

## ASSESSING THE IMPACT OF WEB 2.0 ON CONSUMER PURCHASE DECISIONS: INDIAN PERSPECTIVE

Smita Sharma\*

Dr AsadRehman\*\*

### **Abstract**

Social media and web 2.0 are two terms which are often used interchangeably in the marketing literature, even though they are not entirely the same.

From the marketing perspective, the web 2.0 should be perceived as the new tool for the marketing communication mix and facilitator and enabler of social media.

Social Media is a fast growing way of communicating via new technologies. It's a fusion of sociology and technology, transforming monologue (one to many) into dialogue (many to many).

The objective of this research was to identify Indian consumers' profile of web 2.0 technology and assess the impact of web 2.0 tools on the consumer purchase decisions in Indian perspective.

The study helped in finding out the overall influence of a positive or negative information about a product or a brand available on the Social Media on consumer's purchase behaviour.

**Key words:** Social media, Web 2.0, User generated content, Consumer generated media, Social networking sites, Facebook

\* Assistant Professor, LalBahadurShastri Institute of Management, Dwarka, New Delhi 110075.

\*\* Lecturer, Department of Business Administration, Aligarh Muslim University, Aligarh 202002.

## Introduction

Businesses also refer to social media as user generated content (UGC) or consumer generated media (CGM). The benefit of social media is its low cost and open access to everyone.

Due to increased advertising clutter, growing advertising literacy & changing consumer behaviour, marketers are forced to look for alternative communication strategies.

Increasing fragmentation in the markets may shift the rules of targeting into behavioural marketing favour. Micro marketing & Permission marketing /Unconventional marketing can be used to approach the consumers in the new media world.

Social media has drastically changed the way we communicate to each other. Not just that, 'Social Media' has no longer confined to merely being a communication platform, rather it has now become a virtual world online where people come, become friends, develop relationship, form gangs, listen music, play games and much more. India too has not remained untouched with such an evolution of social media. In India most popular social media sites are 'Facebook', 'LinkedIn', 'Orkut', 'YouTube' and 'Twitter'. And their number of registered members is increasing at a mind boggling rate.

So today it has become all the more important for Businesses and brands to use social media tools to market their product or services. India is the third largest internet market in the world (after USA and China) and also fifth largest online video market. Number of videos posted from India in the last two months were more than what the largest TV network of U.S produced in its history of 72 years.

India has 100+ million unique internet users and they spend around 16 hours a week online. Out of the 100 million users, 40 million access from office and the rest 30 million access from cyber cafes and 30 million access internet from home.

Google recorded 20 times growth in search queries coming from India over the last 5 years. 30 percent of the entire air travel booking in India is done online.

## Scope of Research

In order to enable Social Media Properties (SMP) to integrate into corporate commercial strategy, these areas must be researched in greater depth:

The effects of web 2.0 applications on consumer behaviour

Differences between existing web 2.0 applications' effectiveness and their relationship with traditional mediums.

## Literature Review

A number of books have provocatively announced the "end of advertising," due especially to declining trust, the proliferation of media choice, and the rise of the internet (Godin, 2005; Jaffe, 2005; Ries and Ries, 2002; Semovitz, 2006; Zyman and Brott, 2002). This discussion is further

driven by research that illustrates the growing impact of word of mouth (V\OM) as the primary driver of consumer purchase decisions (Advertising Age, 2008)

The internet stands apart from other media in enabling its "users" to *interact*. From this perspective, the internet will always be, at its core, a tool for interpersonal communication. Even the tagging, posting and sharing of popular videos on YouTube are fundamentally *community-related* pursuits. Facilitated by countless blogs, forums, chat rooms, and social networking sites, we now live in a 24-hour rolling, emotive, media world where we can satisfy our indelible need to feel a part of the events that unfold around us. While there are practical and emotional benefits to participating in online discussions (Piper Jaffray, 2007), these conversations have profound commercial implications as well. Everyday consumers are wielding greater control over their media habits and their role in the commercial marketplace. Moreover, with the growth of online participation, consumers exert greater influence over the products and brands considered for purchase.

In today's highly fragmented media landscape, generating positive word of mouth (WOM) among consumers has become a very important tool for marketers (Bowman and Narayandas, 2001; Godes and Mayzlin, 2004; Liu, 2006), and this is especially so in digital media (Huang and Chen, 2006). Traditional marketing methods simply do not reach their target audiences with the same effectiveness as they did just a decade ago. Instead, WOM has become an increasingly useful channel to share information in our society and should continue to grow in importance (Keller and Berry, 2003). There has been a recent surge of interest in how marketers can take advantage of social networks to generate buzz.

#### **Constantinides and Fountain (2008) defined web 2.0 as follows:**

Web 2.0 is a collection of open-source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes.

Web 2.0 applications support the creation of informal users' networks facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing / refining of informational content .

Hoegg (Hoegg et al, 2005) suggested that web 2.0 is "the philosophy of mutually maximizing collective intelligence and added value for each participant by formalized and dynamic information sharing and creation".

Web 2.0 marketing is an emerging concept, and it is not easy to pin down exactly how it can engage consumers. However, Moran (2008, p. 24) defines Web 2.0 marketing as "any way to get attention for your message using people connected to the Internet." In addition, he categorizes Web 2.0 marketing into four types of social media: content, personality, interest, and fantasy. Content-based social media marketing builds around individual messages-for example, YouTube

hosts videos designed to be shared with others. Other content-based social media sites do not host the content but rather link to it. Personality-based social networking sites allow each member to create a profile description, which again can be linked to the profiles of colleagues and friends, forming a network. Facebook, Twitter, and LinkedIn have become significant personality-based networks for targeting adult segments. Interest-based social media marketing involves communities formed around specific subjects on message boards, blogs, and so on. These communities give companies the opportunity to interact with consumers and, most important, listen and learn from their experience and ideas about product improvements. Specialized search sites like Twingly allow category searches for blogs on a specific topic. Finally, virtual worlds such as Second Life are also social media. Marketing through a virtual world is fantasy-based social media marketing.

**Constantinides and Fountain (2008) classified web 2.0 into 5 broad types according to their nature:**

**Blogs:** Short for Web logs: Online journals, the most known and fastest-growing category of web 2.0 applications. Blogs are often combined with Podcasts, that is, digital audio or video that can be streamed or downloaded to portable devices. Examples: <http://gizmodo.com>, <http://www.boingboing.net>, <http://www.huffingtonpost.com>

**Social networks:** Applications allowing users to build personal websites accessible to other users for exchange of personal content and communication. Examples: <http://www.myspace.com>, <http://www.facebook.com>

**(Content) Communities:** Websites organising and sharing particular types of content. Examples are applications of video sharing: <http://video.google.com>, [www.youtube.com](http://www.youtube.com)

**Photos sharing:** <http://www.flickr.com>, **Social Bookmarking:** [www.digg.com](http://www.digg.com), <http://del.icio.us> and **Publicly Edited Encyclopaedia's (Wikis):** [www.wikipedia.org](http://www.wikipedia.org), [http://en.citizendium.org/wiki/Main\\_Page](http://en.citizendium.org/wiki/Main_Page)

**Forums/bulletin boards:** Sites for exchanging ideas and information usually around special interests. Examples: [www.epinions.com](http://www.epinions.com), [www.personaldemocracy.com](http://www.personaldemocracy.com), <http://www.python.org>.

**Content aggregators:** Applications allowing users to fully customise the web content they wish to access. These sites make use of a technique known as Real Simple Syndication or Rich Site Summary (RSS). Examples <http://uk.my.yahoo.com/>, <http://www.google.com/ig>, <http://www.netvibes.com/>

## Objectives of Study

- (a) Identification of Indian consumers' profile of web 2.0 technology

- (b) To study the overall influence of a positive or negative information about a product or a brand available on the Social Media on consumers' purchase behaviour.
- (c) To verify if communication through web 2.0 technology triggers positive word of mouth, thus impacting consumer decision making.

### Research methodology

This research is broadly divided in two phases. First stage covers following steps: Pretesting of the questionnaire (sample size - 20 and sampling technique – convenience). Changes in questionnaire to eliminate leading questions; confusing terminology and confusing scales

Certain cues were added to help respondents understand the questionnaire in a better manner.

In the second stage of the research, Descriptive- Cross-Sectional Study is conducted with sample Size of 142. This survey helped in verifying the research hypotheses and capture opinions, behaviors, attitudes and facts. The self-administered online questionnaire method was chosen for conducting the survey. Sampling method chosen was Snowball Sampling and the time duration of survey was 2 months.

With 46 million MAUs (Monthly Active Users) in India as of December 31, 2011, an increase of 132 per cent from the prior year, Facebook becomes a natural choice to engage with the population. (Source: Company's report)  
Sampling method: Snowball Sampling  
Sample size: About 500 messages with the survey link were sent to members. 142 responses were received, out of which 69 were males and 73 were females.

### Fieldwork

As mentioned earlier, the survey was conducted on Facebook. After completion of the pilot study it was decided to run the survey for 2.5 weeks period, due to possibility that some of the respondents might not be checking their accounts or messages very often. About 500 messages with the survey link were sent to members. 142 responses were received, out of which 69 were males and 73 were females.

### Data analysis and results

*The consumer profile of SNS users in India*

In order to achieve the Objective 1 and create a general consumer profile of SNS users in India, the answers to the questionnaire were analyzed. The sex of the respondents was asked under the personal details tab. As observed, the sex distribution among users is very similar, but female users outweigh the males in India.

The sample consisted of almost equal number of male and female respondents, thus removing gender biases in the final output obtained. The aim was to study a heterogeneous mix of respondents of all age groups. However, it was seen that majority of the respondents belong to the age group of 16 – 25. This is because of the fact that the 16 -25 age group comprises of largest number of SNS users in practical world as well. The second highest group of respondents falls in the 26-35 years group. It is possible to make an assumption that these two groups are the main users of SNS, even though it cannot be stated for certain as the results might be affected by the survey distribution method.

According to the survey results, the majority of people using SNS are on the middle income or less, as most of them fall into the Rs. 3-6 lakh group Next group of majority users fall in the income bracket of Rs. 6 – 9 lakh followed by the bracket Rs. 9-12 lakh, representing higher middle class. It was found that SNS usage is highest among users with a post graduate degree followed by users with a graduate degree and lowest among people with an intermediate degree. Almost all respondents said that they pay attention to status updates/Blogs/Tweets on SNS, while only 15-16% respondents reported paying attention to featured ads/deals and brand pages on SNS.

#### *What Social Networking Sites are they using?*

According to the survey, the most popular social networking site amongst Indian users is Facebook with almost all respondents saying that they frequently visit the site. LinkedIn, which is a professional networking site emerged as the second most popular social networking site amongst Indian users. Orkut & Twitter also score significantly on popularity. Blogger is only fairly popular with approximately 10% of the respondents frequently visiting the site. However, social networking sites like Flickr, MySpace and Hi5 are seen to be very rarely accessed and therefore, score very low on popularity.

#### *Respondents were asked about what they think about brand communication through SNS:*

About 50% of the respondents feel that brand communication through SNS is a bout two-way communication and b e t t e r knowledge of marketing campaigns. About 40% of the respondents feel that brand communication is about faster replies to feedback.

*What is the degree of association of respondents to social networking sites?*

More than half of the total number of respondents (46.48%) stated that SNS has a somewhat important role in their lives indicating the high growth and acceptability of SNS in India

The tag line used with this option was “I feel an attachment/addiction to SNS”. About 19.72 % of the respondents stated that they can’t decide (Tag lines used: Love-hate relationship with SNS, sometimes totally addicted, at other times-not at all). Another 21.13% stated that SNS has a somewhat unimportant role in their lives (Tag lines: (I do access SNS sometimes but don't feel any attachment/addiction to SNS). Only 11.27% of the respondents stated that SNS has a highly important, almost indispensable role in their lives and they can't do without SNS.

Majority of the population considers SNS as a „somewhat important“ part of their life indicating the high growth and acceptability of SNS in India.

#### *Time Spent on SNS*

The research results revealed that people using SNS in India spend a good amount of time surfing and networking. About 45.07% of the respondents stated that they spend about less than 1 hour/day on SNS, while 40.14% reported spending about 1-3 hours daily.

#### *Visibility of SNS ads*

People usually do not notice all SNS ads while using the SNS sites as found in the research. 6.34% said that they notice almost always, 23.24% noticed it often, whereas sometimes, seldom, never %ages were 30.28, 23.24, and 16.90 respectively.

#### *Category wise analysis of SNS ads*

The survey shows that people are likely to notice ads in the category of education, fashion/accessories, beauty & cosmetics, malls & shops, automobiles, media & entertainment, hospitality & tourism and social campaigns. On the other hand ads in the category of FMCG, consumer durables, health & fitness, banks & insurance, hospitals & clinics, travel & transport, lifestyle products and event planning and are likely to go unnoticed. *(Insert table 1 here)*

(Criterion for selection: Cumulative percentage of less likely, least likely, and maybe/maybe not - is less than equal to 65% for an ad to be noticed)

#### *Analysis of ads according to medium used*

Results indicate that „recommendations by family/friends (WOM) are perceived to be the most effective MARCOM channel by consumers. Television followed by Newspaper and Magazines

are also perceived to be effective MARCOM channels. On the other hand, Billboard, SNS, Blog, Web and Mobile are perceived to be less effective MARCOM channels. (*Insert figure 1 here*)

## Statistical Analysis

### Cluster Analysis

There are two types of clustering procedures.

First perform a hierarchical method to define the number of clusters. Then use the k-means procedure to actually form the clusters. Divisive (start from 1 cluster, to get to n cluster).

By applying Hierarchical Analysis, three clusters were formed.

(*Insert table 2 here*)

#### Cluster 1

No. of cases: 09

6% of the respondents fall into this category. Respondents in this cluster were neutral towards referring to the pages/discussion forums of products discussed in SNSs. They don't trust the information/feedback or user generated content on SNSs. Negative reviews about a product make them hostile towards the product.

#### Cluster 2

No. of cases: 94

66% of the respondents fall into this category. Respondents in this cluster were found to be very open towards referring to the pages/discussion forums of products discussed in SNSs. They trust the information/feedback or user generated content on SNSs. They get influenced by positive word of mouth mentioned on social media properties. Characteristics of respondents include risk taking abilities, less conflict in minds, quick decision making, etc.

#### Cluster 3

No. of cases: 39

Around 28% of respondents fall into this cluster. Respondents in this cluster were found to be moderate towards referring to the pages/discussion forums of products discussed in SNSs. They trust the information/feedback or user generated content on SNSs, to some extent.

They get influenced to some extent by positive word of mouth, but are not quick in decision making.

The ANOVA table tells that which of the fourteen variables is significantly different across the 3 clusters. (*Insert Table 3 here*) Based on the assumption that ANOVA is a valid test, the interpretation of clusters & difference across clusters were made on the basis of those variables, which were significant across clusters at 0.05 level. The last column in ANOVA table indicates that all variables except one are significant at 0.05 level, as they have probability values less than 0.05. The variable "If I am interested in a product, I give a deep thought of purchasing it upon reading positive reviews posted by the users on SNS" has a probability value of .668 which is more than .05. Thus it is not statistically significant.

### Managerial Implications

This research yielded interesting insights about social media environment in India. Marketers can consider new marketing communication tools to approach the postmodern consumers. Different types of customers can be targeted with different social media properties. Companies can create viral impact through social media. Optimal use of different social media properties as well as their integration into mainstream media can be practised by the marketers for effective brand communication.

### Efforts to be undertaken by marketers

The companies need to leverage interactive marketing. Marketing oriented firms should think how to venture into the virtual world for brand and service extensions. Users are leaving traditional advertising outlets and giving more time, attention and "impressions" to new media. The companies ought to invest in measurable advertising services and platforms to get better return on investment. Measuring and observing is very important for companies to stay on a map what audience is talking about the brand. Even though the ROI may be hard or even impossible to count in some cases, brand attitudes and tone of voice can and must be observed constantly. Optimal use of different social media properties as well as their integration into mainstream media can be practised by the marketers for effective brand communication.

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Category	Cumulative percentage of least likely, less likely, may be/may be not
FMCG	71.1
Consumer Durables	76.1
Education	62.7
Fashions/Accessories	45.1
Beauty & Cosmetics	66.9
Hospitals/Clinics	81
Health & Fitness	69.7
Malls/Shops	56.3
Banks & insurance	83.1
Automobiles	58.5
Media & Entertainment	39.4
Hospitality/Tourism	66.2
Travel & Transport	76.1
Lifestyle products	69
Event Planning	85.2
Social campaigns	55.3

Table 1: Category wise analysis of SNS ads

**Final Cluster Centres**

	Cluster		
	1	2	3
I refer the pages / discussion forums in SNS of the product that I intend to purchase	Neutral	Agree	Agree
I refer various pages / discussion forums in SNS for those products / brands which are of my interest	Neutral	Agree	Agree
I find information about the product available on pages / discussion forums in SNS helpful in making a purchase decision	Disagree	Agree	Agree
I seek the opinion of my social networking friends before making a purchase decision	Neutral	Agree	Disagree
I find the information about the product on SNS more helpful and correct as compared to that obtained from a salesperson of any branded outlet/store	Neutral	Agree	Neutral
Upon reading negative reviews posted by the users about a product on SNS, I cancel my plan of purchasing it	Agree	Neutral	Disagree
SNS helps me remain up to date about the product I intend to purchase	Neutral	Agree	Agree
I believe that the information mentioned about a product by its users in SNS is highly authentic and reliable	Neutral	Agree	Neutral
I form a better and positive perception about a product / brand which has higher number of members / posts on the discussion forum / page of that SNS	Disagree	Agree	Neutral
If I am interested in a product, I give a deep thought of purchasing it upon reading positive reviews posted by the users on SNS	Agree	Agree	Agree
Even though I might not be interested towards a product, I give a deep thought of purchasing it upon reading positive reviews posted by the users on SNS	Disagree	Neutral	Neutral
If I am interested in a product, I end up purchasing it upon reading positive reviews posted by the users on SNS	Disagree	Agree	Disagree
Even though I might not be interested towards a product, I end up purchasing it upon reading positive reviews posted by the users on SNS	Disagree	Neutral	Disagree
The positive or negative information mentioned about a product on SNS by the users has a significant impact on my mind in making a purchase decision	Agree	Agree	Neutral

(Table2)

ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
I refer the PAGES / DISCUSSION FORUMS in SNS of the product that I intend to purchase	6.830	2	.383	139	17.822	.000
I refer various pages / discussion forums in SNS for those products / brands which are of my interest	3.568	2	.473	139	7.544	.001
I find information about the product available on pages / discussion forums in SNS helpful in making a purchase decision	11.884	2	.467	139	25.424	.000
I seek the opinion of my social networking friends before making a purchase decision	34.559	2	.729	139	47.389	.000
I find the information about the product on SNS more helpful and correct as compared to that obtained from a salesperson of any branded outlet/store	11.156	2	.588	139	18.961	.000
Upon reading negative reviews posted by the users about a product on SNS, I cancel my plan of purchasing it	17.619	2	.827	139	21.297	.000
SNS helps me remain up to date about the product I intend to purchase	5.881	2	.655	139	8.972	.000
I believe that the information mentioned about a product by its users in SNS is highly authentic and reliable	11.743	2	.576	139	20.380	.000
I form a better and positive perception about a product / brand which has higher number of members / posts on the discussion forum / page of that SNS	16.594	2	.458	139	36.263	.000
If I am interested in a product, i give a deep thought of purchasing it upon reading positive reviews posted by the users on SNS	.126	2	.312	139	.404	.668
Even though I might not be interested towards a product, I give a deep thought of purchasing it upon reading positive reviews posted by the users on SNS	7.857	2	.693	139	11.342	.000
If I am interested in a product, I end up purchasing it upon reading positive reviews posted by the users on SNS	26.963	2	.503	139	53.632	.000
Even though I might not be interested towards a product, I end up purchasing it upon reading positive reviews posted by the users on SNS	16.326	2	.997	139	16.373	.000

The positive or negative information mentioned about a product on SNS by the users has a significant impact on my mind in making a purchase decision	2.360	2	.622	139	3.795	.025
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(Table 3 ) The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

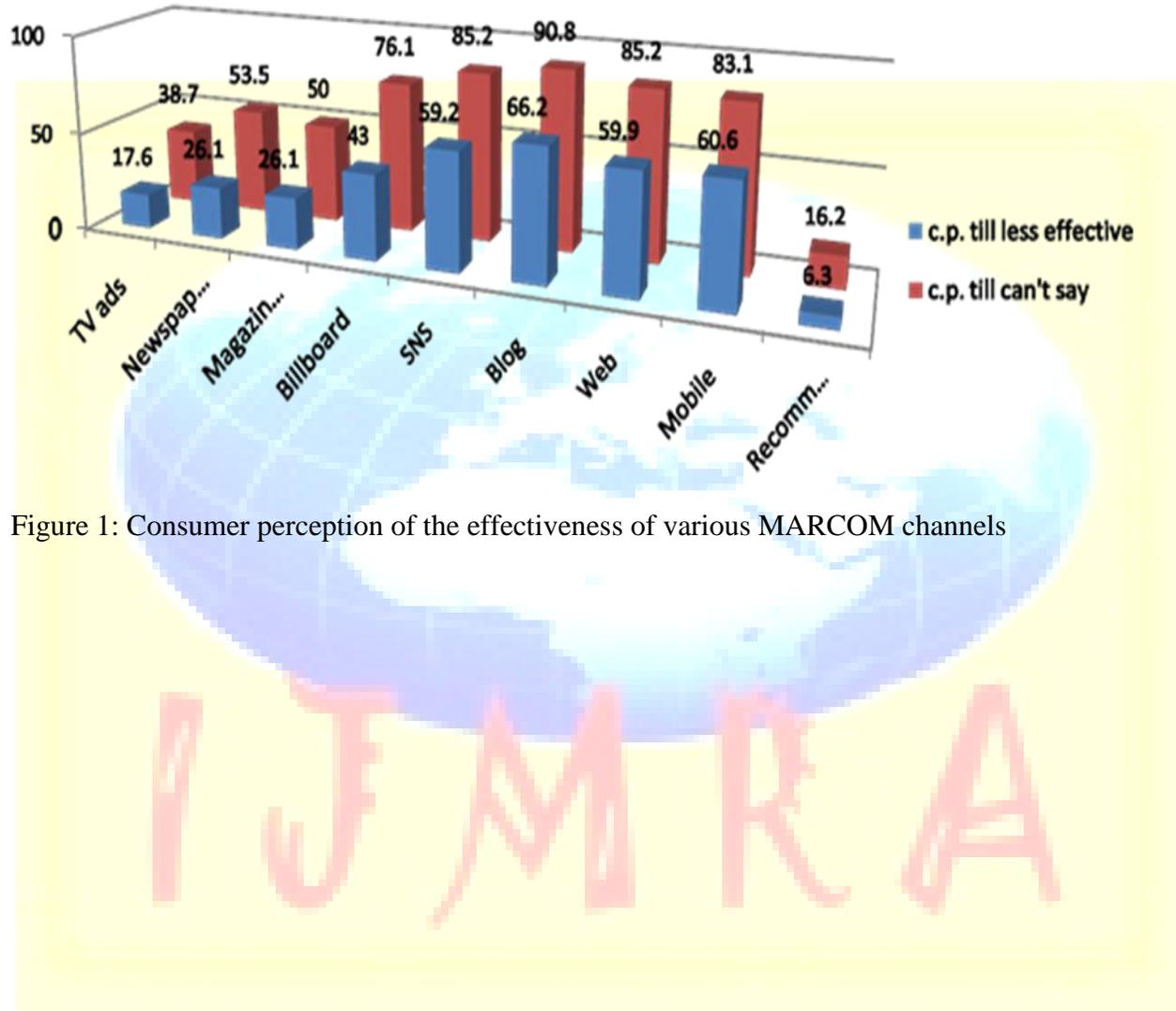


Figure 1: Consumer perception of the effectiveness of various MARCOM channels