

MARKETING COMMUNICATION IN ONLINE SOCIAL PROGRAMS: OHANIAN MODEL OF SOURCE CREDIBILITY

Serban Corina

The Bucharest Academy of Economic Studies

The Faculty of Marketing

The development of the Internet as a medium for interaction with customers has resulted in many changes regarding the promotion of organizations. Online marketing is nowadays used not only to sell a product on the market, but also requires ideas and behavioral change. Non-profit organizations active in online communication are based on the quality of their provided information. Credibility, attractiveness and usefulness are the key elements that provide effective online social programs. This paper aims to extend the scope of research in the field of social marketing by studying the Ohanian model in the online environment. The goal is to highlight the important theories and social models intrinsic to the online non-profit organizations' communication. The results show that the efficiency of social programs depends on the level of incorporated elements of social theories in the design, content and structure of the website.

Keywords: social marketing, Internet, Ohanian model, non-profit organizations (NGOs), online behaviour

JEL Classification: M31

Introduction

Social marketing is nowadays an important line of study concerning consumer behaviour in society. The complexity of social problems imposes the finding of quick solutions that meet the specific economic, cultural, historical and religious environment that is characteristic of a target population.⁵³⁰ The emergence of the Internet as a dynamic, flexible and effective environment has opened up new opportunities for organizations to communicate and interact with consumers. Non-profit organizations (NGOs) have understood the advantages of the Internet and have adapted their programs to follow specific online communication. This paper aims to provide NGOs and practitioners in the field of online social marketing a valuable model to determine online consumer reaction, that model being the Ohanian model. Its three dimensions: credibility, attractiveness and expertise, are the basis to any communication, whether it is done online or offline. Starting with the Ohanian model, the article analyzes consumer perception towards currently undertaken online social programs. Thereby, consumer opinions on the quality of websites are studied and the relations between the considered variables and described. Furthermore, by using the model, it can be shown that the dimensions of online communication are not to be ignored, as they are in close relation with the support toward the target segments and with the influence of the individuals' behaviour in society.

The Ohanian Model

In the process of communication with target segments, an important role is played by the degree of persuasion inherent to the transmitted messages. The persuasiveness of a message depends on the considered characteristics of the source (Kelman, 1961). Credibility is a multidimensional concept, with

⁵³⁰ Ranchodd A. and Marandi E. 2006, *Strategic Marketing in Practice*, Butterworth-Heinemann, page 105

particular impact on the consumer's attitudes, intentions and behaviour. Credibility is strongly linked to information, therefore it may be described as part of communication.⁵³¹

The credibility source is the basis for credibility, being generally used to describe the positive influence of the communicated message on the receiver or transmitter (Ohanian, 1991). Researchers found that the degree of persuasiveness of a message largely depends on the credibility of the source (Petty and Cacioppo, 1986).

Based on the studies of, Desarbo, Likewise and Harshmann (1985), in 1990, Ohanian propounded three factors that contribute to the credibility of the source. The first of them is the **trust of the source**, or "the extent to which the audience perceives communication as valid" (Hovland, 1953). Ohanian describes the concept of **trust** as having dependent variables as "honesty", "addiction" and "sincerity" linked to it. Another factor, the **expertise**, expresses the ability of the source to be perceived as "qualified", "professional", "expert." The last factor, the **source attractiveness**, has the role of amplifying the message sent by features such as: beauty, elegance and style. Corresponding source attractiveness variables are: similitude - similarity between source and receiver of the message, familiarity - the near of the receiver and the source, and sympathy – the affectivity shown to the receptor (Erdogan, 1999).⁵³² The figure below shows the credibility of the Ohanian model source (1990), including variables for every factor.

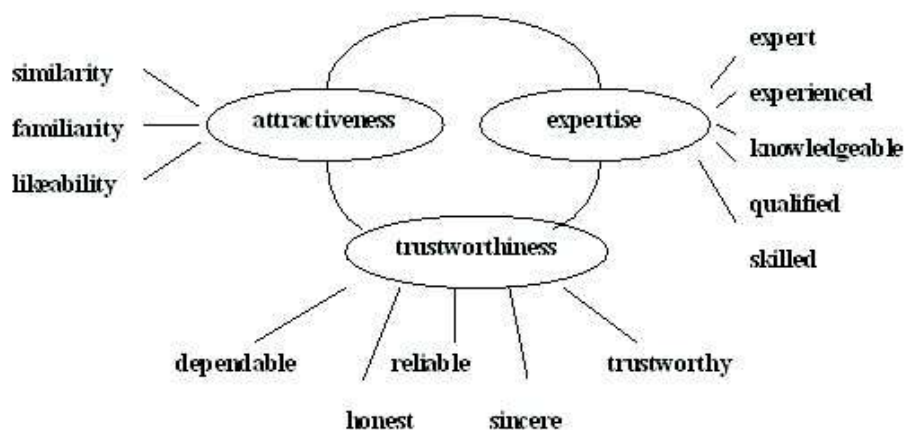


Figure 1. The Ohanian Model of Source Credibility
Source: Louise E Canning, celebrity endorsement in *Business Markets*, 2005

Credibility in social marketing programs

Although most social marketing programs, referred to as social programs, are based on solid research and involve strong national institutions such as public authorities, national agencies and NGOs, their online presence creates many problems related to fierce competition and low confidence. Using an aggressive means of communication and a hidden image, online organizations that promote unhealthy products and behaviours (cigarettes, alcohol, activities like gambling and bets) often win consumer confidence, adversely influencing their behaviour. In this context, the role of NGOs concerning the empowerment of social behaviour is extremely important and so is the need to gain credibility on behalf of the online consumer.

In what concerns social programs, online credibility can be gained in two ways: either by **using the human factor** and the social relationships between people, either by promoting a healthy lifestyle

⁵³¹ Eisend M. 2006, *Source Credibility Dimensions in Marketing, Communication – A Generalized Solution*, Journal of Empirical Generalisations in Marketing, 2006, page 3

⁵³² Canning L. 2006, *Celebrity endorsement in business markets*, 22nd IMP Conference, Italy

through *counteracting negative effects of risky products campaigns*.⁵³³ The first case, using the human factor, involves transmitting the message through a public office, a model in society. An example of an unprecedented social program was the "*Cherish Life*" campaign in 2007, when Andreea Marin, anchorwoman and UNICEF ambassador to Romania, has endorsed a national health system for bone marrow transplant to leukaemia patients. The campaign won the Media Award next year, donations mounting to the equivalent of the annual budget of the Ministry of Health allocated for bone marrow transplantats in Romania. Reducing the harm of unhealthy products campaigns was achieved through the "*I want fresh bread*" campaign in 2008. The project was initiated by three NGOs: CPA Romania (Consumer Protection Association), PRO ALIM SAN and Eurolink, and concerned these issues: non-specific legislation in connection to bread production, corruption and tax evasion, aswell as the need to attract European funding. That campaign has raised a warning sign on the quality of the bread market and the increasing level of corruption currently existing in the industry.

Credibility is thus a multidimensional concept, which plays a decisive role in the impacts that social programs have on consumers. Credibility is easily influenced by media and social networks, therefore it is necessary to establish a relationship of trust and honesty with the consumers.

Study of the credibility of online social marketing programs

Purpose

The purpose of this research is to examine the extent to which the information on websites containing social organizations in Romania is considered trustworthy by consumers.

Objectives

Target goals: 1) determining the percentage of people who visit websites containing social programs, 2) determining the impact generated by each Ohanian model components (confidence, attractiveness and expertise) on consumers, 3) establishing relationships between respondent's demographic characteristics and their opinions on the analyzed problem.

Hypotheses

We defined the following hypotheses:

H1: The credibility of the source depends directly on trust.

H2: The credibility of the source depends directly on expertise.

H3: The credibility of the source depends directly on attractiveness.

Methods

In achieving the research, a questionnaire with questions based on the Ohanian model was used. The study was conducted online in March 2010-April 2010. To determine the number of people visiting websites containing social programs the following filter question was used: "Have you ever visited a site that promotes a social cause or one that fights problems such as smoking, maintaining health (fitness, diet), environmental issues (recycling), health problems (cancer, heart disease), education (education of the child), car accidents, etc.?" The questionnaire had 9 closed questions with multiple answers, arranged in a proportional scale.

Participants

A total of 76 persons were interviewed, of which 31 have not passed the filter question.

⁵³³ Cugelman B. 2009, *The psychology of Mass Interpersonal Behavioral Change Websites: a meta analysis*, Medicine 2.0 Conference, Canada

Respondents were aged between 18-30 years, with an average of 22 years' age. Respondents are singles (75%) residing outside Bucharest (78%) and are currently students or belong to academic environment (65%).

Data analysis and results

The data analysis program was conducted in Eviews' 4 software program. A multiple regression model was built containing these independent variables: trust, expertise and attractiveness, aswell as a dependent variable- the credibility of source. Links between variables' intensities were measured using a proportional scale of 1 to 5, where 1 equalled very poor, and 5 - very strong. Furthermore, simple correlations were examined between regression model variables.

	Credibility	Trust	Expertise	Attractiveness
Credibility	1,00			
Trust	0,13	1,00		
Expertise	0,08	0,08	1,00	
Attractiveness	0,47	0,46	0,16	1,00

Table 1. Simple correlations between source credibility, trust, expertise and attractiveness variables

Since the values obtained did not exceeded 0.5, it can be said that there were no independent variables that strongly correlated.

Dependent Variable: CREDIBILITY				
Method: Least Squares				
Date: 04/18/10 Time: 17:24				
Sample: 1 35				
Included observations: 35				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.252878	0.696682	6.104476	0.0000
TRUST	0.092813	0.142328	0.652108	0.5191
EXPERTISE	-0.016925	0.186495	-0.090750	0.9283
ATTRACTIVENESS	-0.458216	0.157376	-2.911589	0.0066
R-squared	0.234850	Mean dependent var	3.114286	
Adjusted R-squared	0.160803	S.D. dependent var	0.900047	
S.E. of regression	0.824512	Akaike info criterion	2.559161	
Sum squared resid	21.07443	Schwarz criterion	2.736915	
Log likelihood	-40.78531	F-statistic	3.171637	
Durbin-Watson stat	2.485058	Prob(F-statistic)	0.037960	

Table 2. Multiple regression model features with source credibility as dependent variable

Based on the information obtained in Table 2, we defined the following regression equation:

Website Credibility = 4.252 + (0.092 x trust) - (0.016 x expertise) - (0.458 x attractiveness)

The Student test was used to test significance of model parameters. Since probabilities were higher than 5% (except for attractiveness, prob = 0.0066), Wald test was used. Applying this test high values for Fisher test (F-statistic = 127.21) and Hi-square test (Chi-square = 508.84) and very low probabilities (Probability = 0.00) were obtained. We thus conclude that the parameters are significantly different from zero.

Checking the validity of proposed model

These hypotheses were tested:

1) Assumption of errors normality

The Jarque-Bera test coefficient is not significant ($0.63 > 0.05$), therefore null hypothesis is accepted, errors presenting a normal distribution.

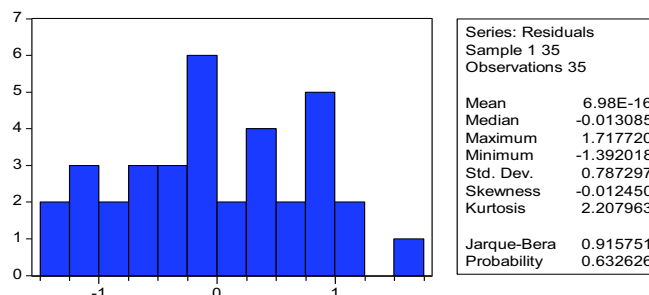


Figure 2. Normal distribution of errors

2) The hypothesis of autocorrelation errors

This can be verified by applying the Durbin-Watson test. Since the d calculated value is equal to 2.48, it can be said that errors do not show autocorrelation.

3) The hypothesis of homoscedasticity errors

The White test value ($R^2 = 7.504$) is higher than tabular value, that being safe to say because there is no heteroscedasticity between model errors.

White Heteroskedasticity Test:				
F-statistic	1.273711	Probability	0.301034	
Obs*R-squared	7.504555	Probability	0.276692	
Dependent Variable: <i>RESID</i> ^2				
Method: Least Squares				
Date: 04/18/10 Time: 21:55				
Sample: 1 35				
Included observations: 35				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	2.074388	1.261281	1.644668	0.1112
<i>INCREDERE</i>	-0.363702	0.478665	-0.759826	0.4537
<i>INCREDERE</i> ^2	0.029941	0.075102	0.398674	0.6932
<i>EXPERTIZA</i>	-0.186793	0.880436	-0.212159	0.8335
<i>EXPERTIZA</i> ^2	0.054649	0.166036	0.329141	0.7445
<i>ATTRACTIVITATE</i>	-0.735444	0.509543	-1.443341	0.1600
<i>ATTRACTIVITATE</i> ^2	0.161929	0.082723	1.957488	0.0603
R-squared	0.214416	Mean dependent var	0.602127	

Adjusted R-squared	0.046076	S.D. dependent var	0.671443
S.E. of regression	0.655792	Akaike info criterion	2.170909
Sum squared resid	12.04175	Schwarz criterion	2.481979
Log likelihood	-30.99091	F-statistic	1.273711
Durbin-Watson stat	2.096952	Prob(F-statistic)	0.301034

Table 3. White test

4) The hypothesis of multi-collinear errors

Multi-collinearity points to the linear or nonlinear relationship between two independent variables of a model. Results of the correlation matrix showed a correlation between the nature of reverse credibility and trust, and between credibility and attractiveness.

	Credibility	Trust	Expertise	Attractiveness
Credibility	1.000000	-0.130893	0.081283	-0.473642
Trust	-0.130893	1.000000	0.080128	0.466027
Expertise	0.081283	0.080128	1.000000	-0.163013
Attractiveness	-0.473642	0.466027	-0.163013	1.000000

Table 4. Correlation matrix

From these assumptions, it is to conclude that the defined model is valid.

Conclusions

This article presented several theoretical and practical aspects related to source credibility in the online environment. Based on information obtained from research, a model of credibility in the online social programs was defined. Research results showed that the credibility of websites is quite low, average values of considered variables ranking around 3, a somewhat favourable opinion. This has confirmed the restricted nature of social online programs and their relatively low level of promotion. Some limitations of this paper were connected to the large number of people removed by filter question, the small number of researchers in the field and the sample consisting mainly of students.

References

1. Andreasen A. 1995, Marketing Social Change: Changing Behavior to Promote Health, Social Development and the Environment, Georgetown University.
2. Canning L. 2006, Celebrity Endorsement in Business Markets, 22nd IMP Conference.
3. Catoiu, I. (coordonator) 2009, Cercetări de Marketing–Tratat, Uranus Publishing, Bucuresti.
4. Catoiu, I. and Balan, C. 1999, Metode si Tehnici Utilizate in Cercetarile de Marketing, Aplicatii, Uranus Publishing, Bucuresti.
5. Cugelman, B. 2009, The Psychology of Mass Interpersonal Behavioral Change Websites: a Meta Analysis, Medicine 2.0 Conference, Canada.
6. Cugelman, B. 2009, The Dimensions of Web Site Credibility and Their Relation to Active Trust and Behavioural Impact, Communications of Association for Information Systems, Vol. 24.
7. Earle, R. 2001, Beating Them at Their Own Game: Using the Internet to Disseminate Social Marketing Messages, Social Marketing Quarterly, No.3.
8. Eisend, M. 2006, Source Credibility Dimensions in Marketing, Communication – A Generalized Solution, Journal of Empirical Generalisations in Marketing.
9. Ohanian, Roobina 1990, Construction and validation of a Scale to Measure Celebrity Endorser's Perceived Expertise, Trustworthiness and Attractiveness, Journal of Advertising, no.19.

10. Princeton Survey Research Associates 2002, A Matter of Trust: What Users Want from Websites, Consumer WebWatch Transparency Survey.
11. Vreau paine curata 2008, accessed on the 16th of April 2010, www.vreaupainecurata.ro.
12. Pretuieste Viata 2010, accessed on the 17th of April 2010, www.pretuiesteviata.ro.
13. Ranchodd, A. 2006, Strategic Marketing in Practice, Butterworth-Heinemann.
14. Schwartz, B. 2001, Going Through the Out Door: Capitalizing Online Technology to Promote Behaviour Change through Partnerships, Social Marketing Quarterly, No.3.
15. Stancu, S and Andrei T. 2008, Introducere in Econometrie Utilizand Eviews, Economica Publishing.
16. Weinreich, N. 1999, Hands-On Social Marketing: A Step-by-Step Guide, Sage Publications.