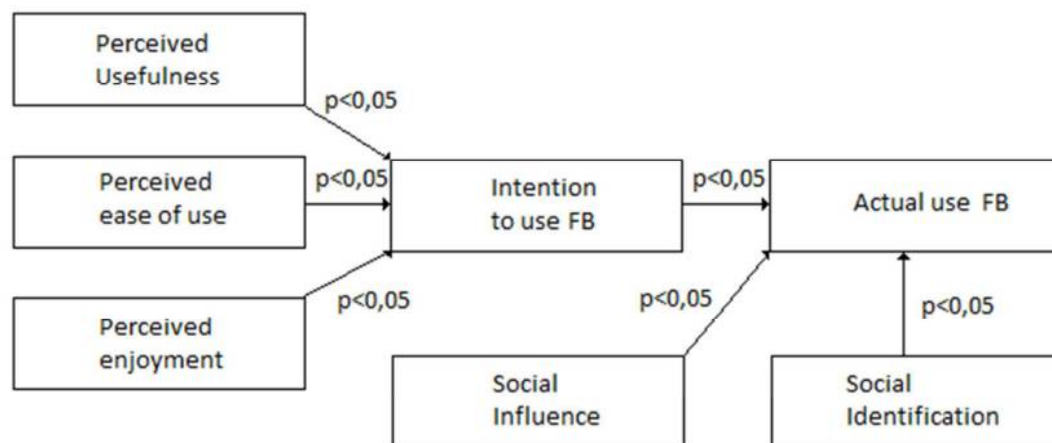

Figure 8. TAM verified

Table 1: correlation coefficients for the variables of the proposed model

(a) Correlations TEI OF WESTERN MACEDONIA

	usefulness	ease_of_use	actual_use	social_influence	social identification	Intention to use FB
ease_of_use	,308(**) ,000					
actual_use	,357(**) ,000	,157(*) ,012				
social_influence	,289(**) ,000	,614(**) ,000	,245(**) ,000			
social identification	,228(**) ,000	,166(**) ,006	,219(**) ,000	,195(**) ,001		
Intention to use FB	,404(**) ,000	,307(**) ,000	,221(**) ,000	,201(**) ,001	,178(**) ,003	
enjoyment	,395(**) ,000	,087 ,148	,235(**) ,000	,124(*) ,039	,182(**) ,002	,289(**) ,000

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

(b) Correlations NOVISAD, SERBIA

	usefulness	ease_of_use	actual_use	social_influence	social identification	Intention to use FB
ease_of_use	,173(**) ,002					
actual_use	,207(**) ,000	,078 ,162				
social_influence	,239(**) ,000	,258(**) ,000	,047 ,008			
social identification	,381(**) ,000	,102 ,043	,261(**) ,000	,143(**) ,009		
Intention to use FB	,435(**) ,000	,262(**) ,000	,091 ,003	,210(**) ,000	,238(**) ,000	
enjoyment	,471(**) ,000	,066 ,227	,219(**) ,000	,271(**) ,000	,399(**) ,000	,396(**) ,000

** Correlation is significant at the 0.01 level (2-tailed).

Table 2: Loadings for the two samples under study after factor analysis utilization

	Loadings Novisad sample	Loadings TEI Kozanis sample
Administrators' contribution		
Group Administrators are willing to give answers	,821	,823
Group Administrators give answers to the short term	,759	,797
Group Administrators give confidence	,743	,801
Group Administrators share content with new members	,719	,710
Information posted by Group Administrators are useful to me	,673	,467
Members' contribution		
Uploads by others in the group are useful to me	,778	,850
Group members are willing to give answers	,607	,744
Answers posted by group members give confidence to me	,812	,801
Group usage		
In the group I check new files uploaded by Group Administrators	,433	,868
In the group I read every file uploaded by Group Administrators	,644	,512
Information seeking		
When I am in FB I check FB group	,649	-,576
I check FB group only when I look for certain information	,778	-,697
I check FB group every time I receive group notification	,735	-,601
Members' interests and engagement		
In the group I read only files with topics of my interest	,439	,441
I wish Group Administrators upload files more often	,743	,823
More useful to read uploaded files than to discuss	,626	,724