# 'The Implications of Social Networking Sites for Marketing in Irish

Business'

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Submitted to the Higher Education and Training Awards Council,

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Business'

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#### Abstract

# The Implications of Social Networking Sites for Marketing in Irish Business Sarah Diffley

The objective of this research was to assess the implications of social networking sites for marketing in Irish business. This will then help establish how social networking sites can be effectively integrated into marketing strategy. Six focus groups were conducted with users of social networking sites followed by a survey of social networking site users. These two phases of primary research investigated consumer attitudes towards the use of social networking sites as a marketing tool and to utililise social networking sites as a marketing tool for building relationships and targeting consumers.

Social networking sites are used by significant numbers for interpersonal communications. Such prolific user numbers have led to the belief that SNSs can become a new and effective marketing tool. Yet due to the prolific number of users of these sites they have been deemed to be a new and effective means of marketing to consumers. Yet despite this potential, the majority of marketing efforts by companies on SNSs have been unsuccessful.

This research highlights that companies have thus far been adopting a 'push' marketing strategy, employing traditional marketing techniques. Users of these sites view them as their own private spaces to communicate with one another and therefore different techniques focusing on a 'pull' marketing strategy are required.

This research proposes a social networking site marketing communications model which guides companies in effectively integrating SNSs into marketing strategy. This model is subject to further testing and refinement.



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### List of Abbreviations

**ANOVA** Analysis of Variance

**CSO** Central Statistics Office

**IDC** International Data Corporation

IIA Irish Internet Association

**NCTE** National Centre for Technology in Education

**PWC** PriceWaterhouseCoopers

**ROI** Return on Investment

**SNS** Social Networking Site

SPSS Statistical Package for Social Sciences

TQM Total Quality Management

UK United Kingdom

**US** United States

WOM Word-of-Mouth

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### Introduction

This research aims to assess the implications of Social Networking Sites (SNSs) for marketing in Irish business. Despite the increasing amount of time people are spending on SNSs (McGiboney, 2009), these sites have yet to be harnessed as a successful marketing tool for reaching and engaging consumers (Nielsen, 2009). Furthermore, the area of SNSs and marketing is one that is greatly under researched (Clarke, 2008, Constantinides et al., 2008, Constantinides and Fountain, 2008, Hoegg et al., 2006, Parise and Guinan, 2008, Stephen and Lehman, 2009), thereby creating a great degree of uncertainty in how to effectively use this new medium in marketing.

This study consisted of a literature review and two phases of empirical research. The literature review is presented in Chapter One and introduces the concept of social media, SNSs and the evolution of consumers into empowered and knowledgeable consumers, often referred to as the 'prosumer'. The literature review identifies a number of key issues that are investigated by the researcher in ensuing chapters.

Chapter Two outlines the research methodology. It is here that the objectives and sub objectives of the research are delineated and how they will be addressed by the researcher. A two phase approach was adopted for the research which employed a qualitative research approach in phase one and a quantitative research approach in phase two of the research. The data collection method, measurement technique, sampling approach and analytical approach for each phase are detailed in the chapter.

The qualitative research findings and analysis are presented in Chapter Three. The resultss from five focus groups with SNS users, totalling 38 respondents are analysed. Findings from Chapter Three combined with literature in the area contribute to the development of the research approach utilised for phase two of the research.

Chapter Four presents an analysis of findings from the second phase of the research, an online survey conducted with SNS users. In total, 829 respondents completed the survey, greatly exceeding the required sample size of 376. Reponses were filtered down to the required sample size and subsequently analysed and summarised.

The final chapter, Chapter Five, draws together important findings from the research.

A SNS marketing communications model for the successful integration of SNSs into Irish business marketing strategy is proposed in line with key insights from the research and suggestions for further research in the area.

# Chapter One: Social Media, Social Networking Sites and the

### **Empowered Consumer**

- 1.1 Introduction
- 1.2 Social Networking Sites: Towards a Definition
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### 1.1 Introduction



Social media are tools that enable people to collaborate and communicate with one another online. These tools facilitate the creation and sharing of knowledge, information, media, ideas, opinions and insights. By facilitating consumer participation, social media signal the move from the passive to the active via online tools such as SNSs, blogs, wikis, podcasts, content aggregators and content communities (Solis, 2007).

Of all the social media tools. Social Networking Sites (SNSs) and blogs have experienced the most prolific growth. SNSs accounted for nearly 17% of total Internet time in 2009 (McGiboney, 2009) and as of 2010 this figure has increased to 23% (Nielsen 2010). People are spending increasing amounts of time on SNSs and they do this at the expense of more traditional media (McGiboney, 2009). Hailed as a prospective new means of reaching and engaging consumers. Nielsen (2009, p. 1) highlights the fact that 'the social networks and advertising industry haven't yet found that magic formula to make this happen'.

While social media, also referred to as 'Web 2.0', have become an area that has garnered a great degree of attention, Clarke (2008, p. 30) highlights that there is 'an almost complete lack of formal literature on the topic'. Given that SNSs have become an area of great interest, such literature has become a necessity. Constantinides and Fountain (2008, p. 231) state that there is a lack of extensive research in the area and 'from the academic but also practical point of view, attention must be placed on the demarcation and evaluation of the new technologies and trends so that the real value

of Web 2.0 as a component of modern marketing can be determined'. Hoegg et al. (2006) also maintain that despite the hype surrounding the concept, Web 2.0 and online communities have received little recognition from those in academia. This is regretted by the authors due to the significant effect of these technologies on business. Constantinides et al. (2008, p. 16) argue that for those companies who want to integrate Web 2.0/social media into marketing, the need to determine how it fits into overall marketing strategy should be addressed. The authors conclude that literature thus far however is related to how Web 2.0 applications affect corporate processes, the effect of Web 2.0 technologies on business and the significance of online communities for corporations. In addition they posit that 'there is a considerable knowledge gap on the real nature and importance of Web 2.0 and its added value for marketing strategy'. Stephen and Lehman (2009, p. 9) suggest that 'some work in marketing has examined the role of social context on consumer behaviour, although not from a social networks perspective'. Parise and Guinan (2008, p.1) explain that 'a key interest to marketers is how to effectively leverage Web 2.0 and derive value from these tools'.

The central focus of this chapter is social networking in an online context. As social beings, people constantly seek enhanced channels of interpersonal communications and SNSs have become an innovative online means to this end. This chapter will address how these sites are being utilised by their members and the subsequent power these sites have bestowed on these users. The concept and potential of SNSs as marketing tools will also be discussed, as will the resultant effect of these sites on marketing communications. The context and meaning of friendship will also be

addressed and the influence that these friends have on one another in terms of influencing purchasing behaviour will be explored.

Information has become increasingly important to both companies and consumers. Consumers use information as an integral part of their decision making processes regarding purchases and the more information a company has in relation to customers, the more effectively they can reach and engage them (Clarke, 2008). As a result, the value of information both to consumers and companies is discussed as well as the privacy issues that may influence the disclosure of information by consumers in SNSs. Statistics used are those from the United States (US) and United Kingdom (UK) studies and where available, statistics from Irish reports.

Chapter One primarily introduces the various definitions of SNSs (Section 1.2) and why it is that individuals are motivated to use these sites (Section 1.3). The power and influence social media and SNSs have given to consumers is then outlined (Section 1.4). Due to the increased usage of these sites and lack of success of marketing efforts, the usage of SNSs in a marketing context is then addressed by the researcher (Section 1.5). As consumers essentially trust and value other consumers' opinions when making purchase decisions rather than those of companies, the concept of friending on SNSs is discussed by the researcher (Section 1.6). Complete and full information is also of great value to consumers when making purchase decisions and thus forms the basis for section 1.7. The consequences of the combination of all these factors are addressed in the concluding section.

### 1.2 Social Networking Sites: Towards a Definition

SNSs are increasingly being referred to as the 'third place' for people to connect and communicate with one another, home and work being the first and second places respectively (New Media Consortium, 2007).

Yang et al. (2007, p. 847) define a social network as:

a social structure made of nodes, which are usually individuals or organizations tied by one or more specific types of relations, such as financial exchange, friendship, passion, trade, web links, airline routes, hobbies etc. Social networks connect people with all different types of interests.

A description of social networks is also proposed by Weber (2007, p. 89): 'Social networks are member-based communities that enable users to link to one another based on common interests and through invites'.

Experian-Hitwise (2008, p.1) define SNSs as:

online communities of people who share interests and activities, or who are interested in exploring the interests and activities of others. They typically provide a variety of ways for users to interact, through chat, messaging, email, video, voice chat, file-sharing, blogging and discussion groups.

In their explanation of SNSs, boyd and Ellison (2007, p. 92) believe that SNSs possess three distinctive features:

web-based services that allow individuals to (1) construct a public or semipublic 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.

iProspect (2007, p. 3) defines a SNS as 'one that allows Internet users to have the ability to add user-generated content such as: comments, reviews, feedback, ratings or their own dedicated pages'.

In summary, words such as 'connect', 'link', and 'interact' are used to display the primary purpose of SNS for users – to communicate and engage with one another. 'Interests' is also used in various definitions to show that these users come together on the basis of certain commonalities. Yang et al. (2007) list the extensive areas in which these interests may exist while iProspect (2007) outlines the ability of SNSs to allow users to add their own content. Each definition focuses on the users of these sites, indicative of the latters' importance within SNSs.

### 1.3 Individual Motivations for using Social Networking Sites

Dwyer et al. (2007) cite that communication and relationship maintenance are the main motivating factors for participation in SNSs. This is reinforced by an Ofcom (2008) study on SNS users in which the primary reason for using these sites was to communicate with those people often seen in person, people rarely seen and to

rekindle old friendships. In the context of building social capital, SNSs help users to maintain and develop relationships with both strong and weak ties. Developing and maintaining relationships with weak ties is known as 'bridging social capital' and arises from the ability of SNSs to provide users with multiple means of maintaining more distant relationships (Steinfield et al., 2008). A study of participants in relation to emerging adults' use of SNSs demonstrates that they primarily use such sites to keep in touch with friends they do not often see, because their friends use these sites, to keep in touch with family and in making arrangements to meet friends. Furthermore, respondents also stated that they rarely added people as friends if they had not met them in person, suggesting a convergence between online and offline worlds (Subrahmanyam et al., 2008).

Indeed Hargatti (2007, p. 293) outlines that an individual's offline network will affect the choice of the online network. The author goes on to say that 'the membership of certain online communities mirrors people's social networks in their everyday lives; thus online actions and interactions cannot be seen as *tabula rasa* activities, independent of existing offline identities'. Furthermore, norms of reciprocity, rules, and roles that exist in offline social networks are brought into online social networks (Kavanaugh et al., 2005). If any disruptions or changes are to be made in communications media, strong ties are generally least affected as individuals have a closer relationship to these members and tend to contact them via other types of media in addition to using online social networks (Haythornthwaite, 2005).

Haythornwaite (2005) points out that infrastructure such as the Internet when merged with devices that permit access to them, supports latent social network ties. These

latent ties then become weak ties when communication is initiated and developed between members. The Internet was at times seen as a medium that diminished social capital (Kraut et al., 1998). However, more recent studies have shown that it maintains and supplements social capital when used in a social context, which it is increasingly facilitating (Wellman et al., 2001). Friendships constitute an important role in SNSs through facilitating friendship sourcing within a network and to discern the fabric of the community. The term 'friendship' in online social networks is stretched in a sense. Anyone can be a 'friend' by simply sending an invitation to become one regardless of whether they are known to members or not (boyd, 2006). This development and maintenance of weak ties is important as this is where new information is most likely to be gleaned by members (Haythornwaite, 2005). Strong ties increase members' empathy with and attachment to a community (Kavanaugh et al., 2005). Thus both strong and weak ties play important roles within online social networks.

Ellison et al. (2007), highlighted in their study of Facebook users that there was little interest among users in developing new relationships, whereas maintaining existing relationships was a primary motivation in SNS usage. Other motivations for use included entertainment and friends sharing a common SNS. Essentially, participants used Facebook to supplement, strengthen or maintain ties that had already been developed in an offline setting. Donath and boyd (2004) assert however, that the main point of SNSs is to facilitate the creation of new relationships and the driving force is to grow ones' network of friends. Contrary to this, Dwyer (2007) indicates that where new relationships did develop, it was mainly for the purpose of excitement and novelty. In rare cases users met in an offline context and where new friends were

made, users conceded that these were 'superficial' in nature. Members will have a stronger relationship with those friends where the relationship began primarily in an offline context than those that began in an online context. Therefore, relationships initiated in an offline context will be stronger than those established initially online. Online social networks can also help those with lower self-esteem as there is no face to face interaction and no need to speak directly. This places less demands on those with low self-esteem and lessens their fear of rejection. For those with low self-esteem, studies suggest that SNSs reduce barriers to interaction with weak ties, thus supporting bridging social capital. Essentially, it allows them to initiate conversations which they may find difficult in other circumstances (Steinfield et al., 2008, Ellison et al., 2007). Ofcom (2008) found that SNSs were particularly useful in allowing less confident people, particularly teenagers and single women, to contact and converse with others. Not only did it allow them to contact new people but it also allowed them talk to current friends in a new and more confident manner.

According to Chan et al. (2004), individuals share information online as a means of boosting their self-esteem and to feel self-efficacious. The authors find that the Theory of Information Sharing is applicable to virtual communities in that people visit these communities as a means of sharing and exchanging information and knowledge. If there is a lack of self-efficacy on behalf of individuals, they are less likely to participate in the community. Participation is also found to be increased if members can provide their own identity, which in online communities is achieved through creating a profile.

Ridings and Gefen (2004, p. 16) point out that individuals are motivated to join virtual communities that centre on a specific category as a means of both gaining information from members and providing information to other members. In addition, these communities are also used by their members as a means of seeking both friendship and social support. The authors posit that 'virtual communities, like real ones, are joined not only because of utilitarian information exchange, but also because they serve the social need of having a friend and getting social support'.

Self-efficacy, need to belong, and collective self-esteem have been listed as variables that influence individual attitudes towards and motivation to join SNSs. If individuals have confidence in their ability to use the site, are accepted and viewed as valuable members of the community by others, and is viewed as a valuable member of the group by those in the group itself and external to it, they will develop a positive attitude towards the community (Gangadharbatla, 2008).

Content gratification, building social capital, surveillance, and social networking surfing are proposed by Joinson (2008) as motivating forces driving SNS usage. The strength of these forces, the author maintains, will vary in accordance with time spent onsite, frequency of usage, and the manner in which these sites are utilised by their individual users.

### 1.4 The Empowered Consumer

The trend towards the move to social media shows no sign of slowing, as studies within Gillin's (2007) research shows that those born after 1982 consume fewer

newspapers, magazines and scheduled TV in favour of online activities. Furthermore, if they wish, they can easily consume these media via the Internet using social media tools such as YouTube to watch TV shows and web feeds to receive and read the news (Gillin, 2008).

Rust and Oliver (1994, p. 71) posit that the emergence of new technologies has caused traditional advertising to become increasingly obsolete. In addition, media and markets have become increasingly fragmented. The authors also emphasise that consumers will become more empowered and give way to 'a new era of producer-consumer interaction'. This they argue, will be most prevalent by 2010 and will be no mere fad. These projections appear to be accurate as in August of 2006 Me Kinsey & Co. published a report that indicating that by this year, 2010, traditional television advertising will only be one third as effective as it was in 1990. Among the reasons for this decline in effectiveness is the fragmentation of both media and audiences. Smaller audience size has lessened the effectiveness of the traditional top down, mass 'interrupt and repeat' advertising model. Customers are also becoming 'broadcasters' who are no longer satisfied with just listening to a company but want to be heard (McKinsey & Co., 2006).

Moreover, Clarke (2008, p. 40) suggests that we have now witnessed the evolution of consumers into 'prosumers'. The concept of the prosumer itself is not new but it is new that consumers have evolved into prosumers. The key difference between the consumer and prosumer is that the prosumer is highly knowledgeable about products and services and can play a key role in improving these products and services. Furthermore, these prosumers will be more wary of companies and 'accepting of

exploitation only where they perceive that the exploiter provides service and valueadd in return' (p.40).

Traditional media allow companies to retain control over their message and broadcast it to the consumer. Social media have contributed to the development of the prosumer by empowering consumers and giving them the active role they demand, allowing them to participate and assess content, share it with other consumers, and share opinions, attitudes, and beliefs with one another in relation to that content, including company messages (Kozinets, 1999, Hoegg et al., 2006). Kozinets (1999, p. 258) states that 'the existence of united groups of online consumers implies that power is shifting away from marketers and flowing to consumers. For while consumers are increasingly saying 'yes' to the Internet, to electronic commerce and to online marketing efforts of many kinds, they are also using the medium to say 'no' to forms of marketing that they find invasive or unethical'.

Gillin (2007, p.xiii) states that social medias present an opportunity for marketers to converse with customers. Central to this discipline that Gillin refers to as 'conversation marketing' is dialogue. Conversation marketing will require marketers to approach consumers in a new way as the empowered consumers will expect to receive something of value to them in return for their participation. Gillin concludes that 'it means understanding who your customers are, who influences them and how to engage with those influencers'. As a result, it is not the message and pushing it onto consumers that is important but creating a real and meaningful dialogue with them (Meadows-Klue, 2007).

### 1.5 Social Networking Sites and Marketing Communications

### 1.5.1 Changing Marketing Communications

Traditional communications models (Figure 1.1) centre on mass communications, and as noted previously, as media have become increasingly fragmented, it has become less effective. Traditional communications models fail to account for the now empowered consumers and their ability and propensity to control the messages to which they are exposed and to discuss and pass on communications to one another in relation to messages or indeed pass on the message itself. Li and Bernoff (2008, p. 36) argue that 'this groundswell of people using technologies to get the things they need from one another, rather than from companies, is now tilting the balance of power from the company to customer'.

Organisation Message Medium Consumer

Consumer

Consumer

Consumer

Figure 1.1: The traditional communications model

(Solomon, 2004)

As technologies have evolved, particularly the advent of the Internet and social media tools, consumers have become more empowered and enabled to interact with and pass on company messages. The Internet and social media also provide organisations with the opportunity to partake in two-way dialogue with consumers themselves and to achieve 'producer-consumer interaction'. Figure 1.2 illustrates the advanced web communications model.

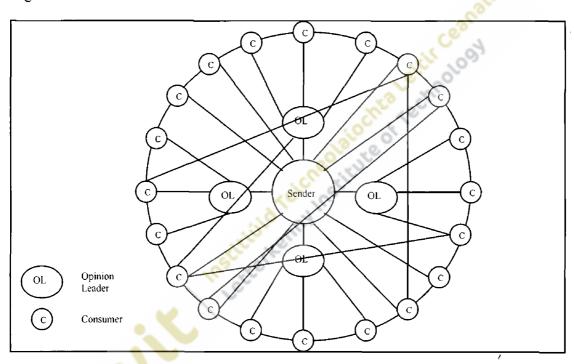


Figure 1.2 Advanced web communications model

(Smith and Taylor, 2004).

Models such as this account for the fact that consumers talk to one another and pass messages on to one another (Constantinides, 2008). Furthermore, Nielsen (2009, p. 3) suggests that 'if the successful ad model can be found', advertising revenue may be primarily generated from social media as opposed to traditional online media.

### 1.5.2 Utilising Connections for Marketing in SNSs

Given the level of connectedness facilitated by SNSs, Enders et al. (2008) highlight the potential these sites offer in terms of reaching a greater number of consumers. This is achieved through enabling companies to access those within an individual's extended network of contacts — those they do not typically access using traditional methods of communication. Building upon Anderson's (2006) model of the 'Long Tail', the authors propose the following model (Figure 1.3):

Figure 1.3: The long tail of social networking Networking Intensity The Short Head The Long Tail Contact pool accessible via Additional contact tradional networking potential of online networking Social Hetworking Sites Maximum number of Capitalise on previously contacts retainable via inaccessible networking traditional networking potential Number of contacts -

(Enders et al. 2008)

ranked by intensity

As depicted in Figure 1.3, traditional social networks (those maintained offline only) are limited. The figure also illustrates however, the prolific network of contacts that a company can potentially access due to online social networks.

The concept of 'scale-free' networks can also be applied in terms of the Internet and SNSs. These networks contain nodes with a number of links that can spread to other nodes in many areas or networks linked to one another through common members. These networks work on the principles of growth and preferential attachment. This underlines the importance of connectedness and critical mass within SNSs. Where a member (node) is highly connected, there will be many friends and the likelihood of developing relationships with an extended network of friends. This in turn will increase the likelihood of connections (links) to other networks and thus increase communication capabilities and reach, increasing the size of the overall network. These networks can provide an ideal medium for marketers to generate word-of-mouth (WOM) in relation to products and services (Barabasi and Bonabeau, 2003).

Eccelston and Griseri (2008) establish that Gladwell's (2000) categorisation of influencer groups can also be applied in an online as well as offline context. He categorised these groups as mavens, connectors and salespeople. Eccelston and Griseri (2008) further build upon these categories, applying them in the context of consumer behaviour. Mavens are those who gather product and service information and are asked by others to provide information in relation to these products and services. Connectors are those who essentially connect to others and connect others they know to one another. This category of influencer is one who has discussed products and services with at least two other individuals. Salespeople are those who influence others to buy or refrain from buying products and services. The authors explain that the majority of SNS members behave as connectors do. However, in exhibiting this behaviour, they are lacking a key element of Eccelston and Griseri's

(2008) influencer types – they are not discussing products and services with each other via SNSs.

MacKelworth (2007, p. 3) maintains that 'technology enabled networks of interaction have extended the social network to become a global mechanism of exchange between social actors with important repercussions for the distribution and influence of marketing communications'. The author stresses the need for a different approach in reaching and engaging customers in online social networks as a result of the subsequent power that has been bestowed upon consumers due to these networks. He finds that trust and tie strength are essential factors influencing consumer purchasing decisions. In addition, a two-way dialogue between that source of information and the consumer will be of more influence than one-way communications. The author conveys that 'what is important for the marketing paradigm is to dedicate resources to engaging with them to lower the reception threshold of marketing communications by encouraging influencers external to the company to promote and evangelise new service and product offerings' (MacKelworth, 2007, p. 30).

Phelps et al. (2004) highlight the importance of comprehending what motivates people to pass on messages and the behaviour of these individuals. They do so in the context of email messaging. The authors emphasise the importance of delivering relevant and interesting emails to the correct targets, those who are interested in these messages and are likely to pass them on to others. These targets, the authors identify as viral mavens and high opportunity infrequent senders. Viral mavens are those who receive many messages and tend to pass on a large percentage of messages. High opportunity infrequent senders are those who receive few emails but exhibit the

tendency to pass on the majority of the messages they receive. These targets will only send on those messages that they deem to be interesting and relevant. As a result, the message content is essential.

In essence, the emergence of SNSs means that companies are presented with the opportunity to reach and engage consumers and their contacts, not only within their immediate network, but also their extended network of contacts. These networks can provide an ideal medium for marketers to generate WOM in relation to products and services within these networks. Not only this, but there is the potential for WOM to spread to other networks on the basis of nodes or members common to two or more networks (Barabasi and Bonabeau, 2003, Enders et al., 2008). The challenge facing marketers is how to integrate themselves into conversations between SNS members and initiate WOM among consumers in online SNSs. Given that SNSs centre on communication between participants, a different approach is required if marketers are to reach and engage consumers via this medium. It is not acceptable to push messages onto users as this will be regarded as an invasion of their privacy. Marketers must seek to pull consumers in and engage them in dialogue, encouraging them to pass on company messages (Gillin, 2007, Kozinets, 1999, Meadows-Klue, 2007).

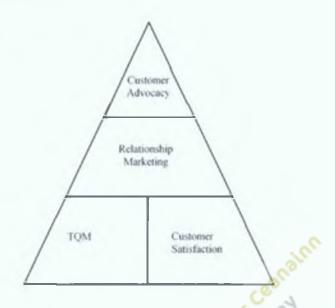
### 1.5.3 Customer Advocacy in Marketing Strategy

Urban (2005) argues that customer advocacy should be at the forefront of marketing strategy given this increase in the power of consumers. Consumers can source information and purchase products from a variety of sources much of which has been

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provided by technologies, in particular the Internet. Before making a purchase decision consumers can find consumer recommendations online, both positive and negative, to aid the decision making process. As a result, control is increasingly in the hands of the consumer. The author states that traditionally, if consumers were dissatisfied, they might tell a few of those close to them, and at worst, a company would lose only a small number of customers. The Internet however has enabled dissatisfied customers to tell an expanse of friends of their dissatisfaction, the effects of which can be detrimental for a company. However, the potential advantages of this in terms of positive WOM and the extent to which this WOM can spread to other consumers can provide many opportunities for a company. Customer advocacy signifies a move away from the traditional push forms of marketing to that of a company providing open, honest, and complete information to consumers that can be applied in both an online and offline setting. Rather than pushing messages onto consumers, customer advocacy involves a dialogue between a consumer and a company based on trust. A company taking an interest in and listening to its consumers, and they in turn purchasing from the company, and providing it with feedback so that it may offer an improved service signifies the reciprocal relationship. This, Urban (2005) believes is the future of marketing and recognises that the consumer is in control. These factors enabled Urban (2003) to develop the advocacy pyramid (Figure 1.4).

Figure 1.4: The advocacy pyramid



(Urban 2003)

Achieving dialogue and trust with consumers first involves building quality management (TQM) and customer satisfaction. This is necessary as delivering value to consumers with quality products and having satisfied customers is an essential prerequisite for knowing your customers. Building a relationship with customers is then essential as a means of getting to know them. It is then through knowledge of customers, being open and honest, providing information to customers and engaging them in dialogue that customer advocacy can be achieved.

Customer advocacy involves seeing customers as equals and therefore communicating with them on the basis of this equality. This involves adopting a different mindset on behalf of a company. This mindset is one that acknowledges that consumers are empowered and pulls them in rather than viewing them as hesitant in their decision making processes and pushing messages on them to influence their decisions. Customer advocacy centres on understanding and helping the consumer rather than

pushing messages onto them and attempting to force their decisions (Constantinides, 2008). As a result, marketers must create and convey the right message, a message that consumers want to see, and one to which they will respond positively.

Studies have primarily focused on the specific area of using SNSs for specific advertising purposesrather than the broader area of marketing on SNSs. PriceWaterhouseCoopers (PWC) establishes that advertising is 'more about presence than persistence' (PWC, 2008a). Companies must respect the social media community as it can and will respond directly and communicate with other SNS users. It is important for companies to effectively integrate advertisements and engage customers rather that infringe on their privacy or irritate customers. Members of the social media community trust one another (Nielsen, 2009). If a company can engage consumers, they will choose to listen to the messages that are conveyed. Highly engaged customers are also more likely to complain directly to the company itself rather than to others when dissatisfied (Kozinets, 1999). This also reflects a fundamental rule that has remained the same between traditional media and social media and that is the importance of creating and maintaining relationships with consumers.

#### 1.5.4 Consumer Attitudes Towards Advertising on Social Networking Sites

Mc Kay (2008) outlines that a study on US consumers and SNSs conducted by research company International Data Corporation (IDC) showed that while SNSs are very popular, 52% of respondents in the study found advertisements on these sites 'annoying'. Click through rates on advertisements are also quite low. The primary

reason these sites are used is for communication and so, what is important is to find the most effective means of reaching and engaging consumers via these sites. The author is clear that using traditional means of advertising simply will not work. This is a common mistake made by marketers. It must be recognised that consumer behaviour is different on social networks and consumers expect to be treated differently when they utilise social media (Williams, 2007).

An IDC survey of 3000 US online consumers illustrates that while consumers d are prepared to positively accept advertising regardless of where they are exposed to it, they are more irritated by advertisements on social networks than anywhere else online. SNS users are shown to be more tolerant of advertising in general. The report reinforces that as an active rather than passive medium, advertisements on SNSs detract from rather than enhance user experience. Furthermore, only one in four consumers finds advertisements on SNSs to be of relevance. The IDC survey states that 'Creating ads for SNSs that are relevant, less annoying to users is your biggest challenge'. The same report also shows that SNS users, though more active online purchasers, tend not to click on advertisements on SNSs (Dangson, 2008, p. 13).

Kelly et al. (2008, p. 4) emphasise that the primary influencing factors driving advertising avoidance in online social networks are expectation of a negative experience, the relevance of the advertising message, scepticism of the advertising message and scepticism of online social networking as an advertising medium. Focus group studies and in-depth interviews conducted among SNS teenage users point to the fact that the presence of one or more of these factors negatively impact on resultant consumer behaviour to the extent that the advertising message is completely

avoided. The authors conclude by noting that 'by understanding the reasons why advertising is being avoided, strategies can be developed to lessen the probability of avoidance'.

Banner advertisements have been deemed ineffective on SNSs as members are there to connect and therefore ignore these advertisements. Advertisements that are designed on search engines are more profitable and popular as they appeal to individual purchase desires which users are experiencing at that time. This would suggest that the key to success within SNSs is to attract members when they have a need or desire for particular products and services. Stross (2008) quotes that Seth Goldstein of advertising company Social Media Networks states that a cycle is occurring. This is a cycle of 'Advertisers distract users; users ignore; advertisers distract better; users ignore better' is taking place. The options available to advertisers are to be more intrusive or create entertaining commercials to attract members. Being intrusive may potentially irritate members and creating commercials can be too expensive for the majority of advertisers.

Excessive advertising also irritates consumers. Burst Media (2008) point to a survey of 4,000 web users, 52.6% have a low tolerance for over two advertising units per web page. If web pages appear too cluttered with advertisements, respondents will either pay less attention to those advertisements or abandon these web pages altogether. Results of the survey also reveal that over half of respondents would develop a diminished opinion of an advertiser if their advertisement appeared on a web page that they felt was too cluttered. Careful placement of advertisements by

both SNS hosts and advertisers is necessary so as to deliver value to advertisers and maintain a positive brand image.

Cherecwich (2008) maintains that the current means of advertising via SNSs are not working as well as expected and so the hosts of these sites require a different approach. As a result, while increases in advertising spend is still expected on SNSs, it will be much less than originally projected. Zeng et al. (2009) argue that in order for members of online communities to be receptive to advertising in these communities they must be comfortable with the presence of these advertisements.

Community members typically dislike participating in communities they feel are too commercialised (Evans et al., 2001). When using SNSs, members anticipate that advertisements will be integrated into content rather than interrupting time spent online. Advertisements that disrupt activities are found to be irritating. Those advertisements that relate to the user and their needs are most effective (PWC, 2008a).

Social Advertising has also been proposed as a means of advertising on SNSs. This utilises member's contacts in targeting advertisements on SNSs, where a member indicates a particular interest. However, US users have had adverse reactions to the idea of the use of their contact information as a means of advertising. As SNS advertisements continue to demonstrate low click-through rates, the IDC highlights the need to encourage users to become more than just communicators with one another. If this can be achieved, SNSs will evolve into a type of portal, resulting in better audience reach and greater effectiveness as an advertising medium (IDC, 2008).

# 1.6 Friending in Online Social Networks

# 1.6.1 The Context and Meaning of Friendship in Online Social Networks

SNS profiles are an individual's self-representation, where they list their details such as age, gender, location, and interests. It is here that the individual chooses how they wish to be seen by others online, and as they increase time and effort spent on SNSs, their profile will change and grow (Wildbit, 2005). boyd and Heer (2006) view profiles as both 'conversation starters and conversation itself'. This can be discerned from comments in the profile, to the profile picture itself.

The context and meaning of friendship in online networks differs to that of offline networks. Those listed as 'friends' on an individuals profile may not necessarily be someone they know, but are still listed as friends. Some may see 'friending' as a game, where the aim is to collect as many friends as is possible and others may list 'fakesters', TV shows, bands and celebrities for entertainment purposes or to say make a statement about who they are. People may also feel social pressures in rejecting someone as a friend and so accept those who request them as a friend rather than facing the consequences of refusal. When choosing friends, members will often be conscious of what being attached to certain friends says about them. Members essentially create their community in an egocentric manner, first choosing friends, and then choosing interests. As a result, both profiles and friends indicate the substance of the community (boyd, 2006).

Individuals may act as social connectors between other friends. They may experience dissatisfaction as SNSs provide a means for these friends to connect directly with one another. As a result, individuals may feel that they have lost the power they once possessed in controlling the flow of information between friends (boyd, 2004). Ofcom (2008) states anyone can be a friend by simply sending an invitation to become one. These friends can range from those that we are close to in our offline worlds to those we have not seen in a long time, to those we do not know at all. Friends are also much more visible online as individuals within users' contact networks where lists are clearly visible.

Lampe et al. (2007) apply signalling theory, common ground theory and transaction cost theory in their study relating to the relationship between profile structure and number of friends in SNSs. Signalling theory relates to information on one's profile that acts as cues to personality and identity. These are the signals that people judge in determining if they will be friend another. Common ground theory relates to how information provided in profiles acts as a means of mutual understanding and transaction cost theory looks at how signalling and common ground theory can help reduce costs such as time and effort for participants. Filling in the various fields in profiles with information resulted in a greater number of friends among participants. Providing more information may provide more 'signals' by which members may find common ground, thus facilitating interactions and reducing the search costs for members of the community. It is not the quantity of information provided that influences the number of friends but the extent to which individuals can draw inferences from the information to which they can relate.

#### 1.6.2 The Influence of Friends on Purchase Decisions in Online Social Networks

Eccelston and Griseri (2008) describe connectors as those individuals who connect to other individuals and connect others they know to one another. They have also discussed products and services with at least two other individuals. Therefore, in order to successfully achieve connector behaviour in SNSs, understanding the influence of friends on purchase decisions in online social networks is an essential prerequisite.

Sakamoto et al., (2008) state that the concept of scale free networks can be applied in the context of influence and community based websites. Focusing on the social bookmarking website Digg, the authors explain that nodes within the site are made up of users and stories. The more user links or 'diggs' there are for a story, the more other users are likely to link to that story, thus creating new connections. This, the authors conclude, may be due to a pressure to conform to others or a tendency to imitate others' behaviour. The study finds that influencers do exist within the community who can generate trends in relation to supporting stories. Where a story is submitted by an influencer or 'bellwether', it is likely to be more popular than those submitted by the average user as these stories are trusted more by others.

Trusov et al. (2008) focus their study on the area of referrals within SNSs. This involves the process of allowing satisfied customers to refer their family and friends. The authors do so in the context of member acquisition and WOM referrals. The purpose of the research was to create a model, which in turn would estimate the elasticity for WOM referrals on site. WOM marketing is also compared to more

traditional forms of marketing. The authors find that WOM referrals have a significant impact for companies on customer acquisitions within the SNS. The effect of WOM referrals is also of considerably greater impact than traditional forms of marketing in terms of long-run elasticity. Traditional marketing is also amplified by WOM when the purposes of traditional marketing efforts are to generate WOM. The authors also suggest using monetary rewards as an inducement for consumers to take part in WOM on their SNS. However, this paid form of inducing WOM which the authors refer to as 'fertilized' WOM may be of lesser impact than organic WOM that is spread naturally by consumers.

Dongyoung (2009) posits that in conjunction with previous research in the area of WOM in online communities, it is easier to induce WOM among strong rather than weak ties. Those members of a dense network (those where members know one another well) find both positive and negative information to be of equal value and as a result will communicate both. Those members in a non-dense network (those where members are much less familiar with each other) find positive information to be of greater value than negative information and this will affect WOM communications. The authors suggest that as a result, members are most likely to provide both positive and negative product information to strong ties and mainly positive product information to weak ties or strangers.

Iyengar et al. (2009) maintain that within SNSs, friends have a considerable influence on their friends' purchasing behaviour. Focusing on Korean SNS Cyworld, the authors also find that this influence varies notably among its users. Cyworld earns the majority of its revenue from transactions whereby members can purchase virtual

items, the remainder of revenue being attributed to advertising and mobile services. Based on these transactions the authors investigate their impact on the purchasing behaviour of other members. Findings illustrate that those members who are less socially connected (lower status) onsite are not influenced by their friends' purchase behaviour as they are rarely active onsite and are therefore less engaged with other members. As less socially connected and active members they are not affected by this activity. Those who have an average number of contacts and level of activity (middle status) are positively influenced by their friends. The authors suggest this behaviour is to maintain one's status or image among their friends in their SNS. Those who have a large number of contacts and were very active on their SNS (high status) are negatively influenced by their friends' purchasing activity. They maintain their high status as they are unique and do not have a fear of losing their social standing. The authors point out that while middle status members may base their purchase decisions on the choices of high status members, high status members may veer away from those products that have been adopted by middle status members. In essence, the more other members of the community purchase products, the less high status members will engage in purchase related behaviour onsite as they will seek to differentiate themselves by alternative, non-purchasing means. The study itself focused on Cyworld as this SNS employs a marketing model based on the influence of friends' behaviour on one another whereas other SNSs utilise an advertising-based model.

Goldenberg et al. (2009, p. 3) identify two types of social hubs within a social network. Social hubs are those individuals within a network with a significant number of ties. Social hubs may be classified as either innovative or follower hubs.

Using SNS Cyworld, the authors investigate the role played by hubs in the diffusion and adoption of products. Innovator hubs are those whom the authors describe as being 'genuine innovators', whereas follower hubs are those who 'adopt early because of exposure to other adopters'. Due to the high degree of connectedness experienced by hubs, Goldenberg et al. (2009) put forward the theory that they will adopt earlier than non-hubs, regardless of whether they are of innovator or follower status. Given the number of links in their network they will frequently be exposed to a new product by indirect means and as a result adoption of such products should occur early. Hubs affect both the speed and extent of adoption of products. Innovator hubs play a key role in the speed at which products are adopted while follower hubs play a key role in the market size of adopters. The authors outline the potential effectiveness of utilising these social hubs as a means of initiating WOM among members of a large social network.

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Oh et al. (2008) find in relation to the SNS YouTube that within friendship based networks, pressure to conform to those who hold key positions within a network will influence the diffusion of video content onsite. Furthermore, those individuals who are central to a network will increase the diffusion of content. This will typically occur at the latter stages of the diffusion process, as at this stage content has been verified by others and the central figure no longer runs the risk of recommending content that may be deemed unfavourable by those to whom they are connected. A common link from one network may also affect the diffusion of content within another network, allowing that network to gain more information, thus experiencing social learning. This association with non-local ties the author finds, has a greater impact on the diffusion process than those in one's immediate network and indicates

that the desire to learn may be more important to members than conforming to network behaviours. This supports Haythornwaites (2005) synopsis of weak ties in online social networks and their importance as a means of providing new information to network members. Where users subscribe to other users, channels or content, Oh et al. (2008) maintain that those subscribers with a greater number of connections will have a greater impact at the early stages of the diffusion of content. This is due to the propensity for those subscribers who are highly connected to exhibit a greater likelihood to subscribe to new content, possess large amount of information regarding content onsite and share this content with others to communicate their expertise.

Vilpponel et al. (2006) maintain that within online social networks, strength of tie is not related to influencing individual adoption behaviour despite the propensity for members to find strong ties more reliable and trustworthy as information sources.

Stephen and Berger (2009) focus their study in the area of social networks and the ongoing consumption of products, building a model of WOM, social contagion, and social epidemics. When new products are being discussed, influence will move from those who initiate conversions regarding products and services to other members in the social network. In order for this discussion to take place regarding products and services, initiators must be enthusiastic about the product. However, in order to maintain conversations and consumption regarding products and services it is necessary not only for enthusiasm to move from initiators to others in the network but also back to initiators again so that enthusiasm regarding products will continue to be generated. As conversations and enthusiasm regarding products inevitably decay through time, the location of conversation initiators within a network becomes critical.

The closer the initiator is to the rest of the network, the shorter the distance there is between nodes, facilitating speedier conversations and enthusiasm between members and back again, thus reinforcing enthusiasm. Contrary to Vilpponel et al. (2006), Stephen and Berger (2009) suggest that it is not degree centrality that is important in selecting people to initiate conversations and enthusiasm regarding products but their closeness to others in their network.

In order to create social epidemics in SNSs it is necessary to understand the drivers of these epidemics and how they influence one another. Conversations regarding products will inevitably decline over time due to competition and a decrease in enthusiasm. To maintain conversation and enthusiasm, increasing product virality and utilising initiator position can be of benefit. Increasing the virality of products should result in a greater propensity for people to discuss a product whereas initiator position can ensure the rapid spread of conversations and enthusiasm around products throughout a network (Stephen and Berger, 2009).

Stephen and Lehman (2009) postulate that consumers are 'selective transmitters' in that they will not discuss products with all those known to them. Initiators of WOM communications utilise their social capital within their social networks as a means of voicing their opinions. Hence, it is likely that they will choose to express their thoughts to those they deem most likely to listen. Those who are most likely to listen are those who are highly connected, have high receptivity and/or are a strong tie. Those who pass on, or re-transmit WOM do so as a means of utilising their social capital as a means of acquiring new information. These transmitters are likely to choose to transmit this information to those who are likely to listen but are also well

connected. Where individuals are highly connected they have the opportunity to collect information from a variety of sources and as a result may be well informed. Their high level of connections also allows then to access information from a variety of sources as required. Thus, transmitting WOM may allow individuals to utilise their existing social capital or to create new social capital. The act of transmitting WOM is essentially for the benefit of the transmitter, whether it is in the context of initial transmission or re-transmission, rather than to help others in their network. Initial transmission centres on attention and re-transmission centres on reciprocity.

Xu et al. (2008) find that the frequency-rating model best describes consumer influence in relation to product adoption in egocentric online social networks. An egocentric network refers to a member's personal network of contacts on the online social network. The model accounts for the number of times that an individual is in contact with those who have already adopted a product in their egocentric network. The more times this occurs, the greater the chances are of that individual adopting the product. It also accounts for whether an adopter has engaged in positive or negative WOM regarding a product. Where adopters engage in positive WOM behaviour, this will encourage the individual encourage another individual to adopt the product in turn, with the opposite occurring in the case of negative WOM. Therefore, it is not the structure of an individual's social network that affects influence, but it is the degree of activity within the network.

The dispersion of WOM throughout different social networks is an important factor influencing opinions regarding products. It is not the number of times that a product has been discussed that matters but the extent to which conversations flow to and

throughout various heterogeneous networks. This ensures that the same individuals are not consistently discussing a product but that word is spreading, initiating discussions among those who had not previously taken part in discussions. This means that those who have not already been influenced by WOM are now being reached (Godes and Mayzlin, 2004).

# 1.7 The Value of Information

# 1.7.1 The Importance of Trust to Consumers

As consumers' time, trust and attention has become scarce, information has become increasingly important, and information technology has enabled consumers to access this information more quickly and easily. Lewis and Bridger (2004) describe how information technology has led to the development of a consumer-producer collaborative relationship. This view is shared by Clarke (2008) and Rust and Oliver (1994). As consumers become less and less trusting of companies, the trust that does remain will be invested in those companies that collaborate with them regarding products and services (Lewis and Bridger 2004).

Consumers do still have a great degree of trust in one another. Recommendations, whether positive or negative, will influence consumers' decision making processes. Consumers find each other more credible than advertising and they are more concerned for each others' interests than companies are. The network value of consumers and their subsequent potential to pass on messages to numerous individuals should not be ignored. It must be remembered that individuals' online

social network may not just end with their immediate network, but messages can pass from one network to another on the basis of those members common to two or more networks (Domingos, 2005).

The Edelman trust barometer points to a large decline in consumer trust in television and radio as sources of company information. While traditional media continue to lose consumer trust, Edelman (2009) highlights the continued growth of WOM communications as a source of company information. The reality is that consumers trust people who share similar interests. The study, however, also shows a decline in trust among digital media sources including SNSs as a means of amassing company information. On a global basis, trust in SNSs fell from 20% to 15% among 35-64 year olds (Edelman, 2009)

Trust is an essential element for consumers in determining whether to purchase a product or service from a company. 91% of respondents in the Edelman (2009) survey have purchased a product/service from a company they trusted over the previous year and 77% then recommend these to a friend or colleague. Furthermore, 77% refused to purchase a product/service from a distrusted company and 72% criticised them to a colleague or friend. 91% of respondents also claimed that a company's reputation is affected by trust and the extent to which they communicate openly and honestly with their customers on business matters. In participating in these conversations, Edelman (2009) states that while mainstream media are still a viable option to communicate with consumers it is not the only one and social media are also an option.

Dellarocas (2003) indicates the means whereby the Internet is changing consumer behaviour in terms of sourcing information regarding products and services. Advertisements and professional advice once played a larger part in motivating purchase decisions. However, consumers now increasingly look towards one another as a source of information, basing purchase decisions on online feedback and comments provided by other consumers. The scalability of consumer networks can be unlimited with the Internet providing linkages between networks that were not previously possible, allowing opinions and information to disseminate to a significant number of consumers.

# 1.7.2 The Impact of Privacy on Information Disclosure in Online Social Networks

Trusov et al. (2008) emphasise that SNSs can provide beneficial information on their users that can be of use to marketers as a means of targeting consumers. Tsai (2008) concurs with this, stating that for the marketer, SNSs are much more than social vehicles. They have the potential to provide a wealth of information far beyond that of just overt data provided in profiles. Data mining can provide marketing with a much more in-depth picture of consumers and an effective means of reaching these consumers. Trusov et al. (2008) state that the data is there; it is simply a matter of using it.

However, the amount of personal information that is displayed on one's profile page has given rise to privacy and safety concerns regarding SNSs. It is felt that risks can develop from this display of information, especially among younger SNS users who tend to display a large amount of information to those in their social network, not all of whom are close friends. Risks are deemed to also arise from the apparent lack of knowledge teenagers have in relation to privacy settings on these sites and who actually has access to their profiles (Livingstone, 2008). A study conducted among Facebook users shows that while many users state that they are aware of how they can control who views their profiles, there are still those who are not aware of how to do this (Acquisti and Gross, 2006). Another study carried out with MySpace users finds that while SNSs allow users to vary privacy settings, the majority of respondents do not take advantage of these settings. Users acknowledge that activating privacy settings is their responsibility and that anonymity and the use of pseudonyms are often used as a means of protection (Dwyer, 2007).

Hinduja and Patchin (2008) agree that while risks do exist for young people online, they may not be as careless in divulging information as is generally thought. They reveal that in their study of MySpace profile pages, 40% of young people have privatised their profile pages. In addition, a very low number of users detail how they can be reached outside MySpace. While a high number reveal their city of residence (81%), very few (under 9%) list their full name. Tufekci (2008) finds that of Facebook users surveyed, over 90% use their real names, but do vary the level of visibility of their profile to prevent unwanted viewing. MySpace users also vary the level of visibility of their profiles. Concerns over privacy issues do not generally affect information disclosure on site. Respondents disclose information in relation to a variety of topics on their profiles, such as music, books, romantic status and movies. Disclosure in relation to religion, phone number and address is considerably lower, yet such information is still disclosed by some users. Profiles represent user identity

are and there is a general consensus that if people have a profile, they are going to use it as a means of identity presentation. PWC (2008a) suggest that privacy is not a main concern of individuals, especially those of a younger age and while personal information is disclosed, address and phone numbers typically are not. The same study also establishes that older age groups are less concerned about privacy than they once were but are still more aware of it than younger users.

Age verification for SNS users has been suggested as a possible means of preventing underage users from creating profiles. Credit cards, drivers licenses, birth certificates, parental or guardian verification of age, and school verification are among some of the methods that have been suggested to verify the age of SNS users. However, problems exist with each of these methods. For example, the use of a credit card does not necessarily mean that you are the card owner, not all members would possess a driver's license and in terms of a parent or guardian vouching for the young person, it would prove difficult to affirm that that person is in fact the parent or guardian in reality. Thierer (2007) concludes that it is unrealistic to be able to find one main method of age verification, and stresses the importance of educating youths in relation to privacy and safety online. Cheng (2007) also raises concerns in relation to age verification methods as reports have shown that so called 'verified' identities can be sold online and that in the majority of assault cases on the Internet, and that in 95% of online assault cases young people are aware that it is an adult with whom they are conversing and in 80% of cases, they are aware of the adult's intentions. It is the responsibility of government. SNSs and parents to adopt what the author refers to as a 13-E1 approach: empowerment of parents to properly monitor childrens' online activities, education of children in relation to privacy and safety online and enforcement of more effective means of detecting online predators (Thierer, 2007).

As Weiss (2008) advises, SNSs have lead to the emergence of new risks in relation to informational privacy (Table 1.1). Table 1.1 demonstrates that numerous risks exist for users of SNSs. While risks may vary dependent on the category of SNS, the most prevalent of these risks are the misuse or reuse of data, cyberbullying, predator activity and discrimination.

Table 1.1: New risks for informational privacy emerge on social networking sites

Category	Examples	Informational Privacy Risks	
Business	Linkedin	Blackmail, Breach of	
	Monster	Confidentiality, Data	
	XING	Reuse/Secondary Use,	
		Discrimination, Aggregation (i.e.	
	.0	Pre-screening for Recruiting,	
	, cr	Harvard Business Case on Mimi	
	100	Brewster)	
Personal	MySpace	Intrusion, Breach of Confidentiality,	
	Orkut	Data Reuse/Secondary Use,	
	Hi5	Aggregation, Identity theft, Abuse	
	Classmates	by Cyberbullies or Predators,	
	Bebo	Video-bullying, Objectionable	
		material, Paedophilia, Child	
		Pornography	
Publication	YouTube	Unwanted Exposure, Distortion,	
	Xanga	data reuse/Secondary Use, Abuse by	
	Broadcaster	Cyberbullies or Predators, Video-	
	Last.fm	bullying, Objectionable material,	
	LiveJournal	Paedophilia, Child pornography	
Special Interests	BlackPlanet	Discrimination, Data	
	Cyworld	reuse/Secondary Use, Aggregation,	
	Mixi	Intrusion, Exposure, Breach of	
	WAYN	Confidentiality	
	Care2		
Individual	SecondLife	Exposure, Appropriation, Identity	
	Gaia Online	theft, Breach of Confidentiality,	
		Insults, Cyberbullying	
<del></del>		(11/.: 2000)	

(Weiss, 2008)

Weiss applies Tapscott and Williams (2007) principles of 'Wikinomics' – openness, peering, sharing and acting globally - to the privacy of users in social networks. Weiss (2008) believes that privacy safeguarding, empowering users to determine the usage parameters of their personal data and perhaps a set of rules for each individual to set and impose in terms of privacy of the data they are providing should be put in place. Clear emphasis is placed on the need to rethink privacy in relation to online social networks and giving control to individual SNS users in this respect.

Privacy of SNS users has also been raised in the context of employers using SNSs to investigate the backgrounds of potential employees and assess their suitability for particular positions. The Internet is quickly developing into your permanent 'record' as once data has been entered it is essentially archived and stored online permanently (Thierer, 2007). Discussion has arisen as to whether the use of these SNSs in decision-making regarding employment is equitable. They are proving quite popular in aiding employers in the recruitment and selection process. A study carried out by CareerBuilder.com shows over 40% of employers use the Internet and SNSs in the recruitment process. The same report details that 66% of respondents did not hire certain individuals as a consequence of their SNS profiles. While professionals feel the SNS profiles are strong indicators of an individual's professionalism, students feel very differently in this respect and are quite aware that profiles can be used by employers in the screening process (Waters, 2007). However, Tufekci (2008) points out that the knowledge that prospective employers, government and potential romantic partners can view via online profiles does not affect respondents' actions towards the visibility of their profiles. They felt that this is only likely to occur in the case of potential romantic partners. Synder et al. (2006) advocate that rules governing the use of information displayed in SNSs should be put in place to protect users and used to justify sanctions against those those who violate the social contract of the site. However, Ernst and Young use their Facebook group to hire a number of employees. Within the group, job information is posted and prospective employees can post questions about job vacancies and the company itself (Li and Bernoff, 2008).

While emphasis has of late been placed on safety matters in SNSs, Ybarra and Mitchell (2008) find that this emphasis may be unwarranted as solicitation and harassment of children and youths tend to occur less on SNSs than other means of online communication. Such incidents tend to occur more via instant messaging and chat rooms. They also reinforce the concept of focusing on prevention and education regarding such issues and that such focus should be placed on the Internet as a whole and not limited to SNSs.

SNS hosts themselves have become increasingly aware of the potential dangers that face younger users of SNSs. As a medium that has become an integral part of youths' lives, SNSs in Europe have signed an agreement to combat problems of cyberbullying and predators to make this a safe environment for communication. SNSs are also increasingly working with authorities to protect youths from online predators (Nicole, 2009).

The National Centre for Technology in Education (NCTE) (2008) reports that SNSs have become highly integrated into Irish youth's lives. The '2008 Watch Your Space' survey is conducted among Irish teenagers, specifically 13-18 year olds' usage of SNSs. The findings of the report show that more teenagers have online profiles on

SNSs and are accessing these more frequently than in previous years. A decrease in the number of profiles that are public on SNSs was observed from the same time in 2007 – from 71% to 66%.

# 1.8 Conclusion

Within their short life span, SNSs have grown to be a large part of many peoples' lives. Such sites allow the creation and maintenance of relationships with new contacts or those already known in an offline context. They serve to provide users with a new and innovative means of communicating with one another. As consumers spend increasing amounts of time on these sites, they do so at the expense of other media, which poses a fundamental challenge to marketers, namely, how to utilise these sites as a marketing tool.

Literature highlights the vast range of customers that a company can reach using SNSs. Despite the potential these sites hold, this potential has not been fully realised. As a means of communicating with one another in a social context, participating with and passing on company messages is not at the forefront of the consumer's mind when they are utilising their SNSs. The challenge for marketing therefore lies in gaining the attention of SNS users and encouraging them to engage in WOM behaviour regarding products and services. While information has become increasingly important to SNS users it has become equally important to marketers as a means of reaching and engaging key audiences. As consumer trust grows in one another and they play a key role in influencing one another's purchases, reaching and engaging consumers by the correct means has become increasingly important.

Consumer trust in SNSs as a means of gathering company information is also in decline. As a medium that centres on communication between individuals who share common interests this is surprising, as WOM influence is growing stronger. This may raise issues as to how these sites are being used by companies as a means of delivering messages, why consumers have a lack of trust in relation to messages and why they are not passing company messages on to one another.

Thus far SNSs have not experienced the high levels of success regarding advertising that was expected given the prolific number of users on site; they are simply not responding to the majority of marketing efforts. While the potential is there to garner the attention of consumers and for them to pass on company messages, it has yet to be fully realised. The adoption of traditional marketing techniques among companies is believed to be part of the reason contributing to this lack of success. Developing most appropriate strategy is essential.

As consumers continue to spend greater amounts of time on SNSs, their online representations and the information they share with one another will also evolve. As a result, SNSs will continue to grow in popularity. Other academics however fear that if the privacy of SNS users is increasingly infringed, their future may be at risk as a marketing tool.

# Chapter Two: Research Methodology

- 2.1 Introduction
- 2.2 Qualitative Research Methodology
  - 2.2.1 Research Objectives
  - 2.2.2 Data Collection Method
  - 2.2.3 Measurement Technique
  - 2.2.4 Sampling
  - 2.2.5 Analytical Approach
- 2.3 Survey Research Methodology
  - 2.3.1 Research Objectives
  - 2.3.2 Data Collection Method
  - 2.3.3 Measurement Technique
  - 2.3.4 Sampling
  - 2.3.5 Analytical Approach
- 2.4 Conclusion

# 2.1 Introduction

Chapter Two addresses the research methodology adopted for the research. Two stages of empirical research were conducted. The first stage of the primary research consisted of qualitative research (Section 2.2) and the second stage adopted a quantitative approach in the form of survey research (Section 2.3). The reliability, validity and generalisability of the research, is then discussed in the conclusion (Section 2.4).

A researcher may take a theoretical or empirical approach to carrying out research. A theoretical approach involves working with secondary data; taking other's ideas and putting them together in new and interesting ways. It is a process of "re-thinking" others work. An empirical approach relies on primary data collected by the researcher for the purposes of the study at hand. The two main paradigms that exist within the empirical approach are positivism and interpretivism (Weber, 2004).

The following table outlines the differences between positivist and interpretive approaches to research (see Table 2.1).

Table 2.1: Differences between positivism and interpretivism

Metatheoretical Assumptions About	Positivism	Interpretivism
Ontology	Person (researcher) and reality are seperate.	Person (researcher) and reality are inseperable (life-world)
Epistemology	Objective reality exists beyond the human mind.	Knowledge of the world is intentionally constituted through a person's lived experience.
Research Object	Research object has inherent qualities that exist independently of the researcher.	Research object is interpreted in light of meaning structure of person's (researcher's) lived experience.
Method	Statistics, content analysis.	Hermeneutics, phenomenology, etc.
Theory of Truth	Correspondence theory of truth: one-to-one mapping between research statements and reality.	Truth as intentional fulfillment: interpretations of research object match lived experience of the object.
Validity	Certainty: data truly measures reality.	Defensible knowledge claims.
Reliability	Replicability: research results can be reproduced.	Interpretive awareness: researchers recognize and address implications of their subjectivity.

(Weber, 2004)

Table 2.1 illustrates that positivism is a structured approach to data gathering and relies primarily on quantitative data collection and analysis. Interpretivist approaches rely on data collection and analysis from qualitative research methods and are more flexible in nature. As an approach that is based on statistics, positivism allows the generalisability of its results as they are more objective in nature. Interpretivism, however, does not afford this generalisability of results as it is an individual's opinion, knowledge and experience that form these results which are consequently subjective in nature.

While qualitative research is generally used to uncover trends in thought and opinion, quantitative research is used to measure occurrences or incidence of opinions and thoughts. Quantitative research is objective and empirical in nature; it involves counts and measurements, which are statistically valid, the outcome of which is a report that is set in its structure (Creswell, 2009).

Using mixed methods in conducting research employs both qualitative or interpretivist and quantitative or positivist research techniques and is based on the premise that the researcher's combination of different research strategies, approaches and methods will maximise the strengths of the research and minimise weaknesses, thus reinforcing one another.

# Mixed methods research may be defined as:

the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration (Johnson et al., 2007, p. 123).

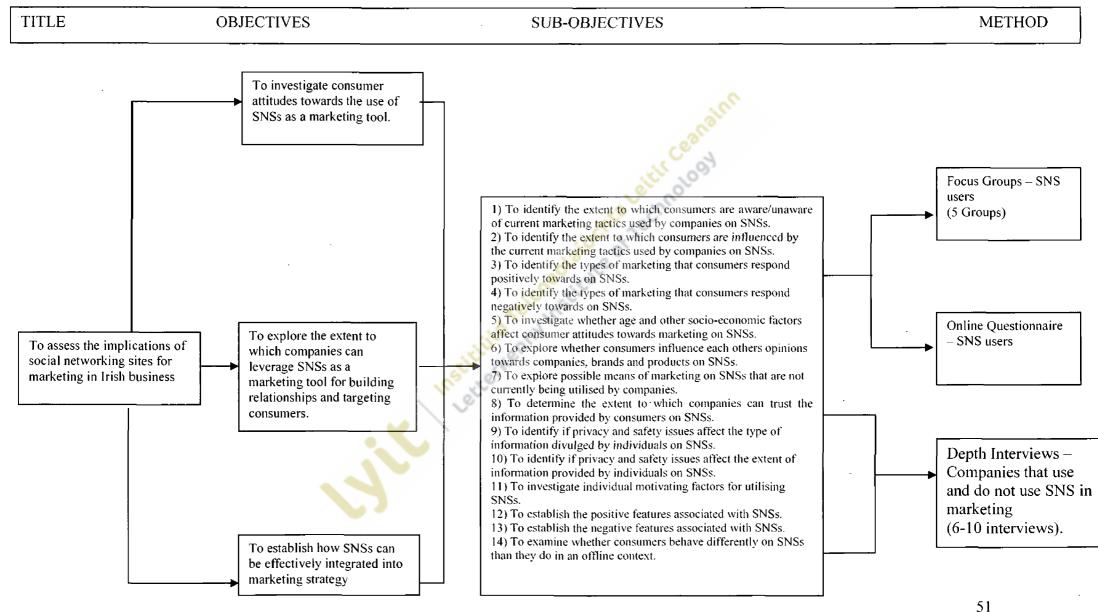
This research employs both a positivist and interpretivist approach through the adoption of a mixed method primary research methodology. Qualitative research was carried out in order to gain insights into consumer attitudes towards marketing on SNSs and to investigate consumer behaviour on site. Given that focus groups comprise a small number of members of the population of interest, whose member interactions and opinions may have an impact on responses, they do not afford statistical analysis (Stewart et al., 2006). As a result quantitative research was

undertaken to allow generalisation of results in relation to the population of Irish SNSs users as a whole, thus enabling more definitive conclusions to be drawn.

In order to assess the implications of SNSs for marketing in Irish business, a two phase primary research approach was adopted. Phase one of the research consisted of a number of focus groups carried out with SNS users and phase two took the form of an online survey, the purpose of which was to investigate consumer attitudes towards the use of SNSs as a marketing tool and to explore the extent to which companies can leverage SNSs as a tool for building relationships and targeting consumers. Addressing these two objectives would then allow the researcher to address the third objective of establishing how SNSs can be effectively integrated into marketing strategy.

Figure 2.1 outlines the research objectives for the research.

Figure 2.1: Research objectives for exploring how SNSs can be used by companies as a marketing tool



Literature in the area of SNSs enabled the researcher to identify the key issues pertaining to the usage of SNSs by consumers, their attitudes towards the usage of SNSs as a marketing tool, the extent to which SNSs can be used as a marketing tool by companies and how SNSs can be effectively integrated into marketing strategy. After these were developed the researcher then developed numerous sub-objectives that could influence the overall objective of the research. Literature was also used to develop these sub-objectives. In order to effectively address the objectives and sub-objectives of the research it was determined that both qualitative and quantitative research techniques should be employed.

# 2.2 Qualitative Research Methodology

Five focus groups were conducted with SNS users in the area of Co. Donegal, Ireland, the purpose of which was to gain insights into consumer attitudes towards marketing on SNSs and how companies can leverage SNSs as a tool for building relationships and targeting consumers.

# 2.2.1 Research Objectives

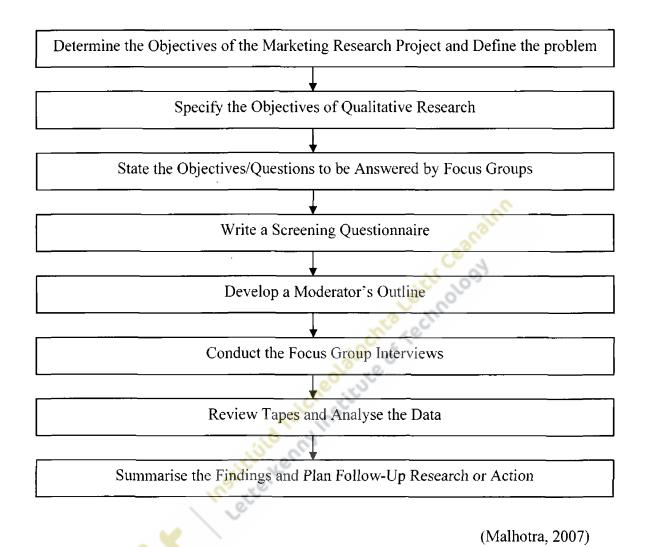
The overall research objectives and sub objectives addressed by the focus groups are detailed in Figure 2.1. All objectives and sub-objectives were addressed by the focus groups.

#### 2.2.2 Data Collection Method

Five focus groups with SNS users were conducted. Categories comprised the following age groups: 14-17, 18-24, 25-34 and 35+. The use of different age groups is based on the premise that different age groups use SNSs for different reasons and may behave differently on site (PWC, 2008a) and as a result may have varying attitudes towards marketing tactics. As the most active users of SNSs (iProspect, 2007), two focus groups were conducted with the 18-24 age category. Focus groups consisted of both male and female participants as both use SNSs and interact with one another on site. The 14-17 year old focus group was comprised of four males and four females. The first 18-24 year old focus group which was conducted with students (hereafter referred to as the 18-24 student group) consisted of four females and three males, the second 18-24 year old focus group which was conducted with non-students (hereafter referred to as the 18-24 nonstudent group) was comprised of four females and three males, the 25-34 and 35+ focus groups were both comprised of four females and four males. In order to be effective, focus groups should comprise between six and twelve members. The smaller the group, the less likely it is for important synergy to be created among members and the larger the group, the more difficult it is to achieve a meaningful discussion between members (Parasuraman et al., 2004).

Malhotra (2007) puts forward the following procedure for planning and conducting focus groups which was utilised for this research at hand (Figure 2.2).

Figure 2.2: Procedure for planning and conducting focus groups



Threlfall (1999) postulates that focus groups are most appropriate for consumer use in the study of attitudes and cognition subject matter.

An attitude refers to 'a predisposition to respond in a consistent or predictable manner to a stimulus...The stimulus can be anything, such as a physical or a social object, an idea or even advertising' (Evans et al, 2006, p. 67).

Attitudes are enduring and individuals develop attitudes over time. They are deeply engrained within the individual. The stimulus which an individual possesses an attitude towards is known as the attitude object (Solomon, 2004).

The Fishbein multiattribute attitude model centres on how attitudes are formed but also how attitudes may also be changed by marketers. It is a tripartite model. It addresses the salient beliefs an individual holds in relation to an attitude object (A<sub>ijk</sub>), the probability that the attitude object possesses certain attributes that are important to the individual and the evaluation of attributes according to the degree of importance an individual attaches to them (Silk, 2006).

The formula is calculated as follows:

$$A_{ijk} = \sum \beta_{ijk} I_{ik}$$

Where:

i = attribute

j = brand

k= consumer

I = the importance weight given attribute i by consumer k

 $\beta$  = consumer k's belief regarding the extent to which brand j possess attribute i

A= a particular consumer's (k's) attitude score for brand j.

'A' represents the consumer's overall attitude score and is acquired from the consumer's rating of each attribute for all of the brands considered multiplied by the importance weighting they have attached for that attribute.

Focus groups within this study were modelled loosely to Fishbein's multiattribute model. The aim of these groups was to determine consumer's overall attitudes towards different types of marketing on SNSs ( $A_{ijk}$ ), through determining the extent to which they believe different types of marketing on SNSs possess certain characteristics/attributes ( $\beta_{ijk}$ ) and the relative importance attached to each of these attributes ( $I_{ik}$ ).

Face-to-face focus groups were conducted to gain an in-depth understanding of consumer attitudes and the reasoning behind these attitudes. Due to the profound and complex nature of attitudes, it was felt that face-to-face focus groups were more appropriate for the research at hand, as indicated by previous studies conducted in the area of SNSs (Coyle and Vaughan, 2008, PWC, 2008a, PWC, 2008b). Taking into account those respondents who may use a number of sites and different sites to those of other respondents, offline focus groups are more appropriate. SNSs are used for numerous reasons, including the maintenance and development of relationships with others created in the physical world. Sweet (2001) maintains that where interactions are conducted online only, online focus groups are more appropriate. As this is often not the case between members of SNSs and indeed with members of SNSs and companies, offline focus groups are in this instance the more appropriate option.

# 2.2.3 Measurement Technique

The focus group process involved a pre-screening questionnaire (Appendix I) followed by completion of an opinion sheet (Appendix II) which respondents were required to fill out alone. The purpose of this was to uncover underlying issues that participants were reluctant to discuss with others in the focus group. Focus group discussion then took place with a theme sheet used as a guide (Appendix III). The theme sheet detailed the subject areas the researcher would address within focus group proceedings. The themes were developed based on literature in the area of SNSs. The two main themes that arose were consumers' usage of SNSs and their attitudes towards marketing on these sites. Focus group length varied from one hour thirty minutes to two hours, the typical length of time for focus group proceedings (Parasuraman et al., 2004).

#### 2.2.4 Sampling

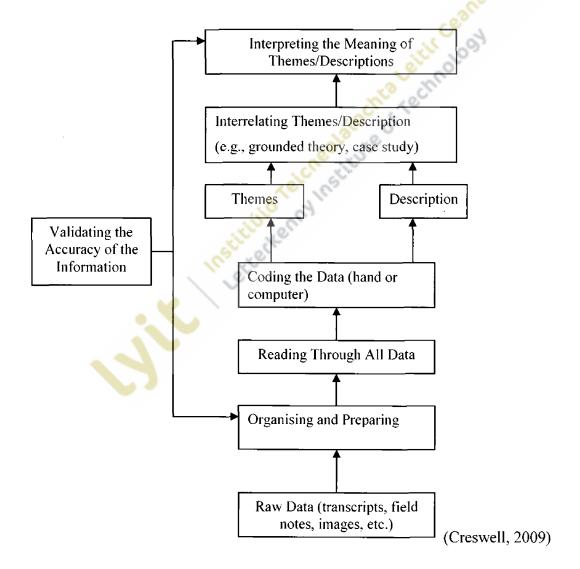
The population was defined as 'users of social networking sites over the age of 14 in Co. Donegal between March and July 2009'. The majority of SNSs require that individuals are at least 14 before they can become members and as a result this was chosen as the lower age limit for the research. There is no upper age limit on membership of SNSs and so none chosen within the research (Ybarra and Mitchell, 2008). Respondents were chosen using convenience sampling due to ease of sample selection and data collection. The main limitation of using convenience sampling is its lack of representativeness. However, as the survey research methodology would be representative, utilising

convenience sampling for the focus groups was deemed acceptable (Malhotra, 2007). The researcher selected participants by ascertaining they were SNS users and belonged to the relevant age category.

# 2.2.5 Analytical Approach

Focus groups were analysed using the process proposed by Creswell (2009) illustrated in

Figure 2.3: Data analysis in qualitative research



In line with figure 2.3, focus group data was recorded via recording devices in the form of a Dictaphone and video recorder. Proceedings were then transcribed into notes in order to organise and prepare the data for analysis. The data was then thoroughly read and coded with themes developed, interrelated in narrative format and interpreted in the focus group conclusions. The focus group findings are presented in Chapter Three.



## 2.3 Survey Research Methodology

An online survey of SNS users in the Republic of Ireland was undertaken, the purpose of which was to measure consumers' attitudes towards marketing on SNSs and how companies can leverage SNSs as a tool for building relationships and targeting consumers.

## 2.3.1 Research Objectives

The overall research objectives and sub objectives being addressed by the online survey are detailed in Figure 2.1. The survey research addressed sub-objectives 2-11.

## 2.3.2. Data Collection Method

Data collection took the form of an online survey. An online questionnaire was developed using Survey Monkey and administered to the population using the top seven most popular SNSs in Ireland (YouTube, Facebook, Bebo, Twitter, Flickr, MySpace and Linkedin) and posting the survey link on groups created for the purpose of this research. Respondents were then taken to the Survey Monkey site to fill out the survey. Respondents were also encouraged to pass on the survey link to other SNS users and invite them to join those groups that had been created for the purposes of the survey. The SNSs utilised to administer the survey research were those that were ranked within the top 40 websites in the Republic of Ireland in October 2009. Alexa, the web information

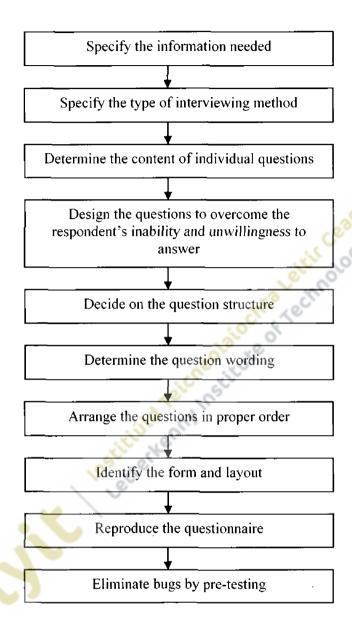
company, was used to identify these sites as it provides information on top websites available by country and category. This resulted in the emergence of YouTube, Facebook, Bebo, Twitter, Flickr, MySpace and Linkedin as the most popular SNSs in the Republic of Ireland (Alexa, 2009).

Within this research, an online survey research was utilised. Val Selm and Jankowski (2006) argue that online surveys are suitable where the focus of the research is associated with Internet use. As this research focuses on SNSs and its users, administering an online survey is appropriate. As only those with Internet access can participate in online surveys, the results cannot be related to the general population. However, as the population of interest in this study are users of SNSs, it is acceptable to utilise an online survey as it can be expected that they have Internet access. Numerous researchers have employed the use of online questionnaires in undertaking research on SNSs, for example, Acquisti and Gross, 2006; Casalo et al., 2008; Chiu et al., 2008; Ellison et al., 2006; Shang et al., 2006; Steinfield et al., 2008; Subrahmanyam et al., 2008; Wu and Tsang, 2008; Ybarra and Mitchell, 2008.

## 2.3.3 Measurement Technique

The following process (Figure 2.4) was employed for the questionnaire design:

Figure 2.4: Questionnaire design process



(Malhotra, 2007)

The purpose of this process is to maximise the effectiveness of questionnaires and avoid potential error (Malhotra, 2007).

The questionnaire (Appendix IV) was designed on the basis of literature in the area of SNSs (Chapter 1) and from findings from the focus groups' research. In order to assess the suitability of respondents for the purposes of the survey, qualifying questions were first asked of respondents. These are also detailed in Appendix IV.

Respondents were first presented with qualifying questions in order to assess their suitability for the survey. If respondents were suitable to take part in the survey, they were then presented with the main content of the survey. This consisted of three main sections. Section one, titled 'Using Social Networking Sites', comprised 10 questions. Section two, 'Companies and Producs on Social Networking Sites', consisted 12 questions, while Section three, 'Social Networking Sites and Your Friends', comprised of 3 main questions. The survey took respondents 15 minutes on average to complete. There was no time restriction on completion of the survey.

# Qualifying Questions:

Question 1 was asked to establish if respondents resided in the Republic of Ireland. If respondents did not reside in the Republic of Ireland they were unsuitable for the survey.

Question 2 enquired as to whether respondents had created a profile on a SNS as it was required that those who took part in the survey had done so. Respondents were asked to

state their age in Q.3, previously given as a quota for the survey while the second quota (gender) was housed in Q.5.

Question 4 was developed to identify when respondents had last accessed their profile on a SNS.

Question 6 required respondents to outline the highest level of education they had completed and question 7 requested respondents' occupational details. Categories for education were sourced from the Central Statistics Office of Ireland (CSO). Numerous categories for education exist (CSO, 2006a) and consequently were condensed for the purposes of this survey and to prevent respondent fatigue and confusion. Occupation was an open ended question. Respondents were asked to be specific in detailing their occupation. This could then be used to classify respondents into the appropriate social class category (using the CSO classification). Where respondents were under 18 or dependent on their parents, the occupation of the primary earner in the household was requested. In the case of respondents being retired or unemployed, former occupation was requested (CSO, 2006b). The format of question 6 was also sourced from the CSO in order to accurately categorise respondents in the appropriate occupation and ultimately the appropriate social class (CSO, 2006c). Research relating social class to SNS usage is in its infancy. Recent research by Nielsen Claritas suggests that social class may influence SNS usage among US consumers (Hare, 2009). As a result, while social class did not serve as a quota in this research, it was investigated within the questionnaire.

Occupation is the measurement most frequently employed as the best indicator of social class (McNeill and Chapman, 2005).

The qualifying information section consisted of both nominal and ordinal scales. In relation to nominal scales, a mixture of dichotomous and multiple choice questions was used to provide structured answers and classification of responses (McNabb, 2004). Nominal scales are those where numbers act as labels for identifying and categorising objects only (Malhotra, 2004). Questions 1, 2, and 5 used dichotomous questions. Ordinal scales were utilised in questions 3, 4 and 6. 'An ordinal scale is a ranking scale in which numbers are assigned to objects to indicate the relative extent to which the objects possess some characteristic' (Malhotra, 2007, p. 254). Question 7 was an openended question.

# Section 1: Using Social Networking Types

Question 1 was used to determine the level of innovativeness of respondents. The statements were adapted from Rogers' (2003) description of innovator types. This enabled the categorisation of respondents into the adopter categories of innovators, early adopters, early majority, late majority and laggards. These were used in order to establish influencer types on SNSs and investigate the variance in behaviour of different adopter types (McNabb, 2004). This would aid in establishing if connector behaviour can be achieved among SNS users (Eccelston and Griseri, 2008). Question 1 consisted of a multiple choice question where respondents were required to select the statement which they felt best represented their purchasing behaviour. Question 1 consisted of a multiple choice question.

Questions 2, 3, 4 and 5 were put to respondents to investigate their SNS usage patterns and were sourced from both literature and focus group proceedings. Questions 2.a, 2.c, 4, 5 and 6 were ordinal scales while questions 2.b, 2.d, 2.e, and 3 took the form of multiple choice scales. Respondents were requested to express the degree to which they agreed or disagreed with a number of statements regarding SNSs and over-commercialisation, pressure to accumulate friends on SNSs and the importance of SNSs as a communications mechanism in question 7. These statements were formed based on focus group proceedings. The Likert scale provides a means of measuring attitudes and was used in question 7. All Likert scales in the survey used 5 response categories where 1 was 'strongly disagree' and 5 was 'strongly agree'.

Questions 8 and 10 were sourced primarily from focus group findings. Question 9, which focused on negative experiences on SNSs, was developed based on Weiss's (2008) table of privacy risks in relation to SNSs (see Table 1.1, Chapter One). Categories of risks were then grouped based on focus group discussions. The purpose of this question was to examine the potential effects that privacy risks may have on SNSs. Questions 8, 9 and 10 were also multiple choice questions. 'The Likert scale is a widely used rating scale that requires the respondents to indicate a degree of agreement or disagreement with a series of statements about the stimulus object' (Malhotra, 2007, p. 274). Likert scales were used throughout the survey as they are easy to construct, administer and score, This enabled effective and reliable analysis of the survey data (Malhotra, 2007).

# Section 2: Companies and Products on Social Networking Sites:

Questions in section 2 of the questionnaire were sourced from deliberations during the focus group discussions, where respondents outlined how they felt about different types of marketing used on SNSs and why they took part in certain types of marketing and refrained from others. These questions were asked of respondents in order to further explore consumer attitudes towards marketing on SNSs. Question 8 was sourced from focus group proceedings and the profile information fields on SNSs themselves to list the various means by which an individual's personal information may be displayed on a SNS.

Section 2 employed Likert, dichotomous, multiple choice and rank order scales. Questions 1 and 6 consisted of Likert scales while questions 2, 5, 9 and 11 utilised dichotomous. Questions 3, 4, 7, 8, 10, and 12 were multiple choice questions. Question 1 was used to assess respondents feelings towards the advertisements they currently see on SNSs while question 2 enquired as to whether respondents had ever clicked on an advertisement on a SNS. If respondents had not clicked on an advertisement, they were asked to outline the reason in question 3. If they had clicked on an advertisement on a SNS, they were asked to outline why in question 4. Where respondents had never clicked on an advertisement on their SNS, question 5 enquired if the presence of the advertisement had ever led them to find out more about the product being advertised. Question 6 required that respondents indicate the type of advertisements they would be induced to click on while question 7 queried as to whether respondents would allow the

use of their personal information in order for them to become the target of more relevant information. Where respondents would allow the use of their personal information for this purpose if under certain circumstances, they were asked to indicate what kind of personal profile information they would allow to be used in question 8. Respondents indicated whether they had joined a group and visited a company profile page in questions 9 and 11 and if so, their reasons for so doing in questions 10 and 12.

## Section 3: Social Networking Sites and Your Friends:

Focus group proceedings highlighted that respondents' friends have a significant influence on their attitudes. However, this behaviour rarely occurred in relation to products and services onsite. In order to further investigate the area of the influence of friends on purchase decisions in online social networks, questions in section 3 were developed from literature in the area (Section 1.6.2).

Section 3 exploited both Likert and multiple choice scales. Question 1 used a Likert scale where respondents were asked to indicate the extent to which they agree or disagree with a number of statements in relation to discussing products with their friends on SNSs. Questions 2 and 3 took the form of multiple choice questions where respondents were asked to indicate what factors they felt make a friend influential on a SNS and why they discuss products with their friends on SNSs.

## 2.3.4 Sampling

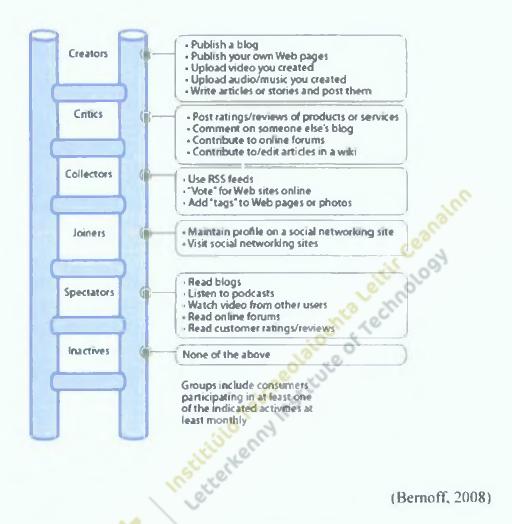
The population sample was defined as 'all people over the age of 14 who have created a profile on a social networking site and have accessed and updated at least one of their social networking site profiles in the Republic of Ireland from December 2009 to February 2010 inclusive'.

No sampling frame could be utilised for this research as there is no available list in the Republic of Ireland of the population of interest. A list of the most popular SNSs in the Republic of Ireland was obtained from Alexa, the web information company (Alexa, 2009). This site provides information on web site traffic and was used to obtain a list of the top 100 web sites in the Republic of Ireland. From this list the top 40 websites in the Republic of Ireland in October were identified and the top SNSs within this list were identified, namely YouTube, Facebook, Bebo, Twitter, Flickr, MySpace, and Linkedin (Alexa, 2009). Any remaining listed SNSs after the top 40 websites constituted an extremely small proportion of the Irish SNS user base in the Republic of Ireland and were excluded from the study (Alexa, 2009). The sampling unit for the research was SNSs that were used by those residing in the Republic of Ireland. Calculating the precise population of SNS users in the Republic of Ireland was impossible due to the ability of individuals to create profiles on more than one site. As a result, one method of attaining an approximate calculation of SNS users in the Republic of Ireland was to calculate an approximation of how many individuals were using the most popular sites and to determine approximately how many social networking site profiles the average Irish consumer creates.

As of September 2009, YouTube reported 1.3 million Irish visitors to their site. These figures were provided to the Irish Internet Association (IIA) by YouTube (IIA, 2009). As of October 2009, according to CheckFacebook.com, deriving figures from Facebook's advertising statistics, 1,049,000 individuals residing in the Republic of Ireland were on Facebook (CheckFacebook.com, 2009). Bebo is estimated to have over 850,000 Irish visitors and MySpace has approximately 300,000 users in Ireland as of September 2009 (TGI, 2009). As of May 2009 Flickr was estimated to have approximately 165,000 Irish users, Twitter was estimated to have approximately 117,000 Irish users and Linkedin 24,000 Irish users (McPartlin, 2009). This was the most recent approximation that could be found in relation to Flickr, Twitter and Linkedin and Irish usage.

In calculating the approximate population of SNS users in Ireland, it was taken into consideration that in order for individuals to use YouTube, a profile does not need to be created. Those who create a profile on YouTube it can be assumed, do so to upload videos and music. As a result, referring to Forrester's Social Technographics Ladder (Figure 2.5), those who have created a profile on YouTube are referred to as creators.

Figure 2.5: Forrester's social technographics ladder



Referring to creator statistics, this category represented 21% of the total US online population in 2008. This category is described as being a slow growth category (Bernoff, 2008). If this percentage is applied as an approximation of Irish consumers who have created a profile on YouTube, this would result in 273,000 of the 1,300,000 visitors to YouTube creating profiles on the site.

The total number of profiles created on SNSs in the Republic of Ireland as of October 2009 was therefore estimated to be 2,778,000 and is detailed below:

Facebook	1,049,000
Bebo	850,000
MySpace	300,000
Flickr	165,000
Twitter	117,000
Linkedin	24,000
YouTube	<u>273,000</u>
	2,778,000

The focus group proceedings indicated that between the 38 focus groups respondents, an average of 2.8 profiles on SNSs werer created. As no statistics are available in relation to the average number of profiles created by Irish residents, the average number of the profiles created by those in focus group was used. This is supported by findings from Rapleaf (2008), who based on a study of 49.3 million people in relation to SNS usage, found that each person averaged 2-3 SNS profiles.

The estimated percentage of SNS users in the Republic of Ireland was then calculated by dividing the total number of accounts created on SNSs in the Republic of Ireland by the average number of profiles created by a SNS user.

This represents 29% of the relevant population.

The population of the Republic of Ireland was obtained from the CSO on the basis of the Census 2006 (CSO, 2006d, CSO, 2006e). Those under the age of 14 were excluded from these figures as Ybarra and Mitchell (2008) point out that the majority of SNSs stipulate 14 as a threshold age for membership.

This figure (29%) compares reasonably closely with other estimates. TGI Ireland (2009) reported in September 2009 that 23% of Irish adults (those 15 and over) are using SNSs. Facebook alone has grown from 800,000 to 1,049,000 from September to October 2009 representing 5.03% of this 6% difference between this research's estimate that 29% of the population use SNSs and TGI Irelands estimate. Furthermore, TGI conducted their study on adults 15 and over, whereas the above calculations include those of 14 years as they too are permitted to use most SNSs. It is also conceivable to that the usage of other sites has also grown and that other, less popular sites and niche sites are also being used by Irish residents. As approximations only have been used, a slight variance is to be expected in calculations.

There are no available lists pertaining to the population of interest – SNSs in the Republic of Ireland. Therefore, as no appropriate sampling frame could be utilised for the research a quota sample was developed in relation to SNS users in the Republic of Ireland using

existing research in the area to determine the relevant quotas (Chappell, 2009, Solis, 2009). The quota sample also took the most popular SNSs in the Republic of Ireland into account (Alexa, 2009). Age and gender were found to be influencing factors affecting SNS usage and as a result were the quotas adopted for the development of the quota sample for per Adams, 2009; Dougherty and Fanelli, 2008; Experian-Hitwise, 2008; Lenhart and Madden, 2007; Pfeil et al., 2008; PWC, 2008a; Rapleaf, 2008; Shi et al., 2009; Thewall, 2008. Snowball sampling was then employed in order to fill the respective quotas.

The sampling method utilised was non-probability sampling as a sampling frame in relation to Irish users and SNSs does not exist. Non-probability sampling took the form of developing a snowball sample into a quota sample. Here 'the researcher makes initial contact with a small group of people who are relevant to the research topic and then uses these to establish contact with others' (Bryman and Bell, 2007, p. 200). Using this group of people, referrals would then be used to fill the quotas of age and gender that were found to be variables impacting SNS usage. This process would be continued until the necessary quotas were filled, thus resulting in a quota sample. Babbie (2009, p. 194) describes quota sampling as:

a type of non-probability sampling in which units are selected into a sample on the basis of pre-specified characteristics, so that the total sample will have the same distribution of characteristics assumed to exist in the population being studied. Bryman and Bell (2007, p. 197) maintain that 'the quota sample – is claimed by some practitioners to be almost as good as a probability sample'. Malhotra (2007, p. 344) posits that the quota sampling procedure 'may be viewed as two-stage restricted judgemental sampling'. First, quotas are developed and a proportion of each variable in the population for each quota can then be developed. Quota and total sample size can then be calculated. Secondly, the elements to fill quotas may be selected using convenience or judgement. Bradley (2007) maintains that snowball sampling may be used to fill quantitative quota samples by the researcher.

As there are different numbers of SNS users in each gender and age range and each SNS occupies a different share of the SNS market in the Republic of Ireland, taking an average of averages is not recommended. The weighted average gives a more accurate result than using averages alone. Barrow (2006) states that using averages alone is misleading and in order to achieve more accurate results a weighted average approach is recommended. Here weightings are assigned to averages on the basis of the importance of that average within the population of interest. In this case, for example, the users of Facebook outweigh the users of Linkedin significantly as Facebook constitutes a significantly greater share of the Irish SNS user market. The distribution of users within each age category and gender for each SNS will also vary and this too must be taken into account.

The weighted average approach was adopted by estimating the average market share occupied by the main SNSs utilised in the Irish market, that is, YouTube, Facebook, Bebo, MySpace, Flickr, Twitter and Linkedin. The total number of accounts previously

estimated to have been created on SNSs in the Republic of Ireland as of October 2009 was 2,778,000.

Incorporating statistics for the number of accounts created and not each individual visit alone was deemed acceptable by the researcher as the population of interest in the research encapsulates those who have created a profile on a SNS. The weighted average for each SNS was then calculated. Barrow (2006) postulates the weighted average should sum to one. Appendix V highlights the means by which the weighted average was estimated. The weighted averages for gender and age quotas were then calculated by multiplying the individual categories within each quota by the weighted average for each SNS (Appendix V).

Utilising recent SNS research (Chappell, 2009; Solis, 2009) and taking the most popular SNSs in the Republic of Ireland (Alexa, 2009), it was established that 40% of males and 60% of females use SNSs (Appendix V). These approximations of statistics were compiled utilising Google Ad Planner and Google Insights. This is broadly in line with findings from research conducted by Anderson Analytics (2009) who found that 55% of women and 45% of men use SNSs in the US.

Age category approximations (Appendix V) were again based on recent research conducted in the area of SNSs (Chappell, 2009; Solis, 2009; Hazlett, 2008). Statistics for YouTube had to be further condensed based on estimations for the purposes of the research. Age categories provided by the research included a 55-64 and 65+ age category, but due to the exceptionally small percentages within the 65+ age category, the 55-64 and 65+ age categories were combined. The youngest age category was denoted as

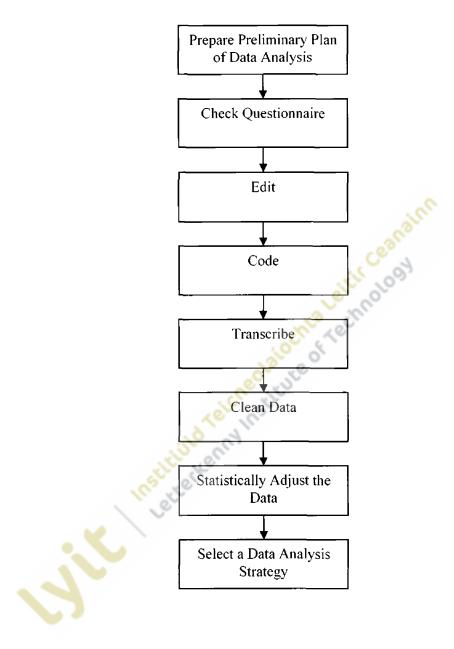
the 0-17 age category. As this research focuses on those over 14 using the full percentages for this category was judged acceptable as again individuals must be 14 years old if they wish to create a profile on most SNSs (Ybarra and Mitchell, 2008).

As outlined in Section 2.3.4, a quota sample was developed. Quotas were developed by dividing the potential sample size on the basis of gender (male and female) and age (14-17, 18-24, 25-34, 35-44, 45-54 and 55+). A minimum cell size of 12 was chosen and assigned to the cell that constituted the smallest percentage of the sample size. Subsequent cell sizes were then calculated on the basis of the percentages assigned to those age cells. The researcher also took into account that the cell sizes would vary according to gender as it was calculated that 40% of males and 60% of females use SNSs. This resulted in a total required sample size of 376 for the survey. The approach is outlined in detail in Appendix V.

# 2.3.5 Analytical Approach

Given the in-depth level of analysis that would be required, the Statistical Package for Social Science (SPSS) was utilised in order to facilitate data analysis. SPSS is a widely used and recommended package for the analysis of data gathered from survey research (Malhotra, 2007; Pallant, 2007; Kent, 2001). The data preparation process employed in the analysis of quantitative research was that proposed by Malhotra (2007) (Figure 2.6).

Figure 2.6: Data preparation process



(Malhotra, 2007)

Questionnaires were checked for integrity of data and as the total number of responses exceeded each quota, questionnaires that exceeded quotas were removed.

The technique used for deciphering which questionnaires to utilise within each quota involved primarily excluding those questionnaires that were unfinished and those that respondents had continued to fill out even though they had not created a profile on a SNS. As this was a requirement for the survey these responses were removed. Where inappropriate and misleading information was provided by respondents, these too were removed from the quotas, for example, where abusive language was used instead of providing answers. After the integrity of the remaining responses had been established, to filter the quotas down to the appropriate number, those who had filled out the survey last in each quota were removed (Wrenn et al., 2002, p.167).

The questionnaire was then coded into an SPSS codebook with the appropriate variables assigned to individual questions and numerical values then assigned to individual responses. The data was then imported from excel to SPSS and initially checked for any potential errors. Preliminary analysis (simple tabulations) were conducted initially, followed by statistical techniques to explore relationships among variables and statistical techniques to compare groups (cross tabulations) (Pallant, 2007).

## 2.4 Conclusion

Creswell (2009) posits that reliability, validity and generalisability are important elements within research methodology. Reliability relates to the consistency of responses. Validity refers to the ability of an individual to gain meaning and

measurable results from the research. Generalisability relates to the ability to apply research findings from the sample population to the population as a whole. Yet the researcher must be aware that these factors have different meanings in the context of qualitative and quantitative research. Differing procedures must be employed to check the validity, reliability and generalisability of data in qualitative and quantitative research.

Validity was achieved in relation to qualitative research through the development of a pre-screening questionnaire, an opinion sheet and a theme sheet. These were utilised in focus group proceedings and pilot tested before focus groups were conducted to ensure reliability. Focus group proceedings were transcribed, read thoroughly, coded, and themes were developed. Interrelated themes were then developed and the meanings of these themes were interpreted. These results were not generalised to the Irish SNS population as a whole but acted as an indicator and mechanism by which survey questions could be developed which would enable results to be generalised to the Irish SNS population as a whole. Reliability and validity were established within the survey research through the development of an online survey, which was pilot tested before it was administered to the sample. Pilot testing in the case of both qualitative and quantitative research allowed the researcher to establish that respondents understood the questions being posed and could answer them adequately (Malhotra, 2007). The identity of respondents in relation to the quantitative research was unknown and proven methods of data collection utilised.

Generalisability was achieved through the development of a quota sample. The

quotas developed were those that impacted on the SNS user population and the quota and total sample size were then subsequently developed. This was deemed to be the most effective means of gaining results as probability sampling methods were not feasible. In accordance with marketing research theorists, this method of sampling is effective and can yield results similar to conventional probability sampling (Babbie, 2009; Bryman and Bell; 2007, Malhotra, 2007).

The online survey was estimated to be the most appropriate approach to the second phase of the research; however, the use of an online questionnaire may have limited the quality of responses to certain questions, especially open-ended questions. Had the questionnaire been more condensed, more responses may have been gathered in a lesser amount of time. Also, the online questionnaire comprised of six seperate age groups whereas focus group consisted only four different age groups. The 35+ age group in the focus groups was an all embracing age cohort and in retrospect a division into three 35-44, 45-54 and 55+ age groups as was the case with the survey might have been advisable.

# **Chapter Three: Qualitative Research Findings and Analysis**

- 3.1 Introduction
- 3.2 Consumer Behaviour on SNSs
  - 3.2.1 Individual Motivations to use Social Networking Sites
  - 3.2.2 Usage of SNSs
- 3.3 Friending in Online Social Networks
  - 3.3.1 Friend Networks in SNSs
  - 3.3.2 Influence of friends in SNSs
- 3.4 Consumer Attitudes towards Marketing on SNSs
  - 3.4.1 Negative Implications of Marketing on SNSs
  - 3.4.2 Positive Implications of Marketing on SNSs
  - 3.4.3 Opportunities to Reach and Engage Customers
  - 3.4.4 Using Personal Information to Target Advertisements at

Users

- 3.5 Privacy in Online Social Networks
- 3.6 Conclusion

## 3.1 Introduction

This chapter discusses the findings of five focus groups conducted among users of SNSs. Focus groups were conducted to gain an in-depth understanding of consumer attitudes towards marketing on SNSs and how companies can leverage SNSs as a tool for building relationships and targeting consumers. The findings of these focus groups contributed to the development of phase two of the primary research and establishing how SNSs can be effectively integrated into marketing strategy. Section 3.2 (Consumer Behaviour in SNSs) examines why and how consumers are using SNSs, since understanding how consumers are utilising these sites is important if they are to be used as a marketing tool. Section 3.3 (Friending in Online Social Networks) investigates the structure of friend networks in online social networks and the level of influence these friends have on one another. Section 3.4 (Consumer Attitudes towards Marketing on SNSs) investigates how consumers feel about the current marketing tactics that are being adopted on SNSs and possible means of reaching and engaging consumers via these sites. Section 3.5 (Privacy in Online Social Networks) examines the negative features and experiences that respondents associate with SNSs and the extent to which users are aware as to whether their profiles are public or private and why.

# 3.2 Consumer Behaviour on SNSs

## 3.2.1 Individual Motivations to use Social Networking Sites

In conjunction with previous research in the area, for example Dwyer et al., 2007; Ofcom, 2008; Steinfield et al., 2008, findings from phase one focus groups highlight the primary reason for using SNSs by participants participants which is the maintenance and development of communications and relationships in order to build and maintain social capital with their ties. While participants from all age groups noted the ability to meet new friends via these sites, they are used primarily to build and maintain relationships with those they had already met in an offline context. Information exchange was also highlighted by respondents as a motivation for using their SNS. This was predominantly related to the exchange of information in relation to social interests, however also occurred regarding company, product and brand information in some cases.

Motivations to use SNSs for all age groups are detailed in Table 3.1.

Table 3.1: Motivations to use SNSs

Age Group	14-17 year old	18-24 year old (student)	18-24 year old (non-	25-34 year old	35+ year old
Motivation		(01000111)	student)		
Connect with current friends	8	7	7	8	8
Connect with old friends	6	7	7	8	8
Make new friends	7	1	2	1	4
Blog	3	-	1	1	3
Upload and share	6	-	7	8	8
photographs				acio.	
Upload and share	2	-	3	2	1
videos		_		1, 00,	
Search for	-	1	- 9	M COL	2
company/product/brand information			TIES	Chi	
Provide information to	-	1	70 04	1	2
others regarding		, c	6 50		
company/product/brand		Co.	100		
information		10,0	<b>3</b>		
Other	1	1,70	-	-	-
	(entertain	(form of			
	ment) 💉	texting)			

The 14-17 group outlined that while SNSs allow them to keep in contact with weak ties and those far away, they primarily use them to contact strong ties. Participants also outlined gaining and sharing information in relation to news, bands and celebrities as reasons for using SNSs. One group member who had joined a niche SNS, noted that it afforded the opportunity to meet alternative people who shared their interests in relation to specific subject areas. The 18-24 student group use SNSs as a means of communicating with both strong and weak ties, close by and far away.

In particular, they provided an effective means for group members to keep up with those who live far away and maintain an awareness of what is going on in each others' lives. Media consumption was also noted as a reason for using SNSs. These sites also allowed participants to keep updated on events they were interested in. The 18-24 non-students group emphasised that while SNSs allowed them to keep in contact with those close by they were particularly useful for keeping in contact with weak ties and those far away. One respondent also outlined that they use SNSs to find information. Participants in the 25-34 group used SNSs as a means of communicating with both strong and weak ties, close by and far away. One participant also noted the ability of these sites to provide valuable information in relation to the industrial sector in which the respondent's company operated, such as competitors, and that they also provided a means of communicating with companies and suppliers in a cost effective manner. Those in the 35+ group use their SNS to keep in contact mainly with weak ties and those who live far away. Four group members also used niche SNS and reasons outlined for this were that respondents could share and discuss their interests with others who shared the same interests and to meet like-minded individuals.

## 3.2.2 Usage of SNSs

Participants frequency of usage of SNSs are outlined in Table 3.2.

Table 3.2: SNS frequency of usage

Group	14-17	18-24	18-24 non-	25-34	35+
		student	student		
Usage					
Daily	4	1	5	5	6
3-5 times	2	3	-	2	2
per week					
Twice a	1	1	1	-	Tur
week				Cear	
Once a	-	2	•	Fell Colo	-
week			, och	S. Lech.	
Few times a	1	-	- 0/2/10	1	-
month			echedistrice straight of the second		
Rarely	-	- willo	1	_	-
Total	8	7 rst roll	7	8	8

Participants in all focus groups found it difficult to articulate how long they would spend on their SNS per visit. However most accessed their SNS very regularly, either daily or 3-5 times per week. Participants often expressed that they could get engrossed in their SNSs and lose track of time signifying the addictive nature of these sites and their 'sticky' nature as outlined by Joinson, 2008. This behaviour would also extend to examining other user's profiles and 'surfing' the site. Therefore, it may also be said that content gratification, surveillance and social networking surfing also

plays a role in individual motivations to use SNSs (Joinson, 2008).

# 3.3 Friending in Online Social Networks

#### 3.3.1 Friend Networks in SNSs

Participants within the 14-17 group tended to have the largest number of friends on their SNS. All group members had over 150 friends on their SNS. Four of these participants had over 200 friends and two participants had over 300 friends on their SNS. One respondent stated that he did not know all of the friends on his SNS while others were not very close to the majority of their friends but did know who they were. When asked if they felt pressure to accept people as friends when requested, the majority of participants said that they did not and would not accept people as friends if they did not want to. A male group member stated that he would first look at that person's profile page and if they had over 500 friends already he would not accept them as they would only be trying to get as many friends as is possible. Others in the group agreed with this statement. A female participant stated that she would tend to just accept people as friends without looking at their profiles. If she felt something was wrong after she had added them, she would then delete or block them. Another female group member stated she would do the same but would be careful that it was not a virus. Those who had not added a person they did not know into their network would feel uncomfortable accepting people unknown to them as friends. Another female participant stated that she would not accept people as friends if they

were over a certain age. The 18-24 student group and 18-24 non-student group also had accumulated a large network of friends, with the majority of participants having over 100 friends on their SNS. They felt that pressure to accept people as friends is more prevalent among younger users of SNSs, a pressure that they themselves did not feel. Peer-pressure is a major factor influencing people to accept a large number of people, many unknown, as friends, and as people get older, these matters become less important. A male group member explained that peer-pressure would happen within the 18-24 age group but not to the same extent as it would in younger groups.

Participants in the 25-34 group varied in the amount of friends they had accumulated on their SNS. Six group members had over 100 friends while two group members had less than 50 friends. One participan said she felt that this was also dependent on the site being used. In terms of pressure to accept people as friends, some participants acknowledged that they felt this pressure, yet they would not accept people as friends if they did not want to. One participant said she would not reject them and would ignore the message instead as she did not want that person to know she had rejected them. This suggests a fear of the consequences of rejecting an individual as a friend.

In the 35+ group, three participants had over 100 friends. Five participants had less than 100 friends. A male group member who had less than 100 friends on his SNS felt that having a large number of friends on the SNS might be related to the addictive element of SNSs. He joined his SNS as a means of keeping in contact with a cousin who lived far away. Using his SNS meant that he contacted her more frequently due to the ease and low cost of use. His friends accumulated onsite very quickly. A

female group member agreed with this and felt it could be very addictive to see what people have been doing with their lives. Others agreed with this statement.

Participants stated that they would not feel pressurised to accept people as friends and this tended to occur among younger people in order to look good and feel popular. However, a male group member stated that where people did request him as a friend and he did not wish to accept them, instead of declining the invitation he merely ignored it. He stated that he may not want these people to see certain information about him but in the future he may accept them if he needed to contact them in relation to certain matters. One male participant asked whether a rejected friend request would be notified to the initiator. This signifies concerns around initiator reactions.

Participants in all focus groups tended to have large friend networks within their SNSs, particularly among those in the 14-17 group. Those in the 14-17 age group exhibited the greatest tendency to accept those unknown to them as friends on their SNS yet highlighted that they did not feel peer-pressure to accept people as friends. The participants of the other focus groups however felt that this pressure did exist, particularly among younger users of SNSs.

## 3.3.2 Influence of friends in SNSs

There was a general consensus among the members of all focus groups that if friends were to make comments regarding products, companies and brands on SNSs, it would

have an impact on their attitudes towards that product, company or brand. They felt however that this was their decision to make and disliked feeling compelled to recommend to recommend applications (games, quizes and content on SNSs) to others in order to gain access to the application themselves. A participant in the 18-24 non-student group felt that if friends were to recommend something, it would be of interest to them too as friends share similar interests and they would have have your individual needs in mind rather than just sending it the way companies may do. This way the respondent felt that it was pre-filtered.

However those in the 18-24 student, 18-24 non-student and the 25-34 groups could not recall any incidents where this had happened on their SNSs. Moreover, respondents in the 18-24 student group believed this was unlikely to happen and they would expect this from younger individuals individuals since the latter would be more prone to group think.

Participants in the 14-17 group stated they have watched advertisements and videos recommended by friends and have been influenced by what their friends' opinions are in relation to companies, products and brands. Three participants in the 35+ group responded that the recommendations of friends had influenced their opinions towards companies, products and brands on their SNS and this would encourage them to learn more about a company and its offerings. Furthermore, if friends were to recommend that they stay away from a product or service, they would listen. Members of the 35+ group stated that it all came down to the fact that they would trust their friends more than companies.

# 3.4 Consumer Attitudes towards Marketing on SNSs

In the context of an awareness of the presence of companies, products and brands on their SNS, participants tended to discuss marketing tactics that irritated them, as these were most memorable to them, as the latter retained a vivid memory of such tactics.

## 3.4.1 Negative implications of marketing on SNSs

Those in the 14-17 group initially discussed pop-up advertisements in relation to SNSs when the subject of marketing on SNSs was discussed. Participants felt they had become quite frequent on SNSs, and often appeared unexpectedly causing participants to click on them by mistake. This would then take them to a different site and away from what they were doing which was considered to be very annoying. One group member noted that icons for pop-ups would often be placed strategically. When going to click on something else such as a photograph on her SNS, she would often click on the advertisement by mistake as it was so close and a pop-up would appear. This she found to be very misleading, a comment which elicited the agreement of others in the focus group. Banner advertisements that also appeared while the profile page was loading were also found to be misleading. These advertisements would load last and participants would often inadvertently click on these advertisements while attempting to access a part of their profile.

Respondents also spoke of the appearance of advertisements within profile pages on their SNS. The lack of choice in relation to these advertisements being placed within the content of their profile irritated respondents as they felt a lack of control over their online representations of themselves. Advertising within content was also noted by participants, for example, advertisements within videos. These advertisements could be closed by respondents yet they still such advertisements impared the user experience.

Placed advertisements are typically ignored by respondents. They use SNSs to be social, not to look for advertisements. Respondents also stated that advertisements were rarely relevant to their age and interests and so there was no motivation to click through on them. The potential for viruses and trust issues also affected respondent willingness to click on advertisements.

Other advertisements that agitated respondents were those that started automatically with some sort of movement, dialogue, or noise. These advertisements distracted participant activity and they typically only clicked on them to stop them and then went back to what they were doing straight away. All participants felt that SNSs have become over commercialised.

When discussing advertisements on SNSs with the 18-24 student group it became apparent very quickly that trust was a major issue among participants. They felt that advertisements were not secure and so they typically ignored them. Lack of familiarity with advertisements played a large role here. If participants do not see any

logo with which they are familiar they ignore the advertisements. They also felt that advertisements tended not to be relevant to them at all and so would not click through on them.

Participants began to discuss pop-ups and roll-overs. Roll-overs occurred when users rolled the mouse over a part of the screen and an advertisement then took over the whole screen. Partcipants found this very irritating. This interrupted what they were doing and they could not proceed without clicking on the advertisement to close it or to find out more information. Once they had resumed their previous activity, this tended to happen again when the mouse rolled over that part of the screen, which participants found very frustrating.

In relation to advertisements on SNSs participants discussed advertisments relating to their area of residence. These advertisements would indicate that an individual residing in their area wanted to make contact. One group member had clicked through this advertisement but found an application process in place on order to ascertain the identity of the individual in question. The process of filling out their details on the application form was found to be off-putting and they went no further with the process as there was too much work involved.

Participants stated that they never really take notice of advertisements on SNSs as they felt that they did not stand out and tended to blend into the background. Banner advertisements, they noted were not different or noticeable enough to stand out. For those who tended to block advertisements out completely, clutter and the sheer

quantity of advertisements were cited in part as demotivating factors.

Those in the 18-24 non-student group also identified trust as important in relation to advertisements on SNSs and as a result would rarely click through on advertisements on SNSs. A male group member said that some advertisements did not take him to the website of the company who had placed the advertisement and for this reason he did not trust these advertisements. A female participant felt the company itself and familiarity with that company were issues influencing click through rates. If she did not trust the advertisement she would not click through on it for fear of viruses. Again, all participants said that advertisements were rarely, if at all, relevant to them. They often felt that advertisements were just 'randomly' placed on their pages.

Advertisements that flash and make noise were found to be irritating by participants. Participants also disliked advertisements informing the user that they have a new message or that someone in their area likes them. These were not trusted by participants and they did not believe the advertisements. Participants said that they would be curious about such advertisements in the beginning but such curiosity soon diminished. Two group members (1 male, 1 female) had clicked through on these the first time they saw them. However they were taken to a different site and did not know these people who had apparently professed a liking for them and so they left the site. Being brought to another website annoyed respondents; particularly if it was not for the purpose they believed it to be, which often occurred. Banner advertisements were deemed to be boring and uninteresting by participants who thought they were

not eye catching at all.

Participants in the 25-34 group were irritated by pop-ups as they appeared when they were in the middle of doing something and interrupted what they were doing. Only one male group member stated that pop-ups did not bother him. One group member had clicked on an advertisement relating to someone in their area having a crush on this group member. However when the group member was requested to provide information and call a number, the group member desisted.

In relation to applications, respondents reported that when they were using these applications, a number of advertisements appeared which they had to keep closing. Some participants had stopped using applications for this reason. Pop-ups in content, such as those in videos were also noted by participants who found them irritating and would never click through on them. The placement of advertisements was also outlined as irritating by participants. When completing applications they were often placed very close to the application itself and could then be clicked on inadvertently.

Trust was also a major issue among participants and was a driving force behind not clicking through on advertisements, particularly if personal details were requested, for example where competitions were concerned. A lack of trust in whom you could be providing your details to, not knowing who would be viewing your information, fear of viruses, and a lack of familiarity with companies were outlined as reasons for not clicking on advertisements. All participants felt that advertisements on SNSs were not relevant to them. Participants tended to ignore or not even notice placed

advertisements. They stressed that they were there to talk to their friends, not to click on ads.

Participants in the 35+ group stated that they ignore advertisements on their SNSs the majority of the time. In relation to advertisements on SNSs, a female participant brought up those advertisements that notify people they have won a prize. These were quite distracting. She was often subjected to these, did not trust them and as a result she ignored them. Pop-up advertisements had become such a frequent occurrence that one male participant used a pop-up blocker when he went online.

Others agreed and felt that pop-up advertisements were merely distracting and useless. A male participant felt that these advertisements were very aggressive in nature. A female participant felt that she had encountered advertisements that even when clicked out of, would continually reappear – a comment with which other respondents concurred. A male group member did not trust the companies that placed such advertisements. He had provided his information to one betting company advertisement and had then started receiving a number of emails from other companies. He believed that his information had been sold on and as a result did not trust such companies and advertisements. A male group member also reported that he had clicked through on an advertisement on his SNS and while he could not remember what the advertisement was for, it did annoy him as he was taken to a site which he felt was not related to the advertisement itself and what he believed it to be.

All participants would have major trust issues with those advertisements that

requested information from them if they were not familiar with the company as they could not be sure as to what their information was being used for. Participants also felt that viruses played a large part in deterring advertisement click through rates.

Two female participants stated that advertisements on SNSs were rarely relevant to them as consumers. A male respondent who tended to use more niche SNSs such as art and music related sites felt that advertisements were often relevant to him as they were related to the content of the SNS itself. They were essentially tailored to meet the SNS user needs and as a result encouraged users to click through on advertisements more readily. All participants in relation to more general SNSs felt that 80% of advertisements were irrelevant to them. If they were relevant it would simply be a matter of coincidence.

Overall, participants in all focus groups tended to find advertisements on SNSs irritating, untrustworthy and irrelevant to their needs and wants as consumers. Their reaction to this was to ignore such advertisements. A different approach to advertising on SNSs was felt necessary by participants in all focus groups.

### 3.4.2 Positive implications of marketing on SNSs

Marketing tactics that elicited a positive participant reaction were rare. However, the majority if not all of the participants in each focus group had joined groups. Groups on SNSs are set up to allow SNS users to join specific groups that centre on a particular interest, company or subject matter. Here, discussion in the group centres

on that particular interest, company or subject matter and helps bring like-minded individuals together. Reasons cited for joining groups were that participants did not have to leave their SNS, they allowed them to keep updated on their interests and they could control their participation in the group.

Where groups were recommended to participants by their SNS they felt that they were recommended based on their interests and as they were relevant to them they accepted such recommendations more readily. A male member in the 35+ group who used music SNSs stated that users can sign up to an application which analyses what users listen to and make recommendations on the basis of the music that people listen to. He felt this was a good way of finding out about new music and artists. Other focus group members responded positively to mechanisms such as this. Again it was their choice and only certain information was being used. The participant stated that it also tied in with advertising in a subtle yet effective way in that if participants liked the music, they were provided with a link where they could go and buy that artist's music. This was also the case when friends recommended groups as participants stated their friends would have similar interests to them and have them in mind when suggesting the group. This meant they were likely to join and take part in that group. Where items on SNSs were relevant to participants they were likely to notice them more.

Some participants, although to a much lesser extent than groups, had visited company pages. Reasons outlined by participants for visiting company profile pages included taking part in competitions and the fact they were different, relevant and interesting.

They also allowed participants to access that company through allowing them to make comments on the companys page. When participants were familiar with the company they also visited the page as they could relate to the content on the company page. Participants stressed, however, that they disliked when companies requested them as friends and it should be under their control whether they signed on.

Three participants in the 18-24 non-student group noted that they had clicked on advertisements on a SNS. While participants had highlighted previously that advertisements were rarely relevant to them, in this case they were relevant and so they clicked through on the advertisement for this reason. This was also the case for participants in the 35+ group. Where advertisements were relevant to them, they would click through on them. Two members also noted that familiarity with the advertiser is also a factor influencing click through rates. A male participant who used art and music SNSs stated that he had clicked through on some advertisements on these sites. Advertisements on these sites tended to relate to music and art and as they were more relevant and related to the theme of the site, he clicked through ..on those advertisements that were of interest to him.

Participants in all focus groups respond positively to those advertisements that are not pushed onto them by popping up unexpectedly and more importantly, were relevant to them. They would be much more likely to click on advertisements that were inviting them to click on them rather than being forced onto them and were also more relevant to them. The vast majority of participants in all focus groups had joined groups on SNSs as they had control over joining these groups and could join those groups that

appealed to their interests, allowed them to voice their opinions and meet like-minded individuals. Although fewer participants had visited company pages on SNSs, those who did, had visited these pages for the same reasons outlined by participants for joining groups on SNSs.

#### 3.4.3 Opportunities to reach and engage consumers

Advertisements that did not take participants to a new web page and were more relevant to participant needs and wants were identified as means by which companies could effectively reach and engage them. Noticeable, interesting and eye-catching advertisements also provided opportunities for companies to reach and engage with customers. Advertisements that respondents could trust would also be much more effective. All groups felt that SNSs had become over-commercialised and advertisements were being pushed onto them, disrupting their online activities.

Respondents in the 14-17 and 35+ groups suggested that knowing they would be diverted from from their online activities would discourage them from clicking on advertisements and perhaps a mini-window that opened on the same page of the SNS would be effective. This would mean that respondents could stay where they were and could easily close the advertisement if they wished. The 18-24 student group stressed that familiarity with the advertiser was a key element influencing trust in advertisements and the 25-34 group reported that advertising on a medium such as TV and radio could achieve this as they are more trustworthy. These advertisements

could then direct people to the SNS. A female respondent stated that she herself had heard a radio advertisement directing her to a website so this had worked for her.

Possible means of making advertisements more eye-catching and attention grabbing suggested by the 25-34 group were placing a price on the advertisement and offering free gifts and incentives to click on advertisements. The 18-24 non-student group stressed the importance of control and choice in the advertisements to which they are exposed. The 35+ group also felt that permission-based advertisements would be more effective, particularly if respondents' profile information was to be used in targeting advertisements.

Focus group discussions regarding advertisements on SNSs underline that when advertisements are pushed onto users, they have an adverse effect. While they notice them, they do so for all the wrong reasons. Advertisements that are relevant to users, offer incentives and that they find trustworthy grab user attention and pull them in rather than irritate them and infringe on their privacy. Permission-based advertisements that are integrated into content also appear to be more effective.

## 3.4.4 Using personal information to target advertisements at users

Table 3.3 highlights the number of respondents in each focus group that would allow the use of their personal information (such as profile information, interests, status updates and friends) by companies.

Table 3.3: Use of personal information

Age Group	14-17 year old	18-24 year old (student)	18-24 year old (non-student)	25-34 year old	35+ year old
Number of respondents	7/8	4/7	6/7	5/8	5/8

For those who did not object to the use of their personal profile information in targeting advertisements at them, the general consensus was that the information was there anyway and as a result it was fair to use it. Participants tended to feel that as advertisements only have certain target audiences it is acceptable as they preferred to be exposed to advertisements that were relevant to them than those they had no interest in at all. A participant in the 18-24 non-student group explained that he felt this was fair as long as it meant he was not bombarded with advertisements. A participant in the 35+ group out forward the view that companies forming groups and creating more relevant advertisements could provide a means of being exposed to information that would be both valuable and pleasing to the user while, at the same time, affording a learning opportunity.

For those who had no objections to the use of their personal profile information in targeting advertisements at them, this was regarded as an invasion of privacy and the prospect of others having access to their personal information was deemed objectionable. A participant in the 35+ group explained that she had a private profile to make her information available to friends only. She would be greatly offended if she thought others had access to her information to target advertisements at her as this

was intended solely for private use.

Participants in the 18-24 non-student group, 25-34 group and 35+ group tended to agree that if permission-based advertising were used, it would be more effective as they would have control over who had access to their information and the type of information used. A participant in the 35+ group gave the view that it would be much like the friending process of SNSs in that one can exercise control over who can view and access your information.

## 3.5 Privacy in Online Social Networks

Table 3.4 illustrates the negative aspects that participants in each focus group associate with SNSs.

Table 3.4: Negative aspects of SNSs

Age Group	Negative aspects
14-17	<ul> <li>Viruses</li> <li>Cyber-bullying</li> <li>Regulations on joining groups</li> <li>Creation of potentially harmful groups</li> <li>Online predators</li> <li>Anti-social behaviour as a result of lack of face-to-face contact and</li> </ul>
18-24 student	<ul> <li>overuse</li> <li>Bullying</li> <li>Stalking</li> <li>Harassment</li> <li>Users posting unsavoury or incriminating information about other users</li> <li>Nasty comments made by others</li> <li>Potential employers viewing profiles</li> </ul>
18-24 non-student	<ul> <li>Bullying</li> <li>Predators</li> <li>Potential employers viewing profiles</li> <li>Nasty comments made by others</li> <li>Anti-social behaviour as a result of lack of face-to-face contact and overuse</li> </ul>
25-34	<ul> <li>Bullying</li> <li>Predators</li> <li>Potential employers viewing profiles</li> <li>Nasty comments made by others</li> <li>Anti-social behaviour as a result of lack of face-to-face contact and overuse</li> </ul>
35+	<ul> <li>Bullying</li> <li>Predators</li> <li>Anti-social behaviour as a result of lack of face-to-face contact and overuse</li> <li>Young people divulging too much information online</li> <li>Infringement of privacy</li> <li>SNSs potentially passing member information to third parties</li> </ul>

These negative experiences were often not experienced by participants themselves.

Only a small number of participants had a negative experience on their SNS. These experiences did not just occur among young people.

Participants in the 14-17 group recalled incidents where people had left rude comments on other users' pages. One focus group member referred to an incident where her profile information was copied and a fake profile created by someone pretending to be her. Participants did state that when such incidenta were reported they were dealt with by the SNS host quickly and effectively. Participants, regardless of these incidents, tended to think that SNSs posed no risk to a person's reputation.

Within the 18-24 student group, a member's friend had created a fake profile of him which he found offensive. A female group member also recalled an incident of a couple's relationship ending and one partner divulging personal information about the other on the SNS. Participants felt that the uncontrollable factor rested with friends posting photographs and information about another user.

A participant in the 18-24 non-student group who was a teacher recalled an incident where another teacher had been refused employment by an employer based on information on her SNS profile. She also spoke of a teacher who had been reprimended for accepting one of her students as a friend on her SNS.

A participant in the 25-34 group referred to an occasion where she had received an email from a friend which turned out to have been a virus when she clicked on it.



Those in the 35+ group felt that the negative features of SNSs existed mainly in relation to children.

Table 3.5 shows respondents privacy levels on the SNS profile.

Table 3.5: Privacy levels on respondents profile

Age Group	14-17	18-24	18-24 non-	25-34	35+	Total
		student	student		_	
Privacy					Tur.	
level				-03	3	
Public	7	4	3	3	4	21
Private	1	2	4	4	4	15
Mix of public	-	1	-	1	-	2
and private				J. W.		
Total	8	7	7	8	8	38

Table 3.5 highlights that a large proportion of participants had public profiles on their SNSs. Participants in the 14-17 group with public profiles were aware that anyone could see their profile yet this this was not a cause for concern with one participant noting that if she had chosen to have her profile private, people could just add her as a friend anyway and show her profile to others so it did not matter. One male participant who did have his profile private had left it that way as it had been private by default. If it were public, it would not have unduly concerned him if it could be viewed by others.

Participants in the 18-24 non-student group who had public profiles were not concerned by the fact that others could view their profiles. This was also the case with the 25-34 and 35+ groups. In most cases of public profiles, participants felt that

they did not have too much information on their profiles and as a result had no qualms about viewer access.

Participants were also asked if they behave differently on SNSs than they would in an offline context. In the 14-17 age group, the majority of participants felt they were careful with regards to the issues they discussed as others could see these discussions. General discussions and comments were primarily discussed on SNSs and if participants wanted to discuss more sensitive or in-depth issues, they used instant messenger or meet offline. All respondents felt that who were of a reticent nature and not very talkative in an offline context would talk more freely and openly via SNSs. The fact that they can think about what they want to say and the lack of face-to-face confrontation were suggested as possible reasons for this. The majority of participants felt this was a good thing as it could build that person's confidence but one respondent felt that these people may then become over-reliant on the SNS and feel that they have to keep this behaviour up offline.

Participants in the 18-24 student group could never really be 100% themselves on their SNSs and were very careful about the comments made onsite although they acknowledged that not everyone feels had a similar opinion. This was also the case in the 18-24 non-student group yet a female participant maintained that there were certain things that she would not say but she could still be herself onsite despite this. She went on to state that SNSs were for talking to others but discretion was exercised and private mail used when it came to a topic which needed restricted access. Two participants stated that as their profiles were private they could behave in the same

manner as they would offline. This was also the case with the 25-34 group where a group member also noted that a different behavious mode was called for on their SNS as suppliers and customers in their industry would be able to see comments made.

All participants except one in the <u>35+ group</u> stated that they would be more careful regarding their behaviour on their SNSs as people can take things the wrong way as misinterpretations could more easily arise and potential resultant disputes were best avoided. A male member stated that he would behave much the same as he would be talking to people he knew anyway.

#### 3.6. Conclusion

Focus group findings illustrate clearly that SNSs represent a means of communication for their users, primarily to keep in contact with both strong and weak ties, but also to reactivate latent ties and generate new ties. However, what is also important is that SNSs are also utilised by participants as a means of sharing information with one another. An issue facing marketers however is how to initiate this information sharing regarding products and services. Communications are made and updated frequently between participants and their friends and participants were highly connected in terms of the number of friends they had accumulated on their SNSs. This illustrates the extended network of contacts a company could potentially reach with the added possibility of network bridging. However, it may appear that network size is not as significant a factor as argued in the literature, for example Vilpponel et

al., 2006; Stephen and Lehman, 2009. Focus group proceedings may point to the fact that it is the degree of closeness and the frequency of interaction that is important within online social networks, in concurrence with arguments made by other studies, for example Xu et al., 2008. Participants are most likely to have a greater degree of trust in those friends with whom they have more frequent interactions and information sharing. A participant in the 35+ group stated that he did not have to know a person in an offline context in order for that person to influence his attitudes towards products or services to with which others agreed; it was frequent interactions between these two members and the degree of closeness between participants to allow messages to pass easily and quickly that created a relationship of trust conducive to information sharing.

Findings from focus groups highlight that those marketing challenges surrounding SNSs centre primarily on control. As control is increasingly in the hands of the consumer, creating and conveying the right message, that is one that consumers want to see, and one to which they will respond positively, is necessary. Companies must seek to integrate advertisements and engage customers rather than infringe on their privacy or irritate customers. If a company can engage customers, they will choose to listen to the messages that are being conveyed and potentially pass these messages on to others. Engagement and dialogue are essential yet rarely utilised. Relevancy and timing are key factors in gaining the attention of SNS users. Yet advertisements are often deemed to be irrelevant by users, who are of the consensus that they are just randomly placed there. A significant number of participants from focus group proceedings were open to the use of their information as a means of targeting more

relevant advertisements at them. All participants, although quite wary of advertisements on SNSs, would be more inclined to click through on those advertisements that were relevant to them. However, to some the use of this information might be regarded an invasion of their privacy.

Possible means of counteracting this may be to communicate to users that the use of such information would result in more relevant advertisements. Assurance that the data would not be misused would also be appropriate.

Participants felt that messages are continually pushed onto consumers. They are being denied control and are responding negatively towards these marketing tactics. Popups, roll-overs, flashing and noisy advertisements were prime examples divulged according to participants. All groups felt that SNSs had become overcommercialised.

Permitting consumers to participate in advertising when they want, on their terms, without taking them away from what they are doing and rewarding them for their participation may be potential techniques of to achieve greater acceptance and participation in advertising on SNSs. These rewards for participation must also be of value to consumers whether it is recognition, information or incentives. Groups and company pages demonstrate this. Using these is at the discretion of members and company pages allow them to engage in conversation with a company itself, feel involved with that company and make themselves heard in relation to that company. Trust is a crucial element that emerged from focus group proceedings. If familiarity

could be created between respondents and companies, the former would be more likely to click through on advertisements. Mixed media advertising, advertising design, honesty and personable, localised advertisements were suggested by participants as possible avenues to reach this goal.

In addition, the influence of friends is highly prevalent on SNSs. Participants react and listen to their friends' comments, which, in turn affects their attitudes. This is clearly illustrated in group dynamics on SNSs, whereby if a participants's friend joins a group, and recommends it to friends, these are likely to enquire about the group and also join it. This influence, participants explain would extend to that of products and services. Thus, connections do have the capacity to influence one another's opinions and attitudes towards companies, products and brands. However, this rarely happens as often companies fail to grab the attention of users so that they may pass their messages onto their connections. Referring to Eccelston and Griseri's (2008) influencer groups, the 14-17 group takes part in the most connector behaviour in SNSs. As noted by respondents in the 18-24 student group, this may be due to a group mentality or may signal that when consumers do respond positively to marketing on SNSs, they will tell others about the marketing used. Connecting behaviour also does occur at times in other age groups as some members in the 18-24 student group, 25-34 group and 35+ group, although very few, did indicate that they use SNSs to search for and provide information in relation to companies, products and brands. The strength of influence between connections on SNSs is clearly evident, yet while that potential exists, it has yet to be realised fully in the context of discussing products and companies.

Privacy and safety issues may potentially impact on the use of and information disclosure on SNSs. Younger users, although stating that they are quite careful on site, appear to be less responsible in terms of information disclosure on site and exhibit a greater likelihood to accept those unknown to them as friends. Incidents of bullying and arguments were not confined to the 14-17 group only. These also occurred within older age groups, yet members of these groups appeared to be better equipped to deal with these both emotionally and in terms of what remedial actions to take than the 14-17 group.

Information in relation to privacy settings should arguably also be made more clearly and easily available and communicated to other age groups as many participants were unaware of these on their SNSs.

Findings from focus group clearly highlight the need for a different approach by marketing when using SNSs as a marketing tool. Push tactics are being employed at present which engender adverse responses among participants. Pull tactics are more effective in engaging participants and where advertisements are more relevant and trustworthy they grab participants attention and they are more likely to click through on the advertisement. However, in the majority of cases, participants feel that advertisements are not relevant and trustworthy on SNSs.

## Chapter Four: Survey Research Findings and Analysis

- 4.1 Introduction
- 4.2 Profile of Respondents
- 4.3 Consumer Behaviour on SNSs
  - 4.3.1 Individual Motivations to use SNSs
  - 4.3.2 SNS Usage
- 4.4 'Friending' in Online Social Networks
  - 4.4.1 Friend Networks in SNSs
  - 4.4.2 Influence of Friends in SNSs
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  - 4.5.1 Implications of Marketing SNSs
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    Customers
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- 4.6 Privacy in Online Social Networks
- 4.7 Conclusion

## 4.1 Introduction

This chapter outlines the findings and detailed analysis of a survey of SNS users. The research was undertaken with individuals in the Republic of Ireland over the age of 14 who had created a profile on a SNS and had accessed and updated one of their SNS profiles between December 2009 and February 2010 inclusive.

The total number of respondents who attempted the survey was 1,145. Of these respondents, 829 completed the survey. 493 useable questionnaires were completed. As highlighted in Chapter Two, as the total number of responses exceeded each quota, it was necessary to remove a certain number of questionnaires to achieve the required sample size of 376.

A total of 149 hypotheses was developed and tested for the purposes of comprehensive statistical analysis. The full list of hypotheses is given in Appendix VI. Due to the large number of hypotheses, only those where the null hypothesis was rejected are discussed in detail in this chapter.

Section 4.2 (Profile of Respondents) classifies respondents by social class and innovator type. Section 4.3 (Consumer Behaviour on SNSs) explores respondent motivations to use SNSs and the usage patterns among respondents of these sites. Section 4.4 (Friending in Online Social Networks) investigates the structure of friend networks in social networks and the level of influence these friends have on one another. Section 4.5 (Consumer Attitudes towards Marketing on SNSs)

investigates how consumers feel about the current marketing tactics that are being adopted on SNSs and possible means of reaching and engaging consumers via these sites. Section 4.6 (Privacy in Online Social Networks) examines the negative features and experiences that respondents associate with SNSs and the extent to which users are aware if their profiles are public or private and the reasons why.

## 4.2 Profile of Respondents

A quota sample of 376 SNS users was taken, using gender and age as quota controls.

Appendix V illustrates the breakdown of the total sample by age and gender quotas.

Respondents were classified into their social class based on occupation (CSO, 2006b). Figure 4.1 portrays the social classes of survey respondents. Where respondents did not indicate occupation sufficiently clearly they were classified as 'all others gainfully occupied and unknown'.

Figure 4.1: Social Class of Respondents

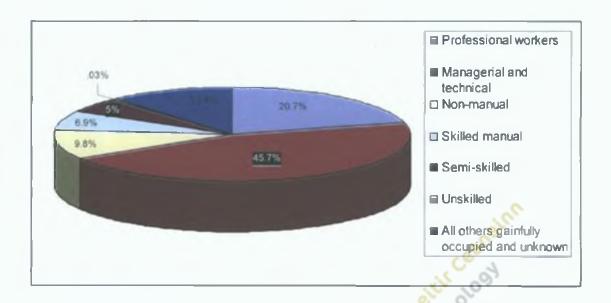
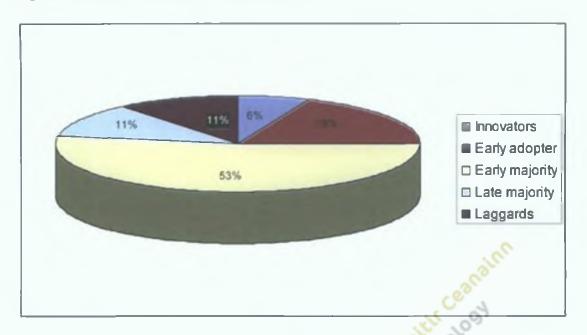


Figure 4.1 clearly shows that the majority of respondents belong to the professional workers and managerial and technical social classes. According to the CSO (2006c) these social classes are ranked from highest (professional workers) to lowest (all others gainfully occupied and unknown). The two highest social classes comprised 66.4% of all respondents.

Respondents were also classified by innovator type using Rogers (2003) innovator types. Figure 4.2 depicts the proportion of respondents within each category.

Figure 4.2: Respondents by Innovator Type



Rogers (2003) finds that innovators comprise 2.5% of the population, early adopters 13.5% of the population, early majority 34% of the population, late majority 34% of the population and laggards 16% of the population. In terms of SNSs laggards comprise 6% of the SNS population, early adopters 19% of the SNS population, early majority 53% of the SNS population, late majority 6% of the SNS population and laggards 11% of the SNS population. Innovator and follower hubs are essential in SNSs as innovator hubs play a key role in the speed at which products are adopted and follower hubs play a key role in the market size of adopters. In turn, these can be very important in WOM regarding products and services. Figure 4.2 depicts that both these types of hubs are present within SNSs. Not only are they present on SNSs but they are more prevalent than in the general population.

### 4.3 Consumer Behaviour on SNSs

### 4.3.1 Individual Motivations to use Social Networking Sites

Table 4.1 illustrates survey respondent motivations to use SNSs. The total percentage is greater than 100% as multiple responses were permitted.

Table 4.1: Respondent motivations to use SNSs

Motivations to use SNSs	%
Connect with current friends	73.1
Connect with old friends	65.2
Make new friends	28.5
Blog	13
Share photographs	35.9
Share videos	11.2
Search for company information	17.3
Search for product information	8
Provide information to others	13.8
regarding companies	
Provide information to others	12.5
regarding products	
Other	22.1

Table 4.1 clearly illustrates that the primary motivating factors relating to SNS usage are to connect with those friends with whom a respondent has a current relationship (73.1%) and to reconnect with old friends (65.2%). This corresponds with findings from the literature, for example Dwyer et al., 2007; Ellison et al., 2007; Ofcom, 2008; and Steinfield et al., 2008. Connections to both strong and weak ties

are of equal importance as strong ties increase the user's attachment to a community (Kavanaugh et al., 2005) while new information is most likely to be obtained by members from their weak ties in the community (Haythornwaite, 2005). SNSs also provide a means for respondents to make new friends with almost a third of respondents indicating that they use SNSs for this purpose. While findings from this survey are contrary to Donath and boyd's (2004) findings that the main point of SNSs is to allow the creation of new friendships, it may be consistent with growing one's network of friends as one of the motivations for use of SNSs. Sharing photographs is also evident as a strong motivator for SNS usage with 35.9% of respondents indicating that they use them for this reason. While it is clear that SNSs are primarily used in a social context, it is also evident that respondents use them in search of company and product information and to provide company and product information to others.

A total of 22.1% of respondents commented that they used their SNSs for 'other' reasons. A number of respondents noted in 'other' that they used SNSs from a business perspective. This suggests that SNSs are becoming much more than social tools to certain users and appeal to them in a professional context. They also use SNSs as a means of building and developing professional ties, building social capital on a professional level, seeking employment, recruiting employees, promoting one's business and learning more about their professional discipline. This increase in the usage of SNSs from a professional perspective may also be influenced by the social classes using them. Respondents also noted the ability to use these sites as a means of promoting

and advertising their business, implying that SNSs are seen by some as a marketing tool. Respondents also outlined that they use SNSs due out of boredom, to pass the time and to be 'nosey', suggesting that in line with Joinson (2008), content gratification, surveillance and social networking surfing play a role in individual motivations to use SNSs.

Based on these findings, further statistical analysis of the data from a company or product perspective was carried out and resulted in the rejection of the null hypotheses listed below. Gender and age were investigated as influencing variables as previous research in the area highlights that these are factors influencing SNS usage. Innovator type and the SNS on which respondents were most active were also investigated as influencing variables as these were deemed by the researcher to be factors that could affect respondent attitudes towards SNSs. Therefore gender, age, innovator type and the SNS on which respondents were most active, were the dependent variables.

H0: Searching for company information as a motivation to use SNSs is not affected by gender.

H05: Searching for company information as a motivation to use SNSs is affected by gender

H0: Searching for product information as a motivation to use SNSs is not affected by gender.

H06: Searching for product information as a motivation to use SNSs is affected by

gender.

H0: Providing company information as a motivation to use SNSs is not affected by gender.

H07: Providing company information as a motivation to use SNSs is affected by gender.

H0: Searching for company information as a motivation to use SNSs is not affected by age.

H09: Searching for company information as a motivation to use SNSs is affected by age.

H0: Providing company information as a motivation to use SNSs is not affected by age.

H11: Providing company information as a motivation to use SNSs is affected by age.

H0: Providing product information as a motivation to use SNSs is not affected by age.

H12: Providing product information as a motivation to use SNSs is affected by age.

H0: Searching for company information as a motivation to use SNSs is not affected by innovator type.

H13: Searching for company information as a motivation to use SNSs is affected by innovator type.

A Chi-square test for independence (with Yates Continuity Correction) indicated a significant association between searching for company information as a motivation to use SNSs and gender,  $\chi^2$  (1, n = 376) = 6.833, p = .009, phi = .142, a significant association between searching for product information as a motivation to use SNSs and gender,  $\chi^2$  (1, n = 376) = 4.481, p = .034, phi = .119 and a significant association between providing company information as a motivation to use SNSs and gender,  $\chi^2$  (1, n = 376) = 4.066, p = .044, phi = .112.

Findings indicate that within their genders, males (23.6%) are more motivated to use SNSs to search of company information than females (12.9%). Males (11.9%) are more motivated to use SNSs to search for product information than females (5.3%) and again males (18.5%) are more motivated than females (10.7%) to use SNS to provide company information to others.

A Chi-square test for independence verified a significant association between searching for company information as a motivation to use SNSs and age,  $\chi^2$  (5, 376) = 40.801, p = .000, phi = .329, a significant association between providing company information as a motivation to use SNSs and age,  $\chi^2$  (5, n = 376) = 35.599, p = .000, phi = .308 and a significant association between providing product information as a motivation to use SNSs and age,  $\chi^2$  (5, n = 376) = 36.600, p = .000, phi = .312.

Respondents in the 45-54 age group (31.6%) are more likely than any other age group to use SNSs to search of company information while the 18-24 age group (100%) is least likely to use SNSs for this reason. As with searching for company information, respondents in the 45-54 age group (25.3%) are the most likely of all age groups to have joined a SNS to provide company information to others while the 18-24 age group (100%) are most unlikely to use these sites for this reason. The 45-54 age group (25.3%) are most likely to use SNSs to provide product information to others than any other age group while no respondents in the 14-17 and 18-24 age groups stated that they would be motivated to use SNSs for this reason.

A Chi-square test for independence showed a significant association between searching for company information as a motivation to use SNSs and innovator type,  $\chi^2(4, 376) = 10.212$ , p = .037, phi = .165.

The early adopter category (28.6%) is most motivated to use SNSs to search for company information while the late majority (7%) is least motivated to use SNSs for this purpose.

The results of the above hypotheses are illustrated in Appendix VII.

Respondents were also asked to indicate the extent to which they agreed or disagreed that the SNSs they were most active on had become an important communication tool for them. The results are detailed in the table below (Table 4.2).

Table 4.2: Importance of SNSs as a communications mechanism

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	%	%	%	%	%
'This social networking site has become an	4.3	7.4	21	42.6	24.7
important method of communication for me'				Canal Car	C

The majority of respondents (67.3%) either agree or strongly agree that the SNSs they are most active on have become an important method of communication channel for them, thus highlighting the increasing extent to which these sites have become integrated into their lives.

## 4.3.2 Usage of SNSs

Table 4.3 delineates the number of SNSs on which respondents have at any time created a profile.

Table 4.3: Number of SNSs respondents have ever created a profile on.

Number of SNSs profile created on	%
One	14.9
Two	23.9
Three	24.2
Four or more	37
Total	100

14.9% of respondents had created a profile on one SNS with slightly over 85% having created a profile on two or more SNSs. 37% of these respondents had created a profile on four or more SNSs.

To investigate the extent to which respondents were still using those SNSs that they had ever created a profile on which they had at any time created a profile, they were asked how many of these SNSs they had been active on in the last 30 days (Table 4.4) and to indicate which SNS they had been most active on in the last 30 days (Table 4.5).

Table 4.4: Number of SNSs active on in the last 30 days.

Number of SNSs active on in the last 30	%
days	
None	1.1
One	30.1
Two	30.6
Three	22.6
Four or more	15.7
Total	100

Only 1.1% of respondents had not been active on any of the SNSs t of which they are a member in the last 30 days, with 68.9% active on 2 or more SNSs in the last 30 days, of which 15.7% had been active on four or more SNSs of which they are a member the last 30 days.

Table 4.5: SNS most active on in the last 30 days

SNS most active on in the	%
last 30 days	•
Bebo	14.1
Facebook	52.7
MySpace	2.1
YouTube	4.8
Linkedin	14.6
Twitter	8.2
Digg	0
Flickr	0
Other	3.5

Facebook is clearly the SNS respondents had been most active on in the last 30 days (52.7%) with over three times more respondents most active on it than the next most frequently mention SNS Linkedin (14.6%). Digg and Flickr were not mentioned by any respondent.

Continuing this theme of gender as a dependent variable, the following null hypothesis was rejected:

H0: There is no association between gender and the SNS respondents had been most active on in the last 30 days.

H19: There is an association between gender and the SNS respondents had been most active on in the last 30 days.

A Chi-square test for independence indicated a significant association between gender and the SNS respondents were most active on in the last 30 days.  $\chi$  (6, n = 376) = 31.803, p = .00, phi = .291. Findings indicated that of those 53 respondents who are most active on Bebo, there is an approximately even split between males and females in terms of usage. Of those respondents who selected Facebook as the SNS they are most active on, a much greater difference is observed with only approximately 30% of males being most active on site and a significant 70% of females most active on site, with the opposite occurring in the case of YouTube. An even gender split is also observed in the case of MySpace. More males are most active on professional SNS Linkedin (60%) than females (40%). More females (58.1%) exhibit a tendency to be

most active on Twitter than males (41.9%) and more males (15.4%) more active on other SNSs than females (84.6%). Despite an uneven gender split in the sample population. SPSS compensates for this when drawing a comparison between which gender is most active on each SNS detailed above. The statistical analysis is presented in Appendix VIII.

Respondents were also asked within the last seven days, on how many of those days they had used the SNS they are most active on (see Figure 4.3).

Figure 4.3: Number of days in the last seven days respondents used SNS on which most active

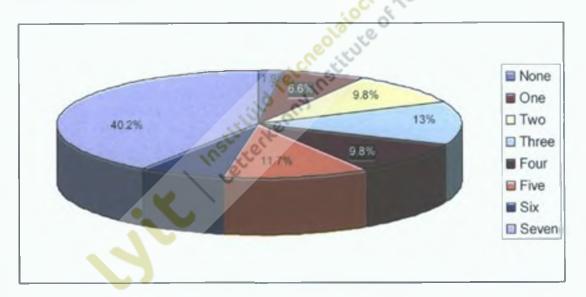


Figure 4.3 illustrates that respondents are highly active in terms of their usage of the SNSs they are most active on. Over 40% of respondents used the SNS they are most active on every day of the 7 days prior to taking part in the survey. Only a very small percentage (1.9%) had not accessed that SNS at all in the previous seven days.

In relation to the SNSs specified by respondents they were also asked how long they spent onsite on their last visit (see Figure 4.4).

Figure 4.4: Time spent on last visit to most active SNS

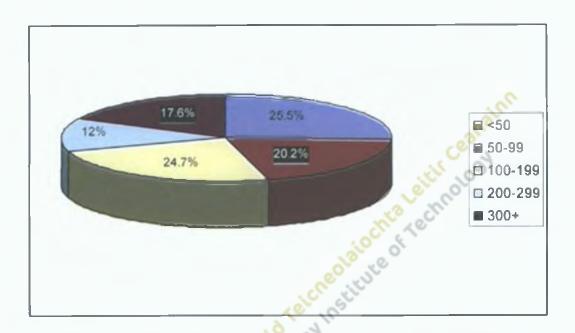
Nearly half of respondents spent less than 30 minutes on their most active SNS on their last visit with a just 8% spending greater than three hours onsite. However, over 30% of respondents spent 30 minutes to an hour onsite on their last visit.

# 4.4 'Friending' in Online Social Networks

#### 4.4.1 Friend Networks in SNSs

Respondents were asked to indicate how many friends they had accumulated on the SNS they are most active on (Figure 4.5).

Figure 4.5: Number of friends on most active SNS



The highest proportion of respondents had accumulated less than 50 friends on their SNS (25.5%). This was closely followed by those who had accumulated between 100 and 199 friends on their SNS (24.7%) and 50 to 99 friends on their SNS (20.2%). Those who have accumulated over 200 friends on their SNS comprised 29.6% of respondents respectively. Findings highlight a big spread in the number of friends people have on the SNS they are most active on.

Gender, age, innovator type and the SNS respondents were most active on were investigated as factors impacting on friending in online social networks. Previous research in the area of SNSs suggests gender and age to be factors affecting SNS

usage while innovator type and the SNS respondents were most active on were factors the researcher felt might impact on he friending process on SNSs.

Further analysis allowed the rejection of the following null hypotheses:

H0: Age has no effect on the number of friends respondents have on their most active SNS.

H27: Age has an effect on the number of friends respondents have on their most active SNS.

A Chi-square test for independence did indicate a significant association between age and the number of friends respondents had on their most active SNS,  $\chi^2$  (20, n = 376) = 101.540, p = .000, phi = .520 resulting in the rejection of the null hypothesis. Analysis clearly delineates that younger age groups have much larger friend networks than older age groups. Respondents in the 14-17 age category accounted for 47% of the respondents who had over 300 friends on their most active SNS and 35.6% of the respondents who had 200-299 friends on their most active SNS. Respondents in the 18-24 age category also accounted for 24.4% of the respondents who had 200-299 friends on their most active SNS. 73.3% of respondents in the 14-17 age category, 93.4% of respondents in the 18-24 age category and 65.3% of respondents in the 25-34 age category had over 100 friends on their most active SNS, while 58.8% of respondents in the 35-44, 63.3% of respondents in the 45-54 and 77.8% of respondents in the 55+ age categories had less than 100 friends on the SNS on which they were most active.

H0: There is no association between innovator type and the number of friends that respondents have accumulated on the SNS they are most active on.

H29: There is an association between innovator type and the number of friends that respondents have accumulated on the SNS they are most active on.

The Chi-square test for independence indicated a significant association between innovator type and the number of friends respondents had on their most active SNS,  $\chi^2$  (16, n = 376) = 34.651, p = .004, phi = .304. Findings indicated that of the 24 respondents who classified themselves as innovators, 50% had over 300 friends on their most active SNS. The highest proportion of the respondents in the early adopter category (22.9%) indicated that they had 50-99 friends on their most active SNS. However over 55% of respondents in this group had over 100 friends on their SNS. Similarly, over 55% of the respondents that indicated they belonged to the early majority category had over 100 friends on their SNS. For those respondents within the late majority category, over 50% had over 100 friends on their most active SNS. However this fell to approximately 40% relative to the respondents in the laggard category, with a significant number of respondents (39%) stating that they had less that 50 friends on their most active SNS. This demonstrates that innovators express a tendency to accumulate a large number of friends on SNSs. Only 16.7% of those within this category had less than 50 friends on their most active SNS – the lowest of all innovator categories.

The in-depth statistical analysis is illustrated in Appendix IX.

Respondents were also asked to indicate the extent to which they felt that there was a pressure to accumulate a large number of friends on their SNS (Table 4.6).

Table 4.6: Pressure to accumulate a large number of friends on most active SNS

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
'I feel there is pressure to accumulate a large number of friends on this social networking site'	23.9	42.3	19.9	9.6	4.3

The majority of respondents (66.2%) either disagreed or strongly disagreed that there is a pressure to accumulate a large number of friends on the SNSs they are most active on. 13.9% either agreed or strongly agreed with this statement.

#### 4.4.2 Influence of friends in SNSs

The issue of the influence of those within an individual's friend networks on their SNSs was explored. A series of statements was presented to respondents to which they responded as to the extent of their agreement or disagreement (Table 4.7).

Table 4.7: The influence of friends in relation to products on SNSs

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
'My friends talk about products on social networking sites'	17.8	39.6	24.5	16.2	1.9
'My friends make positive comments about products on social networking sites'	16.5	34.8	30.9	16.2	1.6
'Comments made by my friends about products on social networking sites affect my opinions'	16.8	33.8	28.7 00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18.1	2.7
'My friends make negative comments about products on social networking sites'	12.2	34	35.6	15.7	2.4
'I have made comments to my friends on social networking sites about products'	16	40.2	26.6	15.2	2.1
'I make positive comments about products on social networking sites'	15.7	35.6	34	12.5	2.1

'I would make comments to friends about products on social networking sites if it was of interest to them'	11.7	26.1	25	33	4.3
'I make negative comments about products on social networking sites'	13	35.9	34	14.4	2.7

Table 4.7 highlights that in general, respondents disagreed with each of the statements. Percentages of respondents strongly agreeing or agreeing with these statements typically ranged from 14.6% to 20.8%. A change in respondents' behaviour in terms of discussing products with friends if they felt that they would be of interest to them was observed. In this case 37.3% of respondents agreed or strongly agreed with the statement.

Again gender, age, innovator type and the SNS respondents were most active on in the last 30 days were investigated as factors affecting the influence of friends in SNSs. The number of friends respondents had accumulated on their SNS was also investigated as the researcher felt this may also impact on the influence of friends on SNSs.

Further analysis allowed the rejection of the following null hypotheses (Tables 4.8 - 4.21):

# Table 4.8: **Hypothesis Number 33**

H33: There is an association between gender and respondents' friends making negative product comments on SNSs.

males (M = 2.76, SD = 1.044) and females (M = 2.52, SD = .907); t (374) = 2.339, p = .020 (two-tailed).

mean difference = .237, 95% CI: .038 to .437; Effect size (eta squared) = .01

An independent-samples t-test was conducted to compare friends making negative comments on SNSs scores for males and females. There was a significant difference in scores for both genders. The difference in the means was small. Results suggest that male respondents' friends show the greatest propensity to make negative product comments on SNSs.

Table 4.9: Hypothesis Number 34

H34: There is an association between age and friends making positive product comments on SNSs.

14-17 year olds (M = 2.65, SD = .961); over 55 (M = 2.52, SD = 1.001)

Effect size (eta squared) = .03

In relation to H34, a one-way between-groups ANOVA showed a statistically significant difference at the p < .05 level in scores for the various age groups: F (5, 370) = 2.964, p = .012. The actual difference in mean scores between the groups was

in the medium range. Post-hoc comparisons using the Tukey HSD test indicated the mean score for 14-17 year olds was significantly different from those over 55 years of age and the mean score for 45-54 year olds was significantly different to those over 55. The friends of those aged 14-17 and 45-54 exhibited the greatest means score score when it came to making positive on SNSs.

Table 4.10: Hypothesis Number 35

H35: Respondents making comments to friends on social networking sites about products is affected by age.

14-17 year olds (M = 2.55, SD = .951); over 55 (M = 2.04, SD = .903);

25-34 year olds (M = 2.86, SD = 1.137)

Effect size (eta squared) = .05.

In relation to H35, a one-way between-groups ANOVA revealed a statistically significant difference at the p < .06 level scores for the various age groups in respect to H35: F(5, 370) = 3.789, p = .002. The actual difference in mean scores was in the medium range. Post-hoc comparisons using the Tukey HSD test indicated the mean score for the 14-17 year olds was significantly different from those over 55 and the mean score for 25-34 year olds was significantly different to those over 55. Those in the 25-34 and 14-17 age categories displayeded evidence of making most comments to friends on SNSs about products while those over the age of 55 displayed the lowest means score.

#### Table 4.11: Hypothesis Number 37

H37: Respondents making negative comments about products on SNSs is affected by age

14-17 year olds (M = 2.69, SD = .923); over 55 (M = 2.16, SD = .878); 25-34 year olds (M = 2.88, SD = 1.130)

Effect size (eta squared) = .04.

In relation to H37, a one-way between groups ANOVA demonstrated a statistically significant difference at the p < .05 level in scores for the different age groups: F(5, 370) = 3.043, p = .010. The actual difference in the mean scores was in the medium range. Post-hoc comparisons using the Tukey HSD test indicated the mean score for 14-17 year olds was significantly different from those over 55 and the mean score for 25-34 year olds was statistically different to those over 55 years of age. 25-34 year olds had the highest mean score in making negative comments regarding products on SNSs while those over 55 recorded the lowest means score.

#### Table 4.12: Hypothesis Number 39

H39: There is an association between innovator type and respondents making comments about products to friends on SNSs

innovators (M = 2.79, SD = 1.41); laggards (M = 2.07, SD = .985);

early adopters (M = 2.64, SD = 1.077)

Effect size (eta squared) = .02.

The one-way between-groups ANOVA also showed a statistically significant difference at the p < .05 level in scores for the various innovator types: F (4, 371) = 2.917, p = .021. The actual difference in the mean scores between the groups was quite small. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for innovators was significantly different from laggards and the mean score for early adopters was significantly different from laggards. Innovators had the highest mean score in making comments to friends on SNSs about products than all other innovator groups with laggards obtaining the lowest mean score.

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Table 4.13: Hypothesis Number 42

H42: Respondents' friends making negative product comments on SNSs are affected by the SNS respondents had been most active on in the last 30 days

Facebook (M = 2.48, SD = .996); Twitter (M = 3.10, SD = 1.012)

The effect size, calculated using eta squared, was .05.

In relation to H42, a one-way between-groups ANOVA showed a statistically significant difference at the p < .05 level in scores for the SNS respondents' had been most active on in the last 30 days: F(6, 369) = 2.973, p = .008. The actual difference in the mean scores was in the medium range. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Facebook (M = 2.48, SD = .996) was significantly different from Twitter (M = 3.10, SD = 1.012). The friends of those who were most active on Twitter and YouTube recorded the highest mean scores relative to making negative product comments on SNSs while the friends of those who were most active on other SNSs and Facebook recorded the lowest mean scores.

Within the one-way between-groups ANOVA, the Levene's test for homogeneity of variances (.02) was below .05 thus violating the assumption of homogeneity of variance. This was also the case for the Welch (.012) and Brown-Forsythe (.009). As results obtained did not meet the stringent assumptions of this parametric technique, a non-parametric technique was employed and thus a Kruskal-Wallis test was carried out.

A Kruskal-Wallis test revealed a statistically significant difference in scores for the SNS respondents who had been most active on in the last 30 days, X2 (6, n = 376) = 18.25, p = .006. Bebo, MySpace, YouTube, Linkedin, Twitter and other SNSs recorded a higher median score (Md = 3.0) than Facebook (Md = 2.0). Twitter had the highest overall ranking, corresponding to the highest score on the variable being analysed. This was followed by YouTube and Linkedin in concurrence with one-way between-groups ANOVA findings.

Table 4.14: Hypothesis Number 43

H43: Respondents making positive comments to friends about products on SNSs is

affected by the SNS respondents who had been most active on in the last 30 days

Facebook (M = 2.40, SD = .949); Twitter (M = 3.16, SD = 1.036);

Linkedin (M = 2.45, SD = .959)

Effect size (eta squared) = .05

In relation to H43, a one-way between-groups ANOVA showed a statistically significant difference at the p < .05 level in scores for the SNS respondents had been

most active on in the last 30 days. F (6.369) = 3.218, p = .004. The actual difference in the mean scores between the groups was between small and medium. Post-hoc comparison using the Tukey HSD test indicated the mean score for Facebook was significantly different from Twitter and the mean score for Linkedin was significantly different from Twitter. Respondents who were most active on Twitter recorded the highest mean score in terms of making positive product comments compared to any other SNS, with MySpace recording the lowest mean score.

Table 4.15: Hypothesis Number 44

H44: Respondents making negative comments to friends about products on SNSs is affected by the SNS respondents who had been most active on in the last 30 days

Facebook (M = 2.48, SD = .975); Twitter (M = 3.13, SD = 1.024);

MySpace (M = 1.88, SD = .991); YouTube (M = 3.11, SD = 1.023)

Linkedin (M = 2.45, SD = .878)

The effect size, calculated using eta squared was .06.

In relation to H44, a one-way between-groups ANOVA demonstrated a statistically significant difference at the p < .05 level in scores for the SNS respondents who had been most active on in the last 30 days: F(6, 369) = 4.086, p = .001. The actual difference in the mean scores between the groups was medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Facebook was significantly different to Twitter, the mean score for MySpace was significantly different to YouTube and Twitter, and the mean score for Linkedin was significantly different to Twitter. YouTube and Twitter recorded the highest scores while

MySpace recorded the lowest means scores.

Table 4.16: Hypothesis Number 47

H47: There is an association between the number of friends respondents have on the SNS they are most active on and respondent's friends making negative product comments on SNSs

50 friends (M = 2.49, SD = .846); 50-99 friends (M = 2.45, SD = .929);

over 300 friends (M = 2.94, SD = 1.108)

Effect size (eta squared) = .03

In relation to H47, a one-way between-groups ANOVA showed a statistically significant difference at the p < .05 level in scores for the different friend network size: F(4, 371) = 3.046, p = .017. The difference in the means scores between the groups was between small and medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for those with less than 50 friends was significantly different to those with over 300 friends and those with 50-99 friends was significantly different to those with over 300 friends. Respondents with over 300 friends on the SNS they were most active on obtained the highest scores while those with 50-99 friends obtained the lowest mean score.

Table 4.17: Hypothesis Number 50

H50: There is an association between the number of friends respondents have on the SNS they are most active on and respondents making negative product comments on SNSs

less than 50 friends (M = 2.4, SD = .900); 50-99 friends (M = 2.45, SD = .929); 100-199 friends (M = 2.47, SD = .951); 300 friends (M = 2.97, SD = 1.052) Effect size (eta squared) = .051

In relation to H50, a one-way between-groups ANOVA showed a statistically significant difference at the p < .05 level in scores for the different friend network sizes. The actual difference in mean scores bordered on medium. Post-hoc comparisons using the Tukey HSD indicated that the mean score for those with less than 50 friends was significantly different to those with over 300 friends, the mean score for those with 50-99 friends was significantly different to those with over 300 friends, and the mean score for those with 100-199 friends was significantly different to those with over 300 friends. Respondents with over 300 friends on their most active SNS received the highest scores with those with less than 50 friends recording the lowest scores.

Table 4.18: Hypothesis Number 52

H52: There is an association between age and the influence of product comments made by friends on SNSs on respondent opinions

18-24 age group (M = 2.20, SD = 1.031); 25-34 age group (M = 2.90, SD = 1.159);

55+ age group (M = 2.16, SD = 1.043).

Effect size (eta squared) = .04

In relation to H52, a one-way between-groups ANOVA highlighted a statistically significant difference at the p < .05 level in scores for the different age groups: F(5, ..., ..., ..., ...)

370) = 3.429, p = .005. The actual difference in mean scores between the groups was between small and medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the 18-24 age group was significantly different from the 25-34 age group and the 25-34 age group was statistically different from the 55+

age group. The 25-34 age category recorded the highest scores on the variables being studied while the 55+ age category recorded the lowest scores.

# Table 4.19: **Hypothesis Number 53**

H53: There is an association between innovator type and the influence of product comments made by friends on SNSs on respondent opinions

early adopters (M = 2.66, SD = 1.141); laggards (M = 2.07, SD = .932);

late majority (M = 2.63, SD = 1.070)

Effect size (eta squared) = .02

In relation to H53, a one-way between-groups ANOVA illustrated a statistically significant difference at the p < .05 level in scores for the various innovator types: F(4, 371) = 2.6, p = .037. Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small. Post-hoc comparisons using the Tukey HSD test signify that the mean score for early adopters was significantly different to laggards and the mean score for those in the late majority category was significantly different to laggards. Early adopters recorded the highest scores while laggards recorded the lowest score.

#### Table 4.20: Hypothesis Number 57

H57: Age does affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them

18-24 age group (M = 
$$2.40$$
, SD =  $1.192$ ); 25-34 age group (M =  $3.29$ , SD =  $1.118$ )

Effect size (eta squared) = .04

In relation to H57, a one-way between-groups ANOVA illustrated a statistically significant difference at the p < .05 level in scores for the six age groups: F(5, 370) = 2.807, p = .017. The actual difference in the mean scores between the groups was between small and medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the 18-24 age group was significantly different from the 25-34 age group.

# Table 4.21: **Hypothesis Number 61**

H61: Respondents talking on SNSs is affected by their friends making positive comments about products on SNSs and their friends making negative comments about products on SNSs

Total variance = 52.2%;  $X^2(2, n = 376) = 203.644$ , p < .000.

Multiple regression highlighted a substantial correlation between friends making positive comments about products on SNSs and friends making negative comments about products on SNSs with respondents making comments on SNSs about products (.650 and .653 respectively). Collinearity diagnostics demonstrated tolerance values of greater that .10 and variance inflation factors of less than 10 and as a result, there

was no indication of multicollinearity. The normal p-p plot depicted the points in a diagonal line from bottom left to top right, proposing no major deviations from normality. The scatter plot also suggested no deviations, with the clustering of scores in the centre. The total variance explained by the model as a whole was 52.2% and was statistically significant. Both independent variables make a statistically unique contribution to the equation, with friends making negative comments about products on SNSs making the strongest unique contribution towards explaining the dependent variable (beta = .405). Friends making positive comments about products on SNSs made a slightly lesser contribution (beta = .396).

The researcher then investigated the factors that make a friend influential concerning products on a SNS (Table 4.22).

Table 4.22: Factors making a friend influential on a SNS

Factors making a friend	% of respondents
influential on a SNS	
When they have a large number	15
of friends on the SNS	
When I have met them before in	40.7
person	
When they are a close friend	51.6
offline	
When they are members of my	32.7
family	
When I talk to that friend	21.8
frequently on the SNS	
When that friend provides	13.8
information to others on the	
SNS	
Other	10.4
Non-response	.8

The single most influential factor that respondents felt makes a friend influential on a SNS was their status as a close friend offline with 51.6% of respondents expressing that they felt this was the case. 'When I have met them before in person' and 'When they are members of my family' scored highly with 40.7% and 32.7% of respondents agreeing that these were influencing factors. A number of respondents (21.8%) also chose 'When I talk to that friend frequently on the SNS' as an influencing factor.

'Other' constituted 10.4% of responses. 'Other' responses typically related to the fact that respondents felt this was not applicable to them and are detailed in Appendix XI.

The final question explored the various factors that cause respondents to discuss products with friends on a SNS (Table 4.23).

Table 4.23: Factors that cause respondents to discuss products with friends on a SNS

Factors that would cause respondents to discuss products with friends on a SNSs	% of respondents
To voice my opinion	41
To provide my friends with product information relevant to them	51.3
To gain product information in return	17
To pass on that product information to a large number of people	16.5
Other	12.2

Over half of respondents (51.3%) indicated that providing friends with product

information relevant to them would cause them to discuss products with friends on a SNS. This was followed by wanting to voice their own opinions with 41% of respondents selecting this option. A lower percentage of respondents chose the remaining options – to gain product information in return (17%), to pass on that product information to a large number of people (16.5%) and other (12.2%). Other' responses again tended to relate to the fact that respondents felt this was not applicable to them and these are detailed in Appendix XI.

Continuing on the theme of the influence of friends on-line, in-depth statistical analysis enabled the rejection of the following null hypotheses:

H0: 'When that friend provides information to others on the social networking site' as a factor that makes friends influential on SNSs is not effected by age.

H63: 'When that friend provides information to others on the social networking site' as a factor that makes friends influential on SNSs is effected by age.

H0: 'When they have a large number of friends on the social networking site' as a factor that makes friends influential on SNSs is not effected by innovator type.

H64: 'When they have a large number of friends on the social networking site' as a factor that makes friends influential on SNSs is effected by innovator type.

H0: 'When they are a close friend offline' as a factor that makes friends influential on SNSs is not effected by innovator type.

H65: 'When they are a close friend offline' as a factor that makes friends influential

on SNSs is effected by innovator type.

H0: 'When that friend provides information to others on the social networking site' as a factor that makes friends influential on SNSs is not effected by innovator type.

H66: 'When that friend provides information to others on the social networking site' as a factor that makes friends influential on SNSs is effected by innovator type.

H0: 'To provide my friends with product information relevant to them' as a factor that causes respondents to discuss products with friends on SNSs is not effected by age.

H67: 'To provide my friends with product information relevant to them' as a factor that causes respondents to discuss products with friends on SNSs is effected by age.

H0: 'Other' as a factor that causes respondents to discuss products with friends on SNSs is not effected by age.

H68: 'Other' as a factor that causes respondents to discuss products with friends on SNSs is effected by age.

H0: 'To voice my opinion' as a factor that causes respondents to discuss products with friends on SNSs is not effected by innovator type.

H69: 'To voice my opinion' as a factor that causes respondents to discuss products with friends on SNSs is effected by innovator type.

H0: 'To pass on that product information to a large number of people' as a factor that causes respondents to discuss products with friends on SNSs is not effected by the SNS respondents were most active on in the last 30 days.

H70: 'To pass on that product information to a large number of people' as a factor that causes respondents to discuss products with friends on SNSs is effected by the SNS respondents were most active on in the last 30 days.

A Chi-square test for independence illustrated a significant association between age and that friend providing information to others on the SNS as a factor making a friend influential on a SNS,  $\chi^2$  (5, n = 376) = 17.853, p = .003, phi = .218, innovator type and that having a large number of friends on the SNS as a factor making a friend influential on a SNS,  $\chi^2$  (4, n = 376) = 19.571, p = .001, phi = .228, innovator type and that person being a close friend offline as a factor making a friend influential on a

SNS,  $\chi^2$  (4, n = 376) = 9.991, p = .041, phi = .163, innovator type and that friend providing information to others on the SNS as a factor making a friend influential on a SNS,  $\chi^2$  (4, n = 376) = 11.116, p = .025, phi = .172, age and to provide friends with product information relevant to them as a factor causing respondents to discuss products with friends on SNSs,  $\chi^2$  (5, n = 376) = 15.732, p = .008, phi = .205, age and other as a factor causing respondents to discuss products with friends on SNSs,  $\chi^2$  (5,

n = 376) = 17.106, p = .004, phi = .213, innovator type and to voice their opinion as a factor causing respondents to discuss products with friends on SNSs,  $\chi^2$  (4, n = 376) = 18.899, p = .001, phi = .224 and the SNS respondents were most active on in the last 30 days and to pass on the product information to a larger number of people as a factor causing respondents to discuss products with friends on SNSs,  $\chi^2$  (6, n = 376) = 14.462, p = .025, phi = .196.

Of those respondents who highlighted 'When that friend provides information to others on the social networking site' as a factor making a friend more influential on a

SNSs, those in the 25-34 (24.5%) and 45-54 (20.3%) age groups showed the highest tendency to see this as an influencing factor. For the respondents who selected 'When they have a large number of friends on the social networking site' as a factor making a friend more influential on a SNSs, the innovator group (41.7%) showed a much higher tendency to see this as an influencing factor than other groups. Observing those respondents who selected 'When they have a large number of friends on the social networking site' as a factor making a friend more influential on a SNSs, the early majority (59.1%) showed higher tendency to see this as an influencing factor than other groups yet other groups still indicated that this was an influencing factor, the innovator group to a lesser extent (37.5%). Of those respondents who highlighted 'When that friend provides information to others on the social networking site' as a factor making a friend more influential on a SNSs, those in the early adopter (24.3%) and innovator (16.7%) groups exhibited the greatest tendency to see this as an

influencing factor. In relation to the respondents who highlighted 'To provide my friends with product information relevant to them' as a factor causing them to discuss products with friends on a SNSs, the 18-24 (70%), 25-34 (65.3%), 45-54 (54.4%) and 55+ (51.1%) age groups exhibited the greatest tendency to see this as an influencing factor with their age groups. 50% of respondents in the 35-44 and 38.1% of respondents in the 14-17 age group saw this as an influencing factor. Of the respondents who highlighted 'Other' as a factor causing them to discuss products with friends on SNSs, the 35-44 age group (26.5%) showed the greatest tendency to see this as an influencing factor. Relative to the respondents who highlighted 'To voice my opinion' as a factor causing them to discuss products with friends on a SNSs, the innovator (66.7%) and early adopter (57.1%) categories showed the greatest tendency

to see this as an influencing factor. Of the respondents who selected 'To pass on that product information to a larger number of people' as a factor causing them to discuss products with friends on a SNSs, those respondents who were most active on MySpace (37.5%) showed the greatest tendency to see this as an influencing factor. Those who were most active on Facebook (10.6%) showed the least tendency to see this as an influencing factor.

# 4.5 Consumer Attitudes towards Marketing on SNSs

#### 4.5.1 Implications of Marketing on SNSs

Respondents were asked to express using a Likert scale the extent to which they agreed or disagreed that SNSs have become over-commercialised (Table 4.24).

Table 4.24: Respondent's SNS has become over-commercialised

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
'This social networking site has become over- commercialised'	7.2	31.1	37.8	18.4	5.6

A total of 38.3% of respondents either disagreed or strongly disagreed with this statement compared to 24% of respondents who either agreed or strongly agreed with this statement. 37.8% of respondents neither agreed nor disagreed with this statement.

Respondents were also presented with statements that dealt with the subject of advertising on the SNS they are most active on (Table 4.25).

Table 4.25: Perceptions towards Advertisements on SNSs

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
'I notice advertisements on this site'	8.8	18.1	16	45.7	11.4
'I like the presence of advertisements on this site'	22.6	30.6	37.8	7.7	1.3
'I find advertisements are relevant to me on this site'	17.6	36.2	28.7	13.6	4
'I find advertisements annoying on this site'	4.8	15.7	30.3	27.7	21.5
'I do not trust advertisements on this site'	4	16	36.7	24.2	19.1
'Advertisements on this site are boring'	2.9	12.2	51.9	21.0	12
'Advertisements on this site are eye- catching'	11.4	19.1	46.8	19.1	3.5

Table 4.25 depicts that the majority of respondents do notice advertisements on their SNSs with 57.1% of respondents agreeing and strongly agreeing with that statement. 9% or respondents either agreed or strongly agreed that they like the presence of advertisements on SNSs while 17.6% of respondents felt advertisements were relevant to them on their SNS. 49.2% of respondents either agreed or strongly agreed that they find advertisements on SNSs annoying while 20.5% of respondents strongly disagreed or disagreed with the statement. A total of 43.3% of respondents either agreed or strongly agreed that they do not trust advertisements on their SNS and 33% agreed or

strongly agreed that advertisements on SNSs are boring. Approximately 30% of respondents either disagreed or strongly disagreed that advertisements on SNSs are eye-catching as they selected the options agree and strongly agree.

Furthermore, a number of null hypotheses could be rejected, the in-depth analysis outlined in Appendix XII. Gender, age, innovator type and the SNS respondents were most active on in the last 30 days again were used in analyses (see tables below).

Table 4.26: **Hypothesis Number 74** 

H74: Most active SNS does affect respondents noticing advertisements on SNSs.

Bebo (M = 3.43, SD = 1.201); Other (M = 2.31, SD = 1.251);

Facebook (M = 3.46, SD = 1.107)

Effect size (eta squared) = .05

In relation to H74, a one-way between-group ANOVA outlined a statistically significant difference at the p < .05 level in scores for the SNS respondents were most active on: F(6, 369) = 3.071, p = .006. The actual difference in the means scores was close to medium. Post-hoc comparisons using the Tukey HSD test indicated that that the mean score for Bebo was significantly different to other and the mean score for Facebook was significantly different to other. MySpace attained the highest scores while 'other' SNSs attained the lowest scores.

Table 4.27: Hypothesis Number 78

H78: Respondents' trust in advertisements on SNSs is affected by age

14-17 age group (M= 2.17, SD = 1.147); 25-34 age group (M = 2.69, SD = .983); 35-

44 age group (M = 2.88, SD = 1.000); 45-54 age group (M = 2.85, SD = .988); 55+

age group (M = 2.87, SD = 1.036)

Effect size (eta squared) = .08

In relation to H78, a one-way between-groups ANOVA delineated a significant difference at the p < .05 level in scores for the different age groups: F (5, 370) = 6.142, p = .000. The actual difference in mean scores between the groups was above medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for those in the 14-17 age group was significantly different to the 25 – 34 age group, the 35-44 age group, the 45-54 age group and 55+ age group. The 35-44 and 55+ age groups recorded the highest scores while the 14-17 age group recorded the lowest scores.

Table 4.28: Hypothesis Number 79

H79: Respondents finding advertisements boring on SNSs is affected by age

14-17 age group (M = 2.43, SD = 1.008); 35-44 age group (M = 2.96, SD = .700);

45-54 age group (M = 2.85, SD = .864)

Effect size (eta squared) = .05

In relation to H79, a one-way between-groups ANOVA demonstrated a significant difference at the p < .05 level in scores for the different age groups: F (5, 370) =

3.588, p = .004. The actual difference in mean scores between the groups was close to medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for those in the 14-17 age group was significantly different to the 35-44 age group and the mean score for those in the 14-17 age group was significantly different to the 45-54 age group. The 35-44 age group obtained the highest scores while the 14-17 age group obtained the lowest scores.

Table 4.29: Hypothesis Number 81

H81: Respondents' finding advertisements annoying on SNSs is affected by the SNS they were most active on in the last 30 days

Bebo (M = 2.17, SD = 1.156); Linkedin (M = 3.00, SD = 1.000);

Facebook (M = 2.49, SD = 1.060); MySpace (M = 3.38, SD = 1.408);

YouTube (M = 1.94, SD = .938)

Effect size (eta squared) = .06

In relation to H81, a one-way between-groups ANOVA showed a statistically significant difference at the p < .05 level in scores for the SNS respondents were most active on in the last 30 days: F(6, 369) = 4.922, p = .000. The actual difference in mean scores between the groups was medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Bebo was significantly different from Linkedin, the mean score for Facebook was significantly different from Linkedin, the mean score for MySpace was significantly different to YouTube and the mean score for YouTube was significantly different to Linkedin. MySpace attained the highest score while YouTube attained the lowest score.

Table 4.30: Hypothesis Number 82

H82: Respondents' trust in advertisements on SNSs is affected by the SNS they were most active on in the last 30 days

Bebo (M = 2.13, SD = 1.177); Twitter (M = 2.97, SD = 1.080);

Facebook (M = 2.56, SD = 1.015); Linkedin (M = 3.16, SD = .938);

YouTube (M = 2.17, SD = 1.043)

Effect size (eta squared) = .09

There was a statistically significant difference at the p < .05 level in 'I do not trust advertisements on this site' scores for the SNS respondents were most active on in the last 30 days: F(6, 369) = 6.169, p = .000. The actual difference in mean scores between the groups was close to large. Post-hoc comparisons using the Tukey HSD test indicated the mean score for Bebo was significantly different from Linkedin, the mean score for Bebo was significantly different from Twitter, the mean score for Facebook was significantly different from Linkedin and the mean score for YouTube was significantly different from Linkedin. Bebo received the lowest score while MySpace received this highest score as shown in the means plot.

Table 4.31: Hypothesis Number 83

H83: Respondents finding advertisements boring on SNSs is affected by the SNS they

were most active on in the last 30 days

Facebook (M = 2.76, SD = .856); Bebo (M = 2.28, SD = 1.007);

MySpace (M = 3.63, SD = .744); Linkedin (M = 2.93, SD = .858)

Effect size (eta squared) = .06

There was a statistically significant difference at the p < .05 level in 'Advertisements on this site are boring' scores for the SNS respondents were most active on in the last 30 days: F(6.369) = 4.146, p = .000. The actual difference in mean scores between the groups was medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Bebo was significantly different from Facebook, the mean score for Bebo was significantly different from MySpace and the mean score for Bebo was significantly different from Linkedin. MySpace recorded the highest score while Bebo recorded the lowest score.

Table 4.32: Hypothesis Number 86

H86: Innovator type does affect respondent opinions that advertisements on SNSs are eye-catching

early majority (M = 2.98, SD = .907); laggards (M = 2.41, SD = 1.284)

Effect size (eta squared) = .04

In relation to H86, a one-way between-groups ANOVA highlighted a statistically significant difference at the p < .05 level in scores for the various innovator groups: F (4, 371) = 3.461, p = .009. The actual difference in mean scores between the groups was medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the early majority (M = 2.98, SD = .907) was significantly different from laggards (M = 2.41, SD = 1.284). The early majority recorded the highest score while laggards recorded the lowest score.

Table 4.33: Hypothesis Number 89

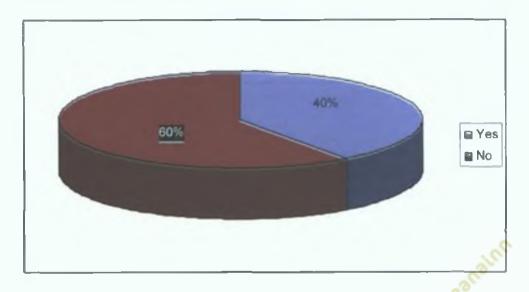
H89: Respondents thinking advertisements are annoying on SNSs is affected by them feeling that advertisements are boring and untrustworthy

Total variance = 52%;  $X^2(2, n = 376) = 200.296$ , p < .000.

Multiple regression highlighted a substantial correlation between respondents finding advertisements on SNSs boring and untrustworthy with respondents thinking that advertisements on SNSs are annoying (.544 and .695 respectively). Collinearity diagnostics demonstrated tolerance values of greater than .10 and variance inflation factors of less than 10 and as a result, there was no indication of multicollinearity. The normal p-p plot depicted the points in a diagonal line from bottom left to top right, proposing no major deviations from normality. The scatter plot also suggested no major deviations, with the clustering of scores in the centre. Two outliers were detected, yet this is not uncommon and after examination of the Mahal. distance, the researcher felt it was acceptable to leave the outliers within the analysis. The total variance explained by the model as a whole was 52% and was statistically significant:  $X^2(2, n = 376) = 200.296$ , p < .000. The trustworthiness of advertisements made the strongest unique contribution towards explaining the dependent variable (beta = .569). Advertisements being boring made a lesser contribution (beta = .224).

To further investigate the influence of advertisements on SNSs respondents were asked if they had ever clicked on an advertisement on a SNS. The results are displayed in Figure 4.6.

Figure 4.6: Respondents who have clicked on an advertisement on a SNS



39.9% of respondents were then asked within a multiple choice question to give a reason why they clicked on the last advertisement on their SNS (Table 4.34).

Table 4.34: Reason for clicking on last advertisement on a SNS

Reason for clicking on last advertisement on a SNS	% of respondents (total sample size)	% of respondents (of those who clicked through on an advertisement)
It was eye-catching	12.2	30.7
It was relevant to me	16	40
A friend recommended it	2.4	6
I was familiar with the company	3.2	8
I trusted it	1.6	4
It was something I wanted at the time	7.4	18.7
Other	7.7	19.3

The two main reasons outlined by respondents for clicking on the last advertisement they selected on their SNSs was that it was relevant to them (40%) and it was eye-

catching (30.7%). Timing also appeared to be a reason as 18.7% of respondents selected 'It was something I wanted at the time'. Eleven respondents stated that they had inadvertently clicked on these advertisements. Nine respondents stated that they clicked through on the advertisement out of curiosity in order to see what is was about and/or where they would be taken to. One of the respondents noted that the motivating factor for clicking on the advertisement was that it looked 'interesting' and another respondent clicked because there was an offer of free tickets. One respondent also felt that they had been lied to by an advertisement as when they clicked through on it they felt what the offering was not as interesting as was primarily presented to them.

Table 4.35: Hypothesis Number 91

H91: Clicking on advertisements on SNSs is affected by age

Chi-square test for independence;  $\chi^2$  (5, n = 376) = 20.863, p = .001, phi = .236.

A Chi-square test for independence (with Yates Continuity Correction) signified a significant association between age and clicking on an advertisement on a SNS. Over half of respondents (59.2%) in the 25-34 age group had at some time clicked on an advertisement on a SNS. Exactly half of respondents in the 18-24 age group had also at sometime clicked on an advertisement on a SNS. Over 40% of respondents in the 35-44 and 45-54 age groups had at sometime clicked on an advertisement on a SNS (44.1% and 44.3% respectively) while 33.3% of respondents in the over 55 age group and 24.8% of respondents in the 14-17 age group had at sometime clicked on an advertisement on a SNS. This highlights that of those respondents (39.9% of the total

sample size of those surveyed,) those in the 25-34 age group exhibit the greatest tendency to click on advertisements on SNSs while 14-17 year olds exhibit the lowest tendency. Of the 60.1% of respondents who had never clicked on an advertisement on a SNS, the researcher, in a multiple-choice question, enquired as to the reason. (Table 4.36).

Table 4.36: Reason for never clicking on an advertisement on a SNS

Reason for never clicking on an advertisement on a SNS	% of respondents (total sample size)	% of respondents (of those who had not clicked through on an advertisement)
They were not relevant to me	23.4	38.9
They were annoying	18.9	31.4
I did not notice them	8.5	14.2
I was not there to look for advertisements	33.5	56.6
I was afraid of computer viruses	16.5	27.4
I did not trust them	23.9	39.8
It was not something I wanted at that time	15.4	25.7
Other	2.1	3.5

The most stated reason for not clicking on advertisements on SNSs by respondents was that they were not on SNSs to look for advertisements. Over half of respondents (56.6%) selected this response. Other factors selected by respondents were that they did not trust advertisements on their SNSs (39.8%), they were not relevant to them (38.9%), they were annoying (31.4%), they were afraid of computer viruses (27.4%) and it was not something they wanted at the time. Only 3.5% of respondents who had never clicked on an advertisement on a SNS selected the option 'Other'. The majority

of respondents stated under 'Other' that they were indifferent to advertisements.

Those respondents who had never clicked on an advertisement on a SNS were then asked if the advertisement had ever led them to find out more about the product that was being advertised. Of the 226 respondents who had noted that they had never clicked on an advertisement on a SNS, 96% (216 respondents) maintained that advertisements on SNSs have never led them to find out more about the product being advertised, while a mere 4% (10 respondents) stated that they had never clicked on an advertisement on a SNS.

# 4.5.2 Means by Which Companies can Reach and Engage with Customers

Respondents were presented with six statements to explore means by which companies might reach consumers more effectively on SNSs and the factors that may influence the potential to reach consumers via SNSs (Table 4.37).

Table 4.37: Means by which companies might reach consumers effectively on SNSs

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
'I prefer to click on					
advertisements					
that do not take me	7.2	15.2	42	26.9	8.8
to a new web page'					
'I am more likely to					
click on	11.2	26.6	36.7	20.2	5.3
advertisements that				- 55	
offer free products				000	
rather than those that				CO0.	
do not'				1000	
'I am more likely to			ò	C. Olo.	
click on	12	26.1	37	20.5	4.5
advertisements that	1		1000	C.	
offer free trials			100		
rather than those that			3.0		
do not'		c	, , , , ,		
'I am more likely to		ich	100		
click on	12.2	33.8	39.4	12.8	1.9
advertisements that		The Sun			
offer me coupons		0			
rather than those that	25	CET			
do not'	11, %	<i>y</i>			
'I trust	1 000				
advertisements more	10.4	17.6	34	30.9	7.2
on social networking					
sites when I am					
familiar with the					
advertiser'					
'I trust					
advertisements more	7.4	10.0	25.6	26.4	
when I have also	7.4	10.9	35.6	36.4	9.6
encountered them					,
offline (for example,					
on TV, radio or in					
magazines)'	<u> </u>			l	<u>L</u>

Regarding each statement, over 34% of respondents in each case selected the neither agree nor disagree option. 35.7% of respondents remarked they would prefer if advertisements did not take them to a new web page. A total of 37.8% of respondents indicated that advertisements offering free products would not induce them to click through on advertisements whereas 25.5% indicated that it would. 25% of respondents felt free trials would cause them to click on an advertisement and this decreased to 14.7% in relation to coupons. 38.1% of respondents suggested that familiarity with the advertiser would increase their trust in advertisements on SNSs while 45% felt also encountering advertisements offline would achieve a greater degree of trust in SNS advertisements.

More in-depth statistical analysis led to the rejection of numerous null hypotheses.

The results of the statistical analysis are outlined in Appendix XIII.

Table 4.38: Hypothesis Number 102

H102: There is an association between innovator type and preference to click on advertisements that do not take respondents to a new web page

innovators (M = 3.42, SD = .974); early adopters (M = 2.77, SD = .981);

early majority (M = 3.31, SD = .946); laggards (M = 2.78, SD = 1.275)

Effect size (eta squared) = .06

In relation to H102, a one-way between-groups ANOVA illustrated a statistically significant difference at the p < 05 level in scores for the different innovator groups: F (4, 371) = 5.705, p = .000. The actual difference in mean scores between the groups

was medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for innovators was significantly different from early adopters, the mean score for early adopters was significantly different from the early majority and the mean score for the early majority was significantly different from laggards. Innovators obtained the highest scores while early adopters and laggards obtained the lowest scores.

Table 4.39: Hypothesis Number 105

H105: There is an association between innovator type and preference to click on advertisements that offer coupons than those that do not

early majority (M = 2.66, SD = .913); laggards (M = 2.12, SD = 1.029)

Effect size (eta squared) = .03

In relation to H105, a one-way between-groups ANOVA highlighted a statistically significant difference at the p < .05 level in scores for the different age groups: F(4, 371) = 3.093, p = .016. The actual difference in mean scores between the groups was in the medium range. Post-hoc comparisons using the Tukey HSD test specified that the mean score for the early majority was significantly different from laggards. Respondents in the early majority received the highest scores while laggards received the lowest.



## Table 4.40: Hypothesis Number 112

H112: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is affected by age

14-17 age group (M = 2.87, SD = 1.110); 25-34 age group (M = 3.61, SD = .885);

35-44 age group (M = 2.99, SD = .889); 55+ age group (M = 2.98, SD = 1.252)

Effect size (eta squared) = .05

In relation to H112, a one-way between-groups ANOVA resulted in a statistically significant difference at the p < .05 level in scores for the different age groups: F(5, 370) = 3.496, p = .004. The actual difference in mean scores between the groups was almost medium. Post-hoc comparisons using the Tukey HSD test suggested that the mean score for the 14-17 age group was significantly different from the 25-34 age group, the mean score for the 25-34 age group was significantly different from the 35-44 age group and the mean score for the 25-34 age group was significantly different from the 55+ age group. The 25-34 age group recorded the highest scores while the 14-17 age group recorded the lowest scores.

Table 4.41: Hypothesis Number 114

H114: Respondents increased trust in advertisements on SNSs when they are familiar

with the advertiser is affected by innovator type

early adopters (M = 3.23, SD = 1.052); laggards (M = 2.41, SD = 1.183);

early majority (M = 3.13, SD = 1.024); late majority (M = 3.23, SD = 1.172)

Effect size (eta squared) = .05

In relation to H114, a one-way between-groups ANOVA depicted a statistically significant difference at the p < .05 level in scores for the different innovator types: F(4, 371) = 4.790, p = .001. The actual difference in mean scores between the groups was almost medium. Post-hoc comparisons using the Tukey HSD test suggested that the mean score for early adopters was significantly different from laggards, the mean score for the early majority was significantly different from laggards and the mean score for the late majority was significantly different from laggards. The early adopter and late majority innovator categories attained the highest scores while laggards attained the lowest scores.

Table 4.42: Hypothesis Number 115

H115: Respondents increased trust in advertisements on SNSs when they have also encountered them offline not affected by innovator type

early majority (M = 3.38, SD = .942); laggards (M = 2.76, SD = 1.261);

late majority (M = 3.49, SD = 1.009)

Effect size (eta squared) = .04

In relation to H115, a one-way between-groups ANOVA displayed a statistically significant difference at the p <.05 level in scores for the different innovator categories: F (4, 371) = 3.648, p = .006. The actual difference in mean scores between the groups was between small and medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the early majority was significantly different from laggards and the mean score for the late majority was significantly different to laggards. The late majority scored highest on scores whereas laggards scored the lowest.

## Table 4.43: Hypothesis Number 116

H116: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is affected by the SNS respondents were most active on in the last 30 days

Facebook (M = 3.24, SD = 1.087); Other (M = 2.15, SD = .962);

Linkedin (M = 2.15, SD = 1.068)

Effect size (eta squared) = .05

In relation to H116, a one-way between-groups ANOVA revealed a statistically significant difference at the p < .05 level in scores for the SNS respondents were most active on in the last 30 days: F(3, 369) = 3.287, p = .004. The actual difference in the mean scores between the groups was medium. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Facebook was significantly different from other and the mean score for Linkedin was significantly different from other. Linkedin obtained the highest scores while other SNSs recorded the lowest scores.

Table 4.44: Hypothesis Number 118

H118: There is a relationship between advertisement click through rates on SNSs and advertisement trust on SNSs

Correlation between the two variables; r = .504, n = 376, p < .0005,

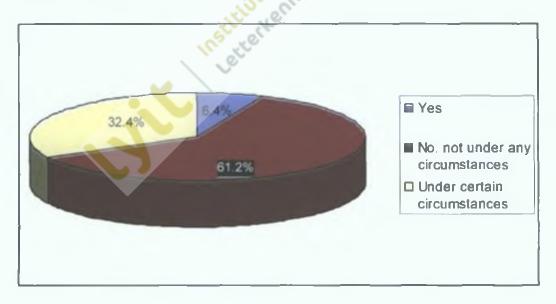
The relationship between advertisement click through rates on SNSs and advertisement trust was investigated using the Pearson product-moment correlation

coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a strong, positive correlation between the two variables, with high level of advertisement click through rates associated with high levels of advertisement trust.

## 4.5.3 Using Personal Information to Target Advertisements at Users

Respondents were questioned as to whether they would allow their personal information to be used for targeting them with more relevant information. The results are displayed in Figure 4.7.

Figure 4.7: Respondent willingness to allow use of personal profile information in targeted advertisements



Those respondents who would not allow the use of their personal profile information

in any way in order to target more relevant advertisements to them amounted to 61.2%. A total of 6.4% of respondents would allow the use of this information while 32.4% of respondents would allow it under certain circumstances.

The circumstances under which respondents would allow the use of their personal information are outlined in Table 4.45.

Table 4.45: Circumstances under which respondents would allow the use of their personal profile information

Circumstances under which respondents would allow the use of their personal profile information	% of respondents (total sample size)	% of respondents (who would allow use of personal information under certain circumstances)
If I can control the type of	27.7	85.5
profile information used		
If I can control the type of	14.9	45.9
companies that can use my		
profile information		
If I can stop the use of such	19.4	59.8
profile information by		
companies when I want		
If I can control the amount of	18.9	58.2
advertising I am exposed to		

Control over the type of profile information used was of utmost importance to respondents with 85.5% of the respondents who selecting. Blocking the use of this information by companies when they want and controlling the amount of advertising they are exposed to, were of equal importance to respondents with 59.8% and 58.2%

of respondents selecting these options. Finally controlling the type of companies that can use the information accumulated the lowest, albeit still significant number of selections by respondents (45.9%).

Those respondents who expressed willingness to allow the use of their personal profile information under certain circumstances were then asked what specific personal profile information they would allow to be used (Table 4.46).

Table 4.46: Personal profile information respondents would allow to be used

Personal profile information respondents would allow to be used	% of respondents (total sample size)	respondents (who would allow use of personal information under certain circumstances)
My demographics (for example	18.1	55.7
age, gender, education, relationship status)	(E)	
	10.6	57.4
Profile (for example interests,	18.6	57.4
status updates, views)	<u></u>	
Contact information (for	2.9	9
example email, phone number,		
postal address)		
Groups I have joined	13.8	42.6
Friends I have	4	12.3
Photographs I have shared	.8	2.5
Videos I have shared	2.7	8.2
Music I have shared	6.9	21.3
Blog postings I have written	4.5	13.9
Comments I have made	2.4	7.4
Other	1.3	4.1

Over half of respondents indicated that they would allow the use of their profile (57.4%) and demographics (55.7%) in order to target more relevant advertisements at

them. 42.6% would allow the use of the groups they had joined while 21.3% would allow the use of the music they have shared. All other remaining choices garnered less than 15% of responses. 13.9% would allow their blog postings to be used while 12.3% would allow their friends to be used as a means of targeting advertisements. 'Other' responses were:

- 'my occupation, role, industry I work in (to be targeted by relevant business to business ads, but not by email)'
- 'not sure, would need to think about it.'
- None
- 'None, I wouldn't be comfortable with that.'
- 'Age and gender fine everything else makes it seem incredibly intrusive.'

These responses deomonstrate that upon seeing the extent of information that could be used by companies to target advertisements, two respondents changed their minds and decided that they would not allow the use of this information under any circumstances.

Gender, age, innovator type and most active SNS were investigated as potential factors impacting on the use of personal information to target advertisements at users. As factors impacting SNS usage, gender and age impact consumer attitudes towards the use of their personal information. As innovator types and most active SNS had been found to impact previous analyses, they were also investigated here.

This resulted in the rejection of the following null hypotheses (statistical analysis results outlined in Appendix XIV):

Table 4.47: Hypothesis Number 119

H119: There is an association between gender and respondents allowing the use of their personal information in order to target more relevant advertisements at them

Chi-square test for independence;  $\chi^2$  (2, n = 376) = 14.805, p = .001, phi = .198.

A Chi-square test for independence indicated a significant association between gender and respondents allowing the use of their personal information in order to target more relevant advertisements at them. The Chi-square test highlights that men show the greatest propensity to allow the use of their personal information in targeting advertisements at them (11.3%) whereas women are less inclined to allow the use of such information (3.1%). Men are also more likely to allow the use of such information under certain circumstances (51.7%) than women (37.1%).

Table 4.48: Hypothesis Number 123

H123: Respondents allowing the use of their profile information if they can control the type of profile information used is affected by gender

Chi-square test for independence;  $\chi^2$  (1, n = 376) = 4.219, p = .04.

A Chi-square test for independence showed a significant association between gender and respondents allowing the use of their personal information to target advertisements at them if they can control the type of profile information used. Of the respondents who would allow the use of their personal profile information to be used to target more relevant advertisements at them if they can control the type of profile information used, men show the highest propensity within the two genders to allow the use of this information under these circumstances (33.8%) compared to women (23.6%).

Table 4.49: Hypothesis Number 128

H128: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by age

Chi-square test for independence;  $\chi^2$  (5, n = 376) = 13.084, p = .023, phi = .187.

A Chi-square test for independence pointed to a significant association between age and respondents allowing the use of their personal information to target advertisements at them provided they could control the companies that can use their profile information. Of the respondents who would allow the use of their personal profile information to target advertisements at them on SNSs provided they could control the type of companies that can use this information, the 18-24 age group (23.3%), 25 – 34 age group (24.5%) and the 55+ age group (24.4%) appear to be most inclined to allow the use of such information under these conditions. The 14-17 age group (9.6%) is least likely within the different age categories to allow the use of such information under these circumstances.

Most respondents had joined a group on their SNS (84.3%). Table 4.50 shows why the 317 respondents who had ever joined a group on a SNS joined the most recent group on their SNS.

Table 4.50: Reasons for joining most recent group on a SNS

Why respondents joined the last group on a SNS	% of respondents (total sample size)	% of respondents (of those who joined a group)
It was interesting	33.5	39.7
It was relevant to me	47.3	56.2
It provided me with information on my interests	25.8	30.6
Taking part in it was under my control	16.5	19.6
I could add my own opinions to the group	15.7	18.6
I could talk to others with the same interests as me	21.5	22.6
It was recommended to me by a friend	18.9	22.4
Other	6.4	7.6

Relevancy is the most popular reason for respondents joining the last group they joined on a SNS with 56.2% choosing this option. Interesting groups and those that provide respondents with information on their interests were also motivating factors for joining with 39.7% and 30.6% of respondents maintaining that this was why they joined their last group on a SNS. Talking to others with the same interests (22.6%) and friend recommendations (22.4%) were selected by over 20% of respondents with control over taking part in the group and adding ones own opinions acquired just fewer than 20% of responses each. 'Other' was selected by 7.6% of respondents and

the vast majority of these respondents had joined the last group they joined on a SNS because it looked like 'fun'.

Over 50% of the sample size had visited a company profile page on a SNS. Table 4.51 delineates why these 191 respondents went to the last company profile page they visited on a SNS.

Table 4.51: Why respondents went to the last company profile page visited on a SNS

Why respondents went to the last company profile page visited on a SNS	% of respondents (total sample size)	% of respondents (who went to profile page)
It was interesting	17	33.5
It was relevant to me	26.9	52.9
It provided me with information about that company	25.5	50.3
Taking part in it was under my control	8.2	16.2
I could add my own opinions to the page	3.2	6.3
I could talk to others in relation to the company	4.3	8.4
I could talk to the company itself on these pages	5.9	11.5
It was recommended to me by a friend	4.8	9.4
Other	2.9	5.8

As with groups, relevancy is a major factor influencing respondents' visits to company profile pages with 52.9% of respondents selecting this option. Usefulness as a means of providing respondents with information on that company was also popular among respondents as a motivator to visit company profile pages with 50.3% of

respondents choosing this. 'It was interesting' also received 33.5% of respondent choice. While control over taking part in the company page was chosen by 16.2% of respondents the remaining options were all selected by less than 12% of respondents. 'Other' reasons included:

 'To find out more information about the person who was working for that company'

• 'Curiosity'

• 'Trying to find someone'

 Research on what other companies were doing on promoting products on social networking sites, how they were going about promoting products'

• 'I was familiar to the company'

'Accident'

• 'It was a family members' company'

• 'I set up the page for my company'

'They lacked an independent website'

'Professional interest'

• 'Was looking for products from that company'

This led to the rejection of the following null hypotheses:

H0: There is no association between joining a group on a SNS and age.

HI40: There is an association between joining a group on a SNS and age.

A Chi-square test for independence showed a significant association between age and joining a group on a SNS,  $\chi^2$  (5, n = 376) = 18.312, p = .003, phi = .221. Those with the 18-24 (96.7%) and 25-34 (91.8%) age groups exhibited the greatest likelihood to join a group on a SNS while the 55+ age group exhibited the lowest likelihood (66.7%).

H0: There is no association between joining a group on a SNS and the SNS respondents were most active on in the last 30 days.

H142: There is an association between joining a group on a SNS and the SNS respondents were most active on in the last 30 days.

A Chi-square test for independence showed a significant association between the SNS respondents were most active on in the last 30 days and joining a group on a SNS,  $\chi^2$  (6, 376) = 27.114, p = .000, phi = .269. Respondents who are most active on Linkedin (98.2%) or Twitter (93.5%) are most likely among the SNS respondents were most active on in the last 30 to have joined a group while those who selected MySpace as the SNS they were most active on in the last 30 days are least likely (50%).

H0: Respondents visiting a company profile page on a SNS is not affected by gender.
H143: Respondents visiting a company profile page on a SNS is affected by gender.

A Chi-square test for independence indicated a significant association between gender and visiting a company profile page on a SNS,  $\chi^2$  (1, n = 376) = 7.249, p = .007, phi =

.144. Males are most likely to visit a company profile page than females.

H0: Respondents visiting a company profile page on a SNS is not affected by age.

H144: Respondents visiting a company profile page on a SNS is affected by age.

A Chi-square test for independence suggested a significant association between age and visiting a company profile page on a SNS  $\chi^2$  (5, n = 376) = 42.949, p = .000, phi = .338. Respondents in the 25-34 age group (79.6%) showed the greatest percentage among the various age groups to have visited a company profile page while those in the 14-17 age group (31.4%) attained the lowest percentage.

H0: Respondents visiting a company profile page on a SNS is not affected by innovator type.

H145: Respondents visiting a company profile page on a SNS is affected by innovator type.

A Chi-square test for independence displayed a significant association between innovator type and respondents visiting a company profile page on a SNS,  $\chi^2$  (4, n = 376) = 13.578, p = .009, phi = .190. Innovators (62.5%) in relation to the other innovator categories show the greatest likelihood to have visited a company profile page on a SNS whereas laggards (26.8%) show the least likelihood.

H0: Respondents visiting a company profile page on a SNS is not affected by the SNS respondents were most active on in the last 30 days.

H146: Respondents visiting a company profile page on a SNS is affected by the SNS respondents were most active on in the last 30 days.

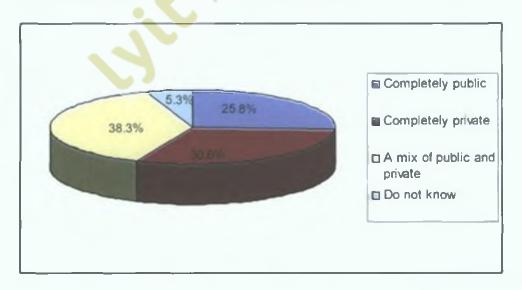
A Chi-square test for independence demonstrated a significant association between the SNS respondents were most active on in the last 30 days and respondents visiting a company profile page on a SNS,  $\chi$  (6, n = 376) = 59.693, p = .000, phi = .398. Respondents who were most active on Linkedin (87.3%) and Twitter (83.9%) were more likely to have visited a company profile page that respondents who were most active on other SNSs.

# 4.5 Privacy in Online Social Networks

Respondents were questioned as to their privacy status (public, private, or a mix).

The results of this are displayed in Figure 4.8.

Figure 4.8: Privacy settings on respondent profiles



Most respondents have set their profile at a mix of both public and private (38.3%).

This is followed by those who have their profiles completely private which constitutes 30.6% of respondents. 25.8% of respondents have completely public profiles and 5.3% of respondents do not know if their profiles are public or private.

The following null hypothesis was therefore rejected:

H0: Respondents having a public or private profile on the SNS they are most active on is not affected by gender.

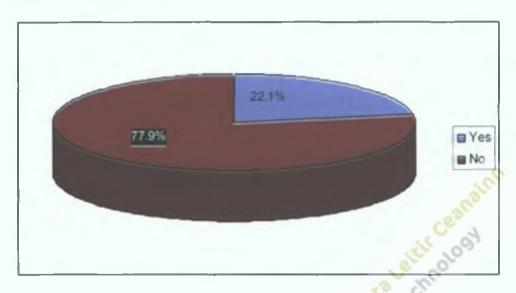
H147: Respondents having a public or private profile on the SNS they are most active on is affected by gender.

A Chi-square test for independence highlighted a significant association between gender and respondents having a public or private profile on the SNS they are most active on,  $\chi^2$  (3, n = 376) = 20.531, p = .000, phi = .234. Males (35.8%) have their profiles on the SNS they are most active on public to a greater degree than females (19.1%). A greater proportion of females (38.2%) have their profiles private than males (38.2%), with a roughly even split of males (39.7%) and females (37.3%) having a mix of public and private settings on their profile. In the case of both genders, 5.3% of respondents did not know if the profile on their SNS was public or private.

Respondents were then asked if they had ever had a negative experience on their SNS,

the results of which are provided in Figure 4.9.

Figure 4.9: Negative experience on a SNS



Those who had a negative experience on their SNS amounted to 22.1% of respondents.

Consequently, the null hypothesis below could be rejected:

H0: Respondents having a negative experience on a SNS is not affected by whether they have a public or private profile.

H149: Respondents having a negative experience on a SNS is affected by whether they have a public or private profile.

A Chi-square test for independence revealed a significant association between respondents having a negative experience on a SNS and having a public or private

profile,  $\chi^2$  (3, n = 376) = 12.066, p = .007, phi = .179. Respondents who have their profile settings at a mix of public and private (30.6%) or completely public (21.6%) have had the most negative experiences on their SNS while those who have their profiles completely private (87%) are most likely not to have a negative experience on site.

In-depth statistical analysis for the rejected null hypotheses in this section can be viewed in Appendix XV.

Table 4.52 summates the negative experiences encountered by the 83 (22.1%) respondents who had a negative experience on their SNS.

Table 4.52: Negative experiences on SNSs

Negative experiences on SNSs	% of respondents (total sample size)	% of respondents (of those who had a negative experience)
Bullying	2.7	12
Online predators	2.9	13.3
Viruses	6.4	28.9
Identity theft	1.1	4.8
Other	11.2_	50.6

'Other' was the most popular selection by respondents when they were asked what their negative experience on SNSs was with 50.6% of participants selecting this option. Viruses were also selected by 28.9% of respondents with online predators, bullying and identity theft receiving 13.3%, 12% and 4.8% of respondent's choices.

Included in 'Other' were negative experiences such as unwanted friends, spasm and a surfeit of marketing messages.

In order to assess the extent to which companies can trust the information provided by respondents on SNSs, respondents were asked to outline whether the information they provide on their SNS was accurate. Where respondents had not made this information available on their SNS, they were asked to select the option 'Not Applicable'. This would also reveal the extent and type of information provided by respondents on their SNSs. The results of this question are described in Table 4.53.

Table 4.53: Accuracy of information on SNSs

Accuracy of information on	Yes	No	Not Applicable
SNSs	(%)	(%)	(%)
Name	95.5	2.9	1.6
Gender	94.7	1.9	3.5
Date of birth	64.9	17.3	17.8
Status updates	74.2	15.2	10.6
Home address	17.6	35.1	47.3
Current location	55.1	20.2	24.7
Relationship status	58.2	14.1	27.7
Activities	59	16.5	24.5
Interests	62	14.9	23.1
Music liked	47.3	18.9	33.8
TV shows liked	35.4	24.5	40.2
Movies liked	42_	19.9	38
Books liked	38.3	27.1	34.6
Education	59	18.6	22.3
Political views	17.8	35.4	46.8
Religious views	19.4	34.3	46.3
Email	60.1	17.6	22.3
Phone number	19.7	35.9	44.4
Occupation	48.9	26.3	24.7

Table 4.53 illustrates that some respondents do make more personal information

available on their SNSs and this information is accurate. For example 64.9% of respondents provided their date of birth, 17.6% of respondents provided their home address, 55.1% provided their current location and 19.7% provided their phone number. Also of interest is the proportion of individuals who did not provide accurate information on their SNSs and those who did not provide this information at all.

#### 4.7 Conclusion

The primary driving force to use SNSs is to connect to strong and weak ties. Gaining and sharing information regarding companies and products is a motivation for use to a much lesser extent. However, findings illustrate that it is a motivating factor for usage among some respondents. As a motivating factor, usage from a business perspective has become more prevalent among respondents for SNS usage. Respondents detailed that they use it as a means of looking for employment, headhunting, finding out about companies in the industry, and to promote their business. SNSs have become an increasingly important part of respondents' lives with over two-thirds of respondents highlighting them as a means of maintaining relationships on both a personal and professional level. Phase two findings highlight that gender impacts on respondent motivations to use SNSs to search for company information, search for product information and to supply company information to others. It is evident that this behaviour does occur on SNSs and furthermore it is predominantly males who appear to use SNSs for this reason. Age was also found to impact on respondents' ability to use SNSs to search for company information,

provide company information to others and to provide product information to others. Contrary to indications from focus groups findings that this activity occurs most among 14-17 year olds, the survey findings revealed that this is actually least common among this age group. Motivations for using SNSs for this reason were also very low among 18-24 year olds, if at all existent. This activity in all cases occurred most among the 45-54 age group. The 25-34 and 35-44 age groups also showed that respondents were motivated to use SNSs to a certain extent for this reason. This was also evident in the case of those over 55 where providing product information to others on SNSs was concerned. Innovator type was also found to be a factor affecting respondent motivations to use SNSs to search for company information. The early adopter category was most motivated to use SNSs for this reason, followed by innovators. This is essential as it is innovators and early adopters who are the first to try new products and whom those in the latter innovator categories will look to and listen to for such information. It is advantageous that innovators and early adopters are present on SNSs and have the potential to use a medium such as SNSs whereby they can pass on messages to a large number of individuals to search for such information. This is advantageous as SNSs have the potential to be used as a medium whereby company messages can be passed on to a large number of individuals who want to receive such information.

Facebook appears to have succeeded in becoming the SNS respondents are most active on with 52.7% of respondents selecting this as their most active SNS, this being true all of age groups, except the 14-17 group. The site accumulated over 3.5 times more respondents than the next biggest SNS.

It was established that gender had an impact on the SNS respondents were most active on in the last 30 days. While both males and females were most active on Facebook, a significantly greater proportion of females were more active on the site than males.

Compared to Facebook, males were more active on Linkedin, with more females active on Twitter and other SNSs. Males were also more active on YouTube than females. As males are more active on Linkedin and YouTube than females, this may suggest that males are more active on SNSs that focus on a particular subject matter — in this case industry/professional networks and videos.

Findings indicate that younger age groups possess much larger friend networks than older age groups on SNSs, particularly those in the 14-17 age group. This corroborated focus group findings whereby respondents in this age group typically had over 200 friends on their most active SNS, many of whom they did not know. Innovator type was also found to affect the number of friends respondents had accumulated on their most active SNS. Innovators, early adopters, and the early majority category have accumulated large friend networks on their SNSs. As innovators initiate discussions regarding products and companies and this is passed on to others by subsequent categories, this highlights the WOM potential that SNSs hold regarding products, services and companies.

These nodes and bridging nodes highlight the extensive network of individuals that a company has the potential to reach and engage in WOM. 18% of respondents suggested that their friends discuss products on SNSs and 20% commented that their

friends influence their opinions regarding products on SNSs. 17.3% of respondents stated that they themselves discuss products on SNSs although if respondents did feel that it was something of interest to their friends 37.3% would discuss products with friends. Relevancy appears to be a key issue in the delivering and passing on of company messages among respondents. This manifested itself with 51.3% of respondents noting that providing friends with product information that is relevant to them would lead them to discuss products on a SNS. Male respondents' friends are more likely to make negative product comments on SNSs than female respondents' friends and friends of respondents in the 14-17 and 45-54 age groups were most likely to make positive product comments on SNSs. Respondents in the 25-34 age group were most likely to make comments to their friends about products on SNSs, either positively or negatively. Respondents in the 18-24 and 55 + age group were least likely to make comments to their friends about products on SNSs. Consistent with previous findings, the 25-34 age group exhibited the greatest tendency to make positive product comments on SNSs with the 18-24 and 55+ age groups exhibiting the least tendency. This was also the case regarding negative product comments on SNSs. Those who were most active on Twitter and YouTube in the last 30 days are also more likely to make comments in relation to products on SNSs. Findings also highlight respondents' friends are more likely to make negative comments about products on SNSs, and respondents themselves are more likely to make positive and negative product comments where respondents have large friend networks on their SNSs.

In terms of friends, and comments made about products on SNSs influencing

respondent opinions, age was found to be an influencing factor. Respondents in the 25-34 age group are most likely to be influenced by comments made by their friends on SNSs in relation to products while respondents in the 55+ and 18-24 age groups are least likely to be influenced by their friends' comments. Innovator types also affect respondents' opinions about products discussed on SNSs. Early adopters and the early and late majority are most likely to be influenced by their friends' comments about products. Laggards are least affected. This is to be expected as innovators are the influencers regarding products and companies want to use these innovators to influence these subsequent categories. Thus the potential to extend influence, albeit not to the desired extent, is there. The aim is to then increase this potential through reaching innovators in the correct way and encouraging them to pass on messages. Age was also found to influence respondents' intentions to make comments to friends about product(s) on SNSs if they were of interest to them. The 25-34 age group showed the greatest tendency to partake in this behaviour. Furthermore, multiple regression analysis highlighted a strong correlation between friends making positive and negative comments about products on SNSs and respondents making comments about products on SNS, that is, if respondents' friends make comments on SNSs, respondents are likely to make comments too.

Surprisingly, only 24% of respondents felt that SNSs have become over-commercialised despite indications from focus group proceedings that this figure would be much higher. Moreover, respondents are noticing advertisements on their SNSs with 57.1% of respondents indicating this. Despite this, advertisements are lacking in effectiveness and over 50% of respondents articulated that they do not like the presence of advertisements on their SNS. Respondents mainly feel that advertisements are annoying, uninteresting and they do not trust them. Relevancy,

although not as predominant as the factors previously mentioned, is also an issue. As a result, approximately 40% of respondents have clicked on an advertisement on their SNS. Of those respondents who had clicked on an advertisement, it was explained that the main reason for doing so was because it was eye-catching. A number of respondents also described how they had actually clicked on the advertisement by mistake. One respondent stated that an advertisement opened without their consent, which may be connected to the issue of pop-ups and roll-overs on SNSs. The reason for respondents not clicking on advertisements was that they are not there to look for advertisements, followed by advertisements not being relevant to them. SNS users should not have to look for advertisements; eye-catching advertisements should be presented to them. Due to this lack of relevancy, trust and other influencing factors, even the presence of advertisements has not motivated the majority of respondents to find out more about the product being advertised.

In relation to what makes friends influential on SNSs, a significant association was found in relation to age and friends providing information to others on the SNS. Respondents in the 25-34 and 45-54 age groups were influenced by friends that provided information to others on the SNS. Respondents in the 14-17 and 18-24 age group were least influenced by these factors. Innovator type and a friend having a large number of friends on the SNS were also found to be significant factors in what makes a friend influential on a SNS. This was very influential among innovators. As the innovator category were among those who had the largest proportion of friends on their most active SNS, as influential people, this may indicate that they believe that if others are to be influential like them they too must have a large number of friends. A



significant association was also found between innovator type and that person being a close friend offline as a factor making a friend influential on a SNS with the early majority showing the greatest tendency to see this as an influencing factor. As the early majority are less trusting of new products and 'try new products when they have been recommended by others', personal trust itself also appears to be an influencing factor and knowing this person offline is often a way of achieving this trust. Innovator type was also found to be a factor relating to when a friend provides information to others on the SNS as a factor making a friend influential on a SNS. The innovator and early adopter categories felt this to be the case more than other innovator categories. As those who are among the first to try new products, if they are to view others as being influential on SNSs, they would like themselves, have to be someone who is a person that often provides information of that kind to others on site. Innovator type affected respondents discussing products on SNSs to voice their opinion where the innovator and early adopter categories showed the highest percentage among the innovator categories to see this as an influencing factor. This decreased in subsequent innovator categories yet never fell below 30% of respondents in each category. This highlights that those who are the first to try new products, innovators and early adopters would initiate discussions about products to voice their opinion and subsequent categories would pass these messages on.

Results also indicate that some SNS users may be more receptive to advertisements if they do not take them to a new web-page and if they are rewarded for their participation, for example, through free product offers. Familiarity with the company that has placed the advertisement was also selected by 38.1% of respondents as a

factor influencing trust in advertisements on SNSs. Encountering the advertisement offline was also selected by 46% of respondents as a factor influencing trust in advertisements on SNSs. This demonstrates that an integrated approach including traditional and social media may be most effective in reaching and engaging with a number of SNS users. Older age groups were much less trusting of advertisements on SNSs than younger age groups. The comparison of these two variables revealed the largest effect size. Older age groups were also more inclined to find advertisements boring on SNSs than younger age groups. Those who were most active on MySpace found advertisements on site annoying while those who were most active on YouTube found them least annoying. Respondents were also least trusting of advertisements on MySpace and most trusting of advertisements on Bebo and YouTube. This was also the case in relation to finding advertisements boring on site. Mean responses for the most popular SNS among respondents - Facebook, were among the lower scores.

The eye-cathing appeal of advertisements on SNSs for respondents was affected by innovator type. Those in the early majority category tended to feel that advertisements on SNSs were more eye-catching than other innovator groups. This would be of benefit to companies in order for them to encourage the further passing on of messages within friend networks on SNSs. As innovators and early adopters are among the first to try new products it would be unlikely that they would garner information to pass on to others from advertisements that everyone could be exposed to but would actively search out new and innovative products themselves. Furthermore multiple regression analysis highlighted that where respondents find advertisements boring and untrustworthy on SNSs, they will find them more

annoying. The trustworthiness of advertisements contributed the most to respondents finding advertisements on SNSs annoying.

The propensity of respondents to click on advertisements on SNSs was found to be affected by age. The 14-17 age category was found to be least likely to click on advertisements on SNSs, while the 25-34 age group were most likely. Trust prevailed as a major factor influencing click through rates on advertisements on SNSs. The 25-34 age group are most receptive to advertisements on SNSs when they are familiar with the advertiser with early adopters and the late majority most trusting of advertisements when they are familiar with the advertiser and the early and late majority are also more trusting of advertisements that they have also encountered offline. The SNS respondents were most active on in the last 30 days also affected respondents' trust in SNS advertisements where they are familiar with the advertiser, although the effect size was only small. Those who were most active on Facebook and Linkedin were most likely to trust advertisements for this reason. As SNSs that are very popular with respondents, creating this familiarity appears to be essential. Correlation analysis also highlighted a strong, positive relationship between advertisement click through rates and advertisement trust signifying that trust in SNS advertisements is directly related to whether SNS users will click through on them.

38.8% of respondents maintained that they would either completely allow or allow in certain circumstances, the use of their personal profile information in targeting advertisements at them. Control appears to also be an important issue as was also revealed in focus group proceedings, particularly over the type of information that can

be used by companies. Males are more likely than females to allow the use of their personal profile information for targeting advertisements at them. For those respondents who would allow the use of such information under certain circumstances there was a significant association with gender in that males are more likely to allow the use of such information than females when they can control the type of profile information used.

Approximately 85% and 50% of respondents have joined a group and visited a company profile page on a SNS. Reasons attributed to this level of participation in groups and company profile pages were that they were relevant, interesting and they provided them with information on their interests. Again, this indicates where advertisements may be going wrong and how the positive factors associated with groups and company profile pages can be utilised in other marketing activities on SNSs. In relation to joining groups on SNSs, age was found to be an influencing factor, with the 55+ age category demonstrating the least propensity to join a group on a SNS. This was also affected by the SNS on which respondents were most active in in the last 30 days whereby Linkedin and Twitter users showed the highest inclination to join groups and MySpace the least. As SNSs that are used from a professional perspective, joining groups on Linkedin and Twitter may prove as a means of expanding one's professional social capital. In relation to visiting company profile pages on SNSs, analysis showed that males are more likely than females to visit company profile pages. Furthermore, those aged 25-34 are most likely to visit company profile pages while those in the 14-17 age group are least likely. A significant percentage of those in the 35-44 and 45-54 age groups were also likely to

visit company pages. This suggests that groups should be created to target younger age groups and company profile pages for older age groups. Innovators are also more likely to visit company profile pages than any other group, followed by early adopters. This suggests that as those who try new products, it is these pages they go to get new product information. Therefore company profile pages should be used to target these innovator categories and encourage them to pass on company messages. Visiting a company profile page on a SNS was also affected by the SNS respondents were most active on. Linkedin and Twitter users were most likely to have visited a company profile page on a SNS perhaps reverting to their use as a professional tool.

Over a fifth of respondents have had a negative experience on their SNS. While the majority of these are minor in nature, ensuring the cases of negative experiences on SNSs are minimised in order to preserve the future of these sites is necessary. Interestingly, a number of respondents also noted over-commercialisation as a negative experience, thus emphasising the importance of getting it right. Findings illustrate that males are more likely to have a completely public SNS profile than females. Age did not significantly affect the privacy of profiles on SNSs suggesting that it is not just young people who have public profiles on SNSs. Moreover, respondents in the 35-44 age group had actually had the most negative experiences on their SNSs with the 14-17 age group recording the second lowest percentage for their age group. As expected, those who had their profiles partially or fully public were subjected to the most negative experiences on site.

## **Chapter Five: Conclusions and Recommendations**

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- 5.2 Key Marketing Insights and Implications of the Research
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## 5.1 Introduction

This study assesses the implications of social networking sites for marketing in Irish business, and adds value to this area of research through providing a greater understanding of consumer attitudes towards the use of SNSs as a marketing tool. It explores the extent to which companies can leverage SNSs as a marketing tool for building relationships and targeting customers. As a result, this has the potential to provide marketers and companies alike with a greater understanding of how SNSs can be effectively integrated into marketing strategy. This research is warranted because, despite the growing number of people using and spending time consuming this medium (McGiboney, 2009), it is a greatly under researched area (Clarke, 2008, Constantinides et al., 2008. Constantinides and Fountain, 2008, Hoegg et al., 2006, Parise and Guinan, 2008, Stephen and Lehman, 2009).

This chapter synthesises the key insights from the research, and the implications of these findings for marketing in Irish business. Integrating SNSs effectively into marketing strategy is addressed in conjunction with the key factors that must be implemented by marketers and companies when delivering messages using this medium. The limitations of the research, research reflections and suggestions for further research are also discussed.

## 5.2 Key Marketing Insights and Implications of the Research

This research has highlighted that SNSs have the potential to be utilised as a marketing tool. However, this potential has yet to be fully realised. Companies are mainly employing 'push' rather than 'pull' tactics when marketing to members via these sites which typically has an adverse effect on their users. Literature in the area delineates that a different approach must be adopted when marketing to consumers via social media as opposed to marketing via traditional media. This research further corroborates these findings.

#### 5.2.1 Motivations to use SNSs

Both the qualitative and quantitative research highlight that SNSs are primarily used in order to allow their users to build and maintain relationships with strong and weak ties already known to them, confirming findings from other studies, for example (Dwyer et al., 2007, Ellison et al., 2007, Ofcom, 2008, Steinfield et al., 2008). While respondents in the focus groups and survey did stress that they used these sites to create new friendships, this was to a lesser extent than building and maintaining relationships with those already known to them. This is contrary to the findings of Donath and boyd's (2004) survey. Nevertheless, these findings are important as strong ties increase user attachment to a community (Kavanaugh et al., 2005) and new information is most likely to come from weak ties either previously known or unknown to respondents (Haythornwaite, 2005).

Investigating respondent motivations to use SNSs did indicate that they are to a certain degree used to search for and provide information to others regarding company, product and brand information. This was most prevalent among those aged 25 and over in survey findings, contrary to focus group findings which indicated that this behaviour, while occurring in older age groups, was most prevalent among 14-17 year olds. Survey findings suggested that they are mostly used by SNS members to search for company information.

The growing propensity among users to utilise SNSs from a business perspective was apparent. A focus group participant stated that these sites are used as a means of finding valuable information in relation to the industry that the company they worked for was operating in and that they provided a means of communicating with companies and suppliers in a cost effective manner. Many respondents in the survey maintained that they use SNSs to build and develop professional contacts and networks, build social capital on a professional level, seek employment, headhunt and recruit employees, promote their business and learn more about their professional discipline. Some respondents also professed a motivating drive to use SNSs as a marketing tool. This growing use of SNSs as a professional interactive tool reflects professional SNS Linkedin's second place position in the SNSs respondents were most active on.

## 5.2.2 Factors Impacting on SNS Usage

Gender and age were found to be factors influencing SNS usage in a number of

studies, for example, (Adams, 2009, Dougherty and Fanelli, 2008, Experian-Hitwise, 2008, Lenhart and Madden, 2007, Pfeil et al., 2008, PWC, 2008a, Rapleaf, 2008, Shi et al., 2009, Thewall, 2008) and as a result formed the quotas for the survey undertaken. Findings from the survey research further verified this, with statistical significances found between gender and SNS usage and age and SNS usage. There was also statistical significance in the context of gender and age and marketing tactics utilised on SNSs.

As highlighted in Chapter Two, research in the area of social class and SNS usage is in the early stages, yet recent research suggests that social class may impact on SNS usage among US consumers (Hare, 2009). The vast majority of respondents that took part in the survey (66.4%) comprised the two highest social classes – professional workers and managerial and technical. The three lowest social classes accounted for only 16.4% of respondents. This and the increased usage of SNSs from a business perspective may suggest that social class does impact on SNS usage among Irish consumers.

Moreover, innovator type and the SNS respondents were most active on were also found to impact on SNS usage and attitudes towards marketing on SNSs. These factors and the social class of those using SNSs should be taken into account by a company when targeting consumers.

#### 5.2.3 SNS Advertisements

The vast majority of participants in the focus groups felt that SNSs have become over-commercialised. Despite this, only 24% of respondents who took part in the survey shared these feelings. Survey research highlights that in the main, it is not the amount of adverting that is affecting respondents but the fact that they dislike these advertisements. 53.2% of respondents indicated that they do not like the presence of advertisements on their SNSs. Furthermore, findings indicate that they do notice these advertisements on their SNSs (57.1%) but it appears to be for all the wrong reasons. If advertisements continue to have a negative impact on SNS users, the percentage of those who notice these advertisements could begin to decline as users will start to block out or ignore advertisements as indicated by focus group participants. Respondents in the 25-34 age group exhibited the greatest tendency to click on SNS advertisements while the 14-17 age group exhibited the lowest tendency. 40% of respondents have clicked on an advertisement on a SNS.

The majority of focus group participants maintained that advertisements on SNSs are pushed on to them and take them away from what they are doing if they click on them. Pop-ups and roll-overs were frequently discussed by participants who viewed them in a negative light. Survey responses further reinforced this with almost half of respondents indicating that they agreed that advertisements on SNSs were annoying and almost a third of respondents who had never clicked on an advertisement on a SNS refraining from doing so because they felt advertisements on SNSs are annoying.

35.7% of respondents noted that they would prefer if advertisements did not take them to a new web page.

Relevancy and timing of advertisements were also key issues raised in focus group discussions. Respondents felt that advertisements were rarely if ever relevant to their needs and wants and if they were, this was fortuitous. 53.8% of respondents disagreed that advertisements on their SNS were relevant to them in the survey. This highlights that creating more relevant advertisements that consumers want to see on SNSs is important (Dangson, 2008). In addition, 38.9% of respondents who had never clicked on an advertisement on a SNS had not done so as they felt that advertisements were not relevant to them.

Focus group participants indicated that a fear of computer viruses would cause them to refrain from clicking on SNS advertisements. Within the survey, 27.4% of respondents who had not clicked on an advertisement on a SNS had refrained from doing so due to a fear of computer viruses. Furthermore, 56.6% of those respondents who had not clicked on advertisements on SNSs explained that they were not there to look for advertisements. Familiarity with the company that had placed the advertisement also influenced whether focus group participants would click on an advertisement. If they were familiar with the company, they were more likely to click on the advertisement. This was echoed in survey responses where 38.1% of respondents indicated that they would trust SNS advertisements more when familiar with the advertiser. This concurs with Kelly et al's., (2008) contention that

expectation of a negative experience, the relevance of the message, scepticism of the advertising message and scepticism of online social networking as an advertising medium are the primary influencing factors driving advertising avoidance in online social networks.

Trust emerged as the second most important factor affecting consumer attitudes towards advertisements on SNSs due to the fact that participants were not actively searching for advertisements. Respondents will not click on the advertisements that they do not trust and this trust is not being achieved on SNSs. 39.8% of respondents who had not clicked on an advertisement on a SNS had not done so as they did not trust those advertisements. Moreover, 43.3% of all survey respondents commented that they do not trust advertisements on SNSs. In order to achieve a greater degree of trust in advertisements, a mixed media approach employing offline media was suggested by focus group participants, and 45% of survey respondents also agreed with this. Age was found to be a factor influencing trust on SNSs with younger age groups possessing a greater degree of trust in SNS advertisements than older age Correlation analysis highlighted a strong positive correlation between groups. advertisement click through rates on SNSs and advertisement trust. Furthermore, multiple regression analysis revealed a significant correlation between respondents' finding advertisements on SNSs boring and untrustworthy with respondents feeling that advertisements on SNSs are annoying.

Control materialised as an important issue within focus groups where participants detailed that they would like control over the advertisements that they are exposed to.

Also, when the researcher enquired why relevancy was such an important issue impacting on the effectiveness of advertisements, and whether respondents would allow the use of their personal profile information in targeting advertisements at them, numerous respondents indicated that they would like control over the information used and who had access to it. Only 6.4% of respondents stated that they would allow the use of their personal profile information in order to target more relevant advertisements at them. For those respondents (32.4%) who would allow the use of their personal profile information under certain circumstances the vast majority of respondents (85.5%) would allow the use of such information if they could control the type of profile information used. Their demographics (55.7%) and profile information (57.4%) were the personal profile information they would most allow to be used. Males had a greater propensity to allow the use of their personal information in order to target more relevant advertisements at them than females. Age also impacted on allowing the use of profile information provided respondents could control the type of companies that can use their profile information. The 18-34, 35-34 and 55+ age groups were most inclined to allow the use of such information under these circumstances and the 14-17 age group least inclined.

Advertisements on SNSs tend to be pushed onto users and infringe on their privacy. They have little if any relevancy to consumer needs and wants. This, comined with a fear of viruses and lack of trust in advertisements, has resulted in the majority of respondents refusing to click through on advertisements. SNSs are viewed by respondents as their own personal space to communicate with others. If users are to be more accepting of advertisements in this space, a permission-based approach may

be more effective in reaching them.

#### 5.2.4 Groups and Company Profile Pages as Marketing Tools

Both phases of research highlighted the immense popularity of groups among respondents, and albeit to a lesser extent, company profile pages also proved popular. Focus group participants pointed out that taking part in groups and visiting company profile pages was under their control. They provided information that was relevant to them, had their opinions heard and talked to others with the same interests as them. Company profile pages also allowed respondents to engage in conversation with the company itself, feel they are involved with that company and can make themselves heard by that company.

84.3% of survey respondents have joined a group on a SNS and over 50% of them joined the last group on their SNS because it was relevant to them. Over 30% of respondents also joined because it provided them with information on their interests. Additional statistical analysis showed that younger age groups are most likely to join groups on SNSs.

50.8% of respondents had visited a company profile page on a SNS, primarily, as with groups, because it was relevant to them (52.9%) and it provided them with information about that company (50.3%). Over 30% of respondents also visited the last company profile page they visited on a SNS because it was interesting. In-depth analysis highlighted that males are more likely to visit company profile pages than

females and younger age groups display the lowest propensity to visit a company profile page.

These findings suggest that companies could keep their target audience in mind when determining whether to create groups of company profile pages on SNSs. Fun, interesting and informative groups appear to appeal to younger age groups whereas more factual, informative pages where the company plays a more active role, appeal to older age groups.

#### 5.2.5 The Influence of Friends

The majority of respondents (67.3%) agreed that the SNS they are most active on has become an important channel of communications for them. The increased usage of these sites by respondents reflects the increasing degree to which these sites have become integrated into respondents' lives.

The influence of friends on SNSs, as indicated in focus group proceedings, is due to the element of trust. 20.8% of respondents agreed that product comments made by friends on SNSs affect their opinions. Respondents trust and value their friends' opinions and this in turn influences their attitudes. This is supported by findings from Edelman (2009). Respondents highlighted that they would discuss products with friends on SNSs to a certain degree (percentages typically ranging from 14%-16%). Not only is trust important here but also relevancy as 37.3% of respondents highlighted that they would discuss products with friends if they felt that these

products would be of interest to them. A shift from discussing products on SNSs to the predisposition to discuss products if they were of interest to friends, suggests that product advertisements are often not relevant to respondents and their friends.

Statistical analysis indicated that male respondents' friends are more likely to make negative product comments on SNSs. The friends of those in the 14-17 and 45-54 age groups are most likely to make positive product comments on SNSs. Those in the 14-17 and 25-34 age groups are most likely to make comments to friends about products on SNSs, and 25-34 year olds are most likely to make negative product comments on SNSs. Where respondents have a greater number of friends on their SNS, they are more likely to make negative product comments. Respondents in the 25-34 age group are more likely to be influenced by product comments made by their friends than any other age group. This was also true of this age group when it came to the propensity to make comments to friends about products if that product was of interest to them. Multiple regression analysis suggested a significant correlation between friends making positive and negative comments about products on SNSs and respondents making comments about products on SNSs.

Factors pertaining to what makes a friend influential on a SNS revealed a strong connection to the offline world, as 51.6% of respondents felt that when a SNS friend is also a close friend offline. 40.7% of respondents felt a strong connection to others on their SNS when they had met in an offline context. 32.7% of respondents felt a strong connection when they were members of their family. Focus group proceedings highlighted that network size may not be as important a factor as determined in

previous studies (Vilpponel et al., 2006). This was also reflected in survey findings with 15% of respondents indicating that they believed a friend to be influential on a SNS when that friend has a large number of friends. Findings from the focus groups did highlight that the degree of closeness and the frequency of interaction are factors that make a friend influential on SNSs. This is supported in research conducted by Stephen and Berger (2009) and Xu et al. (2008). This is corroborated by survey findings, as being a close friend to that person offline is important to respondents. Moreover, 21.8% of respondents indicated that talking to a friend frequently on the SNS would make them influential.

Respondents themselves indicated that the primary factor that would cause them to discuss products with friends on a SNS would be to provide their friends with product information relevant to them (51.3%). This factor was most influential among those in the 18-24 age group. 41% of respondents also outlined that they would do this to voice their opinion. Stephen and Lehman (2009) posit that consumers will discuss products with friends on SNSs as a means of voicing their opinions and survey findings appear to verify this.

SNSs have become an increasingly important means of communication within respondent lives. Furthermore, a fifth of respondents stated that while engaging in conversations with friends, onsite producy comments made by these friends would influence their opinions. Almost 40% of respondents would also discuss products with others onsite if they were of relevance to them. A reciprocal relationship between friends making product comments on SNSs and respondents themselves

making product comments is also evident. Respondents are willing to engage in conversations regarding products on SNSs primarily to provide friends with information that is relevant to them and in order to voice their opinions. Companies must provide relevant messages to SNS users and encourage them to pass on these

messages to others and voice their opinions. If they do take part in these product discussions, others will also be encouraged to do so as part of this reciprocal relationship.

## 5.2.6 Innovator Type and Encouraging Connector Behaviour in SNSs

Survey findings show that there was a significant association between innovator type and searching for company information as a motivation to use SNSs. The early adopter category (28.6%) was most motivated among the innovator types to use SNSs for this reason, followed by innovators (20.8%). Innovator type was also found to influence the number of friends respondents have accumulated on the SNS they are most active on where innovators, early adopters and the early majority show the tendency to accumulate a large number of friends on SNSs. Survey results also indicated that innovators were most likely to make comments to friends on SNSs about products than any other innovator type. Also, those in the early adopter, early majority and late majority categories were most likely to be affected by comments made by friends on SNSs.

In terms of what makes a friend influential on a SNS, innovators are more likely to

view a person who has a large number of friends on the SNS as an influencing factor than all other innovator types and early adopters and innovators are more likely to view a person who provides information to others on the SNS as an influencing factor. Innovators and early adopters are also most likely to discuss products with others to voice their opinions.

In terms of advertisements on SNSs, innovators expressed the view more than the other innovator types that they would prefer to click on advertisements that do not take them to a new web page. Those in the early majority expressed the greatest likelihood to click on advertisements that offer coupons than advertisements that do not, and early adopters and late majority respondents trust advertisements more on SNSs when they are familiar with the advertiser. Innovators also displayed the greatest propensity to visit a company profile page on a SNS.

These findings are important as survey research illustrates that early adopters and innovators have the potential to use SNSs as a means of searching for company information. As the first to try out new products this highlights the potential to use SNSs to reach innovators and encourage them to pass on company messages to others. Survey findings highlight that innovators, early adopters and the early majority have amassed a large number of friends on their SNSs. As innovators are those who are likely to initiate discussions regarding products and companies and this is passed through the successive innovator categories, the WOM potential in relation to products, services and companies using SNSs is apparent. This is further reinforced by the survey that innovators are most likely to make comments to friends on SNSs

about products than any other adoption type, and subsequent adoption categories are most likely to be influenced by these comments.

Nevertheless research highlights that the magic marketing formula has yet to be found. Findings show that innovators are more likely to view a person who has a large number of friends on the SNS as an influencing factor, and early adopters and

innovators are more likely than other adoption types to view a person who provides information to others on the SNS as an influencing factor in product choice. As highlighted in Chapter Four, innovators were among those who had the largest number of friends on their most active SNS. This may indicate that they believe people must have a large number of contacts on their SNS to be influential and provide information to others as they do. These factors should be considered by companies and marketers when they are searching out influencers to initiate discussions regarding products. What must also be considered is that influencers will discuss products in order to voice their opinions and this should also be used to encourage them to engage in WOM behaviour. Also, in order to maintain discussions regarding products and companies among different categories of respondents, eyecatching advertisements could be used. Analysis revealed a statistically significant relationship between innovator type and respondents finding advertisements on SNSs eye-catching. Those is the early majority category found advertisements on SNSs most eye-catching, which could be employed to encourage further WOM regarding products on SNSs and potentially the adoption of such products as argued by Xu et al., (2008). Using advertisements with free offers may be a potential means of

attracting and engaging those in latter innovator categories as highlighted by the research. If advertisements are to be used to target innovators, these should be integrated into content and not take respondents to a new web page. Innovators are also more likely to visit company profile pages than any other group, followed by early adopters. As those who are among the first to try new products, this suggests that it is within the advertisements that they will garner information. These advertising pages should be used to target these categories and encourage them to pass on company messages to voice their opinions. Moreover, these pages should have new and valuable information for these SNS users.

Essentially, the survey research emphasises that connector behaviour can be achieved on SNSs and users can connect to others and connect others they know to one another while also discussing products and services with these users.

#### 5.2.7 Respondents' Most Active SNS

The SNS that respondents were most active on was also found to influence SNS usage among respondents. Findings highlight that a significantly greater proportion of females are more active on Facebook and Twitter than males and males are more active on Linkedin and YouTube than females.

Findings indicated that where respondents were most active on Twitter and YouTube, their friends made negative product comments. This was also the case for respondents making positive and negative comments about products to friends on

SNSs. Where respondents had been most active on MySpace, they were most likely to discuss products with friends on a SNS to pass on that information to a larger number of people. Where respondents were most active on MySpace they were also more likely to find advertisements annoying on this site, yet they were also most likely to trust advertisements on this site. However, where respondents were most active on Linkedin they were more likely to trust advertisements when they were familiar with the advertiser. Those respondents that were most active on Linkedin and Twitter also show a greater propensity to join a group on a SNS. This was also true of the tendency to visit company profile pages. These factors should be taken into consideration when creating marketing messages on SNSs.

### 5.2.8 The Impact of Information Disclosure in Marketing on SNSs

Findings indicate that respondents make a significant amount of personal information available on their SNSs and are largely accurate in the provision of such information. However there are cases where this information, although provided onsite, is inaccurate. For example, 35.1% of respondents have provided inaccurate home address on their SNS. 24.5% have indicated that they like TV shows that they do not actually like. 35.4% and 34.3% of respondents have provided the incorrect political and religious views and 26.3% of respondents have provided the wrong occupation details onsite.

This highlights that SNS users' information onsite, although deemed to hold great potential as a means of targeting consumers (Trusov et al., 2008, Tsai, 2008), can be

inaccurate, resulting in irrelevant advertisements being targeted at SNS users. However, the benefits of using this information to target advertisements at users appears to outweigh the pitfalls, as in the majority of cases the information is accurate.

#### **5.2.9 Privacy in Online Social Networks**

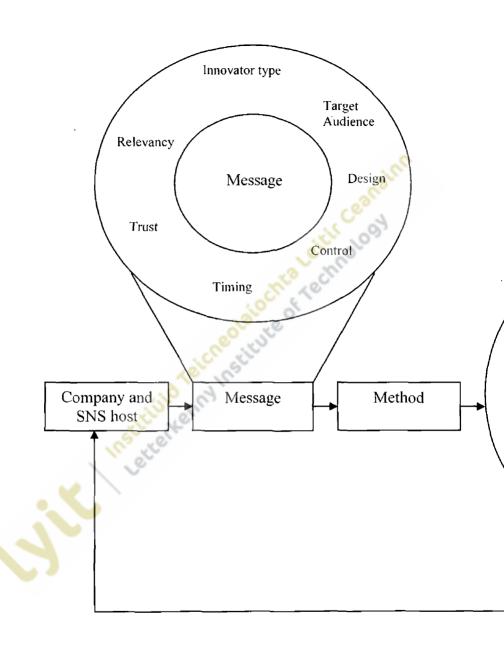
Findings from the focus groups indicated that privacy and safety issues may potentially affect the future of SNSs. Younger users appeared to be less careful onsite and as a result susceptible to a greater number of negative experiences on site as a result of mainly having public profiles and accepting those unknown to them as While educating younger users in relation to privatising profiles, and friends. acknowledging that engaging in safe behaviour onsite is a necessity, as highlighted by focus group proceedings. Research by (Livingstone, 2008, Thierer, 2007, Weiss, 2008), in conjunction with Hinduja and Patchin (2008) and Ybarra and Mitchell (2008), point out that this is not just be confined to younger age groups. Findings suggest that it is gender that had a significant association with respondents having a public or private profile on their SNS and not age, with males more likely to have a public SNS profile than females. Furthermore, as discussed in Chapter Four, respondents in the 35-44 age groups had the most negative experiences on their SNS and those in the 14-17 age group ranked second last with negative experiences on SNSs. As expected, those who had either partially or fully public profiles on their SNSs were subjected to the most negative experiences onsite. Therefore, as a potential factor impacting on the future of SNS education in relation to privacy settings on

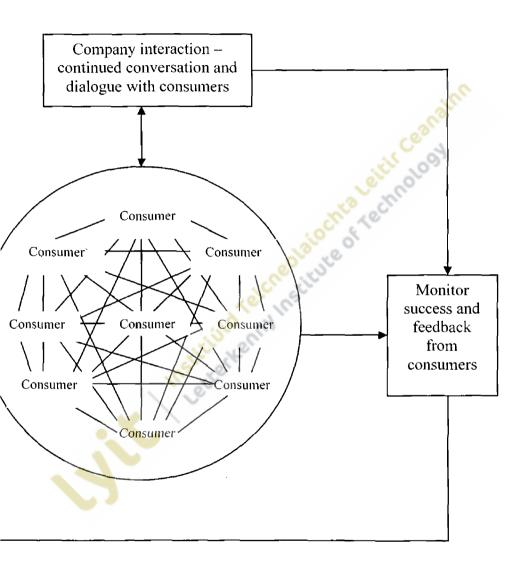
SNSs, the importance of using these settings is increasingly necessary.

# 5.3 SNS Marketing Communications Model

Based on insights from the empirical work undertaken, a marketing communications model is proposed (Figure 5.1). The model seeks to capture how consumers can be effectively approached in this space and to establish how SNSs can be effectively integrated into marketing strategy. This was developed based on a review of the literature and the findings of the research.

Figure 5.1: SNS marketing communications model (following page):





The research identified numerous factors that must be taken into account when developing messages to deliver to consumers on SNSs, including: relevancy, trust, timing, control, target audience and innovator type. Findings show that if marketing messages are to be successful on SNSs they must be relevant to consumers and they must be exposed to them at the right time. Respondents felt that messages were rarely if ever relevant to them and if they were, this was often fortuitous. Messages were seen as relevant to consumers where groups and company profile pages were concerned, as joining and visiting these was something over which one could exercise control. In order to make advertisements more relevant and timely to consumers' needs and wants, research indicated that a proportion of respondents would allow the use of their personal information in order to target advertisements at them. Others stated that they would allow the use of such information under certain circumstances. The type and extent of information used and who has access to it should be made permission-based, that is, under the control of the consumer. This control could also be applied in the context of the amount of advertisements respondents are exposed to, however, survey results suggested that 24% of respondents felt SNSs had become over-commercialised. This was significantly less than was expected arising from the focus group proceedings.

Trust was a primary factor influencing consumer attitudes towards marketing on SNSs. Possible means of increasing respondent trust was to create a familiarity between consumers and a company and use offline media and SNSs in conjunction with one another. A fear of computer viruses also affected respondents' trust in advertisements. Potential means of counteracting this are for SNS hosts to carefully

monitor the sites and help prevent viruses within content. The target audience must also be taken into account, for example, what SNSs they use and what types of marketing they are most susceptible to. Gender and age were factors identified in the literature and the researcher in relation to these issues. When creating messages, the company must also take into account what innovator category or categories they are attempting to reach and tailor messages to suit these. The design of the message itself is also significant and should be of interest and importance to the consumer if they are to engage with it. SNS hosts and companies must work together to ensure the success of marketing messages.

The model then outlines the selection of the delivery method. Taking into account the target audience and its characteristics, the company should determine the most appropriate means of delivering messages to this audience, such as advertisements, groups, profile pages or a combination of these measures.

Once these messages have been delivered, consumers will interact both with them and other consumers in relation to the message. The company itself should play an active role and engage in dialogue with consumers and encourage them to initiate discussions and pass on company messages.

Companies utilising SNSs as marketing tools should continuously monitor the success of marketing messages and monitor comments and conversations in relation to their messages. This should serve as a basis for continuously improving messages, tailoring messages to meet consumer needs and gain the maximum Return on

Investment (ROI) for SNS marketing efforts.

This measurement could include:

- Advertisement impressions
- Advertisement click through rates
- Consumer comments made in relation to the company and its message
- Number of consumers joining the group
- Number of consumers joining the company profile page
- Number of visits to group pages
- Number of visits to company pages
- Consumer recommendations made to friends

In integrating SNS marketing communications into marketing strategy the research illustrated some key points:

• Despite the decreasing effectiveness of traditional advertising (McKinsey & Co., 2006, Rust and Oliver, 1994), marketing strategy should adopt an integrated approach, employing both online and offline media. While the effectiveness of traditional media is decreasing, trust has yet to be established effectively in SNS marketing. 46% of respondents indicated that they trust SNS advertisements more when they have also encountered them offline and 38.1% trust SNS advertisements more when they are familiar with the advertiser. As a result, among the techniques employed to improve trust in

marketing on SNSs should be the use of offline media in conjunction with SNSs while trust in SNS marketing can be effectively established.

- Marketing tactics on SNSs must 'pull' consumers in rather than being
   'pushed' on to them. This too can be achieved through creating more eye catching and less annoying advertisements.
- Traditional means of offline and online marketing cannot simply be applied in SNSs. A different approach must be adopted.
- Acceptance of the source of information by consumers is essential to the success of marketing messages on SNSs.
- Listening to and learning from consumers is essential to the success of marketing messages on SNSs.

### 5.4 Research Limitations

The model proposed by the researcher has yet to be tested. Testing the model would enable its effectiveness to be measured and allow further refinement of the model.

The model also includes measuring the success of marketing efforts on SNSs. However, measuring the success of social media efforts has been highlighted as an area of difficulty. As social media involve conversations, it has been postulated that quantitative measures alone are not enough and qualitative measures must also be employed (Carrabis et al., 2008, Forum One Communications, 2007, Laker, 2008).

Phase two of the research employed an online questionnaire. This was judged to be the most appropriate approach in attempting to answer the research questions; however, the use of an online questionnaire may have limited the quality of responses to certain questions, especially open-ended questions.

The completion of the questionnaire may also have affected the overall response rate.

A response rate of 72.4% is excellent yet may have been even higher and responses gathered more quickly had the questionnaire been more condensed.

The online questionnaire comprised six separate age groups whereas focus group consisted of only four different age groups. The 35+ age group in focus groups was the oldest one conducted and perhaps should have been split into three 35-44, 45-54 and 55+ age groups as with the survey.

## 5.5 Research Reflections

This research has the potential to make a much needed academic, business and marketing contribution to SNS research. The research process was a difficult one due to the lack of extensive research in the area. The process demanded the thorough reviewing of not only SNSs and marketing but the area of SNSs as a whole in order to develop and design an effective research approach. Focus groups and surveys were designed, developed and conducted through an iterative process. The combination of

all of the aspects of the research led to the development of a SNS marketing communications model and guidelines on integrating SNSs effectively into marketing strategy.

The focus groups and online questionnaire were highly successful and gave great insights into the area of SNSs and marketing and how SNSs can be used effectively as a marketing tool.

### 5.6 Suggestions for Further Research

This research focused on the area of consumer usage and attitudes towards marketing on SNSs. A potential area of research to provide a more holistic picture of how SNSs can be used in marketing is to explore the realm of company usage and attitudes towards marketing on SNSs. This could result in the development of a 'best-practice' model based on those companies who have been successful in SNS marketing.

Literature has highlighted that social class may potentially impact on SNS usage in the US (Hare, 2009). Findings from the research here also suggested that social class may impact on SNS usage among Irish consumer, although definitive conclusions could not be drawn. This could prove a potential area for research in the future.

Survey research suggested that innovator type impacts on SNS usage and that the potential to encourage the connector behaviour outlined by Eccelston and Griseri

(2008) does exist. Further research could be conducted on locating influencers and connectors within SNSs in order to investigate their influence on WOM.

As highlighted above, difficultly lies in measuring the success of social media efforts (Carrabis et al., 2008, Forum One Communications, 2007, Laker, 2008). Research in the area would greatly improve company confidence in the use of SNSs as a marketing tool as this would enable the effectively measurement of ROI.

The model developed by the researcher has yet to be applied in practice. Further research could entail testing and applying the model created and refining, adjusting or adapting the model as appropriate.

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# Appendix I: Focus group pre-screening questionnaire

1.	Gender:	Male	Female		
2.	What age category do	you belong to?			
	14 -17	18 – 24		25 - 34	
	35 +			analing	
3.	Do you know what a	social networking si	te is?	Lil Cool	
	Yes	No	Chra	ettir Ceanain	
			Jaiorok		
4.	How would you defin	ne a social networkin	ng site?		
		Trillo any			
		War For			
5.	Have you ever create 9)	d a profile on a socia	al networki	ng site? (If no, go to	o Question
	Yes	No ·			
6.	How many social net	working sites do you	ı have a pro	ofile on:	
	1	2			
	3	> 4			

7.	What social nappropriate be		s have you created a	profile on? Please	tick	
	Bebo	·	Facebook			
	MySpace		YouTube			
	Flickr		Linkedin			
	Twitter		Digg		ic.	
	If other(s), ple	ease state:		Tril Cook		
				STE HOOL		
8.	Why do you	use social netw	orking sites? Please	tick the appropria	te box:	
	Connect with	current friends	S COLONIE	0		
	Connect with	old friends	reich agilt		[	
	Make new fri	ends	orking sites? Please		[	
		Still	- cite			
	To blog	11.01			L	_
	Upload and s	hare photos			[	
	Upload and s	hare videos				
	Search for co	mpany/produc	t/brand information			
	Provide infor	mation to other	rs regarding compan	y/product/brand in	formation	
	If other, pleas	se state:				

Approximately how many friends do you have on your social networking site (s)?	
10. How often would you use social networking sites?:	
Daily 3-5 times a week Twice a week	
Once a week A few times a month Rarely	
11. How long would you smand on go old not woulding sites non visit?	
11. How long would you spend on social networking sites per visit?:	
< 30 minutes 30 minutes to 1 hour 1-3 hours	
3-5 hours 5+ hours	
12. What is the highest level of education (full-time or part-time) which you have completed to date?	
No formal education Primary Education	
Second Level Lower Secondary (Junior Certificate) Upper Secondary (Leaving Certificate)	[
Technical/Vocational Qualification  Both Upper Secondary and Technical/ Vocational Qualification	[
Third Level	ſ
Non Degree Primary Degree	
Professional Qualification Degree and Professional Qualification	[
Postgraduate Certificate/Diploma Postgraduate Degree (Masters)	
Doctorate (Ph.D)	

	Building and Construction		Clerical, Management, Government	
	Communication & Transport		Farming, Fishing, Forestry	
	Manufacturing		Professional, Technical & Health	
	Sales & Commerce		Service Workers	
	Student		Unemployed	
	Other		ocht's Techno	
		. 0	Redaithe of	
14	. Please tick the box which best re	eprese	nts your annual income:	
	Under €15,000	FELLI		
	€15,000 - €24,999			
	€25,000 - €34,999			
	€35,000 - €44,999			
	€45,000 +			

13. What is your occupation? Please tick the appropriate box:

# Appendix II: Focus group opinion sheet

1) What social networking sites do you use?
2) Why do you use these sites?
3) When you use social networking sites, what features do you use. For example, comments, blog, upload photographs?
Mrs Letingle
4) What do you think are the positive features of social networking sites?
10 Inst
illo end
5) What do you feel are the negative features of social networking sites?
6) Do you feel you are more open to people/more careful about what you say on these sites?
7) Do you feel you can be yourself when using these sites?
· · · · · · · · · · · · · · · · · · ·
<u> </u>

8) Have you give example	_	e experience on your socia	al networking site	e? If so, please
9) Do you fe	el social networkin	g sites have become an in	nportant part of s	ocialising?
			anal	
			elticelogy	
10) Please is Would you b	-	ould feel if you couldn't u	se your social ne	etworking site.
Quite Satisified	Somewhat Satisfied	Neither Satisfied or Dissatisfied	Somewhat Dissatisfied	Quite Dissatisfied
		HUILD TO THE		
	10	S. L. Cert		

### Appendix III: Focus group theme sheet

#### Introduction:

Welcome everybody, and thank you for agreeing to take part in the focus group. My name is Sarah and I am a research student at Letterkenny Institute of Technology. I am working on research in the area of social networking sites and marketing. I'm interested in knowing what you think about the types of marketing that are being used on these sites and how it impacts you as a consumer and social networking site user. The results of the research will be used to determine how to effectively market to consumers using these sites. There are no right or wrong answers in this process, so please feel free to be honest and open about your point of view. I'm interested in all your opinions. Before we begin, I'll just tell you a little bit about the process.

The aim of the focus group is to collect information like a researcher does when they ask you to complete a survey. However in the focus group setting, rather than conduct a one to one survey, we discuss various questions and issues as a group where everyone has their say and can discuss these issues with one another. Your identity will remain anonymous in the focus group results so you can express your opinions freely.

The discussion will last about two hours. Everyone will have the opportunity to speak and share their thoughts and feelings and I will guide the discussion.

For the purposes of the research, we would like to record the focus group proceedings. This is purely to analyse the findings thoroughly and this information will be used for the purposes of this research only. If I could get everyone's permission, it would be greatly appreciated.

#### **Questions:**

#### Part 1:

- 1) In general, how familiar are you with online advertising?
- 2) In relation to SNSs, are you aware of the presence of companies and brands on these sites?
- 3) When you see advertisements on SNSs, how do you feel about them?
  - Have you ever joined a company/brand/product appreciation group on SNS's?
  - Have you ever entered a competition on a SNSs?
  - Have you ever used a company/brand/product page as your profile page?
  - Have you ever clicked through advertisements on SNSs?
  - Have you ever added a company/brand/product as a "friend" on your SNS?
  - Have you ever completed a quiz or poll in relation to a company/brand/product on a SNS?
- 4) When using your SNSs, are there any types of advertising that have annoyed you?
- 5) When using your SNSs, are there any types of advertising that you found very interesting and liked?
- 6) Do you find that advertisements on SNS's are relevant to you as a person?
- 7) At times, users of SNSs create and post their own videos and content on SNSs, known as user generated content. This can often incorporate the use of company products and brands. How do you feel about this user generated content?
- 8) Have you ever found certain advertisements on SNSs to be insulting?

- 9) Would you regard it as an invasion of your privacy if companies used your profile information (age, gender, interests, status updates, special interest groups etc) to provide you with advertisements that are more relevant to you?
- 10) Would you accept advertisements more readily and in a greater number if they are more relevant to you?
- 11) Would you disclose more personal information to SNSs or companies if it meant that you would be exposed to advertisements that are better suited to you?
- 12) Essentially SNSs sites are a place where you can connect with friends and others. Within this, would recommendations and comments of friends affect your feelings and opinions towards a company, brand or product?
- 13) Can you think of any ways companies could better grab your attention on SNSs?
- 14) A brand community is an online community whereby members join to discuss a particular company, brand or product. Have you ever joined a brand community?

#### Part 2:

1) Do you use social networking sites such as Bebo, Facebook, YouTube? 2) Why do you use social networking sites? 3) What were your main reasons for choosing to use the social networking sites you currently use? 4) How often would you use social networking sites? 5) How much time would you tend to spend on your social networking site per visit? 6) Where do you access these sites from? 7) When you are using these sites, what features do you use? 8) How many friends do you have on your SNS? 9) What do you think are the positive features of social networking sites? 10) What do you think are the negative features of social networking sites? 11) Do you feel you act/behave differently on these sites, than you would in person? 12) Are your SNS profiles public or private? 13) Do you feel social networking sites have become an important part of socialising? 14) If you couldn't use social networking sites anymore, how would it make you feel? 15) Do you anticipate an increase or decrease in the usage and types of these sites in the future? -

16) Do you feel that social networking sites have become an "addiction" of sorts?

That's great everybody. Thank you for all your time and effort. You've been a great help.

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### Appendix IV: Questionnaire

This survey in Appendix IV was constructed using online survey creation service <a href="https://www.surveymonkey.com">www.surveymonkey.com</a>. The service provides a link to the survey which was posted on groups on SNSs created for the purpose of the research. Respondents were then taken to a site to fill out the survey. Respondents were encouraged to pass on the survey link to other SNS users and invite them to join these groups that had been created for the purposes of the survey.

#### Cover Piece

Thank you for taking the time to take part in this survey. I am a student at the Letterkenny Institute of Technology doing a research masters in the area of social networking sites and your participation in helping me with my research is greatly appreciated. This survey is for academic use only and is completely confidential. The results of the survey will be used only for my thesis and potential academic publications and again, your identity will never be revealed.

When results have been analysed, I can send you a summary of the findings to highlight how you have contributed to my research. If you wish to have this summary sent to you, please enter your email address below:

Again, thank you for filling out the survey and playing such an important role in allowing me to complete my research.

r
Please answer the following questions in order to establish your eligibility for the survey:
1. Do you reside in the Republic of Ireland?
Yes No
If no, respondents are notified that they are not eligible for the survey.
2. Have you ever created a profile on a social networking site?
Yes No
If no, respondents are notified that they are not eligible for the survey.
3. What age category do you belong to?
<14
55+
If respondents select < 14 they are notified that they are not eligible for the survey.
4. When was the last time you accessed your profile on a social networking site?
1-7 days 8-14 days 15-30 days
1 – 3months
5. What is your gender?
J. What is your gender!
Male Female

Qualifying questions:

one box only)
1. No formal education
2. Primary education
3. Secondary education
4. Primary Degree
5. Postgraduate Degree/Masters
6. Ph. D or higher
analin
7. What is (was)* your occupation in your main job?
7. What is (was)* your occupation in your main job?
* If you are unemployed or retired, please state former occupation.
Please describe the occupation fully and precisely giving the full job title.
Use precise terms such as: Retail store manager Secondary teacher Electrical engineer  Do not use general terms such as: Manager Teacher Engineer
• If you are under 18 or dependent on your parents, please select the occupation of the primary earner in your household.
Occupation:
If a farmer or farm worker, write in the SIZE of the farm: hectares

## Questionnaire

## Section 1: Using Social Networking Sites

(Please select the appropriate box)	bes you in terms of purchasing products
'I usually try new products as soon as the	ey enter the market'
'I try new products before most people'	
'I try new products when they have been	recommended by others'
'I try new products after the majority of p	people have already tried them'
'I rarely try new products'	Ceanain
2.a. How many social networking sites have you	ever created a profile on?
1	the rechne
2	alaid of the
3	ERIFUL
4 or more	ever created a profile on?
2.b. What social networking sites have you ever	
Total State of the	
Bebo Fac	ebook
MySpace You	aTube
Flickr Lin	kedin
Twitter Dig	g .
Others	
If others, please specify:	

days?	w many or u	ilese social i	iletworking s	nes have you been a	etive on in the last 50
·	0				
	1				
	2				
	3				
	4 or more				
2.d. What app		tworking sit	tes have you	been active on in the	e last 30 days? (Select all
	Bebo			Facebook	(C) (3)
	MySpace			YouTube	10
	Flickr			Linkedin	
	Twitter			Linkedin Digg	
	Others		1	I luger	
If other	rs, please spe	ecify:	THILL CO.	63	
2.e. W	hat social ne	tworking sit	e have you b	een most active on i	n the last 30 days?
	Bebo			Facebook	
	MySpace			YouTube	
	Flickr			Linkedin	
	Twitter			Digg	
	Other				
If other	r, please spec	cify:			

3. Why do you use the social networking sites you have created a profile on? that apply)	(Select all
To connect with current friends	
To connect with old friends	
To make new friends	
To blog	
To share photographs	
To share videos	
To search for company information	
To search for product information	
To search for company information  To search for product information  To provide information to others regarding companies	
To provide information to others regarding products	
Other	
If other, please specify:	
4. Taking the social networking site you are most active on, in the last 7 days many days did you use that site?	on how
0	
1	
2	
3	
4	
5	
6	
7	

5. Taking the social networking site you are most active on, how long did you spend on your last visit?						
< 30 minutes						
30 minutes – 59 minutes	-					
1-3 hours						
> 3 hours						
6. Taking the social networking s friends do you have?	_					any
· < 50				anain		
50-99			115	Cean		
100-199			Letter	Olo		
200-299		iochi	4700		•	
300+	che	Crititie,				
<ul> <li>&lt; 50</li> <li>50-99</li> <li>100-199</li> <li>200-299</li> <li>300+</li> <li>7. Taking the social networking site you are most active on, please indicate how strongly you agree or disagree with each of statements below by using the following scale: (Please select the appropriate box)</li> <li>1 = Strongly Disagree</li> <li>2 = Disagree</li> <li>3 = Neither Agree nor Disagree</li> <li>4 = Agree</li> <li>5 = Strongly Agree</li> </ul>						
		1	2	3	4	5
		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a. 'This social networking site ha important method of commun me'						
b. 'I feel there is pressure to accunumber of friends on this social	<del>-</del>	site,				

c. 'This social networking site has become over- commercialised'
8. Taking the social networking site you are most active on, is your profile public or private?
Completely public
Completely private
A mix of public and private
Do not know
ceanain.
9. If you have had a negative experience on any social networking site, what was this in relation to? (Select all that apply)
Bullying
Online predators
Viruses
Identity theft Other
If other, please specify:
I have never had a negative experience

10. Taking the social networking site you are most active on, is the following personal information you provide on your profile accurate? (Where you have not made this information available on your social networking site, please select **not applicable**)

	Yes	No	Not Applicable
Name			
Gender			
Date of birth			
Status updates			
Home address			
Current location			
Relationship status			e noto
Activities			ochre lee
Interests		0/2	och (10
Music liked		e Coul	
TV shows liked	فانناه	CC3	
Movies liked	Co. Horn		
Books liked	As .		
Education			
Political views			
Religious views			
Email			
Phone number			
Occupation			

## Section 2: Companies and Products on Social Networking Sites

1. Taking the social networking site you are most you agree or disagree with each of the statements (Please select the appropriate box)		-			
1 = Strongly Disagree 2 = Disagree 3 = Neither Agree nor Disagree 4 = Agree					
5 = Strongly Agree	1	2	3	4	5
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a. 'I notice advertisements on this site'			6300		
b. 'I like the presence of advertisements on this sit	te'		2007		
c. 'I find advertisements are relevant to me on this site'					
d. 'I find advertisements annoying on this site'		0.			
e. 'I do not trust advertisements on this site'					
f. 'Advertisements on this site are boring'					
g. 'Advertisements on this site are eye-catching'					
2. Have you ever clicked on an advertisement on a	a social	network	ing site?		
Yes No					
If no, please go to question 4.					

3. In relation to the last advertisement you clicked on this? (Select all those that apply)	, what was your reason for doing
It was eye-catching	
It was relevant to me	
A friend recommended it	
I was familiar with the company	
I trusted it	
It was something I wanted at that time	
Other	analin.
If other, please specify:	XX Const
Please go to question 6	this Leithold
4. Why have you not clicked through on any advertis	ements? (Select all that apply)
They were not relevant to me	
They were annoying	
I did not notice them	
I was not there to look for advertisements	
I was afraid of computer viruses	
I did not trust them	
It was not something I wanted at that time	
Other	
If other, please specify:	
5. Have any advertisements on a social networking sthe product being advertised?  Yes  No	site led you to find out more about

6. Taking the social networking sites you are fan you agree or disagree with each of the statement (Please select the appropriate box)					
<ul> <li>1 = Strongly Disagree</li> <li>2 = Disagree</li> <li>3 = Neither Agree nor Disagree</li> <li>4 = Agree</li> <li>5 = Strongly Agree</li> </ul>					
	1	2	3	4	5
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a. 'I prefer to click on advertisements that do not take me to a new web page'			cent		
b. 'I am more likely to click on advertisements that offer free products rather than those that onot'	do	N COUNTY	101003		
c. 'I am more likely to click on advertisements that offer free trials rather than those that do n	ot'				
d. 'I am more likely to click on advertisements that offer me coupons rather than those that d not'	lo 🗌				
e. 'I trust advertisements more on social networking sites when I am familiar with the advertiser'					
f. 'I trust advertisements more when I have also encountered them offline (for example, on TV radio or in magazines).	v, 🗌				

7. Would you allow your personal profile information to be used to provide you wi advertisements that are more relevant to you? (Select all that apply)	th
No, not under any circumstances	
Yes, no problem.	
If I can control the type of profile information used	
If I can control the type of companies that can use my profile information	
If I can stop the use of such profile information by companies when I want	
If I can control the amount of advertising I am exposed to	
If 'no, not under any circumstances' and 'yes, no problem', go to question 9.	
8. What kind of personal profile information would you allow to be used by compar (Select all that apply)	nies?
My demographics (for example age, gender, education, relationship status)	
Profile (for example interests, status updates, views)	
Contact information (for example email, phone number, postal address)	
Groups I have joined	
Friends I have	
Photographs I have shared	
Videos I have shared	
Music I have shared	
Blog postings I have written	
Comments I have made	
Other	
If other, please specify:	

A. Have you ever joined a group on a social networking site?
Yes No
f no, please go to question 11.
10. 'The last group I joined on a social networking site was because': (Select all that apply)
It was interesting
It was relevant to me
It provided me with information on my interests
Taking part in it was under my control
I could add my own opinions to the group
I could talk to others with the same interests as me
It was recommended to me by a friend
Other
f other, please specify:
Ingritial Vent
1. Have you ever visited a company profile page on a social networking site?
Yes No
f no, please go to section 3.

(Select all that apply)	i a social networking site occause
It was interesting	
It was relevant to me	
It provided me with information about that com	pany
Taking part in it was under my control	
I could add my own opinions to the page	
I could talk to others in relation to the company	
I could talk to the company itself on these page	s
It was recommended to me by a friend	TRICON .
Other	Ta Stude
If other, please specify:	40
If other, please specify:	TITION TONECLATOCHTA  STANDARIANIANIANIANIANIANIANIANIANIANIANIANIANI

## Section 3: Social Networking Sites and Your Friends

by using the following scale: (Please select the appro	priate bo	ox)			
<ul> <li>1 = Strongly Disagree</li> <li>2 = Disagree</li> <li>3 = Neither Agree nor Disagree</li> <li>4 = Agree</li> <li>5 = Strongly Agree</li> </ul>		0	2	4	_
	1	2	3	4	5
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a. 'My friends talk about products on social networking sites'		Ces	03		
b. 'My friends make positive comments about products on social networking sites'	This s	ecico <sup>lio</sup>			
c. 'Comments made by my friends about products on social networking sites affect my opinions'	or or				
d. 'My friends make negative comments about products on social networking sites'					
e. 'I have made comments to my friends on social networking sites about products'					
f. 'I make positive comments about products on social networking sites'					
g. 'I would make comments to friends about products on social networking sites if it was of interest to them'					
h. 'I make negative comments about products on social networking sites'					

1. Please indicate how strongly you agree or disagree with each of the statements below

2. What do you think makes a friend influential regarding products on a social networking site? (Select all those that apply)	
When they have a large number of friends on the social networking site	
When I have met them before in person	
When they are a close friend offline	
When they are members of my family	_
When I talk to that friend frequently on the social networking site	_
When that friend provides information to others on the social networking site	
Other	
If other, please specify:	
3. Which of the following factors would cause you to discuss products with friends on a social networking site? (Select all those that apply)  To voice my opinion  To provide my friends with product information relevant to them  To gain product information in return	
To pass on that product information to a large number of people	
Other	
If other, please specify:	

Thank you for taking the time to complete this survey.

## Appendix V: Development of survey sampling frame

## Market share and weighted average of SNSs in the Republic of Ireland:

SNS	Total Estimated Accounts Created	Estimated Market Share (%)	Weighted Average
YouTube	273,000	9.83	.0983
Facebook	1,049,000	37.76	.3776
Bebo	850,000	30.6	.306
MySpace	300,000	10.8	.108
Flickr	165,000	5.94	.0594
Twitter	117,000	4.21	.0421
Linkedin	24,000	.86	.0086
Total	2,778,000	100	1

## Weighted Average Calculations:

Gender:

Male:

 $(50 \times .0983) + (43 \times .3776) + (32 \times .306) + (36 \times .108) + (45 \times .0594) + (43 \times .0421) + (50 \times .0086)$ 

Female:

 $(50 \times .0983) + (57 \times .3776) + (68 \times .306) + (64 \times .108) + (55 \times .0594) + (57 \times .0421) + (50 \times .0086)$ 

1

=60%

Age Group:

0-17:

 $(20 \times .0983) + (18 \times .3776) + (45 \times .306) + (34 \times .108) + (13 \times .0594) + (11 \times .0421) + (3 \times .0086)$ 

1

= 28%

18-24:

 $(14 \times .0983) + (7 \times .3776) + (7 \times .306) + (7 \times .306) + (10 \times .108) + (9 \times .0594) + (8 \times .0421) + (3 \times .0086)$ 

1

= 8%

25-34:

 $(22 \times .0983) + (14 \times .3776) + (9 \times .3086) + (12 \times .108) + (19 \times .0594) + (16 \times .0421) + (16 \times .0086)$ 

1

= 13%

35-44:

 $(16 \times .0983) + (20 \times .3376) + (14 \times .3086) + (19 \times .108) + (21 \times .0594) + (21 \times .0421) + (28 \times .0086)$ 

1

= 18%

45-54:

 $(14 \times .0983) + (25 \times .3776) + (17 + .3086) + (19 \times .108) + (21 \times .0594) + (21 \times .0421) + (28 \times .0086)$ 

1

=21%

55+

 $(14 \times .0983) + (16 \times .3776) + (8 \times .3086) + (9 \times .108) + (14 \times .0594) + (14 \times .0421) + (20 \times .0086)$ 

1

= 12%

#### SNS usage by gender:

SNS	Males	Female	
YouTube	50%	50%	-11
Facebook	43%	57%	. <u> </u>
Bebo	32%	68%	
MySpace	36%	64%	
Flickr	45%	55%	

Twitter	43%	57%	
Linkedin	50%	50%	
Average %	43	57	
Weighted Average%	40	60	

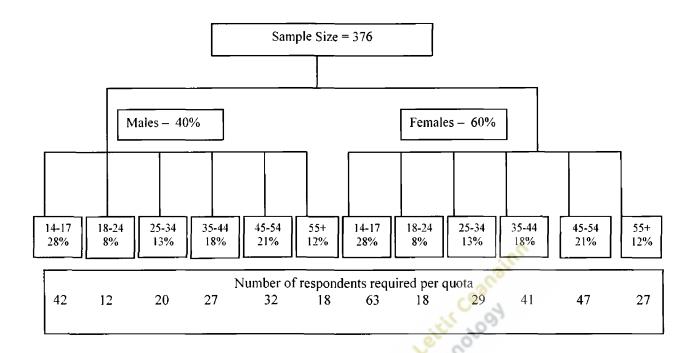
# The percentage of users of the top SNSs in the Republic of Ireland by age

						•	
SNS	0-17	18-24	25-34	35-44	45-54	55+	Total
Youtube (%)	20	14	22	16	14	14	100
Facebook (%)	18	7	14	20	25	16	100
Bebo	45	7	tilida enny	14	17	8	100
MySpace (%)	34	10	12	16	19	9	100
Flickr	13	9	19	24	21	14	100
Twitter	11	8	16	30	21	14	100
Linkedin	3	3	16	30	28	20	100

Average %	20.57	8,29	15.43	21.43	20.71	13.57	100
eighted Average%	28	8	13	18	21	12	100_

# Total sample size:

Quota: Gender	-	Male	40%
		Female	60%
			anain
Quota: Age	-	14-17	28% 8% 13%
	·	18-24	8%
		25-34	13%
		35-44	18%
		45-54	21%
		55+	12%



# Appendix VI: Hypotheses developed for detailed statistical analysis of survey responses

### Hypotheses - Respondents Profile

H0: There is no association between age and innovator type.

H1: There is an association between age and innovator type.

H0: There is no association between gender and innovator type.

H2: There is an association between gender and innovator type.

H0: There is no association between social class and profile last accessed.

H3: There is an association between social class and profile last accessed.

H0: There is no association between social class and innovator type.

H4: There is an association between social class and innovator type.

#### Hypotheses - Consumer Behaviour on SNSs

H0: Searching for company information as a motivation to use SNSs is not affected by gender.

H05: Searching for company information as a motivation to use SNSs is affected by gender.

H0: Searching for product information as a motivation to use SNSs is not affected by gender.

H06: Searching for product information as a motivation to use SNSs is affected by gender.

H0: Providing company information as a motivation to use SNSs is not affected by gender.

H07: Providing company information as a motivation to use SNSs is affected by gender.

H0: Providing product information as a motivation to use SNSs is not affected by gender.

H08: Providing product information as a motivation to use SNSs is affected by gender.

H0: Searching for company information as a motivation to use SNSs is not affected by age.

H09: Searching for company information as a motivation to use SNSs is affected by age.

H0: Searching for product information as a motivation to use SNSs is not affected by age.

H10: Searching for product information as a motivation to use SNSs is affected by age.

H0: Providing company information as a motivation to use SNSs is not affected by age.

H11: Providing company information as a motivation to use SNSs is affected by age.

H0: Providing product information as a motivation to use SNSs is not affected by age.

H12: Providing product information as a motivation to use SNSs is affected by age.

H0: Searching for company information as a motivation to use SNSs is not affected by innovator type.

H13: Searching for company information as a motivation to use SNSs is affected by innovator type.

H0: Searching for product information as a motivation to use SNSs is not affected by innovator type.

H14: Searching for product information as a motivation to use SNSs is affected by innovator type.

H0: Providing company information as a motivation to use SNSs is not affected by innovator type.

H15: Providing company information as a motivation to use SNSs is affected by innovator type.

H0: Providing product information as a motivation to use SNSs is not affected by innovator type.

H16: Providing product information as a motivation to use SNSs is affected by innovator type.

H0: The number of SNSs respondents had been active on in the last 30 days is not affected by gender.

H17: The number of SNSs respondents had been active on in the last 30 days is affected by gender.

H0: The number of SNSs respondents had ever been active on in the last 30 days is not affected by age.

H18: The number of SNSs respondents had ever been active on in the last 30 days is affected by age.

H0: There is no association between gender and the SNS respondents had been most active on in the last 30 days.

H19: There is an association between gender and the SNS respondents had been most active on in the last 30 days.

H0: There is no association between age and the SNS respondents had been most active on in the last 30 days.

H20: There is an association between age and the SNS respondents had been most active on in the last 30 days.

H0: There is no association between gender and the number of days in the last 7 days respondents used the SNS they are most active on.

H21: There is an association between gender and the number of days in the last 7 days respondents used the SNS they are most active on.

H0: There is no association between age and the number of days in the last 7 days respondents used the SNS they are most active on.

H22: There is an association between age and the number of days in the last 7 days respondents used the SNS they are most active on.

H0: The time respondents spent on their last visit to the SNS they are most active on is not affected by gender.

H23: The time respondents spent on their last visit to the SNS they are most active on is affected by gender.

H0: The time respondents spent on their last visit to the SNS they are most active on is not affected by age.

H24: The time respondents spent on their last visit to the SNS they are most active on is affected by age.

H0: There is no association between the time respondents spent on their last visit to the SNS they are most active on and the number of days in the last 7 days respondents used the SNS they are most active on.

H25: There is an association between the time respondents spent on their last visit to the SNS they are most active on and the number of days in the last 7 days respondents used the SNS they are most active on.

## Hypotheses - 'Friending' in Online Social Networks

H0: Gender has no affect on the number of friends respondents have on their most active SNS.

H26: Gender has an affect on the number of friends respondents have on their most active SNS.

H0: Age has no affect on the number of friends respondents have on their most active SNS.

H27: Age has an affect on the number of friends respondents have on their most active SNS.

H0: There is no association between the number of friends respondents have accumulated on their most active SNS and the SNS respondents were most active on in the last 30 days.

H28: There is an association between the number of friends respondents have accumulated on their most active SNS and the SNS respondents were most active on in the last 30 days.

H0: There is no association between innovator type and the number of friends respondents have accumulated on the SNS they are most active on.

H29: There is an association between innovator type and the number of friends respondents have accumulated on the SNS they are most active on.

H0: The pressure felt by respondents to accumulate a large number of friends on the SNS they are most active on is not affected by gender.

H30: The pressure felt by respondents to accumulate a large number of friends on the SNS they are most active on is affected by gender.

H0: The pressure felt by respondents to accumulate a large number of friends on the SNS they are most active on is not affected by age.

H31: The pressure felt by respondents to accumulate a large number of friends on the SNS they are most active on is affected by age.

H0: The pressure felt by respondents to accumulate a large number of friends on the SNS they are most active on is not affected by the number of friends respondents have accumulated on the SNS they are most active on.

H32: The pressure felt by respondents to accumulate a large number of friends on the SNS they are most active on is affected by the number of friends respondents have accumulated on the SNS they are most active on.

H0: There is no association between gender and respondents friends making negative product comments on SNSs.

H33: There is an association between gender and respondents friends making negative product comments on SNSs.

H0: There is no association between age and friends making positive product comments on SNSs.

H34: There is an association between age and friends making positive product comments on SNSs.



H0: Respondents making comments to friends on social networking sites about products is not affected by age.

H35: Respondents making comments to friends on social networking sites about products is affected by age.

H0: Respondents making positive comments about products on SNSs is not affected by age.

H36: Respondents making positive comments about products on SNSs is affected by age.

H0: Respondents making negative comments about products on SNSs is not affected by age.

H37: Respondents making negative comments about products on SNSs is affected by age.

H0: There is no association between innovator type and respondents friends talking about products on SNSs.

H38: There is an association between innovator type and respondents friends talking about products on SNSs.

H0: There is no association between innovator type and respondents making comments about products to friends on SNSs.

H39: There is an association between innovator type and respondents making comments about products to friends on SNSs.

H0: Respondents friends discussing products on SNSs is not affected by the SNS respondents had been most active on in the last 30 days.

H40: Respondents friends discussing products on SNSs is affected by the SNS respondents had been most active on in the last 30 days.

H0: Respondents friends making positive product comments on SNSs are not affected by the SNS respondents had been most active on in the last 30 days.

H41: Respondents friends making positive product comments on SNSs are affected by the SNS respondents had been most active on in the last 30 days.

H0: Respondents friends making negative product comments on SNSs are not affected by the SNS respondents had been most active on in the last 30 days.

H42: Respondents friends making negative product comments on SNSs are affected by the SNS respondents had been most active on in the last 30 days.

H0: Respondents making positive comments to Friends about Products on SNSs is not affected by the SNS respondents had been most active on in the last 30 days.

H43: Respondents making positive comments to Friends about Products on SNSs is affected by the SNS respondents had been most active on in the last 30 days.

H0: Respondents making negative comments to Friends about Products on SNSs is not affected by the SNS respondents had been most active on in the last 30 days.

H44: Respondents making negative comments to Friends about Products on SNSs is affected by the SNS respondents had been most active on in the last 30 days.

H0: There is no association between the number of friends respondents have on the SNS they are most active on and friends discussing products with others on SNSs H45: There is association between the number of friends respondents have on the SNS they are most active on and friends discussing products with others on SNSs

H0: There is no association between the number of friends respondents have on the SNS they are most active and respondent's friends making positive product comments on SNSs.

H46: There is an association between the number of friends respondents have on the SNS they are most active and respondent's friends making positive product comments on SNSs.

H0: There is no association between the number of friends respondents have on the SNS they are most active and respondent's friends making negative product comments on SNSs.

H47: There is an association between the number of friends respondents have on the SNS they are most active and respondent's friends making negative product comments on SNSs.

H0: There is no association between the number of friends respondents have on their most active SNS and respondents making comments to friends about products on SNSs. H48: There is an association between the number of friends respondents have on their most active SNS and respondents making comments to friends about products on SNSs.

H0: There is no association between the number of friends respondents have on their most active SNS and respondents making positive product comments on SNSs.

H49: There is an association between the number of friends respondents have on their most active SNS and respondents making positive product comments on SNSs.

H0: There is no association between the number of friends respondents have on the SNS they are most active and respondents making negative product comments on SNSs.

H50: There is an association between the number of friends respondents have on the SNS they are most active and respondents making negative product comments on SNSs.

H0: There is no association between gender and the influence of product comments made by friends on SNSs on respondent opinions.

H51: There is an association between gender and the influence of product comments made by friends on SNSs on respondent opinions.

H0: There is no association between age and the influence of product comments made by friends on SNSs on respondent opinions.

H52: There is an association between age and the influence of product comments made by friends on SNSs on respondent opinions.

H0: There is no association between innovator type and the influence of product comments made by friends on SNSs on respondent opinions.

H53: There is an association between innovator type and the influence of product comments made by friends on SNSs on respondent opinions.

H0: There is no association between the SNS respondents were most active on in the last 30 days and the influence of product comments made by friends on SNSs on respondent opinions.

H54: There is an association between the SNS respondents were most active on in the last 30 days and the influence of product comments made by friends on SNSs on respondent opinions

H0: There is no association between the number of friends respondents have on the SNS they are most active and the influence of product comments made by friends on SNSs on respondent opinions.

H55: There is an association between the number of friends respondents have on the SNS they are most active and the influence of product comments made by friends on SNSs on respondent opinions.

H0: Gender does not affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H56: Gender affects the propensity of respondent to make comments to friends about products on SNSs if that product was of interest to them.

H0: Age does not affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H57: Age does affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H0: Innovator type does not affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H58: Innovatory type does affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H0: The SNS respondents were most active on in the last 30 days does not affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H59: The SNS respondents were most active on in the last 30 days does affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H0: The number of friends respondents have on their most active SNS does not affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H60: The number of friends respondents have on their most active SNS does affect the propensity of respondents to make comments to friends about products on SNSs if that product was of interest to them.

H0: Respondents talking on SNSs is not affected by their friends talking about products on SNSs, their friends making positive comments about products on SNSs and their friends making negative comments about products on SNSs.

H61: Respondents talking on SNSs is affected by their friends talking about products on SNSs, their friends making positive comments about products on SNSs and their friends making negative comments about products on SNSs.

H0: Respondents talking on SNSs is not affected by their friends making positive comments about products on SNSs and their friends making negative comments about products on SNSs.

H62: Respondents talking on SNSs is affected by their friends making positive comments about products on SNSs and their friends making negative comments about products on SNSs.

H0: 'When that friend provides information to others on the social networking site' as a factor that makes friends influential on SNSs is not affected by age.

H63: 'When that friend provides information to others on the social networking site' as a factor that makes friends influential on SNSs is affected by age.

H0: 'When they have a large number of friends on the social networking site' as a factor that makes friends influential on SNSs is not affected by innovator type.

H64: 'When they have a large number of friends on the social networking site' as a factor that makes friends influential on SNSs is affected by innovator type.

H0: 'When they are a close friend offline' as a factor that makes friends influential on SNSs is not affected by innovator type.

H65: 'When they are a close friend offline' as a factor that makes friends influential on SNSs is affected by innovator type.

H0: 'When that friend provides information to others on the social networking site' as a factor that makes friends influential on SNSs is not affected by innovator type.

H66: 'When that friend provides information to others on the social networking site' as a factor that makes friends influential on SNSs is affected by innovator type.

H0: 'To provide my friends with product information relevant to them' as a factor that causes respondents to discuss products with friends on SNSs is not affected by age.

H67: 'To provide my friends with product information relevant to them' as a factor that causes respondents to discuss products with friends on SNSs is affected by age.

H0: 'Other' as a factor that causes respondents to discuss products with friends on SNSs

is not affected by age.

H68: 'Other' as a factor that causes respondents to discuss products with friends on SNSs

is affected by age.

H0: 'To voice my opinion' as a factor that causes respondents to discuss products with

friends on SNSs is not affected by innovator type.

H69: 'To voice my opinion' as a factor that causes respondents to discuss products with

friends on SNSs is affected by innovator type.

H0: 'To pass on that product information to a large number of people' as a factor that

causes respondents to discuss products with friends on SNSs is not affected by the SNS

respondents were most active on in the last 30 days.

H70: 'To pass on that product information to a large number of people' as a factor that

causes respondents to discuss products with friends on SNSs is affected by the SNS

respondents were most active on in the last 30 days.

Hypotheses – Consumer attitudes towards marketing on SNSs

H0: Gender does not affect respondents noticing advertisements on SNSs.

H71: Gender does affect respondents noticing advertisements on SNSs.

H0: Age does not affect respondents noticing advertisements on SNSs.

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H72: Age does affect respondents noticing advertisements on SNSs.

H0: Innovator type does not affect respondents noticing advertisements on SNSs.

H73: Innovator type does affect respondents noticing advertisements on SNSs.

H0: Most active SNS does not affect respondents noticing advertisements on SNSs.

H74: Most active SNS does affect respondents noticing advertisements on SNSs.

H0: Respondents liking the presence of ads on SNSs is not affected by age.

H75: Respondents liking the presence of ads on SNSs is affected by age.

H0: Respondents finding advertisements relevant to them on SNSs are not affected by age.

H76: Respondents finding advertisements relevant to them on SNSs are affected by age.

H0: Respondents finding advertisements annoying on SNSs is not affected by age.

H77: Respondents finding advertisements annoying on SNSs is affected by age.

H0: Respondents trust in advertisements on SNSs is not affected by age.

H78: Respondents trust in advertisements on SNSs is affected by age.

H0: Respondents finding advertisements boring on SNSs is not affected by age.

H79: Respondents finding advertisements boring on SNSs is affected by age.

H0: Respondents feeling that advertisements on SNSs are relevant to them on SNSs is not affected by innovator type.

H80: Respondents feeling that advertisements on SNSs are relevant to them on SNSs is affected by innovator type.

H0: Respondents finding advertisements annoying on SNSs is not affected by the SNS they were most active on in the last 30 days.

H81: Respondents finding advertisements annoying on SNSs is affected by the SNS they were most active on in the last 30 days.

H0: Respondents trust in advertisements on SNSs is not affected by the SNS they were most active on in the last 30 days.

H82: Respondents trust in advertisements on SNSs is affected by the SNS they were most active on in the last 30 days.

H0: Respondents finding advertisements boring on SNSs is not affected by the SNS they were most active on in the last 30 days.

H83: Respondents finding advertisements boring on SNSs is affected by the SNS they were most active on in the last 30 days.

H0: Gender does not affect respondent opinions that advertisements on SNSs are eyecatching.

H84: Gender does affect respondent opinions that advertisements on SNSs are eyecatching.

H0: Age does not affect respondent opinions that advertisements on SNSs are eyecatching.

H85: Age does affect respondent opinions that advertisements on SNSs are eye-catching.

H0: Innovator type does not affect respondent opinions that advertisements on SNSs are eye-catching.

H86: Innovator type does affect respondent opinions that advertisements on SNSs are eye-catching.

H0: The SNS respondents were most active on does not affect respondent opinions that advertisements on SNSs are eye-catching.

H87: The SNS respondents were most active on does affect respondent opinions that advertisements on SNSs are eye-catching.

H0: Over-commercialisation on SNSs is not affected by respondents feeling advertisements are annoying, boring and not trustworthy on SNSs.

H88: Over-commercialisation on SNSs is affected by respondents feeling advertisements are annoying, boring and not trustworthy on SNSs.

H0: Respondents thinking advertisements are annoying on SNSs is not affected them feeling that advertisements are boring and untrustworthy.

H89: Respondents thinking advertisements are annoying on SNSs is not affected them feeling that advertisements are boring and untrustworthy.

H0: Clicking on advertisements on SNSs is not affected by gender.

H90: Clicking on advertisements on SNSs is affected by gender.

H0: Clicking on advertisements on SNSs is not affected by age.

H91: Clicking on advertisements on SNSs is affected by age.

H0: Clicking on advertisements on SNSs is not affected by innovator type.

H92: Clicking on advertisements on SNSs is affected by innovator type.

H0: Clicking on advertisements on SNSs is not affected by the SNS respondents were most active on in the last 30 days.

H93: Clicking on advertisements on SNSs is affected by the SNS respondents were most active on in the last 30 days.

H0: There is no association between gender and preference to click on advertisements that do not take respondents to a new web page.

H94: There is an association between gender and preference to click on advertisements that do not take respondents to a new web page.

H0: There is no association between gender and preference to click on advertisements that offer free products than those that do not.

H95: There is an association between gender and preference to click on advertisements that offer free products than those that do not.

H0: There is no association between gender and preference to click on advertisements that offer free trials than those that do not.

H96: There is an association between gender and preference to click on advertisements that offer free trials than those that do not.

H0: There is no association between gender and preference to click on advertisements that offer coupons than those that do not.

H97: There is an association between gender and preference to click on advertisements that offer coupons than those that do not.

H0: There is no association between age and preference to click on advertisements that do not take respondents to a new web page.

H98: There is an association between age and preference to click on advertisements that do not take respondents to a new web page.

H0: There is no association between age and preference to click on advertisements that offer free products than those that do not.

H99: There is an association between age and preference to click on advertisements that offer free products than those that do not.

H0: There is no association between age and preference to click on advertisements that offer free trials than those that do not.

H100: There is an association between age and preference to click on advertisements that offer free trials than those that do not.

H0: There is no association between age and preference to click on advertisements that offer coupons than those that do not.

H101: There is an association between age and preference to click on advertisements that offer coupons than those that do not.

H0: There is no association between innovator type and preference to click on advertisements that do not take respondents to a new web page.

H102: There is an association between innovator type and preference to click on advertisements that do not take respondents to a new web page.

H0: There is no association between innovator type and preference to click on advertisements that offer free products than those that do not.

H103: There is an association between innovator type and preference to click on advertisements that offer free products than those that do not.

H0: There is no association between innovator type and preference to click on advertisements that offer free trials than those that do not.

H104: There is an association between innovator type and preference to click on advertisements that offer free trials than those that do not.

H0: There is no association between innovator type and preference to click on advertisements that offer coupons than those that do not.

H105: There is an association between innovator type and preference to click on advertisements that offer coupons than those that do not.

H0: There is no association between the SNS respondents were most active on in the last 30 days and preference to click on advertisements that do not take respondents to a new web page.

H106: There is an association between the SNS respondents were most active on in the last 30 days and preference to click on advertisements that do not take respondents to a new web page.

H0: There is no association between the SNS respondents were most active on in the last 30 days and preference to click on advertisements that offer free products than those that do not.

H107: There is an association between the SNS respondents were most active on in the last 30 days and preference to click on advertisements that offer free products than those that do not.



H0: There is no association between the SNS respondents were most active on in the last 30 days and preference to click on advertisements that offer free trials than those that do not.

H108: There is an association between the SNS respondents were most active on in the last 30 days and preference to click on advertisements that offer free trials than those that do not.

H0: There is no association between the SNS respondents were most active on in the last 30 days and preference to click on advertisements that offer coupons than those that do not.

H109: There is an association between the SNS respondents were most active on in the last 30 days and preference to click on advertisements that offer coupons than those that do not.

H0: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is not affected by gender.

H110: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is affected by gender.

H0: Respondents increased trust in advertisements on SNSs when they have also encountered them offline is not affected by gender.

H111: Respondents increased trust in advertisements on SNSs when they have also encountered them offline not affected by gender.

H0: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is not affected by age.

H112: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is affected by age.

H0: Respondents increased trust in advertisements on SNSs when they have also encountered them offline is not affected by age.

H113: Respondents increased trust in advertisements on SNSs when they have also encountered them offline not affected by age.

H0: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is not affected by innovator type.

H114: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is affected by innovator type.

H0: Respondents increased trust in advertisements on SNSs when they have also encountered them offline is not affected by innovator type.

H115: Respondents increased trust in advertisements on SNSs when they have also encountered them offline not affected by innovator type.

H0: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is not affected by the SNS respondents were most active on in the last 30 days.

H116: Respondents increased trust in advertisements on SNSs when they are familiar with the advertiser is affected by the SNS respondents were most active on in the last 30 days.

H0: Respondents increased trust in advertisements on SNSs when they have also encountered them offline is not affected by the SNS respondents were most active on in the last 30 days.

H117: Respondents increased trust in advertisements on SNSs when they have also encountered them offline not affected by the SNS respondents were most active on in the last 30 days.

H0: There is no relationship between advertisement click through rates on SNSs and advertisement trust on SNSs.

H118: There is a relationship between advertisement click through rates on SNSs and advertisement trust on SNSs.

H0: There is no association between gender and respondents allowing the use of their personal information in order to target more relevant advertisements at them.

H119: There is an association between gender and respondents allowing the use of their personal information in order to target more relevant advertisements at them.

H0: There is no association between age and respondents allowing the use of their personal information in order to target more relevant advertisements at them.

H120: There is an association between age and respondents allowing the use of their personal information in order to target more relevant advertisements at them.

H0: There is no association between innovator type and respondents allowing the use of their personal information in order to target more relevant advertisements at them.

H121: There is an association between innovator type and respondents allowing the use of their personal information in order to target more relevant advertisements at them.

H0: There is no association between the SNS respondents were most active on in the last 30 days and respondents allowing the use of their personal information in order to target more relevant advertisements at them.

H122: There is an association between the SNS respondents were most active on in the last 30 days and respondents allowing the use of their personal information in order to target more relevant advertisements at them.

H0: Respondents allowing the use of their profile information if they can control the type of profile information used is not affected by gender.

H123: Respondents allowing the use of their profile information if they can control the type of profile information used is affected by gender.

H0: Respondents allowing the use of their profile information if they can control the type of profile information used is not affected by age.

H124: Respondents allowing the use of their profile information if they can control the type of profile information used is affected by age.

H0: Respondents allowing the use of their profile information if they can control the type of profile information used is not affected by innovator type.

H125: Respondents allowing the use of their profile information if they can control the type of profile information used is affected by innovator type.

H0: Respondents allowing the use of their profile information if they can control the type of profile information used is not affected by the SNS respondents were most active on in the last 30 days.

H126: Respondents allowing the use of their profile information if they can control the type of profile information used is affected by the SNS respondents were most active on in the last 30 days.

H0: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by gender.

H127: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by gender.

H0: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by age.

H128: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by age.

H0: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by innovator type.

H129: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by innovator type.

H0: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by the SNS respondents were most active on in the last 30 days.

H130: Respondents allowing the use of their profile information if they can control the type of companies that can use their profile information is not affected by the SNS respondents were most active on in the last 30 days.

H0: Respondents allowing the use of their profile information if they can stop the use of such profile information by companies when they want is not affected by gender.

H131: Respondents allowing the use of their profile information if they can stop the use of such profile information by companies when they want is affected by gender.

H0: Respondents allowing the use of their profile information if they can stop the use of such profile information by companies when they want is not affected by age.

H132: Respondents allowing the use of their profile information if they can stop the use of such profile information by companies when they want is affected by age.

H0: Respondents allowing the use of their profile information if they can stop the use of such profile information by companies when they want is not affected by innovator type. H133: Respondents allowing the use of their profile information if they can stop the use of such profile information by companies when they want is affected by innovator type.

H0: Respondents allowing the use of their profile information if they can stop the use of such profile information by companies when they want is not affected by the SNS respondents were most active on in the last 30days.

H134: Respondents allowing the use of their profile information if they can stop the use of such profile information by companies when they want is affected by the SNS respondents were most active on in the last 30 days.

H0: Respondents allowing the use of their profile information if they can control the amount of advertising they are exposed to is not affected by gender.

H135: Respondents allowing the use of their profile information if they can control the amount of advertising they are exposed to is affected by gender.

H0: Respondents allowing the use of their profile information if they can control the

amount of advertising they are exposed to is not affected by age.

H136: Respondents allowing the use of their profile information if they can control the

amount of advertising they are exposed to is affected by age.

H0: Respondents allowing the use of their profile information if they can control the

amount of advertising they are exposed to is not affected by innovator type.

H137: Respondents allowing the use of their profile information if they can control the

amount of advertising they are exposed to is affected by innovator type.

H0: Respondents allowing the use of their profile information if they can control the

amount of advertising they are exposed to is not affected by the SNS they were most

active on in the last 30 days.

H138: Respondents allowing the use of their profile information if they can control the

amount of advertising they are exposed to is affected by the SNS they were most active

on in the last 30 days.

H0: There is no association between joining a group on a SNS and gender.

H139: There is an association between joining a group on a SNS and gender.

H0: There is no association between joining a group on a SNS and age.

H140: There is an association between joining a group on a SNS and age.

H0: There is no association between joining a group on a SNS and innovator type.

H141: There is an association between joining a group on a SNS and innovator type.

H0: There is no association between joining a group on a SNS and the SNS respondents were most active on in the last 30 days.

H142: There is an association between joining a group on a SNS and the SNS respondents were most active on in the last 30 days.

H0: Respondents visiting a company profile page on a SNS is not affected by gender.

H143: Respondents visiting a company profile page on a SNS is affected by gender.

H0: Respondents visiting a company profile page on a SNS is not affected by age.

H144: Respondents visiting a company profile page on a SNS is affected by age.

H0: Respondents visiting a company profile page on a SNS is not affected by innovator type.

H145: Respondents visiting a company profile page on a SNS is affected by innovator type.

H0: Respondents visiting a company profile page on a SNS is not affected by the SNS respondents were most active on in the last 30 days.

H146: Respondents visiting a company profile page on a SNS is affected by the SNS respondents were most active on in the last 30 days.

### Hypotheses - Privacy in online social networks

H0: Respondents having a public or private profile on the SNS they are most active on is not affected by gender.

H147: Respondents having a public or private profile on the SNS they are most active on is affected by gender.

H0: Respondents having a public or private profile on the SNS they are most active on is not affected by age.

H148: Respondents having a public or private profile on the SNS they are most active on is affected by age.

H0: Respondents having a negative experience on a SNS is not affected by whether they have a public or private profile.

H149: Respondents having a negative experience on a SNS is affected by whether they have a public or private profile.

# Appendix VII: Rejected hypotheses relating to individual motivations to use SNSs

# Hypothesis 5: Gender and searching for company information as a motivation to use SNSs – Chi-square

#### Crosstab

			reasonusageSNSsresearchcomp anyinfo		Total
			1 Yes	2 No	
gender	1 Male	Count	36	115	151
		% within gender	23.8%	76.2%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	55.4%	37.0%	40.2%
		% of Total	9.6%	30.6%	40.2%
	2 Female	Count	29	196	225
		% within gender	12.9%	87.1%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	44.6%	63.0%	59.8%
		% of Total	7.7%	52.1%	59.8%
Total		Count	65	311	376
		% within gender	17.3%	82.7%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	100.0%	100.0%	100.0%
		% of Total	17.3%	82.7%	100.0%

#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2- sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.580(b)	1	.006		
Continuity Correction(a)	6.833	1	.009		
Likelihood Ratio	7.438	1	.006		
Fisher's Exact Test		Ì		.008	.005
Linear-by-Linear Association	7.560	1	.006		
N of Valid Cases	376				

a Computed only for a 2x2 table

		Value	Approx. Sig.
Nominal by	Phi	.142	.006
Nominal	Cramer's V	.142	.006
N of Valid Cases		376	

a Not assuming the null hypothesis.

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.10.

b Using the asymptotic standard error assuming the null hypothesis.

# Hypothesis 6: Gender and searching for product information as a motivation to use SNSs-Chi-square

#### Crosstab

			reasonusageSNSsresearchprodu ctinfo		Total
			1 Yes	2 No	
gender	1 Male	Count	18	133	151
		% within gender	11.9%	88.1%	100.0%
		% within reasonusageSNSsresearchpr oductinfo	60.0%	38.4%	40.2%
		% of Total	4.8%	35.4%	40.2%
	2 Female	Count	12	213	225
		% within gender	5.3%	94.7%	100.0%
		% within reasonusageSNSsresearchpr oductinfo	40.0%	61.6%	59.8%
		% of Total	3.2%	56.6%	59.8%
Total		Count	30	346	376
		% within gender	8.0%	92.0%	100.0%
		% within reasonusageSNSsresearchpr oductinfo	100.0%	100.0%	100.0%
		% of Total	8.0%	92.0%	100.0%

#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	5.340(b)	1	.021		
Continuity Correction(a)	4.481	1	.034		
Likelihood Ratio	5.214	1	.022		
Fisher's Exact Test		0		.031	.018
Linear-by-Linear Association	5.326	1	.021		
N of Valid Cases	376				

a Computed only for a 2x2 table

		Value	Approx. Sig.
Nominal by Nominal	Phi	.119	.021
	Cramer's V	.119	.021
N of Valid Cases		376	

a Not assuming the null hypothesis.



b 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.05.

b Using the asymptotic standard error assuming the null hypothesis.

### Hypothesis 7: Gender and providing company information as a motivation to use SNSs - Chi-square

#### Crosstab

			reasonusageSNSsprovidecompa nyinfo		Total
			1 Yes	2 No	
gender	1 Male	Count	28	123	151
		% within gender	18.5%	81.5%	100.0%
		% within reasonusageSNSsprovidecom panyinfo	53.8%	38.0%	40.2%
		% of Total	7.4%	32.7%	40.2%
	2 Female	Count	24	201	225
		% within gender	10.7%	89.3%	100.0%
		% within reasonusageSNSsprovidecom panyinfo	46.2%	62.0%	59.8%
		% of Total	6.4%	53.5%	59.8%
Total		Count	52	324	376
		% within gender	13.8%	86.2%	100.0%
		% within reasonusageSNSsprovidecom panyinfo	100.0%	100.0%	100.0%
		% of Total	13.8%	86.2%	100.0%

		13.076	00.276	100.0%	
		Chi-Square 1	rests .	e .	_
	Value	df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	4.704(b)	1	.030		
Continuity Correction(a)	4.066	1	.044		
Likelihood Ratio	4.612	1	.032		
Fisher's Exact Test	10	250		.034	.023
Linear-by-Linear Association	4.691	1	.030		
N of Valid Cases	376				

		Value	Approx. Sig.
Nominal by Nominal	Phi	.112	.030
	Cramer's V	.112	.030
N of Valid Cases	S	376	

a Computed only for a 2x2 table b 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.88.

a Not assuming the null hypothesis.
 b Using the asymptotic standard error assuming the null hypothesis.

# Hypothesis 9: Age and searching for company information as a motivation to use SNSs – Chi-square

#### Crosstab

			reasonusageSNSsresearchcomp anyinfo		Total
	1 14 17	Count	1 Yes	2 No	
ige	1 14-17	Count	2	103	105
		% within age	1.9%	98.1%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	3.1%	33.1%	27.9%
		% of Total	.5%	27.4%	27.9%
	2 18-24	Count	0	30	30
		% within age	.0%	100.0%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	.0%	9.6%	8.0%
		% of Total	.0%	8.0%	8.0%
	3 25-34	Count	13	36	49
		% within age	26.5%	73.5%	100.0%
		% within			000
		reasonusageSNSsresearchco mpanyinfo	20.0%	11.6%	13.0%
		% of Total	3.5%	9.6%	13.0%
	4 35-44	Count	17	51	68
		% within age	25.0%	75.0%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	26.2%	16.4%	18.1%
		% of Total	4.5%	13.6%	18.1%
	5 45-54	Count	25	54	79
		% within age	31.6%	68.4%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	38.5%	17.4%	21.0%
		% of Total	6.6%	14.4%	21.0%
	6 55+	Count	8	37	45
		% within age	17.8%	82.2%	100.0%
		% within reasonusageSNSsresearchcompanyinfo	12.3%	11.9%	12.0%
		% of Total	2.1%	9.8%	12.0%
otal		Count	65	311	376
		% within age	17.3%	82.7%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	100.0%	100.0%	100.0%
		% of Total	17.3%	82.7%	100.0%

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	40.801(a)	5	.000
Likelihood Ratio	52.511	5	.000
Linear-by-Linear Association	25.381	1	.000
N of Valid Cases	376		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.19.

#### Symmetric Measures

		Value	Approx. Sig.	0
Nominal by	Phi	.329	.000	Tu.
Nominal	Iominal Cramer's V	.329	.000	No.
N of Valid Case	s	376		Cest
	the null hypothesis. mptotic standard err		null hypothesis.	elitinglos
				a the
•				

## - Chi-square

#### Crosstab

			reasonusag nyinfo	eSNSsprovidecompa	Total
			1 Yes	2 No	
ige 1	14-17	Count	1	104	105
		% within age	1.0%	99.0%	100.0%
		% within reasonusageSNSsprovidecom panyinfo	1.9%	32.1%	27.9%
		% of To <mark>ta</mark> l	.3%	27.7%	27.9%
2	18-24	Count	0	30	30
		% within age	.0%	100.0%	100,0%
		% within reasonusageSNSsprovidecom panyinfo	.0%	9.3%	8.0%
		% of Total	.0%	8.0%	8.0%
3	25-34	Count	10	39	49
		% within age	20.4%	79.6%	100.0%
	% within reasonusageSNSsprovidecom panyinfo	19.2%	12.0%	13.0%	
		% of Total	2.7%	10.4%	13.0%
4	35-44	Count	16	52	68
		% within age	23.5%	76.5%	100.0%

		% of Total	13.8%	86.2%	100.0%
		% within reasonusageSNSsprovidecom panyinfo	100.0%	100.0%	100.0%
		% within age	13.8%	86.2%	100.0%
Total		Count	52	324	376
		% of Total	1.3%	10.6%	12.0%
		% within reasonusageSNSsprovidecom panyinfo	9.6%	12.3%	12.0%
		% within age	11.1%	88.9%	100.0%
	6 55+	Count	5	40	45
		% of Total	5.3%	15.7%	21.0%
		% within reasonusageSNSsprovidecom panyinfo	38.5%	18.2%	21.0%
		% within age	25.3%	74.7%	100.0%
l	5 <b>45</b> -54	Count	20	59	79
		% of Total	4.3%	13.8%	18.1%
		% within reasonusageSNSsprovidecom panyinfo	30.8%	16.0%	18.1%

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	35.599(a)	5	.000
Likelihood Ratio	46.323	5	.000
Linear-by-Linear Association	19.050	1	.000
N of Valid Cases	376		Leich Chill

a 1 cells (8.3%) have expected count less than 5. The minimum expected count is 4.15.

#### Symmetric Measures

		Value	Approx. Sig.		
Nominal by	Phi	.308	.000		
Nominal	Cramer's V	.308	.000		
N of Valid Cases		376			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

# Hypothesis 12: Age and Providing Product Information as a Motivation to use SNSs – Chi-square

#### Crosstab

		<u> </u>	reasonusageSN info	Ssprovideproduct	Total
			1 Yes	2 No	
age	1 14-17	Count	0	105	105
ļ		% within age	.0%	100.0%	100.0%
		% within reasonusageSNSsprovidep roductinfo	.0%	31.9%	27.9%
		% of Total	.0%	27.9%	27.9%
	2 18-24	Count	0	30	30
Ī		% within age	.0%	100.0%	100.0%
		% within reasonusageSNSsprovidep roductinfo	.0%	9.1%	8.0%
		% of Total	.0%	8.0%	8.0%
	3 25-34	Count	5	44	49
		% within age	10.2%	89.8%	100.0%
		% within reasonusageSNSsprovidep roductinfo	10.6%	13.4%	13.0%
		% of Total	1.3%	11.7%	13.0%
	4 35-44	Count	14	54	68
		% within age	20.6%	79.4%	100.0%
		% within reasonusageSNSsprovidep roductinfo	29.8%	16.4%	18.1%
		% of Total	3.7%	14.4%	18.1%
	5 45-54	Count	20	59	79
		% within age	25,3%	74.7%	100.0%
	,	% within reasonusageSNSsprovidep roductinfo	42.6%	17.9%	21.0%
		% of Total	5.3%	15,7%	21.0%
	6 55+	Count	8	37	45
		% within age	17.8%	82.2%	100.0%
		% within reasonusageSNSsprovidep roductinfo	17.0%	11.2%	12.0%
		% of Total	2.1%	9.8%	12.0%
Total		Count	47	329	376
	•	% within age	12.5%	87.5%	100.0%
		% within reasonusageSNSsprovidep roductinfo	100.0%	100.0%	100.0%
		% of Total	12.5%	87.5%	100.0%

**Chi-Square Tests** 

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	36.600(a)	5	.000
Likelihood Ratio	50.372	5	.000
Linear-by-Linear Association	30.038	1	.000
N of Valid Cases	376		

a 1 cells (8.3%) have expected count less than 5. The minimum expected count is 3.75.

#### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.312	.000
	Cramer's V	.312	.000
N of Valid Cases	3	376	

# Hypothesis 13: Innovator type and searching for company information as a motivation to use SNSs – Chi–square

		Zelch.	reasonusag anyinfo	eSNSsresearchcomp	Total
		10 61 -	1 Yes	2 No	]
productpurchbeh	1 Innovators	Count	5	19	24
		% within productpurchbeh	20.8%	79.2%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	7.7%	6.1%	6.4%
		% of Total	1.3%	5.1%	6.4%
	2 Early adopters	Count	20	50	70
		% within productpurchbeh	28.6%	71.4%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	30.8%	16.1%	18.6%
		% of Total	5.3%	13.3%	18.6%
	3 Early majority	Count	31	167	198
		% within productpurchbeh	15.7%	84.3%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	47.7%	53.7%	52.7%
		% of Total	8.2%	44.4%	52.7%
	4 Late majority	Count	3	40	43
		% within productpurchbeh	7.0%	93.0%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	4.6%	12.9%	11.4%
		% of Total	.8%	10.6%	11. <b>4</b> %

A Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

1	5 Laggards	Count	6	35	41
		% within productpurchbeh	14.6%	85.4%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	9.2%	11.3%	10.9%
ł		% of Total	1.6%	9.3%	10.9%
Total		Count	65	311	376
		% within productpurchbeh	17.3%	82.7%	100.0%
		% within reasonusageSNSsresearchco mpanyinfo	100.0%	100.0%	100.0%
		% of Total	17.3%	82.7%	100.0%

#### **Chi-Square Tests**

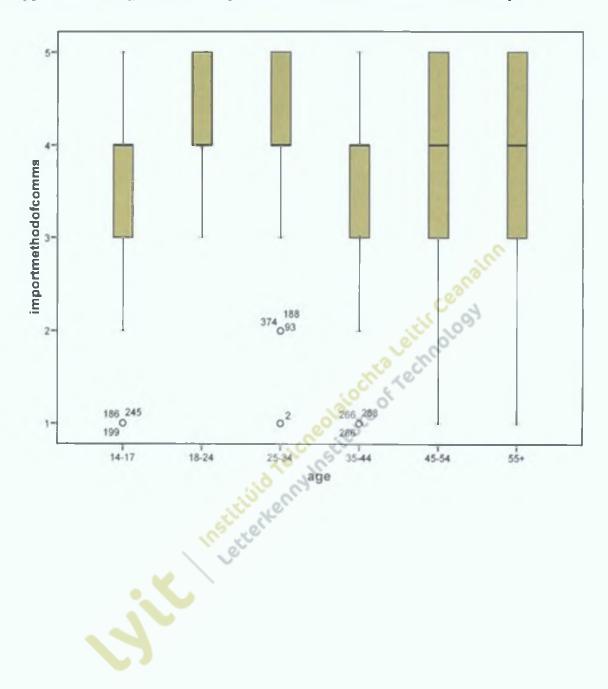
	Value	Df	Asymp. Sig. (2- sided)
Pearson Chi-Square	10.212(a)	4	.037
Likelihood Ratio	10.173	4	.038
Linear-by-Linear Association	4.915	1	.027
N of Valid Cases	376		

a 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.15.

		Value	Approx. Sig.
Nominal by Nominal	, <b>P</b> hi	.165	.037
	Cramer's V	.165	.037
N of Valid Case	s	376	in Keur

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

Hypothesis 18: Age and SNS important method of communication - Box plot



### Age and SNS important method of communication - One-way between-groups **ANOVA**

#### Descriptives

importmethodofcomms

	N	Mean	Std. Deviation	Std. Error	95% Confidence	Interval for Mean	Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 14-17	105	3.48	1.119	.109	3.26	3.69	1	5
2 18-24	30	4.13	.681	.124	3.88	4.39	3	5
3 25-34	49	4.02	.946	.135	3.75	4.29	1	5
4 35-44	68	3.60	1.122	.136	3.33	3.87	1	5
5 45-54	79	3.87	.979	.110	3.65	4.09	1	5
6 55+	45	3.93	.963	.144	3.64	4.22	1	5
Total	376	3.76	1.041	.054	3.66	3.87	1	5

#### ANOVA

importmethodofcomms

Importmentodolcomma					
	Sum of Squares	df	Mean Square	F O	Sig.
Between Groups	20.007	5	4.001	3.831	.002
Within Groups	386.450	370	1.044	SUL	
Total	406.457	375	10	6.	

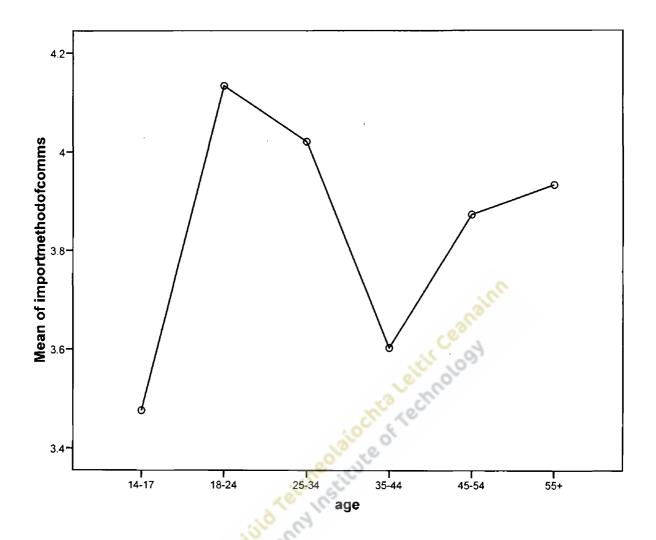
#### Multiple Comparisons

Dependent Variable: importmethodofcomms Tukey HSD

(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	e Interval
		Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 14-17	2 18-24	657(*)	.212	.025	-1.26	05
	3 25-34	544(*)	.177	.027	-1.05	04
	4 35-44	127	.159	.968	58	.33
	5 45-54	397	.152	.097	83	.04
	6 55+	457	.182	.124	98	.06
2 18-24	1 14-17	.657(*)	.212	.025	.05	1.26
	3 25-34	.113	.237	.997	57	.79
	4 35-44	.530	.224	.170	11	1,17
	5 45-54	.260	.219	.843	37	.89
	6 55+	.200	.241	.962	49	.89
3 25-34	1 14-17	.544(*)	.177	.027	.04	1.05
	2 18-24	113	.237	.997	79	.57

		4 35-44	.417	.192	.250	- 13	.97	
		5 45-54	.147	.186	.969	39	.68	
		6 55+	.087	.211	.998	52	.69	
	4 35-44	1 14-17	.127	.159	.968	33	.58	
		2 18-24	530	.224	.170	-1.17	.11	
		3 25-34	417	.192	.250	97	.13	
		5 45-54	270	.169	.599	75	.21	
}		6 55+	330	.196	.544	89	.23	
	5 45-54	1 14-17	.397	.152	.097	04	.83	
		2 18-24	260	.219	.843	89	.37	
		3 25-34	147	.186	.969	68	.39	
		4 35-44	.270	.169	.599	21	.75	
		6 55+	060	.191	1.000	61	.49	
	6 55+	1 14-17	.457	.182	.124	06	.98	
		2 18-24	200	.241	.962	89	.49	
١		3 25-34	0 <b>8</b> 7	.211	.998	69	.52	
		4 35-44	.330	.196	.544	23	.89	
ı		5 45-54	.060	.191	1.000	49	.61	

The mean difference is significant at the .05 level



Age and SNS important method of communication - Kruskal-Wallis test

	L.
П	II.
	n

	age	N	Mean Rank
importmethodofcomms	1 14-17	105	159.59
	2 18-24	30	221.53
	3 25-34	49	215.60
	4 35-44	68	175.60
	5 <b>45</b> -5 <b>4</b>	79	199.39
	6 55+	45	204.82
	Total	376	

#### Test Statistics(a,b)

	importmethodof comms
Chi-Square	17.834
Df	5
Asymp. Sig.	.003

a Kruskal Wallis Test b Grouping Variable: age

#### Report

importmethodofcomms

Age	N	Median
1 14-17	105	4.00
2 18-24	30	4.00
3 25-34	49	4.00
4 35-44	68	4.00
5 45-54	79	4.00
6 55+	45	4.00
Total	376	4.00



# Hypothesis 20: Most active SNS and SNS important method of communication – One-way between-groups ANOVA

#### Descriptives

importmethodofcomms

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	
1 Bebo	53	3.68	1.105	.152	3.37	3.98	1	5	
2 Facebook	198	3.71	1.083	.077	3.56	3.86	1	5	
3 MySpace	8	3.25	1.581	.559	1.93	4.57	1	5	
4 YouTube	18	3.50	.985	.232	3.01	3.99	2	5	
5 Linkedin	55	4.00	.745	.101	3.80	4.20	2	5	
6 Twitter	31	4.32	.541	.097	4.12	4.52	3	5	
9 Other	13	3.23	1.235	.343	2.48	3.98	1	5	
Total	376	3.76	1.041	.054	3.66	3.87	1	5	

#### ANOVA

importmethodofcomms

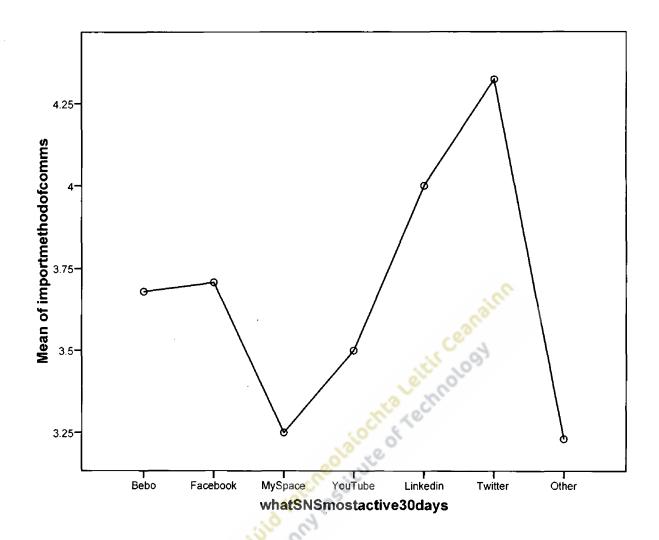
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.818	6	3.470	3.320	.003
Within Groups	385.639	369	1.045		
Total	406.457	375			

#### **Multiple Comparisons**

Dependent Variable: importmethodofcomms Tukey HSD

		Mean Difference (I-J)	Std. Error	Sìg.	95% Confidence	Interval
(I) whatSNSmostactive30days	(J) whatSNSmostactive30days					-
1 Bebo	(3) WhatSNSIIIOStactiveSodays		190			Lower Bound
i Bebo	2 Facebook	028	.158	1.000	50	.44
	3 MySpace	.429	.388	.926	72	1.58
	4 YouTube	.179	.279	.995	65	1.01
	5 Linkedin	321	.197	.663	90	.26
	6 Twitter	-,643	.231	.082	-1.33	.04
	9 Other	.448	.316	.792	49	1.39
2 Facebook	9 Other 1 Bebo 3 MySpace	.028	.158	1.000	44	.50
	3 MySpace	.457	.369	.878	64	1.55
	4 YouTube	.207	.252	.983	54	.95
	5 Linkedin	293	.156	.495	75	.17
	6 Twitter	616(*)	.197	.032	-1.20	03
	9 Other	.476	.293	.665	39	1.34
3 MySpace	1 Bebo	- 429	.388	.926	-1.58	.72
	2 Facebook	457	.369	.878	-1.55	.64
	4 YouTube	250	.434	.997	-1.54	1.04
	5 Linkedin	750	.387	.456	-1.90	.40
	6 Twitter	-1.073	.405	.116	-2.27	.13
	9 Other	.019	.459	1.000	-1.34	1.38
4 YouTube	1 Bebo	179	.279	.995	-1.01	.65
	2 Facebook	207	.252	.983	95	.54
	3 MySpace	.250	.434	.997	-1.04	1.54
	5 Linkedin	500	.278	.548	-1.32	.32
	6 Twitter	823	.303	.097	-1.72	.08

_		_				
	9 Other	.269	.372	.991	83	1.37
5 Linkedin	1 Bebo	.321	.197	.663	26	.90
	2 Facebook	.293	.156	.495	17	.75
	3 MySpace	.750	.387	.456	40	1.90
	4 YouTube	500	.278	.548	32	1.32
]	6 Twitter	323	.230	.799	-1.00	.36
in	9 Other	.769	.315	.185	17	1.70
6 Twitter	1 Bebo	.643	.231	.082	04	1.33
	2 Facebook	.616(*)	.197	.032	.03	1.20
İ	3 MySpace	1.073	.405	.116	13	2.27
	4 YouTube	.823	.303	.097	08	1.72
	5 Linkedin	.323	.230	.799	36	1.00
0.046	9 Other	1.092(*)	.338	.023	.09	2.09
9 Other	1 Bebo	448	.316	.792	-1.39	.49
	2 Facebook	476	.293	.665	-1.34	.39
	3 MySpace	019	.459	1.000	-1.38	1.34
	4 YouTube	269	.372	.991	-1.37	.83
	5 Linkedin	769	.315	.185	-1.70	.17
* The mean difference is	6 Twitter significant at the .05 level.	-1.092(*)	.338	.023	-2.09	09



# Most active SNS and SNS important method of communications – Kruskal-Wallis test

Ranks

	whatSNSmostactive30days	N	Mean Rank
importmethodofcomms	1 Bebo	53	179.55
	2 Facebook	198	184.24
	3 MySpace	8	156.50
	4 YouTube	18	155.92
	5 Linkedin	55	207.55
	6 Twitter	31	244.53
	9 Other	13	140.46
	Total	376	

Test Statistics(a,b)

	Importmethodof comms
Chi-Square	17.198
Df	6
Asymp. Sig.	.009

a Kruskal Wallis Test b Grouping Variable: whatSNSmostactive30days

Report

importmethodofcomms

whatSNSmostactive30days	N	Median
1 Bebo	53	4.00
2 Facebook	198	4.00
3 MySpace	8	3.50
4 YouTube	18	3.50
5 Linkedin	55	4.00
6 Twitter	31	4.00
9 Other	13	3.00
Total	376	4.00

## Appendix VIII: Rejected hypotheses relating to usage of SNSs

### Hypothesis 19: Gender and the SNS respondents were most active on in the last 30 days - Chi-square

gender \* whatSNSmostactive30days Crosstabulation

			whatSNSn	nostactive3(	days					Total
	_		1 Bebo	2 Facebook	3 MySpace	4 YouTube	5 Linkedin	6 Twitter	9 Other	
gender	1 Male	Count	27	59	4	13	33	13	2	151
		% within gender	17.9%	39.1%	2.6%	8.6%	21.9%	8.6%	1.3%	100.0%
		% within whatSNSmostactive30days	50.9%	29.8%	50.0%	72.2%	60.0%	41.9%	15.4%	40.2%
		% of Total	7.2%	15.7%	1.1%	3.5%	8.8%	3.5%	.5%	40.2%
	2 Female	Count	26	139	4	5	22	18	11	225
		% within gender	11.6%	61.8%	1.8%	2.2%	9.8%	8.0%	4.9%	100.0%
		% within whatSNSmostactive30days	49.1%	70.2%	50.0%	27.8%	40.0%	58.1%	84.6%	59.8%
		% of Total	6.9%	37.0%	1.1%	1.3%	5.9%	4.8%	2.9%	59.8%
Total		Count	53	198	8	18	55	31	13	376
		% within gender	14.1%	52.7%	2.1%	4.8%	14.6%	8.2%	3.5%	100.0%
		% within whatSNSmostactive30days	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	14.1%	52.7%	2.1%	4.8%	14.6%	8.2%	3.5%	100.0%

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	31.803(a)	6	.000
Likelihood Ratio	32.193	6	.000
Linear-by-Linear Association	1.075	1	.300
N of Valid Cases	376		

a 2 cells (14.3%) have expected count less than 5. The minimum expected count is 3.21.

		Value	Approx. Sig.
Nominal by Nominal	Phi	.291	.000
Nomina	Cramer's V	.291	.000
N of Valid Cases		376	

Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

## Appendix IX: Rejected hypotheses relating to friend networks in SNSs

Hypothesis 27: Age and number of friends on most active SNS

			Number of	Friends on	Most Active	SNS		Total
		_	1 <50	2 50-99	3 100-199	4 200-299	5 300+	
Age	1 14-17	Count	16	12	30	16	31	105
		% within age	15.2%	11.4%	28.6%	15.2%	29.5%	100.0%
		% within numfriends	16.7%	15.8%	32.3%	35.6%	47.0%	27.9%
		% of Total	4.3%	3.2%	8.0%	4.3%	8.2%	27.9%
	2 18-24	Count	0	2	12	11	5	30
		% within age	.0%	6.7%	40.0%	36.7%	16.7%	100.0%
		% within numfriends	.0%	2.6%	12.9%	24.4%	7.6%	8.0%
		% of Total	.0%	.5%	3.2%	2.9%	1.3%	8.0%
	3 25-34	Count	5	12	17	8	7	49
		% within age	10.2%	24.5%	34.7%	16.3%	14.3%	100.0%
		% within numfriends	5.2%	15.8%	18.3%	17.8%	10.6%	13.0%
		% of Total	1.3%	3.2%	4.5%	2.1%	1.9%	13.0%
	4 35-44	Count	21	19	15	5	8	68
		% within age	30.9%	27.9%	22.1%	7.4%	11.8%	100.0%
		% within numfriends	21.9%	25.0%	16.1%	11.1%	12.1%	18.1%
		% of Total	5.6%	5.1%	4.0%	1.3%	2.1%	18.1%
	5 45-54	Count	27	23	14	5	10	79
		% within age	34.2%	29.1%	17.7%	6.3%	12.7%	100.0%
		% within numfriends	28.1%	30.3%	15.1%	11.1%	15.2%	21.0%
		% of Total	7.2%	6.1%	3.7%	1.3%	2.7%	21.0%
	6 55+	Count	27	8	5	О	5	45
		% within age	60.0%	17.8%	11.1%	.0%	11.1%	100.0%
		% within numfriends	28.1%	10.5%	5.4%	.0%	7.6%	12.0%
		% of Total	7.2%	2.1%	1.3%	.0%	1.3%	12.0%
Total		Count	96	76	93	45	66	376
		% within age	25.5%	20.2%	24.7%	12.0%	17.6%	100.0%
		% within numfriends	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	25.5%	20.2%	24.7%	12.0%	17.6%	100.0%

#### **Chi-Square Tests**

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	101.540(a)	20	.000
Likelihood Ratio	106.044	20	.000
Linear-by-Linear Association	53.530	1	.000
N of Valid Cases	376		

a 1 cells (3.3%) have expected count less than 5. The minimum expected count is 3.59.

		Value	Approx. Sig.
Nominal by Nominal	Phi	.520	.000
	Cramer's V	.260	.000
N of Valid Cases	_	376	

Hypothesis 29: Innovator type and number of friends on most active SNS

productpurchbeh \* numfriends Crosstabulation

			numfriends	100				Total
	_		1 <50	2 50-99	3 100-199	4 200-299	5 300+	
productpurchbeh 1 Inr	1 Innovators	Count	4	4	3	1	12	24
		% within productpurchbeh	16.7%	16.7%	12.5%	4.2%	50.0%	100.0%
		% within numfriends	4.2%	5.3%	3.2%	2.2%	18.2%	6.4%
		% of Total	1.1%	1.1%	.8%	.3%	3.2%	6.4%
	2 Early	Count	15	16	13	12	14	70
	adopters	% within productpurchbeh	21.4%	22.9%	18.6%	17.1%	20.0%	100.0%
		% within numfriends	15.6%	21.1%	14.0%	26.7%	21.2%	18.6%
		% of Total	4.0%	4.3%	3.5%	3.2%	3.7%	18.6%
	3 Early majority	Count	51	38	59	26	24	198
	majority	% within productpurchbeh	25.8%	19.2%	29.8%	13.1%	12.1%	100.0%
		% within numfriends	53.1%	50.0%	63.4%	57.8%	36.4%	52.7%
		% of Total	13.6%	10.1%	15.7%	6.9%	6.4%	52.7%
	4 Late majority	Count	10	11	10	2	10	43
	majority	% within productpurchbeh	23.3%	25.6%	23.3%	4.7%	23.3%	100.0%
		% within numfriends	10.4%	14.5%	10.8%	4.4%	15.2%	11.4%
		% of Total	2.7%	2.9%	2.7%	.5%	2.7%	11.4%
	5 Laggards	Count	16	7	8	4	6	41

A Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

	% within productpurchbeh	39.0%	17.1%	19.5%	9.8%	14.6%	100.0%
	% within numfriends	16.7%	9.2%	8.6%	8.9%	9.1%	10.9%
	% of Total	4.3%	1.9%	2.1%	1.1%	1.6%	10.9%
Total	Count	96	76	93	45	66	376
	% within productpurchbeh	25.5%	20.2%	24.7%	12.0%	17.6%	100.0%
	% within numfriends % of Total	100.0% 25.5%	100.0% 20.2%	100.0% 24.7%	100.0% 12.0%	100. <b>0</b> % 17.6%	100.0% 100.0%

#### Chi-Square Tests

		Value	df		Asymp. Sig. sided)	. (2-	
Pearson Chi-Squar	e	34.651(a)	16		.004		
Likelihood Ratio		30.985	16		.014		
Linear-by-Linear As	ssociation	7.235	1		.007		25 20
N of Valid Cases		376					
4 cells (16.0%) ha	·			minimum e	expected coun	t is 2.87.	echnology
4 cells (16.0%) ha	·	count less the		minimum e	expected coun	t is 2.87.	echnol
	·		ures	minimum e	امارة	t is 2.87.	echnol
4 cells (16.0%) ha	·	metric Meas	ures		امارة	t is 2.87.	echnol
Nominal by	Sym	metric Meas	ures	Approx.	امارة	t is 2.87.	echnol

		Value	Approx. Sig.
Nominal by Nominal	Phi	.304	.004
	Cramer's V	.152	.004
N of Valid Cases		376	Will Sulls

a Not assuming the null hypothesis.
 b Using the asymptotic standard error assuming the null hypothesis.

### Appendix X: Rejected hypotheses relating to the influence of friends in **SNSs**

Hypothesis 33: Gender and friends making negative product comments on SNSs -INSTITUTO TEICNEOLATOCHTA
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LEIT Independent-samples t-test

#### **Group Statistics**

	gender	N	Mean	Std. Deviation	Std. Error Mean
Q1dfriendsnegcomments	1 Male	151	2.76	1.044	.085
	2 Female	225	2.52	.907	.060

#### Independent Samples Test

		Levene's Equality Variance		t-test for Equality of Means						
	-	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Interval	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
Q1dfriendsnegco mments	Equal variances assumed Equal variances not assumed	2.017	.156	2.339	374 290.484	.020	.237	.101	.038	.437

### Hypothesis 41: Age and tendency to make and receive comments - One-way between-groups ANOVA

#### Descriptives

Total Making Comments divide

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 14-17	105	2.59	.746	.073	2.45	2.74	1	5
2 18-24	30	2.27	.830	.152	1.96	2.58	1	4
3 25-34	49	2.76	1.041	.149	2.46	3.05	1	5
4 35-44	68	2.52	.787	.095	2.33	2.71	1	4
5 45-54	79	2.59	.814	.092	2.40	2.77	1	4
6 55+	45	2.16	.701	.104	1.95	2.37	1	4
Total	376	2.52	.827	.043	2.44	2.61	1	5

#### ANOVA

Total Making Comm	ients divide				
-	Sum of Squares	df	Mean Square	F	Sia.

Between Groups	11.384	5	2.277	3.441	.005
Within Groups	244.800	370	.662		
Total	256.184	375			

#### **Multiple Comparisons**

Dependent Variable: Total Making Comments divide

Tukey HSD Mean Difference Std. Error Sig. (I-J) 95% Confidence Interval (I) age (J) age Upper Bound Lower Bound Lower Bound Upper Bound Lower Bound 1 14-17 .325 .168 .384 -.16 81 2 18-24 -.163 .141 .85**6** -.57 .24 3 25-34 .070 .127 .994 -.29 43 4 35-44 .006 .121 1.000 -.34 .35 5 45-54 .035 .433(\*) .145 .02 .85 6 55+ 2 18-24 -.325 .168 .384 -.81 .16 1 14-17 -1.03 05 -.488 .189 .102 3 25-34 -.255 .178 .707 -.77 26 4 35-44 -.320 .174 .445 -.82 18 5 45-54 .107 .192 .993 -.44 .66 6 55+ 3 25-34 .163 .141 .856 -.24 57 1 14-17 488 .189 .102 .05 1.03 2 18-24 .233 .152 .646 -.20 .67 4 35-44 169 .864 -.26 .148 .59 5 45-54 .596(\*) .168 .006 1.08 .11 6 55+ 4 35-44 -.070 .127 994 -.43 .29 1 14-17 .255 .178 .707 -,26 .77 2 18-24 -.233 .152 -.67 .646 .20 3 25-34 .997 -.064 135 -.45 .32 5 45-54 363 .156 .188 -.08 .81 6 55+ 5 45-54 -.35 .006 .121 1.000 .34 1 14-17 320 .174 .445 -.18 .82 2 18-24 .148 -.169 864 -.59 .26 3 25-34 .064 .135 .997 -.32 45 4 35-44 .427 .152 .058 -.01 .86 6 55+ 6 55+ -.433(\*) .145 .035 -.85 -.02 1 14-17 -.107 .192 .993 -.66 .44 2 18-24 .168 -.596(\*) .006 -1.08 -.11 3 25-34 -.363 .156 .188 -.81 .08

.058

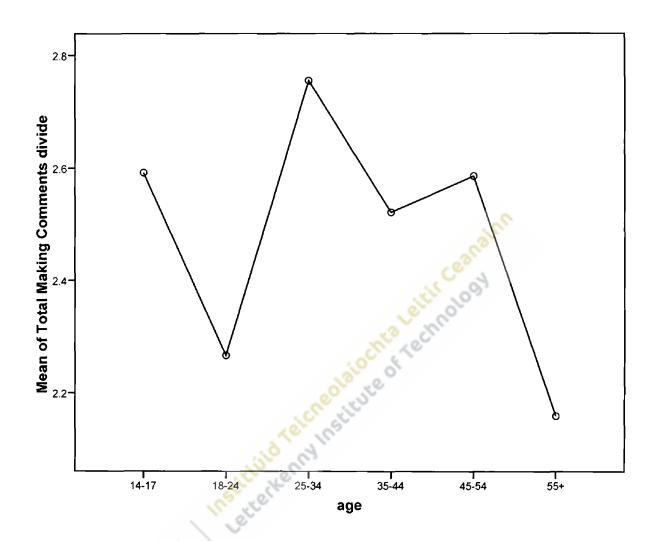
-.86

.01

4 35-44

5 45-54

The mean difference is significant at the .05 level.



## Age and tendency to make and receive comments - Kruskal-Wallis test

### Ranks

	age	N	Mean Rank
Total Making Comments divide	1 14-17	105	198.86
	2 18-24	30	153.30
·	3 25-34	49	209.82
	4 35-44	68	192.31
	5 45-54	79	198.12
	6 55+	45	141.93
	Total	376	

### Test Statistics(a,b)

	Total Making Comments divide
Chi-Square	15.179
Df	5
Asymp. Sig.	.010

otal Makir	ng Commen	Report	Stitling Teicheolaiochta Leithrology
<u>otar wakii</u> ∖ge	N _	Median	alth dog.
1 14-17	105	2.67	a lanco
2 18-24	30	2.17	Charles Co.
3 25-34	49	2.50	aloo of
4 35-44	68	2.67	adia Ke
5 45-54	79	2.50	cos cité
6 <b>55</b> +	45	2.00	10,100
<u>T</u> otal	376	2.50	the old
			The state of the s

### way between-groups ANOVA

### Descriptives

Q1bfriendsposcomments

	N	Mean	Std. Deviation	Std. Error	95% Confidenc Mean	95% Confidence Interval for Mean		Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 14-17	105	2.65	.961	.094	2.46	2.83	1	5
2 18-24	30	2.17	1.020	.186	1.79	2.55	1	5
3 25-34	49	2.59	1.171	.167	2.26	2.93	1	5
35-44	68	2.53	.969	.118	2.29	2.76	1	4
45-54	79	2.65	.934	.105	2.44	2.85	1	4
3 55+	45	2.11	.935	.139	1.83	2.39	1	4
Γotal	376	2.52	1.001	.052	2.41	2.62	1	5

ANOVA

Q1bfriendsposcomments

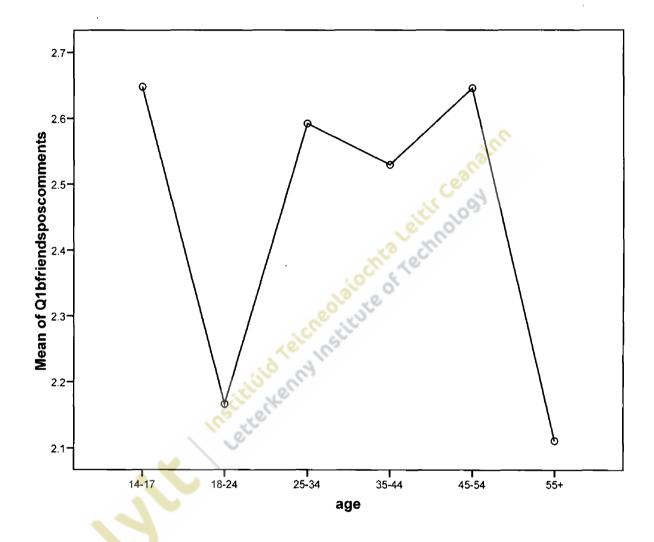
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.477	5	2.895	2.964	.012
Within Groups	361.427	370	.977		
Total	375.904	375			

### **Multiple Comparisons**

Dependent Variable: Q1bfriendsposcomments Tukey HSD

Tukey HS	<del>-</del>	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) age	(J) age	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 14-17	2 18-24	.481	.205	.177	11	1.07
	3 25-34	.056	.171	1.000	43	.55
	4 35-44	.118	.154	.973	32	.56
	5 45-54	.002	.147	1.000	42	.42
	6 55+	.537(*)	.176	.030	.03	1.04
2 18-24	1 14-17	481	.205	.177	-1.07	.11
	3 25-34	425	.229	.431	-1.08	.23
	4 35-44	363	.217	.550	98	.26
	5 45-54	479	.212	.214	-1.09	.13
l	6 55+	.056	.233	1.000	61	.72
3 25-34	1 14-17	056	.171	1.000	55	.43
ļ	2 18-24	.425	.229	.431	23	1.08
	4 35-44	.062	.185	.999	47	.59
	5 45-54	054	.180	1.000	57	.46
	6 55+	.481	.204	.175	10	1.07
4 35-44	1 14-17	118	.154	.973	56	.32
	2 18-24	.363	.217	.550	26	.98
ļ	3 25-34	062	.185	.999	59	.47
	5 45-54	116	.163	.981	58	.35
£ 45 54	6 55+	.418	.190	.239	13	.96
5 45-54	1 14-17	002	.147	1.000	42	.42
	2 18-24	.479	.212	.214	13	1.09
	3 25-34	.054	.180	1.000	46	.57
	4 35-44	.116	.163	.981	35	.58
	6 55+	.534(*)	.185	.046	.01	1.06

6 55+	1 14-17	537(*)	.176	.030	-1.04	03
	2 18-24	056	.233	1.000	72	.61
	3 25-34	481	.204	.175	-1.07	.10
	4 35-44	418	.190	.239	96	.13
	5 45-54	534(*)	.185	.046	-1.06	01
* The me	an difference	is significant at the	e .05 level.			



Hypothesis 35: Age and respondents make comments to friends about products on SNSs – One-way between-groups ANOVA

Q1emakecomments

	N	Mean	Std. Deviation	Std. Error	95% Confidence Mean	e Interval for	Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 14-17	105	2.55	.951	.093	2.37	2.74	1	5
2 18-24	30	2.23	1.040	.190	1.84	2.62	1	5
3 25-34	49	2.86	1.137	.162	2.53	3.18	1	5
4 35-44	68	2.41	.902	.109	2.19	2.63	1	4 ·
5 45-54	79	2.52	1.011	.114	2.29	2.75	1	4
6 55+	45	2.04	.903	.135	1.77	2.32	1	4
Total	376	2.47	1.001	.052	2.37	2.57	1	5

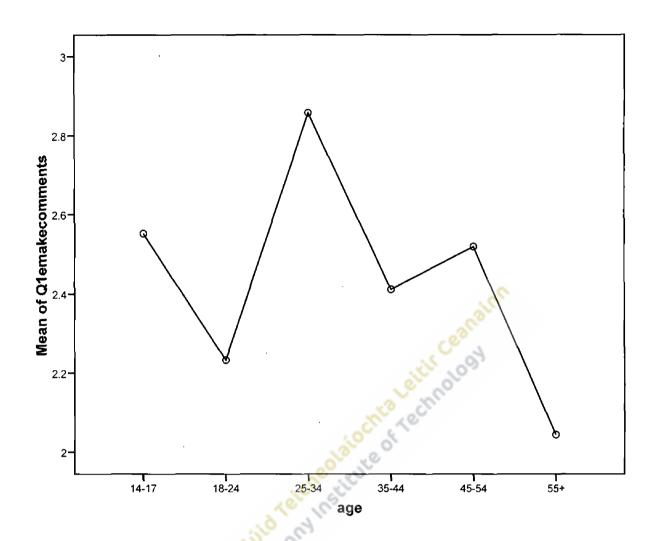
#### **ANOVA**

Total	376	2.47		1.001	.052	2.37	2	.57	1
								ceanain	C
Q1emakeco	mments			ANOVA		nto.	eich	loro	
		of Squares	df	Mea	n Square	F O	Sig.		
Between G	roups 18.3	302	5	3.66	0	3.789	.002		
Within Grou	ips 357	.432 .734	370 375	.966	elche	SLILL			

### Multiple Comparisons

Dependent Variable: Q1emakecomments Tukey HSD Mean Difference Std. Error (I-J) Sig. 95% Confidence Interval (I) age (J) age Lower Bound Upper Bound Lower Bound Upper Bound Lower Bound 1 14-17 .319 .203 .620 -.26 .90 2 18-24 .170 .472 -.305 -.79 .18 3 25-34 .58 .141 .153 .941 -.30 4 35-44 1.000 .033 .146 -.39 .45 5 45-54 .508(\*) .175 .045 .01 1.01 6 55+ 2 18-24 -.319 .203 .620 -.90 .26 1 14-17 -.624 .228 .070 -1.28 .03 3 25-34 .962 -.80 -.178 .215 .44 4 35-44 -.286 .211 .754 -.89 .32 5 45-54 .189 .232 .965 -.47 .85 6 55+ 3 25-34 .305 .170 .472 -.18 .79 1 14-17 .624 .228 .070 -.03 1.28 2 18-24 .445 .184 .1**5**3 -.08 .97 4 35-44

					•		
		5 45-54	.338	.179	.409	17	.85
	4 35-44	6 55+	.813(*)	.203	.001	.23	1.39
		1 14-17	141	.153	.941	58	.30
		2 18-24	.178	.215	.962	44	.80
		3 25-34	445	.184	.153	97	.08
		5 45-54	107	.163	.986	57	.36
		6 55+	.367	.189	.377	17	.91
	5 45-54	1 14-17	033	.146	1.000	45	.39
		2 18-24	.286	.211	.754	32	.89
		3 25-34	338	.179	.409	85	.17
		4 35-44	.107	.163	.986	36	.57
		6 55+	.475	.184	.103	05	1.00
	6 55+	1 14-17	508(*)	.175	.045	-1.01	01
		2 18-24	189	.232	.965	85	.47
		3 25-34	,813 <b>(*</b> )	.203	.001	-1.39	-,23
		4 35-44	367	.189	.377	91	.17
		5 45-54	475	.184	.103	-1.00	.05



Hypothesis 37: Age and respondents make negative product comments on SNSs – One-way between-groups ANOVA

	N	Mean	Std. Deviation	Std. Error	95% Confidenc Mean	e Interval for	Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
14-17	105	2.69	.923	.090	2.51	2.86	1	5
2 18-24	30	2.47	.937	.171	2.12	2.82	1	5
25-34	49	2.88	1.130	.161	2.55	3.20	1	5
35-44	68	2.54	.888	.108	2.33	2.76	1	5
45-54	79	2.56	1.022	.115	2.33	2.79	1	5
55+	45	2.16	.878	.131	1.89	2.42	1	4
Total	376	2.58	.977	.050	2.48	2.68	1	5

### ANOVA

Q1hmakenegcomments

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.130	5	2.826	3.043	.010
Within Groups Total	343.633 357.763	370 375	.929		

### **Multiple Comparisons**

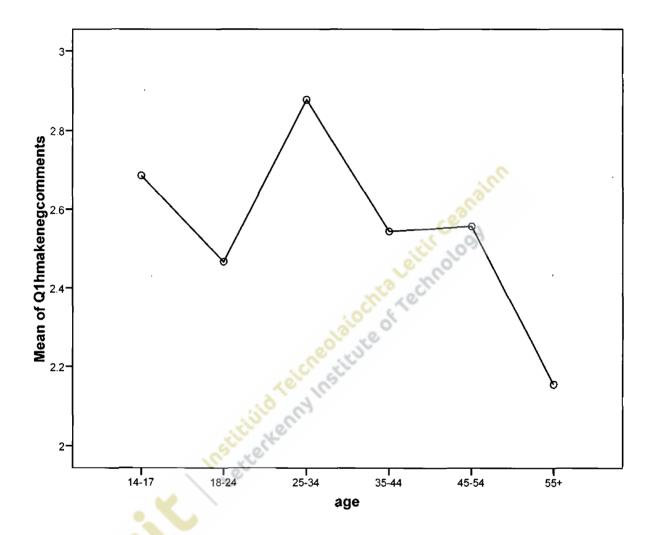
Dependent Variable: Q1hmakenegcomments

Cukev	HSD

Tukey HSI		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) age	(J) age	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 14-17	2 18-24	.219	.200	.882	35	.79
	3 25-34	192	.167	.860	67	.29
	4 35-44	.142	.150	.935	29	.57
	5 45-54	.129	.144	.947	28	.54
	6 55+	.530(*)	.172	.026	.04	1.02
2 18-24	1 14-17	219	.200	.882	79	.35
	3 25-34	411	.223	.442	-1.05	.23
	4 35-44	077	.211	.999	68	.53
	5 45-54	090	.207	.998	68	.50
	6 55+	.311	.227	.745	34	.96
3 25-34	1 14-17	.192	.167	.860	29	.67
	2 18-24	.411	.223	.442	23	1.05
	4 35-44	.333	.181	.437	18	.85
	5 45-54	.321	.175	.448	18	.82
	6 55+	.722(*)	.199	.004	.15	1.29
4 35-44	1 14-17	142	.150	.935	57	.29
	2 18-24	.077	.211	.999	53	.68
	3 25-34	333	.181	.437	85	.18
	5 45-54	013	.159	1.000	47	.44
[	6 55+	.389	.185	.290	14	.92
5 45-54	1 14-17	129	.144	.947	54	.28
	2 18-24	.090	.207	.998	50	.68
ļ ·	3 25-34	321	.175	.448	82	.18
	4 35-44	.013	.159	1.000	44	.47
	6 55+	.401	.180	.226	11	.92
6 55+	1 14-17	530(*)	.172	.026	-1.02	04
ļ		311	.227	.745	96	.34

2 18-24					i	
3 25-34	722(*)	.199	.004	-1.29	15	
4 35-44	389	.185	.290	92	.14	
5 45-54	401	.180	.226	92	.11	

<sup>\*</sup> The mean difference is significant at the .05 level.



Hypothesis 39: Innovator type and respondents make comments to friends about products on SNSs – One-way between-groups ANOVA.

Q1emakecomments

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Innovators	24	2.79	1.141	.233	2.31	3.27	1	5
2 Early adopters	70	2.64	1.077	.129	2.39	2.90	1	5

3 Early majority	198	2.48	.949	.067	2.35	2.61	1	5
4 Late majority	43	2.37	.952	.145	2.08	2.67	1	5
5 Laggards	41	2.07	.985	.154	1.76	2.38	1	5
Total	376	2.47	1.001	.052	2.37	2.57	1	5

### ANOVA

Q1emakecomments

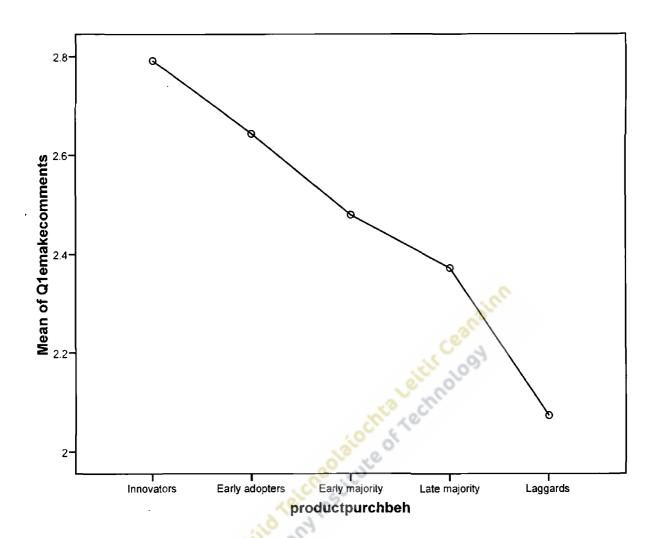
G Terriakecomments					
	Sum of Squares	df	Mean Square	,F	Sig.
Between Groups	11.458	4	2.865	2.917	.021
Within Groups	364.276	371	.982		:
Total	375.734	375			

### Multiple Comparisons

Dependent Variable: Q1emakecomments Tukey HSD

(I) productpurchbeh	(J) productpurchbeh	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
		Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Innovators	2 Early adopters	.149	.234	.969	49	.79
	3 Early majority	.312	.214	.592	28	.90
	4 Late majority	.420	.252	.459	27	1.11
	5 Laggards	.718(*)	.255	.040	.02	1.42
2 Early adopters	1 Innovators	149	.234	.969	79	.49
	3 Early majority	.163	.138	.761	21	.54
	4 Late majority	.271	.192	.621	26	.80
	5 Laggards	.570(*)	.195	.030	.04	1.10
3 Early majority	1 Innovators	312	.214	.592	90	.28
	2 Early adopters	163	.138	.761	54	.21
	4 Late majority	.108	.167	.967	35	.56
	5 Laggards	.407	.170	.120	06	.87
4 Late majority	1 Innovators	420	.252	.459	-1.11	.27
	2 Early adopters	271	.192	.621	80	.26
	3 Early majority	108	.167	.967	56	.35
	5 Laggards	.299	.216	.640	29	.89
5 Laggards	1 Innovators	718(*)	.255	.040	-1.42	02
30	2 Early adopters	570(*)	.195	.030	-1.10	04
	3 Early majority	407	.170	.120	87	.06
	4 Late majority	299	.216	.640	89	.29

<sup>\*</sup> The mean difference is significant at the .05 level.



Hypothesis 42: Most active SNS and friends make negative product comments on SNSs – One-way between-groups ANOVA

	N	Mean	san Std. Deviation		95% Confidence Mean	95% Confidence Interval for Mean		Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Bebo	53	2.62	.904	.124	2.37	2.87	1	5
2 Facebook	198	2.48	.996	.071	2.34	2.62	1	5
3 MySpace	8	2.63	1.188	.420	1.63	3.62	1	4
4 YouTube	18	3.06	.725	.171	2.69	3.42	2	5
5 Linkedin	55	2.76	.881	.119	2.53	3.00	1	5
6 Twitter	31	3.10	1.012	.182	2.73	3.47	1	5
9 Other	13	2.38	.768	.213	1.92	2.85	1	3
Total	376	2.62	.970	.050	2.52	2.72	1	5

### ANOVA

Q1dfriendsnegcomments

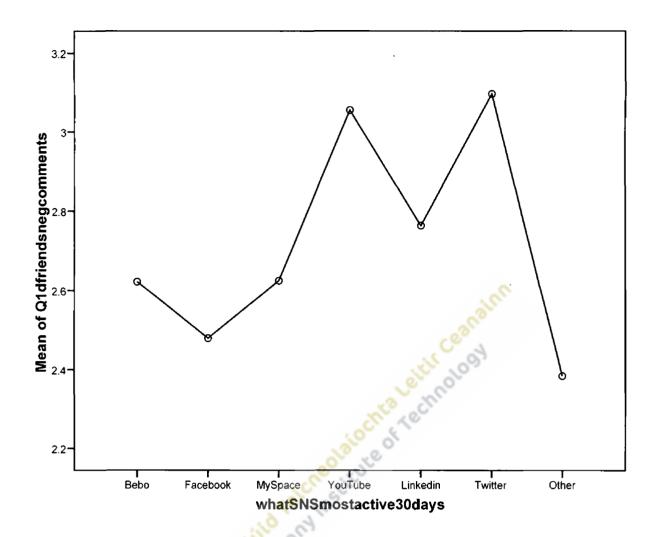
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.209	6	2.702	2.963	.008
Within Groups	336.405	369	.912		
Total	352,614	375			

### **Multiple Comparisons**

Dependent Variable: Q1dfriendsnegcomments Tukey HSD

Tukey HSD		Mean Difference	Old E	Cir.		
	i	(I-J)	Std. Error	Sig.	95% Confidence	e Interval
(I) whatSNSmostactive30days	(J) whatSNSmostactive30days	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Bebo	2 Facebook	.143	.148	.961	29	.58
	3 MySpace	002	.362	1.000	-1.08	1.07
	4 YouTube	433	.260	.642	-1.21	.34
	5 Linkedin	141	.184	.988	69	.40
ļ	6 Twitter	474	.216	.300	-1.11	.17
	9 Other	.238	.296	.984	64	1.11
2 Facebook	1 Bebo	143	.148	.961	58	.29
	3 MySpace	145	.344	1.000	-1.17	.88
	4 YouTube	576	.235	.181	-1.27	.12
	5 Linkedin	284	.146	.448	72	.15
	6 Twitter	617(*)	.184	.016	-1.16	07
	9 Other	.095	.273	1.000	72	.91
3 MySpace	1 Bebo	.002	.362	1.000	-1.07	1.08
	2 Facebook	.145	.344	1.000	88	1.17
	4 YouTube	431	.406	.939	-1.63	.77
	5 Linkedin	139	.361	1.000	-1.21	.93
	6 Twitter	472	.379	.876	-1.59	.65
. V. Tob.	9 Other	.240	.429	.998	-1.03	1.51
4 YouTube	1 Bebo	.433	.260	.642	34	1.21
	2 Facebook	.576	.235	.181	12	1.27
	3 MySpace	.431	.406	.939	77	1.63
	5 Linkedin	.292	.259	.920	48	1.06
	6 Twitter	041	.283	1.000	88	.80
E Linkadin	9 Other	.671	.348	.461	36	1.70
5 Linkedin	1 Bebo	.141	.184	.988	40	.69

1		.284	.146	.448	15	.72
	2 Facebook					
	3 MySpace	.139	.361	1.000	93	1.21
1	4 YouTube	292	.259	.920	-1.06	.48
	6 Twitter	333	.214	.712	97	.30
. 7 7	9 Other	.379	.294	.858	-,49	1.25
6 Twitter	1 Bebo	.474	.216	.300	17	1.11
1	2 Facebook	.617(*)	.184	.016	.07	1.16
	3 MySpace	.472	.379	.876	65	1.59
	4 YouTube	.041	.283	1.000	80	.88
	5 Linkedin	.333	.214	.712	30	.97
	9 Other	.712	.315	.268	22	1.65
9 Other	1 Bebo	238	.296	.984	-1.11	.64
	2 Facebook	095	.273	1.000	91	.72
	3 MySpace	240	.429	.998	-1.51	1.03
J	4 YouTube	671	.348	.461	-1.70	.36
	5 Linkedin	379	.294	.858	-1.25	.49
* The mean difference i	6 Twitter s significant at the .05 level.	712	.315	.268	-1.65	.22



Hypothesis 43: Most active SNS and respondents make positive product comments on SNSs – One-way between-groups ANOVA

<b>△46</b> ma			
Quima	keposc	omm	ents

	N	Mean	Std. Deviation	Std. Error	95% Confidenc Mean	95% Confidence Interval for Mean		Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Bebo	53	2.53	.890	.122	2.28	2.77	1	5
2 Facebook	198	2.40	.949	.067	2.27	2.53	1	5
3 MySpace	8	2.25	1.165	.412	1.28	3.22	1	4
4 YouTube	18	2.72	.895	.211	2.28	3.17	1	4
5 Linkedin	<b>5</b> 5	2.45	.959	.129	2.20	2.71	1	4
6 Twitter	31	3.16	1.036	.186	2.78	3.54	1	5
9 Other	13	2.31	1.032	.286	1.68	2.93	1	4

	•	1	1	1	r .	I .	1		
Total	376	2.50	.972	.050	2.40	2.60	1	5	ı

#### **ANOVA**

Q1fmakeposcomments

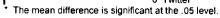
	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	17.600	6	2.933	3.218	.004
Within Groups Total	336.398 353.997	369 375	.912		

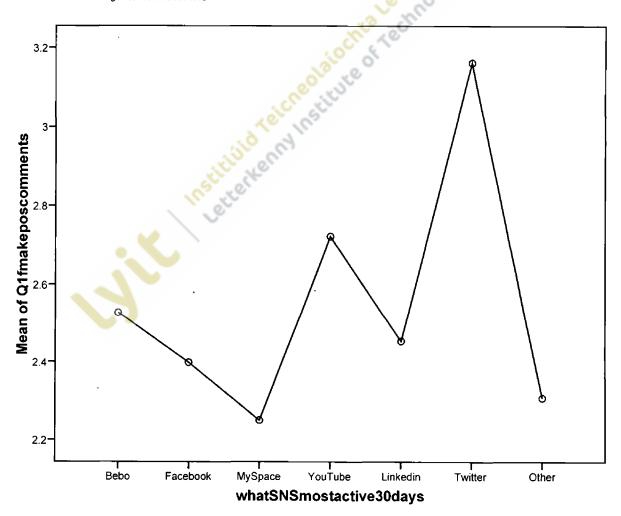
### **Multiple Comparisons**

Dependent Variable: Q1fmakeposcomments

Tukey HSD	<del></del>	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) what CNC mentanting 20 doing	(I) what CNC montantive 20 days			100		
(I) whatSNSmostactive30days  1 Bebo	(J) whatSNSmostactive30days					Lower Bound
. 2020	2 Facebook	.129	.148	.976	31	.57
	3 MySpace	.278	.362	.988	80	1.35
	4 YouTube	194	.260	.990	97	.58
	5 Linkedin	.074	.184	1.000	47	.62
	6 Twitter	633	.216	.055	-1.27	.01
2 Facebook	9 Other	.221	.296	.989	66	1.10
2 Facebook	1 Bebo	129	.148	.976	57	.31
	3 MySpace	.149	.344	.999	87	1.17
	4 YouTube	323	.235	.815	-1.02	.37
	5 Linkedin	056	.146	1.000	49	.38
	5 Linkedin 6 Twitter 9 Other	762(*)	.184	.001	-1.31	22
	9 Other	.091	.273	1.000	72	.90
3 MySpace	1 Bebo	278	.362	.988	-1.35	.80
	2 Facebook	149	.344	.999	-1.17	.87
		472	.406	.907	-1.68	.73
	4 YouTube					
	5 Linkedin	205	.361	.998	-1.28	.87
	6 Twitter	911	.379	.199	-2.03	.21
4 No. 7 L	9 Other	058	.429	1.000	-1.33	1.21
4 YouTube	1 Bebo	.194	.260	.990	58	.97
	2 Facebook	.323	.235	.815	37	1.02
	3 MySpace	.472	.406	.907	73	1.68
	5 Linkedin	.268	.259	.946	50	1.04
	6 Twitter	439	.283	.713	-1.28	.40
_	9 Other	.415	.348	.897	62	1.44
5	1 Bebo	074	.184	1.000	62	.47
	2 Facebook	.056	.146	1.000	38	.49

	3 MySpace	.205	.361	.998	87	1.28
	4 YouTube	268	.259	.946	-1.04	.50
	6 Twitter	707(*)	.214	.018	-1.34	07
	9 Other	.147	.294	.999	73	1.02
6 Twitter	1 Bebo	.633	.216	.055	01	1.27
	2 Facebook	.762(*)	.184	.001	.22	1.31
	3 MySpace	.911	.379	.199	21	2.03
	4 YouTube	.439	.283	.713	40	1.28
	5 Linkedin	.707(*)	.214	.018	.07	1.34
	9 Other	.854	.315	.100	08	1.79
9 Other	1 Bebo	221	.296	.989	-1.10	.66
	2 Facebook	091	.273	1.000	90	.72
	3 MySpace	.058	.429	1.000	-1.21	1.33
	4 YouTube	415	.348	.897	-1.44	.62
	5 Linkedin	147	.294	.999	-1.02	.73
!	6 Twitter	854	.315	.100	-1.79	.08





### Hypothesis 44: Most active SNS and respondents make negative product comments on SNSs

#### Descriptives

Q1hmakenegcomments

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Bebo	53	2.70	.868	.119	2.46	2.94	1	5
2 Facebook	198	2.48	.975	.069	2.35	2.62	1	5
3 MySpace	8	1.88	.991	.350	1.05	2.70	1	3
4 YouTube	, 18	3.11	1.023	.241	2.60	3.62	1	5
5 Linkedin	55	2.45	.878	.118	2.22	2.69	1	4
6 Twitter	31	3.13	1.024	.184	2.75	3.50	1	5
9 Other	13	2.38	.961	.266	1.80	2.97	1	4
Total	376	2.58	.977	.050	2.48	2.68	1	5

### ANOVA

Q1hmakenegcomments

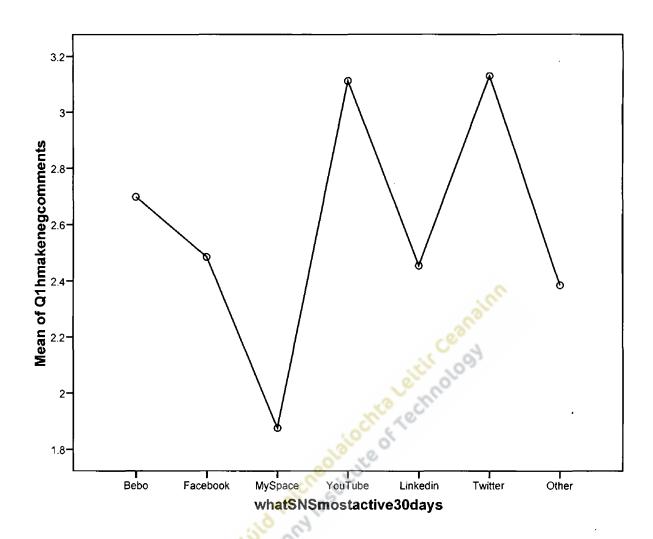
	Sum of Squares	df	Mean Square	E	Sig.
Between Groups	22.289	6	3.715	4.086	.001
Within Groups Total	335.474 357.763	369 375	.909		

### **Multiple Comparisons**

Dependent Variable: Q1hmakenegcomments Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
I) whatSNSmostactive30days	(J) whatSNSmostactive30days	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Bebo	2 Facebook	.213	.147	.776	22	.65
	3 MySpace	.823	.362	.259	25	1.90
	4 YouTube	413	.260	.690	-1.18	.36
	5 Linkedin	.244	.184	.839	30	.79
	6 Twitter	431	.216	.417	-1.07	.21
	9 Other	.313	.295	.939	56	1.19
Facebook	1 Bebo	213	.147	.776	65	.22
•	3 MySpace	.610	.344	.567	41	1.63
	4 YouTube	626	.235	.109	-1.32	.07

			ı	1		1
	5 Linkedin	.030	.145	1.000	40	.46
	6 Twitter	644(*)	.184	.009	-1.19	10
	9 Other	.100	.273	1.000	71	.91
3 MySpace	1 Bebo	823	.362	.259	-1.90	.25
	2 Facebook	610	.344	.567	-1.63	.41
	4 YouTube	-1.236(*)	.405	.039	-2.44	03
	5 Linkedin	580	.361	.678	-1.65	.49
	6 Twitter	-1.254(*)	.378	.017	-2.38	13
	9 Other	510	.428	.898	-1.78	.76
4 YouTube	1 Bebo	.413	.260	.690	36	1.18
	2 Facebook	.626	.235	.109	07	1.32
	3 MySpace	1.236(*)	.405	.039	.03	2.44
	5 Linkedin	.657	.259	.150	11	1.42
	6 Twitter	018	.283	1.000	86	.82
	9 Other	.726	.347	.359	-,30	1.76
5 Linkedin	1 Bebo	244	.184	.839	79	.30
	2 Facebook	-,030	.145	1.000	46	.40
	3 MySpace	.580	.361	.678	49	1.65
	4 YouTube	657	.259	.150	-1.42	.11
:	6 Twitter	674(*)	.214	.029	-1.31	04
	9 Other	.070	.294	1.000	80	.94
6 Twitter	1 Bebo	.431	.216	.417	21	1.07
	2 Facebook	.644(*)	.184 .	.009	.10	1.19
	3 MySpace	1.254(*)	.378	.017	.13	2.38
	1 Bebo 2 Facebook 3 MySpace 4 YouTube	.018	.283	1.000	82	.86
	5 Linkedin	.674(*)	.214	.029	.04	1.31
	9 Other	.744	.315	.218	19	1.68
9 Other	1 Bebo	313	.295	.939	-1.19	.56
	2 Facebook	-,100	.273	1.000	91	.71
	3 MySpace	.510	.428	.898	76	1.78
	4 YouTube	726	.347	.359	-1.76	.30
	5 Linkedin	070	.294	1.000	94	.80
* The mean difference is significa	6 Twitter nt at the .05 level.	744	.315	.218	-1.68	.19



Hypothesis 47: Number of friends on most active SNS and friends make negative product comments on SNSs – One-way between-groups ANOVA.

n	1 dfrior	ndsned	20000	mente
v	TOHICI	JUSH C		

_	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 <50	96	2.49	.846	.086	2.32	2.66	1	4
2 50-99	76	2.45	.929	.107	2.23	2.66	1	4
3 100-199	93	2.61	.978	.101	2.41	2.81	1	5
4 200-299	45	2.73	.963	.144	2.44	3.02	1	5
5 300+	66	2.94	1.108	.136	2.67	3.21	1	5
Total	376	2.62	.970	.050	2.52	2.72	1	5

ANOVA

Q1dfriendsnegcomments

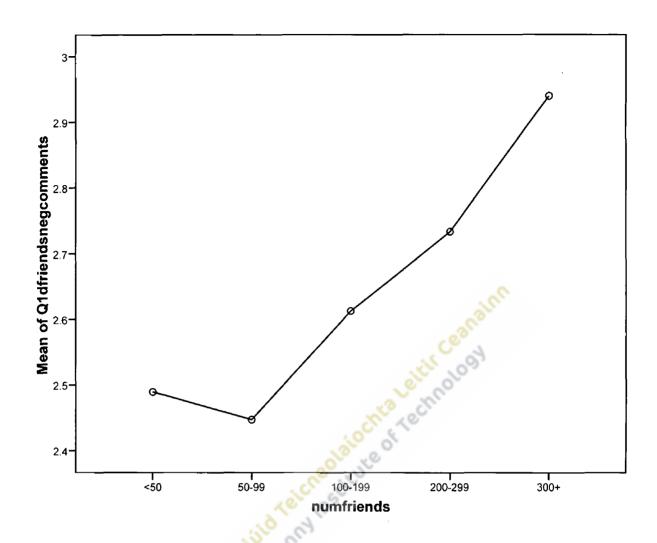
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.213	4	2.803	3.046	.017
Within Groups Total	341.401 352.614	371 375	.920		

### **Multiple Comparisons**

Dependent Variable: Q1dfriendsnegcomments Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) numfriends	(J) numfriends	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 <50	2 50-99	.042	.147	.999	36	.45
	3 100-199	123	.140	.903	51	.26
	4 200-299	244	.173	.624	72	.23
	5 300+	450(*)	.153	.029	87	03
2 50-99	1 <50	042	.147	.999	45	.36
	3 100-199	166	.148	.798	57	.24
	4 200-299	286	.180	.508	78	.21
3 100-199	5 300+	492(*)	.161	.021	93	05
3 100-199	1 <50	.123	.140	.903	26	.51
	2 50-99	.166	.148	.798	24	.57
	4 200-299	120	.174	.958	60	.36
4 200-299	5 300+	326	.154	.216	75	.10
4 200-299	1 <50	.244	.173	.624	23	.72
	2 50-99	.286	.180	.508	21	.78
	3 100-199	.120	.174	.958	36	.60
	5 300+	2 <mark>0</mark> 6	.185	.801	71	.30
5 300+		.450(*)	.153	.029	.03	.87
	1 <50	.492(*)	.161	.021	.05	.93
	2 50-99	.326	.154	.216	10	.75
	3 100-199 4 200-299	.206	.185	.801	30	.71

<sup>\*</sup> The mean difference is significant at the .05 level.



Hypothesis 50: Number of friends on most active SNS and respondents make negative product comments on SNSs

Q1hmakenegcomments

	N	Mean	Std. Deviation	Std. Error	95% Confidence Mean	95% Confidence Interval for Mean		Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 <50	96	2.40	.900	.092	2.21	2.58	1	5
2 5 <b>0-9</b> 9	76	2.45	.929	.107	2.23	2.66	1	5

	3 100-199	93	2.47	.951	.099	2.28	2.67	1	5
ı	4 200-299	45	2.82	.984	.147	2.53	3.12	1	5
١	5 300+	66	2.97	1.052	.129	2.71	3.23	1	5
١	Total	376	2.58	.977	.050	2.48	2.68	1	5

### ANOVA

Q1hmakenegcomments

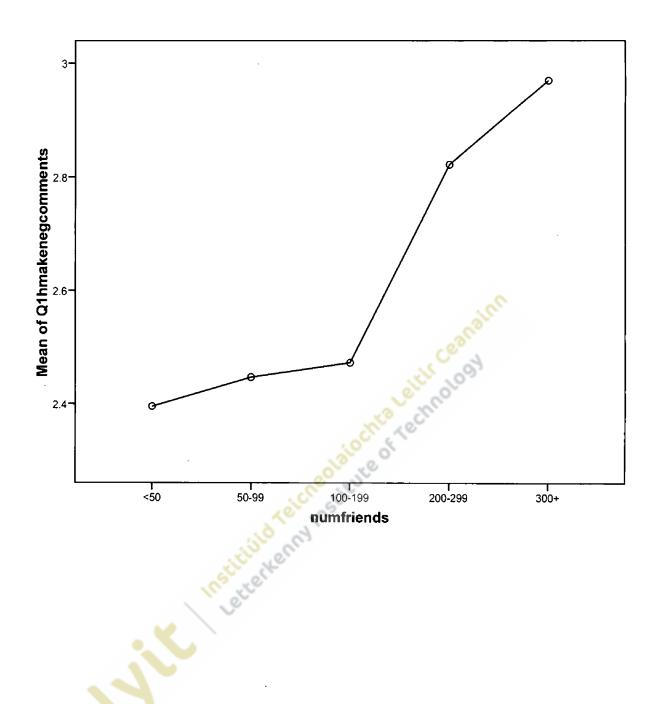
2 minareneg comments							
	Sum of Squares	df	Mean Square	F	Sig.		
Between Groups	18.316	4	4.579	5.004	.001		
Within Groups	339.448	371	.915				
Total	357.763	375					

### **Multiple Comparisons**

Dependent Variable: Q1hmakenegcomments Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
	(J) numfriends	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 <50	2 50-99	052	.147	.997	45	.35
	3 100-199	077	.139	.981	46	.30
	4 200-299	426	.173	.100	90	.05
	5 300+	574(*)	.153	.002	99	15
2 50-99	1 <50	.052	.147	.997	35	.45
	3 100-199	026	.148	1.000	43	.38
	4 200-299	375	.180	.229	87	.12
	5 300+	522(*)	.161	.011	96	08
3 100-199	1 <50	.077	.139	.981	30	.46
	2 50-99	.026 .	.148	1.000	38	.43
	4 200-299	349	.174	.263	83	.13
	5 300+	497(*)	.154	.012	92	07
4 200-299	1 <50	.426	.173	.100	05	.90
	2 50-99	.375	.180	.229	12	.87
	3 100-199	.349	.174	.263	13	.83
	5 300+	147	.185	.931	65	.36
5 300+	1 <50	.574(*)	.153	.002	.15	.99
	2 50-99	.522(*)	.161	.011	.08	.96
	3 100-199	.497(*)	.154	.012	.07	.92
	4 200-299	.147	.185	.931	36	.65

<sup>\*</sup> The mean difference is significant at the .05 level.



Hypothesis 52: Age and product comments made by friends on SNSs affects opinions

Q1ccomments affect opinions

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 14-17	105	2.54	1.000	.098	2.35	2.74	1	5
2 18-24	30	2.20	1.031	.188	1.82	2.58	1	5
3 25-34	49	2.90	1.159	.166	2.57	3.23	1	5
4 35-44	68	2.65	1.019	.124	2.40	2.89	1	5
5 45-54	79	2.67	1.009	.114	2.44	2.90	1	5
6 55+	45	2.16	1.043	.156	1.84	2.47	1	5
Total	376	2.56	1.051	.054	2.45	2.67	1	5

### ANOVA

Q1ccomments affect opinions

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.363	5	3.673	3.429	.005
Within Groups Total	396.230 414.593	370 375	1.071		eltilolo

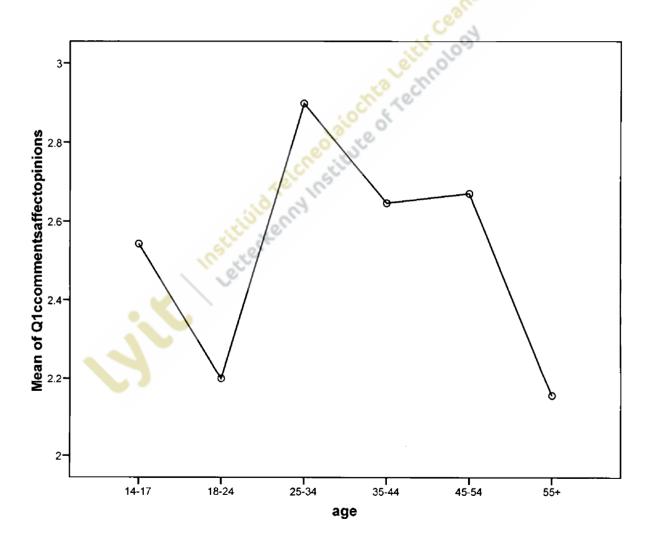
### **Multiple Comparisons**

Dependent Variable: Q1ccommentsaffectopinions Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) age	(J) age	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 14-17	2 18-24	.343	.214	.599	27	.96
	3 25-34	355	.179	.354	87	.16
	4 35-44	104	.161	.987	57	.36
	5 45-54	128	.154	.962	57	.31
	6 55+	.387	.184	.289	14	.92
2 18-24	1 14-17	343	.214	.599	96	.27
	3 25-34	698(*)	.240	.044	-1.39	01
	4 35-44	447	.227	.361	-1.10	.20
	5 45-54	471	.222	.278	-1.11	.16
	6 55+	.044	.244	1.000	65	.74
3 25-34	1 14-17	.355	.179	.354	16	.87
	2 18-24	.698(*)	.240	.044	.01	1.39
	4 35-44	.251	.194	.788	30	.81
	5 45-54	.227	.188	.833	31	.77
4 05 44	6 55+	.742(*)	.214	.007	.13	1.35
4 35-44	1 14-17	.104	.161	.987	36	.57
	2 18-24	.447	.227	.361	20	1.10

1			ا	l		l I
	3 25-34	251	.194	.788	81	.30
	5 45-54	024	.171	1.000	51	.47
	6 55+	.492	.199	.135	08	1.06
5 45-54	1 14-17	.128	.154	.962	31	.57
1	2 18-24	.471	.222	.278	16	1,11
	3 25-34	227	.188	.833	77	.31
	4 35-44	.024	.171	1.000	47	.51
]	6 55+	.515	.193	.085	04	1.07
6 55+	1 14-17	387	.184	.289	92	.14
1	2 18-24	044	.244	1.000	74	.65
	3 25-34	742(*)	.214	.007	-1.35	13
	4 35-44	492	.199	.135	-1.06	.08
	5 45-54	-,515	.193	.085	-1.07	.04

\* The mean difference is significant at the .05 level.



### Hypothesis 53: Innovator type and product comments made by friends on SNSs affects opinions

### Descriptives

Q1ccomments affect opinions

	N	Mean	Std. Deviation	a =	95% Confidence Mean	95% Confidence Interval for Mean		Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Innovators	24	2.54	1.021	.208	2.11	2.97	1	4
2 Early adopters	70	2.66	1.141	.136	2.39	2.93	1	5
3 Early majority	198	2.62	1.025	.073	2.47	2.76	1	5
4 Late majority	43	2.63	1.070	.163	2.30	2.96	1	5
5 Laggards	41	2.07	.932	.146	1.78	2.37	1	5
Total	376	2.56	1.051	.054	2.45	2.67	1	5

#### **ANOVA**

Q1ccomments affect opinions

4 Late majority

& recommentation	topinions				
	Sum of Squares	df	Mean Square	F . 60 4	Sig.
Between Groups	11.208	4	2.802	2.577	.037
Within Groups	403.385	371	1.087	1111	
Total	414.593	375	a color	S	

.086

1 Innovators

### Multiple Comparisons

Dependent Variable: Q1ccommentsaffectopinions Tukey HSD

rukey nob						
	,	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) productpurchbeh	(J) productpurchbeh	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Innovators	2 Early adopters	115	.247	.990	79	.56
	3 Early majority	074	.225	.997	69	.54
	4 Late majority	086	.266	.998	81	.64
	5 Lagg <mark>ar</mark> ds	.468	.268	.406	27	1.20
2 Early adopters	1 Innovators	.115	.247	.990	56	.79
	3 Early majority	.041	.145	.999	36	.44
	4 Late majority	.029	.202	1.000	52	.58
	5 Laggards	.584(*)	.205	.037	.02	1.15
3 Early majority	1 Innovators	.074	.225	.997	54	.69
	2 Early adopters	041	.145	.999	44	.36
	4 Late majority	012	.175	1.000	49	.47
	5 Laggards	.543(*)	.179	.022	.05	1.03

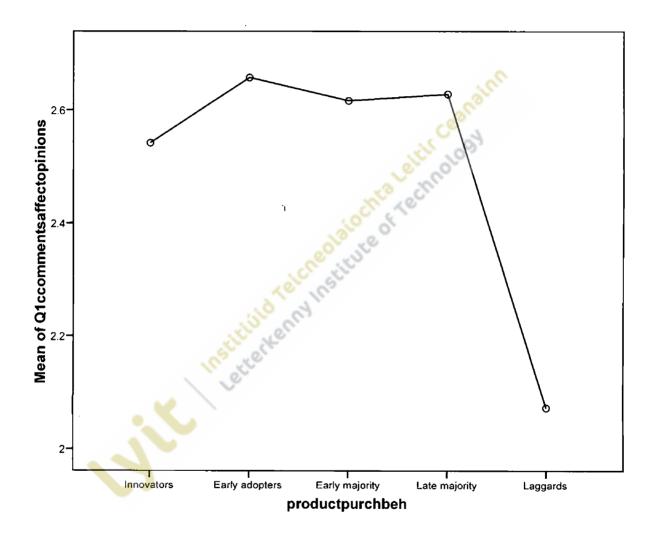
.266

-.64

.998

5 Laggards	<ul><li>2 Early adopters</li><li>3 Early majority</li><li>5 Laggards</li><li>1 Innovators</li></ul>	029 .012 .555 468	.202 .175 .228	1.000 1.000 .108	58 47 07	.52 .49 1.18
	<ul><li>2 Early adopters</li><li>3 Early majority</li><li>4 Late majority</li></ul>	584(*) 543(*) 555	.205 .179 .228	.037 .022 .108	-1.15 -1.03 -1.18	02 05 .07

<sup>\*</sup> The mean difference is significant at the .05 level.



Hypothesis 57: Age and respondents would make comment to friends if the product was of interest to them – One-way between-groups AVOVA

Q1gcommentifofinterest

	N	Mean	Std. Deviation	Std. Error	95% Confidenc Mean	95% Confidence Interval for Mean		Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 14-17	105	2.88	.997	.097	2.68	3.07	1	5
2 18-24	30	2.40	1.192	.218	1.95	2.85	1	5
3 25-34	49	3.29	1.118	.160	2.96	3.61	1	5
4 35-44	68	2.84	1.045	.127	2.59	3.09	1	5
5 45-54	79	3.05	1.097	.123	2.81	3.30	1	5
6 55+	45	2.87	1.272	.190	2.48	3.25	1	5
Total	376	2.92	1.107	.057	2.81	3.03	1	5

### ANOVA

Q1gcommentifofinterest

a rgoommeritation ne	31000				
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.798	5	3.360	2.807	.017
Within Groups	442.809	370	1.197	·	201 105
1 Otal	459.606	375	1		0.0

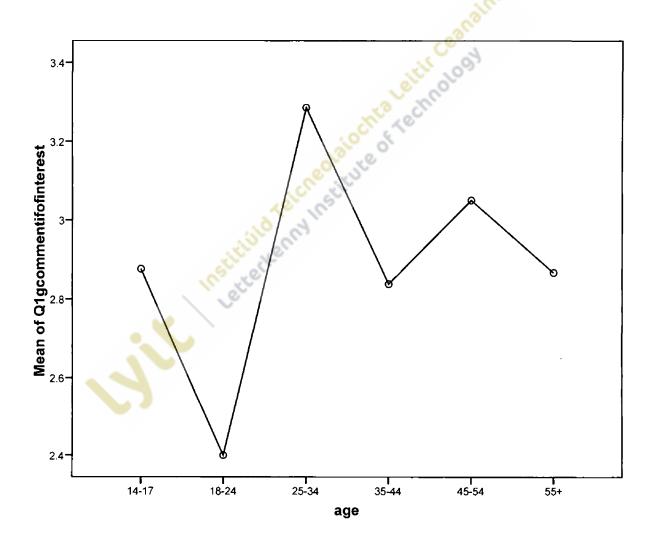
### **Multiple Comparisons**

Dependent Variable: Q1gcommentifofinterest Tukey HSD

Tukey HSL		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	e Interval
(I) age	(J) age	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 14-17	2 18-24	.476	.226	.288	17	1.12
	3 25-34	410	.189	.257	95	.13
	4 35-44	.038	.170	1.000	45	.53
	5 45-54	174	.163	.893	64	.29
	6 55+	.010	.195	1.000	55	.57
2 18-24	1 14-17	476	.226	.288	-1.12	.17
	3 25-34	886(*)	.254	.007	-1.61	16
	4 35-44	438	.240	.449	-1.13	.25
	5 45-54	651	.235	.064	-1.32	.02
	6 55+	467	.258	.461	-1.21	.27
3 25-34	1 14-17	.410	.189	.257	13	.95
	2 18-24	.886(*)	.254	.007	.16	1.61
	4 35-44	.447	.205	.248	14	1.03
	5 45-54	.235	.199	.845	33	.80
	6 55+	.419	.226	.432	23	1.07
4 35-44	1 14-17	038	.170	1.000	53	.45
	2 18-24	.438	.240	.449	25	1.13
	3 25-34	447	.205	.248	-1.03	.14

	5 45-54	212	.181	.849	73	.31
	6 55+	028	.210	1.000	63	.57
5 45-54	1 14-17	.174	.163	.893	29	.64
]	2 18-24	.651	.235	.064	02	1.32
	3 25-34	235	.199	.845	80	.33
	4 35-44	.212	.181	.849	31	.73
1	6 55+	.184	.204	.946	-,40	.77
6 55+	1 14-17	010	.195	1.000	57	.55
	2 18-24	.467	.258	.461	27	1.21
	3 25-34	419	.226	.432	-1.07	.23
	4 35-44	.028	.210	1.000	57	.63
	5 45-54	184	.204	.946	77	.40

\* The mean difference is significant at the .05 level.



### Hypothesis 61: The impact of friends making positive and negative product comments on SNSs on respondents making comments to friends about products on SNSs - Multiple regression

#### Correlations

			Q1emakecomm ents	Q1bfriendsposc omments	Q1dfriendsnegc omments	
Pearson Correlation	Q1emakecomments		1.000	.650	.653	
	Q1bfriendsposcomm	nents	.650	1.000	.626	
	Q1dfriendsnegcomm	nents	.653	.626	1.000	
Sig. (1-tailed)	Q1emakecomments			.000	.000	
	Q1bfriendsposcomm	nents	.000		.000	
	Q1dfriendsnegcomm	nents	.000	.000		
N	Q1emakecomments		376	376	376	
	Q1bfriendsposcomm	nents	376	376	376	
	Q1dfriendsnegcomm	nents	376	376	376	900
				, mi	376 376	00,
	Model Su	ımmary(l	b)	100	10	
Model R	Model Su R Square			Std. Error of the Estimate	26	

#### Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722(a)	.522	.519	.694

a Predictors: (Constant), Q1dfriendsnegcomments, Q1bfriendsposcomments b Dependent Variable: Q1emakecomments

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	196.122	2	98.061	203.644	.000(a)
	Residual	179.612	373	.482		
<u> </u>	Total	375,734	375			

a Predictors: (Constant), Q1dfriendsnegcomments, Q1bfriendsposcomments

### Coefficients(a)

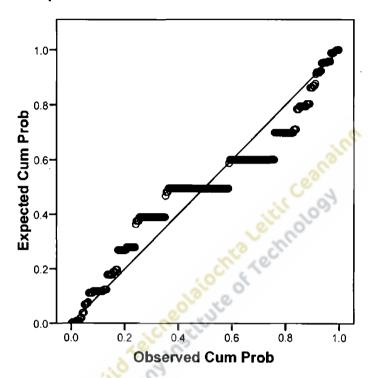
	Unstandardi Coefficients		Standardiz ed Coefficients	t		95% Confide		Correlations			Collinearity 5	Statistics
	В	Std. Error			Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	В	Std. Error
(Constant)	.381	.110		3.468	.001	.165	.597					
Q1bfriendsposcom ments	.396	.046	.396	8.633	.000	.306	.486	.650	.408	.309	.609	1.643
Q1dfriendsnegcom ments	.418	.047	.405	8.829	.000	.325	.511	.653	.416	.316	.609	1.643

a Dependent Variable: Q1emakecomments

b Dependent Variable: Q1emakecomments

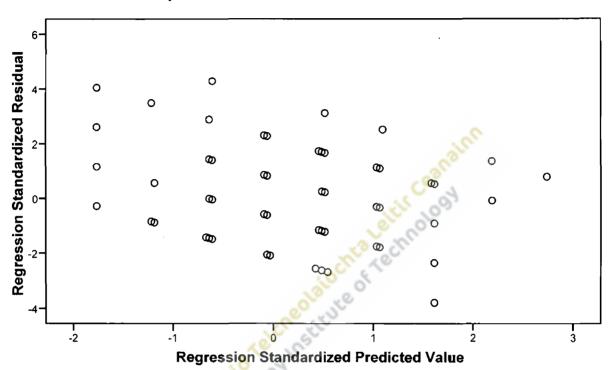
### Normal P-P Plot of Regression Standardized Residual

### **Dependent Variable: Q1emakecomments**



### Scatterplot

### **Dependent Variable: Q1emakecomments**



Hypothesis 63: Age and friends providing information to others on the SNS as a factor making a friend influential on SNSs – Chi-square

age \* influentialprovinfo Crosstabulation

			influentialpre	ovinfo	Total
			1 Yes	2 No	
Age	1 14-17	Count	5	100	105
		% within age	4.8%	95.2%	100.0%
		% within influentialprovinfo	9.6%	30.9%	27.9%
		% of Total	1.3%	26.6%	27.9%
	2 18-24	Count	1	29	30
		% within age	3.3%	96.7%	100.0%
		% within influentialprovinfo	1.9%	9.0%	8.0%
		% of Total	.3%	7.7%	8.0%
	3 25-34	Count	12	37	49
		% within age	24.5%	75.5%	100.0%

		% of Total	13.8%	86.2%	100.0%
		% within influentialprovinfo	100.0%	100.0%	100.0%
		% within age	13.8%	86.2%	100.0%
Total		Count	52	324	376
		% of Total	1.9%	10.1%	12.0%
		% within influentialprovinfo	13.5%	11.7%	12.0%
		% within age	15.6%	84.4%	100.0%
	6 55+	Count	7	38	45
		% of Total	4.3%	16.8%	21.0%
		% within influentialprovinfo	30.8%	19.4%	21.0%
		% within age	20.3%	79.7%	100.0%
	5 45-54	Count	16	63	79
		% of Total	2.9%	15.2%	18.1%
		% within influentialprovinfo	21.2%	17.6%	18.1%
		% within age	16.2%	83.8%	100.0%
	4 35-44	Count	11	57	68
		% of Total	3.2%	9.8%	13.0%
		% within influentialprovinfo	23.1%	11.4%	13.0%

### **Chi-Square Tests**

	Value	df	Asy <mark>mp.</mark> Sig. (2- sided)
Pearson Chi-Square	17.853(a)	5	.003
Likelihood Ratio	19.968	5	.001
Linear-by-Linear Association	9.172	1	.002
N of Valid Cases	376	dille	00.3

a 1 cells (8.3%) have expected count less than 5. The minimum expected count is 4.15.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.218	.003
Nominal	Cramer's V	.218	.003
N of Valid Cases		376	

### Hypothesis 64: Innovator type and that friend having a large number of friends on the SNS as a factor making a friend influential on SNSs - Chi-square

### productpurchbeh \* influentiallargenofriends Crosstabulation

			influentialla	rgenofriends	Total
			1 Yes	2 No	
productpurchbeh	1 Innovators	Count	10	14	24
		% within productpurchbeh	41.7%	58.3%	100.0%

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

I		% within	I	I	[ 1
		influentiallargenofriends	16.7%	4.4%	6.4%
		% of Total	2.7%	3.7%	6.4%
	2 Early adopters	Count	17	53	70
		% within productpurchbeh	24.3%	75.7%	100.0%
		% within influentiallargenofriends	28.3%	16.8%	18.6%
		% of Total	4.5%	14.1%	18.6%
	3 Early majority	Count	22	176	198
		% within productpurchbeh	11.1%	88.9%	100.0%
		% within influentiallargenofriends	36.7%	55.7%	52.7%
		% of Total	5.9%	46.8%	52.7%
	4 Late majority	Count	5	38	43
		% within productpurchbeh	11.6%	88.4%	100.0%
		% within influentiallargenofriends	8.3%	12.0%	11.4%
		% of Total	1.3%	10.1%	11,4%
	5 Laggards	Count	6	35	41
		% within productpurchbeh	14.6%	85. <mark>4%</mark>	100.0%
		% within influentiallargenofriends	10.0%	11.1%	10.9%
		% of Total	1.6%	9.3%	10.9%
Total		Count	60	316	376
		% within productpurchbeh	16.0%	84.0%	100.0%
		% within influentiallargenofriends	100.0%	100.0%	100.0%
		% of Total	16.0%	84.0%	100.0%

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	19.571(a)	4	.001
Likelihood Ratio Linear-by-Linear Association	16.703 8.894	4	.002
N of Valid Cases	376		

a 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.83.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.228	.001
Nominal	Cramer's V	.228	.001
N of Valid Cases		376	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

### Hypothesis 65: Innovator type and that friend being a close friend offline as a factor making a friend influential on SNSs – Chi-square

productpurchbeh \* influentialclosefriend Crosstabulation

			influentialclos	sefriend	Total
			1 Yes	2 <b>N</b> o	
productpurchbeh	1 Innovators	Count	9	15	24
		% within productpurchbeh	37.5%	62.5%	100.0%
		% within influentialclosefriend	4.6%	8.2%	6.4%
		% of Total	2.4%	4.0%	6.4%
	2 Early adopters	Count	31	39	70
		% within productpurchbeh	44.3%	55.7%	100.0%
		% within influentialclosefriend	16.0%	21.4%	18.6%
		% of Total	8.2%	10.4%	18.6%
	3 Early majority	Count	117	81	198
		% within productpurchbeh	59.1%	40.9%	100.0%
		% within influentialclosefriend .	60.3%	44.5%	52.7%
		% of Total	31.1%	21.5%	52.7%
	4 Late majority	Count	20	23	43
		% within productpurchbeh	46.5%	53.5%	100.0%
		% within influentialclosefriend	10.3%	12.6%	11.4%
		% of Total	5.3%	6.1%	11.4%
	5 Laggards	Count	17	24	41
,		% within productpurchbeh	41.5%	58.5%	100.0%
		% within influentialclosefriend	8.8%	13.2%	10.9%
		% of Total	4.5%	6.4%	10.9%
Total		Count	194	182	376
•		% within productpurchbeh	51.6%	48.4%	100.0%
		% within influentialclosefriend	100.0%	100.0%	100.0%
		% of Total	51.6%	48.4%	100.0%

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	9.991(a)	4	.041
Likelihood Ratio	10.042	4	.040
Linear-by-Linear Association	.021	1	.886
N of Valid Cases	376		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.62.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.163	.041
Nominal	Cramer's V	.163	.041

N of Valid Cases	376	

a Not assuming the null hypothesis.

### Hypothesis 66: Innovator type and friends providing information to others on the SNS as a factor making a friend influential on SNSs – Chi-square

productpurchbeh \* influentialprovinfo Crosstabulation

			influentialprovinf	0	Total
			1 Yes	2 No	1 Yes
productpurchbeh	1 Innovators	Count	4	20	24
		% within productpurchbeh	16.7%	83.3%	100.0%
		% within influentialprovinfo	7.7%	6.2%	6.4%
		% of Total	1.1%	5.3%	6.4%
	2 Early adopters	Count	17	53	70
		% within productpurchbeh	24.3%	75.7%	100.0%
		% within influentialprovinfo	32.7%	16.4%	18.6%
		% of Total	4.5%	14.1%	18.6%
	3 Early majority	Count	26	172	198
		% within productpurchbeh	13.1%	86.9%	100.0%
		% within influentialprovinfo	50.0%	53.1%	52.7%
		% of Total	6.9%	45.7%	52.7%
	4 Late majority	Count	3	40	43
ł		% within productpurchbeh	7.0%	93.0%	100.0%
		% within influentialprovinfo	5.8%	12.3%	11.4%
		% of Total	.8%	10.6%	11.4%
	5 Laggards	Count	2	39	41
		% within productpurchbeh	4.9%	95.1%	100.0%
		% within influentialprovinfo	3.8%	12.0%	10.9%
		% of Total	.5%	10.4%	10.9%
Total		Count	52	324	376
		% within productpurchbeh	13.8%	86.2%	100.0%
		% within influentialprovinfo	100.0%	100.0%	100.0%
		% of Total	13.8%	86.2%	100.0%

# Hypothesis 67: Age and providing friends with product information relevant to them as a factor causing respondents to discuss products with friends on a SNS – Chi-square

age \* discussrelevant Crosstabulation

			discussrelev	discussrelevant	
			1 Yes	2 No	
Age	1 14-17	Count	40	65	105

b Using the asymptotic standard error assuming the null hypothesis.

		% within age	38.1%	61.9%	100.0%	
		% within discussrelevant	30.1%	61.976	100.0%	
		70 William diodddor chafain	20.7%	35.5%	27.9%	
		% of Total	10.6%	17.3%	27.9%	
	2 18-24	Count	21	9	30	
		% within age	70.0%	30.0%	100.0%	
		% within discussrelevant	10.9%	4.9%	8.0%	
		% of Total	5.6%	2.4%	8.0%	
	3 25-34	Count	32	17	49	
		% within age	65.3%	34.7%	100.0%	
		% within discussrelevant	16.6%	9.3%	13.0%	
		% of Total	8.5%	4.5%	13.0%	
	4 35-44	Count	34	34	68 .	
		% within age	50.0%	50.0%	100.0%	
		% within discussrelevant	17.6%	18.6%	18.1%	
		% of Total	9.0%	9.0%	18.1%	
	5 45-54	Count	43	36	79	
		% within age	54.4%	45.6%	100.0%	
		% within discussrelevant	22.3%	19.7%	21.0%	
		% of Total	11.4%	9.6%	21.0%	
	6 55+	Count	23	22	45	
		% within age	51.1%	48.9%	100.0%	
		% within discussrelevant	11.9%	12.0%	12.0%	
		% of Total	6.1%	5.9%	12.0%	
Total		Count	193	183	376	
		% within age	51.3%	48.7%	100.0%	
		% within discussrelevant	100.0%	100.0%	100.0%	
		% of Total	51.3%	48.7%	100.0%	

## Hypothesis 68: Age and other as a factor causing respondents to discuss products with friends on a SNS – Chi-square

age \* discussother Crosstabulation

_			discussother		Total
			1 Yes	2 No	
Age	1 14-17	Count	10	95	105
		% within age	9.5%	90.5%	100.0%
		% within discussother	21.7%	28.8%	27.9%
		% of Total	2.7%	25.3%	27.9%
	2 18-24	Count	3	27	30
		% within age	10.0%	90.0%	100.0%
		% within discussother	6.5%	8.2%	8.0%
		% of Total	.8%	7.2%	8.0%

1	3 25-34	Count	2	47	49
		% within age	4.1%	95.9%	100.0%
		% within discussother	4.3%	14.2%	13.0%
		% of Total	.5%	12.5%	13.0%
1	4 35-44	Count	18	50	68
		% within age	26.5%	73.5%	100.0%
		% within discussother	39.1%	15.2% .	18.1%
		% of Total	4.8%	13.3%	18.1%
l	5 45-54	Count	8	71	79
		% within age	10.1%	89.9%	100.0%
		% within discussother	17.4%	21.5%	21.0%
		% of Total	2.1%	18.9%	21.0%
1	6 55+	Count	5	40	45
1		% within age	11.1%	88.9%	100.0%
		% within discussother	10.9%	12.1%	12.0%
		% of Total	1.3%	10.6%	12.0%
Total		Count	46	330	376
		% within age	12.2%	87.8%	100.0%
		% within discussother	100.0%	100.0%	100.0%
		% of Total	12.2%	87.8%	100.0%

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.106(a)	5	.004
Likelihood Ratio	15,361	5	.009
Linear-by-Linear Association	.970	1	.325
N of Valid Cases	376	Linker	

a 1 cells (8.3%) have expected count less than 5. The minimum expected count is 3.67.

#### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.213	.004
Nominal	Cramer's V	.213	.004
N of Valid Cases		376	

#### Hypothesis 69: Innovator and voicing opinions as a factor causing respondents to discuss products with friends on a SNS - Chi-square

#### productpurchbeh \* discussopinion Crosstabulation

d	discussopinion		Total	
 1		2 No		

A Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

productpurchbeh	1 Innovators	Count	16	8	24
[		% within productpurchbeh	66.7%	33.3%	100.0%
		% within discussopinion	10.4%	3.6%	6.4%
		% of Total	4.3%	2.1%	6.4%
ľ ·	2 Early adopters	Count	40	30	70
		% within productpurchbeh	57.1%	42.9%	100.0%
		% within discussopinion	26.0%	13.5%	18.6%
ľ		% of Total	10.6%	8.0%	18.6%
	3 Early majority	Count	69	129	198
		% within productpurchbeh	34.8%	65.2%	100.0%
		% within discussopinion	44.8%	58.1%	52.7%
		% of Total	18.4%	34.3%	52.7%
	4 Late majority	Count	16	27	43
		% within productpurchbeh	37.2%	62.8%	100.0%
		% within discussopinion	10.4%	12.2%	11.4%
		% of Total	4.3%	7.2%	11.4%
	5 Laggards	Count	13	28	41
		% within productpurchbeh	31.7%	68 <mark>.3%</mark>	100.0%
		% within discussopinion	8.4%	12.6%	10.9%
		% of Total	3.5%	7.4%	10.9%
Total		Count	154	222	376
		% within productpurchbeh	41.0%	59.0%	100.0%
		% within discussopinion	100.0%¬	100.0%	100.0%
		% of Total	41.0%	59.0%	100.0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	18.899(a)	4	.001
Likelihood Ratio	18.720	4	.001
Linear-by-Linear Association	11.948	1	.001
N of Valid Cases	376		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.83.

#### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.224	.001
	Cramer's V	.224	.001
N of Valid Case	s	376	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

# Hypothesis 70: Most active SNS and passing product information to a large number of people as a factor causing respondents to discuss products with friends on a SNS – Chi-square

whatSNSmostactive30days \* discussinfopass Crosstabulation

			discussinfopass		Total
			1 Yes	2 No	
whatSNSmostactive30days	1 Bebo	Count	12	41	53
		% within whatSNSmostactive30days	22.6%	77.4%	100.0%
		% within discussinfopass	19.4%	13.1%	14.1%
		% of Total	3.2%	10.9%	14.1%
	2 Facebook	Count	21	177	198
		% within whatSNSmostactive30days	10.6%	89.4%	100.0%
		% within discussinfopass	33.9%	56.4%	52.7%
		% of Total	5.6%	47.1%	52.7%
16	3 MySpace	Count	3	5	8
		% within whatSNSmostactive30days	37.5%	62.5%	100.0%
		% within discussinfopass	4.8%	1.6%	2.1%
		% of Total	.8%	1.3%	2.1%
	4 YouTube	Count	2	16	18
		% within whatSNSmostactive30days	11.1%	88.9%	100.0%
		% within discussinfopass	3.2%	5.1%	4.8%
		% of Total	.5%	4.3%	4.8%
	5 Linkedin	Count	12	43	55
		% within whatSNSmostactive30days	21.8%	78.2%	100.0%
		% within discussinfopass	19.4%	13.7%	14.6%
		% of Total	3.2%	11.4%	14.6%
	6 Twitter	Count	9	22	31
	K.	% within whatSNSmostactive30days	29.0%	71.0%	100.0%
		% within discussinfopass	14.5%	7.0%	8.2%
		% of Total	2.4%	5.9%	8.2%
	9 Other	Count	3	10	13
		% within whatSNSmostactive30days	23.1%	76.9%	100.0%
		% within discussinfopass	4.8%	3.2%	3.5%
		% of Total	.8%	2.7%	3.5%
Total		Count	62	314	376
		% within whatSNSmostactive30days	16.5%	83.5%	100.0%
		% within discussinfopass	100.0%	100.0%	100.0%
		% of Total	16.5%	83.5%	100.0%

#### **Chi-Square Tests**

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	14.462(a)	6	.025
Likelihood Ratio	13.795	6	.032
Linear-by-Linear Association	3.736	1	.053
N of Valid Cases	376		

a 3 cells (21.4%) have expected count less than 5. The minimum expected count is 1.32.

#### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.196	.025
Nominal	Cramer's V	.196	.025
N of Valid Cases	•	376	

Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

#### Appendix XI:

#### What makes a friend influential on a SNS - 'other' responses

- 'none apply'
- 'we don't discuss products'
- 'if I trust the Person online'
- 'Not relevant, not influenced by products on social networking sites'
- 'when they have specialised experience of product'
- 'Reliable information'
- 'If there sound'
- 'would not be influenced'
- 'none of the above'
- 'I wouldn't be influenced by anyone regarding products because they were on a social networking site'
- 'none of the above. I have not noticed products that are relevant to me being advertised on social networking sites'
- 'Don't use sites to access products'
- 'They have no personal interest in the product and the appear to be subject matter experts or offering honest opinion.'
- 'I just don't see it that way in relation to friends. I'm personally not interested in products at all on the sites.'
- 'don't really discuss or am interested in products on a social networking site'
- 'People Who Do Reviews'
- 'no social site friend is influential'
- 'I don't seriously consider any advertisement on a social network site. If I click on it, it would be mild curiosity.'
- 'They don't. IF there was a product where people knew about my interests they might recommend it. But it hasn't happened yet.'
- 'would not happen'

# What would cause respondents to discuss products with friends on a SNS – 'other' responses

- 'none'
- 'I would not discuss products on a social networking site'
- 'as above we don't discuss products'
- 'I wouldn't, because you never know who's watching.'
- 'I do not discuss products on snts.'
- 'if I'm asked by a friend'
- 'nothing!'
- 'I don't discuss products with anyone. I really don't care to.'
- 'ignore products on sites'

- 'if The People Got a Sample or a Loan of Product'
- 'nothing i hate stupid ads and i never pay attention to them'
- 'None of the above. I never recommend products unless specifically asked about the product by a known colleague!'
- 'if i think they'll like it'
- 'I wouldn't. BUT if there was something I KNEW my friend would love, I'd pass it on. But I doubt that'd happen'

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#### Appendix XII: Rejected hypotheses relating to the implications of marketing on SNSs

#### Hypothesis 74: Most active SNS and respondents notice advertisements on their SNS - One-way between-groups ANOVA

#### Descriptives

Q1anoticeads

_	N_	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Bebo	53	3.43	1.201	.165	3.10	3.77	1	5
2 Facebook	198	3.46	1.107	.079	3.31	3.62	1	5
3 MySpace	8	3.63	.916	.324	2.86	4.39	2	5
4 YouTube	18	3.22	1.114	.263	2.67	3.78	1	5
5 Linkedin	55	3.18	1.107	.149	2.88	3.48	1	5
6 Twitter	31	2.97	1.303	.234	2.49	3.45	1	5
9 Other	13	2.31	1.251	.347	1.55	3.06	1	4
Total	376	3.33	1.158	.060	3.21	3.45	1	5

#### ANOVA

Q1anoticeads

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23.930	6	3.988	3.071	.006
Within Groups	479.176	369	1.299		
Total	503.106	375			_

#### **Multiple Comparisons**

Dependent Variable: Q1anoticeads
Tukev HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(l) whatSNSmostactive30days	(J) whatSNSmostactive30days	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Bebo	2 Facebook	031	.176	1.000	55	.49
	3 MySpace	191	.432	.999	-1.47	1.09
	4 YouTube	.212	.311	.994	71	1.13
	5 Linkedin	.252	.219	.912	40	.90
	6 Twitter	.466	.258	.543	30	1.23
	9 Other	1.126(*)	.353	.025	.08	2.17
2 Facebook	1 Bebo	.031	.176	1.000	49	.55
		-,160	.411	1.000	-1.38	1.06

ı	3 MySpace	ı	I	I	I	1
	4 YouTube	.242	.281	.978	59	1.07
	5 Linkedin	.283	.174	.664	23	.80
	6 Twitter	.497	.220	.268	16	1.15
	9 Other	1.157(*)	.326	.008	.19	2.12
3 MySpace	1 Bebo	.191	.432	.999	-1.09	1.47
	2 Facebook	.160	.411	1.000	-1.06	1.38
	4 YouTube	.403	.484	.982	-1.03	1.84
	5 Linkedin	.443	.431	.947	84	1.72
	6 Twitter	.657	.452	.771	68	2.00
	9 Other	1.317	.512	.138	20	2.84
4 YouTube	1 Bebo	212	.311	.994	-1.13	.71
	2 Facebook	242	.281	.978	-1.07	.59
	3 MySpace	403	.484	.982	-1.84	1.03
	5 Linkedin	.040	.309	1.000	-,88	.96
	6 Twitter	.254	.338	.989	75	1.26
e Italia	9 Other	.915	.415	.295	32	2.14
5 Linkedin	1 Bebo	252	.219	.912	-,90	.40
	2 Facebook	283	.174	.664	80	.23
	3 MySpace	443	.431	.947	-1.72	.84
	4 YouTube	040	.309	1.000	96	.88.
	6 Twitter	.214	.256	.981	54	.97
0. Toother	9 Other	.874	.351	.167	17	1.92
6 Twitter	1 Bebo	466	.258	.543	-1.23	.30
	2 Facebook	<b>4</b> 97	.220	.268	-1.15	.16
	3 MySpace	657	.452	.771	-2.00	.68
	4 YouTube	254	.338	.989	-1.26	.75
	5 Linkedin	214	.256	.981	97	.54
9 Other	9 Other	.660	.377	.581	46	1.78
9 Other	1 Bebo	-1.126(*)	.353	.025	-2.17	08
	2 Facebook	-1.157(*)	.326	.008	-2.12	19
	3 MySpace	-1.317	.512	.138	-2.84	.20
	4 YouTube	915	.415	.295	-2.14	.32
	5 Linkedin	874	.351	.167	-1.92 	.17
* The mean difference is significa	6 Twitter nt at the .05 level.	660	.377	.581	-1.78	.46

#### Hypothesis 78: Age and respondents trust in advertisements on SNSs - One-way between-groups ANOVA

#### Descriptives

rQ1etrustads

	N	Mean	Std. Deviation	Std. Error	95% Confidence Mean	95% Confidence Interval for Mean		Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
l 14-17	105	2.17	1.147	.112	1.95	2.39	1	5
18-24	30	2.43	1.104	.202	2.02	2.85	1	5
25-34	49	2.69	.983	.140	2.41	2.98	1	4
35-44	68	2.88	1.000	.121	2.64	3.12	1	5
45-54	79	2.85	.988	.111	2.63	3.07	1	5
<b>5</b> 5+	45	2.87	1.036	.154	2.56	3.18	1	5
Γotal	376	2.61	1.087	.056	2.50	2.72	1	5

#### **ANOVA**

rQ1etrustads

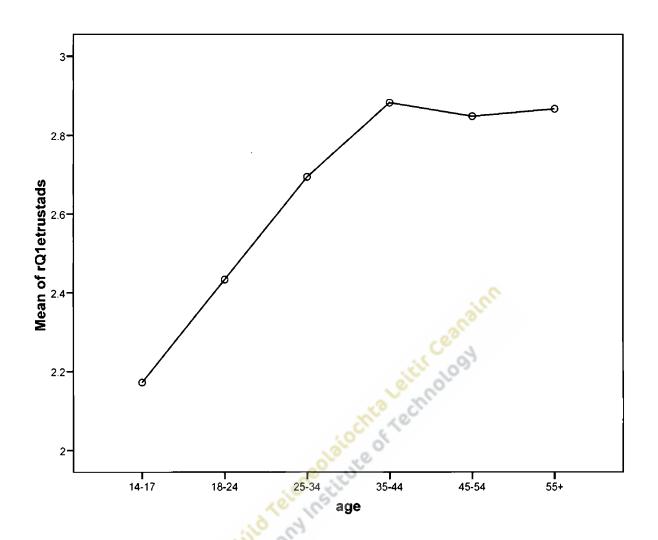
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	33.957	5	6.791	6.142	.000	
Within Groups	409.125	370	1.106			
Total	443.082	375	3000		j	

#### Multiple Comparisons

Dependent Variable: rQ1etrustads
Tukey HSD

-	-	Mean Difference				
(I) age	(J) age	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 14-17	2 18-24	262	.218	.835	89	.36
	3 25-34	522(*)	.182	.049	-1.04	.00
	4 35-44	711(*)	.164	.000	-1.18	24
	5 45-54	677(*)	.157	.000	-1.13	23
	6 55+	6 <b>9</b> 5(*)	.187	.003	-1.23	16
2 18-24	1 14-17	.262	.218	.835	36	.89
	3 25-34	- 261	.244	.893	96	.44
	4 35-44	449	.230	.375	-1.11	.21
	5 45-54	415	.226	.442	-1.06	.23
	6 55+	433	.248	.501	-1.14	.28

	3 25-34	1 14-17	.522(*)	.182	.049	.00	1.04
1		2 18-24	.261	.244	.893	44	.96
		4 35-44	188	.197	.931	75	.38
		5 45-54	154	.191	.966	70	.39
		6 55+	173	.217	.968	79	.45
	4 35-44	1 14-17	.711(*)	.164	.000	.24	1.18
		2 18-24	.449	.230	375	21	1.11
		3 25-34	.188	.197	.931	38	.75
		5 45-54	.034	.174	1.000	46	.53
		6 55+	.016	.202	1.000	56	.59
	5 45-54	1 14-17	.677(*)	.157	.000	.23	1.13
		2 18-24	.415	.226	.442	23	1.06
		3 25-34	.154	.191	.966	39	.70
		4 35-44	034	.174	1.000	53	.46
		6 55+	019	.196	1.000	58	.54
	6 55+	1 14-17	.695(*)	.187	.003	.16	1.23
		2 18-24	.433	.248	.501	28	1.14
		3 25-34	.173	.217	.968	45	.79
		4 35-44	016	.202	1.000	59	.56
		5 45-54	.019	.196	1.000	54	.58



Hypothesis 79: Age and respondents find advertisements on SNSs boring – One-way between-groups ANOVA

#### Descriptives

rQ1fboringads

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 14-17	105	2.43	1.008	.098	2.23	2.62	1	5
2 18-24	30	2.70	.988	.180	2.33	3.07	1	5
3 25-34	49	2.82	.782	.112	2.59	3.04	1	4
4 35-44	68	2.96	.700	.085	2.79	3.13	1	5
5 45-54	79	2.85	.864	.097	2.65	3.04	1	5
6 55+	45	2.82	1.093	.163	2.49	3.15	1	5
Total	376	2.73	.926	.048	2.64	2.83	1	5

ANOVA

rQ1fboringads

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.886	5	2.977	3.588	.004
Within Groups Total	306.984 321.870	370 375	.830		

#### **Multiple Comparisons**

Dependent Variable: rQ1fboringads

Tukev	HSD

Tukey HSL		Moon Difference	<del></del>	<del></del>		
1		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) age	(J) age	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 14-17	2 18-24	271	.189	.703	81	.27
	3 25-34	388	.158	.139	84	.06
	4 35-44	527(*)	.142	.003	93	12
	5 45-54	420(*)	.136	.026	81	03
	6 55+	394	.162	.150	86	.07
2 18-24	1 14-17	.271	.189	.703	27	.81
	3 25-34	116	.211	.994	72	.49
	4 35-44	256	.200	.795	83	.32
	5 45-54	148	.195	.974	71	.41
	6 55+	122	.215	.993	74	.49
3 25-34	1 14-17	.388	.158	.139	06	.84
<u> </u>	2 18-24	.116	.211	.994	49	.72
	4 35-44	140	.171	.964	63	.35
	5 45-54	032	.166	1.000	51	.44
<b>,</b>	6 55+	006	.188	1.000	54	.53
4 35-44	1 14-17	.527(*)	.142	.003	.12	.93
	2 18-24	.256	.200	.795	32	.83
<b> </b>	3 25-34	.140	.171	.964	35	.63
	5 45-54	.108	.151	.980	32	.54
	6 55+	.134	.175	.973	37	.64
5 45-54	1 14-17	.420(*)	.136	.026	.03	.81
	2 18-24	.148	.195	.974	41	.71
	3 25-34	.032	.166	1.000	44	.51
	4 35-44	108	.151	.980	54	.32
	6 55+	.026	.170	1.000	46	.51
6 55+	1 14-17	.394	.162	.150	07	.86
l	2 18-24	.122	.215	.993	49	.74
	3 25-34	.006	.188	1.000	53	.54
	4 35-44	134	.175	.973	64	.37
ļ	5 45-54	026	.170	1.000	51	.46

#### Hypothesis 81: Most active SNS and respondents finding advertisements Boring on SNSs - One-way between-groups ANOVA

#### Descriptives

rQ1dannoyingads

	N Mean Std. Deviation		95% Confidence Inte Mean		e Interval for	Minimum	Maximum	
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Bebo	53	2.17	1.156	.159	1.85	2.49	1	5
2 Facebook	198	2.49	1.060	.075	2.35	2.64	1	5
3 MySpace	8	3.36	1.408	.498	2.20	4.55	1	5
4 YouTube	18	1.94	.938	.221	1.48	2.41	1	3
5 Linkedin	55	3.00	1.000	.135	2.73	3.27	1	5
6 Twitter	31	2.90	1.274	.229	2.44	3.37	1	5
9 Other	13	2.38	1.387	.385	1.55	3.22	1	5
Total	376	2.55	1.133	.058	2.43	2.66	1	5

	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	35.659	6	5.943	4.922	.000	
Within Groups	445.573	369	1.208			
Total	481.231	375	9			

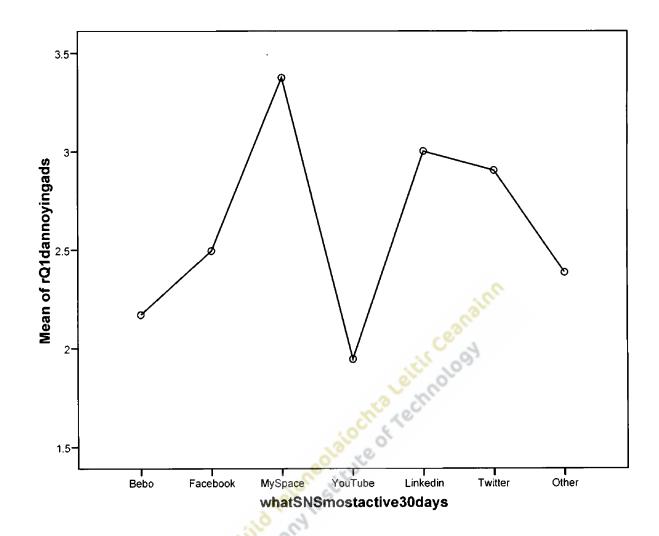
#### **Multiple Comparisons**

Dependent Variable: rQ1dannoyingads
Tukev HSD

101		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) whatSNSmostactive30days	(J) whatSNSmostactive30days	Lower Bound U	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Bebo	2 Facebook	325	.170	.473	83	.18
	3 MySpace	-1.205	.417	.061	-2.44	.03
	4 YouTube	.225	.300	.989	66	1.11
	5 Linkedin	830(*)	.212	.002	-1.46	20
	6 Twitter	733	.248	.052	-1.47	.00
	9 Other	215	.340	.996	-1.22	.79
? Facebook	1 Bebo	.325	.170	.473	18	.83
	3 MySpace	880	.396	.287	-2.05	.29
	о муорасе	.551	.271	.394	25	1.35

	4 YouTube	1	1	I	1	1
	5 Linkedin	505(*)	.167	.043	-1.00	01
	6 Twitter	408	.212	.466	-1.04	.22
	9 Other	.110	.315	1.000	82	1.04
B MySpace	1 Bebo	1.205	.417	.061	03	2.44
	2 Facebook	.880	.396	.287	29	2.05
	4 YouTube	1.431(*)	.467	.038	.05	2.81
	5 Linkedin	.375	.416	.972	86	1.61
	6 Twitter	.472	.436	.933	82	1.76
	9 Other	.990	.494	.413	47	2.45
YouTube	1 Bebo	225	.300	.989	-1.11	.66
	2 Facebook	551	.271	.394	-1.35	.25
		-1.431(*)	.467	.038	-2.81	05
	3 MySpace 5 Linkedin	-1.056(*)	.298	.008	-1.94	17
	5 Ernkedin 6 Twitter	959	.326	.053	-1.92	.01
5 Linkedin		440	.400	.928	-1.63	.75
	9 Other	.830(*)	.212	.002	.20	1.46
	1 Bebo	.505(*)	.167	.043	.01	1.00
	2 Facebook	375	.416	.972	-1.61	.86
	3 MySpace	1.056(*)	.298	.008	.17	1.94
	4 YouTube	.097	.247	1.000	63	.83
	6 Twitter	C. CO.				
	9 Other	.615	.339	.538	39	1.62
Twitter	1 Bebo	.733	.248	.052	.00	1.47
	1 Bebo 2 Facebook 3 MySpace	.408	.212	.466	22	1.04
	3 MySpace	472	.436	.933	-1.76	.82
	4 YouTube	.959	.326	.053	01	1.92
	5 Linkedin	097	.247	1.000	83	.63
	9 Other	.519	.363	.786	56	1.60
Other	1 Bebo	.215	.340	.996	79	1.22
	2 Facebook	110	.315	1.000	-1.04	.82
	3 MySpace	990	.494	.413	-2.45	.47
	4 YouTube	.440	.400	.928	75	1.63
	5 Linkedin	615	.339	.538	-1.62	.39
		1	1	1	1	1

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Hypothesis 82: Most active SNS and respondents trust in advertisements on SNSs – One-way between-groups ANOVA

#### Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Bebo	53	2.13	1.177	.162	1.81	2.46	1	5
2 Facebook	198	2.56	1.015	.072	2.41	2.70	1	5
3 MySpace	8	3.25	.886	.313	2.51	3.99	2	5
4 YouTube	18	2.17	1.043	.246	1.65	2.69	1	4
5 Linkedin	55	3.16	.938	.127	2.91	3.42	1	5

1	6 Twitter	31	2.97	1.080	.194	2.57	3.36	1	5	
	9 Other	13	2.54	1.330	.369	1.73	3.34	1	5	
	Total	376	2.61	1.087	.056	2.50	2.72	1	5	

#### ANOVA

#### rQ1etrustads

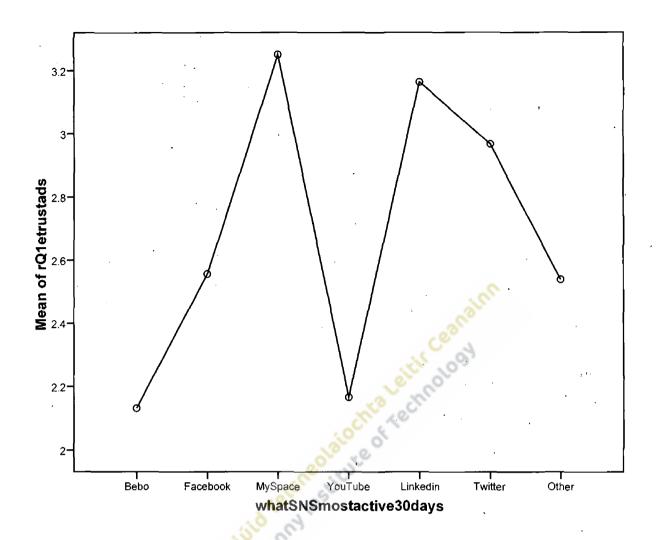
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	40.392	6	6.732	6.169	.000
Within Groups	402.690	369	1.091		
Total	443.082	375			

#### **Multiple Comparisons**

### Dependent Variable: rQ1etrustads

Tukey HSD						
		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) whatSNSmostactive30days	(J) whatSNSmostactive30days	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Bebo	2 Facebook	423	.162	.123	90	.06
	3-MySpace	-1.118	.396	.074	-2.29	.06
	4 YouTube	035	.285	1.000	88	.81
	5 Linkedin	-1.032(*)	.201	.000	-1.63	44
	6 Twitter	836(*)	.236	.008	-1.54	14
	9 Other	406	.323	.871	-1.36	.55
2 Facebook	1 Bebo	.423	.162	.123	06	.90
	3 MySpace	694	.377	.520	-1.81	.42
	4 YouTube 5 Linkedin 6 Twitter	.389	.257	.737	37	1.15
	5 Linkedin	608(*)	.159	.003	-1.08	14
	6 Twitter	412	.202	.390	-1.01	.19
2 MyChana	9 Other	.017	.299	1.000	87	.90
3 MySpace	1 Bebo	1.118	.396	.074	06	2.29
	2 Facebook	.694	.377	.520	42	1.81
	4 YouTube	1.083	.444	.185	23	2.40
	5 Linkedin	.086	.395	1.000	-1.09	1.26
	6 Twitter	.282	.414	.994	95	1.51
A MauTuka	9 Other	.712	.469	.735	68	2.10
4 YouTube	1 Bebo	.035	.285	1.000	81	.88.
	2 Facebook	389	.257	.737	-1.15	.37
	3 MySpace	-1.083	.444	.185	-2.40	.23
	5 Linkedin	997(*)	.284	.009	-1.84	16
	6 Twitter	801	.310	.133	-1.72	.12
	9 Other	372	.380	.959	-1.50	.76

		_			_	
5 Linkedin	1 Bebo	1.032(*)	.201	.000	.44	1.63
	2 Facebook	.608(*)	.159	.003	.14	1.08
	3 MySpace	086	.395	1.000	-1.26	1.09
	4 YouTube	.997(*)	.284	.009	.16	1.84
	6 Twitter	.196	.235	.981	50	.89
	9 Other	.625	.322	.455	33	1.58
6 Twitter	1 Bebo	.836(*)	.236	.008	.14	1.54
	2 Facebook	.412	.202	.390	19	1.01
	3 MySpace	282	.414	.994	-1.51	.95
	4 YouTube	.801	.310	.133	12	1.72
	5 Linkedin	196	.235	.981	89	.50
1	9 Other	.429	.345	.877	59	1.45
9 Other	1 Bebo	.406	.323	.871	55	1.36
	2 Facebook	017	.299	1.000	90	.87
1	3 MySpace	712	.469	.735	-2.10	.68
	4 YouTube	.372	.380	.959	76	1.50
	5 Linkedin	625	.322	.455	-1.58	.33
	6 Twitter	429	.345	.877	-1.45	.59



Hypothesis 83: Most active SNS and respondents finding advertisements on SNSs boring – One-way Between-groups ANOVA

	N	Mean	Std. Deviation	Std. Error	95% Confidence Mean	e Interval for	Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Bebo	53	2.28	1.007	.138	2.01	2.56	1	5
2 Facebook	198	2.76	.856	.061	2.64	2.88	1	5
3 MySpace	8	3.63	.744	.263	3.00	4.25	3	5
4 YouTube	18	2.61	.916	.216	2.16	3.07	1	4
5 Linkedin	55	2.93	.858	.116	2.70	3.16	1	5
S Twitter	31	2.87	1.056	.190	2.48	3.26	1	5
9 Other	13	2.62	1.044	.290	1.98	3.25	1	5
Total	376	2.73	.926	.048	2.64	2.83	1	5

#### ANOVA

rQ1fboringads

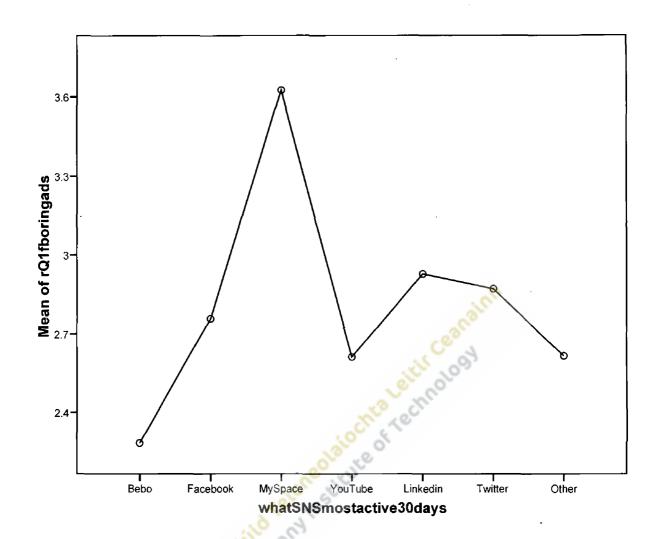
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.329	6	3.388	4.146	.000
Within Groups Total	301.541 321.870	369 375	.817		

#### **Multiple Comparisons**

Dependent Variable: rQ1fboringads Tukey HSD

Tukey HSD		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) whatSNSmostactive30days	(J) whatSNSmostactive30days	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Bebo	2 Facebook	475(*)	.140	.013	89	06
	3 MySpace	-1.342(*)	.343	.002	-2.36	33
	4 YouTube	328	.247	.837	-1,06	.40
,	5 Linkedin	644(*)	.174	.005	-1.16	13
	6 Twitter	588	.204	.064	-1.19	.02
	9 Other	332	.280	.898	-1.16	.50
2 Facebook	1 Bebo	.475(*)	.140	.013	.06	.89
	3 MySpace	867	.326	.111	-1.83	.10
	1 Bebo 3 MySpace 4 YouTube 5 Linkedin	.146	.223	.995	51	.81
	5 Linkedin	170	.138	.881	58	.24
•	6 Twitter	113	.175	.995	63	.40
	9 Other	.142	.259	.998	63	.91
3 MySpace	1 Bebo	1.342(*)	.343	.002	.33	2.36
	2 Facebook	.867	.326	.111	10	1.83
1.31	4 YouTube	1.014	.384	.117	12	2.15
	5 Linkedin	.698	.342	.391	32	1.71
	6 Twitter	.754 1.010	.358 .406	.353 .168	31  19	1.82
4 YouTube	9 Other	.328	.247	.837	40	1.06
	1 Bebo	146	.223	.995	81	.51
	2 Facebook	-1.014	.384	.117	-2.15	.12
	3 MySpace	-,316	.245	.857	-1.04	.41
	5 Linkedin 6 Twitter	260	.268	.960	-1.05	.53
	9 Other	004	.329	1.000	98	.97
5 Linkedin	1 Bebo	.644(*)	.174	.005	.13	1.16

			1		1	ı	ſ
	2 Facebook	.170	.138	.881	24	.58	
}	3 MySpace	698	.342	.391	-1.71	.32	
	4 YouTube	.316	.245	.857	41	1.04	
	6 Twitter	.056	.203	1.000	55	.66	
6 Twitter	9 Other	.312	.279	.922	51	1.14	
	1 Bebo	.588	.204	.064	02	1.19	ſ
	2 Facebook	.113	.175	.995	40	.63	
	3 MySpace	754	.358	.353	-1.82	.31	
Ì	4 YouTube	.260	.268	.960	53	1.05	
	5 Linkedin	056	.203	1.000	66	.55	
	9 Other	.256	.299	.979	63	1.14	
9 Other	1 Bebo	.332	.280	.898	50	1.16	
	2 Facebook	142	.259	.998	91	.63	
	3 MySpace	-1.010	.406	.168	-2.21	.19	
	4 YouTube	.004	.329	1.000	97	.98	
	5 Linkedin	312	.279	.922	-1.14	.51	
* The mean difference is si	6 Twitter gnificant at the .05 level.	256	.299	.979	-1.14	.63	
* The mean difference is si	6 Twitter	i	0° 0		}		



Hypothesis 86: Innovator type and respondents think advertisements on SNSs are eye-catching – One-way between-groups ANOVA

#### Descriptives

Q1ç	eyecatchingads

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Innovators	24	2.71	.859	.175	2.35	3.07	1	4
2 Early adopters	70	2.71	.903	.108	2.50	2.93	1	5
3 Early majority	198	2.98	.907	.064	2.85	3.11	1	5
4 Late majority	43	2.88	1.028	.157	2.57	3.20	1	5
5 Laggards	41	2.41	1.284	.201	2.01	2.82	1	5
Total	376	2.84	.978	.050	2.74	2.94	1	5

**ANOVA** 

Q1geyecatchingads

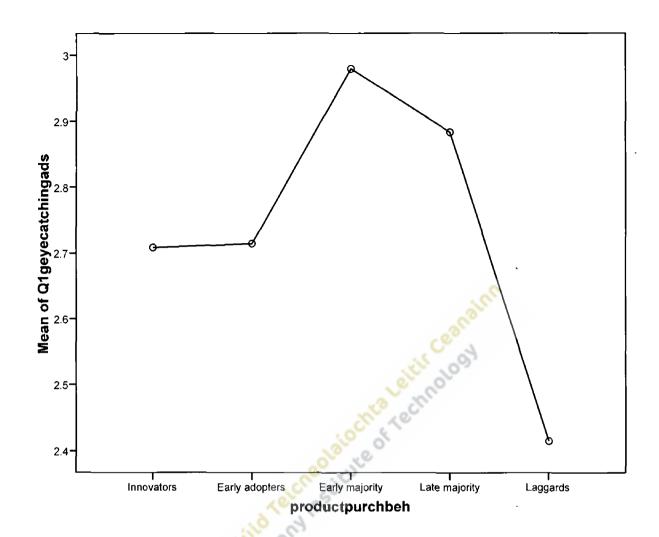
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.892	4	3.223	3.461	.009
Within Groups	345.533	371	.931		
Total	358.426	375			

#### Multiple Comparisons

Dependent Variable: Q1geyecatchingads Tukey HSD

ukey HSD		Mean Difference				
		(I-J)	Std. Error	Sig.	95% Confidence	interval
I) productpurchbeh	(J) productpurchbeh	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Innovators	2 Early adopters	006	.228	1.000	63	.62
	3 Early majority	271	.209	.691	84	.30
	4 Late majority	175	.246	.953	85	.50
	5 Laggards	.294	.248	.761	39	.97
2 Early adopters	1 Innovators	.006	.228	1.000	62	.63
	3 Early majority	266	.134	.279	-,63	.10
	4 Late majority	169	.187	.894	68	.34
	5 Laggards	.300	.190	.512	22	.82
B Early majority	1 Innovators	.271	.209	.691	30	.84
	2 Early adopters	.266	.134	.279	10	.63
	4 Late majority	.096	.162	.976	35	.54
	5 Laggards	.565(*)	.166	.006	.11	1.02
Late majority	1 Innovators	.175	.246	.953	50	.85
	2 Early adopters	.169	.187	.894 .	- 34	.68
-	3 Early majority	096	.162	.976	54	.35
	5 Laggards	. <b>46</b> 9	.211	.172	11	1.05
Laggards	1 Innovators	294	.248	.761	97	.39
	2 Early adopters	300	.190	.512	82	.22
	3 Early majority	565(*)	.166	.006	-1.02	11
	4 Late majority	469	.211	.172	-1.05	.11

<sup>\*</sup> The mean difference is significant at the .05 level.



Hypothesis 89: The impact of friends respondents feeling advertisements on SNSs are boring and untrustworthy on respondents thinking advertisements on SNSs are annoying – Multiple Regression

#### Correlations

		rQ1dannoyingads	rQ1fboringads	rQ1etrustads
Pearson Correlation	rQ1dannoyingads	1.000	.544	.695
	rQ1fboringads	.544	1.000	.562
	rQ1etrustads	.695	.562	1.000
Sig. (1-tailed)	rQ1dannoyingads		.000	.000
	rQ1fboringads	.000		.000
	rQ1etrustads	.000	.000	.
N	rQ1dannoyingads	376	376	376

rQ1fboringads	376	376	376
rQ1etrustads	376	376	376

#### Model Summary(b)

Model	R	R Square		Std. Error of the Estimate
1	.720(a)	.518	.515	.789

a Predictors: (Constant), rQ1etrustads, rQ1fboringads b Dependent Variable: rQ1dannoyingads

#### ANOVA(b)

Model	<u>-</u>	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	249.198	2	124.599	200.296	.000(a)
	Residual	232.034	373	.622		
	Total	481.231	375			2

a Predictors: (Constant), rQ1etrustads, rQ1fboringads b Dependent Variable: rQ1dannoyingads

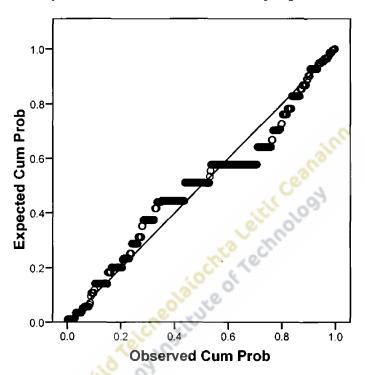
#### Coefficients(a)

	Unstanda Coefficien		Standardize d Coefficients		95% Confidence Interval Sig. 95% Confidence Correlations Collinear		Correlations		Collinearity	Statistics		
del	В	Std. Error	Beta	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	В	Std. Error
(Constant)	.245	.132		1.856	.064	015	.505					
rQ1fboring ads	.274	.053	.224	5.160	.000	.170	.379	.544	.258	.186	.685	1.460
rQ1etrusta ds	.593	.045	.569	13.105	.000	.504	.682	.695	.561	.471	.685	1.460

a Dependent Variable: rQ1dannoyingads

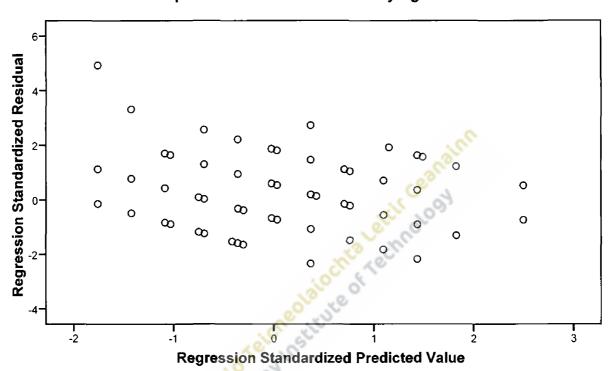
### Normal P-P Plot of Regression Standardized Residual

### Dependent Variable: rQ1dannoyingads



#### Scatterplot

### Dependent Variable: rQ1dannoyingads



Hypothesis 91: Age and clicking on advertisements on SNSs - Chi-square

age \* everclickedad Crosstabulation

		70	everclickeda	ad	Total
			1 Yes	2 No	
Age	1 14-17	Count	26	79	105
		% within age	24.8%	75.2%	100.0%
}		% within everclickedad	17.3%	35.0%	27.9%
		% of Total	6.9%	21.0%	27.9%
	2 18-24	Count	15	15	30
	*	% within age	50.0%	50.0%	100.0%
		% within everclickedad	10.0%	6.6%	8.0%
		% of Total	4.0%	4.0%	8.0%
	3 25-34	Count	29	20	49

1	% within age	59.2%	40.8%	100.0%
	% within everclickedad	19.3%	8.8%	13.0%
	% of Total	7.7%	5.3%	13.0%
4 35-4	4 Count	30	38	68
ļ	% within age	44.1%	55.9%	100.0%
	% within everclickedad	20.0%	16.8%	18.1%
	% of Total	8.0%	10.1%	18.1%
5 45-5	4 Count	35	44	79
	% within age	44.3%	55.7%	100.0%
	% within everclickedad	23.3%	19.5%	21.0%
[	% of Total	9.3%	11.7%	21.0%
6 55+	Count	15	30	45
l	% within age	33.3%	66.7%	100.0%
	% within everclickedad	10.0%	13.3%	12.0%
	% of Total	4.0%	8.0%	12.0%
Total	Count	150	226	376
[	% within age	39.9%	60.1%	100.0%
	% within everclickedad	100.0%	100.0%	100.0%
	% of Total	39.9%	60.1%	100.0%

#### **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.863(a)	5	.001
Likelihood Ratio	21.285	5	.001
Linear-by-Linear Association	3.063	1 🔷	.080.
N of Valid Cases	376	diller	

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.97.

#### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.236	.001
	Cramer's V	.236	.001
N of Valid Cases		376	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

# Appendix XIII: Rejected hypotheses relating to means by which companies can reach and engage customers

# Hypothesis 102: Innovator type and respondents preference to click on advertisements that do not take them to a new web page – One-way between-groups ANOVA

#### Descriptives

Q6anonewwebpage

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Innovators	24	3.42	.974	.199	3.01	3.83	1	5
2 Early adopters	70	2.77	.981	.117	2.54	3.01	1	5
3 Early majority	198	3.31	. <b>94</b> 6	.067	3.18	3.44	1	5
4 Late majority	43	3.23	.947	.144	2.94	3.52	1	5
5 Laggards	41	2.78	1.275	.1 <b>9</b> 9	2.38	3.18	1	5
Total	376	3.15	1.019	.053	3.05	3.25	1	5

#### ANOVA

Q6anonewwebpage

	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	22.578	4	5.644	5.705	.000	
Within Groups Total	367.082 389.660	371 375	.989	SULL STATE		

#### Multiple Comparisons

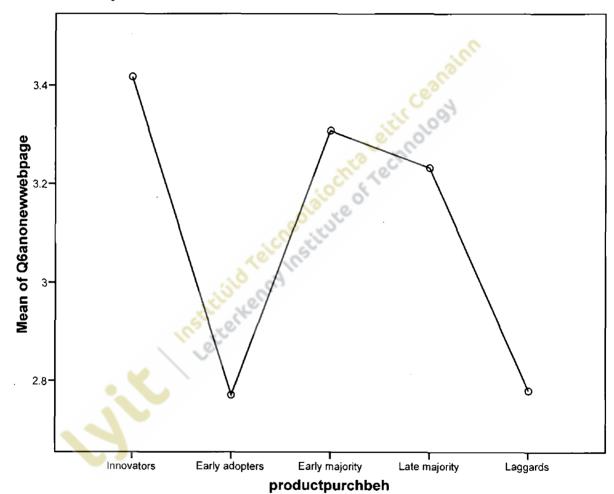
Dependent Variable: Q6anonewwebpage

Tukey HSI

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) productpurchbeh	(J) productpurchbeh	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Innovators	2 Early adopters	.645(*)	.235	.050	.00	1.29
	3 Early majority	.109	.215	.987	48	.70
2 Early adopters	4 Late majority	.184	.253	.950	51	.88
	5 Laggards	.63 <b>6</b>	.256	.095	06	1.34
	1 Innovators	645(*)	.235	.050	-1.29	.00
	3 Early majority	537(*)	.138	.001	92	16
	4 Late majority	461	.193	.120 .	99	.07
	5 Laggards	009	.196	1.000	55	.53
3 Early majority	1 Innovators	109	.215	.987	70	.48
	2 Early adopters	.537(*)	.138	.001	.16	.92
	4 Late majority	.076	.167	.991	38	.53

•		_	•			_
	5 Laggards	.528(*)	.171	.018	.06	1.00
4 Late majority	1 Innovators	184	.253	.950	88	.51
	2 Early adopters	. <b>4</b> 61	.193	.120	07	.99
	3 Early majority	076	.167	.991	53	.38
	5 Laggards	.452	.217	.230	14	1.05
5 Laggards	1 Innovators	636	.256	.095	-1.34	.06
	2 Early adopters	.009	.196	1.000	53	.55
	3 Early majority	528(*)	.171	.018	-1.00	06
	4 Late majority	- 452	.217	.230	-1.05	.14

\* The mean difference is significant at the .05 level.



## Hypothesis 105: Innovator type and respondents preference to click on advertisements that offer coupons than those that do not — One-way between-groups **ANOVA**

#### Descriptives

Q6doffercoupons

	N	Mean	Std. Deviation	Std. Error	95% Confidence Mean	Interval for	Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Innovators	24	2.50	.933	.190	2.11	2.89	1	5
2 Early adopters	70	2.61	.873	.104	2.41	2.82	1	5
3 Early majority	198	2.66	.913	.065	2.53	2.79	1	5
4 Late majority	43	2.65	.870	.133	2.38	2.92	1	5
5 Laggards	41	2.12	1.029	.161	1.80	2.45	1	4
Total	376	2.58	.926	.048	2.49	2.68	1	5

#### **ANOVA**

Q6doffercoupons

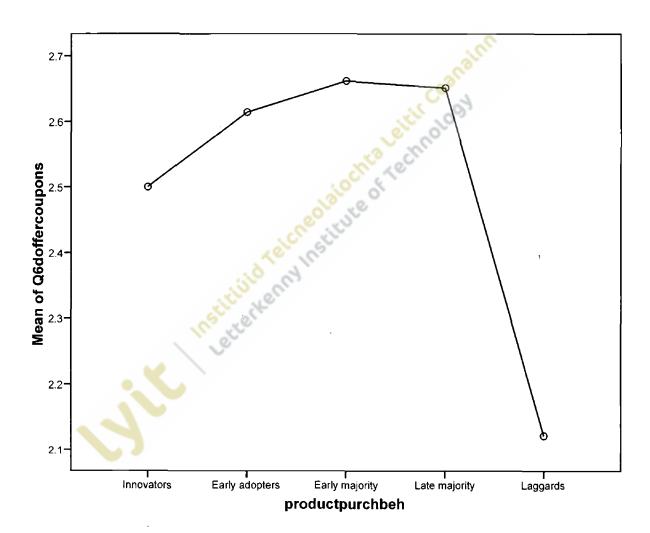
@odoncreoupons	22."				
	Sum of Squares	df	Mean Square	F. 60 67	Sig.
Between Groups	10.372	4	2.593	3.093	.016
Within Groups Total	311.072 321.444	371 375	838	citi	

Dependent Variable: Q6doffercoupons Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interval
(I) productpurchbeh	(J) productpurchbeh	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Innovators	2 Early adopters	114	.217	.984	71	.48
	3 Early majority	162	.198	.925	70	.38
	4 Late majority	151	.233	.967	79	.49
2 Early adopters	5 Laggards	.378	.235	.494	27	1.02
	1 Innovators	.114	.217	.984	48	.71
	3 Early majority	047	.127	.996	40	.30
	4 Late majority	037	.177	1.000	52	.45
2. Forth mainth.	5 Laggards	.492	.180	.051	.00	.99
3 Early majority	1 Innovators	.162	.198	.925	38	.70
	2 Early adopters	.047	.127	.996	30	.40
	4 Late majority	.010	.154	1.000	41	.43

4 Late majority	<ul><li>5 Laggards</li><li>1 Innovators</li><li>2 Early adopters</li></ul>	.540(*) .151 .037	.157 .233 .177	.967 1.000	.11 49 45	.97 .79 .52	
	3 Early majority	010	.154	1.000	43	.41	
	5 Laggards	.529	.200	.064	02	1.08	
5 Laggards	1 Innovators	378	.235	.494	-1.02	.27	
	2 Early adopters	492	.180	.051	99	.00	
	3 Early majority	540(*)	.157	.006	97	11	
	4 Late majority	529	.200	.064	-1.08	.02	

\* The mean difference is significant at the .05 level.



#### Hypothesis 112: Age and respondents increased trust in advertisements when they are familiar with the advertiser – One-way between-groups ANOVA

#### Descriptives

റ	6ef	am	iliaı	with	าลดีง	ertisei	г

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 14-17	105	2.87	1.110	.108	2.65	3.08	1	5
2 18-24	30	3.03	1.159	.212	2.60	3.47	1	5
3 25-34	49	3.61	.885	.126	3.36	3.87	2	5
4 35-44	68	2.99	.889	.108	2.77	3.20	1	5
5 45-54	79	3.14	1.118	.126	2.89	3.39	1	5
6 55+	45	2.98	1.252	.187	2.60	3.35	1	5
Total	376	3.07	1.088	.056	2.96	3.18	1	5

#### ANOVA

Q6efamiliarwithadvertiser

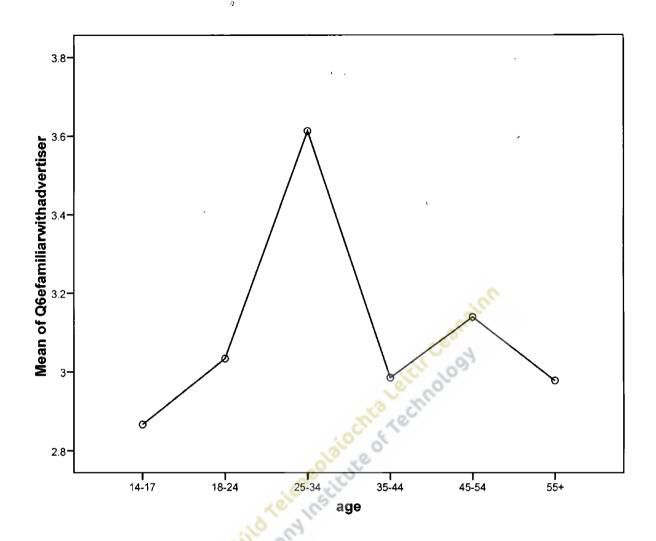
	Sum of Squares	df	Mean Square	EO O	Sig.	
Between Groups	20.038	5	4.008	3.496	.004	
Within Groups	424.164	370	1.146	5		
Total	444.202	375	420111			

#### Multiple Comparisons

Dependent Variable: Q6efamiliarwithadvertiser Tukey HSD

	-	Mean Difference (I-J)	Std. Error Sig.		95% Confidence Interval		
(I) age	(J) age	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	
1 14-17	2 18-24	167	.222	.975	-,80	.47	
	3 25-34	746(*)	.185	.001	-1.28	21	
	4 35-44	119	.167	.980	60	.36	
	5 45-54	273	.159	.526	73	.18	
	6 55+	-,111	.191	.992	66	.44	
2 18-24	1 14-17	.167	.222	.975	47	.80	
	3 25-34	579	.248	.184	-1.29	.13	
	4 35-44	.048	.235	1.000	62	.72	
	5 45-54	106	.230	.997	76	.55	
	6 55+	.0 <b>5</b> 6	.252	1.000	67	.78	

	3 25-34	1 14-17	.746(*)	.185	.001	.21	1.28
		2 18-24	.579	.248	.184	13	1.29
		4 35-44	.627(*)	.201	.023	.05	1.20
		5 45-54	.473	.195	.149	08	1.03
	i	6 55+	.634(*)	.221	.049	.00	1.27
	4 35-44	1 14-17	.119	.167	.980	36	.60
		2 18-24	048	.235	1.000	72	.62
		3 25-34	627(*)	.201	.023	-1.20	05
	•	5 45-54	154	.177	.954	66	.35
		6 55+	.008	.206	1.000	58	.60
	5 45-54	1 14-17	.273	.159	.526	18	.73
I	,	2 18-24	.106	.230	.997	55	.76
		3 25-34	473	.195	.149	-1.03	.08
		4 35-44	.154	.177	.954	35	.66
ļ		6 55+	.161	.200	.966	41	.73
	6 55+	1 14-17	.111	. <b>19</b> 1	.992	44	.66
		2 18-24	056	.252	1.000	78	.67
		3 25-34	634(*)	.221	.049	-1.27	.00
		4 35-44	008	.206	1.000	60	.58
		5 45-54	161	.200	.966	73	.41



Hypothesis 114: Innovator type and respondents increased trust in advertisements when they are familiar with the advertiser – One-way between-groups ANOVA

#### Descriptives

|--|

N		Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Innovators	24	2.92	1.060	.216	2.47	3.36	1	5
2 Early adopters	70	3.23	1.052	.126	2.98	3.48	1	5
3 Early majority	198	3.13	1.024	.073	2.99	3.27	1	5
4 Late majority	43	3.23	1.172	.179	2.87	3.59	1	5
5 Laggards	41	2.41	1.183	.185	2.04	2.79	1	5
Total	376	3.07	1.088	.056	2.96	3.18	1	5

#### ANOVA

Q6efamiliarwithadvertiser

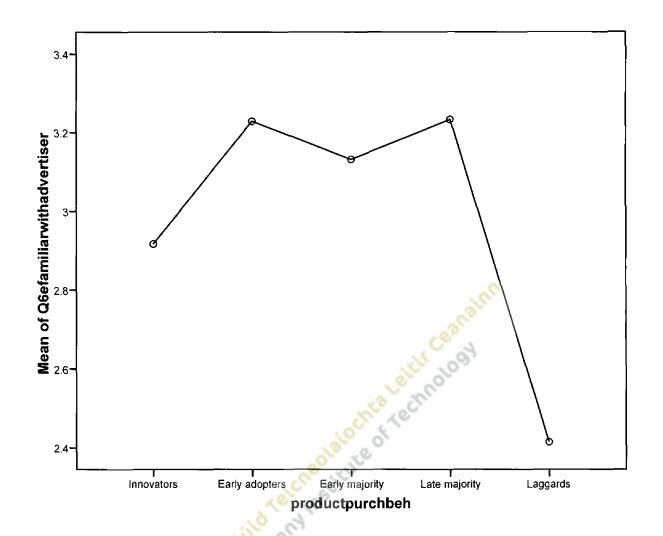
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.814	4	5.454	4.790	.001
Within Groups	422.388	371	1.139	Ì	
Total	444.202	375			

#### **Multiple Comparisons**

Dependent Variable: Q6efamiliarwithadvertiser Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	Interv <b>al</b>
I) productpurchbeh	(J) productpurchbeh	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Innovators	2 Early adopters	312	.252	.730	-1.00	.38
	3 Early majority,	215	.231	.885	85	.42
	4 Late majority	316	.272	.773	-1.06	.43
	5 Laggards	.502	.274	.357	25	1.25
2 Early adopters	1 Innovators	.312	.252	.730	38	1.00
	3 Early majority	.097	.148	.966	31	.50
	4 Late majority	004	.207	1.000	- 57	.56
	5 Laggards	.814(*)	.210	.001	.24	1.39
3 Early majority	1 Innovators	.215	.231	.885	42	.85
	2 Early adopters	097	.148	.966	50	.31
	4 Late majority	-,101	.180	.980	59	.39
	5 Laggards	.717(*)	.183	.001	.21	1.22
Late majority	1 Innovators	.316	.272	.773	43	1.06
	2 Early adopters	.004	.207	1.000	56	.57
	3 Early majority	.101	.180	.980	39	.59
	5 Laggards	.818(*)	.233	.005	.18	1.46
Laggards	1 Innovators	502	.274	.357	-1.25	.25
	2 Early adopters	814(*)	.210	.001	-1.39	24
	3 Early majority	717(*)	.183	.001	-1.22	21
	4 Late majority	818(*)	.233	.005	-1.46	18

<sup>\*</sup> The mean difference is significant at the .05 level.



Hypothesis 115: Innovator type and respondents increased trust in advertisements when they have also encountered the advertisement offline – One-way between-groups ANOVA

#### Descriptives

	N Mean		Std. Deviation S	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Innovators	24	3.25	1.113	.227	2.78	3.72	1	5
2 Early adopters	70	3.27	1.048	.125	3.02	3.52	1	5
3 Early majority	198	3.38	.942	.067	3.25	3.52	1	5
4 Late majority	43	3.49	1.009	.154	3.18	3.80	1	5
5 Laggards	41	2.76	1.261	.197	2.36	3.15	1	5
Total	376	3.30	1.034	.053	3.19	3.40	1	5

ANOVA

Q6fencountoffline

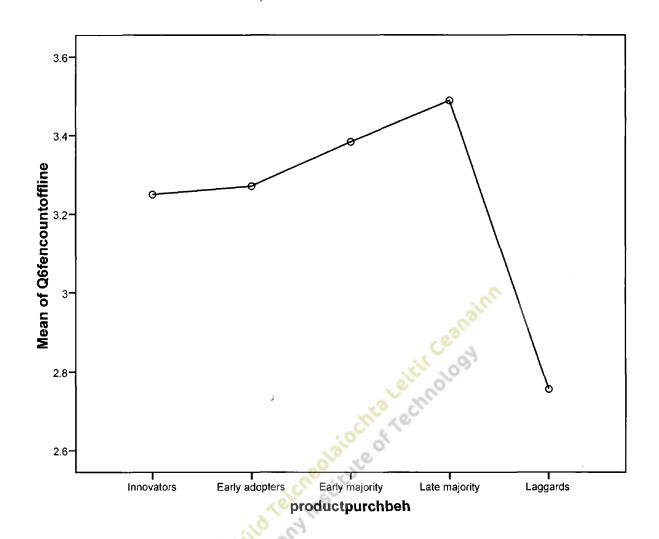
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.162	4	3.790	3.648	.006
Within Groups Total	385.476 400.638	371 375	1.039		

### **Multiple Comparisons**

Dependent Variable: Q6fencountoffline Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	e Interval
l) productpurchbeh	(J) productpurchbeh	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
Innovators	2 Early adopters	021	.241	1.000	68	.64
	3 Early majority	134	.220	.974	74	.47
	4 Late majority	238	.260	.890	95	.47
	5 Laggards	.494	.262	.327	22	1.21
Early adopters	1 Innovators	.021	.241	1.000	64	.68
	3 Early majority	112	.142	.933	50	.28
	4 Late majority	217	.198	.807	76	.32
	5 Laggards	.515	.200	.078	03	1.06
Early majority	1 Innovators	.134	.220	.974	47	.74
	2 Early adopters	.112	.142	.933	28	.50
	4 Late majority	105	.171	.974	57	.37
	5 Laggards	.628(*)	.175	.003	.15	1.11
Late majority	1 Innovators	.238	.260	.890	47	.95
	2 Early adopters	.217	.198	.807	32	.76
	3 Early majority	.105	.171	.974	37	.57
	5 Laggards	.732(*)	.222	.010	.12	1.34
Laggards	1 Innovators	494	.262	.327	-1.21	.22
	2 Early adopters	515	.200	.078	-1.06	.03
	3 Early majority	628(*)	.175	.003	-1.11	-,15
	4 Late majority	732(*)	.222	.010	-1.34	12

<sup>4</sup> Late majority
The mean difference is significant at the .05 level.



Hypothesis 116: Most active SNS and respondents increased trust in advertisements when they are familiar with the advertiser – One-way between-groups ANOVA

### Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidenc Mean	e Interval for	Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
1 Bebo	53	2.75	1.142	.157	2.44	3.07	1	5
2 Facebook	198	3.19	1.087	.077	3.04	3.34	1	5
3 MySpace	8	2.63	1.188	.420	1.63	3.62	1	4
4 YouTube	18	2.94	1.056	.249	2.42	3.47	1	5
5 Linkedin	55	3.24	.962	.130	2.98	3.50	1	5
6 Twitter	31	3.10	.978	.176	2.74	3.46	1	5
9 Other	13	2.15	1.068	.296	1.51	2.80	1	4
Total	376	3.07	1.088	.056	2.96	3.18	1	5

#### **ANOVA**

Q6efamiliarwithadvertiser

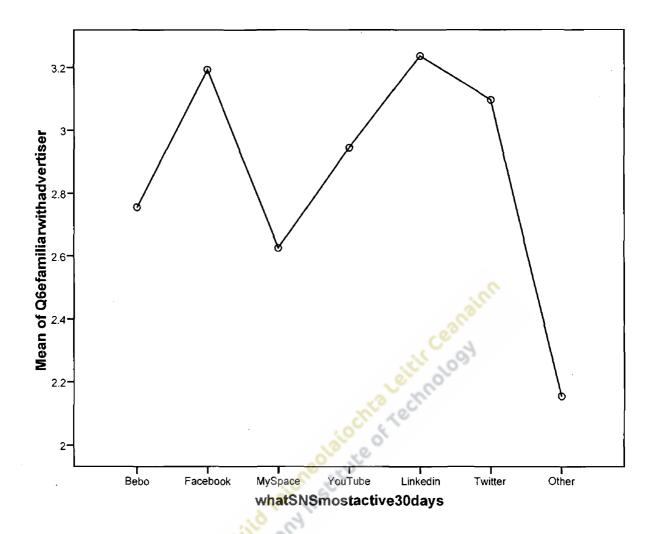
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups						
	22.535	6	3.756	3.287	.004	
Within Groups	421.667	369	1.143	J	J	
Total	444,202	375				
		1 * ' *		1		

### Multiple Comparisons

Dependent Variable: Q6efamiliarwithadvertiser Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	e Interval
I) whatSNSmostactive30days	(J) whatSNSmostactive30days	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
1 Bebo	2 Facebook	437	.165	.116	93	.05
•	3 MySpace	.130	.405	1.000	-1.07	1.33
	4 YouTube	190	.292	.995	-1.05	.67
	5 Linkedin	482	.206	.228	-1.09	.13
	6 Twitter	342	.242	.793	-1.06	.37
	9 Other	.601	.331	.538	38	1.58
? Facebook	1 Bebo	.437	.165	116	05	.93
	3 MySpace	.567	.386	.762	58	1.71
		.247	.263	.966	53	1.03
	5 Linkedin	044	.163	1.000	53	.44
	6 Twitter	.095	.206	.999	52	.71
	4 YouTube 5 Linkedin 6 Twitter 9 Other	1.038(*)	.306	.013	.13	1.95
3 MySpace	1 Bebo	130	.405	1.000	-1.33	1.07
	2 Facebook	567	.386	.762	-1.71	.58
	4 YouTube	319	.454	.992	-1.67	1.03
	5 Linkedin	611	.404	.738	-1.81	.59
	6 Twitter	472	.424	.924	-1.73	.79
	9 Other	.471	.480	.958	95	1.90
YouTube	1 Bebo	.190	.292	.995	67	1.05
	2 Facebook	247	.263	.966	-1.03	.53
	3 MySpace	.319	.454	.992	-1.03	1.67
	5 Linkedin	292	.290	.953	-1.15	.57
	6 Twitter	152	.317	.999	-1.09	.79
	9 Other	.791	.389	.396	36	1.94
Linkedin	1 Bebo	.482	.206	.228	13	1.09
•	2 Facebook	.044	.163	1.000	44	.53

1	3 MySpace 4	.611	.404	.738	59	1.81
	4 YouTube	.292	.290	.953	57	1.15
	6 Twitter	.140	.240	.997	57	.85
	9 Other	1.083(*)	.330	.019	.11	2.06
6 Twitter	1 Bebo	.342	.242	.793	37	1.06
	2 Facebook	095	.206	.999	71	.52
	3 MySpace	.472	.424	.924	79	1.73
	4 YouTube	.152	.317	.999	79	1.09
	5 Linkedin	140	.240	.997	85	.57
	9 Other	.943	.353	.109	-,10	1.99
9 Other	1 Bebo	601	:331	.538	-1.58	.38
	2 Facebook	-1.038(*)	.306	.013	-1.95	13
	3 MySpace	471	.480	.958	-1.90	.95
	4 YouTube	791	.389	.396	-1.94	.36
·	5 Linkedin	-1.083(*)	.330	.019	-2.06	11
* The mean difference is sig	6 Twitter gnificant at the .05 level.	943	.353	.109	-1.99	.10



Hypothesis 118: Advertisement click through rates and advertisement trust – Correlation

### Correlations

		Total Click Throughs Divide	Total ad trust divide
Total Click Throughs Divide	Pearson Correlation	1	.504(**)
	Sig. (2-tailed)	ł	.000
	N	376	376
Total ad trust divide	Pearson Correlation	.504(**)	1
	Sig. (2-tailed)	.000	
	N	376	376

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

### Appendix XIV: Rejected hypotheses relating to using personal information to target advertisements at users

### Hypothesis 119: Gender and the use of personal information to target advertisements at users - Chi-square

gender \* useofpersonalinfo Crosstabulation

			Useofperson	alinfo		Total
			1 Yes	_ 2 No	3 Maybe	
Gender	1 Male	Count	17	78	56	151
		% within gender	11.3%	51.7%	37.1%	100.0%
		% within useofpersonalinfo	70.8%	33.9%	45.9%	40.2%
		% of Total	4.5%	20.7%	14.9%	40.2%
	2 Female	Count	7	152	66	225
		% within gender	3.1%	67.6%	29.3%	100.0%
		% within useofpersonalinfo	29.2%	66.1%	54.1%	59.8%
		% of Total	1.9%	40.4%	17.6%	59.8%
Total		Count	24	230	122	376
		% within gender	6.4%	61.2%	32.4%	100.0%
		% within useofpersonalinfo	100.0%	100.0%	100.0%	100.0%
		% of Total	6.4%	61.2%	32.4%	100.0%

#### **Chi-Square Tests**

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	14.805(a)	2	.001
Likelihood Ratio	14.695	2	.001
Linear-by-Linear Association	.004	1	.947
N of Valid Cases	376	erro	

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.64.

		Value	Approx. Sig.
Nominal by	Phi	.198	.001
Nominal	Cramer's V	.198	.001
N of Valid Cases		376	

Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

### Hypothesis 123: Gender and respondents allowing the use of their personal profile information if they can control the type of profile information used - Chi-square

gender \* controltypeprofileinfo Crosstabulation

			Controltyper	orofileinfo_	Total
			1 Yes	2 No	
Gender	1 Male	Count	51	100	151
		% within gender	33.8%	66.2%	100.0%
		% within controltypeprofileinfo	<b>49</b> .0%	36.8%	40.2%
		% of Total	13.6%	26.6%	40.2%
	2 Female	Count	53	172	225
		% within gender	23.6%	76.4%	100.0%
1		% within controltypeprofileinfo	51.0%	63:2%	59.8%
		% of Total	14.1%	45.7%	59.8%
Total		Count	104	272	376
		% within gender	27.7%	72.3%	100.0%
		% within controltypeprofileinfo	100.0%	100.0%	100.0%
		% of Total	27.7%	72.3%	100.0%

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.716(b)	1,00	.030		
Continuity Correction(a)	4.219	1.	.040		
Likelihood Ratio	4.667	1	.031		
Fisher's Exact Test	102	10.		.034	.020
Linear-by-Linear Association	<b>4</b> .704	1	.030		
N of Valid Cases	376				

		Value	Approx. Sig.
Nominal by	Phi	.112	.030
Nominal	Cramer's V	.112	.030
N of Valid Cases	S	376	

a Computed only for a 2x2 table b 0 cells (.0%) have expected count less than 5. The minimum expected count is 41.77.

a Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

Hypothesis 128: Age and respondents allowing the use of their personal profile information if they can control the type of companies that can use their profile information – Chi-square

age \* controltypecompanies Crosstabulation

			Controltypecomp	oanies	Total
			1 Yes	2 No	
Age	1 14-17	Count	9	96	105
		% within age	8.6%	91.4%	100.0%
		% within controltypecompanies	16.1%	30.0%	27.9%
		% of Total	2.4%	25.5%	27.9%
	2 18-24	Count	7	23	30
		% within age	23.3%	76.7%	100.0%
		% within controltypecompanies	12.5%	7.2%	8.0%
		% of Total	1.9%	6.1%	8.0%
	3 25-34	Count	12	37	49
l		% within age	24.5%	75.5%	100.0%
		% within controltypecompanies	21.4%	11.6%	13.0%
		% of Total	3.2%	9.8%	13.0%
	4 35-44	Count	8	60	68
		% within age	11.8%	88.2%	100.0%
		% within controltypecompanies	14.3%	18.8%	18.1%
ļ		% of Total	2.1%	16.0%	18.1%
	5 45-54	Count	9	70	79
1		% within age	11.4%	88.6%	100.0%
		% within controltypecompanies	16. <b>1</b> %	21.9%	21.0%
		% of Total	2.4%	18.6%	21.0%
	6 55+	Count	11	34	45
		% within age	24.4%	75.6%	100.0%
		% within controltypecompanies	19.6%	10.6%	12.0%
ľ		% of Total	2.9%	9.0%	12.0%
Total		Count	56	320	376
		% within age	14.9%	85.1%	100.0%
		% within controltypecompanies	100.0%	100.0%	100.0%
		% of Total	14.9%	85.1%	100.0%

**Chi-Square Tests** 

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	13.084(a)	5.	.023
Likelihood Ratio	12.563	5	.028
Linear-by-Linear Association	1.674	1	.196
N of Valid Cases	376		

a 1 cells (8.3%) have expected count less than 5. The minimum expected count is 4.47.

#### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.187	.023
Nominal	Cramer's V	.187	.023
N of Valid Cases	S	376	

# Hypothesis 140: Age and respondents joining groups on SNSs – Chi-square

age \* groupjoined Crosstabulation

					40
			groupjoined		Total
	_		1 Yes	2 No	0
Age	1 14-17	Count	92	13	105
		% within age	87.6%	12.4%	100.0%
		% within groupjoined	29.0%	22.0%	27.9%
		% of Total	24.5%	3.5%	27.9%
	2 18-24	Count	29	1	30
		% within age	96.7%	3.3%	100.0%
		% within groupjoined	9.1%	1.7%	8.0%
		% of Total	7.7%	.3%	8.0%
	3 25-34	Count	45	4	49
		% within age	91.8%	8.2%	100.0%
		% within groupjoined	14.2%	6.8%	13.0%
		% of Total	12.0%	1.1%	13.0%
	4 35-44	Count	58	10	68
		% within age	85.3%	14.7%	100.0%
		% within groupjoined	18.3%	16.9%	18.1%
		% of Total	15.4%	2.7%	18.1%
	5 45-54	Count	63	16	79
•		% within age	79.7%	20.3%	100.0%
		% within groupjoined	19.9%	27.1%	21.0%
		% of Total	16.8%	4.3%	21.0%
	6 55+	Count	30	15	45
		% within age	66.7%	33.3%	100.0%

a Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

	% within groupjoined	9.5%	25.4%	12.0%
Total	% of Total Count	8.0% 317	<b>4</b> .0% 59	12.0% 376
	% within age	84.3%	15.7%	100.0%
	% within groupjoined	100.0%	100.0%	100.0%
	% of Total	84.3%	15.7%	100.0%

	Value	Df	Asymp. Sig. (2- sided)
Pearson Chi-Square	18.312(a)	5	.003
Likelihood Ratio	17.956	5	.003
Linear-by-Linear Association	10.567	1	.001
N of Valid Cases	376		

a 1 cells (8.3%) have expected count less than 5. The minimum expected count is 4.71.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.221	.003
Nominal	Cramer's V	.221	.003
N of Valid Cases		376	in enny

### Hypothesis 142: Most active SNS and respondents joining groups on SNSs - Chisquare

#### whatSNSmostactive30days \* groupjoined Crosstabulation

			Groupjoined		Total
			1 Yes	2 No	
whatSNSmostactive30days	1 Bebo	Count	48	5	53
		% within whatSNSmostactive30days	90.6%	9.4%	100.0%
		% within groupjoined	15.1%	8.5%	14.1%
		% of Total	12.8%	1.3%	14.1%
	2 Facebook	Count	158	40	198
		% within whatSNSmostactive30days	79.8%	20.2%	100.0%
		% within groupjoined	49.8%	67.8%	52.7%

Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

		% of Total	42.0%	10.6%	52.7%
	3 MySpace	Count	4	4	8
		% within whatSNSmostactive30days	50.0%	50.0%	100.0%
		% within groupjoined	1.3%	6.8%	2.1%
		% of Total	1.1%	1.1%	2.1%
	4 YouTube	Count	16	2	18
		% within whatSNSmostactive30days	88.9%	11.1%	100.0%
		% within groupjoined	5.0%	3.4%	4.8%
		% of Total	4.3%	.5%	4.8%
	5 Linkedin	Count	54	1	55
		% within whatSNSmostactive30days	98.2%	1.8%	100.0%
		% within groupjoined	17.0%	1.7%	14.6%
		% of Total	14.4%	.3%	14.6%
	6 Twitter	Count	29	2	31
		% within whatSNSmostactive30days	93.5%	6.5%	100.0%
		% within groupjoined	9.1%	3.4%	8.2%
		% of Total	7.7%	.5%	8.2%
	9 Other	Count	8	5	13
		% within whatSNSmostactive30days	61.5%	38.5%	100.0%
		% within groupjoined	2.5%	8.5%	3.5%
		% of Total	2.1%	1.3%	3.5%
Total		Count	317	59	376
		% within whatSNSmostactive30days	84.3%	15.7%	100.0%
		% within groupjoined	100.0%	100.0%	100.0%
		% of Total	84.3%	15.7%	100.0%

	<b>Va</b> lue	Df	Asymp. Sig. (2- sided)
Pearson Chi-Square	27.114(a)	6	.000
Likelihood Ratio Linear-by-Linear Association	28.574 .459	6	.000 .498
N of Valid Cases	376		

### a 4 cells (28.6%) have expected count less than 5. The minimum expected count is 1.26.

		Value	Approx. Sig.
Nominal by	Phi	.269	.000
Nominal	Cramer's V	.269	.000
N of Valid Cases		376	

a Not assuming the null hypothesis.
 b Using the asymptotic standard error assuming the null hypothesis.

Hypothesis 143: Gender and visiting a company profile page on a SNS - Chi-square

### Crosstab

			companypro	filepg	Total
			1 Yes	2 No	
Gender	1 Male	Count	90	61	151
	•	% within gender	59.6%	40.4%	100.0%
•		% within companyprofilepg	47.1%	33.0%	40.2%
		% of Total	23.9%	16.2%	40.2%
	2 Female	Count	101	124	225
		% within gender	44.9%	55.1%	100.0%
		% within companyprofilepg	52.9%	67.0%	59.8%
		% of Total	26.9%	33.0%	59.8%
Total		Count	191	185	376
		% within gender	50.8%	49.2%	100.0%
		% within companyprofilepg	100.0%	100.0%	100.0%
		% of Total	50.8%	49.2%	100.0%

#### **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	7.827(b)	1	.005		
Continuity Correction(a)	7.249	1 0	.007		
Likelihood Ratio	7.864	1 40	.005		
Fisher's Exact Test	]	6		.006	.003
Linear-by-Linear Association	7.806	Jul Court	.005		
N of Valid Cases	376	* Of			

### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.144	.005
Nominal	Cramer's V	.144	.005
N of Valid Cases		376	

a Not assuming the null hypothesis.

### Hypothesis 144: Age and visiting a company profile page on a SNS - Chi-square

### Crosstab

companyprofilepg	Total

a Computed only for a 2x2 table b 0 cells (.0%) have expected count less than 5. The minimum expected count is 74.30.

b Using the asymptotic standard error assuming the null hypothesis.

l			1 Yes	2 No	
Age	1 14-17	Count	33	72	105
		% within age	31.4%	68.6%	100.0%
		% within companyprofilepg	17.3%	38.9%	27.9%
		% of Total	8.8%	19.1%	27.9%
	2 18-24	Count	11	19	30
1		% within age	36.7%	63.3%	100.0%
		% within companyprofilepg	5.8%	10.3%	8.0%
		% of Total	2.9%	5.1%	8.0%
ł	3 25-34	Count	39	10	49
		% within age	79.6%	20.4%	100.0%
		% within companyprofilepg	20.4%	5.4%	13.0%
		% of Total	10.4%	2.7%	13.0%
	4 35-44	Count	41	27	68
		% within age	60.3%	39.7%	100.0%
l		% within companyprofilepg			_
			21.5%	14.6%	18.1%
		% of Total	10.9%	7.2%	18.1%
	5 45-54	Count	49	30	79
		% within age	62.0%	38.0%	100.0%
		% within companyprofilepg	25.7%	16.2%	21.0%
		% of Total	13.0%	8.0%	21.0%
	6 55+	Count	18	27	45
		% within age	40.0%	60.0%	100.0%
		% within companyprofilepg	9.4%	14.6%	12.0%
1		% of Total	4.8%	7.2%	12.0%
Total		Count	191	185	376
		% within age	50.8%	49.2%	100.0%
		% within companyprofilepg	100.0%	100.0%	100.0%
		% of Total	50.8%	49.2%	100.0%

	Value	af	Asymp. Sig. (2- sided)
Pearson Chi-Square	42.949(a)	5	.000
Likelihood Ratio	44.572	5	.000
Linear-by-Linear Association	9.889	1	.002
N of Valid Cases	376		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.76.

		Value	Approx. Sig.
Nominal by	Phi	.338	.000
Nominal	Cramer's V	.338	.000

N of Valid Cases	376	

## Hypothesis 145: Innovator type and visiting a company profile page on a SNS - Chi-

#### Crosstab

			Companyprofile		Total
]			1 Yes	2 <b>N</b> o	
productpurchbeh	1 Innovators	Count	15	9	24
,		% within productpurchbeh	62.5%	37.5%	100.0%
		% within companyprofilepg	7.9%	4.9%	6.4%
		% of Total	4.0%	2.4%	6.4%
	2 Early adopters	Count	41	29	70
		% within productpurchbeh	58.6%	41.4%	100.0%
		% within companyprofilepg	21.5%	15.7%	18.6%
		% of Total	10.9%	7.7%	18.6%
	3 Early majority	Count	105	93	198
		% within productpurchbeh	53.0%	47.0%	100.0%
 		% within companyprofilepg	55.0%	50.3%	52.7%
		% of Total	27.9%	24.7%	52.7%
	4 Late majority	Count	19	24	43
		% within productpurchbeh	44.2%	55.8%	100.0%
		% within companyprofilepg	9.9%	13.0%	11.4%
ľ		% of Total	5.1%	6.4%	11.4%
,	5 Laggards	Count	11	30	41
Ì		% within productpurchbeh	26.8%	73.2%	100.0%
		% within companyprofilepg	5.8%	16.2%	10.9%
1		% of Total	2.9%	8.0%	10.9%
Total		Count	191	185	376
		% within productpurchbeh	50.8%	49.2%	100.0%
		% within companyprofilepg	100.0%	100.0%	100.0%
		% of Total	50.8%	49.2%	100.0%

### **Chi-Square Tests**

	Value	df _	Asymp. Sig. (2- sided)
Pearson Chi-Square	13.578(a)	4	.009
Likelihood Ratio	13.949	4	.007
Linear-by-Linear Association	12.050	1	.001
N of Valid Cases	376		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.81.

a Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

		Value	Approx. Sig.
Nominal by	Phi	.190	.009
Nominal	Cramer's V	.190	.009
N of Valid Cases		376	

Hypothesis 146: Most active SNS and visiting a company profile page on a SNS – Chi-square Chi-square

		1010 05	companypro	filepg	Total
		710111	1 Yes	2 No	
whatSNSmostactive30days	1 Bebo	Count	19	34	53
		% within whatSNSmostactive30days	35.8%	64.2%	100.0%
	10	% within companyprofilepg	9.9%	18.4%	14.1%
		% of Total	5.1%	9.0%	14.1%
	2 Facebook	Count	86	112	198
		% within whatSNSmostactive30days	43.4%	56.6%	100.0%
		% within companyprofilepg	45.0%	60.5%	52.7%
		% of Total	<b>2</b> 2.9%	29.8%	52.7%
	3 MySpace	Count	4	4	8
		% within whatSNSmostactive30days	50.0%	50.0%	100.0%
		% within companyprofilepg	2.1%	2.2%	2.1%
•		% of Total	1.1%	1.1%	2.1%
	4 YouTube	Count	5	13	18
		% within whatSNSmostactive30days	27.8%	72.2%	100.0%
		% within companyprofilepg	2.6%	7.0%	4.8%

Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis.

		% of Total	1.3%	3.5%	4.8%
	5 Linkedin	Count	48	7	55
		% within whatSNSmostactive30days	87.3%	12.7%	100.0%
		% within companyprofilepg	25.1%	3.8%	14.6%
		% of Total	12.8%	1.9%	14.6%
	6 Twitter	Count	26	5	31
		% within whatSNSmostactive30days	83.9%	16.1%	100.0%
		% within companyprofilepg	13.6%	2.7%	8.2%
		% of Total	6.9%	1.3%	8.2%
	9 Other	Count	3	10	13
		% within whatSNSmostactive30days	23.1%	76.9%	100.0%
		% within companyprofilepg	1.6%	5.4%	3.5%
		% of Total	.8%	2.7%	3.5%
Total		Count	191	185	376
		% within whatSNSmostactive30days	50.8%	49.2%	100.0%
		% within companyprofilepg	100.0%	100.0%	100.0%
		% of Total	50.8%	49.2%	100.0%

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	59.693(a)	6	.000
Likelihood Ratio	65.193	6	.000
Linear-by-Linear Association	16.323	1	.000
N of Valid Cases	376		

a 2 cells (14.3%) have expected count less than 5. The minimum expected count is 3.94.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	.398	.000
Nominal	Cramer's V	.398	.000
N of Valid Case	S	376	

Not assuming the null hypothesis.
 Using the asymptotic standard error assuming the null hypothesis

### Appendix XV: Rejected hypotheses relating to privacy in online social networks

## Hypothesis 147: Gender and privacy settings on respondent profiles - Chi-square

### Crosstab

			Profilepublicorpr	Profilepublicorprivate			Total
			1 Completely public	2 Completely private	3 A mix of public and private	4 Do not know	
Gender	1 Male	Count	54	29	60	8	151
		% within gender	35.8%	19.2%	39.7%	5.3%	100.0%
		% within profilepublicorprivate	55.7%	25.2%	41.7%	40.0%	40.2%
		% of Total	14.4%	7.7%	16.0%	2.1%	40.2%
	2 Female	Count	43	86	84	12	225
		% within gender	19.1%	38.2%	37.3%	5.3%	100.0%
		% within profilepublicorprivate	44.3%	74.8%	58.3%	60.0%	59.8%
		% of Total	11.4%	22.9%	22.3%	3.2%	59.8%
Total		Count	97	115	144	20	376
		% within gender	25.8%	30.6%	38.3%	5.3%	100.0%
		% within profilepublicorprivate	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	25.8%	30.6%	38.3%	5.3%	100.0%

### **Chi-Square Tests**

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	20.531(a)	3	.000
Likelihood Ratio	20.955	3	.000
Linear-by-Linear Association	2.309	100	.129
N of Valid Cases	376	Con	

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.03.

		Value _	Approx. Sig.
Nominal by	Phi	.234	.000
Nominal	Cramer's V	.234	.000
N of Valid Case	s	376	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

### Hypothesis 149: Negative experience on a SNS and privacy settings on respondent profiles – Chi-square

### profilepublicorprivate \* negexpSNS Crosstabulation

			negexpSNS		Total
			1 Yes	_ 2 No	
profilepublicorprivate	1 Completely public	Count	21	76	97
		% within profilepublicorprivate	21.6%	78.4%	100.0%
		% within negexpSNS	25.3%	25.9%	25.8%
		% of Total	5.6%	20.2%	25.8%
	2 Completely private	Count	15	100	115
		% within profilepublicorprivate	13.0%	87.0%	100.0%
		% within negexpSNS	18.1%	34.1%	30.6%
•		% of Total	4.0%	26.6%	30.6%
	3 A mix of public and private	Count	44	100	144
		% within profilepublicorprivate	30.6%	69.4%	100.0%
ıı		% within negexpSNS	53.0%	34.1%	38.3%
		% of Total	11.7%	26.6%	38.3%
	4 Do not know	Count	3	17	20
		% within profilepublicorprivate	15.0%	85.0%	100.0%
		% within negexpSNS	3.6%	5.8%	5.3%
		% of Total	.8%	4.5%	5.3%
Total		Count	83	293	376
		% wit <mark>hin profilepublicorprivate</mark>	22.1%	77.9%	100.0%
		% within negexpSNS	100.0%	100.0%	100.0%
	11:	% of Total	22.1%	77.9%	100.0%

### Chi-Square Tests

		df	Asymp. Sig. (2- sided)
Pearson Chi-Square	12.066(a)	3	.007
Likelihood Ratio Linear-by-Linear Associa <mark>tio</mark> n	12.359 1.849	3	.006 .174
N of Valid Cases	376		

a 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.41.

		Value	Approx. Sig.
Nominal by	Phi	.179	.007
Nominal	Cramer's V	.179	.007
N of Valid Cases	3	376	

a Not assuming the null hypothesis.
 b Using the asymptotic standard error assuming the null hypothesis.