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A Study of Factors of Motivation for Forwarding Content in Social Media and Determining the Influence of Mavens of Social Media: Evidence from Face-Book

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ABSTRACT

Impetus for this study came from the fact that technology, social media and digital has become crucial for the success of any organization and therefore better customer engagement content and dissemination of information is of great import. Objective was to identify motivational factors that drive an individual to share or post content in a social network. Relation between emotional appeals in the content and its significance on motivational factors which may drive the individual to share the content was examined. This study proposes modeling the influence of an individual in sharing the content which would enable content creation and distribution of the content amongst effective mavens to create an e-buzz which may further lead to a viral campaign. It can be used by an industry for digital marketing. Theoretical framework was derived from secondary study of published researches on viral marketing, seeding strategies, design of content and cultural and emotional aspects embedded in content. This is an empirical study wherein a scaled questionnaire was used to understand as to how emotional appeals affect the levels of motivational drives .A random sample of 145 respondents within the city of Bangalore and within the set age group of 18-35 was considered to gather data and the data so collected was analyzed using SPSS and excel. Study provided empirical insights as to how different emotional appeals correspond to different motivational factors for sharing content in social media.It suggests what type of emotional appeals should be included in the content to motivate sharing and trigger popularity. A model was created which would assist in measuring the influence of an individual in sharing and identify mavens.

Keywords: Forwarders, Facebook, Reach, Influence, Motivational Factor, Emotional Appeal, Mavens.

INTRODUCTION:

Trends of marketing have been influenced by evolution of internet and web2.0 technologies. Advertising, which is one of the most significant aspects of marketing, has shown a great shift towards digital media in recent years. Media space has been cluttered by a number of commercials of competitors. Even brands are shifting to newer media in digital space to gain attention of viewers with measures and richness of content which differentiates them from their competitors. Pproliferation of internet as a media has made it possible for marketers to create brand awareness within minimum time by dint of exponential propagation of message through varied internet media like social networks, websites and blogs and so on.

Creating content is very crucial to begin with for a digital marketing campaign because certain features and emotions embedded in content strikes the chord with audience in terms of popularity which may eventually

lead to an emotional contagion. In fact understanding features and their construct in such popular content will provide guidance for future content marketers

LITERATURE REVIEW:

(Goel, 2014) studied impact of viral marketing on brand awareness, credibility of company sales. Data was collected from published research articles in journals and books. Majority of articles concentrated on impact of viral marketing through only one or two Medias like email and website marketing whereas this paper fills gap of previous research by studying impact of viral marketing through various formats of media like blog and website marketing apart from email or mobile marketing on factors like brand awareness, sales, credibility etc. Viral marketing starts with a seed of individuals who start spreading message through friends and acquaintances via emails, social sites, sms etc.

(Chahar, 2013) identifies a conceptual framework of viral marketing and defines essential elements for a viral marketing as good content, technical setup, brand integration, social seeding, media plan information. Author finally identifies various formats of campaigns which go viral and essential qualities embedded in them.

(Lawrence Mpele Lekhanya, 2014) disseminate an analysis and evaluation of impact of viral marketing on corporate reputation. Article articulates difficulty of business decision makers to manage flow of communication amongst consumers and thereby controlling reputation of brand. This paper also measures extent of impact of viral marketing on corporate brand reputation. Companies practice viral marketing for exponential growth in message exposure with less cost and effort. Study also illustrates how external and internal environment are to be studied before designing a viral campaign.

(MilKMan) in this article throws light on psychological perspectives which makes an online content go viral. Author takes a psychological approach to understand diffusion and thus identifies characteristics of a content which makes it suitable for social diffusion. Usefulness of information,striking sentiment of altruism may lead to diffusion. Emotionally evocative content (positive or negative) leading to higher arousal have higher tendency of being shared. Emotions of higher activation whether positive or negative leads to higher transmission tendency. Results showed that while more arousing content positive or negative are more viral than those which do not evoke emotions, positive content are more viral than negative content. While more awe-inspiring (a positive emotion) content is more viral and sadness inducing(a negative emotion) content is less viral, some negative emotions are positively associated with virality.

(Guadagno; memes, 2013) identifies characteristics which makes a video go viral.Role of emotional response and source of video were focused perspectives for study. Results showed that highly arousing videos were more likely to be shared. participants were more likely to share videos of positive valence than negative valence. Research methodology involved surveying participants from undergraduate psychology students. Participants gave basic demographic data and were assigned one of twelve randomly assigned videos and their intentions to forward video was assessed.

(Woerndl, 2008) examines different critical factors for positioning a viral marketing.Study has identified five types of factors which critically influences success of viral marketing campaigns.These factors are overall structure of campaign, characteristics of products or service, content of message, characteristics of diffusion and peer to peer information conduit.Author further sorts out risk and benefit factors associated with viral marketing through secondary sources and associates these risks with emerging critical factor for success of campaigns and concludes with a viral marketing typology for three different kinds of campaigns.

(Dempsey, 2010) identifies potential motivational factors behind forwarding of content.Four prime motivations identified are need to be a part of a group, need to be altruistic, need to be individualistic and need for personal growth. Author examines relationship between these motivational factors and frequency of forwarding on line content and effect of trait curiosity in forwarding on line content.Result gives a structural model between motivational factors and drive to forward content. Research tools used for study are: 10 item need to belong scale, individuation scale with 12 likert type questions rated on a 5 point scale,personal growth initiative scale that yields a single scale score for personal growth initiative and scale by price Feick and Gusky to measure altruism.

(Jenkins, 2011) definescharacteristics of a video advertisement in terms of creative typologies which make it go viral. Results showed that transformational and informational content goes viral. Every viral video advertisement used unique selling proposition. Humor and surprise are two most important elements of viral messages. Some important elements are knowledge, empathy, honesty sincerity and advocacy. Research was exploratory in nature which included study of 30 viral social video advertisements.

(Karine Nahon, 2011) elucidates as to how information spreads in blogosphere. Four different types of blogs

were examined in perspective of viral content which determines how information moves through different types of blogs taking into account factors like perceived risk and perceived cost. Results show that information from more elite blogs are more likely to shared. Regression modeling of viral blog posts was looked at.

(Liu-Thompkins, 2012) examines key aspects of seeding strategy.Research identifies four critical aspects of seeding strategy i.e seed network size, tie strength, seed influence and seed homogeneity.Study examines whether number of seeds are going to positively affect diffusion, quality of message for cause of diffusion, seeding individuals who have strong ties with message creator, number of connections seed consumers have to increase diffusion. Three types of influencing variables which are history,demography and content influence were considered. Research was conducted using viral videos posted in you tube and rated on youtube rates scale to measure average rating for a video and affiliate network model for social network analysis (Wasserman and Faust 1994)identified few control variables which are included in analysis to account for impact of demographic, historical, and content factors. For historical influences, this research used a video poster's past experience with two variables.Author does not analyse relation between characteristics of seeds and characteristics of content which they share most and only identifies critical aspects but does not draw a framework for seeding strategy.

(Pel, 2012) examined psychological and behavioral characteristics of e-mavens. An e-maven is one who discovers information first and feels intrinsic enjoyment and gets excited enough to share information.Psychological variables identified are self esteem, status driving, need for uniqueness and emotional stability and extraversion. Behavioral variable identified are loyalty altruism and feminism.Results shows that e-mavens have a desire for gaining status and standing out of norm and that hey are open to new experiences. An online survey was done to attract participants of age group 20-49. Only Dutch participants were selected to reduce cultural bias.. A survey consisting of 96 questions was distributed with help from Qualtrics online survey tools. All questions were presented randomly in order to secure open minded answering using maven scale extracted from Feick and Price which consists of 6 items on a 7 point likert scale.

(Bettina Lis, 2014) compares and analyses factors affecting behavior of forwarders and non-forwarders of viral message and examined effect of brand attitude, brand expertise and self congruity of recipients forwarding behavior.These three factors as a whole give brand perception of recipients. Stimulus organism and response model and theory of reasoned action models are used to understand how these brand perception factors affect forwarding behavior. Results of study shows that forwarders show higher mean values of brand attitude, self congruity and brand experience and involvement.

(West, 2011) analysed top 20 videos and their content and highlights nine factors as important determinants for videos to become viral which are title length, run-time, element of laughter, element of irony, element of surprise, element of minority presence, musical quality, youth , talent. By analyzing twenty videos in terms of these factors author determines their importance. Findings show that elements of brevity like tittle length, run time are more important than element of minority, youth. Results show that more easily view-able content are more viral.Author used Time Magazine's list of top 50 videos.

(Jonas Sebastian Krauss, 2008) shows how to measure forum posts of contributors in network and how it indicates buzz of a movie and its quality.Using web mining approach author combines level of buzz and content of discussion about movie amongst internet movie data community. Author further examines relation between buzz intensity and performance of movie.IMDB database. Though study throws light on structure of buzz network it does not reveal how to determine network.

(Olivier Toubia, 2009) addresses following research questions: (1) How does effectiveness of viral marketing compare to that of traditional media? (2) What is the relation between online and offline social interactions in viral marketing campaigns? and (3) what characterizes most active members in a viral marketing campaign.Study involved working in collaboration with OPI, a leading manufacturer of cosmetic products, in Spring/Summer of 2008 as company was launching a new product, Nic's Sticks. Nic's Sticks are innovative nail polish pens designed for easy and quick application. First, members of panel were invited to participate by email. Second, members filled out an "enrollment" survey that assessed their initial dispositions towards nail polish (category), OPI (brand), and Nic's Sticks (product). A few weeks later, members were invited by email to fill out an optional "evaluation" survey, asking for their post-usage evaluation of product, and asking them to report their WOM transmission activities during campaign. OPI and SheSpeaks TM ran a viral campaign involving 4,315 members of SheSpeaksTM panel. These members of viral marketing campaign were used for sample of study. They also considered sample of other viral marketing firms for study.Measures of return on investment (details of which are confidential) also provide stronger support for viral marketing campaign versus other tools .It was found that although viral marketing campaigns have strong online components and are

typically run from online platforms, most social interactions still take place offline. Third, a simple set of member social characteristics—which are not campaign specific—appear to be good predictors of WOM transmission activity. Product-related 24 member characteristics—which are obviously specific to a given campaign—are not as informative. This suggests that most active members in a campaign may be identified before start of campaign, without using any product-related data.

(Matw C. Nisbet, 2009) studied impact of opinion leaders as even thoughmany researches have been done on communication flow to diffuse social campaigns like awareness on climate change, role of opinion leaders and their importance in communication flow has not found much importance. This study frames complexities of public opinion on climate change in a way that connects core values of public, helping it to reach audience with carefully crafted message. Study extends from established theories on strategic use of opinion leaders (Robertson, Zielinski, & Ward, 1984), Maibach, Roser-Renouf, and Taylor (2008), Anatomy of Buzz (Rosen, 2002), and Applebee's America (Sosnick, Dowd, & Fournier, 2006), patterns of communication and behavior among individuals in a small group (see Kim, 2007; Schenk &Döbler, 2002; Weimann, 1994 for reviews). All these theories describe as to how to take advantage of "mavens," "connectors," "navigators," "network hubs," and "buzz marketing" to sell products and win elections and patterns of communication flow.Research perspective covers following as a part of goal : drawing on past research, six relevant categories of opinion leaders, discussing methods of identification, and where available, lessons from applications in areas of politics, public health, and/or marketing, message development, coordination, and opinion-leader training.Findings of study categorized different self-designated opinion leaders who share several core traits and behaviors but specific opinion leader targeted in a climate change–related campaign should depend on communication goal and population. Although focus in this article has been to introduce a toolbox of concepts, measures, and strategies for use in climate change–related campaigns it could not suggest specific communication structure in opinion leader campaigns using these concepts for climate change.

(Hyoungshick Kim) attempts to find out influencers in Twitter by using real propagation rate of each node by calculating Twitter messages during 2010 UK election campaign. Results of study show that information can be efficiently propagated in online social networks using neighbors with a high propagation rate than those with large number of neighbors.

(Suyog Deshpande)throws light on factors of cultural which influence Indian youth in interfacing and internet browsing. It was found that Indian youth is specifically stimulated by cricket ,matrimony, finance, astrology and Bollywood. Reactions to these domains are culturally conditioned. Colour, language and text, background music, images ,icons are other factors. Findings of research show that, blue is best suited background for Indian youth and white yellow or red make best foreground colours. Best language to be used for Indian youth is Hinglish. Background music if used efficiently can increase work efficiency. Cricket and Bollywood are favorite interest areas and should be taken into consideration while designing content.Sample was of age group 18-35.Sample size was 54 and was selected covering all regions of India South, west, East, North and Central India. 24% are from West. Study is focused only for static and interfacing content.

(Nyugan, 2014) investigates influence of cultural appeals in advertising in India, UK and Brazil. Previous researchers revealed that emotional appeals are more alluring than informational appeals. Studies have also revealed that humor which is one of most common emotional appeals in advertising is associated with cultural dimension of low uncertainty avoidance. A previous research throws light on 42 advertising emotional appeals and links them with various cultural dimensions' of Hofstede's theory. Results of study show that Indian advertising contains appeals linked to individualism, collectivism, power distance, low uncertainty avoidance, masculinity, feminism. Appeals related to power distance, low uncertainty avoidance and masculinity are congruent with cultural dimensions.Study coded all appeals which occurred in advertisements picked for study. In order to ensure cultural representative 15 advertisements from main channel of Nokia and Samsung are selected. In order to have equivalent rating and review commercials are selected according to dates, comments and total views of advertisements. (Oliver Hinz, 2011) exploredreal life viral marketing campaign where 20000 customers of a mobile phone service provider are taken. Study specifically focuses on whether well connected individuals are really harder to activate and participate more actively in campaigns.Study contrasts earlier studies which presents only analytical models or computer simulations for seeding.Study outlines social contagion theory and introduce four strategies for seeding. Four strategies are compared and determinants for differences in success are sorted out. Strategies are based on literature review of three types of studies: first type of study aims at spreading information, typically to create awareness and to improve perception of brand, which represent non-economic measure of success,second type of study of viral marketing campaigns aims at increasing sales as an economic measure of success. Study had not focused on a particular

target group. Study has not focused on a type of content which is targeted for a particular segment and associated strategies of seeding accordingly.

(Helen suiki, 2015) determined the factors affecting message diffusion in social networks, highlighting influence of incentives for diffusion in social marketing messages.Three types of factors identified for diffusion are: Marketing factors, individual factors and network factors. Two types of incentives highlighted are: Intrinsic and extrinsic incentives. Detailed study on incentives that drive people to share content has been done.Though factors have been identified no detail research has been done on factors

(Leonard, 2010) conducted an extended research on established insights on how peer influence and social contagion affect adoption of new products.Previous research have clustered human behavior amongst peers in both networked space and time but such behavioral clustering has not found any evidence of peer influence. Article identifies five questioned structured framework of behavioral influence of opinion leadership which can be conceptualized to manage social contagions in different domains.Study was on attributes of influence, sustained use, network nodes and product characteristics which may lead to social contagion of new products. . However basic structure of understanding social contagion of new products is through questions like: Cause of peer influence, how product characteristics effect contagion, role of sustained use.Cause of peer influence can be understood from attributes of influential behavior that changes peer expectation from new products, mechanism of change, influence of focal behavior in question, likelihood of engaging in focal behavior. Product characteristic features influence contagion and viralty. Two important dimensions are existence of network externalities and product price.

(R van der Merwe, 2009) examined Linking opinion leadership to social network theory, testing assumption that opinion leadership is monomorphic (topic specific) by showing that domain-specific opinion leadership is strongly related to general opinion leadership. It was found that general opinion leadership (non domain-specific) is indeed a good indicator of domain-specific opinion leadership. It was found that social network analysis can be used to identify opinion leaders.Domain-specific opinion leadership was studied in only one domain:gaming consoles. This study used quite a small (5 groups with approximately 25 members per group) and it needs to be expanded to more groups with more members to each group to improve validation.

(Thurau; K.P 2004) addresses aspect of identifying an opinion leader. An opinion leader is one who shares experiences and opinions in internet or orally in informal real world groups. This study reveals motives behind these leaders articulations of these experiences and forms a structure of these motives. These opinion providers are also grouped based on what motive drives them to deliver content online.Attributes of study are various motive factors which is composed of 27 motive items.Study structured motives items into eight motive factors namely Platform assistance, venting negative feelings, concern for or consumers, positive extraversion, social benefits, economic incentives, helping company, advice seeking.It further identified four segments of opinion leaders based on their motives namely self-interested helpers, multiple-motive consumers, consumer advocates and true altruists.Largest segment was found to be those of self-interested helpers.Motives derived have no basis of quantitative scaled structure which poses a challenge to future research. It will be difficult to refines measures. It focuses on motives of writing opinions not reading opinions.

(Anamika Singh, 2015) study throws light on whether a cultural dimension "Masculinity" influences viewers.Cross cultural impact of western advertisement depicting masculinity on Indian youth was analysed. Advertisers manipulate cultural values and sometimes distort values in advertisements thus resulting into a drastic change in culture.Research has found a model of cross cultural element in advertisement and attitude of youth towards advertisement.Traits of masculine culture describe ego-pals, competitiveness, achievement, heroism, and assertiveness and material success. Results of study show that masculinity in advertisements is affecting Indian youth and Indian youth are coming in global cultural flow.

(Pranav Raj Prakash,2012)attempts to build a foolproof and concrete method creating an algorithm for viral marketing in Indian context. Study listed factors leading to content becoming viral and type of media, duration emotion and time of release. Study created an algorithm based on factors and their weightage. Final algorithm includes proportion of each factor to be considered in making content viral. Results revealed that factors which make a video viral are duration, time of release influencers emotion and catchiness. Highest weightage was found to be influencers. second highest weightage was emotions and next highest weightage was shown by simplicity.

(Patrizia Grifoni,2013) adds to existing literature by exploring in detail process of on-line marketing campaign planning. Study reveals elements of four phases of viral marketing planning process. Business context and competition, Objective and target, Message creation and selection tools to use, Implementation of on-line viral marketing campaign. Article provides a theoretical framework that involves elements and actors

that contribute to planning of an on-line viral marketing campaign. Framework only considers planning process but does not highlight details of each phase of campaign planning.

STATEMENT OF THE PROBLEM:

Content creation is quite crucial in terms of emotions embedded in content and therefore link between emotion of content and kind of audience it is targeted to has to be established to make it effective.Revealing insights of content in terms of emotional appeals and drivers of motivation with maximum probability of getting spread within target group is the focus which will also measure influence and perception of forwarders hold about content hold to optimise virality.

OBJECTIVES:

1) To Determine motivational factors which drives an individual to share a content and variables which construct these factors.
2) To deduce a model/algorithm to measure influence of forwarders or seeds in starting spread.

HYPOTHESIS:

Hypothesis 1:
H0: There is no significant correlation between emotional appeals and motivational factors
H1: There is a significant correlation between emotional appeals and motivational factors

Hypothesis 2:
H0: There is a significant correlation between motivational factors and sharing
H1: There is no significant correlation between motivational factors and sharing

RESEARCH METHODOLOGY:

First part entails determining important features of content to become viral amongst given target audience through secondary and primary research. Viral content like pictures sorted out by previous studies will be taken and various appeals in them will be coded and their probability of being shared will be tested within taken sample through an empirical survey using a scaled questionnaire. Focus will be on finding out emotional appeals which drive different motivations to forward a content. Second part involves drawing out a model to determine influence of individual in sharing a content.Research is exploratory in nature.

Research Tools:
Research tool used for empirical study is a scaled questionnaire capturing various variables and the data so collected is analysed using SPSS and MS excel.

Sample Design:
Sample size:Sample size is 150.Sample was selected by simple random sampling from the population of city of Bangalore.

LIMITATION OF STUDY:

Study considers a sample of 150 which is a minuscule part of total facebook users so measure found from model of influence may not be accurate.

DATA ANALYSIS AND DISCUSSION:

Respondent Profile:
Age profile of respondents

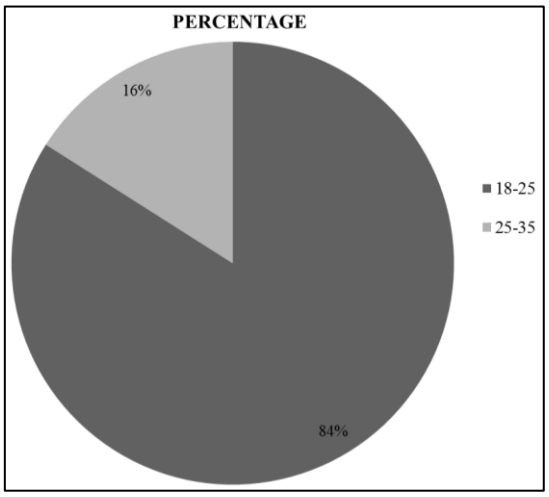

Figure 4.1: Age groups of respondents
Source: Primary data from survey

Gender profile of respondents:

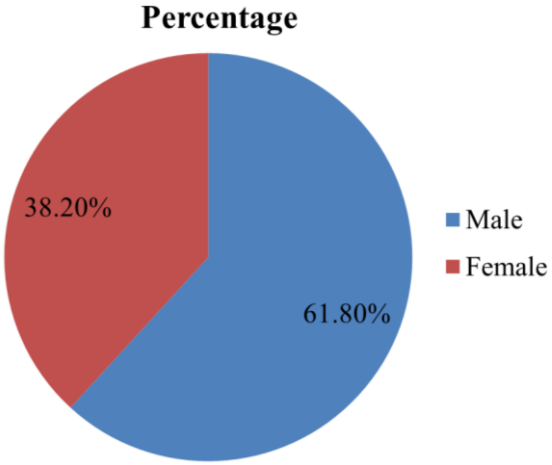

Figure 4.2: Gender of respondents
Source: Primary data from survey

Format of content shared:

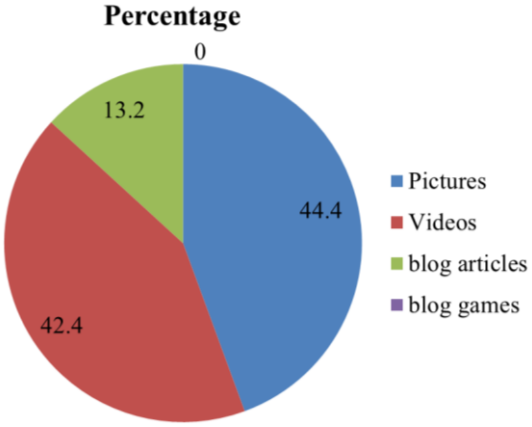

Figure 4.3: Percentage of respondents as per format of content they prefer to share
Source: Primary data from survey

TOPICS OF DISCUSSION:

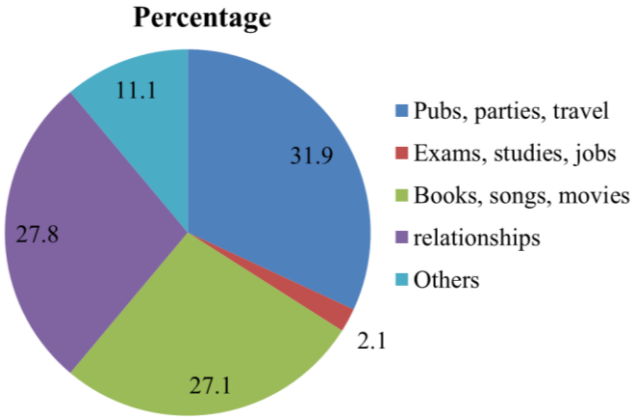

Figure4.4: Percentage of respondents as per what they generally choose to discuss with their friends

Source: Primary data from survey

Identifying most common topics of discussion amongst target group helps in deciding messages around which content should be designed.

QUANTITATIVE ANALYSIS:

Factor analysis of motivational variables:

From factor analysis of motivational variables three factors were extracted.Findings of analysis are as follows:

- KMO measure of sampling adequacy is 0.677 which shows that variables taken for study are appropriate.
- Bartlett's Test of sphericity has a significance of 0.000 which is less than 0.05. Thus all variables are valid for factor analysis.

Table 4.1: KMO and Bartlett's test table for factor analysis of motivational variables

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.677
Bartlett's Test of Sphericity	Approx. Chi-Square	607.943
	Df	36
	Sig.	.000

Source: Primary data from survey

Test revealed three factors from nine variables as follows:

- Factor 1: 74.7% of total variance is explained by factor 1.Variables in this factor are Information seeking in a new exposure, crave for experiencing new things, crave for doing frightening things and this can be grouped and named as Curiosity.
- Factor 2: 17% of total variance is explained by factor 2.Variables in this factor are: Importance of personal identity, importance of better performance than others, self-reliance. These variables explain to what extent individual wants to stand out from others. This factor can be named as individuation.
- Factor 3: 8% of variation is explained by factor 3.Variables included in this factor are: Acceptance by or people, Active membership in community or group, giving money on charity. These variables explain how much individual wants to be amongst a group and this can be named belongingness.

Table 4.2: Varimax rotation of principal component analysis

Rotated Component Matrix[a]			
	Component		
	1	**2**	**3**
Importance of personal identity	.883		
Importance of better performance than ors	.881		
Self reliance	.766		

Rotated Component Matrix[a]			
	Component		
	1	2	3
New things experience		.878	
Doing frightening things		.830	
Information seeking		.814	
Acceptance by or people			.852
Active membership in community or group			.816
Giving money on charity			.683
Extraction Method: Principal Component Analysis. **Rotation Method:** Varimax with Kaiser Normalization.			
a. Rotation converged in 5 iterations.			

Source: Primary data from survey

Correlation and regression analysis of emotional appeals and motivational factors:

For mapping significance of emotional appeals to different motivational factorscorrelation analysis was performed to check which emotional appeals are significantly related to each of motivational factors. Correlational analysis of emotional appeals with each of three motivational factors shows following results:

- correlation of motivational factor curiosity and emotional appeals shows that curiosity is significantly correlated to emotional appeals of thrills, youthfulness amazement or surprise.
- correlation of motivational factor individuation or independent identity shows that individuation is significantly related to emotional appeals of pride, thrill, funniness, inspiration.
- correlation of motivation to belongingness or affiliation shows that belongingness is significantly related to emotional appeals of youthfulness, cuteness, funniness, inspiration.

Table 4.3: Correlation analysis of motivational factors and emotional appeals

Variables		Variables											
		Individuation or Independent Identity	Curiosity	Belongingness	Pride	Thrill	Magical	Youthful	Cute	Funny	Amazing Surprise	Inspiring	Knowledge Giving
Individuation or Independent Identity	Pearson Correlation	1	-0.242	-0.437	0.326	-0.272	-0.113	-0.75	-0.051	-0.268	0.500	0.198	-0.004
	Sig (2-Tailed)		0.003	0.000	0.000	0.001	0.176	0.372	0.539	0.001	0.547	0.018	0.965
	N	145	145	145	145	145	144	144	145	145	145	144	144
Curiosity	Pearson Correlation	-0.242	1	0.015	0.106	0.593	0.057	0.213	-0.097	-0.083	0.347	0.005	-0.031
	Sig (2-Tailed)	0.003		0.861	0.203	0.000	0.498	0.01	0.243	0.319	0.000	0.953	0.712
	N	145	145	145	145	145	144	144	145	145	145	144	144
Belongingness	Pearson Correlation	-0.437	0.015	1	0.063	0.081	0.07	0.18	0.39	0.553	0.117	0.238	0.147
	Sig (2-Tailed)	0.000	0.861		0.454	0.333	0.405	0.031	0.000	0.000	0.162	0.004	0.079
	N	145	145	145	145	145	144	144	145	145	145	144	144

Source: Primary data from survey

Following correlation, regression analysis was performed between these motivational factors and emotional appeals to understand relation between them.Motivational factors are taken as dependent variables and emotional appeals are taken as independent variables.Three such multivariate regression equations are formed for each of three motivational factors.

First regression analysis is performed between curiosity and three significantly correlated emotional appeals. Anova table generated shows that regression model is significant.

Table 4.4: Anova table for regression analysis of emotional appeals and curiosity

ANOVA[b]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	25.584	3	8.528	31.442	.000[a]
	Residual	37.972	140	.271		
	Total	**63.556**	**143**			
a. Predictors: (Constant), Amazing surprise, Youthful, Thrill						
b. Dependent Variable: Curiosity						

Source: Primary data from survey

Linear relation between curiosity and three variables will be given by a linear multivariate equation which is deduced from coefficients table as follows:

Table 4.5: Coefficients table for regression equation for curiosity and emotional appeals

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	.759	.368		2.065	.041
	Thrill	.550	.073	.551	7.573	.000
	Youthful	.170	.054	.205	3.133	.002
	Amazing surprise	.092	.073	.092	1.255	.212
a. Dependent Variable: Curiosity						

Source: Primary data from survey

equation is :

Curiosity = 0.759+0.551*thrill+0.205*youthfulness+0.092*amazement

Second regression analysis is performed between motivational factor of individuation or independent identity and four significantly correlated emotional appeals of pride, thrill, fun and inspiration. Anova table generated showed that regression model is significant.

Table 4.6: Anova table for regression analysis of emotional appeals and individuation or independent identity

ANOVA[b]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	28.351	4	7.088	14.007	.000[a]
	Residual	70.334	139	.506		
	Total	**98.684**	**143**			
a. Predictors: (Constant), Inspiring, Pride, Funny, Thrill						
b. Dependent Variable: Individuation or independent identity						

Source: Primary data from survey

Linear relation between individuation and four variables will be given by a linear multivariate equation which is deduced from coefficients table as follows:

Table 4.7: Coefficients table for regression equation for independent identity and emotional appeals

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.073	.640		6.367	.000
	Pride	.360	.081	.327	4.458	.000
	Thrill	-.399	.090	-.321	-4.412	.000
	Funny	-.213	.067	-.230	-3.170	.002
	Inspiring	.210	.086	.177	2.459	.015
a. Dependent Variable: Individuation or independent identity						

Source: Primary data from survey

Equation is:

Individuation = 4.073+0.327*Pride-0.321*thrill-0.230*fun+0.177*inspiration

Third regression analysis is performed between motivational factor need to belongingness or bond and significantly correlated emotional appeals youthfulness, cuteness, fun and inspiration. anova table generated shows that regression model is significant.

Table 4.8: Anova table for regression analysis of emotional appeals and belongingness

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.439	5	9.688	15.470	.000[a]
	Residual	86.422	138	.626		
	Total	134.861	143			
a. Predictors: (Constant), Knowledge giving, Funny, Youthful, Inspiring, Cute						
b. Dependent Variable: Belongingness						

Source: Primary data from survey

Linear relation between belongingness and four variables will be given by a linear multivariate equation which is deduced from coefficients table as follows:

Table 4.9: Coefficients table for regression equation for belongingness and emotional appeals

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.645	.655		-.985	.326
	Youthful	.046	.092	.038	.504	.615
	Cute	.121	.089	.112	1.358	.177
	Funny	.506	.089	.467	5.689	.000
	Inspiring	.241	.106	.173	2.277	.024
	Knowledge giving	.111	.108	.082	1.033	.303
a. Dependent Variable: Belongingness						

Source: Primary data from survey

Equation is:

Belongingness(affiliation)=0.645+0.038*Youthfulness+0.112*cuteness+0.467*fun+0.173*inspi-ration.

Mathematical model for measuring influence of individual:

Next phase of analysis was done to calculate effectiveness of respondents in social networking platform of facebook. Two metrics were considered to understand effectiveness of individuals as follows:

Influence quotient in sharing a content: This is a dependent variable which depends on reach of individual, shares found by individual, average reach of whole sample. This variable is very important as it explains potentiality of viral forwarding by individual through a model of progression. model which explains influence quotient is:

Influence = N + N1+ N1*Average no of shares found by sample where:

N = Reach of individual

N1= Average reach of sample * shares found by individual

= Av N * R

Since individual's contribution towards spreading has to be calculated, only first two levels of sharing where variables of individual ie reach and shares are considered and hence excluding third variable above equation can be written as

Influence = N +N1

Reach of individual in sharing content (N): reach determines number of connected people to respective individual.Reach in sharing content is number of views that he/she can create by sharing content and is determined by variables of number of followers, number of friends, number of groups, average number of members in groups of active participation and frequency of sharing by individual per week .

reach = (Number of followers + Number of friends + Number of groups (if individual has a habit of sharing in groups) * number of members in group) * Sharing frequency of individual.

All variables taken to define two metrics above are assumed to be exclusive sets of one another.

Correlation and regression analysis between motivation and sharing:

Correlation analysis shows that motivational factors are not significantly correlated to influence and reach. Howeverthere is a significant correlation between motivational factor of belongingness or affiliation and sharing.This is analysed through correlation and regression analysis.

Table 4.10: Table of correlation analysis between motivational factors and sharing

Correlations					
		curiosity	**Individuation**	**Affiliation**	**Frequency of sharing posts**
curiosity	Pearson Correlation	1	-.242**	.015	.158
	Sig. (2-tailed)		.003	.861	.061
	N	145	145	145	142
Individuation	Pearson Correlation	-.242**	1	-.437**	-.050
	Sig. (2-tailed)	.003		.000	.551
	N	145	145	145	142
Affiliation	Pearson Correlation	.015	-.437**	1	.207*
	Sig. (2-tailed)	.861	.000		.013
	N	145	145	145	142
Frequency of sharing posts	Pearson Correlation	.158	-.050	.207*	1
	Sig. (2-tailed)	.061	.551	.013	
	N	142	142	142	142
**. Correlation is significant at 0.01 level (2-tailed).					
*. Correlation is significant at 0.05 level (2-tailed).					

Source: Primary data from survey

On doing regression analysis relation between reach and influence of sharing is found.

anova table showed that regression model is significant.

Table 4.11: Anova table for regression between motivation and sharing

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	16.753	3	5.584	3.701	.013[b]
	Residual	208.200	138	1.509		
	Total	**224.952**	**141**			
a. Dependent Variable: Frequencyofsharingposts						
b. Predictors: (Constant), curiosity, Affiliation, Individuation						

Source: Primary data from survey

coefficient table gave equation relation

Table 4.12: Coefficients table for regression between motivation and sharing

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	-1.499	1.163		-1.289	.200
	Affiliation	.320	.118	.247	2.715	.007
	Individuation	.152	.142	.101	1.070	.287
	curiosity	.341	.162	.179	2.101	.037
a. **Dependent Variable:** Frequencyofsharingposts						

Source: Primary data from survey

Equation thus derived is:

Frequency of sharing = -1.499 + 0.247*Affiliation(belongingness)+.179*Curiosity+ 0.101*Individuation

Average score of motivational factors:

On studying average scores of motivational factors for full sample it was found that highest score is found by individuation followed by motivation and last one is belongingness. Scores are as follows:

- Individuation = 3.98
- Curiosity = 3.94
- Belongingness = 3.39

Hence most important motivational factor in general turns out to be need of individual identity or individuation.Corresponding emotions arepride, youth-fullness, inspiration,fun.These emotions should be highly embedded in a content. Average scores of curiosity and individuation doesnot show much difference and therefore curiosity should also be given due importance while creating a content.Emotions to be embedded are, thrill, amazement, youthfulness.

Correlation between popularity of a post and motivational factors:

Correlation analysis between popularity of a post and motivational factors revealed that popularity of a post given by number of likes is significantly correlated to curiosity factor.

Table 4.13: Correlation table between popularity and motivation

Correlations					
		Number of likes found in a post	**Curiosity**	**Individuation**	**Affiliation, inclusiveness**
Number of likes found in a post	Pearson Correlation	1	.232**	-.095	-.047
	Sig. (2-tailed)		.005	.259	.576
	N	142	142	142	142
Curiosity	Pearson Correlation	.232**	1	-.242**	.015
	Sig. (2-tailed)	.005		.003	.861
	N	142	145	145	145

Correlations					
		Number of likes found in a post	**Curiosity**	**Individuation**	**Affiliation, inclusiveness**
Individuation	Pearson Correlation	-.095	-.242**	1	-.437**
	Sig. (2-tailed)	.259	.003		.000
	N	142	145	145	145
Affiliation, inclusiveness	Pearson Correlation	-.047	.015	-.437**	1
	Sig. (2-tailed)	.576	.861	.000	
	N	142	145	145	145
**. Correlation is significant at 0.01 level (2-tailed).					

Source: Primary data from survey

Regression analysis was performed to determine relation between curiosity and popularity. anova table which tests fitness of model shows that it is fit.

Table 4.14: Anova table for regression between Curiosity and popularity

ANOVA[b]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	161392.744	1	161392.744	7.981	.005[a]
	Residual	2831001.622	140	20221.440		
	Total	**2992394.366**	**141**			
ya. Predictors: (Constant), Curiosity						
b. Dependent Variable: Number of likes found in a post						

Source: Primary data from survey

Regression equation is derived from table of coefficients

Table 4.15: Coefficient table for regression between curiosity and popularity

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	29.349	72.610		.404	.687
	Curiosity	51.125	18.097	.232	2.825	.005
a. Dependent Variable: Number of likes found in a post						

Source: Primary data from survey

Equation will be:

Popularity = 29.349 + 0.232*curiosity.

HYPOTHESIS TESTING:

Hypothesis 1:

Correlation analysis between emotional appeals and motivational factors shows that there is significant correlation between emotional appeals and motivational factors and thus null hypothesis is accepted

Hypothesis 2:

Correlation analysis between sharing frequency and motivational factors shows that there is significant correlation between frequency of sharing and motivational factor affiliation or belongingness or inclusiveness and thus null hypothesis is accepted.

FINDINGS:

From analysis and interpretation of data it was found that:

- Three significant motivational factors formed by nine variables of motivationare: curiosity, individuation or need for independent identity and affiliation or belongingness.
- Need of new experience, crave to earn knowledge in new situation, affinity to do frightening or thrilling things is linked to curiosity
- Need of self-reliance, need of better performance, importance of personal identity is linked to individuation.
- Need of social acceptance, involvement in group or community is linked to affiliation.
- Out of nine emotional appeals chosen, different emotional appeals showed significant correlation to different motivational factors which create motivational drive to share content.
- Model of influence of sharing which shows how much an individual can influence by sharing content is given by individuals reach, average number of shares that individual finds, average reach of network. There is a high correlation between influence of sharing and reach of individual.
- There is significant correlation between motivational factor affiliation and frequency of sharing of an individual.
- A significant correlation was found between motivational factor of curiosity and popularity of sharing.

CONTRIBUTION TO THE BODY OF KNOWLEDGE:

Significance of study lies in mapping emotional appeals in content to motivational drives for sharing that they create.Study proposes a simple mathematical model to measure and compare influence of an individual amongst a set of facebook users.Variables which are significantly related to influence are revealed by study and is targeted towards a particular age group and presence of certain emotional appeals are significantly related to popularity of content.

SUGGESTIONS:

As it has been found that frequency of sharing is increased when content contains emotional appeals related to affiliation. Moreover content becomes popular when it motivates curiosity in viewers. Embedding related emotional appeals of curiosity and affiliation or belongingness may increase spread of content. Emotional appeals which should be necessarily embedded in content are cuteness, fun, youthfulness, inspiration, thrill and amazement.

CONCLUSIONS:

Study revealed connection between major emotional appeals and motivational factor which can lead user to forward content. Effectiveness of user in terms of forwarding is defined in terms of two variables viz influence in sharing and reach as relation between the two is positive Effectiveness of sharing can be explained by motivational factor of curiosity.

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