



DOCTORAL THESIS IN MARKETING  
*STOCKHOLM, SWEDEN 2014*

# Contagious Communications

The role of emotion in viral marketing

ELSIE MARGARETHA BOTHA



# **DOCTORAL THESIS**

## **CONTAGIOUS COMMUNICATIONS: THE ROLE OF EMOTION IN VIRAL MARKETING**

**2014**

**ELSIE MARGARETHA (ELSAMARI) BOTHA**

Division of Industrial Marketing, INDEK  
KTH-Royal Institute of Technology, Stockholm, Sweden





## **DOCTORAL THESIS**

### **CONTAGIOUS COMMUNICATIONS: THE ROLE OF EMOTION IN VIRAL MARKETING**

**2014**

**ELSIE MARGARETHA (ELSAMARI) BOTHA**

Division of Industrial Marketing, INDEK  
KTH-Royal Institute of Technology, Stockholm, Sweden

Supervisors:  
Dr. Esmail Salehi-Sangari  
Dr. Pierre Berthon



## ABSTRACT

The “connection generation” craves interaction with and connection to vast social networks through the sharing of information, photos, opinions, entertainment and news. This sharing comes in the form of electronic word-of-mouth or eWOM, and provides marketing and communication managers with an unparalleled opportunity to reach a large number of consumers quickly. With the ever increasing growth of the internet and the rise of social media and social network sites, viral marketing has cemented itself in the marketing and corporate agenda. However, while there has been a shift in marketing budgets towards online and social media, little is known about how to successfully leverage viral marketing. Consequently, understanding why some videos go viral and others do not is becoming an increasingly popular focus of academic research. This study aimed to answer the following research question: *What are the factors that drive the virality of online content?*

In an attempt to answer this exploratory research question, four papers were used to look at its constituent parts. In the first paper, the role of emotion in the sharing of online content was investigated. Rime’s social sharing of emotion theory was used to explain why emotion could drive the spread of content online. We suggested that people’s propensity to share viral content was a function of the intensity, sociality and complexity of the emotion elicited by the viral content.

The following two papers further investigated the role of emotion in viral marketing by looking at the relationship between content and emotion. Paper 2 used interviews in a qualitative research design to propose a decision-tree of the interplay between content and emotion in viral marketing. This paper showed that the relevance of the content has an influence on viewers’ emotional response. Paper 3 took a closer look at the relationship between content and emotion by using a two-stage design: First, content analysis was done on the comments of selected YouTube videos. Second, an experiment was used to test the emotions that these videos elicited in respondents, the valence of those emotions, the intensity with which they were felt, as well as various content-related factors (e.g. the creativity and humor used in the videos). This paper looked specifically at the use of political communication in viral marketing and showed that creativity, valence and the intensity of the emotions elicited by the content are key drivers of viral success.

The final and fourth paper culminates in a model for the sharing of content online. This paper built on the findings from the previous papers, but also made use of interviews, and the analysis of a longitudinal dataset to propose a comprehensive model for the spread of content online. The longitudinal dataset was compiled using the top 10 posts from Reddit.com, a viral aggregator website, over the period of 25 days. The comprehensive model shows that there are external, intrapersonal and interpersonal drivers of viral content. The *external drivers* of viral content are the viral videos themselves (content) and its popularity. The content construct refers to various

aspects related to the content itself, for example how informative, creative, humorous etc. the content is. Its popularity, on the other hand, was driven by both WOM and mainstream media reports. The *intrapersonal drivers* of viral content refer to the emotions that the content elicited in viewers. Viewers' emotional response to the content was influenced by its relevance, but also by the valence and intensity of the emotion that they felt. Even though some content elicited intense emotions in viewers, some viewers did not share the content and *interpersonal drivers* of viral content was introduced to the model. These drivers recognise the social aspect of social media, and that content gets shared with large social networks. The model contends that people share viral content with their social networks as a form of online gift giving, out of altruism, or simply to build their own reputation. Finally, we contend that, in this content → emotion → social sharing chain, people share viral content both online and offline, as many respondents simply told their friends about the content (thus prompting them to go and watch the content themselves) or showed them the content themselves. This online and offline sharing of content increased the popularity of the content and a self-reinforcing chain was created, increasing the exponential growth typically associated with viral content.

As consumers are exposed to an increasing amount of marketing messages, and marketing budgets shrink, marketing managers could greatly benefit from better understanding how to more effectively make social media part of their marketing strategy. Viral marketing allows for a low-cost way of communicating marketing messages with great potential for impacting the market. This study ultimately shows what marketing managers can do to increase their chances of viral success, and ends off with a list of managerial recommendations to leverage the external, intrapersonal and interpersonal factors present in viral campaigns.

**KEY WORDS:** Viral Marketing, eWOM, Emotion, Valence, Arousal, Social Sharing of Emotion, Social Media



## ACKNOWLEDGEMENTS

I would like to acknowledge the following people, without whom, this thesis would not have been possible.

- I dedicate this thesis to **Gordon**, without whom I would not have been able to fulfil this dream. For your endless support, motivation, and encouragement, as well as the late nights and early mornings that we have shared around this document, I cannot thank you enough. Thank you for always understanding, and always helping me with the load. I hope I can be the same comfort to you during your PhD.
- To my whole **family**, thank you for the support during the process. Thank you for always staying interested, listening, understanding and for being my biggest supporters. I especially want to thank both moms for being my travel partners through this journey: It was so much fun having you with me, and I now wish we had done it more often. **Ma Magda**, thank you for once again encouraging me to finish, for making all those meals, sitting with me, helping me with my other work so that I can focus on the PhD, for being patient, for making sure that I look after myself, and for always taking the stress off. It is such a privilege to have you near. **Mom Karen**, you were my research partner, support group and language editor all in one. Your ideas and contributions to my articles and final document were invaluable, and your insights helped steer my research. Thank you for always being willing to read through any document at the last minute, putting aside your own work and concerns whenever I needed you. This PhD is partly yours, and I could go to war with you two ladies of caliber.
- To **Professor Salehi-Sangari**, thank you for your direction and support. Your guidance during the past year especially has made the thesis what it is today. I am extremely privileged to be part of your program and I hope that our relationship can continue to grow in future.
- **Professor Pierre Berthon**, your sagacious insights have truly inspired me during this process, and I hope to one day be as good an academic as you are. Thank you for not giving up on me when I didn't understand half of what you were saying during our Skype sessions. I hope to keep on learning from you as our relationship continues to grow with fun future research projects.
- **Leyland**, in many ways you should be first on this list as none of this would have been possible without you. You are my mentor, my friend, and an inspiration to me every day. You touch and change so many lives, and you are a father figure to many many academics, students and PhD students, including myself. Thank you for always putting everything into perspective, and above all, making everything fun!
- To my **KTH PhD cohort**, and the new PhD group, meeting all of you has been the major advantage of doing this PhD. This network of support has been invaluable over the past few years. I'll miss the pub nights in Lulea, and the dinners in Stockholm. Thank you, especially, to **Neil Lilford** for the support that you have given along the way, and for the mentor and friend that you have become in the process.

- **Professor Russell Abratt**, for the comments made during my Pi Seminar. The changes that you suggested greatly improved the final document. Thank you not only for the time that you spent on this, but also the encouragement.
- Thank you to the **School of Management Studies (University of Cape Town)**, for being extremely supportive of this endeavor. You did not only provide financial support, but helped out wherever you could, be it with time off or simply emotional support. I especially want to thank my colleagues in marketing, **Gert Human** and **Justin Beneke**, for picking up the slack while I was away, for always understanding and providing support wherever needed. Gert, you are an amazing manager, excellent leader and good friend.
- Finally, thank you to **Lyn Holness** and **Charles Masango**, from the Emerging Researcher Program. You have been extremely helpful during the past 4 years. Thank you for putting a good word in for me at all those funding meetings!



## TABLE OF CONTENTS

<b>CHAPTER 1: OVERVIEW OF THE RESEARCH.....</b>	<b>1</b>
1.1 INTRODUCTION .....	3
1.2 BACKGROUND TO THE STUDY .....	5
1.2.1 Viral Marketing .....	5
1.2.2 Why Content Spreads Online .....	7
1.2.2.1 External Factors that Drive the Sharing of Content Online.....	14
1.2.2.2 Intrapersonal Factors that Drive the Sharing of Content Online .....	15
1.2.2.3 Interpersonal Factors that Drive the Sharing of Content Online .....	16
1.3 SUMMARY OF RESEARCH QUESTIONS .....	21
1.4 LAYOUT OF INDIVIDUAL PAPERS .....	22
1.4.1 Paper 1: Emotional Episodes: Towards Understanding what Drives the Sharing of Viral Content.....	23
1.4.2 Paper 2: To Share or Not to Share: The Role of Content and Emotion in Viral Marketing .....	23
1.4.3 Paper 3: A Means to an End: Using Political Satire to go Viral.....	24
1.4.4 Paper 4: Sharing is Caring: A Model for the Spread of Content Online .....	25
1.5 METHODOLOGY.....	27
1.5.1 Research Designs and Methods within Viral Marketing Research.....	28
1.5.2 Target Population .....	29
1.5.2.1 Description of the Target Population .....	29
1.5.2.2 Sampling.....	30
1.5.3 Measurement .....	31
1.5.4 Data Collection for Each Paper .....	32
1.5.4.1 Paper 1: Theory Development.....	32
1.5.4.2 Paper 2: A Qualitative Research Design .....	33
1.5.4.3 Paper 3: A Mixed Methods Approach: Content Analysis and Experimental Design.....	33
1.5.4.4 Paper 4: Exploratory Two-Stage Design.....	34
1.5.5 Data Analysis for Each Paper .....	35
1.5.5.1 Paper 2: Qualitative Research Design .....	35
1.5.5.2 Paper 3: Content Analysis and an Experiment.....	36
1.5.5.3 Paper 4: Content Analysis and Analysis of Existing Data .....	36
1.6 CONCLUSION .....	39

<b>CHAPTER 2: INDIVIDUAL PAPERS.....</b>	<b>41</b>
2.1 PAPER 1: EMOTIONAL EPISODES: TOWARDS UNDERSTANDING WHAT DRIVES THE SHARING OF VIRAL CONTENT.....	43
2.2 PAPER 2: TO SHARE OR NOT TO SHARE: THE ROLE OF CONTENT AND EMOTION IN VIRAL MARKETING .....	61
2.3 PAPER 3: A MEANS TO AN END: USING POLITICAL SATIRE TO GO VIRAL.....	87
2.4 PAPER 4: SHARING IS CARING: A MODEL FOR THE SPREAD OF CONTENT ONLINE .....	117
 <b>CHAPTER 3: SUMMARY, CONCLUSION AND CONTRIBUTION .....</b>	<b>149</b>
3.1 INTRODUCTION .....	151
3.2 CONCLUSIONS CONCERNING THE RESEARCH QUESTIONS .....	153
3.2.1 Conclusions concerning Research Question 1.....	153
3.2.2 Conclusions concerning Research Question 2.....	156
3.2.3 Conclusions concerning Research Question 3.....	159
3.3 THEORETICAL CONTRIBUTION OF THE STUDY .....	165
3.4 MANAGERIAL IMPLICATIONS .....	168
3.4.1 Managerial Implications for the <i>External</i> Drivers of Viral Content.....	168
3.4.1.1 Creating Quality Content is the First Step in Viral Success .....	169
3.4.1.2 Targeted Content that builds on "Outside Knowledge or Information" is an Effective Viral Marketing Niche Strategy .....	169
3.4.1.3 Viral Videos should not be used as Advertising Space.....	170
3.4.2 Managerial Implications for the <i>Intrapersonal</i> Drivers of Viral Content.....	171
3.4.2.1 Emotional, rather than Informative, Content should be used .....	171
3.4.2.2 The more Intensely the Felt Emotion, the more likely for the Content to go Viral.....	171
3.4.2.3 Positive Emotions are more likely to go Viral than Negative Emotions.....	172
3.4.3 Managerial Implications for the <i>Interpersonal</i> Drivers of Viral Content.....	172
3.4.3.1 Viral Videos allow People to Show their Social Networks Who They Are... 172	
3.4.3.2 Generating Views, WOM and Press are Key Components to Viral Success .....	173
3.4.3.3 Viral Marketing Campaigns should be used to Facilitate Two-Way Communication between the Company and the Consumer .....	174
3.5 POSSIBLE LIMITATIONS OF THE RESEARCH .....	176
3.5.1 Generalizability .....	176
3.5.2 Target Population and Sampling.....	176

3.5.3 Methods Used .....	178
3.5.4 Measures .....	178
3.6 FUTURE RESEARCH .....	180

<b>LIST OF REFERENCES .....</b>	<b>183</b>
---------------------------------	------------

## LIST OF TABLES

Table 1: Summary of key viral marketing literature .....	8
Table 2: Statistical tests used in Paper 4.....	37

## LIST OF FIGURES

Figure 1: Definition of viral marketing .....	6
Figure 2: Model of the factors that drive the sharing of content online .....	19
Figure 3: Layout of individual papers .....	22
Figure 4: The interplay between content and emotion.....	157
Figure 5: The factors that drive the sharing of content online.....	161
Figure 6: Circumplex of personal and social emotions .....	167



## **CHAPTER 1: OVERVIEW OF THE RESEARCH**



## 1.1 INTRODUCTION

The “connection generation” craves interaction with and connection to vast social networks (Pintado, 2009) through the sharing of information, photos, opinions, entertainment and news. This sharing comes in the form of electronic word-of-mouth or eWOM (Nelson-Field, Riebe, & Newstead, 2011) and provides marketing and communication managers with an unparalleled opportunity to reach a large number of consumers quickly, and to interact with them. With the ever increasing growth of the internet and the rise of social network sites, viral marketing<sup>1</sup> has cemented itself in the marketing and corporate agenda.

Seven in ten adult internet users, roughly 52% of all US adults, have used the internet to watch or download videos, and 14% have uploaded videos themselves (Purcell, 2010). Nelson-Field et al. (2011) state that, with the rise of video sharing giants like YouTube and Google Video coupled with increased broadband connectivity and improved sharing functionality across social networking sites, the role of the viral video has been cemented in many IMC strategies. This is evident from the transfer of advertising budgets from TV advertising and search and direct response campaigns, to viral video campaigns. Shrinking budgets and exogenous changes to business revenue models has driven an interest in viral marketing. In today’s global-networked world, the question of what makes a message spread and what makes a communication contagious, has become one of the most hotly debated issues in marketing practice (Ferguson, 2008).

While viral marketing is currently one of the key trends in marketing (Cruz & Fill, 2008; Ferguson, 2008), few understand which factors contribute to its success. Marketers find it difficult, if not impossible, to predict viral success (Watts, Peretti, & Frumin, 2007). Whilst practitioners have wrestled with this phenomenon for some time, academic research in this area is still relatively nascent (Cruz & Fill, 2008; Guadagno, Rempala, Murphy, & Okdie, 2013; Nelson-Field et al., 2011) and Cruz and Fill (2008) state that viral marketing research is still in its early stages. A review of the literature shows the following key limitations of current viral marketing literature: First, as the number of studies have burgeoned, so too have the reasons for why content spreads online. Authors have espoused many different, and often contradictory, justifications for the spread of content online. Second, current research often looks at contributing factors in isolation. Most studies typically look at one or at most two factors that contribute to virality, for example specific emotions (Berger & Milkman, 2009; Blomström et al., 2012; Chakrabarti & Berthon, 2012) valence (Eckler & Bolls, 2011; Nelson-Field et al., 2011), social factors (Laggar, Lux, & Marques, 2011), message involvement and personalization (Blomström et al., 2012) or content specific

---

<sup>1</sup> Viral marketing is defined as “eWOM whereby some form of marketing message related to a company, brand or product is transmitted in an exponentially growing way – often through the use of social media” (Kaplan & Haenlein, 2011).

attributes (Henke, n.d.; Nelson-Field et al., 2011; Teixeira, 2012) resulting in a fragmented view of what it is that contributes to the spread of content online.

Further, regardless of the reasons proffered, very little empirical evidence exists to support these claims (Guadagno et al., 2013; Nelson-Field et al., 2011) and “almost nothing” is known about the motivations, attitudes and behaviors of people who send along content (Phelps, Lewis, Mobilio, Perry, & Raman, 2004). This lack of empirical research could be because traditional surveys and experiments often do not work in the viral marketing context (De Bruyn & Lilien, 2008). The internet is creating new social constructs – communities that could not have formed without this new ability to connect across extremely diverse and dispersed locations (Jones, 1999), and these communities need to be reached in different ways.

And finally, because viral marketing research is still in its early stages, the majority of research is concerned with the motivations and behaviors of those passing along content (Cruz & Fill, 2008). However, there is no model that academics can draw upon to better understand the sharing of content online. Watts et al. (2007) state that, “as appealing as a viral model of marketing seems in theory, its practical implication is greatly complicated by its low success rate”. It is evident that researchers remain unclear as to what drives the spread of content online.

These limitations support the call for research on what makes online content go viral. This thesis investigates the factors that contribute to the spread of content online. This chapter first looks at background theory, summarizes a review of current viral marketing literature, identifies gaps in the literature and consequently the research questions of the study are articulated. This is followed by a discussion of the papers used to compile the thesis. Thereafter the methodological approach of this study is discussed, and each paper’s particular methodology is elaborated on.

## **1.2 BACKGROUND TO THE STUDY**

This section first defines viral marketing; where after the gap in viral marketing literature is identified. Based on this literature review a model for the spread of content online is proposed and appropriate research questions are developed.

### **1.2.1 Viral Marketing**

With consumers' increased resistance to traditional forms of advertising, marketers have turned to creative strategies to reach consumers, including viral marketing (Leskovec, Adamic, & Huberman, 2007). Viral marketing can be defined as a form of peer-to-peer communication wherein people are encouraged to pass along promotional messages within their social networks (Bampo, Ewing, Mather, Stewart, & Wallace, 2008). Viral marketing also refers to strategies that allow an "easier, accelerated, and cost-reduced transmission of messages" by creating environments for the exponential self-replication of marketing messages, increasing the "diffusion, spiritualization, and impact of the message" (Welker, 2002 in Golan & Zaidner, 2008). Consumers are therefore motivated to spread these credible messages to their online community, recruiting more customers (Phelps et al., 2004). This study attempted to help marketing managers better understand viral marketing, in order to enable them to better utilize social media and improve their viral marketing campaigns.

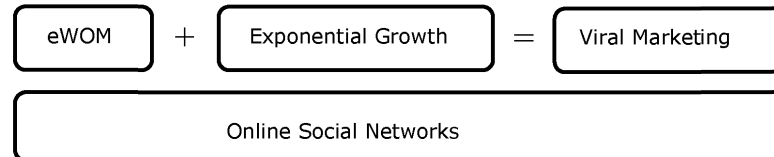
The term "viral marketing" was first introduced in 1996 by Jeffrey Rayport (Kaplan & Haenlein, 2011), but while the term viral marketing has been around for some time, there is still disagreement about its definition (Camarero & San José, 2011; Phelps et al., 2004). The debate centers largely on whether viral marketing is simply another form of word-of-mouth (WOM) marketing or a complete and independent subset of marketing. The first writings in viral marketing in 1997 by Jurvetson and Draper (1997) simply defined viral marketing as "network-enhanced word-of-mouth". Many authors followed their lead and have since referred to viral marketing as a form of eWOM (Blomström et al., 2012; Chen & Berger, 2013; Ferguson, 2008; Guerini, Strapparava, & Ozbal, 2011). Authors that equate viral marketing to eWOM (Blomström et al., 2012; C.-C. Huang, Lin, & Lin, 2009; J. Huang, Chen, & Wang, 2012) argue that it forms part of an IMC strategy and is based on the central components of WOM, i.e. the spread of a message from consumer to consumer via a social network. Except that, instead of face-to-face communication, the medium through which the message spreads is digital media.. Consequently, the term eWOM or electronic word-of-mouth was developed.

On the other hand, not all authors agree that viral marketing is a form of WOM. Sohn et al. (2013) would argue that, if *all* requirements for a definition are not met, the

concept of a definition cannot be used. Sohn et al. (2013) argue that viral marketing is not just another form of WOM and define viral marketing as the “marketer-initiated consumer activity that spreads a marketing message unaltered across a market or segment in a limited time period, mimicking an epidemic”. They argue it is because of the “unaltered message” and “limited time period”, that viral marketing can be distinguished from (albeit closely related to) WOM. In contrast, the WOM message often gets distorted as it is passed from one consumer to the next. Camarero and San Jose (2011) also argue that viral marketing differs from WOM in that those who create the message have a “vested interest in engaging, recruiting or reaching specific individuals”.

In this study, viral marketing was defined as a form of eWOM that has exponential growth (Rodic & Koivisto, 2012), uses interactive multi-media (Rodic & Koivisto, 2012; Sohn et al., 2013) and the message stays the same across the whole social network (Sohn et al., 2013). A definition of viral marketing that is encompassing of all the above mentioned elements was sought, and the following definition of viral marketing was used “eWOM whereby some form of marketing message related to a company, brand or product is transmitted in an exponentially growing way – often through the use of social media” (Kaplan & Haenlein, 2011). This definition is illustrated in Figure 1 below.

**Figure 1: Definition of viral marketing**



**SOURCE: Chohan (2013)**

Viral marketing is therefore a broader framework that encompasses a wide array of electronic word-of-mouth strategies aimed to inspire brand-related online peer-to-peer communication (Golan & Zaidner, 2008). The figure above illustrates that social media facilitates eWOM and assists in its exponential growth to create a viral campaign.

Even though viral marketing was introduced in 1996, it was only with burgeoning social media that viral marketing has come into the spotlight in the past few years (Kaplan & Haenlein, 2011). Social media facilitates eWOM and assists in its exponential growth to create a viral campaign, by giving people easy access to their social networks. Social media also facilitates the multi-media component of viral messages, and offer an interactive platform for users to pass along the message. Therefore, online social networks encourage viral marketing (Berger & Milkman, 2010), and people are encouraged to share marketing content by using these online

social networks (Chohan, 2013; Sansone, Tartaglione, & Bruni, 2012) through social media.

Just as there has been debate regarding the definition of viral marketing, there has been debate regarding the factors that contribute to viral marketing success. The following section reviews current viral marketing literature and identifies gaps in the research.

### **1.2.2 Why Content Spreads Online**

Viral marketing is a key tenant of digital marketing education, and case studies of viral success stories like *United Breaks Guitars* and the *JK wedding dance* often form part of both undergraduate and post-graduate curricula. Some content gets viewed by millions of people, while other content struggles to gain viral traction. While most agree about the importance of better understanding viral marketing, there is not much agreement about what it is exactly that makes content become viral (Watts et al., 2007). In the past decade, an increasing amount of research has focused on explaining why online content goes viral (Cruz & Fill, 2008; Ferguson, 2008).

Table 1 summarizes key studies dealing with why content goes viral online. Studies from the community of scholars concerned with the question of “why content goes viral” were studied. Distinction was made between those focusing broadly and those narrowing their focus to viral marketing. This study investigated the latter only. These studies are listed in alphabetical order. A review of the literature showed that the reasons proffered by researchers can be divided into content specific or *external*, *intrapersonal* and *interpersonal or social* drivers of viral marketing success: *Intrapersonal* reasons often center on the emotional reaction that viewers have after consuming viral content, as well as the impression that it leaves on viewers (Izawa, 2010). These authors typically argue that it is all about how viral content connects emotionally with viewers (Dobele, Lindgreen, Beverland, Vanhamme, & van Wijk, 2007), and how, as a result of that emotional connection, the content gets passed on online. *Social or interpersonal* reasons focus on the social network aspect of viral marketing. It is suggested that passing along content online builds social networks and social capital, it is important for society, and that people anticipate that others would feel happy and grateful to them for sharing viral content (Izawa, 2010). These drivers therefore often consider the social implications of passing along content online. Finally, *external* reasons for spreading content online are given in those studies that focused neither on personal motivation of the sender, nor on social reasons for spreading content online (i.e. intrinsic motivations for passing along content), but rather on other possible extrinsic influencing factors. These studies are diverse in their focus, but the majority of research looks at content-specific characteristics that influence virality.

**Table 1: Summary of key viral marketing literature**

<b>Authors</b>	<b>Year</b>	<b>External Factors</b>	<b>Intrapersonal Factors</b>	<b>Interpersonal Factors</b>
Abedniya, A. & Mahmoudi, S.S.	(2010)	It is the playfulness, number of members, community-driven orientation, and ease of use of the social network site itself that influences virality		Peer pressure was also found to influence virality
Amer, A.S.	(2012)	Low aversive evoking content, in advocacy viral videos, is more effective than medium/high aversive evoking content		
Bampo, M., Ewing, M.T., Mather, D.R., Stewart, D. & Wallace, M.	(2008)	The social structure of digital networks play a key role in the spread of viral messages.		
Berger, J.	(2011b)		Emotional arousal increases the sharing of information	
Berger, J. & Milkman, K.L.	(2011)		Positive content spreads faster than negative. Emotional arousal is key.	
Blomstrom, R., Lind, E. & Persson, F.	(2012)	Personalization of content contributes to virality	Emotions and Comprehension as well as Message Involvement	
Brown, M.R., Bhadury, R.K. & Pope, N.K.L.	(2010a)	Use of comedic violence increases pass along probability		
Camarero, C. & San Jose, R.	(2011)	Frequency with which you receive viral messages	Positive attitude to viral messages	And your social capital influences your likelihood to pass on a message
Chakrabarti, R. & Berthon, P.	(2012)		Social emotions and	Gift giving drives online exchange
Chu	(2011)	Facebook group membership as	Attitude towards social	Self-status seeking influences

		key determinant to viral behavior	media advertising and advertising in general	viral behavior
Dobeles, A., Lindgreen, A., Beverland, M., Vanhamme, J. & Van Wijk, R.	(2007)		Emotions, gender and culture influence virality	
Dobeles, A., Toleman, D. & Beverland, M.	(2005)	The message itself (engaging, imaginative, fun, intriguing), the product (unique, highly visible and susceptible to WOM) and leveraging combinations of technology influences virality.		
Eckler, P. & Bolls, P.	(2011)		Emotional tone influences spread	
Elliot, L.	(2013)		Content that elicits positive emotions like joy, humor and praise	Whether opinion leaders forwarded the message
Gruzd, A., Doiren, S. & Mai, R.	(2011)		More positive than negative messages. Positive messages are 3 times more likely to be forwarded.	
Guadagno, R.E., Rempala, D.M., Murphy, S. & Okdie, B.M.	(2013)	In-group vs. Out-group membership has an influence on the type of content that you spread	Only content that generates stronger affective responses are likely to be spread online + positive content is more likely to be spread than negative	
Guadagno, R.E., Rempala, D.M., Murphy, S. & Okdie, B.M.	(n.d.)	In-group vs. out-group membership only impacted the sharing of angry videos	Positive emotion-evoking content was more likely to spread than negative, and joy-evoking content (high arousal emotion)	

				had the greatest likelihood to be spread online	
Guerini, M., Strapparava, C. & Ozbal, G.	(2011)	"Virality is a phenomenon strictly connected to the nature of the content being spread."		Negative comments were more predominant than positive comments	
Halvey, M. & Keane, M.T.	(2007)	Tagging and textual descriptions play a key role in a video's popularity.			
Hansen, L.K., Arvidsson, A., Nielson, F.A., Colleoni, E. & Etter, M.	(2011)	The social medium itself influences the spread of content online.		Negative news content, and positive non-news content, is more likely to spread on Twitter.	
Hargittai, E. & Walejko, G.	(2008)	Gender and age influence online sharing behavior			
Henke, L.L.	(n.d.)	High vs. low involvement consumers		Effectiveness of shock tactics	
Ho, J.Y.C. & Dempsey, M.	(2010)				Investigates motivations to forward online content: Need to be (1) part of a group, (2) individualistic, (3) altruistic, and the (4) need for personal growth.
Huang, J., Chen, R. & Wang, X.	(2012)	Content quality perception influences forwarding intention			Benefit expectation fully mediates the relationship between quality perception and forwarding intention + Sender's perception of how recipient would receive video also impacts forwarding intention
Huang, C., Lin, T. & Lin, K.	(2009)	Message quality and message involvement influences pass-			Social capital and social cognitive factors influence

		along email intentions	Emotion, impression and utility	pass-along email intentions
Izawa, M.	(2010)			Social ties also influence virality
Jenkins, B.	(2011)	Brand image influences virality	Positive emotions influence virality	
Kaplan, A.M. & Haenlein, M.	(2011)	Viral success depends on whether the content is spread to and by the right people, the message itself (memorable and interesting) and environmental conditions.		
Laggar, C., Lux, M. & Marques, O.	(2011)			Motivations to share videos include: allow others to laugh, show interesting video to a select group, inform people, show others what one has accomplished.
Leskovec, J., Adamic, L.A. & Huberman, B.A.	(2007)	Network dynamics influences the success of viral marketing. As does the product category, price and time of recommendation.		
Nelson-Field, K., Riebe, E. & Newstead, K.	(2011)		Positive and negative emotions spread equally. High arousal emotions get shared more.	
Phelps, J.E., Lewis, R., Mobilio, L. Perry, D. & Raman, N.	(2004)	Frequency with which you pass along email content (viral mavens vs. infrequent senders) influences numerous viral outcomes		
Pousttchi, K. & Wiedemann, D.G.	(2007)	Success factors in mobile viral marketing include perceived usefulness by recipient, reward for communicator, perceived ease of use, free mobile viral content, initial contacts, first mover		

		advantage, critical mass and scalability.		
Rodic, N. & Koivisto, E.	(2012)		Positive content spreads faster	
Roy, S.S.	(2011)	Distinguishes between product specific and general viral content		Motivations to share included: share happiness/joy, resentment, advocacy, economic incentives
Vaish, A., Saxena, A., Dharmaprakash, M., Rajiv Krishna, G. & Utkarsh, G.	(2012)	Social network factors influence virality including share-count, appreciation, user rating, comment rate and controversy.		
Voltz, S. & Grobe, F.	(2013)	The authenticity of the video is the key driver of its success		
Wiedemann, D.G.	(2007)	Factors like the motivation of the communicator, the persuasion technique, content type, network externalities etc. influence virality		
Yang, C., Hsu, Y. & Tan, S.	(2010)	Using TAM, they showed that perceived ease of use and a positive attitude influence video sharing. Sharing behavior is also moderated by gender and influenced by WOM and mass media reports (which they refer to as interpersonal and external influence).		Social and interpersonal norms drive online video sharing.

Each driver of viral content (e.g. external, interpersonal and intrapersonal), is discussed in greater depth in the following section. First, however, a few observations could be made. The “oldest” study from Phelps et al. (2004), showed that research concerning the drivers of viral content is still relatively young. When one looks at the dates of these publications, it is clear there has not been much time for theory development in this area. When organizing the table chronologically, as opposed to alphabetically, a shift in research focus can clearly be observed. Initial studies started off with more traditional approaches to the spread of content online, using for example diffusion of innovation principles and TAM models to try and establish why some content goes viral while others do not. Initial studies also typically focused on content specific factors contributing to virality (e.g. message quality), and this trend continues to this day. The most recent study focuses on the authenticity of viral content (Voltz & Grobe, 2013).

The first authors that suggested that emotion plays a key role in viral marketing, were Dobeles et al. (2007), but the first empirical study on the role of emotions in the spread of content online was that of Berger and Milkman (2011). This study had a great impact on subsequent viral marketing research and most studies that have since looked at why content spreads online also measured some type of emotion, affect, mood or valence. The measurement section (section 1.5.3) in the methodology section further discusses the different approaches that these authors took.

It appears that research into viral online content is not only restricted to marketing. Many studies originated from computer science (Abedniya & Mahmoudi, 2010; Camarero & San José, 2011; Golan & Zaidner, 2008; Guadagno et al., 2013; Guerini et al., 2011; Hansen et al., 2011; Jansen, Zhang, Sobel, & Chowdury, 2009; Lagger et al., 2011; Wu, Tan, Kleinberg, & Macy, 2011), followed by marketing, then business research (Dobeles et al., 2007, 2005; Henke, n.d.; Jansen et al., 2009; Sohn et al., 2013), media and communication studies (Amer, 2012) and even psychology (J. Huang et al., 2012).

Table 1 clearly illustrates that there is disparity in current viral marketing literature with regards to the drivers of viral content: Authors often focus on very diverse topics of investigation, and those focusing on similar topics sometimes have contradictory findings. Whether the message itself, the medium, the emotional response to the message, the sentiment of the message, or the motivations to share content were focused on, it is clear that authors disagree about what the key drivers of viral success are. These disparities in the literature lead to the development of the main research question of this thesis:

*What are the factors that drive the virality<sup>2</sup> of online content?*

---

<sup>2</sup> The use of the term “viral” in viral marketing has often come under critique. Academics from the natural and health sciences have a negative connotation to the word, and authors like Wilson (2005) even state that its use is “offensive”. However,

This research question is the overarching question of this thesis and guides the development of the remaining research questions and articles. The following sections take a closer look at the external, intrapersonal and interpersonal factors individually.

#### **1.2.2.1 External Factors that Drive the Sharing of Content Online**

A review of the literature showed that various external factors, or factors not relating to personal or social motivations, have been studied in viral marketing. These range from the network dynamics and epidemiological principles (Camarero & San José, 2011; Sohn et al., 2013), to the social network sites themselves (Abedniya & Mahmoudi, 2010) and in-group and out-group membership (Chu, 2011). The majority of research that was classified into this category is concerned with the content of the video itself. Authors espousing *content-specific* explanations, have argued that viral content often has utility (Izawa, 2010). In other words, content gets spread across social networks because of its informational and value contribution. Some look at the quality of the video (J. Huang et al., 2012; M. Huang, Cai, Tsang, & Zhou, 2011), but the majority of research focuses on specific types of content: shocking (Henke, n.d.), controversial (Chen & Berger, 2013), comedic violence (Dobele et al., 2005), aversive (Amer, 2012) and authentic (Voltz & Grobe, 2013). In the Pew Internet national survey of internet users, they noted that there had been a tremendous surge in online video watching, particularly comedic or humorous videos (31%-50% of all internet users), educational videos (22-38%), movies or TV shows (16-32%) and political videos (15-30%) (Purcell, 2010).

Guerini et al. (2011) go as far as to say that “virality is a phenomenon strictly connected to the nature of the content being spread”, rather than the influencers who spread it. They then argue that social network structure can only help explain *how* content spreads online, but not *why*. As mentioned research into why content spreads online started off focusing on external and content-related factors (Phelps et al., 2004), and continues along this path to this day (Voltz & Grobe, 2013). While table 1 illustrates the diverse and often contradictory findings of current viral marketing research studies, it also shows that emotions play a critical role in the spread of content online. Next, the intrapersonal factors that authors have investigated are discussed.

---

the term originated as a means to express the exponential spread of content online, and has since been used to express more than the sum of its parts (eWOM, social networks and exponential growth as discussed in chapter 1). Sometimes referring to “the spread of content online” or the “popularity” of online content does not adequately describe these components as a whole, and therefore the terms “viral” and “virality” are used, albeit with caution, in this thesis.

### **1.2.2.2 Intrapersonal Factors that Drive the Sharing of Content Online**

Intrapersonal reasons refer to the viewer specific reactions or mechanisms that might influence the spread of content online and is largely concerned with the emotional reaction that viewers have to the content. Izawa (2010) contends that these center on the emotional reaction that viewers have after consuming viral content, as well as the impression that it leaves on viewers. Factors that have been shown to possibly influence viewers' emotional reaction to the content include the *intensity* with which they felt the emotion (Guadagno et al., n.d.), the *arousal* of the specific emotion involved (Berger & Milkman, 2011; Berger, 2011b; Elliott, 2013; Guadagno et al., 2013). Outside of viewers' emotional response to the content, other intrapersonal variables that have been cited include demographics (Dobele et al., 2007).

The majority of research concerned with virality and emotion, looks at whether positive or negative content spreads faster or is more likely to spread online. Classic theories of diffusion in news media posit that negative affect promotes propagation (Hansen et al., 2011), and indeed, some authors found that negative comments were more common than positive ones (Guerini et al., 2011). However, the majority of research on valence within viral marketing, found that positive content is more pervasive than negative content (Bardzell, Bardzell, & Pace, 2008; Berger & Milkman, 2011; Eckler & Bolls, 2011; Jansen et al., 2009; Wu et al., 2011). Nelson-Field et al. (2011), on the other hand, argues that positive and negative content spreads equally fast. Hansen et al. (2011) argue that the nature of the medium influences the relationship. When content gets spread to friends and acquaintances (like Facebook or email), then positive content could be more prevalent. However, when the audience is largely anonymous, and content gets spread amongst largely anonymous users (like on Twitter), then negative content might be more prevalent. They also argue that the majority of news-related content that spread online is negative, but that content that is not news-related is typically more positive.

Recently there has been a growing body of evidence to suggest that the valence (positive or negative) of the content does not matter as much as the arousal / activation of the particular emotion felt. It seems to be more relevant whether high arousal emotions (e.g. anger) or low arousal emotions (e.g. sadness) are experienced, versus whether the emotion was positive or negative, when it comes to triggering the spread of content online. In their seminal paper, Berger and Milkman (2011), found that high arousal emotions (whether positive or negative), were more likely to spread online. Hansen et al. (2011) contend this finding and argue that the relationship between affect and virality is not that straight forward.

While the study of emotion in viral marketing is relatively new, it is clear that emotion plays a central role in the spread of content online. The role that it plays, however, is still unclear. Consequently, the following research question was developed:

Research question 1: *What is the role of emotion in the sharing of content online?*

Research question 1 takes an in-depth look at the role that emotion plays in the sharing of content online. Because there is disparity in the literature regarding whether valence, affect in general, or specific emotions should be studied in this context, this question takes a broad-based approach and looks at emotion in general. After better understanding the fundamental role that emotion plays in the sharing of content online, the interplay between content and emotion can be further explored. Therefore, a second research question was developed:

Research question 2: *What is the relationship between content and emotion in the sharing of content online?*

From the literature, and the discussion in section 1.2.2, it is clear that the particular content that gets spread plays a role in its virality. Not only is certain content more relevant to target groups, but content that elicits specific types of emotion is also more successful than others. Therefore, research question 2 aimed to investigate the specific relationship between content and emotion. From the definition of viral marketing (see section 1.2.1 and Figure 1), however, it is clear that one more factor plays a central role in the spread of content online: social networks. Once emotions are elicited, viewers might decide to share that content with their social networks for different reasons. The following section investigates the interpersonal reasons why people share content online.

### **1.2.2.3 Interpersonal Factors that Drive the Sharing of Content Online**

Research that focused on interpersonal factors that contribute to the spread of content online has looked at the social network component of viral marketing. More specifically, it refers to research that looked at social and community-oriented justifications as reasons why content gets spread online. *Social* justifications for the spread of viral messages suggest that passing along content online builds social networks and social capital, it is important for society, and people anticipate that others would feel happy and grateful to them for sharing viral content (Izawa, 2010). Ho and Dempsey (2010), for example, found that internet users' motivation to share content online, forms part of their need to: (1) be part of a group, (2) be individualistic, (3) be altruistic, and (4) grow personally. Authors also argue that people share content online to increase their status (Chu, 2011; Lagger et al., 2011; Roy, 2011), out of altruism (Phelps et al., 2004; Roy, 2011), to allow others to laugh

(Lagger et al., 2011; Roy, 2011), to inform others (Lagger et al., 2011), or for economic incentives (Roy, 2011). Similarly, Huang et al. (2009) used social capital theory and social cognitive theory to help explain the sharing of content online. All these reasons focus on people's position with regards to those in their social and online communities.

While authors note that social and other interpersonal factors contribute to the spread of content online, these conclusions often come as managerial recommendations and future research suggestions. Very few studies measure these factors empirically. More importantly, authors typically look at external, intrapersonal and interpersonal factors in isolation, while no complete overview of the problem has been provided. Consequently, the following research question was developed:

Research question 3: *How do external, intrapersonal and interpersonal factors interact, to drive the sharing of content online?*

Inherent in this research question is further investigation into the social factors that contribute to the spread of content online.

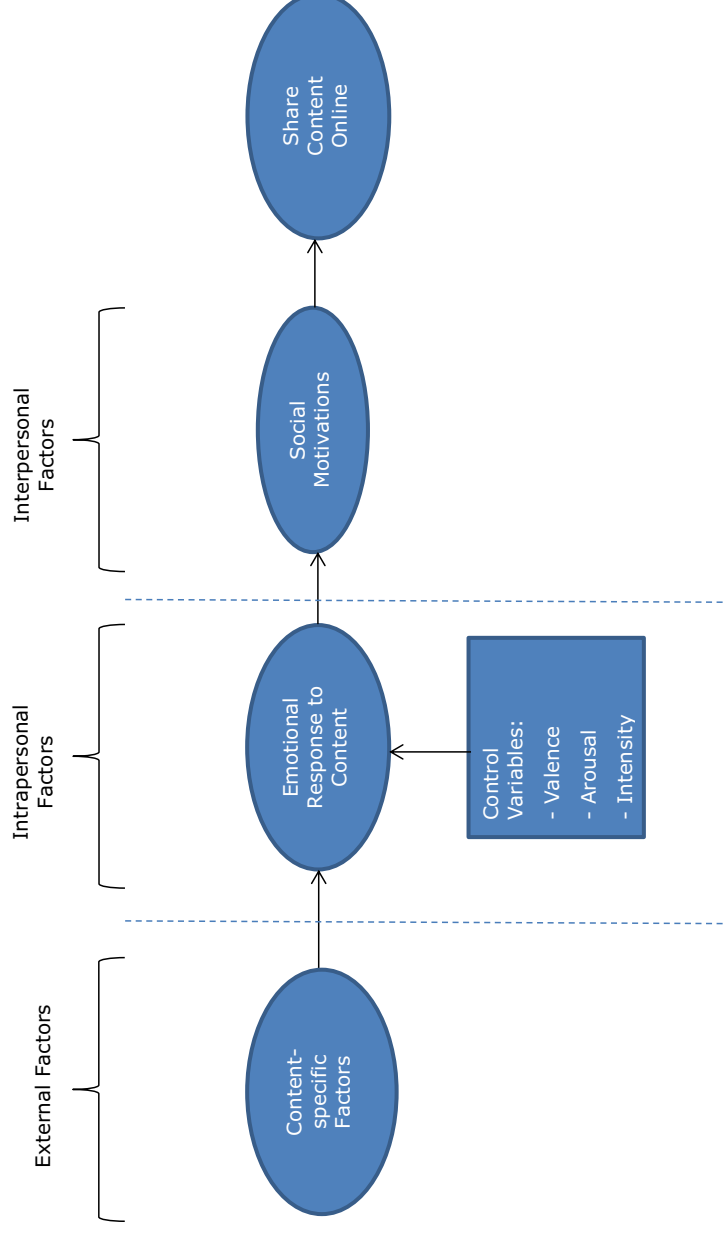
The above literature review lead to the development of a model for the spread of content online (see Figure 2). From sections 1.2.2.1, 1.2.2.2 and 1.2.2.3 it is clear that specific external, intrapersonal and interpersonal factors drive the sharing of content online. The majority of research focusing on external factors looked at content-specific explanations, like the quality of the content (J. Huang et al., 2012; M. Huang et al., 2011) or specific intrinsic characteristics of content that gets spread faster, for example shocking (Henke, n.d.) or controversial (Chen & Berger, 2013) content. Many authors also talk about the type of content that is most prolific in a particular social network site, for example funny, educational or political videos (Purcell, 2010). Guerini et al. (2011) stated that "virality is a phenomenon strictly connected to the nature of the content being spread", and "content-specific" factors consequently became the key focus of external drivers of the spread of content online.

The content itself causes viewers to have an emotional reaction, which further facilitates the spread of content online. The emotional reaction that people have to content is central to the spread of content online (Berger & Milkman, 2010, 2011; Berger, 2011b; Dobeles et al., 2007). Authors argue, however, that the valence (positive vs. negative) of the content (Bardzell et al., 2008; Eckler & Bolls, 2011; Guerini et al., 2011; Jansen et al., 2009; Wu et al., 2011), the intensity with which the emotion was felt (Hansen et al., 2011), and the level of arousal of the emotion (Berger & Milkman, 2011; Berger, 2011b; Elliott, 2013; Guadagno et al., 2013), influence whether the content will be spread online. These factors were therefore included as control variables in the influence that emotion-eliciting content plays on the spread of content online.

After people have experienced an emotional response to content, they consider the option of passing the content on to their social networks. Rime (2009) shows that when people have emotional episodes they tend to interact socially. The Social Sharing of Emotion theory explains why people aim to connect with others after emotional experiences, and how this sharing of emotional content, in turn, causes emotional reactions in others (Christophe & Rimé, 1997; Rime & Christophe, 1997; Rime, Paez, Kanyangara, & Yzerbyt, 2011; Rime, 2009). Online social networks provide viewers with an immediate avenue to socially share the emotions that were elicited by the content. Viral marketing authors contend that there are various social reasons why people share content online: to increase their status (Chu, 2011; Lagger et al., 2011; Roy, 2011), out of altruism (Phelps et al., 2004; Roy, 2011), to allow others to laugh (Lagger et al., 2011; Roy, 2011), to inform others (Lagger et al., 2011), or for economic incentives (Roy, 2011). However, authors disagree about which specific social reasons drive the sharing of content online. These social motivations for the spread of content online need further investigation.

This process of events is illustrated in Figure 2: Specific content-related factors lead to an emotional reaction in people; they then decide to share this content with their online social networks for various interpersonal reasons.

**Figure 2: Model of the factors that drive the sharing of content online**



The model depicted in Figure 2 is a result of the literature review where various parts of the model will be tested by this study. In summary, a simple process of content → emotional reaction → social consideration → online sharing is proposed.

- *Content* plays a key role in the spread of content online. Authors suggest that specific types of content (e.g. shocking), or that particular characteristics of the content (e.g. its quality) influence its spread online.
- People also have different emotional reactions to content. For example, some people might think that political satire is funny, where others might be enraged or upset by the content. Therefore, content leads to different emotional reactions in viewers.
- Whatever the content, viewers still need to have an *emotional reaction* to the content for them to share it online. Viewers' emotional response to the content plays a critical role in the sharing of content online (Berger & Milkman, 2011).
- Viewers' emotional response to the content is influenced by the *valence* (positive/negative) of the content (Guerini et al., 2011; Jenkins, 2011), viewers' emotional *arousal* (i.e. was it a high or low activation emotional response) (Berger & Milkman, 2011; Berger, 2011b; Nelson-Field et al., 2011), and the *intensity* with which they felt the emotion (Guadagno et al., n.d.).
- Having an emotional response to the video, however, is not the only reason viewers would share the content on social media: There must be some social network-related factors that encourage viewers to share content with their online social networks. Previous research suggests that viewers could share content online in order to build social capital in the community, make others happy, that people send content on to interested or like-minded individuals and other social network / community oriented motivations. However, research has also shown that people post content for *self-benefit* and image motivations. Those forwarding content regarding specific causes, on the other hand, could also be doing so for *altruistic* reasons (Chu, 2011; Lagger et al., 2011; Roy, 2011). Authors therefore disagree about which social motivations drive the sharing of content online. This study aimed to take a closer look at the specific social motivations that influenced the spread of content online.
- It is possible for people to have emotional responses to online content and not share it; therefore some social network influence was suggested to moderate the link between emotion and sharing.
- This process finally results in the sharing of content online. There are various ways in which content can be shared with online social networks, including "liking" the content, "posting" it to your wall, or "commenting" on it. Each social network has its own mechanisms for sharing, but the common denominator is that your interaction with the content is shown to your whole online social network. This content also then becomes available to that social network.

Ultimately, when any combination of external, intrapersonal and interpersonal factors occur, viewers are more likely to share content online. This study aimed to propose a more complete framework for the investigation of viral content, and then test various parts of the model. The following section summarizes the research questions proposed.

### 1.3 SUMMARY OF RESEARCH QUESTIONS

The primary, and overarching, research question of this study is:

*What are the factors that drive the virality of online content?*

It is evident that emotion plays a critical role in the spread of content online, hence the following two research questions are proposed. Last, a model is proposed depicting the external, intrapersonal and interpersonal factors that drive the spread of online content, and the final research question is developed around these factors.

Research question 1: *What is the role of emotion in the sharing of content online?*

Research question 2: *What is the interplay between content and emotion in the sharing of content online?*

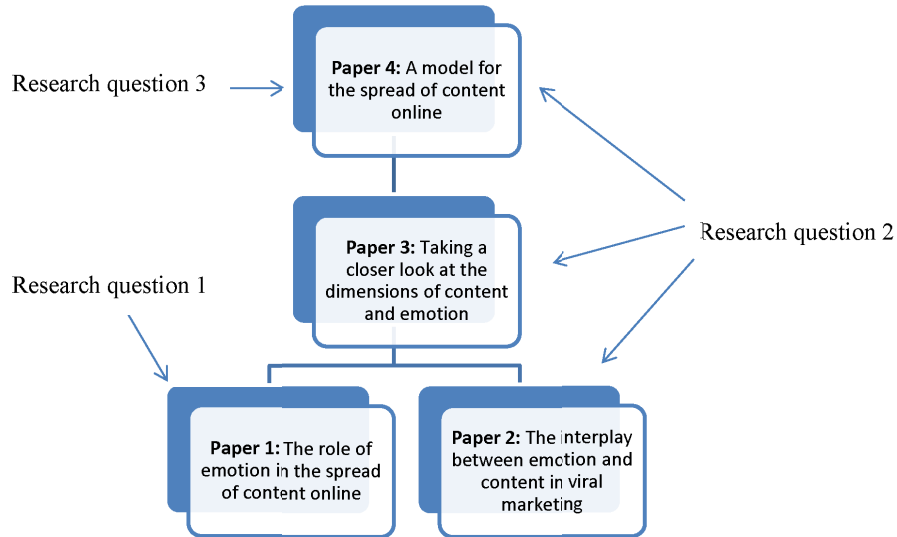
Research question 3: *How do external, intrapersonal and interpersonal factors interact to drive the sharing of content online?*

The remainder of the chapter focuses on the individual papers that focused on answering these research questions, followed by the methodological approach of the study, as well as the methodologies used for each paper. This chapter then ends with a conclusion.

## 1.4 LAYOUT OF INDIVIDUAL PAPERS

Four papers were used to test the research questions proposed in this study. Each paper builds on the previous one, to ultimately propose an improved model for the spread of content online. This chapter established that little is known about the drivers of viral content, consequently an exploratory approach is taken. Each paper has a unique contribution to either understanding the *drivers* (for example the intra- and interpersonal factors as discussed in section 1.2.2.2 and 1.2.2.3) of viral marketing behavior, or the *characteristics* (for example the external drivers as discussed in section 1.2.2.1) of viral content. These papers address each research question in the following way (see Figure 3).

**Figure 3: Layout of individual papers**



Paper 1 takes a look at the role that emotion plays in the spread of content online. While viral marketing literature has established *how* emotion drives viral content, this paper attempts to answer *why* emotion drives the spread of content online. Paper 2 then investigates the relationship between emotion and content in viral marketing, to answer research question 2. Paper 2 suggested that both content and emotion are multidimensional constructs, where emotional responses to online content can have both valence and intensity and content can be creative, humorous and offer utility (in the political communication context). Paper 3 builds on paper 2 by further investigating this relationship in the political communication context. Paper 3 investigated how these dimensions interact. Finally, paper 4 builds on this knowledge and proposes an improved model for the spread of content online. The following

sections discuss each paper in more detail. Paper 1 focuses on research question 1, while paper 2, 3 and 4 contribute towards better understanding research question 2. Finally, paper 4 focuses on answering research question 3. Each paper is now discussed in greater depth.

#### **1.4.1 Paper 1: Emotional Episodes: Towards Understanding what Drives the Sharing of Viral Content**

Research question 1 asks what the role of emotion is in driving viral content. If emotion is a key driver in why online content goes viral, the questions that follow are *how* and *why*: Why does emotion drive the sharing of content online? And how does emotion drive the sharing of content online? This paper attempts to answer these questions, and ultimately research question 1, by using theory from social psychology to explain this phenomenon: Rime's Social Sharing of Emotion theory.

The Social Sharing of Emotion theory (Rime & Christophe, 1997; Rimé, Mesquita, Boca, & Philippot, 1991; Rimé, Páez, Basabe, & Martínez, 2010; Rimé, Paez, Kanyangara, & Yzerbyt, 2011; Rimé, 2007, 2009) explains how emotional episodes trigger social interaction. The paper argues that viral videos trigger emotional responses, and that social interaction needs are met through "posting", "forwarding" and "sharing" these videos with online social networks. The definition, functions and consequences of the social sharing of emotion online are discussed.

This study attempts to answer research question 1, and contributes to current viral marketing knowledge by taking an interdisciplinary approach to better understand the role of emotion in viral marketing. A well-established theory from social psychology is used to better explain why people share content online. The findings have various implications for marketing academics and practitioners alike.

#### **1.4.2 Paper 2: To Share or Not to Share: The Role of Content and Emotion in Viral Marketing**

Following a better understanding of the role of emotion in viral marketing (research question 1), the interplay between content and emotion is more closely investigated (research question 2). Paper 2 takes an in-depth look at the interplay between content specificity and emotion, and how these two factors in particular contribute to the spread of content online by means of in-depth interviews with college-going Generation Y consumers. This paper also looks at the argument that *relevant* content is more likely to evoke an emotional reaction, and consequently more likely to get passed along online. Characteristics related to the content itself has been identified as

one of the key components in viral marketing (Hansen et al., 2011), but its relation to emotion remains largely unexplored. This paper therefore attempts to further explicate the relationship between content and emotion in viral marketing. The paper concludes by proposing a decision tree that viewers can use when deciding whether to share an online video with their friends or not.

This paper finds evidence towards Research Question 2, and contributes to viral marketing literature by firstly investigating the interplay between two key components in the viral model (Figure 2): emotional response and content. To our knowledge, no previous research has done this. While other studies have looked at specific content's (e.g. shocking, evocative) influence on emotion, none have taken a macro perspective on this relationship. Secondly, the paper also proposes a decision tree that marketing managers could use to better understand what content should be used in viral campaigns. Finally, the paper introduces the concept of *relevance*, later used the final model for the spread of content online (paper 4).

Building on the insights gained from paper 1 and 2, paper 3 further investigates the relationship between content and emotion in the political communication context.

#### **1.4.3 Paper 3: A Means to an End: Using Political Satire to go Viral**

Political videos are of the most watched content online. Between 15 and 30 percent of all internet users watch political content (Purcell, 2010). Political content is particularly well suited to the viral context, as was evident with President Obama's "Yes we can" campaign. While viewers might find the content of the video compelling, it is also probable that the "visceral emotional reaction created by the images, music, message, and people in the video" increased viewer interest and emotional response to the content (Guadagno et al., 2013). Consequently, when applying the theory that was developed in previous papers to a specific context, the political context was ideally suited. Using politics to promote a brand was a particularly interesting phenomenon and well worth studying, and formed the context of this study.

In research papers 1 and 2, a theoretical perspective is taken to answer the research questions. This paper applies the knowledge gained from these papers, and attempts to further understand research questions 1 and 2, from an applied perspective, by looking at empirical evidence. It also introduces specific dimensions of emotion (valence and the intensity of the emotion) that could influence the stated relationship between content and emotion, and ultimately its spread online. These factors are investigated in the context of political satire, which allowed the researchers look at the relationship between specific content-related factors, and specific emotional outcomes.

The study followed a two-stage design: First, content analysis of the comments on two viral campaigns was done. One successful, and one less successful, online video that utilized political satire to promote the same brand were used. Second, based on these findings, an experiment was conducted. A model is proposed that looks at the influence of arousal, creativity, humor and utility on virality (liking and or sharing the video), controlling for valence and previous exposure.

This study attempts to provide further evidence towards research question 2. It simultaneously looks at arousal, emotion and content and also quantifies the contributions of each of these in the political communication context. This study also contributes to viral marketing literature by combining quantitative and qualitative findings, where the majority of research in viral marketing, as in other research areas (Johnson & Onwuegbuzie, 2004), uses mono-method approaches. This paper attempts to show marketing managers how to use controversial content in viral marketing campaigns.

Paper 4 builds on the insights gained from the previous three papers and suggests a model for the spread of content online.

#### **1.4.4 Paper 4: Sharing is Caring: A Model for the Spread of Content Online**

A major limitation of viral marketing research, identified in section 2.2, is that researchers often look in isolation at factors that contribute to the spread of content online. Table 1 showed that researchers within this area focus on very different, and often contradicting, aspects related to virality, and not one study has proposed a framework for the investigation of this phenomenon in marketing. In an attempt to answer research question 3, a *two-stage design* is used to propose a model for the spread of content online. First semi-structured interviews are used to understand people's underlying motivations for the sharing of content online. Two sets of interviews are conducted: The first set of interviews use user-generated videos in interviews with 40 young adults. The second set of interviews then uses branded content that had gone viral, and controls for age and gender in 20 respondents. This was done to increase the generalizability of the findings. The second stage of the research uses a longitudinal dataset from a viral aggregator website, Reddit.com (see [www.Reddit.com](http://www.Reddit.com)), to test the propositions developed in the first stage of the research. These two processes result in the proposal of a model for the spread of content online.

The longitudinal dataset represents content that has, to some degree, gone viral. A popular aggregator website that tracks "trending" online content, Reddit.com, was used. Reddit ([www.reddit.com](http://www.reddit.com)) is a social sharing site that claims to be the source of what is new and popular on the web. Reddit has 69.9 million users, 400 million unique visitors and 4.8 billion page views (C. Smith, 2013) and constantly updates its list of "Top 10" things being shared online. This 'top ten list' of the most popular content was

tracked over time. A software program was written to copy information from Reddit for 35 days: from the 10<sup>th</sup> of March 2013 to the 14<sup>th</sup> of April 2013.

The contribution of this paper is threefold: First, this paper takes a macro-level approach to look at the drivers of online sharing. Most research in viral marketing, due to the nature of the context, either looks at *specific issues* related to the spread of content online (e.g. the influence of shock tactics, or comedic horror), or at why *specific cases* went viral. This paper, however, looks at the major external, intrapersonal and interpersonal factors that drive viral success. It consequently attempts to answer research question 3. Second, this study looks at multiple contributing factors at the same time. As pointed out in Table 1, the majority of viral marketing research looks at one, at most two contributing factors. This study takes into account the possible interplay between these factors. Finally, the study proposes a temporal sequence to the sharing of content online: Content-related factors influence the emotional reaction that viewers have to content, followed by social reasons for sharing such content. Even though these three stages might happen almost simultaneously, it could assist marketing managers in the formulation of their viral campaigns. The model also highlights the central role that emotion plays in the sharing of content online.

The following section takes a closer look at the methodologies used within each of these studies, as well as the overall methodological approach of the study.

## 1.5 METHODOLOGY

The internet has allowed market researchers to separate the individual from the market (Jones, 1999). Jones (1999) states that, because of this separation, it is "much easier" to "predict individual behavior when supplied with sufficient data than it is to determine the course of a mass audience", as traditional market research would aspire to do. He warns, however, that even though we are born individually, "we grow jointly". And to have a holistic sense of our interactions (both online and offline), one has to understand both individuals and their relationships in conjunction. This study contributes to the viral marketing body of knowledge by taking (1) a mixed method approach, and (2) often using two-stage designs to better understand both personal motivations for sharing content online, as well as the one-to-many conversations taking place online. Both quantitative and qualitative research designs are combined in mixed method approaches, in order to get a more complete picture of the phenomenon under investigation (Johnson & Onwuegbuzie, 2004) where most viral marketing research follows a mono-method approach.

The success of viral marketing research will lie in its development of suitable criteria and methodologies to measure successful viral campaigns (Cruz & Fill, 2008). This study attempts to look at the research question from different angles, and a mixed methods approach is used. Mixed methods research is when quantitative and qualitative research designs are combined (Teddle, 2009). A key feature of mixed methods research is its "methodological pluralism or eclecticism, which frequently results in superior research (compared to mono-method research)" (Johnson & Onwuegbuzie, 2004). Johnson and Onwuegbuzie (2004) argue against the paradigm "wars" and incompatibility thesis, and show the importance of taking a mixed method approach to gain an in-depth insight into the research question at hand. The specific methods used in this thesis are discussed in more detail in section 5.4, but include:

- Qualitative research designs
  - Semi-structured and depth interviews
  - Content analysis
- Quantitative research designs
  - Experiment
  - Analysis of existing data

The first section looks at the research design and methods, as well as target population and sampling methods, typically used within viral marketing research. Thereafter, the measurement issues associated with measuring emotion in viral marketing is discussed. This is followed by a discussion of the specific research methods used in the individual papers.

### 1.5.1 Research Designs and Methods within Viral Marketing Research

Exploratory, descriptive and causal research designs have been used in viral marketing research. Authors focusing on specific areas of viral marketing, for example the role of specific emotions or specific types of content, have been able to use more conclusive research designs, like experiments (Amer, 2012; Berger & Milkman, 2011), while others have taken a more exploratory approach to better understand the motivations of forwarding content online (Dobele et al., 2007; Elliott, 2013). The most popular research methods used by the authors summarized in Table 1, were:

- Qualitative research methods (Blomström et al., 2012; Chen & Berger, 2013; Dobele et al., 2007; Elliott, 2013),
- Surveys, both online and offline (Abedniya & Mahmoudi, 2010; Camarero & San José, 2011; Chu, 2011; Dobele et al., 2005; Hargittai & Walejko, 2008; Ho & Dempsey, 2010; C.-C. Huang et al., 2009; J. Huang et al., 2012),
- Analysis of existing data (Berger & Milkman, 2011; Chen & Berger, 2013; Guerini et al., 2011),
- Experimental research designs (Amer, 2012; Berger & Milkman, 2011; Brown et al., 2010a; Chen & Berger, 2013; Eckler & Bolls, 2011; Guadagno et al., 2013; Henke, n.d.) and
- Mixed method designs (Blomström et al., 2012; Chen & Berger, 2013; Dobele et al., 2007).

Existing data in the form of “likes”, “views” and comments, from websites like Facebook, Digg and YouTube, is available in abundance in viral marketing research. This data provides researchers with an in-depth look at real-time reactions to viral content. However, studies that have used existing data seldom use this data in isolation. Chen and Berger (2013), for example, analyze comments to the videos that they later use in experimental design. Consequently, a mixed method approach has typically been used by some of the seminal writers in viral marketing (Blomström et al., 2012; Chen & Berger, 2013; Dobele et al., 2007). Other authors have used more specialized methodologies. For example, due to their focus on viewers’ emotional reactions to content, Bardzell et al. (2008) took a neurological approach. However, studies of this nature are in the minority.

This study takes an exploratory look at the possible factors that drive the sharing of content online, and attempts to take a macro perspective of these drivers of virality, in order to contribute towards viral marketing theory. To do this, an in-depth and exploratory research design is most appropriate. Exploratory research designs are used for the discovery of ideas and insights (Churchill & Iacobucci, 2009), and is most appropriate when the possible outcome of the research is unknown (Malhotra, 2010). We look at the content specific factors, interpersonal and intrapersonal motivations for sharing content. The Social Sharing of Emotion theory is also used to better explain the sharing of content online. This study takes an in-depth look at the drivers of virality online, and the outcome of the research was often not known (Malhotra, 2010). Therefore, an exploratory research design was most appropriate.

## **1.5.2 Target Population**

This section starts off with first discussing the target population most appropriate to, and most often used in, viral marketing research, where after the sample designs available to the researchers are elaborated on.

### **1.5.2.1 Description of the Target Population**

Camarero and San Jose (2011) propose that viral marketing studies should focus on targeting a relatively homogenous group of respondents, as previous studies have shown that in-group and out-group characteristics influence people's behavior with regards to sharing content online. They argue that young adults are the most appropriate target population for these studies, as they demonstrate the highest rates of internet adoption and the highest penetration of viral marketing (Camarero & San José, 2011). Furthermore, young adults engage in more "mediated social interactions" and is consequently the ideal targets for viral marketing campaigns (Chu, 2011). This sentiment is mirrored by the majority of research in viral marketing, where almost all studies target students specifically (Abedniya & Mahmoudi, 2010; Amer, 2012; Chu, 2011; Eckler & Bolls, 2011; Guadagno et al., 2013; Hargittai & Walejko, 2008; Henke, n.d.; C.-C. Huang et al., 2009; J. Huang et al., 2012) or young adults in general (Camarero & San José, 2011; Ho & Dempsey, 2010).

The target population of viral marketing research thus often focuses on internet or more specifically, social media users. As the majority of papers in this study also focus on video sharing, the target population can be narrowed down even further to the online video sharing community. According to Pew Internet, young adult internet users, 18 – 29 years old, continue to be the heaviest consumers of online video (Purcell, 2010). The target population and sample size used for this study was similar to those used by others focusing on emotions in online video sharing (Berger & Milkman, 2009), where a representative sample of young adults were targeted. Young adults (between the age of 18 and 34) were largely targeted in this study. According to Nielson (Anon, 2013), YouTube reaches more adults aged 18-34 than any cable network. YouTube is also the predominant online video sharing site (Rotman & Preece, 2010). This target population is therefore most appropriate because:

- They continue to be the heaviest users of online videos (Purcell, 2010) (a specific focus of many of the papers),
- They demonstrate the highest rate of internet adoption (Camarero & San José, 2011),
- They are a relatively homogenous group, as required for most viral marketing research (Camarero & San José, 2011),

- Finally, this target population engage in more social media “mediated communication”, as Chu (2011) refers to it, and communicating to friends via social media comes more naturally to this population.

The following section discusses how these respondents were reached.

#### **1.5.2.2 Sampling**

Viral marketing research often deals with internet users, and young adults who pass along content online. Because of this target population, there is typically no sampling framework available for probability sampling methods. With probability sampling methods respondents have a known and equal chance of being selected to take part in the study (Malhotra, 2010). For this method to be valid it is required that a list of respondents (or population framework (McDaniel & Gates, 2013)) and their details need to be available for the researcher. Non-probability sampling, on the other hand, is when you do not have access to the population framework, and respondents do not have a known and equal probability of being selected (Malhotra, 2010).

Convenience, judgment and quota sampling are the non-probability sampling techniques typically available to authors (Churchill & Iacobucci, 2009), but the sampling method most often used in viral marketing research is convenience sampling (Abedniya & Mahmoudi, 2010; Chu, 2011; J. Huang et al., 2012 to name but a few). However, even though only non-probability sampling methods are typically available to researchers, care still needs to be taken to increase the representativeness of the sample. This can be done through quota sampling (Blumberg, Cooper, & Schindler, 2008; Churchill & Iacobucci, 2009; Malhotra, 2010; McDaniel & Gates, 2013). Quota sampling attempts to ensure the representativeness by selecting the sample to look like the target population (Churchill & Iacobucci, 2009). This is done by enforcing different quota within sampling, like gender, age, or target-specific behavior (Malhotra, 2010). For example, Thelwall (2008), found that the majority MySpace users was female, and the median age was 21. In a study focusing on MySpace, or a similar social networking site, the authors might use age and gender as quota.

Similar to other viral marketing research, this study was faced with no population framework, and hence non-probability sampling techniques had to be used. Quota sampling was used where possible to increase the representativeness of the sample. This study also used the guidelines provided by previous research, as well as marketing research theory, to determine the appropriate sample sizes for each study. The sample sizes used by previous viral marketing studies varied greatly:

- Authors that used interviews sampled between 10 (Blomström et al., 2012) and 20 (Dobele et al., 2005) respondents.

- Surveys ranged from just over 200 (J. Huang et al., 2012) to over 500 (Ho & Dempsey, 2010). However, in some cases, as few as 20 respondents were surveyed (Dobele et al., 2007).
- Experimental designs typically used around 50 respondents (Eckler & Bolls, 2011; Henke, n.d.), but increased to as much as 256 (Guadagno et al., 2013).

In the qualitative research designs, respondents were sampled until research saturation was reached (Flick, 2009). Finally, the measurement issues particular to this study is discussed.

### 1.5.3 Measurement

While each study measures different factors related to the spread of content online, while using different methodologies, the measurement of emotion is pervasive and central in this study. Bagozzi et al. (1999) refer to emotion as “mental states of readiness that arise from appraisals of events or one’s own thoughts”. However, little consistency exists regarding the terminology used in the study of emotion (Ashkanasy & Humphrey, 2011), where some authors use the terms affect, mood and valence (positive vs. negative) synonymously. Thamm (2006), on the other hand, argues that it is distinct from other terms like affect and mood.

This debate has inspired two major competing models: either emotions lie on a continuum, in other words they vary over a few dimensions, or they are defined as discrete events (Lawler & Thye, 1999). This discrete approach is often referred to as the basic emotions approach.

The *discrete* approach states that emotions can be decomposed into a number of distinct regions that represent fundamental emotions, each emotion different from the other (Lawler & Thye, 1999). Discrete emotions are aimed at a specific target or cause, are linked to specific tendencies to act, and typically include emotions like joy, love, anger, fear, sadness, disgust and surprise (Barsade & Gibson, 2007). A *dimensional* approach, on the other hand, suggests that emotions range between two dimensions: one dimension accounts for whether the emotion is positive or negative (valence) and the other for the intensity with which the emotion is felt. Two seminal studies in the dimensional approach are Russell’s (1980) circumplex model of affect (positive affect – negative affect vs. high arousal – low arousal) and Watson and Tellegen’s (1985) consensual structure of mood (high positive affect – low positive affect vs. high negative affect – low negative affect) (Watson, Clark, & Tellegen, 1988; Watson & Tellegen, 1985).

The majority of authors endorse a dimensional approach to the study of emotion as opposed to defining emotions as discrete feelings (Poels & Dewitte, 2006a; Thamm,

2006). This approach has proved to be especially insightful, as it has provided insight into the contradictory findings that viral marketing researchers have found with regards to whether positive or negative content is more likely to be spread online. Berger and Milkman (2011) found that it was not only whether emotions were positive or negative, or whether specific emotions influenced virality, but it was the level of activation and arousal of the emotion that was most relevant. Therefore, a dimensional approach provides greater insight into the role of emotions in viral marketing and was used throughout this study.

This approach has not been used in many viral marketing studies. In a review of viral marketing literature (see Table 1), the diverse and often contradictory frameworks that authors used to classify and measure emotion became evident. Dobeles et al. (2007), for example, suggested looking at basic emotions, where Peters et al. (2009) used Ekman's (1992) classification of basic emotions. Bardzell et al. (2008) used the "Geneva emotion wheel", and Amer (2012) simply measured pleasantness, unpleasantness and arousal. Guadagno et al. (2013), used some combination of the PANAS scale and basic emotions. With some authors it was unclear which classification, if any, was used to measure emotions (Elliott, 2013; Nelson-Field et al., 2011). The majority of studies that argued that emotional arousal was a key determinant in the spread of content online, however, used a dimensional approach to the measurement of emotion (Berger & Milkman, 2011; Berger, 2011b; Hansen et al., 2011; Nelson-Field et al., 2011). Since these studies have become seminal in viral marketing literature, an increasing number of authors have started to adopt the dimensional approach. This study also used the dimensional approach to define emotion, and self-report measures of emotion, including open-ended questions and the PANAS scale were used.

#### **1.5.4 Data Collection for Each Paper**

Multiple methods were used to get an in-depth understanding of what drives viral content. A mix of quantitative and qualitative research techniques were used to answer the research questions, starting with exploratory research methods, and working towards more conclusive research designs:

##### **1.5.4.1 Paper 1: Theory Development**

The first paper was a theory development paper, proposing that the Social Sharing of Emotion theory can be used to better understand viral marketing behavior. There has long been a call for theory development in marketing, and this was supported by the introduction of new journals like *AMS Review*. This paper draws from social psychology and sociology to better understand why content spread online. It

takes an intrapersonal and interpersonal perspective of virality, and looks at how viewers' react emotionally to content, as well as how their need to integrate and connect with a social network increases/decreases the likelihood of them sharing content online. Consequently, data was not collected for this paper.

#### **1.5.4.2 Paper 2: A Qualitative Research Design**

In keeping with the exploratory design of the study, this paper used a qualitative research design to better understand the interplay between content and emotion in viral marketing. It takes an in-depth look at the relationship between content and emotion. Two videos were selected based on pre-determined criteria, and forty in-depth interviews were conducted. Flick (2009) argues that when a stimulus (e.g. a video) is introduced in an interview, a *focused* interview is being conducted. Focused interviews were developed for media research: After a uniform stimulus (e.g. video) is presented to the interviewee, its impact on the interviewee is studied (Flick, 2009). There are typically four criteria for focused interviews:

- *Non-direction*: The interviewer should restrain him- or herself from making early evaluations and should perform a non-directive style of conversation.
- *Specificity* means that the interviewer should highlight the specific elements which determine the impact or meaning of an event for the interviewee. In this case, whether the interviewee would pass along the content to online social networks, and why, was the specific focus of the study. To increase specificity, retrospective inspection is encouraged. E.g. have you forwarded content in the past? What was it? Why? Etc.
- *Range* ensures that all topics relevant to the research question should be mentioned during the interview.
- *Depth* and *personal context* ensure that the interviewer should make sure that emotional responses in the interview go beyond simple assessments of "pleasant" and "unpleasant".

This form of research is particularly well suited to the viral marketing context, particularly with its focus on the interpretation of emotional responses by interviewees. Leximancer was used to analyze participants' comments. Leximancer is discussed in greater depth in the data analysis section to follow.

#### **1.5.4.3 Paper 3: A Mixed Methods Approach: Content Analysis and Experimental Design**

Paper 3 used a mixed method approach to look at a specific viral marketing context: viral marketing campaigns using political communication. Political communication was

identified as a particularly apt application of viral marketing (Purcell, 2010). A combination of qualitative and quantitative research methods (Johnson & Onwuegbuzie, 2004) were used. Two videos were selected to illustrate the use of political satire in viral marketing. Various control measures are enforced in the selection of the two videos (including valence, emotional arousal, creativity, humor, utility and exposure to the video).

First, content analysis was performed on the YouTube comments for these videos. A similar approach was used by Chen and Berger (2013). This was done in order to look at viewers' sentiments towards the videos, as well as to test whether specific themes emerged from the comments. Again, the content analysis software tool, Leximancer, was used in the analysis.

This was followed by an experimental design; to be specific a post-test only experimental design was used. Fifty-two participants were exposed to all three videos (in a random order) and their emotional reaction (and the intensity of that emotion) was measured. This sample size reflected those of other viral marketing studies that used an experimental approach (Eckler & Bolls, 2011; Henke, n.d.). The treatment was one viral and one non-viral online video that focused on political satire, in the fast food context (i.e. unrelated context). These videos were the same videos used in the first stage of the study. However, in order to limit bias, a third control video was introduced. This approach was used to increase both the internal and external validity of the study (Zikmund, Babin, Carr, & Griffin, 2013).

#### **1.5.4.4 Paper 4: Exploratory Two-Stage Design**

This paper used a two-stage design to propose a model for the spread of content online: First, semi-structured interviews were conducted. Semi-structured interviews, unlike depth interviews, have some structure and often have some predetermined questions that get probed in the interview (Malhotra, 2010). Two sets of interviews took place, each with its own viral videos and target population. This contributed towards the generalizability of the results.

Second, a database of viral content was generated and content was analyzed according to the variables identified in stage one of the study. The online context of viral marketing research ensures that there is a plethora of existing data available to researchers. Other viral marketing research studies have also used existing data from blogs (Chen & Berger, 2013), New York Times most popular stories list (Berger & Milkman, 2011), and Digg (Guerini et al., 2011).

To collect the data for stage 2, a software program was written to copy information from Reddit for 35 days, ranging from the 10<sup>th</sup> of March 2013 to the 14<sup>th</sup> of April 2013.

Data was collected on the top ten trending posts every 6 hours, resulting in four data captures per day, and 2140 data entries in total. Repeat entries were removed. For repeat entries, the earliest top ranking post was used in the analysis, and 59 posts were removed in total. Four posts trended for 77% of the observed time. These four posts during this time were 1) that Google has offered a \$20m grand prize to the first privately-funded company to land a robot on the moon, 2) I Am Zach Braff, Ask Me Anything, 3) Pixar's 22 Rules of Storytelling, and 4) a video clip entitled "Referee GoPro cam - I hope this gets introduced in every sport". When these repeat posts were removed, 1029 unique posts remained to be analyzed. This dataset was then used to test some of the relationships proposed by the model. The specific statistical tests used in this second stage of the research are discussed in greater depth in the following section.

### **1.5.5 Data Analysis for Each Paper**

Now that the individual methodologies have been discussed, the data analysis techniques for each individual paper are addressed in the following sections. Because paper 1 was a theoretical paper, and did not have any data, it was subsequently not included in the discussion below.

#### **1.5.5.1 Paper 2: Qualitative Research Design**

Paper 2 used interviews to better understand the relationship between content and emotion. The transcripts from these interviews were analyzed using the text-analysis tool, Leximancer (see [www.leximancer.com](http://www.leximancer.com)). Leximancer allows for a visual depiction of complex textual data allowing for more effective and accurate interpretation. The Leximancer algorithm is based on Bayesian theory (Reyneke, 2011), and the automatic selection of key themes and concepts has been proven to agree with expert human judgement (Stockwell, Colomb, Smith, & Wiles, 2009). Its primary benefits include that it builds concepts as opposed to counting words, pronouns and conjunction. These are all words with low semantic value and are automatically excluded from the analysis. It also does not do stemming, the practice of removing suffixes and reducing words to stem words. Lastly, Leximancer is able to read all types of types of text, including the grammatically incorrect comments often loaded on YouTube (Reyneke, 2011). This benefit of using the Leximancer program for this analysis was that Leximancer is able to read all text, even text that is not grammatically correct (which is often found among individuals in this 18 – 22 year age group). Leximancer ultimately identifies key themes and words from the qualitative data and maps these themes (and their relation to one another) out accordingly, using colours to indicate more important themes, and arrows that link these themes. This provides researchers with a more structured approach to the interpretation of qualitative data.

While Leximancer has been used in other internet studies (Stockwell et al., 2009), because of its ability to analyse a large amount of qualitative text, it has not been used in the viral marketing context. It provided key insights to two of the papers, and was one of the cornerstone techniques used in the study.

#### **1.5.5.2 Paper 3: Content Analysis and an Experiment**

As in paper 2, paper 3 utilized Leximancer to analyze content. However, instead of interviews as the unit of analysis, comments generated by the YouTube videos themselves were used in the analysis. After the content analysis, an experiment was conducted and Ordinary Least Squares (OLS) regression was used to test the proposed model. This type of regression is most appropriate to test the relationship between various independent variables and a dependent variable (Malhotra, 2010). In this case, the dependent variable was whether respondents “liked” or “forwarded” content (viral behavior), and two separate models were tested. The independent variables were the dimensions of both emotion (valence, intensity) and content (creativity, humor and utility) that could influence its spread online. Using linear regression allowed us to consider these multiple characteristics of the target population at the same time. Various dummy variables were included in the model as controls.

#### **1.5.5.3 Paper 4: Content Analysis and Analysis of Existing Data**

Again, Leximancer was used to analyze the comments made by interview participants. Thereafter, a plethora of statistical tests were used to test the assumptions and hypotheses proposed in the first part of the paper. Because an overall model could not be tested, given the type of data accumulated from the Reddit database, individual tests (for example regression, correlation tests, chi-square etc.) were used to test some of the relationships proposed in the first part of the study. Table 2 summarizes the statistical tests used to test these relationships.

**Table 2: Statistical tests used in Paper 4**

<b>Type of Test Required</b>	<b>Type of Data</b>	<b>Statistical Test Used</b>	<b>Assumptions of the Test</b>
Difference between two groups	Grouping variable = nominal data + Dependent variable = interval / ratio data	Independent sample t-test	Levene's test for the equality of variances
Difference between more than two groups	Grouping variable = nominal data + Dependent variable = interval / ratio data	ANOVA	None
Difference between two groups	Both variables are nominal	Chi-square	None
Difference between variables / constructs / measures	Both variables are interval / ratio	Paired sample t-test	None
Relationship between two constructs	Both variables are interval or ratio	Correlation: Pearson's Correlation Coefficient (if data is normal) Spearman's Rho (non-parametric alternative)	Test for normality
Influence of multiple independent variables on a single dependent variable OR relationship between multiple variables	All variables are measured using an interval / ratio scale	Regression	Test for normality for all variables
Influence of multiple independent variables on a single dependent variable	Independent variables are interval / ratio + dependent variable is nominal	Discriminant analysis OR regression using a dummy variable for the dependent variable`	Test for normality
Univariate hypothesis	Variable is measured using an interval / ratio scale	One-sample t-test	None

As can be seen from Table 2, the type of test (or research question) was first considered, whereafter the type of data available specified which statistical test was most appropriate. Finally, the assumptions of the individual test were first addressed whereafter the actual test was conducted using SPSS.

## **1.6 CONCLUSION**

This chapter explored the current gaps in viral marketing literature. It was identified that previous research disparately writes about external, intrapersonal or interpersonal factors that drive viral success. However, many studies have divergent and often contradictory findings. Also, these studies typically look at the factors that drive viral success in isolation (for example creativity, shock tactics or emotion) and few studies look at multiple contributing factors simultaneously. This study proposes a comprehensive model that simultaneously looks at the factors that contribute to the spread of content online.

Four papers are used to better understand the drivers of viral success. First, a theory paper uses the Social Sharing of Emotion theory (Rime, 2009) to better understand why people share emotive content online. Even though authors are increasingly citing emotion as a key driver of virality (Berger & Milkman, 2009, 2011; Nelson-Field et al., 2011), these authors seldom use established and well defined classifications of emotion. Indeed, many of these authors have contradicting classifications of emotion (see Berger & Milkman, 2011 vs. (Henke, n.d.)). This study draws on literature from psychology and sociology to better define and measure emotion in the viral marketing context.

Second, two papers are used to investigate the relationship between content and emotion. While many authors agree that the emotion that content elicits in viewers drives its spread online, few look at the specific relationship between content and emotion. Arousal and valence were identified as two dimensions of emotion that could have an influence on whether content goes viral. A two-stage design was then proposed in paper 3 to take a closer look at this relationship. Finally, the fourth paper builds on the findings from the above studies, and additionally uses a two-stage design to propose a model for the spread of content online. Herewith follows each of the four papers.



## **CHAPTER 2: INDIVIDUAL PAPERS**



## **2.1 PAPER 1: EMOTIONAL EPISODES: TOWARDS UNDERSTANDING WHAT DRIVES THE SHARING OF VIRAL CONTENT**

This paper was submitted to Internet Research.

## **EMOTIONAL EPISODES: TOWARDS UNDERSTANDING WHAT DRIVES THE SHARING OF VIRAL CONTENT**

**Elsamari Botha**

Division of Industrial Marketing, INDEK, KTH Royal Institute of Technology

**Pierre Berthon**

McCallum School of Business, Bentley University

### **ABSTRACT**

Research into the role that emotion plays in driving the sharing of online content, has yielded equivocal results. One possible reason for these inconclusive findings is that virality may not be a function of the type of emotion that the content elicits, but rather the intrinsic motivation for sharing emotions. Thus, rather than ask the question, “*what type* of emotional content spreads faster?” we look at the wider issue of *why* people share emotive content. In this paper we look at the intrinsic motivations for sharing content online, and propose that people share content online to share emotions. From extant literature on social emotions, and using Rime’s theory of the social sharing of emotion, we propose a model of online emotional sharing and finally develop a series of associated propositions. We contend that the probability that an individual will share content online is a function of the characteristics of the emotional episode.

**Keywords:** Viral marketing, emotion, social sharing of emotion

## INTRODUCTION

The convergence of media and technology and the fragmentation and personalization of media is affecting marketers' connection to consumers in unprecedented ways. Not only can consumers interact with marketers and their messages, but they reshape and distribute those messages through global communities (Rasmussen, Ude, & Landry, 2010). Viral marketing has been described as the process of getting consumers to pass along a company's message to these consumers' online social networks. These messages potentially spread like a virus through these online social networks, hence the term viral marketing. This area of marketing has gained tremendous popularity as these social networks facilitate interconnections between companies and their stakeholders. However, there is still a limited understanding of how viral marketing works (Dobele, Lindgreen, Beverland, Vanhamme, & van Wijk, 2007), and what drives the spread of content online.

Researchers have proposed diverse reasons for why content goes viral: From the quality of the content (C.-C. Huang, Lin, & Lin, 2009; J. Huang, Chen, & Wang, 2012), to the influence of market mavens (Barnes & Pressey, 2012), to Facebook group membership (Chu, 2011). Increasingly, however, authors agree that the greatest contributing factor, is how the content connects emotionally with viewers (Berger & Milkman, 2011; Berger, 2011; Dobele et al., 2007; Eckler & Bolls, 2011; Nelson-Field, Riebe, & Newstead, 2011). Authors argue that the intensity with which the emotion is felt (Eckler & Bolls, 2011; Peters, Kashima, & Clark, 2009), the level of arousal of the emotion (i.e. high activation versus low activation emotions) (Berger & Milkman, 2011; Berger, 2011; Nelson-Field et al., 2011), or the valence (positive vs. negative) of the emotion (Elliott, 2013; Guerini, Strapparava, & Ozbal, 2011; Jenkins, 2011; Wu, Tan, Kleinberg, & Macy, 2011) drives the spread of content online. Others suggest that specific emotions drive virality (Derbaix & Vanhamme, 2003; Guadagno, Rempala, Murphy, & Okdie, 2013; Peters et al., 2009). The findings of these studies, however, often contradict one another, where some authors argue that positive emotions spread faster (Elliott, 2013; Guadagno et al., 2013; Jenkins, 2011), and others that negative emotions are more successful in the viral marketing context (Guerini et al., 2011; Hansen, Arvidsson, Nielsen, Colleoni, & Etter, 2011; Hill, Rand, Nowak, & Christakis, 2010). Some authors have suggested that the contradictory findings regarding the role of emotion in the spread of content online, suggests that the relationship between affect and virality is more complex than Berger and Milkman (2009) make it out to be (Hansen et al., 2011).

These issues might be resolved by asking not *how* emotion drives the sharing of content online, but *why*. While authors agree that emotion drives the spread of content online, and many measure *how* emotion drives the spread of content, none have asked *why* an emotional response to content would trigger social interaction. There is consequently a lack of theory development regarding the role of emotion in

the sharing of content online. This study takes a step back and asks the following key research question:

*Why do emotions drive the sharing of content online?*

Theory from social psychology provides a possible explanation to marketers. Rime and Christophe's theory of the social sharing of emotion (Christophe & Rimé, 1997; Rime & Christophe, 1997; Rime, Paez, Kanyangara, & Yzerbyt, 2011; Rime, 2009), posits that when people have an emotional experience, they endeavor to share this emotional experience socially. This paper proposes that the theory of the social sharing of emotion can be used to better understand why emotion drives the sharing of content online, and explicates this theory in the viral marketing context. However, as the context wherein emotions are being shared changes from face-to-face sharing, to sharing emotional content with online social networks, an interesting dynamic can be observed: One person can share emotion-eliciting content with many people at the same time. Large social networks are accessed through social media like Facebook and Twitter, and emotions are spread in an exponential manner. Therefore, better understanding why and how the social sharing of emotion theory can be used to understand viral behaviour, is of key importance to marketers and psychologists alike.

This study contributes to existing literature by (1) developing theory to explain why people share emotional content online, and (2) developing a series of propositions expounding the drivers of sharing. The paper starts with a brief review of the role of emotion in viral marketing literature and research. This is followed by a discussion of the theory of the Social Sharing of Emotion, where the various assumptions, functions and consequences of the theory are discussed. This theory is then extended to the online context. The paper ends with a discussion of future research avenues.

## **THE ROLE OF EMOTION IN THE SHARING OF CONTENT ONLINE**

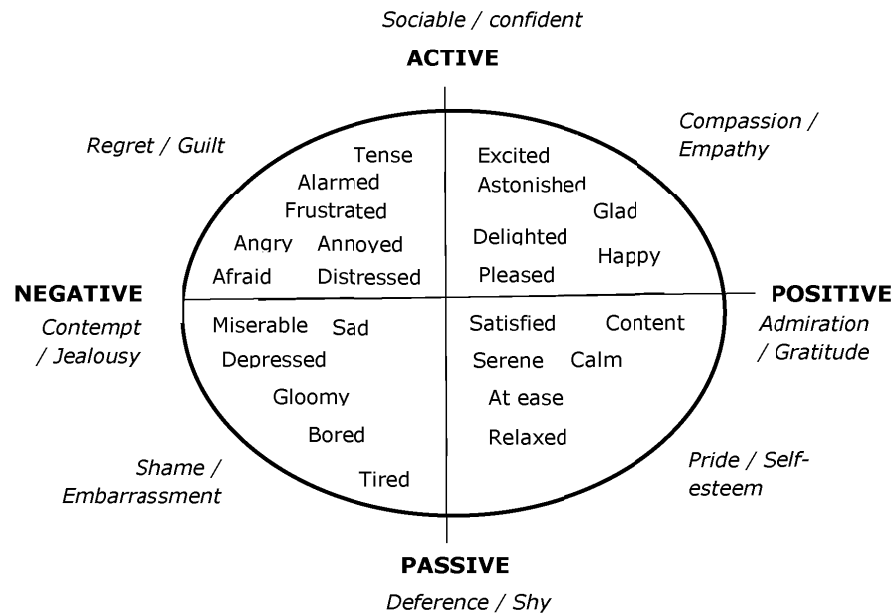
The majority of research on the role of emotion in viral marketing focuses on valence: Positive versus negative emotion-eliciting content, and which of the two types of emotion spreads faster. Authors disagree about what type of content spreads faster across social networks. Some state that there is no difference between positive and negative content (Berger & Milkman, 2011; Eckler & Bolls, 2011; Rimé, Philippot, Boca, & Mesquita, 1992; Rodic & Koivisto, 2012; Russell, 2003), some say negative spreads faster (Guerini et al., 2011; Hansen et al., 2011; Hill et al., 2010), but more often in marketing literature, authors find that positive messages spread faster than negative ones (Berger & Milkman, 2011; Eckler & Bolls, 2011; Rodic & Koivisto, 2012; Russell, 2003). This distinction has often been influenced by the discipline of the researchers. Most social scientists and marketers prescribe to the positive view, while researchers from information systems and computer science that prescribe to the

classic theory of diffusion in news media (Hansen et al., 2011), believe that negative content gets more traction. Researchers from the natural and biological sciences tend to agree with the latter (Salathé, Vu, Khandelwal, & Hunter, 2013).

Recently, however, there has been a shift towards focusing on specific emotions and their impact on viral content. Dobelet et al. (2007), for example, analyze nine viral videos using six basic emotions. Elliot (2013) suggests that joy, humor and praise are key emotions that drive the sharing of content online. Others focus on when more controversial emotion-evoking content works like shock (Henke, n.d.), aversive evoking content (Amer, 2012) or controversial content (Chen & Berger, 2012). How these authors classified and analyzed these emotions, however, is often unclear, and sometimes contradictory.

In the study of emotion, there are two competing models for the definition and measurement of emotion: either emotions lie on a continuum, in other words they vary over a few dimensions, or they are discrete events (Lawler & Thye, 1999). The *discrete* approach states that the circumplex of emotion can be decomposed into a number of distinct regions that represent fundamental emotions, each emotion different from the other (Lawler & Thye, 1999). Discrete emotions are aimed at a specific target or cause, are linked to specific tendencies to act, and typically include emotions like joy, love, anger, fear, sadness, disgust and surprise (Barsade & Gibson, 2007). A *dimensional* approach, on the other hand, suggests that emotions range between two dimensions: one dimension accounts for whether the emotion is positive or negative (valence) and the other the level of arousal that the emotion evokes, also referred to as active or passive emotions. Two seminal studies in the dimensional approach are Russell's (1980) circumplex model of affect (positive affect – negative affect vs. high arousal – low arousal) and Watson and Tellegen's (1985) consensual structure of mood (high positive affect – low positive affect vs. high negative affect – low negative affect). Russell's (1980) seminal paper on the circumplex of emotions introduces these dimensions and maps personal emotions onto them. Chakrabarti and Berthon (2012), building on Russell's work, show how specifically *social* emotions can be mapped onto these two axes of valence and arousal (see Figure 1).

**Figure 1:**  
**Circumplex of personal and social emotions**



SOURCE: Adapted from Russell (1980) and Chakrabarti and Berthon (2012)

The emotions within each quadrant represent the *personal* emotions that people may experience. Rime (2009) contends that high-arousal emotions are more likely to be shared socially. Berger and Milkman (2011) similarly argue that online content that evokes high arousal emotions are more likely to be shared online. The emotions outside the circumplex, show the *social* emotions that may influence social sharing. Some emotions are inherently social. In other words, people have emotional experiences because of their relationship with other people. Where being sad or depressed are inherently isolated and personal emotions, shame and guilt, on the other hand, would not have existed were it not for other people. These emotions have been proposed to drive the sharing of content to online social networks (Chakrabarti & Berthon, 2012).

Emotions in each quadrant have been found to have different influences on behaviour. This classification provides researchers with the ability to position individual emotions, identified by respondents, into active/passive and positive/negative quadrants. The dimensional approach to the study of emotions has been used by most of the seminal writers in this field of study (Bagozzi, Gopinath, & Nyer, 1999; Barsade & Gibson, 2007; Lawler & Thye, 1999; Poels & Dewitte, 2006; Stets & Turner, 2006; Thamm, 2006) as it explains more variance in the role that emotion plays in influencing behavior.

In viral marketing research, authors that have used a discrete approach to the measurement of emotion, have often found contradictory findings, especially when findings are denigrated to positive versus negative basic emotions. Only when Berger and Milkman (2011) suggested that the level of arousal caused by the emotion, is more important than whether the emotion is positive or negative, did authors start using a dimensional approach. The majority of research in viral marketing, however, are unclear with regard to their measures and classifications of emotion, or simply measure positive versus negative sentiment.

When researchers investigate emotions in the viral context, they inevitably have to link these emotions to behavior, specifically the forwarding of content to online social networks. While most authors agree that emotion leads to the sharing of content online, none have explained *why* emotional experiences online might lead to social behavior.

## **EMOTION ELICITS SOCIAL SHARING**

Theory on the social sharing of emotion provides insight into how emotional events stimulate social interaction. Emotional expressions may serve to initiate and maintain social interactions and shape communication patterns between individuals (Lee, 2012). The systematic responses to emotion-sharing can be understood or clarified as mechanisms to satisfy social-attachment needs (Butler & Gross, 2009). In stark contrast to the "Lone Ranger" view in psychology, the theory of the Social Sharing of Emotion explains that when people have emotional experiences, they seek interaction with those in their social networks. Proponents of the Lone Ranger view, on the other hand, argues that as humans develop, they eliminate social dependence (Rime, 2009). The lone ranger view holds healthy individuals as "self-contained, independent and self-reliant" (Riger, 1993), far removed from the social dependence we have as children. Rime (Rimé, 2007; Rime, 2009), on the other hand, proposes that we are dependent on our social networks. His theory of the social sharing of emotion predicts that any private emotional experience entails a number of consequences at both the interpersonal and collective level (Rimé, 2009). Rime (2009:62) argues that, as is the case among children, processes of interaction with others "buffer adults' emotions, stimulate adults' cognitive processing of emotional experiences, increase adults' personal knowledge about emotion, and contribute to the strengthening of their interpersonal relationships and social integration". Consequently, social processes and interaction forms a central part in all human existence. Emotional experiences elicit social processes, referred to as the Social Sharing of Emotion. This section first attempts to define the Social Sharing of Emotion, whereafter the functions of social sharing, and its link to social networks is discussed.

## **Definition and Consequences of Emotional Experiences**

The theory of the social sharing of emotion entails a description of the emotional event, in a socially-shared language, by the person who experienced it, to another (Rimé, Mesquita, Boca, & Philippot, 1991). In its full form, social sharing occurs in discourse when an individual communicates openly with one or more persons about the circumstances of an emotion-eliciting event. In its attenuated forms, it refers to latent or indirect communication in which the addressee is present only at a symbolic level (Rimé, Finkenauer, Luminet, Zech, & Philippot, 1998; Rime, 2009). It consequently consists of two parts: 1) the evocation of emotion in a socially shared language, and 2) at least at the symbolic level, to some addressee (Rimé et al., 1998, 1991).

People share emotions in a social context because (Rimé et al., 1998):

- (1) Emotion elicit ambiguous sensations and people search for clarifying information in their social environment to resolve these ambiguous sensations.
- (2) Emotions are dense and diffuse experiences in need of articulation. In other words, people want to "unfold" the emotional material and try and conform it to the rules of logical thinking.
- (3) Emotion challenges people's beliefs about themselves, others and the world. The social sharing of emotions allows people to work through the emotional experience, facilitate the restoration of their beliefs and allocate an acceptable meaning to the events.
- (4) Emotional episodes challenge people's beliefs. When beliefs are challenged, people's basic feeling of security is undermined and they will usually seek social support and coping assistance.
- (5) Emotion can evoke excessive self-focused attention and as a result dissociate people from their environment. However, when emotions are shared socially and subsequently acknowledged and validated by a person's social environment, the initial privately experienced emotion gets defined by the group and the group can propose socially acceptable ways of dealing with the experience.

One can distinguish between the emotional consequences of negative emotions, and the consequences of positive emotions. Negative emotions initiate a state of cognitive dissonance; people therefore begin important cognitive efforts towards dissonance reduction. Rime (2009) states that negative experiences entail a "temporary destabilization of the person, a generalized distressing condition that a person is highly motivated to reduce". Negative emotions therefore elicit cognitive work and stimulates social interaction in the form of social comparison, storytelling and narration, conversation and most importantly, a search for emotional support through contact with attachment figures or their selective substitutes (Rimé et al., 1998, 1991; Rime et al., 2011; Rimé, 2007, 2009). Extensive empirical support for these assertions can be found in Rime's research (Rimé et al., 1998, 1991; Rimé, Paez, Kanyangara, & Yzerbyt, 2011; Rimé, 2007, 2009).

For very different reasons, positive emotions similarly stimulate important social interaction. Rime (2009) argues that sharing positive emotional experiences allows for one to re-access these emotional episodes, and people are motivated to mentally ruminate upon these. Through their research, they have also shown that positive emotional experiences fuels cognitive work (Rimé et al., 1998, 1991, 2011; Rimé, 2007, 2009). Last, Rime (2009) argues that sharing positive emotions not only boosts individuals' positive affect, but also enhances their social bonds. Consequently, positive emotions are savored and capitalized upon through social sharing. Consequently, when individuals have either a positive or negative emotional experience, they are motivated to share this experience with others (Rimé, 2009). Social sharing, in turn, has various functions, discussed in the following section.

### **Functions of the Social Sharing of Emotion**

There are three main functions served by the social sharing of emotion: First, the very basic function of *rehearsing*, *reminding* or *re-experiencing*. Through spreading of positive emotions, people can enhance their own positive affect. The spreading of negative emotions, on the other hand, fulfils important functions with regard to the memory of the emotional episode. Through the re-experiencing of emotions in a social group, a kind of collective memory is constructed and knowledge building takes place within the social community (Rime, 2009).

Second, the social sharing of emotion has various *socio-affective* functions: The sharing of emotions can attract social attention and interest, as well as arouse empathy among the community. In this way, the social sharing of emotion is a powerful tool for stimulating bonding and the strengthening of social ties (Rimé, 2009).

Last, because emotion is a dense and diffuse experience that needs cognitive work (Rimé et al., 1998, 2011; Rimé, 2007, 2009), social sharing provides *cognitive articulation* that activates *cognitive-social* processes. When people are confronted with ambiguous information, where emotions often involves complex and unexpected eliciting circumstances, they look for clarification in their social network (Rimé, 2009).

With the above functions of social sharing, Rime (Christophe & Rimé, 1997; Rimé, 2007) showed that emotional sharing propagates across a community. An emotional experience is the starting point of various cognitive, symbolic, affective and social processes, and is consequently revealed as a fundamentally interdependent process (Rimé, 2009). Emotional experiences therefore prompt social interaction. With an emotional experience begins a propagation process in which "successive interactants also experience the strengthening of their own social ties" (Rimé, 2009, p. 82). The consequences of emotion are then not only limited to the individual that experiences it: Individual emotional experiences enhance social integration and social cohesion

within the larger community (Rimé, 2009). One of the immediate communities that adults can share their emotional experiences with, are their social networks.

### **Sharing of emotion in a social network**

The sharing of emotions with others opens up a communal spreading of emotion through a social network (Rimé, 2009). In its interpersonal form, the theory of the Social Sharing of Emotion states that being exposed to the social sharing of emotion is emotion-inducing. People who listen to others talk about their own emotions, experience these same emotions, referred to as a "secondary" emotional experience. In this "secondary" emotional experience, people are motivated to, in turn, share this emotional experience with others. This is referred to as secondary social sharing (Christophe & Rimé, 1997; Rimé et al., 1998; Rimé, 2007). These people, in turn, share the emotional experience with others, referred to as tertiary social sharing (Harber & Cohen, 2005; Rimé, 2007). A social sharing propagation chain is created and emotional information is disseminated across a social network (Rimé, 2009). The more intense the emotional experience, the more social sharing will take place (Christophe & Rimé, 1997; Rimé et al., 1998; Rimé, 2007, 2009).

This process of eliciting emotions in others through a shared language is also present in other areas of research such as Hatfield et al.'s (1994) *emotional contagion* and Harber and Cohen's (2005) *emotional broadcaster theory*. Hatfield et al.'s (1994) premise was that positive and negative emotions in other people can cause both positive and negative emotions in the people that they interact with. While Hatfield et al. (1994) theorized that *emotional contagion* takes place through interpersonal contact, emotional contagion, can also be found to influence people in a more indirect way. Schoenewolf (1990) states that emotional contagion is a process in which a person or group influences the emotions or behaviour of another person or group through the conscious or unconscious induction of emotion states. Based on these assumptions, authors have shown that positive and negative emotion can be spread during service encounters (Barger & Grandey, 2006; Du, Fan, & Feng, 2011; Pugh, 2001; Sutton & Rafaeli, 1988), service failures (Du et al., 2011), workplace interactions (Barsade, 2002; Tsai, 2001) and it has been found to influence customer behavioral intentions (Tsai & Huang, 2002) and sales (Sutton & Rafaeli, 1988).

Much of the theory regarding the emotion-eliciting aspect of the social sharing of emotion is based on Bartlett's (1932, in Rime et al., 1998) serial reproduction and the *emotional broadcaster theory* (Harber & Cohen, 2005). Harber and Cohen (2005) show that psychologically arousing stories, in other words stories that elicit intense emotions, travel across social networks. In addition, they show that the extent to which the story travels across the network reflects the degree to which the original teller was affected by the story. This is in line with Russell's (1980, 2003) concept of passive and active emotions, and Watson and Tellegen's (1985) concept of low arousal and high arousal emotions.

Viral marketing researchers have also commented on the communal spread of emotion through the online social network. Gruzd et al. (2011) asked whether happiness was contagious online by looking at Twitter usage during the 2010 Winter Olympics. Lee (2012) showed how people used Youtube to facilitate their collective expression of grief over Michael Jackson's death. Guadagno et al. (n.d.) similarly talk about emotional contagion through the spread of viral content, and argue that "forwarding existing information to another person also can involve shared emotion indirectly". The following section looks at how the sharing of content online facilitates the sharing of emotion, and consequently, how the theory of the Social Sharing of Emotion can be used to better understand the sharing of content online.

## **ONLINE SOCIAL SHARING OF EMOTION**

The social sharing of emotion theory proposes that people, in response to an emotional experience, do not isolate themselves, but seek out interaction with their social networks. They particularly seek to share these emotions with others. Those who the emotions are shared with, in turn, have an emotional experience similar to that of the first person, and a chain of emotional propagation is generated. The intensity of these emotional responses varies depending on the intensity of the emotional experience to which they are exposed. Emotion-sharing situations therefore stimulate attachment behaviours across social networks (Rimé, 2009, p. 71) and stimulates social interaction. The collective process of emotion sharing across a community contributes to the construction of social knowledge within that community, builds social capital, collective memory and clarifies ambiguous information. The social sharing of emotion also contributes to the emotional climate of the community (Rimé, Páez, Basabe, & Martínez, 2010; Rimé et al., 2011; Rimé, 2007). Using Durkheim's classic model of the social functional effects of collective remembering, Rime et al. (2010) show that the more people share emotional experiences with their social networks, the greater their social integration, and the higher their contentment, hope, solidarity and confidence in the emotional climate of the social network.

Emotions, resulting from viewing viral content, are therefore shared online via online social networks. Previous research has shown that viewing viral content is an emotion-eliciting event and authors have shown that online content that connects emotionally to viewers go viral (Berger & Milkman, 2011; Dobeles et al., 2007). Berger and Milkman (2009) show that the intensity of the emotion that the content elicits, is positively related to its virality. We argue that the social sharing of emotion can be extended to online social networks. As viewers are exposed to positive or negative emotion-eliciting content online, they go through the same cognitive and socio-affective processes described above. These emotional experiences stimulate social sharing, and one of the social networks within immediate reach is viewers' online social networks. They could consequently decide share the content with their online social networks, and a propagation process unfolds of multiple emotional contagions through content that has gone "viral".

Previous authors have argued that the emotional response that viewers have to content, propagates its online sharing. Gruzd, Doiren and Mai (2011) suggested that the emotional tone and content of online messages may influence users' interactions. Using the social sharing of emotion theory to better understand the viral marketing phenomenon, we see that online social networks provide people with another avenue to "deal" with emotional experiences. However, online social networks could also lead to these emotional experiences: As members of social networks share content that elicit emotional responses, viewers are exposed to this content, in turn have emotional experiences when viewing the content, and consequently have a need to share these emotions with others. Through the sharing of emotions, people build community, social capital and shared knowledge, and the online community is strengthened. Online social networks therefore provide fertile ground for the social sharing of emotion. Lee (2012) analysed comments made on Youtube to show how Youtube plays an important role in facilitating emotional expressions, and concluded that "users can depend on the content provided by Youtube to meet their emotional needs".

Viral marketing, by its very nature, is not just about the sharing of information between two people, but rather about the exponential sharing of information through a large social network. While the social sharing of emotion theory talks about secondary and tertiary sharing, viral messages spread much farther than that. Bartlett's (1932) research on serial reproduction and how and why emotions are shared *exponentially* are examples of the effect of sharing emotions with a large social network quickly. Therefore, extending the social sharing of emotion theory to an online context introduces two key aspects to the social sharing of emotional episodes: Emotions are shared with multiple people at the same time. And second, emotions are spread exponentially over a large social network. The impact of the social sharing of emotion, is therefore amplified. The following section deals in particular with how this sharing would take place in an online context.

## **MODEL AND PROPOSITIONS**

We contend that social sharing of content online is less a function of the specific emotion (e.g. anger, joy etc.) than the characteristics of the emotional episode. We use the term episode to denote the entire emotional experience elicited. This can include multiple emotions of varying intensity and interaction. As an analogy an emotional episode is to a specific emotion as a musical tune is to a specific music note. For example, the philosopher Wollheim argues that emotions are extended mental episodes (Wollheim, 1999). The characteristics of an emotional episode include the intensity of the emotional response, the sociality of the emotion or emotions elicited and the complexity of the emotional episode. It is important to note that intensity is not the same as activation. For example sadness is classified as a passive emotion and happiness an active one, this says nothing about absolute intensity or strength of the feeling experienced. For example, the sadness one feels on receiving news of the death of an animal companion may be orders of magnitude greater than the

happiness one experiences from receiving a birthday greeting. We lay out our argument below.

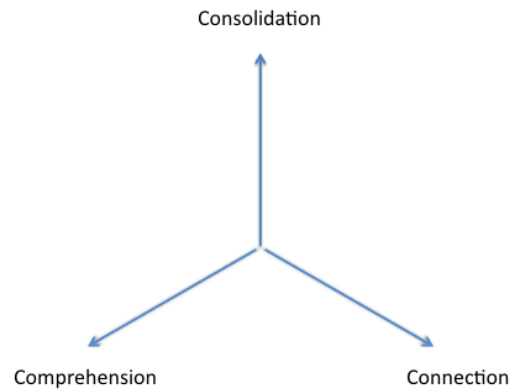
First, it is important to note that content (video, news story, tweet, cartoon etc.) has no emotional characteristics per se. Rather it is the interaction of the content and the individual viewer that produces the emotional episode (cf. Botha & Reyneke, 2013). This is an important caveat (often overlooked) as the same content may produce very different emotions. So for example a story about the secrets leaker Snowden may elicit indignation and anger in one person and delight and solidarity in another.

Second, we propose that people share content to share emotions. That is, when a person shares content they are *inter alia* sharing the emotion(s) that their interaction with the content produces. People share content to share emotional episodes. Of course this is not exclusive. That is, people may share content for non-emotional or un-emotional reasons, but that non-emotion sharing will be more targeted (i.e. exclusive) and less contagious than emotional sharing.

Third, the probability that an individual will share content online may be a function of the characteristics of the emotional episode. Following from Rimé (2007) people share emotions for specific reasons: memory, socio-affect, cognitive-symbolic. We extend this and argue that people share online content to *consolidate* the emotional experience, to emotionally *connect* with others in a network and finally make sense or *comprehend* the emotional episode.

*Consolidation* comprises the emotional processing or digestion of the episode. As Rimé (2007) suggests, we share to rehearse, remind, or re-experience emotions. This can range from diminution of negative emotions through containment to amplification of positive emotions. *Connection*, in turn, comprises the socio-affective element to the processing of emotions: We aim to build community and solidarity through the social sharing of emotion. This can range from connection through commonality to connection through difference. Finally, *comprehension* deals with the cognitive-symbolic processing of emotional episodes. Through the social sharing of emotion, we attempt to make sense of that emotional experience and digest the emotional episode. Feedback from social networks, through the sharing of these emotions, helps us to better understand our own emotions. These characteristics of an emotional episode that lead to the social sharing of emotion, are illustrated in Figure 2.

**Figure 2:**  
**Characteristics of an emotional episode**



These three dimensions of emotion sharing interact when people are exposed to online content that elicit emotion. Their need to comprehend, connect and consolidate their emotional interaction influences whether they share the content with their online social networks or not. As individuals share the content, they are *inter alia* sharing the emotion(s) that the content elicited in themselves.

In the social sharing of emotion, the more intense the emotional response, the more likely people are to connect socially as a result of the emotional episode (Rime et al., 2011; Rime, 2009). We propose that similarly, in an online context, the more intense the emotional reaction to emotion-eliciting content, the more likely the content is to be shared online. From this we can deduce the following propositions:

*P1: Intense emotional episodes will be shared over weak (for consolidation)*

Psychologists propose that intense emotions are more difficult to process and consolidate than weak (e.g. Rachman, 1980). A primary mechanism for consolidation is talking (Lucan, 1998). That is the emotions are relived, remembered and relieved through the telling (Rudnytsky & Charon, 2008). Simply, in social interaction people share the stories to consolidate the emotions they have experienced. In the online world the content is the story, thus through sharing people are consolidating emotional reaction; consequently the stronger the emotion the more likely a person is to socially share content online. Indeed, evidence to support this proposition already exists in viral marketing literature. Guadagno et al. (2013) showed that stronger affective responses increased participants' likelihood to share content online. Similarly, when people struggle to comprehend their emotional reaction to content, or the content evokes strong cognitive-symbolic processes, they are more likely to share the content with their online social networks:

*P2: Social emotional episodes will be shared over non-social (for connection)*

Next, we propose that the *sociality* of the emotion experienced influences its likelihood of being shared online. Social emotions are those emotions that are experienced in relation to one's social network or in relation to others, for example fear, grief, anger, jealousy. These oppose emotions like sadness and depression, which are isolating and individual in their very nature. Transactional psychologists of emotion (e.g. Fridlund, 1986; Parkinson, 1995) argue that social emotions are moves people make as they navigate how others will treat them and how they will think of themselves and their social role. The key to these emotions lies in the interaction with others. Thus de facto, emotions that are experienced as social are more likely to be acted upon in a social manner – i.e. through sharing.

*P3: Complex emotional episodes will be shared over simple (for comprehension)*

Because emotions are dense and diffuse experiences in need of articulation, people want to “unfold” the emotional material and try and conform it to the rules of logical thinking (Rimé et al., 1998). Now a number of philosophers and psychologists make the distinction between simple and complex emotions (cf. Charland, 1995; Damasio, 1999). Simple emotions are part of our collective evolutionary inheritance and related to specific environmental stimuli, complex emotions are acquired during development and have cultural and individual variation. Critically complex emotions are also more sensitive to subtle and abstract features of situations, and as such have more cognitive rather than pure emotional aspects (Charland, 1997). Moreover complex emotions can be an admixture of more than one emotion, for example ‘sad love’ and indeed can contain conflicting emotions, such as ‘love hate’ (cf. Rothbaum and Tsang, 2004). Irrespective of the specific composition, complex emotions pose a greater cognitive puzzle than simple emotions and thus are more likely to be shared<sup>3</sup>. Once again sharing is a mechanism by which people comprehend emotional complexity. The act of sharing and the feedback it elicits a sense making activity designed in part for comprehension.

These three processes that take place when emotion-eliciting content is consumed online, can be summarized by the following equation:

$$P(e_{share}) = fn (intensity, sociality, complexity)$$

When people are exposed to emotion-eliciting content online, the likelihood of them forwarding that content to their online social networks, is a function of the intensity of the emotion that was elicited by the content, the complexity of the emotion elicited, as

---

<sup>3</sup>It's perhaps unsurprising that TV shows with characters that elicit complex emotions such as House and Breaking Bad have had such a huge success and have ignited sharing on the internet.

well as whether a social emotion was elicited over a non-social emotion. Such that the greater the intensity of a person's emotional response, the greater the complexity and sociality of that emotion, the more likely they are to share the content online. This process is illustrated in Figure 3.

**Figure 3:**  
**The Process of Online Sharing of Emotion**

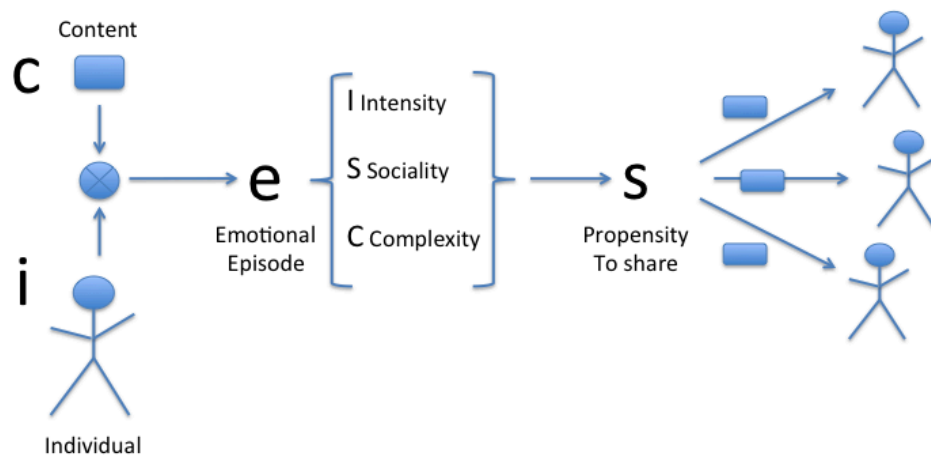


Figure 3 illustrates that individuals (I) will have different emotional reactions to different content (C). The intensity (I), sociality (S) and complexity (C) of the emotion evoked either increases or decreases their propensity to share (S) the content online. This content is then shared with their online social networks, where individuals in turn have their own emotional reactions to the content. Consequently, multiple emotional reactions, or emotional contagion is induced through the sharing of content online.

## CONCLUSION

An emotional experience is only the starting point for important subsequent processes simultaneously involving cognitive, symbolic, affective, and social aspects (Rime, 2009:81). This paper suggests that, because the watching and forwarding of viral content elicits an emotional response (Berger & Milkman, 2011; Dobeles et al., 2007) the social sharing of emotion theory can be used to explain how the emotions elicited by online videos lead to viral behaviour. Similar to interpersonal emotion sharing, we

argue that online social networks offer people one avenue to socially share their emotional experience. There are various functions served by, as well as consequences of, the social sharing of emotion discussed in this paper. We argue that these functions are facilitated through online social networks, and the consequences (for example community building, social capital generation and building shared knowledge) are propagated by these networks. We also argue that the intensity, complexity and sociality of the emotion that they experience, influences the likelihood of the online content being forwarded.

## **FUTURE RESEARCH**

The most obvious future research direction resulting from this paper is in the empirical testing of the theory proposed to explain viral behaviour. This paper argues for an extension of the context wherein the social sharing of emotion is applicable, and a vast array of empirical evidence exists to validate the theory itself, empirical backing to support our claim is still lacking. Various research procedures could be used to examine the generalizability of the phenomenon across various viral / online contexts.

A distinction can be made between the sharing of *positive* as opposed to *negative* emotion-eliciting content. When viewers experience *positive emotions* after viewing online content, they are motivated to re-access and mentally ruminate on this emotion, they are motivated to boost their own positive affect and to enhance their social bonds. They therefore socially share this positive emotion-eliciting event with their online social network. When viewers experience *negative emotions* after viewing online content, they are temporarily destabilized and motivated to reduce the cognitive dissonance that they experience. They also search for emotional support and consequently socially share their negative emotion-eliciting content with their online social network (Christophe & Rimé, 1997; Rime & Christophe, 1997; Rime et al., 2011; Rime, 2009). Future research should further investigate how positive as opposed to negative content influences the spread of content online, when viewed from a Social Sharing of Emotion perspective.

Authors assume that all social media are equal. The impact that different social media have on the sharing of emotion, should be further investigated. Hansen et al. (2011) argued that a distinction can be made between different types of social media: Facebook, for example, is where friends and acquaintances are often connected. With

Twitter, on the other hand, people are often followed by strangers and brands (e.g. Newsgroups). This, they argue, has an impact on which type of emotion-eliciting (positive vs. negative) content gets shared. Using the classic theory of diffusion in news media, they argue that Twitter has characteristics that are much more suited to news media, and negative content is consequently shared more readily. Hansen et al. (2011) have just "scratched the surface" with regard to the impact that the medium itself has on the sharing of content online, and more research is required in this area. In a similar vein, authors have not investigated whether viral messages viewed via mobile devices as opposed to computers influences its spread. Okazaki (2008) argues that this form of computer-mediated communication is increasingly important to marketers. Choi, Hwang and McMillan (2008), for example, show that various cultural factors influence the effectiveness of mobile advertising. This hypothesis could be extended to the viral marketing concept.

The social sharing of emotion is also effective in strengthening social bonds, linking the "interactants", and ending in enhanced social integration. The social sharing of emotion therefore appears to be an "efficient tool for refreshing and consolidating intimacy" (Rimé, 2009, p. 72). In their daily lives, people are busy with their own occupations and social ties consequently loosen. Every emotional experience thus creates an opportunity to "reinstate intimacy" (Rimé, 2009). Therefore, if people lend themselves to the interaction and emotions elicited by social sharing, they are expected to manifest interest, emotional contagion, empathy and sympathy, attachment behaviour and enhanced affection for the narrator. Future research should investigate the effect that sharing emotion-eliciting content has on online social network communities (for example whether it affects network structure, social bonds, or perceptions of network participants) and social network outcomes (for example shared knowledge and social capital).

If social media can be used to satisfy people's need to connect socially after an emotional episode, then how effectively does this medium satisfy these needs as opposed to, for example, personal contact or other mediums? Lee (2012) used Media Systems Dependency theory (MSDT) to show how social media can facilitate the processing of grief. MSDT investigates people's dependency on mass media to satisfy certain needs. While this paper showed that people have social reactions to emotional experiences, and consequently share content online, Media Systems Dependency theory can be used to further understand the role of social media in the sharing of emotions. MSDT could explain how social media fulfills the need to interact socially, and future research could look at how this theory could be used to better understand the role of emotion in viral marketing.

## **2.2 PAPER 2: TO SHARE OR NOT TO SHARE: THE ROLE OF CONTENT AND EMOTION IN VIRAL MARKETING**

Paper was published in the Journal of Public Affairs in 2013:

Botha, E. & Reyneke, M. 2013. To share or not to share: The role of content and emotion in viral marketing. *Journal of Public Affairs*, 13(2):160-171 (ISSN: 1479-1854)

## **TO SHARE OR NOT TO SHARE: THE ROLE OF CONTENT AND EMOTION IN VIRAL MARKETING**

**Elsamari Botha\***

Division for Industrial Marketing, INDEK, Royal Institute of Technology (KTH),  
Stockholm, Sweden

Email: [elsamari.botha@uct.ac.za](mailto:elsamari.botha@uct.ac.za); Tel: +27 (0) 83 679 7102

**Mignon Reyneke**

School of Management Studies, University of Cape Town, South Africa

Email: [mignon.reyneke@uct.ac.za](mailto:mignon.reyneke@uct.ac.za)

### **ABSTRACT**

One of the most recent influential trends in the global environment has been the rise of social media. Consumers have found a strong voice in social media and messages are spread among social media users at an astounding speed across a global landscape. As a result of this phenomenon and in an effort to use this viral spread of messages across social media, marketers are increasingly making use of viral marketing. Viral messages are playing an increasingly important role in influencing and shifting public opinion on corporate reputations, brands and products as well as political parties and public personalities to name but a few.

Very little is known about the motivations, attitudes, and behavior of the people who forward viral messages to their online networks. Through in-depth interviews with college-going Generation Y consumers we explore this relationship between viral media and emotions. We look at two very specific components of online videos that have gone viral: first, the relevance of the video's content, and second, participants' emotional reaction to these videos to try and better explain the viral spread of online video messages. The paper concludes by proposing a decision tree that inter-users might subconsciously experience when deciding whether to share a video with their friends or not. The article concludes with a discussion about future research avenues in the area of emotions and viral marketing.

## **TO SHARE OR NOT TO SHARE: THE ROLE OF CONTENT AND EMOTION IN VIRAL MARKETING**

### **INTRODUCTION**

A variety of global megatrends are shaping the contemporary global environment in terms of politics, the social- as well as the commercial landscape within which a company operates. This paper considers the social as well as the commercial environment of the public domain by focusing on the global trend of viral marketing.

In a viral marketing campaign, information spreads at unprecedented speed in comparison to more traditional marketing mediums. Due to the fact that the Internet is the medium of transfer of messages, viral marketing messages are not bound to a geographic location and have the potential to reach consumers on a global scale in a very short period of time (Van der Lans & Van Bruggen, 2011). The term, 'viral marketing' was first introduced by Knight in 1996 (Phelps, Lewis, Mobilio, Perry & Raman, 2004). At the time, marketing managers and public officials alike had little idea of the impact that this phenomenon would have on their future marketing activities.

Viral messages are playing an increasingly important role in influencing public opinion about topics such as corporate reputations, products, brands, public personalities and political parties to name but a few. While there is an abundance of success stories of viral campaigns, many more attempts have failed (Van der Lans & Van Bruggen, 2011). The lack of success is likely due to very little being known about what contributes to the success of a viral campaign (Dobele, Lindgreen, Beverland, Vanhamme & Van Wijk, 2007; Phelps *et al.*, 2004; Wallsten, 2010).

In an effort to explain why some videos have gone viral and others have not, various authors have attempted to draw comparison between the spread of messages online and theories relating to the spread of epidemics and population growth. Phelps *et al.* (2004), however, state that very little is known about the motivations, attitudes, and behavior of the people who send along these messages.

Previous authors have suggested that emotions generated by certain videos play a role in why messages go viral (Dobele *et al.*, 2007; Phelps, 2004). They believe that videos that have gone viral have some level of emotional resonance with its viewers, however the role of emotions in viral messages has not yet been fully explored.

Previous work on viral videos has generalized their findings to all video messages however we find that participants' ability to relate to the content of the video had a great influence on their emotional reaction to it. The contribution of this article therefore lies firstly in providing a better understanding of the role of emotions in the spread of online content. Secondly, the study sheds light on the relationship between the content (relevance of the content to the user) of the video and the emotional reaction to the video. Lastly, the paper suggests a decision tree that viewers may subconsciously experience when deciding whether to pass on video messages or not. Therefore, in contrast to previous studies that have focused on modeling the spread of viral messages as a means of explaining the phenomenon (for example Phelps *et al.*, 2004; Van der Lans & Van Bruggen, 2011).

This article first provides an introduction to viral marketing and a review of the literature on emotions. We first look at emotions in marketing in general, particularly the sharing of emotions in groups through emotional contagion, and then at its application to social media and viral messages. Thereafter, the methodology is discussed and the findings from the interviews are provided. The article concludes with suggested managerial implications of the findings as well as possible limitations to the study and future research opportunities.

## **VIRAL MARKETING**

Video sharing on the Internet has become increasingly popular among Internet users. According to Madden (2007) a study among the American public showed that 8% of adult Internet users have uploaded a video for public view by other users. The management team at You Tube have also estimated that 10 hours of video is uploaded to this popular video sharing site per minute (Grove, 2008). The reasons why consumers forward online videos to others, and therefore causing a video to 'go viral', have not received a great deal of attention in the academic literature to date. In studying the use of viral videos in the use of political campaigns, Wallsten (2010) agrees that despite their popularity, there is little empirical research on the reasons viral videos spread across the Internet.

Researchers have suggested that various factors might influence why some videos go viral and others not, including viewers' emotional connection to the video (Dobele *et al.*, 2007; Phelps *et al.*, 2004). However, no previous studies have married the wealth of knowledge about emotions in marketing and psychology with the spread of viral videos.

## EMOTIONS IN MARKETING

Emotions are central to the actions of marketing managers and marketing teams, however, in comparison to information processing and behavioral research, marketers know much less about the role of emotions in consumer behavior ([Bagozzi, Gopinath, & Nyer, 1999](#); [Pugh, 2001](#)). Bagozzi *et al.* (1999) reviewed the role of emotions in marketing, and later Ashkanasy and Humphrey (2011) do the same for organizational behavior.

Bagozzi *et al.* (1999) refer to emotions as “mental states of readiness that arise from appraisals of events or one’s own thoughts”. However, little consistency exists regarding the terminology used in the study of emotions (Ashkanasy & Humphrey, 2011). Few authors agree on the definition of emotions, its distinction from other terms like affect and mood, and whether a limited set of emotions exist (Thamm, 2006). This question has inspired two competing models: either emotions lie on a continua, in other words they vary over a few dimensions, or they are defined as discrete events (Lawler & Thye, 1999).

The discrete approach states that emotions can be decomposed into a number of distinct regions that represent fundamental emotions, each emotion different from the other (Lawler & Thye, 1999). Discrete emotions are aimed at a specific target or cause, are linked to specific tendencies to act, and typically include emotions like joy, love, anger, fear, sadness, disgust and surprise (Barsade & Gibson, 2007). A dimensional approach, on the other hand, suggests that emotions range between two dimensions: one dimension accounts for whether the emotion is positive or negative (valence) and the other for the intensity with which the emotion is felt. Two seminal studies in the dimensional are Russell’s (1980) circumplex model of affect (positive affect – negative affect vs. high arousal – low arousal) and Watson and Tellegen’s (1985) consensual structure of mood (high positive affect – low positive affect vs. high negative affect – low negative affect).

Even though authors still disagree as to what the dimensions of the circumplex of emotions should be, the majority of authors endorse a dimensional approach to the study of emotion as opposed to defining emotions as discrete feelings (Poels & Dewitte, 2006; Thamm, 2006). The two most popular scales using this approach is the JAS scale (Job Affect Scale) (for example Lewis, 2000) or the PANAS scale (for example Johnson, 2008) or both (Pugh, 2001). In 1985, Watson and Tellegen reanalyzed a number of studies and proposed a two-factor model of emotion: Emotions ranged from high to low Positive Affect, and high to low Negative Affect (Watson & Tellegen, 1985). They later introduced the PANAS (Positive Affect Negative Affect Scale) that was found to be highly internally consistent, largely uncorrelated, and stable over two months (Watson, Clark & Tellegen, 1988). The PANAS scale and

focus on either positive affect or negative affect (or both), has since been used extensively by other researchers (see for example Gountas, Ewing & Gountas, 2007; Johnson, 2008; Pugh, 2001).

From this approach, the term affect is used when talking about the study of emotions. However, authors are still in disagreement as to whether these terms can be used interchangeably and whether they mean the same thing. Similar to Bagozzi *et al.*'s (1999) approach, however, this article will use the term *affect* and *emotions* interchangeably as umbrella terms.

Another topic of debate has been the social, as opposed to individual, nature of emotions.

### **The Sharing of Emotions between People**

Parkinson (1996) stated that emotions are not necessarily just individual reactions, but are social phenomena. Subsequent to this, other authors have also suggested that emotions are social (Chakrabarti & Berthon, 2012; Tahtinen & Blois, 2011), that emotions should be studied at the social level (Butler & Gross, 2009) and that peoples' emotions affect the emotions of those around them (Barsade, 2002; Gountas & Ewing, 2003; Gountas, Ewing & Gountas, 2007; Johnson, 2008; Pugh, 2001).

Authors have argued that certain emotions require a greater depth of processing, and happen because of our context in society and the relationships that lie therein, and are therefore *social emotions*. Bagozzi (2006) referred to these emotions as "self-conscious" emotions and states that there are four positive- (pride, attachment, empathy, emotional wisdom) and six negative social emotions (guilt, shame, embarrassment, envy, jealousy, social anxiety). He too defines these emotions as higher-order emotions aimed at interpersonal relationships, and that these emotions require different coping and self-regulative responses.

The question still remains, however, if all emotions are social in nature. Storm and Storm (1987), in their taxonomic study of the vocabulary of emotions, found that only certain positive emotions are only used in an interpersonal manner, but Parkinson (1996) on the other hand argued that *all* emotions are social. Therefore, as in all research concerning emotions, there is much debate about which emotions are social, and if social emotions even exist.

If emotions are social phenomena, then it follows that there will always be emotions involved in group processes. Hatfield *et al.* (1994) developed a theory of emotional contagion in social groups, directly addressing the social nature of emotions. As people interact with one another their behavior is affected in fundamental ways. Human emotions are strongly influenced by social contact ([Hill, Rand, Nowak & Christakis, 2010](#)).

## **Emotional Contagion**

Hatfield *et al.*'s (1994) work on emotional contagion has greatly contributed to understanding of the process of emotional transfer between people. Their premise was that positive and negative affect in other people can cause both positive and negative affect in the people that they interact with. Previous studies investigating emotional contagion have found that both positive and negative emotions have been found to spread during service encounters ([Barger & Grandey, 2006](#); [Du \*et al.\*, 2011](#); [Pugh, 2001](#); [Sutton & Rafaeli, 1988](#)), service failures ([Du \*et al.\*, 2011](#)), workplace interactions ([Barsade, 2002](#); [Tsai, 2001](#)) and have been found to influence customer behavioural intentions ([Tsai & Huang, 2002](#)) and sales ([Sutton & Rafaeli, 1988](#)).

Schoenewolf (1990) similarly states that emotional contagion is a process in which a person or group influences the emotions or behavior of another person or group through the conscious or unconscious induction of emotion states and behavioral attitudes. Using this definition, emotional contagion can impact people in many more contexts, and not just through interpersonal contact. The specific context that this study is interested in is the spread of emotions in online social networks through the spread of viral content.

## **Emotions and Social Media**

Chakrabarti and Berthon (2012) argue that emotions, specifically social emotions, are central to various exchanges on social media today. They argue that consumers have moved away from the production of services to the production of experiences, and that the primary online experience of value is an emotional one.

The consumption of viral videos in social media is equated to the consumption of experiences. Where different approaches have been used to define these experiences: "Experiences can range from social to spiritual and from material to mental" (Chakrabarti & Berthon, 2012:157). Central to these experiences in social media, however, is the consumption of emotion. Here, a distinction can be made between

basic emotions (as discussed above) and social emotions. Where basic emotions can arise in social settings, one can experience any range of basic emotions at any time including enthusiastic, excited, sad and sorry. Social emotions, on the other hand, are an appraisal of other people's thoughts, feelings, and actions, and include: regret, guilt, contempt, jealousy, shame, embarrassment, deference, shyness, pride, self-esteem, admiration, gratitude, compassion, empathy, sociable and confident (Chakrabarti & Berthon, 2012).

Dobele *et al.* (2007) asked why people pass on viral messages, and the answer was "because they connected emotionally". They argued that viral marketing messages must build an emotional connection between the campaign and the viewer in order to ensure that the message gets spread. This, according to them, is because with viral marketing campaigns, there is a social sharing of emotions. This statement, however, was not tested and empirical research is needed to gain a greater understanding of the role of emotions in viral marketing.

Phelps *et al.* (2004) found that internet users forwarded emails when they experienced the following emotions: "happy", "brightens", "excited", "connected" and "inspired". On the other hand, participants also experienced negative emotions when receiving "pass-along" emails including "irritated", "disappointed" and "overwhelmed". They therefore found that emotions did play an integral role in passing along emails to friends and family. Previous authors have explored the amount of variance that emotional responses accounts for in referral behavior (for example Maute & Dube, 1999 in Dobele *et al.*, 2007), and if it would cause them to forward a "pass-along email" (Phelps *et al.*, 2004) but few have studied its impact on viral behavior, specifically why videos go viral. Previous studies also generalize their findings to all viral messages. We argue that the relevance of the content in the video also plays a key role in determining viral campaign success.

Interestingly, from some of the transcripts that Phelps *et al.* (2004) provided around why people didn't forward emails, it was clear that many participants in the study mentioned the relevance of the content that they received. Participants commented that they were "uninterested" in the emails, and that they became irritated because the "message is irrelevant" and when the "content is offensive or shocking" (p.339). Therefore, instead of only focusing on emotional explanations of why emails were not forwarded, they commented on the content of the emails. This study builds on the interplay between content relevance and emotion in viral videos in an attempt to better explain why some videos go viral and others do not.

## RESEARCH METHODOLOGY

In order to conduct this exploratory study, a qualitative approach was used in the form of 40 semi-structured interviews, until saturation was reached (Calder, 1977). The interviews ranged from 30 – 45 minutes and the respondents were all members of Generation Y i.e. those born between 1978 and 1994 (Sheahan, 2005). Due to the nature of this group, the respondents were largely made up of University students, but also included some young professionals from a variety of different industries.

These members of Generation Y were chosen for various reasons. First, this generation has in the region of 76 million members (Kennedy, 2001) and made up as much as 41% of the American population in 2009 (Welles, 1999). Secondly, this group was raised in a consumption oriented environments and as a young population have more money available to them than any such young group in history (Morton, 2002). Gardyn (2002) posited that college students (Generation-Y members) as far back as 2002 had an annual spending power of \$200 billion. Third, studies investigating this generation's attitudes to media (Shearer, 2002) and Internet behavior (Freestone & Mitchell, 2004) found this to be a generation that is savvy in terms of both media and technology (Noble, Haytko & Phillips, 2008). Finally, little information is available, about how these members of Generation Y (particularly the college aged members) behave in the market place (Martin & Turley, 2004; Noble, Haytko & Phillips, 2009). These consumers are also the major drivers and consumers of social media and viral messages (Berthon, Pitt & DesAutels, 2011).

The participants were each shown both of the videos discussed below and were then interviewed based on these. The interview guidelines followed an approach of asking the same few open-ended questions in order to gain an in-depth understanding of the emotions generated by the videos they watched as well as the likelihood and reasons that they would or would not share these videos with others.

In order to analyze the above-mentioned responses the text analysis tool Leximancer was used (leximancer.com). This analysis tool allows for a visual depiction of complex textual data allowing for more effective and accurate interpretation. The resulting responses for each separate question were combined in a text document for each of the questions. This was used as input data for analysis by the Leximancer program. The benefit of using the Leximancer program for this analysis is that Leximancer is able to read all text, even text that is not grammatically correct (which is often found among individuals in this 18 – 22 year age group). The program therefore has the benefit that the text does not have to be cleaned before inputting the data into the program. A further benefit is that the Leximancer program does not reduce adjectives and verbs to stem words (which could affect the outcome of the analysis) as is often the case with other qualitative data analysis tools.

Leximancer then identifies key themes and words from the qualitative data and maps these themes (and their relation to one another) out accordingly. In a Leximancer analysis, the size of the theme (balloon) is important, as well as its position in relation to other themes and the colour of the theme (where the warmer the colour the more important the theme). We used Watson and Tellegen's definition of emotion and his circumplex of emotion as a guide when investigating emotional words and themes that arose from the analysis.

### **The videos selected**

The two videos used in this specific study were selected for various reasons. First, they both received very high views on YouTube (see Table 1). Second, they were videos that have gone viral relatively recently and both were the topic of discussion and debate (see Drew, 2011 and Hamilton, 2008). A further reason for choosing these two videos was that the first video (referred to as "Star Wars" for the purpose of discussion) has specific content where the second video (referred to as Numa Numa for the purpose of discussion) video has more general content. With specific content, we mean that the content might only be applicable to a certain group of the population. For example, videos commenting on certain movies or political events are more relevant to people who have watched the movie and are aware of the political event. Therefore, with specific video content, the assumption is that the viewer should have been privy to some background information related to the video. On the other hand, with the video containing more general content, viewers did not need to have access to any information or background knowledge in order to relate to the video.

Lastly, both videos were videos that portrayed positive affect. Various authors have suggested that either only Positive Affect or Negative Affect be used in studies investigating emotions (see Gountas, Ewing & Gountas, 2007; [Pugh, 2001](#); [Sutton & Rafaeli, 1988](#)) so as not to prime or confuse respondents. This also allowed us to focus on and get a better understanding of one side of affect: positive affect.

**Table 1: Videos selected**

<b>Video</b>	<b>URL</b>	<b>Specific or General Content Videos</b>	<b>Number of Views</b>
Star Wars according to a 3 year old.	<a href="http://www.youtube.com/watch?v=EBM854BTGL0">http://www.youtube.com/watch?v=EBM854BTGL0</a>	Specific: Some understanding of what happened in the Star Wars movie is implied	20,362,338
Numa Numa	<a href="http://www.youtube.com/watch?v=60og9gwKh1o">http://www.youtube.com/watch?v=60og9gwKh1o</a>	General: A video of somebody singing and dancing to a song	46,789,884

\*Number of views on 30 May 2012

The first video (Star Wars) depicts a three-year old girl discussing the characters and storyline of the Star Wars movies. This video reached the number eight position on Time's "Top 10 Everything of 2008" (Hamilton, 2008).

The second video (Numa Numa) features Gary Brolsma dancing to the Romanian lyrics of the Numa Numa song (Dragostea din tei by O-zone). This video was first released on Newgrounds.com before being uploaded on YouTube. In September 2006, the video got 15 million views on Newgrounds.com alone. The video later featured in various newspapers, television shows and on radio (Drew, 2011).

In investigating the relationship between content and emotions in videos going viral, these videos were selected first for their content specificity (and general content), and second for their focus on positive affect. This allows us to first discuss the findings about the emotions that participants experienced when viewing the videos, and thereafter focus on the viral behavior around these videos. We controlled for previous exposure to these videos by excluding participants who had already seen the videos before.

## **FINDINGS**

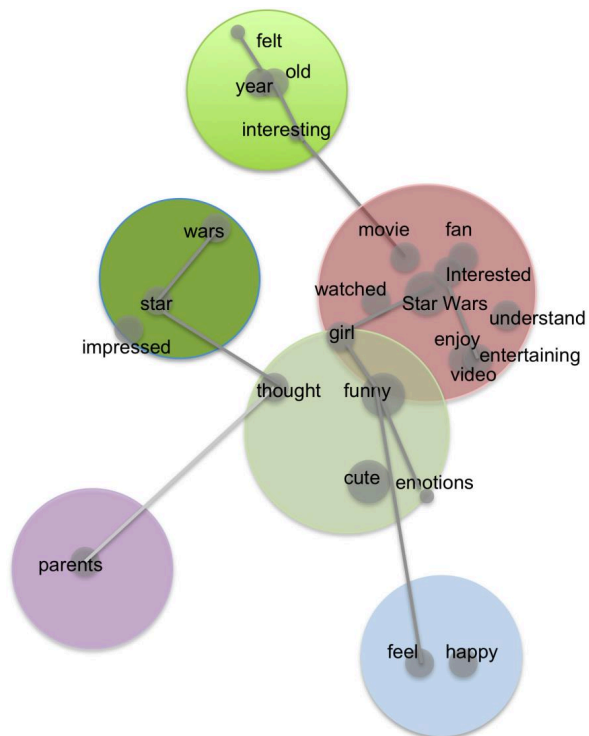
In the interviews, we first endeavored to understand participant's emotions around the video. Second, we realized that even if participants had an emotional reaction to the videos, it did not mean that they would forward the video to their friends and/or family (a key component in "going viral"). Therefore, after first understanding participants' emotions regarding the video, we then asked them if and why they would forward the video to their friends or family to better understand viral behavior. The

first set of findings relates to the question posed to participants on how the respective videos made them feel.

### Positive Affect and Viral videos

The first analysis map looks at participants' responses to how the content specific Star Wars video made them feel.

**Figure 1: How did the Star Wars video make you feel?**



The most notable themes that resulted from the participants' responses were "old", most often referring to the girl's age, "feel" and "emotions" in describing their emotions, "cute" in describing the girl, and the strongest theme, "Star Wars", was indicated by the largest circle. One would expect that the three year old girl would be most important here, but "Star Wars" emerged as the most prominent theme in the discussions. Interestingly, this related to a distinct polarity in the responses based on

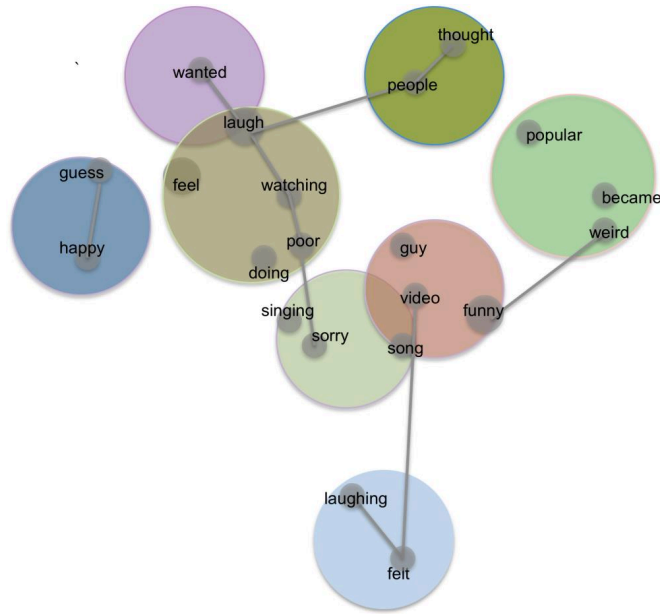
whether a participant is interested in Star Wars or not. The relevance of the video was discussed before any mention was made of emotion. For example "It is very interesting and applicable to me because Star Wars..." and "It was a bit strange, probably because I never watched Star Wars so it doesn't really relate to me" as well as "I'm not a big fan of the franchise, so it didn't make much sense to me and I didn't really enjoy it".

Thus in this video where the content was very specific, there was a much greater polarization in opinions (those participants who liked it and those who did not). As soon as the content was relevant, the participants spoke about their emotions and how the video made them feel. Some typical responses were: "...very entertaining, and I would watch a lot of those types of videos because she is so cute and it was so funny. I think also because it relates to a popular topic many people would be able to enjoy or appreciate it" and "I was curious to see what the little girl thought about it and her take on the movies was really funny and very cute".

The relevance of the content caused participants to have both positive and negative emotions about the video, as opposed to just positive emotions as expected. Some of the comments above were examples of the positive emotions associated with the video, where negative emotions were coupled with comments like: "I am not a Star Wars fan so I had no idea what the girl was talking about. This video dragged on and didn't appeal to me". Therefore, the content was referred to first by most of the participants before they divulged either positive emotions (as indicated on the analysis map by concepts such as "feel" and "happy" mapping closely together) or negative emotions brought on by watching the video. Where typically, positive emotions were experienced by those participants to whom the content was relevant, and negative emotions were experienced by those participants who were not familiar with the content.

The second analysis map (see Figure 2) indicates the responses to how the Numa Numa video made them feel.

**Figure 2: How did the Numa Numa video make you feel?**



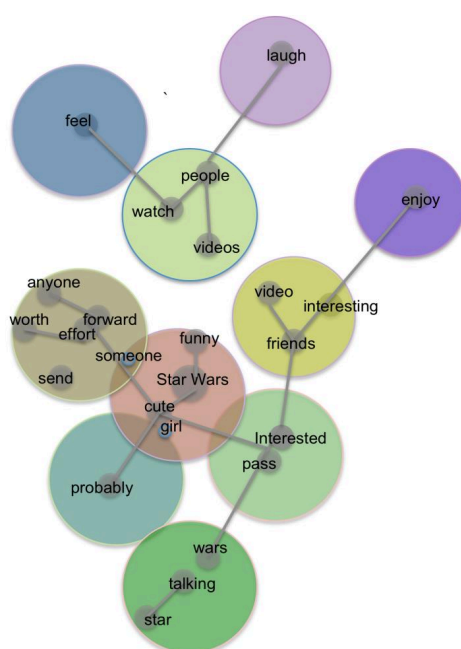
The most notable themes emerging in the case of the Numa Numa video were “feel”, “felt” and “happy”, as emotionally laden terms, and “funny”, as a descriptive term. Participants’ first response was to discuss their emotions. Both emotional and descriptive cues described by participants were much more prominent than in the Star Wars video with words like “laughing”, “happy”, “felt”, “funny” and “laugh” (indicating emotions of happiness or joy) emerging as key concepts. In a key theme in the map, the words “feel”, “laugh” and “watching” were closely tied together, and “feel” related to “happy” in the following theme.

Most of the connectivity in the map is explained by the theme “funny”. The term “Feel” emerged as a major theme as participants experienced strong emotions while watching this video. Some comments to illustrate this are, “emotions really came over me when watching the video” and “I felt pity and sadness” and “It made me feel really happy and lifted my mood”.

### Viral behavior: Would you forward the video?

Following the discussion on emotion generated by the video, participants were asked whether they were likely to forward the video and why or why not. Again, participants' responses around the Star Wars video were analyzed first (see Figure 3 below).

**Figure 3: Would you forward the Star Wars video?**



The major themes that resulted were "cute", "forward", "pass", "friends" and "probably". These themes also had the highest connectivity scores, indicated by the overlap of the themes in the map above.

The content again played an important role in whether the video would be forwarded or not. This can be seen by how prominent "Star Wars" and even "wars" (relating to Star Wars) were in the conceptual map. The Star Wars concept was directly linked to "cute" and "funny", and this theme, in turn, was linked to the next theme where "interested" and "pass" were central concepts. Many participants indicated that they would forward the video, as the content was cute. Responses indicating this sentiment include: "I would forward this to my girlfriend – she would think it's cute" and "I would

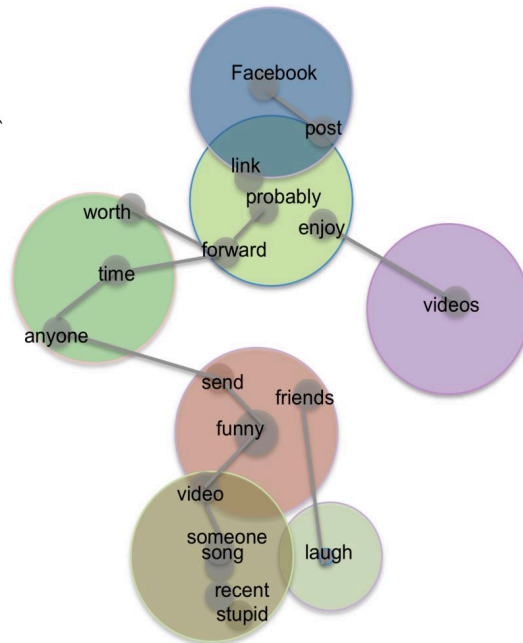
probably forward this - they would think it's funny and cute" and "It's such a cute video and I know my friends would like it because they also like Star Wars".

As well as playing a central role in forwarding behavior, content played a key part in participants' explanation of why they would not forward the video. For example: "Star Wars does not interest me or many of my friends, so I have no desire to pass it on" and "None of my friends watch Star Wars, so they probably wouldn't understand it either".

While emotions were also mentioned by participants in answering this question, it played less of a role in terms of passing the video to friends. Themes such as "feel" and "enjoy" did emerge, but were not closely connected to "friends", "pass" or "forward" indicating that whether the content was relevant to them and their friends was a more important determinant than emotion in sharing this video with others. On the other hand, where the content was familiar to participants, they were more likely to use emotion part of their decision to forward this video. This is evident in the concepts of "video", "interesting" and "friends" being directly linked to the themes of "enjoy" and "pass".

Similarly, participants were asked whether they were likely to forward the Numa Numa video to friends and family. The responses resulted in the analysis map below (Figure 4).

**Figure 4: Would you forward the Numa Numa video?**



The major themes that emerged in this case were “funny”, “laugh”, “probably” and “Facebook”. The themes “funny” and “laugh” had high connectivity for obvious reasons, but both were closely connected to the concepts “friends” and “send”. This is explained by most respondents noting that they would forward this video to friends as it made them laugh or made them happy and that their friends were likely to have the same reaction. Comments indicating this sentiment include: “I would send this to someone who will find this funny as well” and “Yes, because it would make them laugh” and “I would send it to friends and family, someone who would find this funny as well, they’ll also find him amusing”. Sending behavior in this video therefore, was more clearly explained by emotions where the actual content didn’t emerge as a key theme in the findings.

Reasons for not forwarding the video followed a similar theme. Those participants who did not find the video funny would not forward it for that reason. For example: “No, it’s not funny enough” and “I think it’s stupid and they would think it’s stupid” and “No, my friends wouldn’t care because the guy is not funny”. This suggests that the emotion that was stimulated by the video plays a major role in participants’ decision to share a video as they would want to share this emotion with their peers. It is evident that with the video where the content was general, emotions were given as reasons for forwarding behavior. On the other, with the video where the content was

specific (Star Wars), the relevance of the content was first discussed where after emotions were linked to forwarding behavior.

Two interesting points also emerged from the interview with participants. Firstly the theme "Facebook" is visible in the analysis map. Facebook was often mentioned as the viral medium of choice among these participants as many indicated that they would share the video through their Facebook pages rather than sending it via e-mail.

Secondly, in the theme "video" that was visible in the analysis maps, many respondents commented on the quality of the video, indicating that they were less likely to forward a video of bad quality.

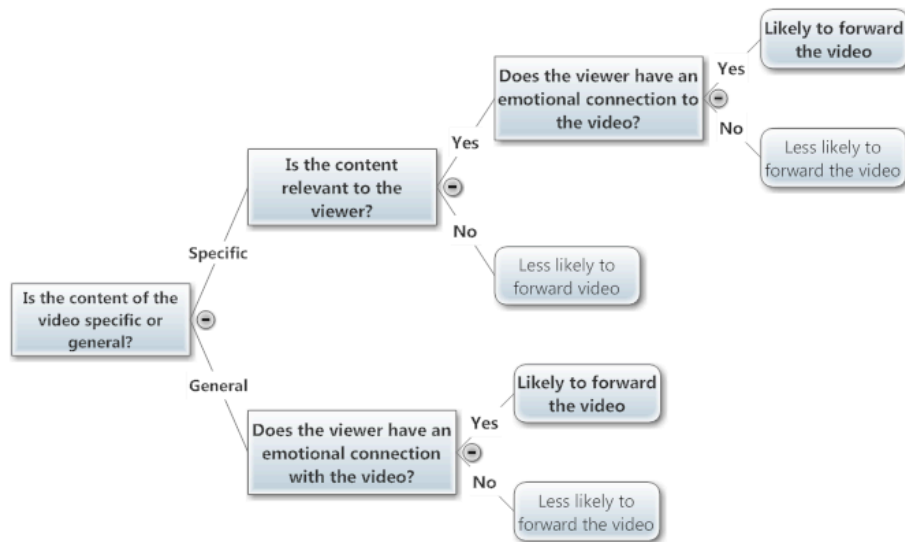
## **DISCUSSION AND CONCLUSIONS**

This article looked specifically at the relationship between emotions and content in viral videos. From the above observations, it can be concluded that in the case of specific video content, the viewers' feelings about a video are dependent on their familiarity with the content. Where viewers were familiar with the content, they generally had a stronger emotional reaction to the video, but where the content was unfamiliar to the viewers, they had little if any emotional reaction to the video. However, viewers needed to connect with the videos emotionally before sending the videos on to their friends and family.

Most consumers who had a positive emotional reaction to the video indicated that they would be likely to share the video. In the case where there was a negative or no emotional reaction to the video, participants indicated that they were not likely to share the video with anyone. Therefore, content is the first determinant of a decision to forward. If the content of the video is "universal" or general, then videos are immediately assessed in terms of their emotional impact. On the other hand, if the content of the video is specific, the relevance of the video is first assessed. If the video's content is familiar to the viewer, their emotional reaction to the video is the second determinant of them sharing the video.

Based on these findings, we propose a decision tree that can be used to explain the interplay between content and resulting emotions in viral marketing (Figure 5).

**Figure 5: A decision tree of the interplay between content and affect in viral marketing**



From the decision tree above, it is evident that only two strategies result in viewers forwarding the video, both of which depend heavily upon whether they connected emotionally with the video or not. Therefore, emotions play a key role in viral behavior. And the more intensely viewers experience the emotions; the more likely they are to share the viral message (Dobele *et al.*, 2007).

Decision trees are typically used to model decisions and their possible consequences to help managers (or analysts) identify a strategy most likely to reach a desired goal. This decision tree is aimed at providing managers and public policy officials with a tool to assist in strategy formulation. Gregory, Fischhoff and McDaniels (2005) argues that decision analysis, that is informed by behavioral decision research, "offers procedures and standards for creating responsible deliberative processes" in public policy choices.

The decision tree above provides evidence towards emotional contagion in online social networks. Emotional contagion studies typically look at the spread of emotions between individuals in a face-to-face setting. However, we argue, from the findings above, that emotional contagion can also occur through the spread of online content that evokes emotional reactions in its viewers. This is in line with Schoenewolf's (1990) definition of emotional contagion as a process of the conscious or unconscious induction of emotion to groups of people. In other words, the emotional reaction that

people have to viral content causes them to pass on these videos to their social network who in turn have emotional reactions to the content. Emotional contagion is therefore possibly a key determinant of viral marketing and future research should investigate this phenomenon in greater depth.

The findings of this study give rise to a number of practical managerial implications to build a successful viral campaign.

### **MANAGERIAL IMPLICATIONS**

First, in terms of determining video content for a viral marketing campaign, keep it simple. Choose the content in a way that considers the lowest and most general common denominator which will allow more consumers to find an affiliation with the content or the joke and share it with others.

Second, one must pay attention to the likely emotional reaction viewers will have to the video. If viewers feel no emotion in watching a video, they are less likely to share it. While content that ignites a negative emotion is often shared (consider the case of the Kony video), consumers are also very likely to share videos that generate positive emotions as they tend to factor how likely the recipient is to enjoy the video into their decision to share it or not.

Third, Facebook emerged as a very popular medium for sharing videos among the 18 – 22 year old age group. Marketers would do well to consider using Facebook campaigns if targeting this segment as there seems to be a higher likelihood that a video go viral in this medium than any other.

Finally, marketers should ensure that good quality video is produced for a viral campaign, particularly with Generation Y consumers. Despite the content and emotion receiving the needed attention and the consumer having the intention to share the video, they may decide otherwise if the video is of bad quality.

### **LIMITATIONS**

By conducting interviews as our primary means of collecting data, a few limitations of the research have to be acknowledged. These limitations are typically mentioned and

include issues surrounding generalizability that it is difficult to reproduce and that it is subject to researcher bias (Malhotra, 2010). However, the purpose of the study was not to generalize our findings, but to gain an in-depth understanding as to why the two selected videos had gone viral and was therefore appropriate for this study.

Another limitation of the study is the narrow focus on the role that only content and emotion play in why videos go viral. We realize that many other factors might contribute towards why viewers connect emotionally with certain videos or why they forward videos, for example personality type, busyness of the viewer at the time of watching the video, cause-related content, to name but a few. However, we believe that the emotional reaction that viewers have when watching the video plays a central role in understanding viral media, and therefore needs further investigation.

By looking at positive affect only, our findings cannot be extended to the full emotional spectrum, or the two factor structure of affect referred to by Watson and Tellegen (1985). We also don't look at the possible role that social emotions might play in why videos go viral (Chakrabarti & Berthon, 2012). However, because so little is known about the effect that emotions have on why videos go viral, the objective of the article was first to get an in-depth understanding of how this complex construct might impact viral media. As can be seen from the above, there is a lot of scope for future research in this area.

## **AVENUES FOR FUTURE RESEARCH**

The role of emotions in social media has not been fully explored, especially emotions at the social level of analysis (see Butler & Gross, 2009; Parkinson, 1996), how social emotions spread through social media (Chakrabarti & Berthon, 2012) and how emotional contagion is facilitated through social media.

Few studies have also looked at the role of negative emotions, not only in viral media, but also in other areas of public life like negative business relationships (see Tahtinen & Blois, 2011) and other social relationships that are embedded in both the public and corporate sphere. The majority of authors focus on the impact that positive affect might have on various outcomes for various reasons, including 1) it is difficult to get respondents to participate in studies where they have to talk about or possibly relive negative experiences and 2) it might be difficult to get honest responses from respondents regarding negative emotions. This has caused researchers, including this study, to generalize their findings to both positive and negative affect; however, negative affect might have a different impact on the outcome of various studies. Therefore, there is a lot of scope for research focusing on negative affect and its

influence on various phenomena. At the same time, researchers can compare the outcomes related to studies where positive affect was used as opposed to studies where negative affect was used.

This study focused specifically on Generation Y users and we cannot generalize the findings to other age groups. Future research might investigate whether the findings above are applicable to older age groups, and possibly whether older age groups have the same emotional reaction to viral media and messages. The viral behavior of different age groups needs to be investigated in isolation.

Last, the decision tree proposed by this study should be tested and extended to better understand viral media. In public policy formation specifically, decision trees offer policy makers a way of increasing public participation in public policy choices. Extensions of traditional decision analysis create opportunities to “formalize the aspirations of participants and ensure that the intellectual content of deliberative processes is worthy of the political hopes vested in them” (Gregory *et al.*, 2005). Therefore, future research on viral media in public affairs should focus on building decision trees applicable to the spread of positive messages relating to public issues. In this way public affairs officials could utilize a mega global social trend to strengthen communication of public policy and the benefit thereof to the public to which it applies.

## LIST OF REFERENCES

- Ashkanasy, N.M. & Humphrey, R.H. 2011. Current emotion research in organizational behavior. *Emotion Review*, 3(2):214-224.
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. 1999. The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27(2): 184.
- Barger, P. B., & Grandey, A. A. 2006. Service with a smile and encounter satisfaction: Emotional contagion and appraisal mechanisms. *The Academy of Management Journal ARCHIVE*, 49(6): 1229-1238.
- Barsade, S. G. 2002. The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, 47(4): 644-675.
- Barsade, S.G. & Gibson, D.E. 2007. Why does affect matter in organizations? *Academy of Management Review*, Feb(2007):36-59.
- Berthon, P., Pitt, L. & DesAutels, P. 2011. Unveiling videos: Consumer-generated ads as qualitative inquiry. *Psychology & Marketing*, 28(10): 1044-1060.
- Bartel, C. A., & Saavedra, R. 2000. The Collective Construction of Work Group Moods. *Administrative Science Quarterly*, 45(2): 197-231.
- Butler, E.A. & Gross, J.J. 2009. Emotion and emotion regulation: Integrating individual and social levels of analysis. *Emotion Review*, 1(1): 86-87.
- Calder, B.J. 1977. Focus groups and the nature of qualitative research. *Journal of Marketing Research*, 14(3): 353-364.
- Chakrabarti, R. & Berthon, P. 2012. Gift giving and social emotions: Experience as content. *Journal of Public Affairs*, 12(2): 154-161.
- Dobele, A., Lindgreen, A., Beverland, M., Vanhamme, J. & Van Wijk, R. 2007. Why pass on viral messages? Because they connect emotionally. *Business Horizons*, 50: 291-304.
- Drew. 2011. *Numa Numa – Viral Celebrity*. [Online] Available from: <http://viralnuma.blogspot.com/> [Accessed: 06/06/2012]
- Du, J., Fan, X., & Feng, T. 2011. Multiple emotional contagions in service encounters. *Journal of the Academy of Marketing Science*: 1-18.
- Freeston, O. and Mitchell, V.W. 2004. Generation Y attitudes towards E-ethics and Internet-related misbehaviours. *Journal of Business Ethics*. 54(2): 21-28.
- Gardyn, R. 2002. Educated Consumers. *American Demographics*, 24(10) :18-19.
- Gountas, S. & Ewing, M. 2003. The softer side of services: Exploring the effect of sincerity and emotional contagion on satisfaction. *ANZMAC 2003 Conference Proceedings, Adelaide, 1-3 December, 2003*.

- Gountas, S., Ewing, M.T. & Gountas, J.I. 2007. Testing airline passengers' responses to flight attendants' expressive displays: The effects of positive affect. *Journal of Business Research*, 60: 81-83.
- Gregory, R., Fischhoff, B. & McDaniels, T. 2005. Acceptable input: Using decision analysis to guide public policy deliberations. *Decision Analysis*, 2(1): 4-16.
- Grove, S. 2008. YouTube: The flattening of politics. *Nieman Reports*. [Online] Available from: <http://www.nieman.harvard.edu/reportsitem.aspx?id=100019>. [Accessed: 25/05/2011]
- Hamilton, A. 2008. *The Top 10 Everything of 2008*. [Online] Available from: [http://www.time.com/time/specials/packages/article/0,28804,1855948\\_1864281\\_1864269,00.html](http://www.time.com/time/specials/packages/article/0,28804,1855948_1864281_1864269,00.html) [Accessed: 06/06/2012].
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. 1994. *Emotional Contagion*. Cambridge, UK: Cambridge University Press.
- Hill, A. L., Rand, D. G., Nowak, M. A., & Christakis, N. A. 2010. Emotions as infectious diseases in a large social network: the SISa model. *Proceedings of the Royal Society B: Biological Sciences*, 277(1701): 3827.
- Johnson, S.K. 2008. I second that emotion: Effects of emotional contagion and affect at work on leader and follower outcomes. *The Leadership Quarterly*, 19: 1-19.
- Kennedy, L. 2001. The up and coming generation. *Retail Merchandising*, 41(8):66.
- Lawler, E.J. & Thye, S.R. 1999. Bringing emotions into social exchange theory. *Annual Review of Sociology*, 25:217-244.
- Lewis, K.M. 2000. When leaders display emotion: How followers respond to negative emotional expression of male and female leaders. *Journal of Organizational Behavior*, 21(2): 221-234.
- Madden, M. 2007. *PIP research report: Online video*. [Online] Available from: [http://www.pewinternet.org/~media/Files/Reports/2007/PIP\\_Online\\_Video\\_2007.pdf](http://www.pewinternet.org/~media/Files/Reports/2007/PIP_Online_Video_2007.pdf) [Accessed: 23/05/2012].
- Malhotra, N.K. 2010. *Marketing Research: An Applied Orientation*. 6<sup>th</sup> ed. New Jersey, USA: Pearson.
- Martin, C.A. and Turnley, L.W. 2004. Malls and consumption motivation: an exploratory examination of older Generation Y consumers. *International Journal of Retail Distribution Management*, 32(10): 464-475.
- Morton, L.P. Targeting generation Y. *Public Relations Quarterly*, 47(2): 46-48.
- Noble, S.M., Haytko, D.L. and Phillips, J. 2009. What drives college-age Generation Y consumers? *Journal of Business Research*, 62: 617-628.
- Parkinson, B. 1996. Emotions are social. *British Journal of Psychology*, 87(4): 663-683.

- Phelps, P.H., Lewis, R., Mobilio, L., Perry, D. & Raman, N. 2004. Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. *Journal of Advertising Research*, December: 2004.
- Poels, K. & Dewitte, S. 2006. How to capture the heart? Reviewing 20 years of emotion measurement in advertising. *Social Science Research Network*. [Online] Available from: papers.ssrn.com [Accessed:29/06/2012].
- Pugh, S. D. 2001. Service with a smile: Emotional contagion in the service encounter. *The Academy of Management Journal*, 44(5): 1018-1027.
- Russell, J.A. 1980. A circumplex model of affect. *Journal of Personality and Social Psychology*, 39(6):1161-1178.
- Schoenewolf, G. 1990. Emotional contagion: Behavioral induction in individuals and groups. *Modern Psychoanalysis*, 15:49-61.
- Sheahan, P. 2005. *Generation Y: Surviving (and Thriving) with Generation Y at Work*. Victoria, Australia: Hardy Grant Publishing.
- Shearer, E. 2002. Generation ignored. *American Journalism Review*. 24(3): 7.
- Storm, C. & Storm, T. 1987. A taxonomic study of the vocabulary of emotions. *Journal of Personality and Social Psychology*, 53(4):805-816.
- Sutton, R. I., & Rafaeli, A. 1988. Untangling the relationship between displayed emotions and organizational sales: The case of convenience stores. *The Academy of Management Journal*, 31(3): 461-487.
- Tahtinen, J. & Blois, K. 2011. The involvement and influence of emotions in problematic business relationships. *Industrial Marketing Management*, 40: 907-918.
- Tsai, W. C. 2001. Determinants and consequences of employee displayed positive emotions. *Journal of Management*, 27(4): 497.
- Tsai, W. C., & Huang, Y. M. 2002. Mechanisms linking employee affective delivery and customer behavioral intentions. *Journal of Applied Psychology*, 87(5): 1001.
- Thamm, R.A. 2006. The classification of emotions. In: Stets, J.E. & Turner, J.H. *Handbook of the Sociology of Emotions*. Springer.
- Van der Lans, R. & Van Bruggen, G. 2011. Viral marketing: What is it, and what are the components of viral success? In Wuyts, S., Dekimpe, M.G., Gijsbrechts, E. & Pieters, R. (Eds). *The Connected Customer: The Changing Nature of Consumer and Business Markets*. NY, USA: Routledge Taylor and Francis.
- Wallsten, K. 2010. "Yes we can": How online viewership, blog discussion, campaign statements, and mainstream media coverage produced a viral video phenomenon. *Journal of Information Technology*, 7(2-3):163-181.

- Watson, D., Clark, L.A. & Tellegen, A. 1988. Development and validation of brief measures of positive and negative affect: The PANAS scale. *Journal of Personality and Social Psychology*, 54(6): 1063-1070.
- Watson, D. & Tellegen, A. 1985. Toward a consensual structure of mood. *Psychological Bulletin*, 98(2): 219-235.
- Welles, E. O. 1999. The diva of retail. *Inc*, 21(14): 36-49.

### **2.3 PAPER 3: A MEANS TO AN END: USING POLITICAL SATIRE TO GO VIRAL**

Paper was published in Public Relations Review in 2014.

Botha, E. 2014. A means to an end: Using political satire to go viral. *Public Relations Review*, 40(2014): 363-374. **(ISSN: 0363-8111)**

## **A MEANS TO AN END: USING POLITICAL SATIRE TO GO VIRAL**

**Elsamari Botha**

Industrial Marketing, INDEK,

KTH Royal Institute of Technology, Stockholm, Sweden

Email: [elsamari.botha@uct.ac.za](mailto:elsamari.botha@uct.ac.za); Tel: +27(0) 83 679 7102

### **ABSTRACT**

With the rise of video sharing giants like Youtube and Google Video, coupled with increased broadband connectivity and improved sharing functionality across social networking sites, the role of the viral video has been cemented in many IMC strategies. While most agree about the importance of better understanding viral marketing, there is less agreement about what makes content become viral. While some content gets viewed by millions of people, others struggle to gain viral traction. Content specific, intrapersonal and interpersonal reasons have been proposed for viral marketing success. This paper focuses on the intrapersonal reasons for content going viral in the context of political satire. More specifically, the role of emotion in the spread of content online, is investigated. Political satire focuses on gaining entertainment from politics. Satire, and specifically political satire, forms part of using humour in advertising and has been influential in shifting public opinion since ancient Greece. This study compares success and unsuccessful viral campaigns that used political satire, by first analysing the online comments that viewers made about the video. Following these findings, an experiment is conducted and the influence of intensity, creativity, humour and utility on virality is modelled, controlling for valence and previous exposure. The findings suggest that, when using political satire in viral campaigns, creativity and the intensity of the emotions felt are key influencing factors in whether videos get "shared" or "liked". Therefore, while many authors contend that particular emotions or positive content has a greater likelihood to become viral, this paper shows that it is not the particular emotion, but the intensity with which that emotion was felt that drives viral success.

**Keywords:** Viral marketing, Valence, Arousal, Political satire, Emotion, Creativity

## 1. Introduction

The “connection generation” craves interaction with and connection to vast social networks (Pintado, 2009) through the sharing of information, photos, opinions, entertainment and news. This sharing comes in the form of electronic word- of-mouth or eWOM (Nelson-Field, Riebe, & Newstead, 2011) and provides marketing and communication managers with unparalleled opportunity to reach a large number of consumers quickly, and to interact with them. Viral marketing is a form of WOM (Blomström, Lind, & Persson, 2012; Porter, 2006; Rodic & Koivisto, 2012), and a marketing communications strategy (Rodic & Koivisto, 2012), that attempts to engage and affect consumers. These consumers, in turn, spread the communicated message further through different social media (Blomström et al., 2012). With the ever increasing growth of the internet and the rise of social network sites, viral marketing has cemented itself in the marketing and corporate agenda.

While many videos that went viral in the past were “lucky” spin-offs from advertising campaigns, marketers are increasingly making communicating through social media platforms a central part of their communication strategy. Nelson-Field et al. (2011) state that, with the rise of video sharing giants like YouTube and Google Video, coupled with increased broadband connectivity and improved sharing functionality across social networking sites, the role of the viral video has been cemented in many IMC strategies. This is evident from the transfer of advertising budgets from TV advertising, search and direct response campaigns, to viral video campaigns.

While most agree about the importance of better understanding viral marketing, there is less agreement about what makes content become viral. While some content gets viewed by millions of people, others struggle to gain viral traction. *Content specific*, *intrapersonal* and *interpersonal* reasons have been proposed for viral marketing success. Authors espousing *content*-specific explanations, argue that viral content often has utility (Izawa, 2010). In other words, content gets spread across social networks because of its informational and value contribution. *Intrapersonal* reasons often center around the emotional reaction that viewers have after consuming viral content, as well as the impression that it leaves on viewers (Izawa, 2010). These authors argue that it is how viral content connects emotionally with viewers (Dobele, Lindgreen, Beverland, Vanhamme, & Van Wijk, 2007), and often focus on the spread of positive versus negative content online (Eckler & Bolls, 2011; Rodic & Koivisto, 2012). Others state that it is the extent to which the emotion is felt (or the *intensity* with which the emotion is felt) or the specific emotion, and not simply a case of affect (Berger & Milkman, 2009; Nelson-Field et al., 2011). Finally, *interpersonal* justifications are concerned with the social motivations for the spread of content online, and suggest that passing along content online builds social networks and social capital, it is important for society, and that people anticipate that others would feel happy and grateful to them for sharing viral content (Izawa, 2010). Regardless of the

reason proffered, very little empirical evidence exists to support these claims (Nelson-Field et al., 2011) supporting the call for further research on what makes content viral.

A recently successful viral campaign made use of political satire. Political satire focuses on gaining entertainment from politics, and differs from political protest or political assent in that it does not necessarily have an agenda, and does not necessarily seek to influence the political process. Satire, and specifically political satire, forms part of using humor in advertising and has been influential in shifting public opinion since ancient Greece (Bal, Pitt, Berthon, & DesAutels, 2009). Mascha (2008), for example, states that political satire was critical in the rise of fascism. It entails the use of ridicule, irony or sarcasm to lampoon someone or something, and is designed to generate laughter (Bal et al., 2009).

In a country with a strong political history, using political satire in a viral campaign in South Africa is risky for various reasons. First, because “forwarding” or “liking” online content is a permanent act of communicating to many people at once, one would imagine that social network users are hesitant to associate with political content. Especially when sharing online content is a way to connect with others and to build community (Izawa, 2010), and sharing online content has permanent social implications. Two, a company runs the risk of alienating certain markets because of their political affiliation. This is especially true in the divided and often tumultuous South African political context. Third, it is unclear what the effect of such an advertising campaign would be on the reputation of a company.

Yet some of these viral campaigns are extremely successful, while others are not. Political satire has been systematically neglected by researchers (Mascha, 2008). This study aims to contribute to both viral marketing and political satire literature, by investigating the interplay between content and emotion in viral campaigns that use political satire.

Researchers are increasingly using viral videos as the subject of their analysis in viral marketing (see Eckler & Bolls, 2011; Henke, n.d.; Izawa, 2010; Lager, Lux, & Marques, 2011; Nelson-Field et al., 2011). More than three quarters of broadband users are regularly watching or downloading video content (Madden, 2007 in Reyneke, 2011). Because of the popularity of the medium, many companies have placed their ads on video sharing sites like YouTube to increase brand awareness and stimulate conversation about the brand (Reyneke, 2011). Reyneke (2011) also states that the increasing popularity of sites like YouTube, is changing the advertising landscape.

Traditional advertising research tools like surveys, rating services and viewer response profiles, may not be as effective in measuring conversation about a viral video. Traditional methods may also not be able to capture the nuances of an environment where consumer feedback to content is networked, rather than one-way (Reyneke, 2011). These consumer dialogues may provide marketing and communication managers with valuable insight into why some videos have gone viral and others have not. This paper starts off with an analysis of two online videos that used political satire to go viral. One was successful, the other was not. The design of this study, as well as the data and findings are discussed in the following section. Based on the findings from this study, an experiment is conducted to better understand the success factors of these two viral videos. The design and results of the second study is discussed in section three. This is followed by a discussion of the findings of both studies in the conclusions and managerial implications section. The paper ends with a brief summary of the possible limitations of the study, followed by suggestions for future research.

## **2. Study 1: a field study of viewers' comments**

The first study used an exploratory approach to better understand the use of political satire in a viral campaign. Content analysis was done on viewers' comments of two YouTube videos. The selected videos as well as the process that was followed to analyze their comments, are discussed in the section below.

### **2.1 Data**

While traditional viral marketing research focused on the spread of emails, and the majority of research in this area have used email, customer reviews and online forums, researchers are increasingly using viral videos as the subject of their analysis (Eckler & Bolls, 2011; Henke, n.d.; Izawa, 2010; Lagger et al., 2011; Nelson-Field et al., 2011). Izawa (2010) states that relatively few viral marketing studies have focused on video content, and consequently, little is known about the process by which viral videos are shared. This study uses online video sharing, particularly YouTube videos, as the unit of analysis. YouTube is one of the video sharing giants (Nelson-Field et al., 2011) and arguably the number one site where one can find viral videos.

Two videos, that focused on South African politics and used political satire, were selected for this analysis. The YouTube videos were selected based on the following criteria:

- They made South African politics the focus of their message while not being associated with government in any way.
- These branded and company generated videos resulted in a public relations debate. Both the videos, first launched as television advertisements, were taken off the air either because of threats from political factions.
- The relative popularity of these videos: to be able to compare results, one successful viral video was used, and one less successful one.
- Both videos have been online for longer than a year.

These criteria correspond to previous studies using a similar approach (see Reyneke, 2011).

In order to control for the influence of the quality of the content and subject matter of the videos themselves, the two videos were chosen to maximize the similarity between them: these videos both used humor and political satire and both made fun of controversial political figures. To control for the influence of the actual product or brand, two videos from the same company (Nando's, a popular fast food chain) were used. The selected videos were as follows.

### **2.1.1 Nando's "Last Dictator Standing"**

<http://www.youtube.com/watch?v=u1EX--vdxh4>

This video portrays Robert Mugabe, the president of Zimbabwe, having a good time with some of the world's most notorious dictators like PW Botha, Muammar Gaddafi, Saddam Hussein and Idi Amin. Mugabe stands out as the sole remaining member of this "club" (Maclean, 2011) as the rest have all passed away. Many praised the fast food chain for its innovativeness, but many criticised it for Nandos' insensitivity (Maclean, 2011). Soon after the campaign was launched, Nando's was forced to pull the ad off the air because of threats from Zimbabwean youth militia (Conway-Smith, 2011). However, the video still remained online.

### **2.1.2 Nando's "Julius Malema Campaign Ad"**

<http://www.youtube.com/watch?v=L8Aq042KPSg>

The second video from Nando's featured a puppet named Julius, that referenced Julius Malema, the South African ANC Youth League president at the time, endorsing chicken. In the video, Malema demands "change" and states that Nando's can give you more "change" if you pay with more money. Political satire is created by representing Julius Malema as a puppet, which has implications and prescribes meaning far wider than Julius Malema talking about Nando's. As Grofman (1989) would say, the more you know about puppets and Malema, the more you understand the advertisement. This video suggests that Julius Malema 1) is a puppet for stronger political forces, and is directed by these political forces, and 2) is a "dummy" or not intelligent.

Julius Malema is a highly contentious political figure in South Africa, who has since been suspended from the ANC and is facing criminal charges. When the advert aired, the ANC Youth League demanded that it be removed as it was "intended at mocking" Julius Malema, and "in a racist fashion portrays political leaders as cartoons" (Hartley, 2009). Table provides the YouTube summary statistics of these videos. Two separate

links to the Last Dictator Standing video went viral, but both of these were deemed important in the analysis and were subsequently included.

**Table 1: Summary of YouTube statistics\* for the two videos**

Video	Date added to YouTube	Number of Views	Number of Comments	Number of "Likes"	Number of "Dislikes"
Last Dictator Standing	24 Nov 2011	1,307,159 + 435,794 = 1,742,953	1,110 + 524 = 1,634	6,126 + 2,398 = 8524	158 + 74 = 232
Julius Malema	21 April 2009	338,123	372	325	6

\*As reported on the 12<sup>th</sup> of March 2013

Even though the Julius Malema video has been on YouTube for two years longer than the Last Dictator Standing video, it achieved considerably less views than the latter. It also had a much lower comments/view ratio of 0.1% (number of comments per views) as opposed to the Last Dictator Standing's 9%. At first glance, however, the videos appeared to be very similar as both used political satire and focused on African leaders. Further analysis is necessary into why one of these videos achieved viral success and the other didn't. Viewers' comments were the first port of call to gain further insights.

The three general steps of qualitative data analysis, namely data reduction, data display and conclusion drawing (Malhotra, 2010) were the next steps in the research process.

## 2.2 Content Analysis of Viewers' Comments

A text analysis tool (Leximancer, [www.leximancer.com](http://www.leximancer.com)) was used to analyse viewers' comments. Leximancer is a simple, yet powerful, qualitative data mining tool that has been used in over 804 academic studies (Leximancer, 2013). It has often been applied to the analysis of online content (see for example Stockwell, Colomb, Smith, & Wiles, 2009) because of its ability to analyse a large amount of qualitative text. The Leximancer algorithm is based on Bayesian theory (Reyneke, 2011), and the automatic selection of key themes and concepts has been proven to agree with expert human judgement (Rooney, 2005 in Reyneke, 2011; Stockwell et al., 2009). Its primary benefits include that it builds concepts as opposed to counting words, pronouns and conjunction. These are all words with low semantic value and are automatically excluded from the analysis. It also does not do stemming, the practice of removing

suffixes and reducing words to stem words. Lastly, Leximancer is able to read all types of types of text, including the grammatically incorrect comments often loaded on YouTube (Reyneke, 2011).

To discover themes and key concepts in the text, Leximancer does both a conceptual (thematic) and relational (semantic) analysis (Reyneke, 2011). Leximancer then displays the key themes and concepts visually through a “concept map” that visually displays the interrelationships between themes and concepts, as well as their relative importance. Key themes are represented by large circles and concepts are shown by dots (Reyneke, 2011; Stockwell et al., 2009). The more concepts per theme, the more important that theme is, while the size of the theme does not provide any specific indication of its importance. Heat mapping is also used to show relative importance where warmer colours, like red and orange, are more important than cooler colours, like blue and green (Leximancer, 2013). If concepts overlap in the map, or are closer together, they typically appear together in-text, as semantic links are represented by distance.

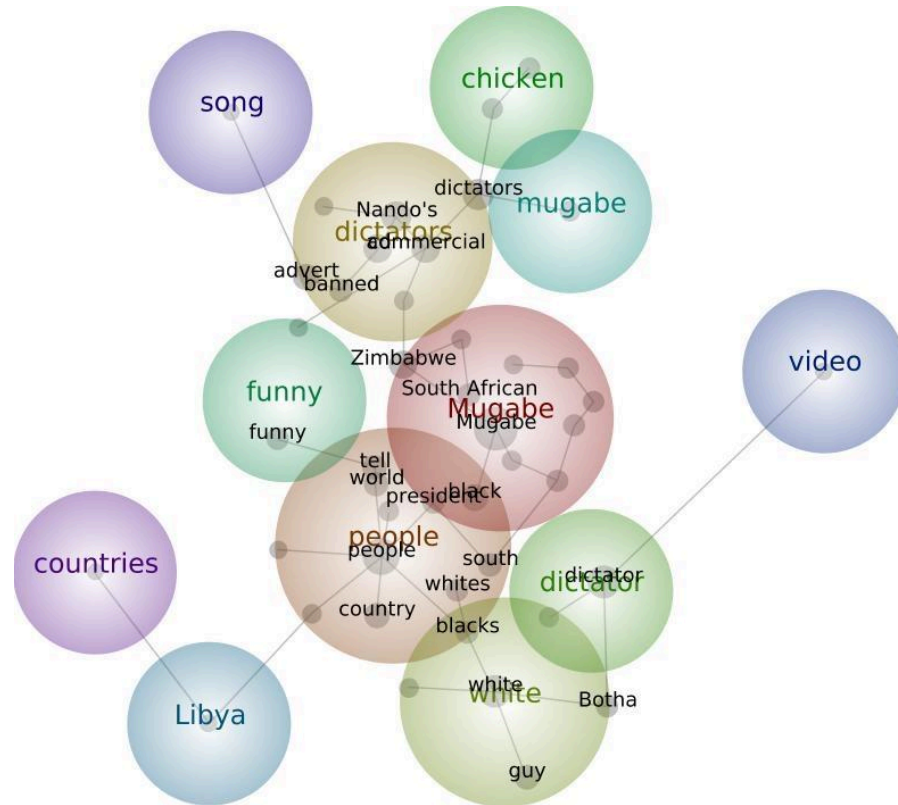
## **2.3 Results**

The concept maps for each video will first be analysed, whereafter conclusions are drawn based on these analyses, specifically around the use of emotion in these videos.

### **2.3.1 Interpretation of the Leximancer Maps**

There were 1 634 viewer comments on YouTube regarding this video. Figure provides the visual representation of these comments.

**Figure 1: Leximancer map of online comments regarding the Nando's Last Dictator Standing advertisement**



The major themes that emerged from viewers' comments were Mugabe (100% connectivity to the rest of the themes), people (86%), dictators (83%), white (45%), chicken (13%) and funny (11%). These themes converged around the following discussion threads:

The *Mugabe* and *People* themes were central in viewers' comments as is evident from the central position of these themes, and their colour (red and orange as opposed to blue or green). Viewers that commented on *Mugabe*, could broadly be classified into those who support his regime (linked to words like "country" and "Zimbabwe") and those who opposed him. These two opposing views are illustrated by the following comments:

*"Mugabe deserves all the scorn in the world for the way he's treated his own people." Vs. "Long live Mugabe! He took land away from 6,000 European invade[rs] and gave it to over 200,000 poor blacks that have been exploited from imperialism for so long."*

These show how comments regarding Mugabe himself are linked to comments regarding the people (theme 2), where many of the arguments for or against Mugabe revolved around the way he treated (or liberated) his people. The comments around *People* and how they were treated sparked a discussion of other *Countries* suffering, specifically *Libya*. The comments around Mugabe and the way he treated his people also sparked a debate around race. This can be seen from the words "black" and "white" emerging in the *people* theme. One viewer commented *"Please tell me what injustice, the type that Mugabe is doing to the remaining whites by taking their farms and having them killed?"* and another commented *"If I may ask are you white or black? The reason why those farms are taken is because the white farmers had land the size of a mini island while the blacks lived in barren small farms"*.

While many of the comments regarding *White* were race oriented, the majority were about viewers asking who the "white" "guy" was in the video. With the international audience of this video, many viewers did not know who the white dictator depicted in the video was. Consequently, the themes *White*, *Dictator* and *Video* were linked together and the themes *Dictator* and *Dictators* loaded separately. Comments regarding *Dictator* were mainly focused on finding out who was in the video, and viewers responded that it was former South African president P.W. Botha ("Botha") – a president associated with the apartheid regime.

The comments regarding *Dictators* on the other hand, were linked to words like "Nando's", "commercial" and "banned". Many of these comments centred around how *funny* this ad was, as well as a discussion of the dictators included and not included in the ad. These sentiments are reflected in the comments below.

*"Gotta [sic] love this ad - all the goons ripped off together – including PW Botha with Mugabe, Gaddaffi etc is also a nice touch. It reflects the contempt the average person has for the various african dictators."* and

*"Where is Singapore's Lee Kuan Yew?"* followed by *"He's not dead."* and *"He was not that brutal."*

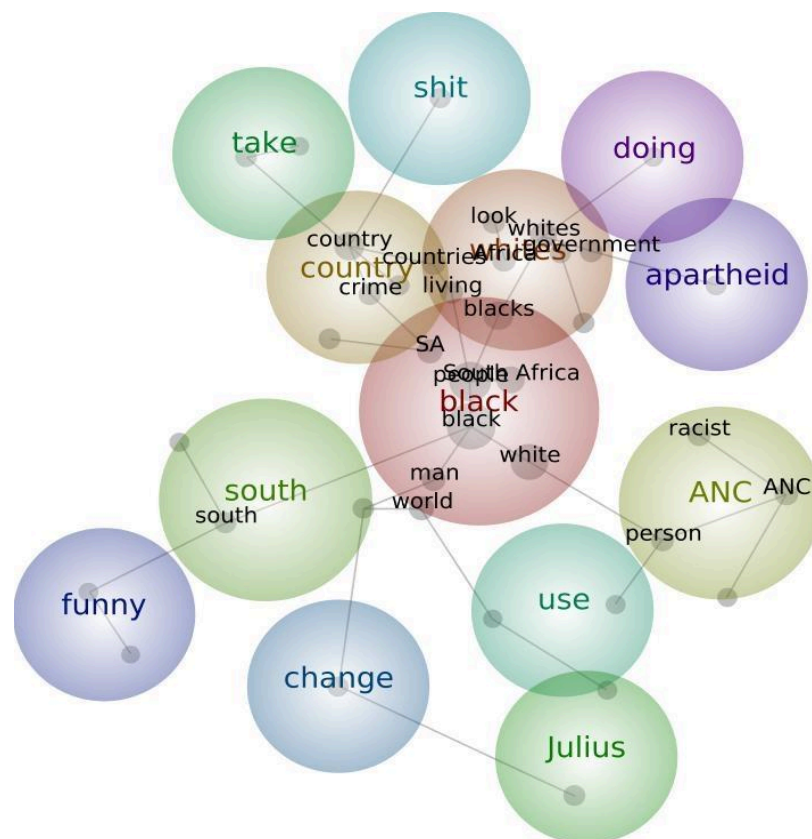
Many of the viewers commented on *chicken* and how the chicken depicted at the end of the ad "looks delicious" or how they plan to go out and buy the chicken. Finally, comments around the *Song* in the video mostly resulted from viewers asking which song was used in the video.

The only specific emotions referred to within the comments, were those around “pity” for Mugabe and “feeling bad” for him after watching the video. The following comments encapsulate these sentiments:

*“I know these are/were bad people, very very bad people, but everytime [sic] I watch this I can't help but feel kinda [sic] sad for the guy.” and “At the end, why do I feel bad for Robert Mugabe?”.*

Next, the video that used Julius Malema was analysed. Around 372 comments were used in the Leximancer analysis.

**Figure 2: Leximancer map of online comments regarding the Nando's Julius Malema advertisement**



The main themes that emerged from viewers' comments were negative comments around being *Black* (100% connectivity to all themes), *white* (37%), the country (21%) and the ANC (16%). By using a controversial political figure, Nando's sparked polarised comments from those for or against Julius Malema. The comments quickly turned into a racial debate where viewers fought about *White* people, *Black* people, and the *Government*. Comments were characterised by few participants making many comments. These were the central themes (according to position, linkages and colour) of the majority of the comments:

*"... black people from other countries look at South Africa [and] its black government as laughable idiots. And if you knew your history, you would know that whites founded South Africa [and] NOT blacks."*

*"When are you people going to acknowledge that the reason black south africans are killing the farmers is because they want their land back. Take a look at zim[babwe]. After Mugabe took back the land, white people are living peacefully."*

*"...look at every prosperous nation [and] what do you find? White hands [and] white minds that invented, created [and] built those nations including South Africa. And if you like, you can say the black slaves of the times hands built them. But it was the white man who told them what to do [and] the black man who wasn't [and] isn't smart enough to, apart from destroying countries."*

The comments were either aimed at Julius Malema himself (*Julius* theme), or at the ANC government (*ANC* theme). These negative comments sparked a big debate from viewers around the world, where one viewer stated in response that *"the situation here [in South Africa] is complicated and the general population white, black no matter what colour is struggling. The only people benefitting seem to be government"*. This debate was further fuelled by the ANC Youth League threatening militant action if Nando's did not remove the ad (Hartley, 2009).

The themes *take*, *shit*, *doing* and *apartheid* were all linked to the debates mentioned above. *Take* often referred to what "white" South African took from "blacks", or what "blacks" are taking from "whites" now. *Doing* thus often referred to the acts that these two groups are doing to each other, many of these originating from apartheid: *"So sadly the ANC has reversed apartheid in what seems to be 'payback' which is causing both black and [sic] white to suffer"*.

The next group of themes referred to *south* and *funny*. *South* refers to comments around South Africa, many of which were also linked to the debate mentioned above. *Funny*, on the other hand, referred to one of two things. First, to how funny viewers found the Nandos ad. Second, to how "funny" the online racial debate that was

generated by video was, where the word was often used sarcastically. The following comments are example of the latter:

*"Hahahaha!!!! This is so funny. You know why it's [sic] funny? I read your comment ..."*

Many of the viewers also urged others to *"stop taking things so seriously"* as this was just a *"funny ad"*. The final group of themes centred on *Julius* and *change*. Comments around these themes referred to the actual advertisement where Julius Malema talked about the "change" you get when buying Nando's. A few of the comments around change were also linked to sentiments around change in the country, illustrated by the link between this theme and the *South [Africa]* theme.

The majority of comments around this video were negative and intense debate resulted from the video, however, this video did not generate many "hits" online compared to the Last Dictator Standing video. When considering that the video generated a lot of press, its number of hits is small. As one viewer commented:

*"Honestly if he [Julius Malema] hadn't thrown such a hissy fit about it [the video], it would never have gotten the same publicity it did."*

### **2.3.2 Valence and arousal (emotional intensity) within each video**

When looking at viewers comments, these two videos appeared to be similar in that they generated commentary on the same current political climate and political issues. Both videos received a hostile reaction from politically oriented youth groups (the typical age group of online users). And with both videos, viewers commented that Nando's was "funny", and that they felt "amused". In both sets of commentary, viewers exclaimed (albeit more in the Last Dictator group) that the video was the "best ad ever". The videos were dissimilar, however, in that specific emotions elicited by the ads were mentioned in the Last Dictator Standing video, but no emotions were mentioned with the Julius Malema video.

Two emotions that were specifically mentioned in the comments of the Last Dictator video were "happy" and "sad". Viewers commented on how happy watching the video made them feel, or how surprised they were to feel sad for this controversial president after watching the videos. This suggests that a form of emotional convergence, called emotional contagion, took place with the Last Dictator video that might not have occurred with the Julius Malema video.

## **2.4 Discussion**

The above analyses show that many of the comments from viewers, centered on the same themes. For example “black”, “white” and “government” featured in both the Nando’s videos. Both the Nando’s ads were also classified as being “funny”. Both videos proved to be humorous and creative – two key contributors for content to go viral. However, only one of these videos reached over a million viewers.

The theory discussed at the beginning of the paper suggests that viewers’ emotional reaction, as well as the level of intensity of their emotional reaction, may be key influencing factors in whether the video goes viral. While the comments above suggest that viewers had emotional reactions to the videos, the specific emotions involved could not be ascertained. The relationship between content-specific factors, and the emotion that it elicits, consequently needs further investigation.

The following study therefore used these same videos (while adding a third video as a control) in an experimental setting to better understand the relationship between content and emotion in viral videos.

### **3 Study 2: How the intensity of emotions impact its virality**

Provided that both videos used political satire, both were creative, both had similar levels of utility and both were humorous, further research was necessary into the only seemingly variable explanation of the virality of these two videos: viewers' emotional reaction to the videos. Theory suggests that a key determinant of viral marketing is the emotion that the content elicits (Dobele et al., 2007). When investigating the influence of emotions on viral content, one should not only look at the particular emotion generated by the online content, but also at the intensity of the particular emotion (Berger & Milkman, 2009; Nelson-Field et al., 2011).

#### **3.1 Method**

Fifty-two participants were exposed to all three videos (in a random order) and their emotional reaction (and the intensity of that emotion) was measured. This resulted in  $n = 156$ . The treatment was viral (Last Dictator) and non-viral (Julius Malema) online videos that focused on political satire. And in order to limit bias, a third control video was brought in. This approach was used to increase both the internal and external validity of the study (Zikmund, Babin, Carr, & Griffin, 2013). Other controls used in the experiment are discussed in greater depth in the following section, while this section focuses on the key research design elements.

The target population and sample size used for this study was similar to those used by others focusing on emotions in online video sharing (see for example Berger & Milkman, 2009). Respondents' average age was 25 years, and around 60% were female. With regards to measures, the established positive affect negative affect (PANAS) scale was used (Watson, Clark, & Tellegen, 1988). Self-report measures of one's subjective experience constitute the most frequently used approach in the measurement of emotions (Bagozzi, Gopinath, & Nyer, 1999; Barsade, 2002). This follows a dimensional approach to the measurement of emotions (Russell, 1980; Watson & Tellegen, 1985), suggested by various authors (Bagozzi et al., 1999). Participants were also asked to what extent they felt the stated emotion, in order to measure the level of arousal or intensity of the emotion.

Viral behavior can be measured either through self-report measures of intent (see Eckler & Bolls, 2011) or through actual sharing behavior (Berger & Milkman, 2009; Nelson-Field et al., 2011). This study uses a combination of these where actual sharing behavior was used in the selection of the videos, and self-report measures (of both simply "liking" and "forwarding" online content) were used to measure the dependent variables of the study. Most studies focusing on the spread of online

content use either an objective or subjective measure of whether the content investigated was passed on to viewers' social networks. New technology, however, provides viewers with an additional option of just "liking" the content. Consequently, both were measured separately. However, both actions would mean that the viewers' social network would (1) see that the viewer has watched the video and (2) be provided with a link to the content.

### **3.2 Controls**

Internal validity is a measure of the accuracy of the experiment while external validity refers to the generalizability of the experiment (Malhotra, 2010; Zikmund et al., 2013). One often sacrifices the one for the other (Malhotra, 2010). With the sheer number of online videos on YouTube, as well as the different types of videos, truly claiming generalizability of experimental findings would be next to impossible. With decreased external validity, the internal validity of the study was a key focus. This was improved by incorporating a third video in the analysis as a control measure.

The additional video was a controversial advert from First National Bank (FNB) called "controversial 2013 advert" (see [http://www.youtube.com/watch?v=S8\\_0MYzz4cw](http://www.youtube.com/watch?v=S8_0MYzz4cw)). This video was added to YouTube on the 22nd of January 2013. On the 13th of March 2013 it had 50,327 views, 150 comments, 290 likes and 22 dislikes. This video formed part of an integrated campaign where children were asked what they hope for in South Africa. A young girl is shown as part of a seemingly "live" broadcast, where she discusses the challenges faced by the country as well as her hopes for the country. The national government criticized the campaign for feeding into the opposition narrative that "sought to project the ANC and government in a negative manner" (News24, 2013). The CEO of FNB soon thereafter apologized to the government and pulled the campaign off air.

While this video is still comparable to the two Nando's ads in that it focuses on South African politics to get a message across, and received similar media attention and was ultimately pulled from the air due to political pressure. After being removed from mainstream media, it remained on YouTube. However, this video differs from the other two in that it does not use humor in political satire, but rather focuses on a different type of emotion (hope and inspiration) in order to get variance in the findings. It was also a video from a different South African company. The three videos were randomly shown to respondents.

Based on the literature review, the influence of emotions on the virality of the videos was investigated while controlling for:

- *Valence*. Many studies show that positive content is more likely to spread than negative content (Eckler & Bolls, 2011; Izawa, 2010; Rodic & Koivisto, 2012).
- *Emotional intensity*. An increasing number of studies have shown that it is not necessarily the valence of the emotion that influences its virality, but the intensity with which the emotion is felt (Berger & Milkman, 2009; Harber & Cohen, 2005; Heath, Bell, & Sternberg, 2001; Henke, n.d.; Nelson-Field et al., 2011; Rimé et al., 1998).
- *Creativity*. Creative content has often been shown to be more successful in IMC campaigns than other approaches to advertising.
- *Humor*. Similarly, funny videos are suggested to spread further and quicker than others (Golan & Zaidner, 2008).
- *Utility*. Last, in the study of urban legends, ideas that are informative to the listener have been shown to spread further than those that are not (Berger & Milkman, 2009; Rodic & Koivisto, 2012).
- *Exposure to the video*. As existing online content was used, we also controlled for the influence that seeing the video before the experiment had on viewers' propensity to forward and like content.

### 3.3 Results

First the descriptive statistics that were measured in the study are discussed in Table 2, where after the models are fitted.

**Table 2: Descriptive statistics of predictors**

<b>Video</b>	<b>Predictor</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Overall</b>	Arousal	7.05	1.63
	Creativity	7.43	2.21
	Humour	5.50	3.61
	Utility	5.17	2.49
<b>Julius Malema</b>	Arousal	6.48	1.55
	Creativity	7.00	2.18
	Humour	6.53	2.62
	Utility	5.18	2.32
<b>FNB</b>	Arousal	7.12	1.65
	Creativity	6.61	2.40
	Humour	1.36	1.41
	Utility	5.47	2.69
<b>Last Dictator Standing</b>	Arousal	7.56	1.54
	Creativity	8.65	1.40
	Humour	8.46	1.83
	Utility	4.86	2.44

\*Measured on a scale from 1 to 10.

On average, participants found that the videos had a high level of creativity, but average levels of humor and utility. The Last Dictator Standing video was rated to have the highest level of creativity and humor by participants, but provided participants with little utility value. The control video (FNB) was rated, on average, to have little to no humor and an average amount of utility.

Participants also experienced high intensity in the emotions that were elicited by the three videos, where the intensity for the Julius Malema video was slightly less than the overall average, and the Last Dictator Standing's intensity slightly higher. The majority (94%) of participants experienced positive emotions when watching the Last Dictator Standing. The spread between positive and negative emotions was slightly more varied for the other two videos: Julius Malema (79% positive, 21% negative), FNB (67% positive, 33% negative). Finally, regardless of the amount of time that

these three videos have been on YouTube, relatively equal percentages have seen the three videos: Julius Malema (67% have not seen the video), FNB (64% have not seen the video) and Last Dictator Standing (62% have not seen the video).

Independent sample *t*-tests were used to test whether intensity and valence, when tested independent of other controls, influenced viral behavior. Participants who experienced high-intensity emotions were more likely to forward online videos ( $p = 0.00$ ,  $t = -4.96$ ) and were more likely to "like" online videos ( $p = 0.00$ ,  $t = -4.21$ ). Similarly, Pearson Chi-square was used to test whether there was an association between valence and viral behavior. Valence was found to positively influence whether participants "forwarded" the video ( $p = 0.00$ , Chi-Square = 6.93) and if they "liked" the video ( $p = 0.00$ , Chi-Square = 23.60). Consequently, both valence and arousal were found to significantly influence viral behavior, such that the greater the intensity of the emotion experienced, the greater the likelihood that they will "forward" and "like" the video.

Similarly, videos evoking positive emotions are more likely to be "forwarded" and "liked" than videos that evoke negative emotions. These findings are consistent with previous research (see for example Berger & Milkman, 2009; Eckler & Bolls, 2011; Izawa, 2010; Nelson-Field et al., 2011), however, few studies have controlled for other factors while investigating the influence of valence and arousal on viral behavior.

Forty-one percent of participants indicated that they would "like" the ad, but only 21% stated that they would "forward" the ad. Within those respondents who stated that they would not "like" the video, 97% indicated that they would also not "forward" the video. Conversely, of those who indicated that they would "like" the video, only 47% indicated that they would forward the video. Only 19% of participants stated that they would both "like" and "forward" the video.

Next, the influence of emotion (valence), the intensity of the emotion, and the control variables discussed on viral behavior ("forward" or "like" online videos) are addressed. First the model fit statistics for each model is discussed. Each model, except for the model predicting if participants would forward the Last Dictator Standing, was significant (Tables 3 and 4).

**Table 3: Model fit statistics**

Model Fit Statistics									
Overall Model	Model	R		R Square		Adjusted Square		Std. Error of the Estimate	
		0.47	0.56	0.22	0.31	0.19	0.29	0.41	0.42
	ANOVA	Sum Squares		of df		Mean Square		F	
	Regression	6.79	11.75	6		1.13	1.96	6.78	10.88
	Residual	23.88	25.73	143		0.17	0.18	Sig.	
	Total	30.67	37.47	149				0.00**	0.00**
Last Dictator Standing	Model	R		R Square		Adjusted Square		Std. Error of the Estimate	
		0.32	0.49	0.10	0.24	-0.02	0.13	0.51	0.45
	ANOVA	Sum Squares		of df		Mean Square		F	
	Regression	1.28	2.77	6		0.21	0.46	0.82	2.2
	Residual	11.35	8.88	44		0.26	0.20	Sig.	
	Total	12.63	11.65	50				0.56	0.05*
Julius Malema	Model	R		R Square		Adjusted Square		Std. Error of the Estimate	
		0.50	0.59	0.25	0.35	0.15	0.26	0.37	0.43
	ANOVA	Sum Squares		of df		Mean Square		F	
	Regression	1.99	4.28	6		0.33	0.71	2.41	3.89
	Residual	6.05	8.07	44		0.14	0.18	Sig.	
	Total	8.04	12.53	50				0.04*	0.00**
FNB	Model	R		R Square		Adjusted Square		Std. Error of the Estimate	
		0.59	0.66	0.35	0.44	0.25	0.36	0.36	0.40
	ANOVA	Sum Squares		of df		Mean Square		F	
	Regression	2.76	5.05	6		0.46	0.84	3.66	5.36

	<b>Residual</b>	5.16	6.43	41	0.13	0.16	<b>Sig.</b>	
	<b>Total</b>	7.92	11.48	47			<b>0.01**</b>	<b>0.00**</b>

\*The first values relate to the models where "Forward" was the dependent variable, the second to the models where "Like" was the dependent variable.

**Table 4: The influence of emotion, arousal, creativity, humour and utility on viral behaviour**

	Overall Model			Last Standing		Dictator		Julius Malema		FNB	
	Forward	Like		Forward	Like	Forward	Like	Forward	Like	Forward	Like
<b>Predictors</b>	<b>Arousal</b>	0.17*	0.15^	0.01	0.17*			0.15	0.001	0.27*	0.13
	<b>Creativity</b>	0.33**	0.29**	0.35	0.33**			0.47*	0.45*	0.29^	0.20
	<b>Humour</b>	-0.01	0.00	-0.09	-0.01			-0.15	-0.05	0.02	-0.15
	<b>Inform</b>	0.05	0.10	0.01	0.05			0.09	0.12	0.09	0.36*
<b>Control Variables</b>	<b>Valence</b>	0.08	0.26**	0.07	0.08			-0.12	0.19	0.26^	0.28*
	<b>Seen video before</b>	-0.003	0.05	0.01	-0.003			-0.004	0.13	0.004	-0.16

Linear regression was used. The dependent variables, “forward” and “like”, as well as the control variables were coded binomially. Standardized coefficients are reported.

^Significant at a 10% level of significance; \*Significant at a 5% level of significance; \*\*Significant at a 1% level of significance.

Creativity, followed by intensity, appeared to be the greatest influencer of viral behavior when using political satire in viral campaigns. Creativity significantly impacted the majority videos’ viral behavior and had the greatest influence on viral behavior in the overall model. Intensity was found to influence both whether participants forwarded and “liked” online videos. The video where it had the greatest influence was the one of Julius Malema. Valence (or whether the video aroused positive or negative emotions), however, only impacted whether participants “liked” the video, and not whether they forwarded the video to their online social networks. Whether participants had seen the video before or not, had no influence on viral behavior. This suggests that future research can similarly make use of existing videos to study viral behavior. The utility of the video, as well as the humor contained in the video, did not appear to have an influence on viral behavior.

### **3.4 Discussion**

The results show that it is important to distinguish two types of viral behavior: "forwarding" or passing along content, and "liking" content. Even though the factors that contributed to these behaviors were similar, there were positive nuances in the way that creativity, affect and the intensity of the emotion elicited by the video impacted them. The creativity of the content, as well as the intensity of the emotion that it evoked, impacted whether participants forwarded the videos. While these two factors also predicted whether participants would "like" the videos, the valence of the video also played a role. This could possibly explain why previous studies have found inconsistent results with regards to the effect of valence on content going viral.

While almost all participants who stated that they would "forward" the videos, also stated that they would "like" the videos, but the reverse did not hold. Some participants indicated that they would "like" the content, but not necessarily forward it. This suggests that viewers of viral content see these two behaviors as distinct.

The majority of participants perceived all three videos to be positive. Around 30% of participants thought that the FNB and Julius Malema ads were negative, but less than 10% thought that the Last Dictator video was negative. In this case, it would appear that the video eliciting positive emotion, was more successful than the one eliciting negative emotion. The results suggest that not only valence, but also the intensity of the emotion felt influences its' virality.

## 4 Conclusions and managerial implications

Making fun of beloved politicians or the government in general is a risky communication strategy. All three cases mentioned in this study resulted in political backlash and both positive and negative publicity. All three videos ultimately had to be removed from its above the line media slots, and were left on social media only. The question is therefore, when does this strategy pay off?

Two videos were chosen because of the similar strategies that they followed: the same company, using political satire and comedy, making fun of politicians, to sell product and build reputation. However, the one campaign was successful whilst the other was not. The findings from this study suggest that using political satire to gain viral traction is not enough: these videos need to be creative and evoke strong emotions in viewers.

While the creativity of the videos played a key role in the selected videos going viral, not all content can be creative in nature. Marketing and Communication managers should rather focus on the one element that is present in all viral videos: the *emotion* that the video elicits. This paper shows that the emotional reaction that each video had on the viewer, as well as how intense that emotional reaction was, had a key influence on its online traction.

Using political satire in advertising could increase the likelihood of viewers having more intense emotional reactions when watching the videos. People generally have higher emotional reactions to issues that hits closer to home, and using politics to increase emotional-intensity, is a smart tactic by companies like Nando's.

When using political satire in viral campaigns, marketing managers should focus on the emotions elicited by the content, and not only on the content itself. When debate centers solely on the content (for example in the Julius Malema video), then the video is less likely to gain viral traction. The relationship between content and emotion is consequently central to viral success.

### 4.1 Possible limitations of the study

While this paper took an exploratory look at the influence of political satire on the spread of content online, the generalizability of the findings is a limitation of this study. By only using two videos (and the FNB video as a control), as well as the

narrow focus of these videos (South African politics), the findings from this study cannot be extrapolated to all viral content. Ideally, representation would have been gotten in terms of both positive and negative videos, different types of videos (for example, informative, creative), user vs. corporate generated, etc. The findings of this study, however, are consistent with those of others, and our current understanding of viral behavior, lending confidence thereto. Also, with the number of YouTube videos uploaded daily, getting a representative sample of videos from this platform would be close to impossible. Ideally, we would have controlled for other factors like valence, arousal and virality in a factorial. Consequently, the following section suggests ways in which these findings, as well as extensions thereof, could be investigated.

#### **4.2 Avenues for future research**

Really good viral campaigns transform the emotions of viewers and a process of emotional contagion takes place. Emotional contagion refers to the transfer of moods from one person to another (Hatfield, Cacioppo, & Rapson, 1994) and among people in a group (Barsade, 2002) and is concerned with the impact that people's emotions have on the people in their environment. Emotional contagion is therefore the tendency of people to "catch" and feel the emotions that others are feeling. In their seminal work, Hatfield et al. (1994) state that the underlying mechanism of emotional contagion is a tendency to mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person automatically and, consequently, to converge emotionally. Schoenewolf (1990), however, uses a broader definition and states that emotional contagion is a process in which a person or group influences the emotions or behavior of another person or group through the conscious or unconscious induction of emotion states and behavioral attitudes (Schoenewolf, 1990).

The Last Dictator Standing video, more than the Julius Malema video, encouraged this emotional contagion in viewers. Not only did participants in the experiment state how their emotions changed after watching the video, they also commented on this in YouTube. A few of the comments by viewers referred to how sad the video made them feel, even though they know that the video portrays really bad people. While none of the comments from the Julius Malema video elicited such remarks. This suggests that the Last Dictator video facilitated this process of emotional contagion better than the Julius Malema video. Future research should look into how emotional contagion facilitates the sharing of content online.

Research regarding viral behavior, viral marketing and the spread of content online, in general, lacks theoretical depth. While there is a large body of knowledge from sociology and psychology that focuses on human emotions and emotional reactions, these seldom get incorporated into viral research. Authors often simply state that

emotions play a role (Dobele et al., 2007), or use disparate scales to measure and classify emotions (see for example Berger & Milkman, 2009 versus Nelson-Field et al., 2011). Some classify sadness as a "low arousal" emotion (Nelson-Field et al., 2011) while others classify it as a "high arousal" emotion (Berger & Milkman, 2009). Future research should attempt to better incorporate theories regarding emotion and the sharing of emotion within social networks. The social sharing of emotion (Rimé, 2007; Rimé et al., 1998; Rimé, Paez, Kanyangara, & Yzerbyt, 2011), theory regarding memes (Heath et al., 2001) or the Emotional Broadcaster Theory (Harber & Cohen, 2005) serve as good examples of theories that could contribute to the current understanding of viral behavior.

The difference between "forwarding" content and "liking" content as two different forms of viral behavior was interesting and warrants further investigation. Authors disagree about the role that valence plays in viral marketing: some suggest that positive content, in general, have more viral success (Eckler & Bolls, 2011), while others state that "going viral" is more about viewers' emotional-arousal, regardless of the valence of the content (Berger & Milkman, 2009; Nelson-Field et al., 2011). Our findings suggest that valence does play a role if respondents are simply required to "like" content, but not necessarily if they are asked to "forward" content. Could the differences in previous studies be accounted for by how viral behavior was measured? And what is the substantive difference between "liking" and "forwarding"? We suggest that simply "liking" content requires less commitment from viewers. While the content that viewers' "like" still gets shared with their social network, they do not, in a sense, take responsibility for originally posting the content. Also, "liking" could be seen as showing supportive behavior for the content that others have posted, where "forwarding" content requires more commitment from viewers. These assertions certainly call for further investigation.

## References

- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27(2), 184. doi:10.1177/0092070399272005
- Bal, A. S., Pitt, L., Berthon, P., & DesAutels, P. (2009). Caricatures, cartoons, spoofs and satires: political brands as butts. *Journal of Public Affairs*, 9(4), 229–237. doi:10.1002/pa.334
- Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behavior. *Administrative science quarterly*, 47(4), 644. doi:10.2307/3094912
- Berger, J., & Milkman, K. (2009). *What Makes Online Content Viral?* (SSRN Scholarly Paper No. ID 1528077). Rochester, NY: Social Science Research Network. Retrieved from <http://papers.ssrn.com/abstract=1528077>
- Blomström, R., Lind, E., & Persson, F. (2012). *Triggering Factors for Word-of-Mouth: A case study of Tipp-Ex's viral marketing campaign*. Retrieved from <http://hj.diva-portal.org/smash/record.jsf?pid=diva2:529823>
- Conway-Smith, E. (2011). Nando's pulls controversial "dictators" ad after Zimbabwe threats. *GlobalPost*. Online Newspaper. Retrieved March 13, 2013, from <http://www.globalpost.com/dispatches/globalpost-blogs/weird-wide-web/nandos-dictators-commercial-last-dictator-standing-ad-mugabe-chipangano-militants>
- Dobele, A., Lindgreen, A., Beverland, M., Vanhamme, J., & Van Wijk, R. (2007). Why pass on viral messages? Because they connect emotionally. *Business Horizons*, 50(4), 291–304. doi:10.1016/j.bushor.2007.01.004
- Eckler, P., & Bolls, P. (2011). Spreading the virus: Emotional tone of viral advertising and its effect on forwarding intentions and attitudes. *Journal of interactive advertising*, 11(2), 1.
- Golan, G. J., & Zaidner, L. (2008). Creative Strategies in Viral Advertising: An Application of Taylor's Six-Segment Message Strategy Wheel. *Journal of computer-mediated communication*, 13(4), 959. doi:10.1111/j.1083-6101.2008.00426.x
- Grofman, B. (1989). Richard Nixon as Pinocchio, Richard II, and Santa Claus: The Use of Allusion in Political Satire. *The Journal of Politics*, 51(1), 165–173. doi:10.2307/2131614
- Harber, K. D., & Cohen, D. J. (2005). The emotional broadcaster theory of social sharing. *Journal of language and social psychology*, 24(4), 382. doi:10.1177/0261927X05281426
- Hartley, R. (2009). ANC Youth League wants Julius Malema Nandos ad removed | The Wild Frontier. *The Sunday Times*. Retrieved March 10, 2013, from <http://blogs.timeslive.co.za/hartley/2009/04/21/anc-youth-league-wants-julius-malema-nandos-ad-removed/>

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional Contagion*. Cambridge University Press.

Heath, C., Bell, C., & Sternberg, E. (2001). Emotional selection in memes: the case of urban legends. *Journal of personality and social psychology*, 81(6), 1028. doi:10.1037/0022-3514.81.6.1028

Henke, L. L. (n.d.). Viral marketing and music videos: When shock tactics backfire. *Journal of Behavioural Studies in Business*. Retrieved from [www.aabri.com/manuscripts/121198.pdf](http://www.aabri.com/manuscripts/121198.pdf)

Izawa, M. (2010). *What makes viral videos viral? Roles of emotion, impression, utility, and social ties in online sharing behavior*. The Johns Hopkins University, Baltimore, MD. Retrieved from [advanced.jhu.edu/media/files/communication/Izawa-Thesis-Final.pdf](http://advanced.jhu.edu/media/files/communication/Izawa-Thesis-Final.pdf)

Lagger, C., Lux, M., & Marques, O. (2011). What makes people watch online videos: An exploratory study. *ACM Computers in Entertainment*, (May 7-12). doi:978-1-4503-0268-5/11/05

Leximancer. (2013). Leximancer: From Words to Meaning to Insight | home. Retrieved March 12, 2013, from <https://www.leximancer.com/>

Maclean, S. (2011). Last dictator standing: Mugabe playfights Gaddafi and giggles with Saddam in Nando's advert showing happier times for despot. *Mail Online*. Retrieved March 13, 2013, from <http://www.dailymail.co.uk/news/article-2066087/Last-dictator-standing-Mugabe-playfights-Gaddafi-giggles-Saddam-Nandos-advert-showing-happier-times-despot.html>

Malhotra, N. (2010). *Marketing Research* (6th ed.). USA: Prentice Hall.

Mascha, E. (2008). Political satire and hegemony: A case of "passive revolution" during Mussolini's ascendance to power 1919–1925. *Humor - International Journal of Humor Research*, 21(1), 69–98. doi:10.1515/HUMOR.2008.003

Nelson-Field, K., Riebe, E., & Newstead, K. (2011). To shock or inspire: Understanding which emotions drive video sharing on Facebook. In ANZMAC. Presented at the Annual Australia and New Zealand Marketing Academy Conference, Perth WA. Retrieved from [anzmac.org](http://anzmac.org)

News24. (2013). FNB apologises for controversial campaign. *News24*. Retrieved March 13, 2013, from <http://www.news24.com/SouthAfrica/Politics/FNB-apologises-for-controversial-campaign-20130125>

Pintado, I. (2009). *Connection Generation: How Connection Determines Our Place in Society and Business*. ConnectGen Pty Limited.

Porter, L. (2006). From subservient chickens to brawny men: A comparison of viral advertising to television advertising. *Journal of interactive advertising*, 6(2), 30.

- Reyneke, M. (2011). In the lap of luxury: Consumer conversation concerning online advertisements of luxury brands. *South African Journal of Business Management*, 42(2), 27–35.
- Rimé, B. (2007). The social sharing of emotion as an interface between individual and collective processes in the construction of emotional climates. *Journal of social issues*, 63(2), 307. doi:10.1111/j.1540-4560.2007.00510.x
- Rimé, Bernard, Finkenauer, C., Luminet, O., Zech, E., & Philippot, P. (1998). Social sharing of emotion: New evidence and new questions. *European review of social psychology*, 9(1), 145. doi:10.1080/14792779843000072
- Rimé, Bernard, Paez, D., Kanyangara, P., & Yzerbyt, V. (2011). The Social Sharing of Emotions in Interpersonal and in Collective Situations: Common Psychosocial Consequences. In I. Nyklíček, A. Vingerhoets, & M. Zeelenberg (Eds.), *Emotion Regulation and Well-Being* (pp. 147–163). New York, NY: Springer New York. Retrieved from [http://www.springerlink.com/index/10.1007/978-1-4419-6953-8\\_9](http://www.springerlink.com/index/10.1007/978-1-4419-6953-8_9)
- Rodic, N., & Koivisto, E. (2012). Best practices in viral marketing. Media+Mark. Retrieved from <http://www.aaltomediamark.org/wp-content/uploads/2012/02/Rodic-N.-2012-Best-Practices-in-Viral-Marketing.pdf>
- Russell, J. A. (1980). A circumplex model of affect. *Journal of personality and social psychology*, 39(6), 1161. doi:10.1037/h0077714
- Schoenewolf, G. (1990). Emotional contagion: Behavioral induction in individuals and groups. *Modern Psychoanalysis*, 15(1), 49–61.
- Stockwell, P., Colomb, R. M., Smith, A. E., & Wiles, J. (2009). Use of an automatic content analysis tool: A technique for seeing both local and global scope. *International Journal of Human-Computer Studies*, 67(5), 424–436. doi:10.1016/j.ijhcs.2008.12.001
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, 54(6), 1063. doi:10.1037/0022-3514.54.6.1063
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological bulletin*, 98(2), 219. doi:10.1037/0033-2909.98.2.219
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business Research Methods* (9th ed.). Canada: South-Western Cengage.

#### **2.4 PAPER 4: SHARING IS CARING: A MODEL FOR THE SPREAD OF CONTENT ONLINE**

Paper was submitted to Marketing Theory.

## **SHARING IS CARING: A MODEL FOR THE SPREAD OF CONTENT ONLINE**

### **Elsamari Botha\***

Industrial Marketing, INDEK,  
KTH Royal Institute of Technology, Stockholm, Sweden  
Email: [elsamari.botha@uct.ac.za](mailto:elsamari.botha@uct.ac.za); Tel: +27(0) 83 679 7102

### **Pierre Berthon**

McCallum School of Business  
Bentley University  
Waltham, 02452, USA  
Email: [PBerthon@Bentley.edu](mailto:PBerthon@Bentley.edu)

### **Raeesh Chohan**

Marketing, School of Management Studies, University of Cape Town,  
Cape Town, South Africa

## **SHARING IS CARING: A MODEL FOR THE SPREAD OF CONTENT ONLINE**

Viral marketing is one of the key trends in marketing at the moment (Ferguson, 2008). Consumers are spending more time online, as the integration between online and offline activity grows (Kozinets, 2010). As social media burgeon, and marketing budgets shrink, marketers are increasingly forced to take their campaigns online. Viral marketing is defined as “eWOM [electronic word-of-mouth] whereby some form of marketing message related to a company, brand or product is transmitted in an exponentially growing way – often through the use of social media” (Kaplan & Haenlein, 2011), and has become an increasingly popular tool for marketers to build their brands. However, very little is still known about what contributes to viral success (Guadagno et al., 2013; Nelson-Field et al., 2011) and viral marketing research is still at its early stages (Cruz & Fill, 2008). Watts et al. (2007) argue that it is still very difficult for marketers, if not impossible, to predict viral success. Therefore, there is still much to learn about the drivers of viral content.

In the past decade, an increasing amount of research has focused on explaining why online content goes viral. However, there are four major limitations to current viral marketing research (Botha, Berthon, & Reyneke, n.d.):

- (1) As the number of studies have burgeoned, so too have the reasons for why content spreads online. Authors have espoused many different, and often contradictory, justifications of what contributes to viral success.
- (2) Current viral marketing research often looks at contributing factors in isolation. Most studies typically look at one or at most two factors that contribute to virality, for example specific emotions (see for example Berger & Milkman, 2009; Blomström et al., 2012; Chakrabarti & Berthon, 2012) or valence (Eckler & Bolls, 2011; Nelson-Field et al., 2011), social factors (Laggar et al., 2011), message involvement and personalization (Blomström et al., 2012) or content specific attributes (Henke, n.d.; Nelson-Field et al., 2011; Teixeira, 2012).
- (3) Regardless of the reasons proffered, very little empirical evidence exists to support these claims (Guadagno et al., 2013; Nelson-Field et al., 2011) and “almost nothing” is known about the motivations, attitudes and behaviours of people that send along content (Phelps et al., 2004), further supporting the call for research on what makes content viral.
- (4) A final limitation of current viral marketing research is that there is no complete model or framework under which to investigate the drivers of viral content.

This study aims to address these limitations by taking a macro perspective look at the possible drivers of viral content, and aims to propose a model for the spread of content online. An exploratory approach is used to identify the key drivers of the social sharing of content online.

The paper starts by briefly reviewing viral marketing literature and introducing a framework with which the drivers of viral content can be investigated. Thereafter, three studies are used to determine these drivers: First, semi-structured interviews are conducted. Two interview studies are used where each focuses on different viral content and a different target population. Then, existing data is used to test the relationships proposed in the first two studies. A model for the spread of content online is proposed, and a brief conclusion to the study follows. Finally, some limitations of the study and future research directions are discussed.

## **EXTERNAL, INTRAPERSONAL AND INTERPERSONAL DRIVERS OF VIRAL CONTENT**

Botha, Berthon and Reyneke (n.d.) in their review of viral marketing literature, classified all research that concerned itself with the factors that contribute to the spread of content online, into either *external drivers*, *intrapersonal drivers* and *interpersonal drivers*. *Intrapersonal drivers* refer to studies that focus on the personal reactions, motivations and individual factors that might influence the spread of content online. These often focus on the emotional reaction that viral content elicits, as well as the impression that it leaves on viewers (Izawa, 2010). These authors argue that the emotion elicited by viral content drives its online spread (Blomström et al., 2012; Dobeles et al., 2007; Ho & Dempsey, 2010; Lee, 2012; Phelps et al., 2004), and they often reference the seminal work by Berger and Milkman (2011).

The role that emotion plays in the spread of content online is a particular point of contention in viral marketing literature. Much research in viral marketing focuses on whether positive or negative content spreads faster on online social networks. While the majority found that positive content spreads faster, or is more prevalent than negative content (Bardzell et al., 2008; Berger & Milkman, 2011; Eckler & Bolles, 2011; Jansen et al., 2009; Wu et al., 2011), some found that negative comments were more pervasive (Guerini et al., 2011). Others still argue that there is no difference in the spread of positive as opposed to negative content online (Nelson-Field et al., 2011). Other emotion-related factors that have been shown to possibly influence viewers' emotional reaction to viral content include the *intensity* with which they felt the emotion (Guadagno et al., n.d.), the *arousal* of the specific emotion involved (Berger & Milkman, 2011; Berger, 2011b; Elliott, 2013; Guadagno et al., 2013). While emotion appears to play a central role in the spread of emotion online, there still appears to be much debate about what specifically that role is.

*Social or interpersonal drivers*, on the other hand, focus on the social network aspect of viral marketing. These studies typically look at social and community-oriented justifications for why content gets spread online. They argue that passing along content online builds social networks and social capital, it is important for society, and that people anticipate that others would feel happy and grateful to them for sharing viral content (Izawa, 2010). Ho and Dempsey (2010), for example, found that internet

users' motivation to share content online, forms part of their need to: (1) be part of a group, (2) be individualistic, (3) be altruistic, and (4) grow personally. These studies therefore look at the interpersonal drivers and social motivations for the spread of viral content (Botha et al., n.d.).

However, there were many diverse reasons proffered by viral marketing academics that did not fit into these two categories. Most of these, however, focused on factors outside of the sphere of control of the consumer, for example the content or the quality of the message itself, the medium, or the network influence of the person sending along the content (Botha et al., n.d.). These were referred to as *external drivers* of viral content. The majority of research in this category, however, focused on content-specific characteristics of viral content. And authors like Guerini et al. (2011) espouse that "virality is a phenomenon strictly connected to the nature of the content being spread", rather than the influencers who spread it.

The review (Botha et al., n.d.), and the three categories identified by the review, provided a comprehensive framework for the interpretation of both the qualitative and quantitative findings of this study. The following main research question for this paper was consequently developed:

*What are the external, intrapersonal and interpersonal drivers of viral success?*

Two research methods, in the form of a two-stage design, are used to investigate this research question. First, semi-structured interviews are used to take an exploratory look at these drivers. This is followed by the use of existing data from a social media aggregator website.

## **STUDY 1: AN IN-DEPTH LOOK AT THE MOTIVATIONS TO SPREAD CONTENT ONLINE**

The first study (study 1.1) focused only on young adults, as the key audience involved in the spread of online videos (Camarero & San José, 2011), and in line with viral marketing research tradition (Abedniya & Mahmoudi, 2010; Camarero & San José, 2011; Chu, 2011; Ho & Dempsey, 2010; C.-C. Huang et al., 2009; J. Huang et al., 2012). The findings from this study suggested that older internet users might have different motivations to share content online, and a subsequent set of interviews were conducted. The second study (study 1.2) used quota sampling to target participants from different age groups, to see if the findings from study 1.1 hold. To increase the generalizability of the findings, two different viral videos were selected as the stimuli in the interviews. The following sections discuss each of these studies, their methodologies and findings in greater depth. Leximancer ([www.leximancer.com](http://www.leximancer.com)) was used to analyse the comments from each set of interviews. Leximancer allows for a visual depiction of complex textual data allowing for more effective and accurate interpretation (Botha & Reyneke, 2013; Reyneke, 2011). Using Leximancer to analyse

qualitative data provides researchers with a more structured approach to the interpretation of qualitative data, and reduces errors introduced by inter-rater reliability and researcher bias.

### **STUDY 1.1: NUMA NUMA AND STAR WARS ACCORDING TO A 3 YEAR OLD**

This study focused on young adults as the most appropriate target population for these studies: they demonstrate the highest rates of internet adoption and the highest penetration of viral marketing (Camarero & San José, 2011; Purcell, 2010). Furthermore, young adults engage in more “mediated social interactions” and is consequently the ideal targets for viral campaigns (Chu, 2011).

#### **Methodology**

Two videos were selected based on given criteria, and forty in-depth interviews were conducted. Flick (2009) argues that when a stimulus (e.g. a video) is introduced in an interview, a *focused* interview is being conducted. Focused interviews were developed for media research. After a uniform stimulus (e.g. video) is presented to the interviewee, its impact on the interviewee is studied (Flick, 2009). Care was taken to meet all these criteria for focused interviews proposed by Flick (2008, 2009). The interview schedule focused on first understanding participants general video-sharing behavior, where after their specific responses to the videos, their emotional reactions to the videos, and the likelihood (and reasons) of them sharing the videos with their social networks. For the analysis, all the responses related to the sharing of content online were collated.

Thirty-nine respondents took part in the interview, and after an initial discussion of their video sharing behavior, they were shown two videos that have gone viral: Numa Numa (<http://www.youtube.com/watch?v=6Oog9gwKh1o>, over 52 million views) and Star Wars according to a 3 year old (<http://www.youtube.com/watch?v=EBM854BTGL0>, over 21.7 million views). To control for the influence that a brand association could have on participants' responses, consumer-generated content was used. Both videos were home-made and of relatively the same quality. These videos both elicited positive emotion and attempted to make viewers laugh. They both received very high views on YouTube. And finally, they were videos that had gone viral relatively recently.

## Findings

The findings section of study 1.1 is divided into two parts: First, themes were identified in participants' responses to why they would share viral videos in general. The framework identified in the literature review (external, intrapersonal, interpersonal drivers) was used to structure the findings. We found that participants did give intrapersonal and social motivations for sharing the content, and they also spoke about other factors that might contribute towards them passing on viral content (then classified as external drivers). Thereafter, the comments participants made regarding the general sharing of viral videos, as well as whether they would share the videos presented to them is analysed using Leximancer.

- **External drivers**

Participants' comments that fit into the external drivers category centred around the content of the video, the popularity of the video, or whether they supported a cause through posting the video. With regards to the *content* of the video, participants often mentioned the nature of the content itself in relation to whether they would share it with others or not. One participant mentioned that, *"If the videos are humorous and light-hearted, I believe they have a better chance of going viral. We all enjoy a good laugh every now and again. In today's stressful times, a funny video is something that will be spread very rapidly."* Another commented that *"it comes down to being entertained. I also think it comes down to sharing an experience with others."* Others commented that they go and watch specific content (for example music videos), and go back to Youtube over and over again to watch the same video. Therefore, participants felt the content itself does influence its spread online.

Many also commented that the popularity (both online and offline) of the video prompted them to go and search for it and watch it. Friends and family greatly influenced which content was being watched, and a number of participants commented about this:

*"I actually heard people talking about it in lectures and then one of my friends showed it to me."*

*"I think it has a lot to do with word of mouth, soon as one person hears about it everyone gets interested, I think that is the main reason"*

*"I generally watch videos on YouTube after hearing about it from other people."*

One participant felt so strongly about this, that when asked what medium would most likely convince him to watch a video online, he commented that *"If one of my friends told me about it"*.

The final external-related driver of viral content concerned whether participants felt that they were supporting a cause by watching the video and posting the video. We

distinguished cause-driven videos from content-specific videos, because cause-driven content was linked to a broader picture or an outside cause. Content-specific factors, on the other hand, focus on the “here and now” of the video, its quality, creativity etc. The participants that supported causes through social media also mentioned the emotional reaction that they had to the content of the video, but the main driver was the cause behind the video itself. For example, one participant mentioned the Kony video: *“the video is for a good cause, it’s promoting something they believe in; [I’d post the Kony video for example] all over Facebook”*. Another mentioned, when discussing posting a video regarding a particular cause that she had been involved in, that she *“posted it on my Facebook wall. It actually was an inspiring video”*. Cause-related content was often discussed as part of a broader story that was unfolding outside social media, and this broader story also motivated to watch the video in the first place.

While these external factors prompted participants to watch particular videos, it seemed that their emotional reaction to the content was key with regards to whether they would share the content or not. The intrapersonal drivers of viral content section focuses on how these emotional reactions could possibly drive the sharing of content online.

- **Intrapersonal drivers**

Participants had a lot to say about how viral content made them feel. The key themes identified in these comments focused either on participants’ emotional reaction to the comment, how they want to share those emotions with others, the intensity of the emotional reaction, the valence of the emotion or the relevance of the content, and how that influenced whether they would share the content or not.

A key theme in participants’ comments was the *emotional reaction* that they had to online content, and how that influenced whether they would pass it on to their social networks. One participant summarized it succinctly:

*“Um, well really I think that anything that shocks you or causes you to go “wow” or “ew” or “aw”. I don’t think that they subject matter is very specific, I think that it’s more about the emotion that the video makes you feel is what makes it go viral. I mean no one is going to forward something that doesn’t make any psychological or emotional impact on them. Like paint drying. It would have to be an extraordinary case of paint drying for people to want to send it to their friends or for it go viral and get out of hand.”*

Participants also commented about how content made them happy and feel good about themselves, and how they wanted others to experience the same emotion. Later, when probed regarding forwarding the specific videos shown, participants often used emotional motivations to justify whether they would forward content or not. For

example, with the Star Wars according to a 3 year old video, many commented that the video made them "happy". For the Numa Numa video however, those who did not want to send the video commented on how "sad" the video made them feel, and how "sorry" they were for the guy in the video.

A second key theme was consequently *sharing these emotions* that they felt when watching the video. When asked why she thinks people share viral videos, one participant commented that is was *"because they want to share with them the emotions that they felt watching that video and share the moment with that person who they cannot necessarily see when they watch the video"*. Another said that she *"would probably want to make them [others in her social network] laugh too. So I would probably want to share the same emotions I felt when I watched the videos"*. Another stated that she thought other people shared viral videos *"So that they can share their enjoyment with other people"*. Participants' emotional reaction to the video consequently prompted social action.

Some participants also mentioned that the *intensity* of the emotion that they felt when watching the video, influenced their forwarding behaviour: *"Something that stirs up emotion; creates a lot of reaction...that doesn't make sense... something that brings people to react."* Another participant summarized this theme by stating that *"I think that it's the reaction that the video draws out of people that makes it go viral. The more that the video makes you feel – positive or negative – the more likely a person would be to forward that video"*. Also, when talking about previous videos that they forwarded, participants also often overstated their reaction to the video, for example stating that it was the "funniest" or "saddest" video that they had ever seen. Not only did participants remember videos that elicited a more intense emotional response, but it also seemed to increase the likelihood of them sharing the content with others.

The *valence* (positive or negative emotional reaction) of their emotional reactions also seemed to influence whether participants would forward the content or not. While only positive videos were shown to participants, some remembered and commented on negative emotion-eliciting content. One participant told a story about viral videos in general: *"Well there are just ones that are disturbing, well ones that I find disturbing. But I guess that's why they go viral – because they are disturbing.... So I guess even negative things in videos can cause them to go viral."*

Finally, the *relevance* of the video was mentioned, and how being a fan of particular content, a brand or a franchise, made them (1) watch the video in the first place, and (2) forward that video to their friends. One participant commented that *"If your friends and family know what you enjoy viewing, they will send you the relevant videos"*. One participant summarized the importance of relevance by stating by stating what they believed viral videos were all about: *"I believe it is all about trust, understanding and relevance. If you friends and family know what you enjoy viewing, thy will send you the relevant videos"*. Botha and Reyneke (2013) talk about the interaction between content and emotion, and how the relevance of the content influences people's emotional reaction to it. Study 1.1 also found that participants

often commented on how they relate to the content, or how they would share the content with friends or family with similar interests.

However, all these comments and themes regarding participants' emotional reaction to the content, was not separated from their social networks. When all intrapersonal motivations were discussed, there was always a social justification for sharing. The following comment from a participant summarizes this interaction between the content, the emotion elicited, and its link to their social networks:

*"I think that we hope that our friends will share the same feelings toward the video as we did and thus we will be credited for showing them the video which they will hopefully pass on. The social web depends heavily on this inherent need to spread content that we find online allowing our friends to see what we like and maybe share the passion."*

The following section deals exclusively with these social motivations for sharing content online.

- **Interpersonal drivers**

Participants often used interpersonal motivations for sharing content online. These could be divided into the following key themes: First, participants watched and shared viral content to *"fit in"*. Second, they shared content to improve their *status* in their online social network. Third, they seemed to share the content out of *altruistic* motivations. This seemed to often be linked to cause-related content. And finally, they saw the sharing of content online as a form of *gift giving*.

Participants often expressed the view that online video sharing was part of today's culture and society, and that they themselves had to do this to *fit in* with the norm. The following comments by participants were particularly telling in this regard:

*"Sharing videos just seems to be the norm in today's society"*

*"I think people liking sharing things with other, it just in our nature."*

*"Also people talk about it, so you watch it also to be able to relate with others."*

*"I think it's a combination of this new information age where people are constantly wanting to share experiences online. There's a culture of being up to date with the latest media online and also the development of online celebrities."*

*"After watching the video I was also able to take part in conversations about the topic."*

It therefore seemed like participants felt a kind of peer pressure to watch, be up to date with and be involved in the viral video sharing community. This could partly be caused by the target population of study 1.1. Young adults were targeted, and the

majority of participants were students. They often commented that they heard about a video in class, and did not want to feel excluded from the conversation, or "stupid" for not knowing what was going on.

A second social driver for the sharing of content online was participants' *status*. It seemed that a particular status was attached to being the first one to discover a good video, or a video that had gone viral recently: *"And sometimes, I am one of the first people to have seen it, so I share it or make it a Facebook status so I can kind of look cool you know."* Another participant commented *"I think people want the credit of being the first person to discover a certain video."* Participants also stated that, being the first to post a good video to a particular online social network provides people with "recognition" for finding the video.

Interestingly, participants also only shared videos that fit into what they thought their reputation was in the social network. This became evident when probing into the motivations to share the particular videos shown to them. Even if two participants felt exactly the same emotion when watching the video, and this emotional response to the content should in theory prompt them to share the content, one might not share the video because it did not fit into what they believed their online reputation was. One participant had an intense and positive emotional experience to the Star Wars according to a 3 year old video. However, when asked whether he would share the video online, he said *"No, I think they [my friends] would find it weird if I sent them a video with little girl talking about star wars"*. Therefore, even though an emotional reaction to the video was a key motivation for sharing content online, social considerations was made first before the video was sent to online social networks.

Third, some *altruistic* and cause-related social motivations were observed from participants. Some participants commented that their reasons for sharing online videos were to support causes:

*"Um, I think... sometimes I share links that like a video that has meaning. Or that I really think people should watch and actually makes a statement."*

*"I don't usually share videos on my Facebook wall but Kony 2012 was an exception. It really touched my heart and I thought it would be good for people to know what is actually going on."*

In the second quote, it seemed that the participant changed her usual online behaviour to support this cause. Others also spoke about never sharing content online, except if it was for example for their church or their religion.

Finally, it appeared that participants saw the sharing of viral content as a form of *gift giving*. Many participants commented that sharing content with your online social networks was *"Like giving a gift - just a very small version of it."* Or that they *"think that it is almost like giving a virtual gift because you know that your friends and family will get enjoyment from it."* The word "gift" was often explicitly used, but participants

also mentioned forwarding content to specific people who they thought would “appreciate it”, or who they thought “would enjoy it”.

- **Sharing content**

It was also interesting to observe that participants did not see “posting”, “liking” or “forwarding” content on online social networks as their only route to sharing the content socially. Many said that they would not necessarily share the content online, but would tell their friends and family about it, or would even show them the content themselves. For example *“No, I didn’t but I did speak about it amongst close friends and tell them how good it was.”*

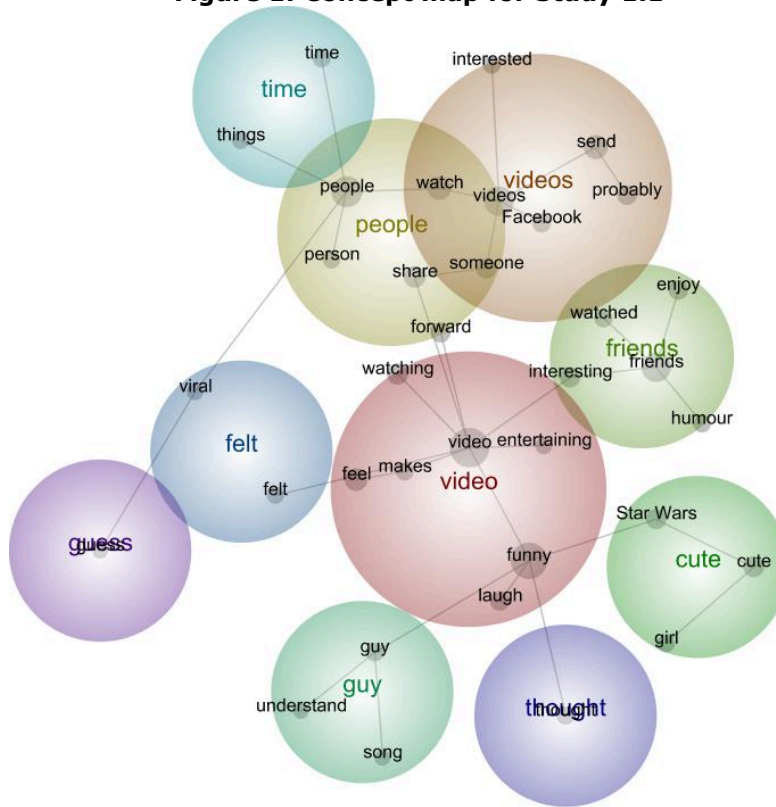
This was often the case when status motivations were used to explain why some content would be posted and others not. This corresponds with Schau and Gilly’s (2003) assertion that “we are what we post”. They argue that people portray an ideal version of themselves online, and control what they put online to fit in with the reputation that they want to have.

Previous viral marketing research limits the sharing of content to online contexts, in other words, if people do not state that they would share the content on social media, they get classified as “not sharing the content”. However, these findings suggest that this approach might not provide marketers with a complete picture of viral behaviour, and that more complex online and offline processes driver the sharing of online content. Next the Leximancer analysis is used to visually depict the key themes in the comments.

### **Leximancer analysis of Study 1.1**

Participants’ comments regarding why they would share videos online, why they think videos are shared online by other people, and whether and why they would share the videos shown to them, was used in the Leximancer analysis. The analysis results in a concept map (see Figure 1), a thematic summary and it ranks the concepts identified in the analysis.

**Figure 1: Concept map for Study 1.1**



The key themes that emerged from the analysis were video (100% connectivity), people (58%), friends (48%), cute (24%), guy (12%), time (11%), felt (9%), thought (6%) and guess (3%). In fact, two themes for the video itself was detected, the one called "video" and the other "videos". The video theme was drawn from comments made about the video itself, and the contents of the video, for example that it was funny and entertaining, or inspiring. This theme was key in the Leximancer analysis because of its positioning (centre of the map), size (larger theme than other themes), as well as its colour (where warmer colours are more important than cold colours like blue and purple). A key finding was that the theme "video" was 100% connected to all other themes, including the emotions and people mentioned. Each theme has specific concepts associated with it, and the words "video, funny, feel, watching, laugh" were constantly mentioned when talking about the videos, and whether respondents would share it or not. It seems that the video itself, i.e. the content of the video plays a central role in its online spread, and appears to be the starting point of the viral process.

The next theme was "people" and the concepts associated with this theme were "people, watch, share and forward". Comments that were picked up in this theme typically focused on what participants typically forwarded and shared with their friends. The "people" theme was the second largest and most important theme and was directly linked the "video" theme. The content of the video was directly linked to participants sharing it with others. The next theme, "friends" had key concepts associated with content including "interesting" and "enjoy". The main concepts identified in these three themes centred around the video that was "entertaining", humourous ("humor") or "interesting", and because of this, "people" would share this content with others, or they themselves would share the content with "friends". The "videos" theme reiterated this finding where participants indicated that they would "probably" "send" the video to their friends via "Facebook".

The "cute" theme showed that many participants commented on how cute the child in the Star Wars according to a 3 year old was, as "cute", "girl" and "Star Wars" were the two only concepts in this theme. The "guy" theme, on the other hand, referred to the Numa Numa video, and participants often commented either about the actual "song" that he sang, or that they did not "understand" what he was doing. Both these themes, however, were directly linked to the concepts "funny" and "laugh", which in turn was connected to the "thought" theme. This theme emerged because many participants, when shown the two videos, commented that they "thought the video was funny". These three themes, therefore, in essence discuss content related factors that drive sharing.

The "time" theme can also be linked to the social motivations for sharing content, as this theme emerged from participants' response about not wasting other people's time. It is directly linked to the "people" theme and shows that, even though participants could have had an emotional reaction to the video, they did not want to waste other people's time by forwarding it to them.

The "felt" theme emerged from comments made by participants regarding how they felt after watching the video. Interestingly, the concept of "viral" emerged in this theme as many participants commented that viral videos depend on how the video itself made you feel. Hence this theme was also directly linked both the "video" theme and the "people" themes. Finally, the "guess" theme emerged from participants' use of language when talking about why they think content goes viral. They often said "I guess ..." and this theme is directly linked to the "viral" concept.

The Leximancer analysis provides support for the suggestion that content-related factors, emotion and social factors are the key drivers for the sharing of content online. This analysis showed that the video itself (content) was central to why people would share content online, but that this theme was also directly linked to both the social (people, friends, share, forward) and emotional (felt) themes that emerged from participants' comments.

## **STUDY 1.2: AUDI VS. VOLKSWAGEN**

Study 1.1 revealed that some of the themes identified in participants responses could be target population specific. Specifically, we wondered if the same *social drivers* (specifically “status” and the “need to fit in”) would emerge if a broader target audience was selected. While the amount of user-generated content on Youtube is constantly growing, it only forms part of the type of content that gets shared on this medium. While this is a difficult number to determine, the monthly payment that Youtube makes in music licensing fees gives an indication of the percentage of user-generated content on this site. Of the monthly payments YouTube makes in music-licensing fees, a total between one-third and one-half is currently generated from user-contributed videos (Bruno, 2011). Participants also commented about watching ads and music videos that their friends spoke about, or that they saw on other mediums. Therefore, in order to increase the generalizability of the study, and to make sure that the findings above are reflected in other contexts, corporate or branded content was used in this study.

Finally, as relevance emerged as a key theme in Study 1.1, and gender and age were considered to be key influencing factors in determining the relevance of particular content, this study also controlled for gender. Previous research has shown that there exists a difference between the sharing behaviour of males and females (Yang et al., 2010). At the same time, the gender distribution of the social media community is slightly skewed towards females (60% female vs. 40% male) (Pingdom, 2012; Purcell, 2010). Because the gender distribution is not equal, and because previous research showed that gender differences exist in the viral marketing context, it was important to get a representative sample in order to control for the possible influence that gender could have on people’s likelihood to pass along content online.

In summary, the second study used different videos from the first, targeted both males and females and focused on a broader target population (discussed in greater depth in the following section) to make sure that the findings from Study 1.1 remain constant.

## **Methodology**

The previous study looked at only students and young adults. This study looked at a wider target population to see if age was a possible influencing factor in the spread of content online. Quota sampling was used where quotas for age and gender were introduced. The ratios introduced aimed to target a sample representative of the larger internet community (Purcell, 2010). Saturation was reached at 20 participants and the quota was met (40% between 15 and 24; 30% between 25; 34% between 35 and 49; and 10% over 50 years old); and gender (60% females and 40% males).

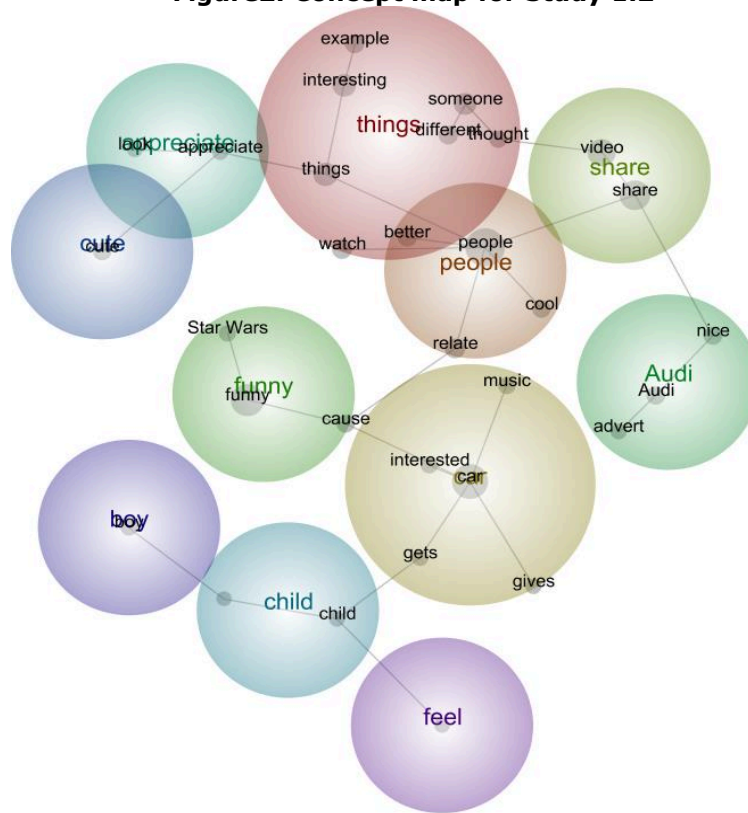
The videos were selected based on similar criteria as Study 1.1. For this study, however, branded content was used in the form of ads that went viral on Youtube. Both ads were from car manufacturers, and both were geared towards eliciting positive emotions towards the brand. The first video was Audi's "Prom" campaign (<http://www.youtube.com/watch?v=ANhmS6QLd5Q>, over 10.7 million views). The second video was the Volkswagen "The Force" campaign (<http://www.youtube.com/watch?v=R55e-uHQna0>, over 58.5 million views). While the Audi video had significantly fewer views than the VW video, the researchers felt that it was more important to control for equivocal content. And 10.7 million views could also be deemed a successful viral advertisement. A pre-test was used to determine whether the videos elicited positive or negative emotions. The videos elicited both positive and negative emotions from participants. Again, comments regarding why content would be shared online were collated and analysed using Leximancer.

## Findings

The same approach that was taken for Study 1.1 was used here, where participants' comments were divided into external, intrapersonal and interpersonal motivations. While evidence was found for all three these, this group of respondents was much more focused on the actual content of the videos themselves and other videos that they had watched, than the previous group. This was most evident in the Leximancer analysis, which is consequently discussed first (Figure).

The main themes that emerged from the semantic summary were "things" (100% connectivity), "people" (78%), "car" (68%), "share" (55%), "funny" (52%), "Audi" (29%), "appreciate" (12%), "child" (12%), "cute" (10%), "boy" (8%) and "feel" (5%). Content-related factors therefore contributed to the majority of themes identified, followed by social references (e.g. people and share) and feelings ("feel") emerged on the periphery and had the least connectivity with other themes.

**Figure2: Concept map for Study 1.2**



The “things” theme had the most connectivity to other themes and the concepts of “things, interesting, someone, watch, different, and example” emerged in this theme. The “things” theme talks about the “things” that people like to watch online. Already, a difference in language could be observed from the previous group, where young adults used the correct terminology like “videos” and “tweets”. Regardless of the language difference, however, the theme focused on similar concepts than the “videos” theme in the previous analysis: Participants commented that they liked to watch “interesting” videos, or videos that were “different”.

The “things” theme was directly linked to the “appreciate”, “people” and “share” themes. These themes are interconnected and all talk about sharing relevant and interesting content with those who would appreciate it. One quote epitomizes the trend in these two comments: *“You need to ask the question of who they share it with, they obviously share it with people who share the same interests as themselves.”* And *“People generally share the video if it’s something that interests them.”* Participants also go on to talk about what specific interests they have in online content. It appeared that older participants used video sharing websites like Youtube

for targeted activity (for example searching for educational content), where younger participants were open to more diverse content, and video sharing was part of their daily lives.

The "Audi" theme was connected to the "share" theme, as many participants commented that they like Audis, or that they would share the ad with their friends who either owned or liked Audis. This theme, as well as the "car" and "funny" themes reiterated the focus of participants on the actual content of the videos. Similarly, the "boy" and "child" themes emerged from participants talking about the boy in the "The Force: Volkswagen" ad. Finally, participants often mentioned an emotional reaction to the content because the "child" or boy was used in the video, hence this key theme emerged.

While the external and content-related comments dominated the analysis, intrapersonal and interpersonal drivers of viral content still emerged when looking at the comments made by participants.

- **External drivers**

Popularity and cause-driven were key factors that motivated participants to watch online content. With regards to *popularity*, participants also mentioned that friends often directed them to content: *"I don't really watch unless someone takes me to YouTube and shows it to me there. I don't click on it."* Interestingly, another dimension to popularity was mentioned by these participants. While participants from Study 1.1 mainly spoke about learning about viral content from friends and family, participants from study 1.2 also refer to how the online popularity of videos prompt them to watch them:

*"When it has lots of likes or comments then you want to know what the video is about. I click on it and if it's interesting then obviously I want to see similar videos like that."*

*"Sometimes the comments under the link or how many people like it, or if it's like a band that I like or someone that I know, then I'd watch it."*

One participant combined both of these and answered that he watches online videos *"If it's gone viral and people are speaking about it I also wanna[sic] check it out for the social commentary aspect and staying informed. If it has lots of views then you almost think that it must have something interesting going on."*

Many participants also mentioned watching videos for a particular *cause*, or passing along content that supported a particular cause. In particular, religion-related content was often mentioned. One participant was asked why he would forward religious content online, and he answered: *"Because it's inspirational and I am Muslim so I would rather send that out. It's spiritual and I love that. I do love the funnies as well"*

*but they mustn't be where people can't identify with it. Sometimes you need to laugh.*" This linked to both the relevance and content drivers identified in Study 1.1.

Finally, participants made many comments about the actual *content* that they like to watch online, including music videos and *"Ah, lots of things, amusing adverts, music videos, opinions, political commentary, commentary or entertainment, ya[sic] basically those kind of videos"*. Participants reiterated that they wanted to be entertained, and seemed to have a particular affinity for funny or humorous videos. They also used video sharing to stay abreast of current issues, as well as for educational purposes.

The Leximancer analysis also showed that content-specific factors were the key discussion points for participants. Botha and Reyneke (2013) provide one possible explanation for this: In content that is specific in its focus (like the two videos used), people's focus shift from their emotional responses to the content itself. Only after they have established that the content is relevant to themselves and their social networks, do they focus their attention on the emotion that the content elicits. Because of this shift in focus, they are polarized in their opinions as to whether to pass along the content online, much more than they would have been if the content had been "universally relevant" (for example about baby or animal behaviour in general) (Botha & Reyneke, 2013).

- **Intrapersonal drivers**

Where the previous group of respondents spoke much more about how the emotions elicited by the content influenced whether they would share it or not, this group of participants focused on the content itself. This does not mean, however, that intrapersonal drivers were not mentioned. They also spoke about their *emotional reaction* to viral content, for example one participant mentioned that they watch videos online because *"They make you laugh. They are feel-good and light-hearted – everybody likes to feel good. Who likes to feel bad?"*. And when asked why they would share either one of the videos shown, two respondents used emotion as their main driver for sharing content online:

*"It just found it light-hearted and it made me laugh."*

*"Makes me feel good. Good way to de-stress."*

Similar to Study 1.1, participants used these emotional reactions to explain why they would share the video with others: One participant mentioned that the video made them feel *"Happy because it makes other people laugh, or at least I hope someone else will laugh"*.

While the *intensity* of their emotional reaction was not mentioned, however the *valence* and *relevance* of the content was. Some participants commented that they

would only share positive videos that made others feel good as illustrated in some of the comments above. While another participant indicated that he watches both positive and negative content online: *"Sometimes funny, sometimes sad, but I like to know everything."* Relevance was a key influencing factor in whether viral content was passed on to social networks (as shown in the Leximancer analysis above) and was illustrated by comments like:

*A video which is of interest to me which I think can be of interest to others.*

Finally, interpersonal drivers were also identified in the comments.

- **Interpersonal drivers**

While the social aspect of video sharing was prominent in the Leximancer analysis, participants did not mention the finer nuances of why they share content online; at least not as readily as participants in Study 1.1. As expected, participants did not mention the need to *fit in*, and only peripheral *status* mentions were made, for example that *"It's nice to know what is trending."* And that they liked being knowledgeable in conversations with others. However, they did see sharing a video with people for whom the content was relevant as a form of *gift giving* (even though the word was not explicitly used). This was observed through comments about making others feel better by sending them inspirational videos, or videos that would make them feel better.

One social driver identified in Study 1.1, however, was strongly observed in Study 1.2: That of sharing because of *altruistic* reasons. For example, those participants who indicated that they watched religious content online, often indicated that they would share such religious content with others because of the cause. But even those who did not watch religious content, often commented on sharing online content for a good cause:

*"If I thought something was clever then I thought it would interest them. I like to share things with people because it's a good thing to do and it's a nice habit. Sharing is caring."*

- **Sharing content**

Similar to Study 1.1, sharing content was not limited to online sharing. Some participants even indicated that they only share content offline: *"If I see a video I might tell my sisters to see it. I don't share it on Facebook. I don't really use Facebook. I don't share it on social networks or anything."* Sharing content with others, therefore, was not limited to online sharing. And sharing content with others, in turn, increased the popularity of the content (a key driver in both Study 1.1 and

Study 1.2). The greater the popularity of the video, the more participants wanted to watch it, and thus a social propagation chain was reinforced.

### **Summary of Findings from Study 1.1 and 1.2**

The findings from study 1.1 and study 1.2 suggest that the following external, intrapersonal and internal drivers influence the spread of content online:

- External drivers
  - The content itself, whether it be creative, innovative, entertaining, funny, or for a cause.
  - The popularity of the content. The popularity of the content is measured by both the number of hits, as well as whether participants heard about the content from friends or family (i.e. through WOM).
- Intrapersonal drivers
  - The emotional reaction that the content elicits seems to influence the likelihood of somebody passing it along.
  - This emotional reaction, in turn, is influenced by the valence of the content, and the intensity with which the emotion is felt.
- The findings also suggest that there is interaction between the external and intrapersonal drivers in the spread of content online. One variable that influences that interaction is the relevance of the content to a participant: The more relevant the content to them, the more likely they were to have an emotional reaction to the content.
- Interpersonal drivers
  - After an emotional reaction was elicited, participants appeared to have social motivations for sharing content online. In the first study, participants expressed a need to fit in and join their peer group conversations by knowing what was going on online. However, this did not seem to be the case when adult participants were interviewed. The social motivations that were present in both studies, however, was a need to influence their own status or reputation through posting specific content, or posting that content first. It appeared to be a form of online gift giving, or just an altruistic gesture in support of a cause.
- Sharing of content appeared not to be limited to the online context. Many participants commented that even though they would not post or share the content online, that they would tell their friends about it. This was often the case when the content elicited the required emotional response, but did not fit into the participant's online reputation or view of themselves.

The findings from Study 1.2, in large part, confirmed the findings from Study 1.1, except for the intrapersonal driver of intensity, and the interpersonal driver of fitting in. We also suspect that controlling for gender distribution might have influenced

these outcomes. Therefore, both gender and age might be demographic variables that influence the spread of content online.

## **STUDY 2: USING EXISTING DATA TO UNDERSTAND THE DRIVERS OF VIRAL CONTENT**

While study 1.1 and 1.2 provided insight into the multiple factors that drive the spread of content online, there were two limitations to these studies. First, the relationships proposed were not tested empirically. While qualitative research provides insight and understanding, the generalizability of the study was hampered by this limitation. Second, another issue that influenced the generalizability of the findings: the studies only focused on viral video sharing. In order to be able to generalize the findings, we needed to test whether these relationships hold for all for all types of online content. While previous viral marketing research typically focus on a single form of viral content (e.g. Berger and Milkman's (2011) focus on newspaper articles), media richness theory suggest that different types of content would influence human behaviour differently (Brunelle, 2009). For example, videos might have a greater likelihood of spreading, then photos, and photos, better than text etc. Media richness theory suggests that people's performance in a communication context will depend on the fit between the communication characteristics, or the media richness, and the characteristics of the task to be achieved (Daft & Lengel, 1986). We could therefore expect that different types of online content would perform differently in the viral marketing context, as posting content to online social networks is, in essence, a communication task.

### **Methodology**

The online context of viral marketing research ensures that there is a plethora of existing data available to researchers. Other viral marketing research studies have also used existing data from blogs (Chen & Berger, 2013), New York Times most popular stories list (Berger & Milkman, 2011), and Digg (Guerini et al., 2011). The focus of this study was to look at various types of viral content, for example videos, photos, posters and news, instead of just looking at one. Like previous research (Berger & Milkman, 2011; Chen & Berger, 2013; Guerini et al., 2011), study 1.1 and 1.2 only focused on one type of viral behavior: video sharing. A database of viral content was generated and the variables, identified in study 1.1 and 1.2, that could be measured using an existing database was analyzed according to the variables identified in Study 1.1 and 1.2.

Aggregator websites provide marketers with a summary of key statistics. An aggregator refers to a website or computer software that aggregates a specific type of information from multiple online sources. These could include data aggregators, news

aggregators and social network aggregators to name but a few. Reddit.com is an aggregator of viral content on social media. It tracks what content is trending on social networks, and allows the Reddit community to comment and pass along the content themselves (Reddit.com, 2013). No one type of content (e.g. videos) is favoured on Reddit, and any type of content is allowed. Users can also form their own communities, get their own followers, and load content to Reddit. A software programme was written to trawl information from Reddit for 35 days: from the 10<sup>th</sup> of March 2013 to the 14<sup>th</sup> of April 2013. Data was collected on the top ten trending posts every 6 hours, resulting in four data captures per day, and 2140 data entries in total. Repeat entries were removed. For repeat entries, the earliest top ranking post was used in the analysis, and 59 posts were removed in total. Four posts trended for 77% of the observed time. These four posts during this time were 1) that Google has offered a \$20m grand prize to the first privately-funded company to land a robot on the moon, 2) I Am Zach Braff, Ask Me Anything, 3) Pixar's 22 Rules of Storytelling, and 4) a video clip entitled "Referee GoPro cam - I hope this gets introduced in every sport". When these repeat posts were removed, 1029 unique posts remained to be analysed.

Reddit provides rich information regarding each top ten post, including its ranking (1 to 10 at the time of data collection), who posted the comment, the link to the content, date and time it was posted, the number of comments that the post has generated, the category of content (e.g. humor, surprise) and its "approval bubble". The approval bubble in Reddit is a community tool, much like the "like" button on Facebook: Reddit community member can "approve" content. The approval bubble is a tool specific to the Reddit community and it is how the Reddit community members control the spread of content online. Because the approval bubble is the Reddit community tool used to indicate the popularity of particular content, it is used as a main proxy for the "virality" of the content in study 2.

However, while Reddit provides rich objective information, it does not address the emotional and social motivations for sharing content online. While it would be impossible to determine what the social motivations for passing along content on Reddit were, some basic information about the emotions that Reddit content elicits could be obtained. A random sample of 300 posts was drawn from the population of 2140 posts. Similar to the process followed by Berger and Milkman (2011), two independent raters were used to code: what type of content was posted (type of content), whether the content elicited positive or negative emotion (valence), the specific emotion that was experienced (specific emotion), as well as the intensity with which they experienced that emotion (intensity). The type of content was classified according to different levels of media richness (Daft & Lengel, 1986), into video, picture with text (e.g. posters), picture only, long text (e.g. news articles) and short text (e.g. posts). Watson and Tellegen's (1985) two-factor structure of affect was used. Raters were given feedback on their coding of a test set of content until it was clear that they understood the relevant construct (Berger & Milkman, 2011).

## Findings

The findings of study 2 are ordered as the previous ones, in that external and then intrapersonal drivers of viral content are discussed. As the interpersonal drivers of viral content could not be measured, however, this was not included in the analyses. The findings section ends with a discussion of the interaction between the external and interpersonal drivers.

- **Descriptive Statistics**

The following table summarizes the descriptive statistics of the key variables measured in this study (Table).

**Table 1: Descriptive statistics of Reddit study**

Variable	Mean	Std. Dev.	Minimum	Maximum
Popularity Statistics				
• Approval bubble	2284.70	690.58	7	4687
• Rank	5.52	2.875	1	10
• Number of Comments	834.60	1518.24	18	17563
Intrapersonal variables				
• Intensity of Emotion	5.86	1.913	1	10

Both Rank and Intensity used a scale from 1 to 10, where the average rank of the top 10 content was around 5.5, and the average intensity of the emotions elicited by content was 5.9 (where 0 was “not intense at all” and 10 was “extremely intense”). The average size of the top ten content’s approval bubble was 2286.7, and the average number of comments 834. The majority of content on Reddit was pictures with text (42%), for example posters or photos with comments. This was followed by long text pieces (19.2%) like links to news stories or columns. Sixteen percent of Reddit content was classified as pictures only, but this could include art or any visuals that had no subscript or comments attached to it. Only 15% of posts were links to videos, and only 7% was short text (for example Tweets).

Forty-six percent of the content was rated as positive, 17% as negative, and 37% was neutral. Content that concerned news about technological developments, for example, was coded as neutral. The specific emotion, according to the Watson and Tellegen (1985) affect structure, most often elicited by the viral content was happiness (14.5%), followed by boredom (12.5%), warm-heartedness (11.1%) and dullness (9.1%).

When content is uploaded to Reddit, community members are forced to classify the type of content. Reddit has 19 set categories that one can choose from, including gaming, funny and politics. They also have more fluid categories like "aww" implying cuteness and "WTF" implying surprise or shock. A relatively equal spread was observed in the different types of content that people uploaded to Reddit. The most popular type of content uploaded to Reddit was "pics" (10.7%), a combined category for content about animals and where advice is asked called "AdviceAnimals" (10.3%), and third "gaming" (10%). "Funny" content was also popular at 9% as well as "aww" (7.3%). The least popular categories uploaded were "bestof" (0.3%), "blogs" (0.3%) and "music" (0.3%).

- **External Drivers of Viral Content**

This section aimed to investigate which content-specific factors influence the spread of content online. As was the case with the different types of media, the different types of content also differed in their popularity: approval bubble ( $p=0.00$ ,  $F_{18}=2.87$ ), rank ( $p=0.00$ ,  $F_{18}=6.69$ ) and number of comments ( $p=0.00$ ,  $F_{18}=61.83$ ). Pictures were the most popular category, followed by technology, and then videos. The least popular category was named "bestof". This supported the notion purported in study 1.1 and 1.2 that different types of content drive the spread of content online.

Content that supported a specific cause (religious, health, political, environmental) were coded by raters, and content could be any one or any combination of these, depending on what they supported. We used linear regression and dummy variable modelling to ascertain whether content that supported specific causes was popular on Reddit. The model was not significant, and none of the indicators was significantly related to approval on Reddit.

Next, a control check was done to test the assumption that is a difference in the online popularity of different types of content (with regards to their media richness). One-way ANOVA was used and difference was found in the popularity of different types of content with regards to their rank ( $p=0.00$ ,  $F_4=7.41$ ) and the number of comments that they got ( $p=0.00$ ,  $F_4=51.29$ ). The difference between types of content and their approval bubbles were significant at a 10% level of significance ( $p=0.055$ ,  $F_4=2.35$ ).

- **Intrapersonal drivers of Viral Content**

This section aimed to test whether emotional reaction, the intensity of the emotion-elicited by the viral content, and the valence of the content influenced its spread online. First, an independent sample t-test was used to determine if there is a difference in the popularity of positive as opposed to negative content. There was a difference in the popularity of positive and negative content on Reddit ( $p=0.00$ ,

$t_{170}=-3.59$ ), where the average approval for positive content ( $M=2439$ ,  $STD=690$ ) was higher than the approval for negative content ( $M=2011$ ,  $STD=745$ ).

There was also a difference between the individual emotions elicited, and their spread on Reddit ( $p=0.03$ ,  $F_{26}=1.66$ ). The content that was most popular on Reddit, elicited the following emotions in order of their popularity: Peppy ( $M=3075$ ,  $STD=310$ ), satisfied ( $M=3015$ ,  $STD=1174$ ), sad ( $M=2601$ ,  $STD=496$ ), and happy ( $M=2574$ ,  $STD=820$ ). The emotions that had the least approval were: Scornful ( $M=1458$ ,  $STD=1326$ ), nervous ( $M=1590$ ,  $STD=620$ ), enthusiastic ( $M=1650$ ,  $STD=1011$ ) and grouchy ( $M=1748$ ,  $STD=310$ ).

Finally, the influence that the level of intensity of the emotion evoked by the content had on its spread online was measured. The intensity of emotions elicited had a positive relationship to its approval on Reddit ( $p=0.01$ , Spearman's  $Rho=0.15$ ). Therefore, the valence, intensity and specific emotion elicited by the viral content, had an influence on its spread online. Finally, the relationship between content and emotion was investigated.

- **The Relationship between Content and Emotion**

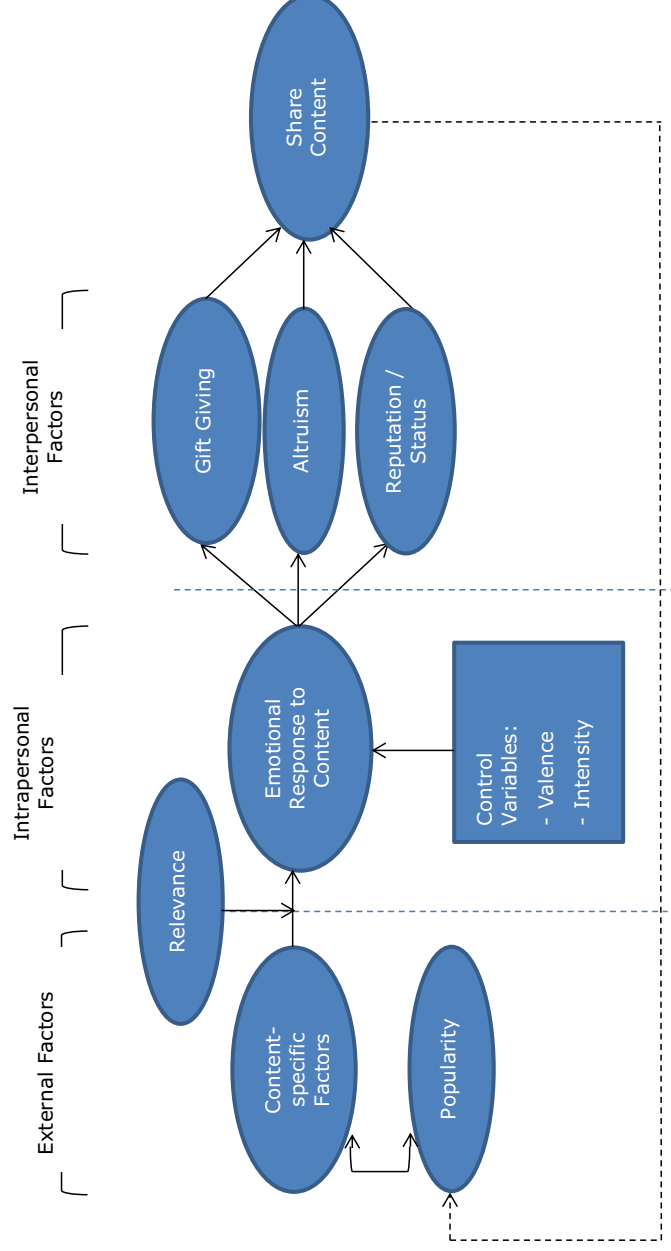
This section aimed to test whether there was interaction between the specific types of content that spread online (category) and emotion. Because valence and the specific emotions were measured using categorical variables, Chi-square test of association was used to test these hypotheses. An association was found between content and valence ( $p=0.00$ ,  $Chi-square_{36}=145.55$ ), and content and the specific emotions that they elicited ( $p=0.00$ ,  $Chi-square_{126}=279.21$ ). One-way ANOVA was used to show that there was also a difference in the different types of content, and the intensity of the emotion that they induced ( $p=0.00$ ,  $F_{18}=2.97$ ). This showed that there was interaction between the content and emotion, and that specific content-related factors could be linked to emotion outcomes (including valence and intensity)

## **MODEL FOR THE SPREAD OF CONTENT ONLINE**

Evidence from the three studies discussed above suggests that a *content* → *emotional reaction* → *social motivation* → *online sharing* chain is initiated by viral content. It is clear that this chain is started by the content itself, influenced by its popularity, and ends with the sharing of content both online and offline. Using the framework provided by Botha, Berthon and Reyneke (n.d.), who suggest that external, intrapersonal and interpersonal drivers influence the spread of content online, a model is proposed for the drivers of online sharing (see Figure).

The results from the study suggest that *popularity* begets popularity: Participants in study 1.1 and 1.2 were often directed to specific viral content through offline conversations and WOM. In study 1.2, participants also mentioned that when online, the popularity of the content (for example the number of “views” and “likes”) encouraged them to watch or read the content. The popularity of the content therefore played a role in the spread of content online, and this role was played at the beginning of the process as a stimulant to consume the content in the first place. The popularity of content therefore has two dimensions: Its popularity online (for example the number of views, likes or hits that the content has, depending on the specific social network), and its popularity offline. The latter refers to whether people had heard about the viral content from friends, family, colleagues or acquaintances. Popularity is therefore the starting point of the proposed model. Popularity and content interact, as studies 1.1 and 1.2 suggested, and these variables are proposed to reinforce one another: The content-specific factors (e.g. innovativeness) increase popularity and the popularity, in turn, gets people watching the content. However, the popularity of the content itself cannot influence the emotional reaction that the content elicits.

**Figure 3: Model of the factors that drive the sharing of content online**



Study 1.1., 1.2 and 2 confirm that the viral *content* itself plays a central role in the spread of content online. Previous research has shown that content that is shocking (Henke, n.d.), controversial (Chen & Berger, 2013), comedic violence (Dobele et al., 2005), aversive (Amer, 2012) and authentic (Voltz & Grobe, 2013) influences its virality. Others suggest that the quality of the content influences its spread online (J. Huang et al., 2012; M. Huang et al., 2011). Findings from study 1.1 and 1.2 suggested that content that is cause-driven has more viral traction, however, no support for this was found in study 2. While content is a relatively general term that encompasses a broad spectrum of terms, it is also naïve to make statements like “humorous content drives virality”, as not all humorous content will go viral. However, the process for the spread of content online starts with the content itself, and ultimately how the content effectively elicits emotion in viewers. Therefore, this variable was included as the starting point of the model, and was generally referred to as content-specific variables that drive the sharing of content online. Study 2 showed that there was indeed an interaction between the content and emotion variables in the Reddit study. Based on the findings from the study, as well as previous literature, we suggest that authors should measure to what degree content was a combination of entertaining, creative, innovative, current, surprising etc.

The *relevance* of the content, to the particular person consuming that content, influenced the emotional response that was elicited by the content. Findings from study 1.1 and 1.2 confirm Botha and Reyneke’s (2013) finding that a key influencing factor in the relationship between content and emotion. We hypothesize that relevance moderates this relationship, such that the greater the relevance of the content, the greater the chance that emotion will be elicited by the online content.

Studies 1.1 and 1.2 confirmed a key tenant in current viral marketing literature: That *emotion* plays a central role in the spread of content online. This was confirmed empirically through study 2, and the specific emotions that were elicited, the intensity of these emotions and their valence influenced the popularity of the content. Particularly in study 1.1, participants often mentioned how viral content influences their emotions, and how they would like others to experience the same emotions. We therefore propose that content elicit an emotional reaction in people, and this emotional reaction influences the content’s subsequent spread online. All three studies confirmed, however, that the *valence* of the emotion and *intensity* with which the emotion was felt, influenced whether they would pass along the content online. This is confirmed in viral marketing literature where many studies focus on how positive versus negative content spreads online (Eckler & Bolles, 2011; Gruzds et al., 2011; Guadagno et al., 2013; Hansen et al., 2011; Jansen et al., 2009; Jenkins, 2011; Wu et al., 2011), or how the intensity of the emotion elicited influenced its subsequent spread (Guadagno et al., n.d.; Heath, Bell, & Sternberg, 2001). These two variables were consequently introduced as two controls on the emotional response elicited by viral content.

However, study 1.1 and 1.2 found that there were some important *interpersonal or social considerations* that participants made when deciding whether to pass along

emotion-eliciting content online. For example, while some participants thoroughly enjoyed watching the videos, they felt that their friends would find it “weird” if they posted the content online. Similarly, many participants mentioned that they would share the content with their social networks so that they could share the emotion that they felt while watching the videos. Chu (2011) found that people shared viral content with their online social networks to increase their own status. While we could not directly measure the interpersonal drivers of viral content in study 2, viral marketing literature and studies 1.1 and 1.2 suggest that these social drivers are central to the sharing of content online. Rime’s (2009) theory of the social sharing of emotion argues that when people have emotional experiences, they are prompted to interact socially. Botha and Berthon (n.d.) use this theory to show how emotion-eliciting content contributes to the social sharing of that content online. The social network aspect of viral marketing, therefore, is central to the spread of content online. We therefore propose that the relationship between participants’ emotional reaction to the viral content, and their subsequent sharing of the content, is fully mediated by participants’ social considerations to share the content with their online social networks. The two studies (1.1 and 1.2) found that specific social considerations influenced participants’ social sharing of the content: First, they saw sharing content with social networks as a form of *gift giving*. Second, they often saw themselves as behaving *altruistically* when sharing content related to a specific cause, or through sharing content that would increase the shared knowledge of the community. Finally, they shared content in accordance with and in order to build their own *online reputation and status*. These three variables were proposed to be the main interpersonal drivers of the sharing of content online.

Finally, the content that elicited specific emotions and social motivations gets shared online. The study found, however, that content not only gets shared online but also offline, and that both the WOM and eWOM element to viral content, purports its popularity. The dependent variable of this model is broadly defined as *sharing content*, and includes the sharing of content online (for example via social media or email) and offline via WOM. The sharing of content, in turn, influences its popularity (also measured by both online and offline popularity measures), and a chain of the social sharing of emotion-eliciting content is purported.

## CONCLUSION

This study used an exploratory research design to propose a model for the sharing of content online. A gap in viral marketing research is that previous studies often look at the drivers of viral content in isolation: Some specific aspect related to the content, or the emotional reaction that it elicits is typically investigated. Botha, Berthon and Reyneke (n.d.) classified these studies as focusing on either the external, intrapersonal or interpersonal drivers of viral content. Using this framework, this study aimed to take a macro perspective of the drivers of viral content to answer the following research question: *What are the external, intrapersonal and interpersonal*

*drivers of viral content?* The study found that the emotions elicited by the content, and people's subsequent social considerations for the sharing of the content, are central to its spread online. These two key variables informed the title of this paper, which was aptly summarized by one of the participants: *"If I thought something was clever then I thought it would interest them. I like to share things with people because it's a good thing to do and it's a nice habit. Sharing is caring."* However, this process of emotional reaction → social motivation → sharing, is started by the content itself. As the study was exploratory in nature, and the final model was not tested empirically, a number of limitations and consequent future research directions are discussed next.

## **LIMITATIONS OF THE STUDY AND FUTURE RESEARCH**

The most obvious and important limitation of the study is that the proposed model was not empirically tested in its entirety. The goal of this study, however, was to first investigate all the possible drivers of viral content and to justify their inclusion in a model for the spread of content online. Subsequent research should focus on (1) developing scales to measure these constructs, and (2) testing the model as a whole. Some elements of the model might not lend themselves to empirical testing (for example the WOM dimensions of both popularity and the dependent variable), however were still included to show a complete picture of the possible drivers of viral content.

Study 2 attempted to empirically test parts of the model, and support was found for some of the relationships proposed. However, none of the interpersonal motivations for the spread of content online could be tested. There is also very little current research on the social drivers of viral content. This dimension of the model, therefore, needs particular attention and refinement.

There are also some variables that have substantial backing in viral marketing literature, that wasn't included in the model. For example, there is evidence in the literature to support the inclusion of arousal in the model above (Berger & Milkman, 2011; Berger, 2011b; Elliott, 2013; Guadagno et al., 2013). The methodological approach of this study made it particularly difficult to measure arousal: Participants often just spoke about how they "felt" after watching viral content, and did not mention specific emotions other than, for example, "happy" and "feel good". Participants also did not have the vocabulary to distinguish between high and low arousal emotions. As no evidence for its inclusion was found in the three studies used, it was omitted from the model. However, its exclusion might be short-sighted, and future research should focus on clarifying the role that arousal plays in the model presented above (Figure).

Another variable that could be included in the model was media richness. Study 2 found that the type of content (for example video, picture or text only) influenced its

popularity online. There is a body of knowledge on media richness and the outcomes it influences. Using the seminal papers by Daft and Lengel (1983, 1986, 1986), future research can show how the type of content influences its subsequent spread online. This will be useful to marketing managers in their development of viral campaigns.

An interesting study would be to look at the influence of mood on the spread of content online. Because emotion is a key driver of viral content, and because the emotions elicited by specific content influences one's mood, it would be interesting to see how initial mood drives the sharing of content online. One participant commented: *"Realistically, its dependent on the mood I'm in, if, like right now I don't have much time, I would rather be studying, if I had time and was in a hyperactive mood, or a rude, ridiculing mood, I may forward it."* This could contribute towards better understanding emotional contagion online, where emotional contagion has been shown to be a key driving force in consumer behavior (Barger & Grandey, 2006; Barsade, 2002; Du et al., 2011; Gountas & Ewing, 2003; Hatfield et al., 1994; Pugh, 2001; Schoenewolf, 1990).

Finally, many participants mentioned that they always opened or watched content spread by particular members of their social network. Comments reflecting this include:

*"I was interested by the link, what the person posted, so I watched it."*

*"All depends who posts it."*

*"The first is that it would be recommended by someone that I know and that I would generally appreciate their opinion or have similar way of thinking. That's almost always why I click on videos to be honest because I don't really YouTube browse on my own."*

*"Definitely, I feel that when I receive a link to a video, or a picture for that matter, from someone I trust, I usually assume that they have sent it to me because they know I would find it interesting or funny."*

Elliot (2013) argued that opinion leaders in social networks have a great influence on the virality of content. He shows that online content is more likely to be watched and forwarded if it came from opinion leaders. Future research could look at how social influence measures, for example the Klout scores ([www.klout.com](http://www.klout.com)) of the people forwarding the content, influences its subsequent spread online.

### **CHAPTER 3: SUMMARY, CONCLUSION AND CONTRIBUTION**



### 3.1 INTRODUCTION

Over the past few years, the web has fundamentally shifted towards user-driven technologies. As sites like YouTube, Facebook and Twitter have moved into the mainstream, they are redefining how the internet works (T. Smith, 2009). Even though these social media sites are still perceived as relatively new phenomena, they have established their presence in most peoples' lives, and have been recognized for their roles as driving forces behind new societal developments. (Herold, 2008). The full societal impact of these sites yet remains to be seen over time.

Of these user-based activities, video-sharing has been shown to be the quickest growing platform in history (T. Smith, 2009), and the most successful video-sharing site is YouTube (Cheng & Liu, 2009; T. Smith, 2009). In 2011, YouTube had more than 1 trillion views around the world, averaging around 140 views per capita for the world's population. Currently more than 1 billion unique visitors visit YouTube every month (Anon, 2013). Seven in ten adult internet users, roughly 52% of all US adults, have used the internet to watch or download videos, and 14% have uploaded videos themselves (Purcell, 2010). In 2008 YouTube estimated that 10 hours of video is uploaded to this popular video sharing site per minute (Grove, 2008). This figure has now increased to 72 hours of video per minute (Anon, 2013). Preferred videos, and in particular why certain videos go viral, remain a mystery (Watts et al., 2007). Videos that go viral captivate audiences worldwide and get posted, shared, liked and retweeted millions of times. One recent example, Gangnam Style (see <http://www.youtube.com/watch?v=9bZkp7q19f0>), was watched over 1.5 billion times worldwide. However, while there has been a shift in marketing budgets towards online and social media, little is known about how to successfully leverage viral marketing and social networking sites (Abedniya & Mahmoudi, 2010). Viral videos have unprecedented reach and impact, and marketers aim to better understand this marketing phenomenon.

Understanding why some videos go viral and others do not is becoming an increasingly popular focus of academic research (Ferguson, 2008). Indeed, Smith (2009) argues that because of social media, and the consequent shift away from talking through mass media, to listening and conversing through social media, research on these platforms and their uses has become even more important. However, despite its popularity, there is little empirical research that investigates the reasons for videos to go viral on the Internet (Wallsten, 2010). This study aimed to answer the following research question:

*What are the factors that drive the virality of online content?*

Four papers were used to investigate this question. This chapter deals with the findings of these papers, as well as their contribution to the viral marketing body of knowledge. Each paper aimed to address a research question developed in Chapter 1. The first section looks at the conclusions of each paper and how they address each research question. Thereafter, a revised model for viral marketing is presented and discussed. The contribution of the study as a whole is then discussed, followed by managerial implications, possible limitations of the study, and finally suggestions for future research.

## 3.2 CONCLUSIONS CONCERNING THE RESEARCH QUESTIONS

Three research questions were developed in chapter 1. Chapter 1 also explains how each paper was used to answer these research questions. This section addresses the conclusions with regards to each research question.

### 3.2.1 Conclusions concerning Research Question 1

Paper 1 dealt with research question 1: *What is the role of emotion in the sharing of content online?* Rime's theory of the social sharing of emotion was used to better understand why people would interact with their online social networks when they have an emotional reaction to viral content. The theory holds that people share emotions in a social context because (Rimé et al., 1998):

- 1) Emotions elicit ambiguous sensations and people search for clarifying information in their social environment to resolve these ambiguous sensations.
- 2) Emotions are dense and diffuse experiences in need of articulation. In other words, people want to "unfold" the emotional material and try and conform it to the rules of logical thinking.
- 3) Emotions challenge people's beliefs about themselves, others and the world where the social sharing of emotions allows people to work through the emotional experience, facilitate the restoration of their beliefs and allocate an acceptable meaning to the events.
- 4) Emotional reactions challenge beliefs. When beliefs are challenged, people's basic feeling of security is undermined and they will usually seek social support and coping assistance.
- 5) Emotions can evoke excessive self-focused attention and as a result dissociate people from their environment. However, when emotions are shared socially and subsequently acknowledged and validated by a person's social environment, the initial privately experienced emotion gets defined by the group and the group can propose socially acceptable ways of dealing with the experience.

The paper argues that viral content elicits emotional responses, and online social networks facilitate the social sharing of emotion. An emotional experience is the starting point of various cognitive, symbolic, affective and social processes, and is consequently revealed as a fundamentally interdependent process (Rimé, 2009). Viewing emotion-eliciting content online activates this interdependent process and social action consequently ensues. There are three functions served by the social sharing of emotion: First, the very basic function of *rehearsing, reminding or re-experiencing*. Through spreading of positive emotions, people can enhance their own positive affect. The spreading of negative emotions, on the other hand, fulfils

important functions with regards to the memory of the emotional episode. Second, the social sharing of emotion has various *socio-affective* functions; the sharing of emotions can attract social attention and interest, as well as arouse empathy among the community. In this way the social sharing of emotion is a powerful tool for stimulating bonding and strengthening of social ties (Rimé, 2009). Last, because emotion is a dense and diffuse experience that needs cognitive work (Rimé et al., 1998, 2011; Rimé, 2007, 2009), social sharing provides *cognitive articulation* that activates *cognitive-social* processes. When people are confronted with ambiguous information the emotions elicited are complex and unexpected. When they experience this, they look for clarification from their social networks (Rimé, 2009).

The collective process of emotion sharing across a community contributes to the construction of social knowledge within that community, builds social capital, collective memory and clarifies ambiguous information. The social sharing of emotion also contributes to the emotional climate of the community (Rimé et al., 2010, 2011; Rimé, 2007). We argue that these same outcomes are facilitated through the social sharing of emotion-eliciting content online, i.e. the sharing of viral content.

In summary, we argue that the social sharing of emotion can be extended to online social networks: As viewers are exposed to emotion-eliciting content online, they go through the same cognitive and socio-affective processes described above. These emotional experiences stimulate social sharing needs, and the platform within immediate reach is viewers' online social network. When applying the three basic functions of the social sharing of emotion theory to viral content, the most likely circumstances for the sharing of emotion-eliciting content becomes apparent: First, when the emotion is *intense* the likelihood of socially sharing the content and thus the emotion is stronger. In the social sharing of emotion, the more intense the emotional response, the more likely people are to connect socially as a result of the emotional episode (Rime et al., 2011; Rime, 2009). We propose that similarly, in an online context, the more intense the emotional reaction to emotion-eliciting content, the more likely the content is to be shared online.

Second, the *complexity* of the emotion will influence its likelihood of being shared socially. This is tied to the cognitive articulation processes activated by complex emotions. Because emotions are dense and diffuse experiences in need of articulation, social networks are used to articulate and unfold particular emotional experiences. People see how others react to emotion-eliciting events / content to better understand how they themselves should react to the content. A number of philosophers and psychologists make the distinction between simple and complex emotions (cf. Charland, 1995; Damasio, 1999). Simple emotions are part of our collective evolutionary inheritance and related to specific environmental stimuli, complex emotions are acquired during development and have cultural and individual variation. Critically complex emotions are also more sensitive to subtle and abstract features of

situations, and as such have more cognitive rather than pure emotional aspects (Charland, 1997). Moreover complex emotions can be an admixture of more than one emotion, for example 'sad love' and indeed can contain conflicting emotions, such as 'love hate' (cf. Rothbaum and Tsang, 2004). Irrespective of the specific composition, complex emotions pose a greater cognitive puzzle than simple emotions and thus are more likely to be shared

Finally we argue that content that elicits social emotions is more likely to be shared than non-social emotions. Therefore, the *sociality* of the emotion experienced influences the likelihood of it being shared online. Social emotions are those emotions that are experienced in relation to one's social network or in relation to others, for example fear, grief, anger or jealousy. These oppose emotions like sadness and depression, which are isolating and individual in their very nature. Psychologists propose that intense emotions are more difficult to process and consolidate than weak (e.g. Rachman, 1980). A primary mechanism for consolidation is talking (Lucan, 1998). That is the emotions are relived, remembered and relieved through the telling (Rudnytsky & Charon, 2008). Simply, in social interaction people share the stories to consolidate the emotions they have experienced. In the online world the content is the story, thus through sharing people are consolidating emotional reaction; consequently the stronger the emotion the more likely a person is to socially share content online. Indeed, evidence to support this proposition already exists in viral marketing literature. Guadagno et al. (2013) showed that stronger affective responses increased participants' likelihood to share content online. Similarly, when people struggle to comprehend their emotional reaction to content, or the content evokes strong cognitive-symbolic processes, they are more likely to share the content with their online social networks. Therefore, we contend that social emotional episodes will more likely be shared over non-social episodes.

We argue that these three dimensions to emotional responses to online content, is represented by the following equation:

$$P(e_{share}) = fn(intensity, sociality, complexity)$$

In summary, the equation proposes that the probability of electronically sharing content online is a function of the intensity of the emotion that was elicited by the content, the complexity of the emotion elicited, and its sociality (i.e. whether a social vs. non-social emotion was elicited). Therefore, the greater the intensity of a person's emotional response, the greater the complexity and sociality of that emotion, the more likely they are to share the content online.

With regards to research question 1, we find that emotion does indeed play a central role in the spreading of content online. However, people have different emotional

responses to content (for example some might be enraged by a politically sensitive video, where others might find it funny), and their individual emotional response to a video will influence their propensity to share the content online. This propensity to share the content is further influenced by elements related to the emotional reaction itself (e.g. the intensity, sociality and complexity of the emotion evoked by the content). The next research question continues to look at the role of emotion in the spread of content online, but looks at the relationship between the content itself and the emotion that it elicits.

### 3.2.2 Conclusions concerning Research Question 2

Paper 2, 3 and 4 were used to better understand research question 2:

*What is the relationship between content and emotion in the sharing of content online?*

Paper 2 found that there was a direct relationship between the content and the emotion it elicited in viewers, but this relationship would often differ, depending on the type of content. Specifically, whether the content was specific or universally relevant. *Specific content* refers to viral content that focuses on reaching a specific niche market by referring to "inside knowledge" or information out of the immediate context of the video, for example using references to a particular movie franchise, or to a specific online game. An example of this is the recently popular video "Batman vs. Superman" (<http://www.youtube.com/watch?v=-G4Y8JtT1j0>) that quickly got viral traction with over 4.6 million views within a month of being uploaded. *Universally relevant* content, on the other hand, refers to content that is not specific to any other context outside of the video itself, but instead relies on how intrinsically creative, funny or innovative (for example) the content is. In other words, no additional information is needed outside the video itself. YouTube is flooded with videos of babies laughing, cats falling off television cabinets or pets doing silly things. One example of a universally relevant video "Twins playing" (<http://www.youtube.com/watch?v=-6CRCW80-2E>), a video of twins playing on a mat that received more than 16.8 million views. The type of content influenced when emotion kicked in in the sharing of content online.

For specific content, the *relevance* of the content played a key role in whether content was forwarded to online social networks. With specific content, there was a much greater polarization in viewers' likelihood to share the content online. Even though the video was selected for its positive valence, the relevance of the content caused both positive and negative emotional reactions in viewers. This showed that even though viral videos can be selected based on valence (i.e. only positive or negative videos), viewers can still have both negative and positive emotional reactions to the content,

depending on the relevance of the content to their specific frame of reference. This supported the findings from paper 1. With universally relevant content, on the other hand, viewers' *emotional response* to the content had a much greater influence on whether the content was shared by participants or not. Participants' reasons for sharing online content in this context, centered on emotional responses to the content in general, and not necessarily the content itself. The following decision tree was consequently developed (see Figure 4).

**Figure 4: The interplay between content and emotion**

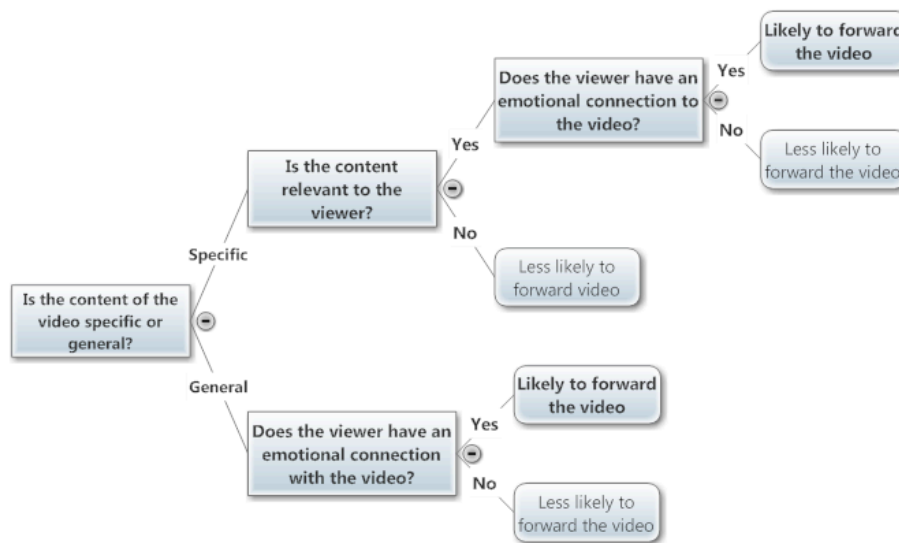


Figure 4 showed that while the specificity of the content influenced its spread online, the emotional reaction that viewers had to the content, still played the central role in the propagation of the content. This paper was also central in introducing the concept of *relevance*, later used in the final model for the spread of content online.

Paper 3, built on the insights from paper 2, and looked at the interplay between content and emotion in an applied context: political communication in social media. Political videos are of the most watched content online, where between 15 and 30% of all internet users watch political content (Purcell, 2010). The paper's focus on political videos aimed to better understand the relationship between specific content and emotion. Findings from the two previous papers suggested that both content and emotion were more complex, multi-dimensional constructs. This paper subsequently introduced two specific factors that might influence people's emotional reaction to the

content (valence and intensity), and three key aspects related to the content (creativity, humor, utility), that could influence its virality. The relationship between content and emotion was investigated with a two-stage design: First the comments generated by the two selected videos were analyzed, where after the same videos were used in an experimental design. The same videos used in the content analysis were used in the experimental design, and a model for the relationship between content and emotion was tested. The following key points summarize the findings of the content analysis:

- The video that elicited positive comments and emotion was more successful than the video that elicited a negative response.
- In the successful video, viewers' emotions converged with those depicted by the person in the video and participants often commented how "sad" they felt, just as Robert Mugabe was portrayed as sad in the video.
- The key themes that emerged in the content analysis of these two specific videos, centered around the content of the actual videos, or the political debates that these videos were connected to, and the subsequent emotional responses to the videos were in the periphery (if present at all). In the successful video, content specific factors were central, followed by participants' emotional responses. In the video that did not gain viral traction, however, only content specific factors were discussed and these were not connected to individual emotional responses. The findings from paper 3 therefore supported the decision-tree proposed in paper 2.

The first phase of the research for paper 3 therefore confirmed that content needs to elicit emotional responses in viewers in order for that content to be shared online. In the second phase of the research, specific characteristics of the content and emotions elicited were investigated. First, the findings regarding the *emotion-eliciting characteristics* of the videos are discussed. The study found that both valence and the intensity of the emotion experienced significantly influenced viral behaviour. The greater the intensity of viewers' emotional reaction to the content, the greater the likelihood that they will forward and "like" the video. With regards to valence: Videos evoking positive emotions are more likely to be forwarded and "liked" than videos that evoke negative emotions. When looking at the specific *content* characteristics of the videos, the creativity of the video had the greatest influence on whether respondents would spread the content online. This was the only content-specific factor that influenced the spread of these videos, however, it had the greatest influence on whether each video was "liked" or "forwarded". This was followed by intensity with which they felt the emotion. The valence (positive vs. negative emotion-eliciting content) also influenced whether respondents "liked" the video. The following overall models<sup>4</sup> were fitted:

---

<sup>4</sup> Distinction was made between "forwarding" and "liking" comment. Both actions are considered viral behaviour, as both actions lead to the sharing of content to their

*Forward video* = 0.17Intensity\* + 0.33Creativity\*\* - 0.01Humour + 0.05Informative + 0.08Valence - 0.003SeenVideoBefore

*Like video* = 0.15Intensity^ + 0.29Creativity\*\* + 0.00Humour + 0.10Informative + 0.26Valence\*\* + 0.05SeenVideoBefore

\*\*Significant at a 1% level of significance. \* Significant at a 5% level of significance.

^Significant at a 10% level of significance.

While paper 2 showed that there is a relationship between content and emotion, paper 3 looked at which specific content-related factors interact with which specific emotion-related factors to contribute to the sharing of content online. The paper found that both emotion and content factors played a key role in the sharing of content: Creativity was a key driver for both “liking” and “forwarding” the videos in this context, and valence and arousal influenced this behavior (respectively for “liking” and “forwarding”).

Last, paper 4, which proposed a model for the sharing of content online, proposed in which order these events occur and how specifically these constructs are related to one another. The model shows that the content itself (and its popularity) is the start of the viral propagation process. The content leads to an emotional reaction in viewers, moderated by the content’s relevance, which ultimately leads to the content being shared. Further discussed in section 2.3, the model shows that the emotion that viral content elicits plays a central role in its spread online, and that both the valence and intensity of the emotion elicited influences the virality of the content. This process ultimately results in the sharing of content with social networks, both on- and offline.

### 3.2.3 Conclusions concerning Research Question 3

The final paper of the study builds on what has been learnt in papers 1 to 3, and develops a model for the sharing of content online. This model was based on the external, intrapersonal and interpersonal factors identified in the literature review, and as a result, the following research question was formulated:

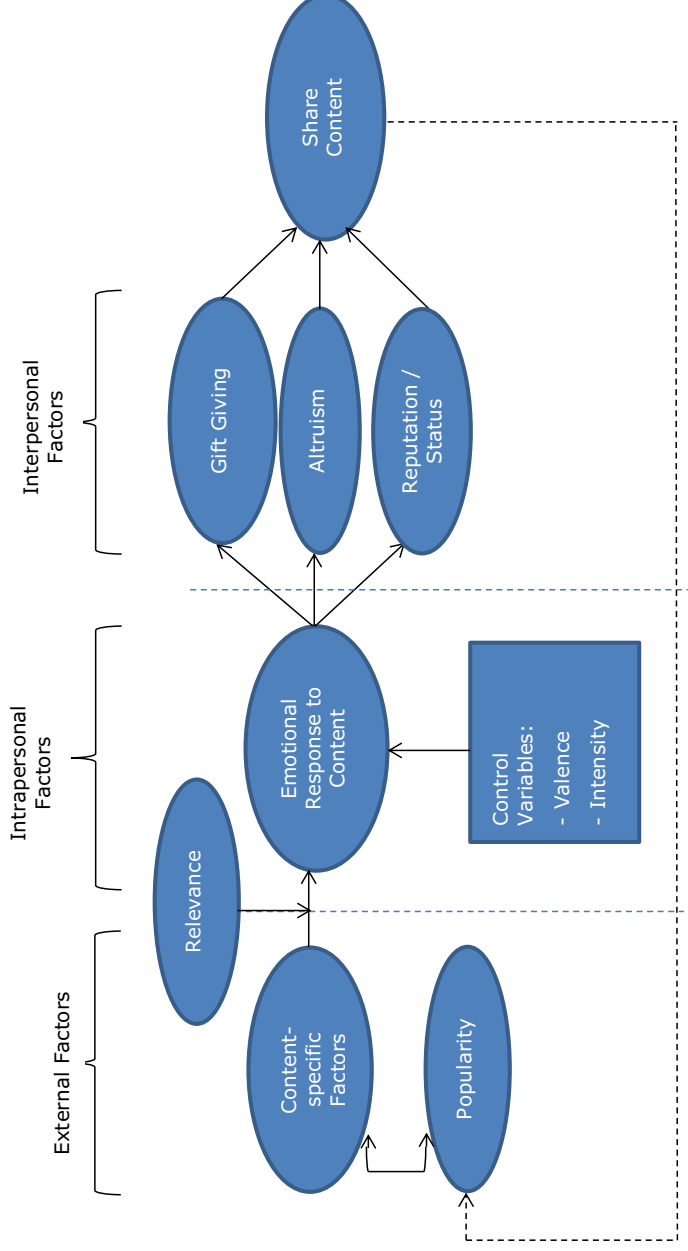
*How do external, intrapersonal and interpersonal factors interact, to drive the sharing of content online?*

---

whole social networks. This study found that there was a significant difference between these two actions with regards to all the main constructs, and they were kept separate for the remainder of the analysis.

Paper 4 used a two-stage design to better understand these drivers: First, two sets of interviews were conducted where respondents were exposed to different viral stimuli. The first set of interviews focused on young adults and user-generated content, while the second set of interviews used internet users from a mixed age and gender distribution (to see if these variables influenced the viral model) and used branded viral content. Second, a longitudinal dataset from a viral aggregator website ([www.Reddit.com](http://www.Reddit.com)) was used to clarify which external and intrapersonal drivers influenced the popularity of online content. The findings with regards to research question 3 lead to the development of a comprehensive model for the spread of content online (see Figure 5).

**Figure 5: The factors that drive the sharing of content online**



This model, and the key constructs contained therein, are discussed in-depth in paper 4, but can briefly be summarized as follows. The sharing of content online first starts with external drivers: the content itself (e.g. its creativity), drives people to “consume” the content, and the process of socially sharing content ensues. Previous research shows that the *content* itself, and various aspects related to the content, drives its virality (Amer, 2012; Chen & Berger, 2013; Dobeles et al., 2005; Henke, n.d.; J. Huang et al., 2012; M. Huang et al., 2011; Voltz & Grobe, 2013). This consumption of online content is also fueled by the popularity of the content where respondents often commented that they heard about it from friends, at university or on mainstream media. The results from the study suggest that *popularity* begets popularity. Paper 4 showed that both online (for example the number of views, comments or likes generated by the viral content) and offline (WOM) measures of popularity influenced participants in the content’s subsequent spread online. The popularity of the content therefore played a role in the spread of content online, and this role was played at the beginning of the process as a stimulant to consume the online content in the first place.

Next, the content is hypothesized to elicit an *emotional response* in people that is central to the spread of content online. This relationship between content and emotion was shown by both paper 2 and 3, and paper 2 specifically talks about the relevance of the content. More specifically, the *relevance* of the content, to the particular person consuming that content, influenced the emotional response was elicited by the content. Relevance is consequently proposed to moderate the relationship between content and emotion, such that the more relevant content is to a person, the greater their emotional response to that content.

There are certain factors, however, that need to be taken into consideration when dealing with emotion in viral marketing: Paper 3, as well as the results in paper 4 showed that the *valence* and the *intensity* of people’s emotional response to the content influenced its virality. Previous research have shown that valence influences the spread of content online (Eckler & Bolls, 2011; Gruzd et al., 2011; Guadagno et al., 2013; Hansen et al., 2011; Jansen et al., 2009; Jenkins, 2011; Wu et al., 2011). And other studies have also argued that the intensity of the emotion elicited influenced its subsequent spread (Guadagno et al., n.d.; Heath et al., 2001). There is evidence in the literature to support the inclusion of *arousal* in the model above (Berger & Milkman, 2011; Berger, 2011b; Elliott, 2013; Guadagno et al., 2013), and paper 1 also argued that the type of emotion elicited by the content influenced its virality. However, no empirical evidence was found to support this claim and arousal was consequently excluded from the final model.

Paper 4 then argued that before emotion could directly be linked to the spread of content online, some important *interpersonal or social considerations* need to be taken into account. We found that, under some circumstances, even though intense emotions were elicited, respondents did not necessarily share the online content. For example, while some participants thoroughly enjoyed watching the videos, they felt that their friends would find it “weird” if they posted the content online. Similarly, many participants mentioned that they would share the content with their

social networks so that they could share the emotion that they felt while watching the videos. Chu (2011) similarly found that people shared viral content with their online social networks to increase their own status. Consequently, additional constructs (all related to the social sharing of the content) were included in the model. Paper 1 also argued that if emotional responses are elicited, then social action and social consideration follows. The social network aspect of viral marketing, therefore, was included as the final stage of the model.

Paper 4 proposed specific interpersonal and social factors that could drive the sharing of content online: First, participants saw sharing content with social networks as a form of *gift giving*. Second, they often saw themselves as behaving *altruistically* when sharing content related to a specific cause, or through sharing content that would increase the shared knowledge of the community. Finally, they shared content in accordance with and in order to build their own *online reputation and status*. These three variables were proposed to be the main interpersonal drivers of the sharing of content online.

Finally, the dependent variable of the model was slightly adapted to include a wider spectrum sharing: *share content*. Paper 4 found that not only do people pass along the content to their online social networks, they also talk about the content with their friends and family. Many participants had viewed videos because they were personally recommended to them, and they then in turn recommend these videos to others, or even showed others the videos themselves. Many respondents commented that they saw a video because a particular friend of their showed it to them (on their laptops, phones etc.). The study therefore found that there was a real human element to the propagation of content online, and word-of-mouth still played a big role in the promulgation of online content. The sharing of the content, both online and offline, in turn increased the popularity of the content, which again interacted with content-specific factors to elicit emotional responses from viewers. Consequently, a social sharing chain is propagated through the sharing of viral content.

The changes from the model presented in chapter 1 were the following:

- The influence of the popularity of the content, both on- and offline, became apparent in paper 4 and was introduced as one of the key external drivers of viral content.
- The influence that the relevance of the content had on the relationship between content and the subsequent emotion that it elicited, became evident in paper 2. Therefore, relevance was proposed to moderate the relationship between content and emotion.
- Paper 1 argues that the intensity of the emotion felt influences the subsequent role that “emotional reaction” has on the spread of content online. Paper 3 similarly finds that both the valence and intensity of the emotion aroused influences its virality. Paper 4 found support for the inclusion

of both these controls, but not for the inclusion of arousal. Arousal was subsequently omitted from the model as a control variable.

- The social drivers of viral content was elaborated on and a distinction was made between gift giving, altruism and reputation building as key drivers for the sharing of content online.
- The dependent variable "share content online" was broadened to "share content" as paper 4 found that the spread of viral content was not limited to the online content, and that word-of-mouth played a key role in the spread of online content.
- Finally, a propagation chain for the spread of content online was proposed, where paper 4 found that the online sharing and WOM generated by the proposed process, reinforces the popularity of the content. The popularity of the content was also promulgated by mainstream media. Popularity, in turn, starts the process anew by driving more people to see the videos, then have emotional reactions to the content, and then themselves share the content.

The major contribution of this study was taking a macro-perspective of the drivers of viral content, and proposing a model for the spread of content online. As such, research questions 1 to 3 were addressed systematically, and the overall research question of the study was answered: Each of the four articles shed light on which factors drive the spread of content online. The following section deals with the contribution of these findings to the viral marketing body of knowledge.

### 3.3 THEORETICAL CONTRIBUTION OF THE STUDY

In chapter 1, four gaps in current viral marketing literature were identified:

- 1) While viral marketing research has burgeoned, so too has the reasons for the spread of content online. Authors have suggested that an array of (often contradictory) factors contribute to the spread of content online.
- 2) Current research also often looks at contributing factors in isolation. Studies either focused on the external, intrapersonal or interpersonal reasons for the spread of content online. Very few have looked at the interaction between different contributing factors, or have looked at all possible factors as a whole.
- 3) Because of this, there is currently no comprehensive model to explain the spread of content online.
- 4) Regardless of the reasons proffered, very little empirical evidence exists to support these claims (Guadagno et al., 2013; Nelson-Field et al., 2011) and “almost nothing” is known about the motivations, attitudes and behaviours of people that send along content (Phelps et al., 2004).

It was also identified that there is a lack of theory development in viral marketing literature. This study consequently contributes to the viral marketing body of knowledge by addressing the following overall research question:

*What are the factors that drive the virality of online content?*

As a result, a comprehensive model for the spread of content online is proposed. This study shows that emotion plays a central role in the spread of content online: The social sharing of emotion theory is used to explain *why* emotion could be driving the spread of content online, and the relationship between content and emotion is further investigated. Therefore, the theoretical contribution of this study lies in (1) its explication of the role of emotion in the sharing of content online, (2) drawing from psychology and sociology to better classify and measure emotion in viral marketing research, and finally (3) the proposal of a model for viral marketing. Each of these theoretical contributions is now discussed in turn.

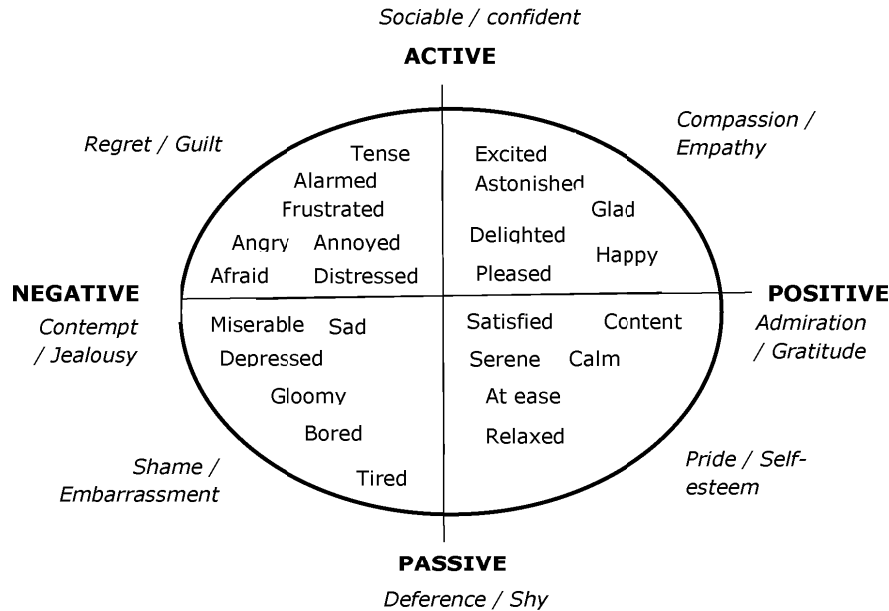
Researchers have proposed diverse reasons why content goes viral; from the quality of the content to Facebook group membership. Increasingly, however, authors agree that a key contributing factor to the spread of content online is how the content connects emotionally with viewers. The findings of these studies, however, often contradict each other. Some argue that the intensity with which the emotion is felt, the level of arousal of the emotion (i.e. high activation versus low activation emotions), or the valence (positive vs. negative) of the emotion drives the spread of content online. Others suggest that specific emotions drive the spread of content online. Still others argue that positive emotions spread faster, while some feel that negative emotions are more successful in the viral marketing context. What is clear from these contradictory findings is that the relationship

between emotion and virality is more complex than some suggest. The first theoretical contribution of this study was established in taking a step back and asking, not *how* emotion drives the sharing of content online, but *why*. Theory from sociology is used to better explain the underlying mechanism to the sharing of content online. This study therefore contributes to the current viral marketing body of knowledge by introducing the theory of the social sharing of emotion to better explain why emotion-eliciting content spreads online.

The remaining papers continue to contribute towards understanding the complex role that emotion plays in the spread of content online. The papers show that content that elicits emotion that is intense, social and complex is more likely to be shared (Paper 1), and content that is relevant to viewers is more likely to be shared (Paper 2). Finally, the valence of the content, as well as the level of intensity of the elicited emotion influences whether people share content online (Paper 3). The model proposed in paper 4 a content → emotional reaction → social considerations → share, chain is propagated in viral marketing. From this perspective, not only the emotions elicited by the content, but also the social motivations for sharing content online are the key drivers to viral success.

Studies that have measured emotion in viral marketing research, have seldom used established and reliable scales for its measurement. Even though the measurement of emotion is a long established tradition in not only marketing, but also psychology and sociology, viral marketing scholars often choose to ignore existing emotion theories. This could be both the cause of, or caused by, the contradictory findings that studies have found when focusing on emotion in this context (see for example Berger & Milkman, 2011 vs. Henke n.d.). This study built on theory from both marketing and social psychology to propose a matrix for the classification of emotion in viral marketing research (see Figure 6).

**Figure 6: Circumplex of personal and social emotions**



SOURCE: Adapted from Russell (1980) and Chakrabarti and Berthon (2012)

The emotions within each quadrant represent the *personal* emotions that people may experience when exposed to content. Emotions are divided into four quadrants, based on two axes: The valence of the emotion (positive vs. negative) and its arousal (active emotions vs. passive emotions). Rime (2009) contends that high-arousal emotions are more likely to be shared socially. Berger and Milkman (2011) similarly found that online content that evokes high arousal emotions are more likely to be shared online, i.e. in a viral marketing context. Paper 1 also contends that emotions that are social are more likely to be shared than non-social emotions, i.e. emotions caused by people's relationship to others (e.g. jealousy and anger are directed at others and can be seen as social emotions). Where being sad or depressed are inherently isolated and personal emotions, feeling shame and guilt, on the other hand, would not have existed if not in relation to other people. The emotions outside the circumplex show the *social* emotions that may influence social sharing. These emotions have been proposed to drive the sharing of content to online social networks (Chakrabarti & Berthon, 2012). Each quadrant is suggested to have different influences on viral behaviour.

### **3.4 MANAGERIAL IMPLICATIONS**

Maclaran and Catterall (2002) argue that the internet has transformed marketing. Specifically, that the internet will actualize the promises of relationship marketing, one-to-one marketing and mass customization (Maclaran & Catterall, 2002). It has allowed one-to-one communication between consumers and marketers, and because of consumers' new found input, has made the relationship between marketers and consumers more equitable – one of equal partners, whereby both parties gain value and satisfaction from a long term relationship (Maclaran & Catterall, 2002). Smith (2009) similarly states that the impact of social media can be felt across the globe, and argues that social media has forced marketers into a "listening economy" where marketers should orient away from talking through mass media to listening and conversing through social media. And it is when marketers approach viral marketing campaigns with this in mind that the chances of their message spreading online, significantly increases. Consumers do not want static messages that "sell" an idea or a brand; they want to be involved with the process of adding value to their lives.

As the amount of information and marketing messages that consumers need to deal with increase on a daily basis, and while marketing budgets shrink, marketing managers could greatly benefit from better understanding how to more effectively make social media part of their integrated marketing strategy. A key component of an online marketing strategy is getting consumers to pass along marketing messages to their online social networks. Viral marketing allows for a low-cost way of communicating marketing messages as well as a significantly reduced response rate and a greater potential for impacting the market (Dobele et al., 2007). Viral marketing messages are passed on from customer to customer, and are seen by consumers as credible. Consequently, consumers are motivated to spread these messages to their online community and subsequently recruit more customers (Phelps et al., 2004). The practical and managerial contribution of this study centers on better understanding why content spreads online, which emotional reactions to the content marketing managers want to elicit, and how to tap into the social component of viral marketing.

The managerial implications of this study can be summarized in a number of key practical suggestions for marketing managers. These suggestions have been grouped according to the external, intrapersonal and interpersonal drivers of viral content.

#### **3.4.1 Managerial Implications for the *External* Drivers of Viral Content**

The following managerial implications are recommended based on this study's findings with regards to the external drivers of viral content:

#### **3.4.1.1 Creating Quality Content is the First Step in Viral Success**

Two of the papers focused on the critical role that content plays in viral marketing. While emotion plays a central role in the spread of content online, the process begins with the content. Content that is entertaining, informative, creative, humorous, interesting, shocking, unique, practically useful, surprising, or current has been shown to increase the likelihood of being shared with online social networks. Content-specific factors start the intra- and interpersonal processes needed for viral campaigns. Content is also the only factor under marketing managers' control: While marketers can choose the message that they want to send out on social media, they cannot control the emotional response that people will have to the content.

#### **3.4.1.2 Targeted Content that builds on "Outside Knowledge or Information" is an Effective Viral Marketing Niche Strategy**

Using specific content that taps into knowledge held by the viewer, where this knowledge is outside of the video itself, is especially effective in viral campaigns because of the social component in the spread of content online. Interview participants commented that they would forward these videos to their friends who they knew were big Star Wars fans and they also commented that they would share the content with their social networks because others knew that they themselves were Star Wars fans. Therefore, content was leveraged by allowing people to share something about themselves (the fact that they are Star Wars fans) with their online social networks.

This study showed that targeted content, that is relevant to a specific niche market, could be an effective viral marketing strategy. Building on the positive sentiment that people already have towards a brand, franchise, product or story could leverage the emotional connection that people have to the content. It could also possibly elicit a more intense emotional reaction because sentiment and memory are activated when evoking such shared content. In this study, two videos were used that were targeted to a niche market, and both concerned the Star Wars franchise. The first video was "Star Wars according to a 3 year old" (<http://www.youtube.com/watch?v=EBM854BTGL0>) which generated over 21 million views. The second was "The Force: Volkswagen commercial" (<http://www.youtube.com/watch?v=R55e-uHQna0>) which generated over 58.5 million views. Both successfully tapped into the existing Star Wars franchise to leverage their viral campaigns.

What we have learned from the relationship between content and emotion is that while social media can be used to target a mass audience, it can similarly be used to target niche markets. Marketing managers need to decide which of these strategies they want to follow and subsequently either use specific content (e.g. Star Wars-related) or general content (previously referred to as universally relevant). With specifically targeted content, marketers can tap into an existing "fan base". The only caveat, however, is that emotional responses to the content will be polarized between those who find the content relevant, and those who do not. If, on the other hand, a more general target population needs to be targeted, universally relevant content should be focused on. In these cases, the creativity, humanity, surprise or attractiveness etc. of the content should be capitalized upon. Both these strategies will tap into emotional responses of viewers, but if the latter strategy is used, an even greater focus should be placed on generating the "right" emotional response from the target market.

#### **3.4.1.3 Viral Videos should not be used as Advertising Space**

To encourage greater sharing of their content online, marketers should ensure that the content is not too persuasive in nature. This is because consumers are sceptical about marketing campaigns (Phelps et al., 2004), especially when these campaigns intrude on their personal space (in this case, their online social networks). People are unlikely to forward content that is loaded with information about a brand (Kaplan & Haenlein, 2011).

Viral campaigns that have successfully leveraged brands were those that did not explicitly focus on the brand or product. Rather, the focus of the campaign was on the content of the video (be it surprising, creative, innovative etc.) and the emotion that it elicited. The Old Spice viral campaign (<http://www.youtube.com/watch?v=owGyKVbfgUE>) has been considered one of the most successful viral campaigns to date. This viral campaign, while successfully integrating product placement in the video, focused on the ingenuity of the production of the video. The campaign centers on the idealistic "Man Your Man Could Smell Like", played by actor Isaiah Mustafa (an American actor and former NFL player), addressing the viewer in confident, rapid-fire monologues which promote the benefit of using Old Spice products. While reciting the monologues, Mustafa progresses through various activities, locations, costumes, and/or extraordinary situations, all in one uninterrupted take while maintaining constant eye-contact with the camera in a nonchalant demeanor ("The Man Your Man Could Smell Like," 2013).

### **3.4.2 Managerial Implications for the *Intrapersonal* Drivers of Viral Content**

Managerial implications with regards to the intrapersonal drivers of viral content focus on the role that emotion plays in the spread of content online, and include:

#### **3.4.2.1 Emotional, rather than Informative, Content should be used**

Many authors advertising, have debated the benefits of taking an emotional versus informative approach towards advertising. Yoo and MacInnes (2005), for example show that ads with an emotional ad format, enhanced thoughts about credibility of the ad, which in turn affected ad attitudes and brand attitudes. They also showed that ads with an informational format influenced thoughts about the credibility of the ad and subsequently enhanced positive feelings and reduced negative feelings. However, in the viral marketing context, the immediate need of marketers is not only to enhance brand attitude and brand related perceptions, but to generate immediate action, i.e. sharing content with online social networks. The social sharing of emotion theory suggests that content that elicits an emotional response will generate such social action. This suggests that marketing managers should focus on an emotive approach for their viral content. Therefore, remembering that viral marketing should ideally form part of an integrated marketing communication strategy (Watts et al., 2007), we suggest that the viral component of that campaign should focus on emotive content.

#### **3.4.2.2 The more Intensely the Felt Emotion, the more likely for the Content to go Viral**

While marketing managers cannot control which emotions will be elicited by their content, we know that the more intense that emotional response by consumers (whether positive or negative), the more likely they are to share the content. Consequently, viral content should aim to generate intense emotional reactions in viewers to increase its likelihood of being forwarded. There is a long history of advertising research that marketers can tap into, in order to make viral content more emotive. For example, content can be made more emotive by using specific images and music (Brader, 2005). Leon et al. (2010) similarly suggest that different design elements can be used to generate emotive reactions to online content, including typography, the theme, graphic images and art as well as audio. There is a lexicon of literature that marketing managers can tap into to increase the emotiveness of viral campaigns.

### **3.4.2.3 Positive Emotions are more likely to go Viral than Negative Emotions**

While there is still a debate regarding whether positive versus negative content spreads faster, this study found that participants were more receptive to positive emotion eliciting content. The viral videos that focused on eliciting positive were also more successful than those that elicited negative emotions. This reflects findings from other studies in viral marketing where positive content was found to be more successful than negative content (Bardzell et al., 2008; Berger & Milkman, 2011; Eckler & Bolls, 2011; Jansen et al., 2009; Wu et al., 2011).

While intense emotional reactions are preferred over more diffuse ones, marketing managers should be careful of just seeking "intensity", they should also strive to have that emotional reaction be positive. Henke (n.d.), for example, found that using shock tactics in viral marketing can easily backfire, as the more shocked respondents were, the less likely they were to share the content online. With negative emotions, then, the relationship between the intensity of the emotion and its virality could be inverse. Brown et al. (2010b) had similar findings when looking at the use of comedic violence in viral marketing, and so too did Amer (2012) when looking at aversive evoking content. Marketing managers should thus focus on viral campaigns that elicit positive as opposed to negative emotions, and steer clear of controversial campaigns that aim to shock, scare, generate fear, or any other intense negative emotion. Eliciting positive emotions through viral campaigns also has a positive influence on brand attributes (Nussey, 2011).

### **3.4.3 Managerial Implications for the *Interpersonal Drivers of Viral Content***

A key component of the definition of viral marketing is that it is facilitated by online social networks. Network effects, and the social element of viral content, can subsequently not be separated from viral marketing. The following managerial implications focus on the social aspect of viral marketing and what that means to marketing managers.

#### **3.4.3.1 Viral Videos allow People to Show their Social Networks Who They Are**

The model proposed suggests that social motivations form a key part in the spread of content online. Schau and Gilly (2003) show that consumers construct identities

by digitally associating themselves with signs, symbols, material objects, and places. Similarly, posting viral videos on online social networks are used to communicate about a person, their identity, what they believe in and the causes they support. When consumers are involved in the creation of the message, this is even truer.

Marketing managers should make use of the interactive nature of social media to drive the sharing on content online. An excellent example of this was the Nike Write the Future campaign, for the 2010 FIFA World Cup. On May 20th 2010, several weeks before the games began, Nike released a three-minute video ad called "Write the Future" on its Facebook page. The well-crafted ad, featured some of football's most famous players (all in Nike gear) imagining what their future would be if they were to make, or fail to make, a certain play in the game. But "Write the Future" was not just a static ad. Fans were given tools to edit the spot — and their edited versions competed for votes from appreciative peers. The success of the campaign was indisputable. Five weeks after its debut, the online video had been viewed by over 20 million people. According to a Nielsen survey that tracks brand buzz (by examining brand references in blogs, online message boards, and social networking sites), as of mid-June 2010, Nike enjoyed more than double the share of buzz associated with the World Cup than its rival Adidas (30.2% share of buzz vs. 14.4%, respectively) (Ofek, 2010).

Marketing managers should capitalize on the social aspect of viral content and develop campaigns geared towards providing consumers with a voice to, ultimately, talk about themselves to their social networks.

#### **3.4.3.2 Generating Views, WOM and Press are Key Components to Viral**

##### **Success**

The popularity of the viral video had an influence on whether it was shared or not. Popular videos were promulgated through large numbers of views, WOM and through mainstream media. While some suggest that viral marketing should not be approached from a diffusion of innovation perspective (Sohn et al., 2013), the findings from this study suggests that gaining critical mass in views, does indeed influence the consequent spread of content online. Many participants indicated that they would watch a video because they saw that it had many views. They also commented that they would forward a video with many views, because even though they did not necessarily like the video, they believed that their social networks might because it had already generated a number of views. Therefore, the greater the number of views generated by online content, the greater its chances of being viewed further still, and consequently becoming viral. This seems to be not only due to network effects (the exponential exposure of content to people because they share the content with their whole social networks), but also due to the perception that is created by a large number of views.

Respondents also commented about watching videos because their friends told them to, and hearing about videos on campus and not wanting to feel left out. They also watched videos spoken about in mainstream media or on the news. These respondents also took pride in being the first to upload a video that later became popular. In this case, for example, marketing managers could motivate people to be "the first to share" creative or interesting content. Therefore, the "offline" popularity of the video had a great influence on its online success. This suggests that marketing managers cannot simply use viral marketing as the catch all to their marketing strategy, more "traditional" marketing tactics should be used to drive viral campaigns. For example, press releases should be sent to mainstream media, and events can be held that tie in to the viral marketing campaign.

The information overload that consumers are faced with, where marketers are competing for share of mind, has created an attention economy (Davenport & Beck, 2001). Marketers should therefore use every strategy possible to get their share of mind from consumers. These findings suggest that marketers should focus on generating as many views as possible during the early stages of the online campaign, to increase the chances of the content becoming viral. Both above the line and below the line strategies can be used to generate these views.

#### **3.4.3.3 Viral Marketing Campaigns should be used to Facilitate Two-Way Communication between the Company and the Consumer**

Marketing managers should not lose sight of the purpose and main function that social media fulfills; it is there to facilitate the connection between people. Therefore, campaigns that are geared towards facilitating these connections are more likely to be successful. This could be done by encouraging consumers to interact with one another through the viral campaign (see Nike's Write the Future Campaign discussed above). It could also be done by creating content that is easy to share, for example short tweets, and the use of "sharing buttons" that make sharing the content easy, thereby encouraging a two-way as opposed to a one-way conversation with consumers (Chohan, 2013). Interacting with consumers allows marketers to better understand the consumer decision-making process, their emotions, and essentially their behaviour online (Leon et al., 2010). This can be done by following up on the content that they have shared, and the comments that they have made to content that marketers themselves have shared (Chohan, 2013).

Even though key insights were gained from each article as well as the study as a whole, the study was not without limitations. These limitations should be considered when making inferences about the general population, based on this

study's findings. Each possible limitation of the study is now discussed in greater depth.

### **3.5 POSSIBLE LIMITATIONS OF THE RESEARCH**

The possible limitations of this study revolve around the generalizability of the findings, the target population, the specific research methods used, as well as the measurement of emotion. Each is discussed in turn in the following sections.

#### **3.5.1 Generalizability**

This study attempted to take a macro perspective of the drivers of virality and attempts to build theory within viral marketing literature. In order to do this, an in-depth and exploratory research design was deemed most appropriate. Exploratory research designs are used for the discovery of ideas and insights (Churchill & Iacobucci, 2009), and is most appropriate when the possible outcome of the research is unknown (Malhotra, 2010).

Exploratory research designs aim to provide hypotheses and propositions that future research can build on. Because this study ends off with a model for the spread of content online, this particular purpose of the study was certainly fulfilled. However, as exploratory research designs are typically associated with qualitative research, they are not without their limitations, the most notable of which the typical generalizability of findings (Churchill & Iacobucci, 2009; Malhotra, 2010). The purpose of the study, however, was not necessarily to generalize our findings, but to gain an in-depth understanding as to the drivers of viral content, and to take a macro-level perspective of these drivers, as is the motivation to undertake most exploratory research.

An exploratory research design was used because of various considerations including the degree to which the current research question had been crystalized, the power of the researcher to influence the variables under study, the purpose of the study and the research environment (Blumberg et al., 2008). A further impingement on the generalizability of the study was its focus on young adults as a target population.

#### **3.5.2 Target Population and Sampling**

Because the majority of papers in this study focused on young adults, the findings from the study could not be generalized to other age groups. Young adults, however, are the major users of social media, and distributors of viral content, and therefore represented the most obvious target population to better understand this

phenomenon. In a summary of what was discussed in chapter 1, this target population was most appropriate because:

- they continue to be the heaviest users of online videos (Purcell, 2010) (a specific focus of many of the papers),
- they demonstrate the highest rate of internet adoption (Camarero & San José, 2011),
- they are a relatively homogenous group, as required for most viral marketing research (Camarero & San José, 2011),
- and finally, this target population engage in more social media “mediated communication”, as Chu (2011) refers to it, and communicating to friends via social media comes more naturally to this population.

However, even though the research was well justified in its focus on young adults, the findings from the study cannot be generalized to the whole internet population. One limitation of using this target population was the absence of a sampling frame that would enable the researcher to do probability sampling. Probability sampling is when each respondent has a known and equal probability of being selected, and requires a complete population framework (from which a sample frame could be drawn) (Malhotra, 2010). Non-probability sampling is used when such a population framework is not available, and the size and distribution of the population is not clear (Malhotra, 2010). Because of the fluid nature of the internet, where one person can be in many places at the same time, and where one person could have multiple personas, non-probability sampling is often used in viral marketing research. This study also made use of non-probability sampling techniques.

In exploratory studies, probability sampling is not usually applied (Malhotra, 2010); and a non-probability sampling approach is considered appropriate (McGivern, 2006). Also, non-probability sampling gives the researcher some control over selecting the elements to be used in the sample (McGivern, 2006), which is sometimes necessary in qualitative research techniques. Thus, this study adopts non-probability sampling techniques; but to overcome some of the issues around representativeness introduced by this sampling technique, quota sampling was used.

Quota sampling is two-stage sample design; where the first stage is based on defining quotas; and in the second stage either convenience or judgement sampling is used to select participants that represent these quotas (Malhotra, 2010). The quotas are based on the target population’s characteristics, to ensure that the sample effectively represents the whole target population (Churchill & Iacobucci, 2009; Malhotra, 2010). Quota sampling thus uses primary and secondary sources, such as census data to create a sampling framework that describes the target population (McGivern, 2006). Quota sampling is a cost-effective, convenient (Malhotra, 2010) and a quick sampling approach that is also an advantageous alternative, when the researcher does not have access to a sampling frame

(McGivern, 2006). Additionally, quota sampling allows researchers to obtain a sample that is representative of the entire target population (Blumberg et al., 2008; Churchill & Iacobucci, 2009; Malhotra, 2010).

### **3.5.3 Methods Used**

The success of viral marketing research will lie in its development of suitable criteria and methodologies to measure successful viral campaigns (Cruz & Fill, 2008). To further understand consumer behaviour on online social networks, methodologies should be improved to adapt to the quickly changing online social networks. This could be done by more ethnographic research on consumers who use the internet and its platforms, such as the use of Netnography (Chohan, 2013).

This study made use of a number of research methods to get a more complete picture of the drivers of viral success, each of which has its own limitations. While personal interviews, for example, offer researchers a greater level of interaction, insight into the research question, and the ability to ask additional questions as the interview progresses (Chohan, 2013), its key limitations include that it only provides an indirect understanding of consumer behavior (Flick, 2009). It is also a timeous and costly research (Malhotra, 2010). However, due to the exploratory nature of the research, this research method was deemed most appropriate for many of the studies. At the very least, it was deemed the most appropriate first or second stage in the research in the papers that built on the findings from interviews with quantitative research. In a similar way, the relevance of each paper's research method(s) is discussed in the individual papers.

### **3.5.4 Measures**

A key component of this study was the measurement of emotion. One issue with all self-report measures is the validity and reliability of the responses that respondent give (Malhotra, 2010). This is particularly true for the measurement of emotion. There are three basic approaches to the measurement of emotion: First, emotional response is measured using open-ended questions. This view is proposed for exploratory research, where respondents should not be primed as to their possible emotional responses. Second, a discrete approach can be used where emotions are defined as a limited number (usually 6) of basic emotions. The discrete approach states that emotions can be decomposed into a number of distinct regions that represent fundamental emotions, each emotion different from the other (Lawler & Thye, 1999). Discrete emotions are aimed at a specific target or cause, are linked to specific tendencies to act, and typically include emotions like joy, love, anger, fear, sadness, disgust and surprise (Barsade & Gibson, 2007). Third, a dimensional approach can be used to classify and consequently measure emotion. A dimensional

approach, on the other hand, suggests that emotions range between two dimensions: one dimension accounts for whether the emotion is positive or negative (valence) and the other for the intensity with which the emotion is felt. Two seminal studies in the dimensional are Russell's (1980) circumplex model of affect (positive affect – negative affect vs. high arousal – low arousal) and Watson and Tellegen's (1985) consensual structure of mood (high positive affect – low positive affect vs. high negative affect – low negative affect).

The majority of authors endorse a dimensional approach to the study of emotion as opposed to defining emotions as discrete feelings (Poels & Dewitte, 2006a; Thamm, 2006). The two most popular scales using this approach is the JAS scale (Job Affect Scale) (Lewis, 2000) or the PANAS scale (Pugh, 2001). The PANAS scale was found to be highly internally consistent, largely uncorrelated, and stable over two months (Watson et al., 1988). The PANAS scale and focus on either positive affect or negative affect (or both), has since been used extensively by other researchers (Pugh, 2001).

This study made use of self-report measures of emotion, both in the form of open-ended questions and the PANAS scales. Future research might make use of other market research techniques that could obtain more objective responses. Neuro-marketing, for example, which uses a Functional Magnetic Resonance Imaging fMRI machine could be used. fMRI machines measure physical changes in people and specifically changes in brain activity. Therefore, an fMRI machine can be used to measure emotional reactions in people (Chohan, 2013). While neuro-marketing techniques might reduce respondent bias, it also poses some limitations, particularly in that it cannot yet measure specific emotions. Neural imaging can only confirm whether emotional responses were positive or negative. Therefore, if a more nuanced insight into the influence of emotion in the spread of online content is required, then neuro-marketing might not be the answer. Consequently, self-report scales (both in the form of open-ended questions and the use of established scales like PANAS) were used in this study.

### 3.6 FUTURE RESEARCH

There are numerous avenues for future research in the viral marketing context. Particularly when looking at the role that emotion plays in the spread of content online. The most obvious future research direction resulting from this study is in the empirical testing of the whole model presented in Figure 5. This study took an exploratory look at the drivers of viral content, and ultimately proposed a model for the spread of emotion online. The next, and first, logical study that should flow from this is a test of that model.

This study also provided a theory to help explain why emotion-eliciting content gets shared online: The social sharing of emotion theory. This theory, too, can be tested using the unique and interesting methodologies used in the sociology studies that tested this assertion (Christophe & Rimé, 1997; Harber & Cohen, 2005; Rime & Christophe, 1997; Rimé et al., 1991, 2010; Rime et al., 2011; Rime, 2009). Rime (2009) shows that the social sharing of emotion is effective in strengthening social bonds, linking the "interactents", and ends in enhanced social integration. The social sharing of emotion therefore appears to be an "efficient tool for refreshing and consolidating intimacy" (Rimé, 2009, p. 72). In their daily lives, people are busy with their own occupations and social ties consequently loosen. Every emotional experience thus creates an opportunity to "reinstate intimacy" (Rimé, 2009). Therefore, if people lend themselves to the interaction and emotions elicited by social sharing, they are expected to manifest (1) interest, (2) emotional contagion, (3) empathy and sympathy, (4) attachment behaviour and (5) enhanced affection for the narrator. Future research should investigate the effect that sharing emotion-eliciting content has on online social network communities (for example whether it affects network structure, social bonds, or perceptions of network participants) and social network outcomes (for example shared knowledge and social capital). One key finding from this study could also open up new doors to testing the social sharing of emotion theory in a viral marketing context; that emotion-eliciting viral content also drives interpersonal eWOM.

When asked about the most recent viral video that interview participants had seen, many indicated that they had watched a particular video because they had heard about it from friends. When discussing particular videos on the interviews, some consumers also commented that they might tell others (e.g. their family and friends) about the video, but that they would not necessarily share it online. One participant commented that even though the video was interesting, it was just not the type of content that she usually shared. She consequently opted to just "tell" others about it. It appears, therefore, that the mechanisms driving viral content are not isolated to the online environment. More traditional person-to-person WOM also plays a key role in the spread of content online. Goldenberg (2001) states that little is known about the underlying processes of personal communication. They show that weak ties in a social network are at least as influential as strong ties, and that external marketing efforts are only effective at relatively early stages of WOM. They argue that the efficacy of marketing's efforts quickly diminishes and that WOM through strong and weak ties quickly becomes the main driver of growth. No viral

marketing research, to our knowledge, has looked at the influence of offline WOM on eWOM and the spread of viral content. This will provide even more insight into the motivations to (1) access or view, and (2) share online content.

Next, the role of emotion in the sharing of content online can be further investigated. This study has contradictory findings with regards to the use of positive versus negative emotion-eliciting content in viral marketing. In paper 1, we suggest that it is not so much the valence of the emotion being evoked, but the intensity of that emotion that influences its spread online. In paper 3, however, we find that positive emotion-eliciting content is more successful than negative emotion-eliciting content. This notion is supported by most viral marketing scholars (Bardzell et al., 2008; Berger & Milkman, 2011; Eckler & Bolls, 2011; Jansen et al., 2009; Wu et al., 2011), however, many still argue that it is not the valence of the emotion, but its arousal that causes virality (Berger & Milkman, 2011; Berger, 2011a; Nelson-Field et al., 2011). At the same time, all authors that have focused on positive emotion-eliciting content show that there is a positive linear relationship between the intensity of the emotion felt and its spread online. While studies that have focused on negative emotion-eliciting content have not been as straightforward: Henke (n.d.), Brown et al. (2010b) and Amer (2012) found an inverse relationship between the intensity of the emotion and its likelihood of being shared when shock tactics, comedic violence and aversive evoking content was used respectively. Future research should focus on establishing whether the conditions proposed by this study for the spread of emotion online (intensity, complexity and sociality), hold for both positive and negative emotion-eliciting content. The social sharing of emotion theory distinguishes separate mechanisms for the sharing of positive versus negative emotion-eliciting content. This theory could possibly be used to better understand these discrepancies.

This study strongly suggests a focus on emotive content when undertaking viral campaigns. However, there is a body of advertising research focusing on the benefits and disadvantages of taking an emotive versus informative approach in developing advertising content. Yoo and MacInnes (2005), for example, show that taking an informative versus emotive approach to advertising, affects consumers' attitude towards the brand. Future research should investigate whether the suggested strategy to use only emotive content in viral campaigns is sustainable in the long term with regards to elements such a brand attitude, reputation, trust and loyalty to name but a few.

Viral marketing, by its very nature, is not just about the sharing of information between two people, but rather about the exponential sharing of information through a large social network. While the social sharing of emotion theory talks about secondary and tertiary sharing, viral messages spread much farther than that. Bartlett's (1932) research on serial reproduction, and similar research into how and why emotions are shared *exponentially*, would greatly benefit viral marketing literature. Many authors have mentioned emotional contagion online, but none have explicitly measured this phenomenon in the viral marketing context.

Therefore, the following question still remains unanswered: Do viral videos cause mass emotional contagion?

Authors assume that all social media are equal. The impact that different social media have on the sharing of emotion, should be further investigated. Hansen et al. (2011) argued that a distinction can be made between different types of social media: Facebook, for example, is where friends and acquaintances are often connected. With Twitter, on the other hand, people are often followed by strangers and brands (e.g. Newsgroups). This, they argue, has an impact on which type of emotion-eliciting (positive vs. negative) content gets shared. Using the classic theory of diffusion in news media, they argue that Twitter has characteristics that are much more suited to news media, and negative content is consequently shared more readily. Hansen et al. (2011) have just scratched the surface with regards to the impact that the medium itself has on the sharing of content online, and more research is required in this area.

Following this, one can ask: If social media can be used to satisfy people's need to connect socially after an emotional episode, then how effectively does this medium satisfy these needs as opposed to, for example, personal contact or other mediums? Lee (2012) used Media Systems Dependency theory (MSDT) to show how social media can facilitate the processing of grief. MSDT investigates people's dependency on mass media to satisfy certain needs. While this paper showed that people have social reactions to emotional experiences, and consequently share content online, Media Systems Dependency theory can be used to further understand the role of social media in the sharing of emotions. MSDT could explain how social media fulfills the need to interact socially, and future research could look at how this theory could be used to better understand the role of emotion in viral marketing.

Last, we speculate at the emergence of new emotions. Because there is no real personal contact in the sharing of emotion, could new emotions possibly emerge? The nuance of the 'new' emotion experienced in the genre of social network is a certain bravura caused by the corporeal absence of the other party. The person addressing the subject on the platform of, for instance, YouTube has the freedom to really say what he or she feels because they don't have to *face* the party they are addressing. The risk of social ostracism is considerably smaller in the safer environment of the internet. Future research should look at the impact that sharing emotions through a third party (the social network, the computer screen) has on the social exchange. Could it act as a buffer for fear of retribution? What is the impact of anonymity on the sharing (and experiencing) of emotions? So called "cyber emotions" could be formed like cyberangst or surfangst, cyberpsychosis, cyberbravade and surftirades.

## LIST OF REFERENCES

- Abedniya, A., & Mahmoudi, S. S. (2010). The impact of social networking websites to facilitate the effectiveness of viral marketing. *International Journal of Advanced Computer Science and Applications*, 1(6), 139–146.
- Amer, A. S. (2012). *What, you care?: the effective use of aversive evoking content in viral videos for advocacy group advertising* (Thesis). University of Missouri-Columbia. Retrieved from <https://mospace.umsystem.edu/xmlui/handle/10355/33123>
- Anon. (2013). Statistics - YouTube. *Youtube*. Retrieved May 24, 2013, from <http://www.youtube.com/yt/press/statistics.html>
- Ashkanasy, N. M., & Humphrey, R. H. (2011). Current Emotion Research in Organizational Behavior. *Emotion Review*, 3(2), 214–224. doi:10.1177/1754073910391684
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27(2), 184. doi:10.1177/0092070399272005
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27(2), 184. doi:10.1177/0092070399272005
- Bampo, M., Ewing, M. T., Mather, D. R., Stewart, D., & Wallace, M. (2008). The Effects of the Social Structure of Digital Networks on Viral Marketing Performance. *Information Systems Research*, 19(3), 273–290. doi:10.1287/isre.1070.0152
- Bardzell, J., Bardzell, S., & Pace, T. (2008). Emotion, engagement, and internet video. *Emotion*. Retrieved from <http://www.onetooneglobal.com/wp-content/uploads/2009/03/affect-study-screen-view1.pdf>
- Barger, P. B., & Grandey, A. A. (2006). Service with a Smile and Encounter Satisfaction: Emotional Contagion and Appraisal Mechanisms. *The Academy of Management Journal*, 49(6), 1229–1238. doi:10.2307/20159829
- Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, 47(4), 644. doi:10.2307/3094912
- Barsade, S. G., & Gibson, D. E. (2007). Why does affect matter in organizations? *The Academy of Management Perspectives*, 21(1), 36. doi:10.5465/AMP.2007.24286163
- Bartlett, S. F. C. (1932). *Remembering: A Study in Experimental and Social Psychology*. Cambridge University Press.
- Berger, J. (2011a). Arousal Increases Social Transmission of Information. *Psychological Science*, 22(7), 891–893. doi:10.1177/0956797611413294
- Berger, J. (2011b). What drives immediate and ongoing word of mouth? *Journal of Marketing Research*, 48(5), 869. doi:10.1509/jmkr.48.5.869
- Berger, J., & Milkman, K. (2010). *Social transmission, emotion, and the virality of online content*. Wharton.
- Berger, J., & Milkman, K. (2011). *What Makes Online Content Viral?* (SSRN Scholarly Paper No. ID 1528077). Rochester, NY: Social Science Research Network. Retrieved from <http://papers.ssrn.com/abstract=1528077>
- Blomström, R., Lind, E., & Persson, F. (2012). *Triggering Factors for Word-of-Mouth: A case study of Tippi-Ex's viral marketing campaign*. Retrieved from <http://hj.diva-portal.org/smash/record.jsf?pid=diva2:529823>

- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2008). *Business Research Methods* (2nd European Edition.). Berkshire, England: McGraw-Hill.
- Botha, E., & Berthon, P. (n.d.). Epizootic Emotions: Towards Understanding the Online Sharing of Emotional Content. *[Forthcoming]*.
- Botha, E., Berthon, P., & Reyneke, M. (n.d.). What makes content spread online? A review of viral marketing literature. *[Forthcoming]*.
- Botha, E., & Reyneke, M. (2013). To share or not to share: the role of content and emotion in viral marketing. *Journal of Public Affairs, 13*(2), 160–171. doi:10.1002/pa.1471
- Brader, T. (2005). Striking a Responsive Chord: How Political Ads Motivate and Persuade Voters by Appealing to Emotions. *American Journal of Political Science, 49*(2), 388–405. doi:10.1111/j.0092-5853.2005.00130.x
- Brown, M. R., Bhadury, R. K., & Pope, N. K. L. (2010a). The impact of comedic violence on viral advertising effectiveness. *Journal of Advertising, 39*(1), 49. doi:10.2753/JOA0091-3367390104
- Brown, M. R., Bhadury, R. K., & Pope, N. K. L. (2010b). The impact of comedic violence on viral advertising effectiveness. *Journal of Advertising, 39*(1), 49. doi:10.2753/JOA0091-3367390104
- Brunelle, E. (2009). Introducing media richness into an integrated model of consumers' intentions to use online stores in their purchase process. *Journal of Internet Commerce, 8*(3-4), 222. doi:10.1080/15332860903467649
- Bruno, A. (2011, April 14). YouTube: Growth In User-Generated Content Is Outpacing Official Videos. *Billboard*. Text. Retrieved November 22, 2013, from <http://www.billboard.com/biz/articles/news/1178328/youtube-growth-in-user-generated-content-is-outpacing-official-videos>
- Butler, E. A., & Gross, J. J. (2009). Emotion and emotion regulation: Integrating individual and social levels of analysis. *Emotion Review, 1*(1), 86. doi:10.1177/1754073908099131
- Camarero, C., & San José, R. (2011). Social and attitudinal determinants of viral marketing dynamics. *Computers in Human Behavior, 27*(6), 2292–2300. doi:10.1016/j.chb.2011.07.008
- Chakrabarti, R., & Berthon, P. (2012). Gift giving and social emotions: experience as content. *Journal of Public Affairs, 12*(2), 154. doi:10.1002/pa.1417
- Charland, L. C. (1995). Emotion as a natural kind: Towards a computational foundation for emotion theory. *Philosophical Psychology, 8*(1), 59.
- Charland, L. C. (1997). Reconciling Cognitive and Perceptual Theories of Emotion: A Representational Proposal. *Philosophy of Science, 64*(4), 555–579.
- Chen, Z., & Berger, J. (2013). When, why and how controversy causes conversation. *Journal of Consumer Research, Forthcoming*.
- Cheng, X., & Liu, J. (2009). NetTube: Exploring Social Networks for Peer-to-Peer Short Video Sharing. In *IEEE INFOCOM 2009* (pp. 1152–1160). doi:10.1109/INFCOM.2009.5062028
- Chohan, R. (2013). *Understanding the role of emotion in viral marketing* (Masters dissertation). University of Cape Town, Cape Town.
- Christophe, V., & Rimé, B. (1997). Exposure to the social sharing of emotion: Emotional impact, listener responses and secondary social sharing. *European Journal of Social Psychology, 27*(1), 37. doi:10.1002/(SICI)1099-0992(199701)27:1<37::AID-EJSP806>3.0.CO;2-1
- Chu, S. C. (2011). Viral advertising in social media: participation in Facebook Groups and Responses among college-Aged users. *Journal of Interactive Advertising, 12*(1), 30.

- Churchill, G. A., & Iacobucci, D. (2009). *Marketing Research: Methodological Foundations*. Cengage Learning.
- Cruz, D., & Fill, C. (2008). Evaluating viral marketing: isolating the key criteria. *Marketing Intelligence & Planning*, 26(7), 743–758. doi:10.1108/02634500810916690
- Daft, R. L., & Lengel, R. H. (1983). *Information Richness. A New Approach to Managerial Behavior and Organization Design*.
- Daft, R. L., & Lengel, R. H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*, 32(5), 554–571. doi:10.1287/mnsc.32.5.554
- Damasio, A. R. (1999). *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*. New York, NY: Harcourt Brace.
- Davenport, T. H., & Beck, J. C. (2001). *The Attention Economy: Understanding the New Currency of Business*. Harvard Business Press.
- De Bruyn, A., & Lilien, G. L. (2008). A multi-stage model of word-of-mouth influence through viral marketing. *International Journal of Research in Marketing*, 25(3), 151–163. doi:10.1016/j.ijresmar.2008.03.004
- Derbaix, C., & Vanhamme, J. (2003). Inducing word-of-mouth by eliciting surprise – a pilot investigation. *Journal of Economic Psychology*, 24(1), 99–116. doi:10.1016/S0167-4870(02)00157-5
- Dobele, A., Lindgreen, A., Beverland, M., Vanhamme, J., & van Wijk, R. (2007). Why pass on viral messages? Because they connect emotionally. *Business Horizons*, 50(4), 291–304. doi:10.1016/j.bushor.2007.01.004
- Dobele, A., Toleman, D., & Beverland, M. (2005). Controlled infection! Spreading the brand message through viral marketing. *Business Horizons*, 48(2), 143–149. doi:10.1016/j.bushor.2004.10.011
- Du, J., Fan, X., & Feng, T. (2011). Multiple emotional contagions in service encounters. *Journal of the Academy of Marketing Science*, 39(3), 449. doi:10.1007/s11747-010-0210-9
- Eckler, P., & Bolls, P. (2011). Spreading the virus: Emotional tone of viral advertising and its effect on forwarding intentions and attitudes. *Journal of Interactive Advertising*, 11(2), 1.
- Ekman, P. (1992). An argument for basic emotions. *Cognition & Emotion*, 6(3-4), 169–200. doi:10.1080/02699939208411068
- Elliott, L. (2013). *What makes a non-professional video go viral: a case study of "I'm farming and I grow it"* (Thesis). Kansas State University. Retrieved from <http://krex.ksu.edu/dspace/handle/2097/15780>
- Ferguson, R. (2008). Word of mouth and viral marketing: taking the temperature of the hottest trends in marketing. *Journal of Consumer Marketing*, 25(3), 179–182. doi:10.1108/07363760810870671
- Flick, U. (2008). *Designing Qualitative Research*. SAGE.
- Flick, U. (2009). *An Introduction to Qualitative Research*. SAGE.
- Frijda, N. H. (1986). *The Emotions*. Cambridge University Press.
- Golan, G. J., & Zaidner, L. (2008). Creative Strategies in Viral Advertising: An Application of Taylor's Six-Segment Message Strategy Wheel. *Journal of Computer-Mediated Communication*, 13(4), 959. doi:10.1111/j.1083-6101.2008.00426.x
- Goldenberg, J., Libai, B., & Muller, E. (2001). Talk of the Network: A Complex Systems Look at the Underlying Process of Word-of-Mouth. *Marketing Letters*, 12(3), 211–223. doi:10.1023/A:1011122126881

- Gountas, S., & Ewing, M. (2003). The softer side of services: Exploring the effect of sincerity and emotional contagion on satisfaction. Presented at the ANZMAC 19, 1-3 December, Adelaide. Retrieved from [http://anzmac.org/conference/2003/papers/CON19\\_gountass.pdf](http://anzmac.org/conference/2003/papers/CON19_gountass.pdf)
- Grove, S. (2008). Nieman Reports | YouTube: The Flattening of Politics. *Nieman Reports*. Retrieved April 23, 2013, from <http://www.nieman.harvard.edu/reportsitem.aspx?id=100019>
- Gruzd, A., Doiren, S., & Mai, P. (2011). Is happiness contagious online? A case of Twitter and the 2010 Winter Olympics. In *System Sciences (HICSS)*. Hawaii.
- Guadagno, R. E., Rempala, D. M., Murphy, S., & Okdie, B. M. (2013). What makes a video go viral? An analysis of emotional contagion and Internet memes. *Computers in Human Behavior*, 29(6), 2312–2319. doi:10.1016/j.chb.2013.04.016
- Guadagno, R. E., Rempala, D. M., Murphy, S., & Okdie, B. M. (n.d.). *Why do Internet videos go viral? A social influence analysis*. Arlington, Virginia: National Science Foundation.
- Guerini, C., Strapparava, C., & Ozbal, G. (2011). Exploring text virality in social networks. In *ICWSM*. AAAI.org. Retrieved from <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM11/paper/viewFile/2820/3235>
- Halvey, M. J., & Keane, M. T. (2007). Analysis of Online Video Search and Sharing. In *Proceedings of the Eighteenth Conference on Hypertext and Hypermedia* (pp. 217–226). New York, NY, USA: ACM. doi:10.1145/1286240.1286301
- Hansen, L. K., Arvidsson, A., Nielsen, F. A., Colleoni, E., & Etter, M. (2011). Good Friends, Bad News - Affect and Virality in Twitter. In J. J. Park, L. T. Yang, & C. Lee (Eds.), *Future Information Technology* (pp. 34–43). Springer Berlin Heidelberg. Retrieved from [http://link.springer.com/chapter/10.1007/978-3-642-22309-9\\_5](http://link.springer.com/chapter/10.1007/978-3-642-22309-9_5)
- Harber, K. D., & Cohen, D. J. (2005). The emotional broadcaster theory of social sharing. *Journal of Language and Social Psychology*, 24(4), 382. doi:10.1177/0261927X05281426
- Hargittai, E., & Walejko, G. (2008). THE PARTICIPATION DIVIDE: Content creation and sharing in the digital age1. *Information, Communication & Society*, 11(2), 239–256. doi:10.1080/13691180801946150
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional Contagion*. Cambridge University Press.
- Heath, C., Bell, C., & Sternberg, E. (2001). Emotional selection in memes: the case of urban legends. *Journal of Personality and Social Psychology*, 81(6), 1028. doi:10.1037/0022-3514.81.6.1028
- Henke, L. L. (n.d.). Viral marketing and music videos: When shock tactics backfire. *Journal of Behavioural Studies in Business*. Retrieved from [www.aabri.com/manuscripts/121198.pdf](http://www.aabri.com/manuscripts/121198.pdf)
- Herold, D. K. (2008). Development of a civic society online? : Internet vigilantism and state control in Chinese cyberspace. *Asia Journal of Global Studies*, 2(1), 26–37.
- Hill, A. L., Rand, D. G., Nowak, M. A., & Christakis, N. A. (2010). Emotions as infectious diseases in a large social network: the SISa model. *Proceedings of the Royal Society B: Biological Sciences*, 277(1701), 3827–3835. doi:10.1098/rspb.2010.1217

- Ho, J. Y. C., & Dempsey, M. (2010). Viral marketing: Motivations to forward online content. *Journal of Business Research*, 63(9–10), 1000–1006.  
doi:10.1016/j.jbusres.2008.08.010
- Huang, C.-C., Lin, T.-C., & Lin, K.-J. (2009). Factors affecting pass-along email intentions (PAEIs): Integrating the social capital and social cognition theories. *Electronic Commerce Research and Applications*, 8(3), 160–169.  
doi:10.1016/j.elerap.2008.11.001
- Huang, J., Chen, R., & Wang, X. (2012). Factors influencing intention to forward short Internet videos. *Social Behavior and Personality: An International Journal*, 40(1), 5–14. doi:10.2224/sbp.2012.40.1.5
- Huang, M., Cai, F., Tsang, A. S. L., & Zhou, N. (2011). Making your online voice loud: the critical role of WOM information. *European Journal of Marketing*, 45(7/8), 1277. doi:10.1108/03090561111137714
- Izawa, M. (2010). *What makes viral videos viral? Roles of emotion, impression, utility, and social ties in online sharing behavior*. The Johns Hopkins University, Baltimore, MD. Retrieved from  
advanced.jhu.edu/media/files/communication/Izawa-Thesis-Final.pdf
- Jansen, B. J., Zhang, M., Sobel, K., & Chowdury, A. (2009). Twitter power: Tweets as electronic word of mouth. *Journal of the American Society for Information Science and Technology*, 60(11), 2169. doi:10.1002/asi.21149
- Jenkins, B. (2011). *Consumer sharing of viral video advertisements: A look into message and creative strategy typologies and emotional content* (Masters). American University School of Communication, Washington DC.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14–26.  
doi:10.3102/0013189X033007014
- Jones, S. (1999). *Doing Internet Research: Critical Issues and Methods for Examining the Net*. SAGE.
- Jurvetson, S., & Draper, T. (1997). *Viral Marketing*. Netscape M-Files.
- Kaplan, A. M., & Haenlein, M. (2011). Two hearts in three-quarter time: How to waltz the social media/viral marketing dance. *Business Horizons*, 54(3), 253–263. doi:10.1016/j.bushor.2011.01.006
- Kozinets, R. V. (2010). *Netnography: Doing ethnographic research online*. SAGE Publications Inc.
- Lacan, J. (1981). *The four fundamental concepts of psycho-analysis*. Toronto, ON: Parasitic Ventures Press. Retrieved from  
[http://www.artype.de/Sammlung/pdf/PVP\\_Erratum.pdf](http://www.artype.de/Sammlung/pdf/PVP_Erratum.pdf)
- Lagger, C., Lux, M., & Marques, O. (2011). What makes people watch online videos: An exploratory study. *ACM Computers in Entertainment*, (May 7-12).  
doi:978-1-4503-0268-5/11/05
- Lawler, E. J., & Thye, S. R. (1999). Bringing Emotions into Social Exchange Theory. *Annual Review of Sociology*, 25(1), 217–244.  
doi:10.1146/annurev.soc.25.1.217
- Lee, C. S. (2012). Exploring emotional expressions on YouTube through the lens of media system dependency theory. *New Media & Society*, 14(3), 457–475.  
doi:10.1177/1461444811419829
- Leon, S., Nikov, A., & Chadee, D. (2010). A control structure for intelligent emotion-oriented eCommerce systems. In *Proceedings of the World Congress on Engineering 2010* (Vol. I). London. Retrieved from  
[http://www.iaeng.org/publication/WCE2010/WCE2010\\_pp102-107.pdf](http://www.iaeng.org/publication/WCE2010/WCE2010_pp102-107.pdf)

- Leskovec, J., Adamic, L. A., & Huberman, B. A. (2007). The Dynamics of Viral Marketing. *ACM Trans. Web*, 1(1). doi:10.1145/1232722.1232727
- Lewis, K. M. (2000). When leaders display emotion: How followers respond to negative emotional expression of male and female leaders. *Journal of Organizational Behavior*, 21(2), 221. doi:10.1002/(SICI)1099-1379(200003)21:2<221::AID-JOB36>3.0.CO;2-0
- Maclaran, P., & Catterall, M. (2002). Researching the social Web: marketing information from virtual communities. *Marketing Intelligence & Planning*, 20(6), 319–326. doi:10.1108/02634500210445374
- Malhotra, N. (2010). *Marketing Research* (6th ed.). USA: Prentice Hall.
- McDaniel, C., & Gates, R. (2013). *Marketing Research* (9th ed.). Asia: John Wiley and Sons.
- McGivern, Y. (2006). *The pract of market and social research: An introduction*. Pearson Education.
- Nelson-Field, K., Riebe, E., & Newstead, K. (2011). To shock or inspire: Understanding which emotions drive video sharing on Facebook. In ANZMAC. Perth WA. Retrieved from anzmac.org
- Nussey, V. (2011). The six-step emotional appeal. *Raven Internet Marketing Tools*. Blog. Retrieved November 21, 2013, from <http://raventools.com/blog/the-6-step-emotional-appeal/>
- Ofek, E. (2010). The World Cup Brand Winner: Adidas or Nike? *Harvard Business Review*. Retrieved November 21, 2013, from <http://blogs.hbr.org/2010/07/the-world-cup-winner-adidas-or/>
- Parkinson, B. (1995). *Ideas and Realities of Emotion*. Psychology Press.
- Peters, K., Kashima, Y., & Clark, A. (2009). Talking about others: Emotionality and the dissemination of social information. *European Journal of Social Psychology*, 39(2), 207–222. doi:10.1002/ejsp.523
- Phelps, J. E., Lewis, R., Mobilio, L., Perry, D., & Raman, N. (2004). Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. *Journal of Advertising Research*, 44(04), 333.
- Pingdom. (2012). Report: Social network demographics in 2012. Retrieved November 22, 2013, from <http://royal.pingdom.com/2012/08/21/report-social-network-demographics-in-2012/>
- Pintado, I. (2009). *Connection Generation: How Connection Determines Our Place in Society and Business*. ConnectGen Pty Limited.
- Poels, K., & Dewitte, S. (2006a). How to capture the heart? Reviewing 20 years of emotion measurement in advertising. Social Science Research Network, Katholieke Universiteit Leuven. Retrieved from [https://lirias.kuleuven.be/bitstream/123456789/228488/1/MO\\_0605.pdf](https://lirias.kuleuven.be/bitstream/123456789/228488/1/MO_0605.pdf)
- Poels, K., & Dewitte, S. (2006b). *How to Capture the Heart? Reviewing 20 Years of Emotion Measurement in Advertising* (SSRN Scholarly Paper No. ID 944401). Rochester, NY: Social Science Research Network. Retrieved from <http://papers.ssrn.com/abstract=944401>
- Pousttchi, K., & Wiedemann, D. G. (2007). Success Factors in Mobile Viral Marketing: A Multi-Case Study Approach. In *Management of Mobile Business, 2007. ICMB 2007. International Conference on the* (pp. 34–34). doi:10.1109/ICMB.2007.61
- Pugh, S. D. (2001). Service with a Smile: Emotional Contagion in the Service Encounter. *The Academy of Management Journal*, 44(5), 1018–1027. doi:10.2307/3069445

- Purcell, K. (2010). *The state of online video* (Research Report). Washington DC: Pew Internet. Retrieved from <http://pewinternet.org/~media//Files/Reports/2010/PIP-The-State-of-Online-Video.pdf>
- Rachman, S. (1980). Emotional processing. *Behaviour Research and Therapy*, 18(1), 51.
- Rasmussen, A., Ude, C., & Landry, E. (2010). HD Marketing 2010: Sharpening the conversation. Booz Allen Hamilton. Retrieved from [http://www.aaaa.org/agency/compensation/surveys/Documents/hd\\_marketing\\_2010.pdf](http://www.aaaa.org/agency/compensation/surveys/Documents/hd_marketing_2010.pdf)
- Reddit.com. (2013). reddit.com: about reddit. Retrieved November 23, 2013, from <http://www.reddit.com/about/>
- Reyneke, M. (2011). In the lap of luxury: Consumer conversation concerning online advertisements of luxury brands. *South African Journal of Business Management*, 42(2), 27–35.
- Riger, S. (1993). What's wrong with empowerment? *American Journal of Community Psychology*, 21, 279–292.
- Rime, B. (2009). Interpersonal Emotion Regulation. In *Handbook of Emotion Regulation*. Guilford Press.
- Rimé, B. (2007). The social sharing of emotion as an interface between individual and collective processes in the construction of emotional climates. *Journal of Social Issues*, 63(2), 307. doi:10.1111/j.1540-4560.2007.00510.x
- Rimé, B. (2009). Emotion elicits the social sharing of emotion: Theory and empirical review. *Emotion Review*, 1(1), 60. doi:10.1177/1754073908097189
- Rime, B., & Christophe, V. (1997). How individual emotion episodes feed collective memory. In J. W. Pennebaker, D. Paez, & B. Rimé (Eds.), *Collective memory of political events: Social psychological perspectives*. New Jersey, USA: Lawrence Erlbaum Associates.
- Rimé, B., Finkenauer, C., Luminet, O., Zech, E., & Philippot, P. (1998). Social sharing of emotion: New evidence and new questions. *European Review of Social Psychology*, 9(1), 145. doi:10.1080/14792779843000072
- Rimé, B., Mesquita, B., Boca, S., & Philippot, P. (1991). Beyond the emotional event: Six studies on the social sharing of emotion. *Cognition & Emotion*, 5(5–6), 435–465. doi:10.1080/02699939108411052
- Rimé, B., Páez, D., Basabe, N., & Martínez, F. (2010). Social sharing of emotion, post-traumatic growth, and emotional climate: Follow-up of Spanish citizen's response to the collective trauma of March 11th terrorist attacks in Madrid. *European Journal of Social Psychology*, 40(6), 1029–1045. doi:10.1002/ejsp.700
- Rime, B., Paez, D., Kanyangara, P., & Yzerbyt, V. (2011). The social sharing of emotions in interpersonal and collective situations: Common psycho-social consequences. In I. Nyklicek, A. Vingerhoets, & M. Zeelenberg (Eds.), *Emotion Regulation and Well-Being*. New York, NY: Springer.
- Rimé, B., Paez, D., Kanyangara, P., & Yzerbyt, V. (2011). The Social Sharing of Emotions in Interpersonal and in Collective Situations: Common Psychosocial Consequences. In I. Nyklíček, A. Vingerhoets, & M. Zeelenberg (Eds.), *Emotion Regulation and Well-Being* (pp. 147–163). New York, NY: Springer New York. Retrieved from [http://www.springerlink.com/index/10.1007/978-1-4419-6953-8\\_9](http://www.springerlink.com/index/10.1007/978-1-4419-6953-8_9)
- Rimé, B., Philippot, P., Boca, S., & Mesquita, B. (1992). Long-lasting cognitive and social consequences of emotion: Social sharing and rumination. In W. Stroebe

- & M. Hewstone (Eds.), *European review of social psychology* (Vol. 3, p. 225). New York, NY: John Wiley and Sons.
- Rodic, N., & Koivisto, E. (2012). Best practices in viral marketing. Media+Mark. Retrieved from <http://www.aaltomediemark.org/wp-content/uploads/2012/02/Rodic-N.-2012-Best-Practices-in-Viral-Marketing.pdf>
- Rothbaum, F., & Tsang, B. Y. P. (1998). Lovesongs in the United States and China on the nature of romantic love. *Journal of Cross-Cultural Psychology*, 29(2), 306.
- Rotman, D., & Preece, J. (2010). The "WeTube" in YouTube – creating an online community through video sharing. *International Journal of Web Based Communities*, 6(3), 317–333. doi:10.1504/IJWBC.2010.033755
- Roy, S. S. (2011). *Exploring the propensity to share product information on social networks* (Masters). School of Journalism and Mass Communication, The University of Minnesota, Minnesota. Retrieved from [http://conservancy.umn.edu/bitstream/117151/1/Sen%20Roy\\_Sahana\\_August2011.pdf](http://conservancy.umn.edu/bitstream/117151/1/Sen%20Roy_Sahana_August2011.pdf)
- Rudnytsky, P. L., & Charon, R. (2008). *Psychoanalysis and Narrative Medicine*. SUNY Press.
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39(6), 1161. doi:10.1037/h0077714
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological Review*, 110(1), 145. doi:10.1037/0033-295X.110.1.145
- Salathé, M., Vu, D. Q., Khandelwal, S., & Hunter, D. R. (2013). The dynamics of health behavior sentiments on a large online social network. *EPJ Data Science*, 2(1). doi:10.1140/epjds16
- Sansone, M., Tartaglione, A. M., & Bruni, R. (2012). How do companies achieve their marketing goals with social networks? *Chines Business Review*, 11(11), 970–980.
- Schau, H. J., & Gilly, M. C. (2003). We Are What We Post? Self-Presentation in Personal Web Space. *Journal of Consumer Research*, 30(3), 385–404. doi:10.1086/jcr.2003.30.issue-3
- Schoenewolf, G. (1990). Emotional contagion: Behavioral induction in individuals and groups. *Modern Psychoanalysis*, 15(1), 49–61.
- Smith, C. (2013, August 5). How Many People Use the Top Social Media, Apps & Services? | DMR. Retrieved August 23, 2013, from <http://expandedramblings.com/index.php/resource-how-many-people-use-the-top-social-media/>
- Smith, T. (2009). The social media revolution. *International Journal of Market Research*, 51(4), 559. doi:10.2501/S1470785309200773
- Sohn, K., Gardner, J. T., & Weaver, J. L. (2013). Viral marketing - More than just a buzzword. *Journal of Applied Business and Economics*, 14(1), 21–42.
- Stets, J. E., & Turner, J. H. (2006). *Handbook of the sociology of emotions*. Springer.
- Stockwell, P., Colomb, R. M., Smith, A. E., & Wiles, J. (2009). Use of an automatic content analysis tool: A technique for seeing both local and global scope. *International Journal of Human-Computer Studies*, 67(5), 424–436. doi:10.1016/j.ijhcs.2008.12.001
- Sutton, R. I., & Rafaeli, A. (1988). Untangling the Relationship between Displayed Emotions and Organizational Sales: The Case of Convenience Stores. *The Academy of Management Journal*, 31(3), 461–487. doi:10.2307/256456

- Teddlie, C. (2009). *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*. SAGE Publications Inc.
- Teixeira, T. (2012). The new science of viral ads. *Harvard Business Review*, 90(3), 25.
- Thamm, R. A. (2006). The Classification of Emotions. In J. E. Stets & J. H. Turner (Eds.), *Handbook of the Sociology of Emotions* (pp. 11–37). Boston, MA: Springer US. Retrieved from [http://www.springerlink.com/index/10.1007/978-0-387-30715-2\\_2](http://www.springerlink.com/index/10.1007/978-0-387-30715-2_2)
- The Man Your Man Could Smell Like. (2013, November 17). In *Wikipedia, the free encyclopedia*. Retrieved from [http://en.wikipedia.org/w/index.php?title=The\\_Man\\_Your\\_Man\\_Could\\_Smell\\_Like&oldid=579934844](http://en.wikipedia.org/w/index.php?title=The_Man_Your_Man_Could_Smell_Like&oldid=579934844)
- Thelwall, M. (2008). Social networks, gender, and friending: An analysis of MySpace member profiles. *Journal of the American Society for Information Science and Technology*, 59(8), 1321–1330. doi:10.1002/asi.20835
- Tsai, W. C. (2001). Determinants and consequences of employee displayed positive emotions. *Journal of Management*, 27(4), 497. doi:10.1177/014920630102700406
- Tsai, W. C., & Huang, Y. M. (2002). Mechanisms linking employee affective delivery and customer behavioral intentions. *Journal of Applied Psychology*, 87(5), 1001. doi:10.1037/0021-9010.87.5.1001
- Vaish, A., G., R. K., Saxena, A., M., D., & Goel, U. (2012). Quantifying Virality of Information in Online Social Networks: *International Journal of Virtual Communities and Social Networking*, 4(1), 32–45. doi:10.4018/jvcsn.2012010103
- Voltz, S., & Grobe, F. (2013). *The viral video manifesto*. McGraw-Hill. Retrieved from <http://cds.cern.ch/record/1539796>
- Wallsten, K. (2010). "Yes we can": How online viewership, blog discussion, campaign statements, and mainstream media coverage produced a viral video phenomenon. *Journal of Information Technology & Politics*, 7(2-3), 163. doi:10.1080/19331681003749030
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063. doi:10.1037/0022-3514.54.6.1063
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98(2), 219. doi:10.1037/0033-2909.98.2.219
- Watts, D. J., Peretti, J., & Frumin, M. (2007). *Viral marketing for the real world*. Retrieved from [http://www.itu.dk/people/rkva/2010-Summer-IM/readings/watts2007\\_viralmarketing.pdf](http://www.itu.dk/people/rkva/2010-Summer-IM/readings/watts2007_viralmarketing.pdf)
- Wiedemann, D. G. (2007). Exploring the concept of mobile viral marketing through case study research. *MMS*, 49–60.
- Wilson, R. F. (2005). The six principles of viral marketing. *Web Marketing Today*, (February 1). Retrieved from <http://library.softgenx.com/Children/marketing/ViralMarketing.pdf>
- Wollheim, R. (1999). *On the Emotions*. New Haven: Yale University Press.
- Wu, S., Tan, C., Kleinberg, J., & Macy, M. (2011). Does bad news go away faster? In *Proceedings of the fifth international AAAI Conference on Weblogs and Social Media* (pp. 646–649). AAAI.org.

- Yang, C., Hsu, Y.-C., & Tan, S. (2010). Predicting the Determinants of Users' Intentions for Using YouTube to Share Video: Moderating Gender Effects. *CyberPsychology, Behavior & Social Networking*, 13(2), 141–152.  
doi:10.1089/cyber.2009.0105
- Yoo, C., & MacInnis, D. (2005). The brand attitude formation process of emotional and informational ads. *Journal of Business Research*, 58(10), 1397–1406.  
doi:10.1016/j.jbusres.2005.03.011
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business Research Methods* (9th ed.). Canada: South-Western Cengage.



**US-AB**  
universitetsservice digitaltryck

Printed in Sweden 2014, [www.us-ab.com](http://www.us-ab.com)



341550  
Printed matter

ISBN 978-91-7595-222-2  
ISSN 1100-7982  
ISRN KTH/IEO/R-2014:06