



Innovations in Modern World

Monograph 3

Association 1901 SEPIKE

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**Social Educational Project of Improving
Knowledge in Economics**

INNOVATIONS IN THE MODERN WORLD

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AUTHORS & CONTRIBUTION

Subhankar DAS (CHAPTER 1: 1.1)	<i>Research Scholar in Faculty of Management Studies, IBCS, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, India</i>
Subhra Rani MONDAL (CHAPTER 1: 1.1)	<i>Research Scholar in Faculty of Management Studies, IBCS, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, India</i>
Nana SHENGELIA (CHAPTER 1: 1.2)	<i>PhD in Social Communications, Associate Professor, Akaki Tsereteli State University, Georgia</i>
Zurab MUSHKUDIANI (CHAPTER 1: 1.2)	<i>PhD in Business Administration, Kutaisi City Council, Saint Nino High Public School #3, Georgia</i>
Galyna STUDINSKA (CHAPTER 1: 1.3)	<i>Doctor in Economics, Associate Professor, Kyiv national university of trade and economics, Ukraine</i>
Sergey KHARICHKOV (CHAPTER 1: 1.3)	<i>Doctor in Economics, Full Professor, National Polytechnic University, Odesa, Ukraine</i>
Katarina BELANOVA (CHAPTER 2: 2.1)	<i>PhD in Economics, Associate Professor, University of Economics in Bratislava, Slovakia</i>
Aneta EJSFONT (CHAPTER 2: 2.2)	<i>Doctor in Economics, Professor, Edward F. Szczepanik State Higher Vocational School in Suwalki, Poland</i>
Lyazzat SEMBIYEVA (CHAPTER 3: 3.1)	<i>Doctor in Economics, Full Professor, L.N. Gumilyov Eurasian National University, Astana, Kazakhstan</i>
Lyazzat BEISENOVA (CHAPTER 3: 3.1)	<i>PhD in Economics, Associate Professor, L.N. Gumilyov Eurasian National University, Astana, Kazakhstan</i>
France KRIŽANIČ (CHAPTER 3: 3.2)	<i>PhD in Economics, EIPF – Economic Institute, Ljubljana, Slovenia</i>
Žan OPLOTNIK (CHAPTER 3: 3.2)	<i>PhD in Economics, Full Professor, University of Maribor, Slovenia</i>
Vasja KOLŠEK (CHAPTER 3: 3.2)	<i>M.Sc. in Economics, EIPF – Economic Institute, Ljubljana, Slovenia</i>
Alenka KAVKLER (CHAPTER 3: 3.2)	<i>PhD in Mathematics, Associate Professor, University of Maribor, and EIPF – Economic Institute, Ljubljana, Slovenia</i>
Krasimir NIKOLOV (CHAPTER 4: 4.1)	<i>PhD in Economics, CGAP EU Funded Projects Expert, Chief Internal Auditor, Ministry of Interior, Sofia, Bulgaria</i>
Miroslava PEICHEVA (CHAPTER 4: 4.2)	<i>PhD in Economics, Associate Professor, University of National and World Economy, Sofia, Bulgaria</i>
Vira SHCHEPAK (CHAPTER 5: 5.1)	<i>PhD in Engineering Science, Assistant Professor, Poltava National Technical Yuri Kondratyuk University, Ukraine</i>
Alla KARIUK (CHAPTER 5: 5.1)	<i>PhD in Engineering Science, Assistant Professor, Poltava National Technical Yuri Kondratyuk University, Ukraine</i>
Grygorii SHARYI (CHAPTER 5: 5.1)	<i>Doctor in Economics, Full Professor, Poltava National Technical Yuri Kondratyuk University, Ukraine</i>
Nadiia STEZHKO (CHAPTER 5: 5.2)	<i>Doctor in Economics, Associate Professor, Kyiv National University of Technologies and Design, Ukraine</i>
Aleksandrs RUBANOVSKIS (CHAPTER 6: 6.1-6.2)	<i>PhD in Economics, Professor Emeritus, Expert, Latvian Scientific Council, Riga, Latvia</i>
Valbona KALO (SHËNGJERGJI) (CHAPTER 7: 7.1-7.3)	<i>PhD in Literature, Lecturer, "Aleksandër Xhuvani" University, Elbasan, Albania</i>

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PREFACE

The transition to a new "transfer" stage of economic development in a globalized world puts society at the heart of the need to solve the problem of ensuring its effective functioning for increasing the human capital value. The current stage of world economic development is characterized by a focus on innovations that can lead to economic growth and bring the economy to a fundamentally new level. A key success factor in such conditions is the intellectual resource, i.e. knowledge that is an indivisible intangible asset of any society (its entities).

Obviously, the essential global changes taking place in all countries of the world are due to the innovative course. As a result, the landmarks of socioeconomic processes, mechanisms of their interaction, their institutional support (which actually represents the implementation of a new stage of knowledge-based economy development) are changing. The "transferring" to the knowledge-based economy takes place under the influencing growth of the role of applied knowledge and practical competences on the basis of assimilating and testing of theoretical knowledge; under an increase in the proportion of services in the context of deep structural deformations in the sphere of material production worldwide; under shifting emphasis on the investments into human capital value from resource-based ones; under the intellectualization of information in the form of obtaining a new knowledge quality; under the continuous dynamic development of the informational and communicational technology system and high-tech industries.

Globalization also led to the fact that the problem of incomplete use of existing labor and intellectual potential by each country and, as a result, volatile (unstable) employment has become threatening scale and has become a category of "urgent", adding to the list of social threats of the modern society, which, in turn, led to the chain reaction at the resources markets (financial, human, capital, intellectual, commodity, etc.), violating traditional mechanisms of their regulation and limiting the timely reaction to "unpredictability turbulent vigils" of the economic systems, which are reflected in our monograph.

The experience of the socioeconomic systems' functioning in well-developed countries convincingly suggests that economic success and stability are inextricably linked with investment in human capital, the development of science and education, the support of innovation-oriented industries' functioning. Knowledge in the modern economy becomes capital only in case, if it will be commercialized, that is in case of its transformation into innovative products. On the other hand, we can observe the intensive development of technologies and a significant reduction of life cycles, not only of individual products, but of entire product categories and related industries. All above-mentioned determines the relevance of scientific studies, which results should be presented and used worldwide.

There are many scientific publications on innovation (innovation management) having been published, but there is a need for editions that cover the knowledge management system from organizational knowledge to its commercialization, which connect the main approaches and knowledge management technologies.

Our scientific monograph "Innovations in the Modern World" differs from other scientific publications, because it embraces the diverse views of scientists from all over the world on the processes of knowledge management and innovation - they consider them from the standpoint of the economy (commercialization mechanisms of various innovative projects; development of the innovative potential at the country level; development of innovative projects in various economic areas and sectors); management (peculiarities of different organizational structures), law (legal provision for generating new knowledge and their implementation; requirements of standards and norms for innovative products), public administration (state policy on the innovative development; state system of the intellectual property protection in various sectors of the economy), social communications and digital marketing (marketing of the scientific research results, influence on the behavioral component of society), social security and food security (audit of the social security level; ensuring protection of society with healthy food), applied modeling and monitoring methods to ensure the prevention of regulatory decisions and, even humanitarian, for the formation of an innovative world outlook on the basis of historical heritage in literature, philosophy, philology, etc.

Our monograph consists of 7 chapters.

Chapter 1 "Innovations in social communications and branding" includes results of scientific researches on socioeconomic factors for Facebook usage and its impact in purchasing behavior of buyers; social media advertising in banking sector and new edges in branding. Authors from India study different interdependence between variables that influence customers' behavior according to the advertising in the social media (viz. Facebook) to justify interconnections. Authors from Georgia have studied the relation between media outlets and banking business. The present study shows that the banking advertising in media is directly proportional to the success of this type of business, since well-planned campaign and consumer awareness are prerequisites for the success of banking business. Authors from Ukraine discover new brand forms, viz. informational and organizational. Branding is recognized by them as a factor in the competitiveness management system of the national economy.

Chapter 2 "New ways for SMEs development" includes results of scientific researches on their innovative activity in the Slovak Republic and Poland. Authors from Slovakia and Poland point out that improving the innovation level and on its base the competitiveness level of the SME sector is based on the international cooperation, both vertical and horizontal.

Chapter 3 "Perspectives of financial service sector development and energy production" includes results of scientific researches on main trends of the insurance market development and Capacity Remuneration Mechanism (CRM) in response to market conditions for electricity production. Authors from Kazakhstan and Slovenia discover peculiarities of these sectors, define their perspectives. In particular, authors from Slovenia indicate that in these new circumstances CRM became one of the most important instruments for balancing and regulating the market (i.e. electricity market), which is characterized by a very rigid demand and slow response on the supply side, having limited capacities.

Chapter 4 "Innovative approaches to the social responsibility concept development" includes results of scientific researches on "input-output" scientifically based strategic audit approach and creation of a new approach to the academic education on the sustainable development and corporate social responsibility (CSR).

Chapter 5 "Innovations in the sectoral economic modelling and monitoring" includes results of scientific researches on legal regulatory aspects of land monitoring and modelling prospects of global food problem solution. Authors from Ukraine propose new approaches for the land monitoring and solution of the global food problem.

Chapter 6 "Food security" includes results of scientific researches on the food balance and using nuts and fruits for the health security. Expert in the field of food security from Latvia have proposed detailed description of some products (nuts and exotic fruit) and their composited influence on the health of human beings.

Chapter 7 "Innovations in education" includes results of scientific research on the historical novel in the literature and its role in the modern era". Author from Albania made deep literature monographic research on the influence of the typology of Albanian historical novels, its features and consideration of "time" element. A logic line has been pointed in the deep role of historical literature heritage for the next generations to create innovative outlook on the basis of historiographical literary information.

Authors of the monograph will be sincerely grateful to all interested scientists, who are concerned with solving problems of the modern world in the current and innovative branches, for the critical assessment of our scientific papers and constructive scientific cooperation.

Respectfully,
Michael Schaefer,
Doctor in Economics, Professor,
President of Scientific Association
Association 1901 "SEPIKE"

CHAPTER 1

INNOVATIONS IN SOCIAL COMMUNICATIONS AND BRANDING

1.1 ANALYSIS OF THE SOCIOECONOMIC FACTORS FOR FACEBOOK USAGE AND ITS IMPACT IN PURCHASING BEHAVIOR OF BUYERS

Introduction

Advertising is the non-personal communication of the information usually paid for and persuasive in nature about products, services or ideas by identified sponsors through the various media (Datta, 2008). The advertiser intends to spread his ideas about the products and offerings among the prospects. Popularization of products is thus the basic aim of advertising (Ramaswami & Namakumari, 2004). With advent of digital media this advertising goes to next level from mass media to social media. The social Web is changing the facets of traditional marketing communications. Traditional brand communications that were previously controlled and administered by brand and marketing managers are gradually being shaped by consumers. The rapid growth in popularity of social media platforms in recent years has raised the question of whether this phenomenon has reduced marketers' control of brand management (Berthon et al, 2007). During the social media age, knowledge of both the influence of company created communication on consumer perception of brands & the influence of consumer online content creation on brands is important (Berthon, Pitt & Campbell, 2008; Christodoulides, 2009). Social media platforms like Facebook offer an opportunity for consumers to interact with other consumers; thus, companies are no longer the sole source of brand communication (Li & Bernoff, 2011). Moreover, consumers are increasingly using social media sites to search for information and turning away from traditional media, such as TV, radio and magazines (Magold and Faulds, 2009).

Social media like Facebook are gaining popularity and are increasingly used in regular operations of many companies, ranging from start-ups and SMEs to large corporations (Lee et al, 2008; Osimo, 2008; Andriole, 2010; Bell & Loane, 2010). Despite extensive use of Facebook, little is known on the specific impact that these tools & technologies have on business process performance (Denyer et al, 2011).

This paper highlights important factors of consideration on the buying decision of consumers, who are mainly using Facebook as a tool of information for brand through advertising along with how they perceive. Our study tries to fill the gap in literatures, which are a few or absent in highlighting the importance of socioeconomic factors of Facebook users on their purchase decision. Vast Facebook use of around the globe has made it a new and important advertising platform, where businesses place their ads to reach their prospective customers. This is probably because Facebook allows businesses to target specific customer and promoting their product or services through effective advertisements. As Vahl (2011) argues, Facebook is facilitating the manufacturers and service providers to reach customers of specific age group and interest. Growing Facebook based advertising is perhaps an indication that it is becoming an important source of business presentation and the firms are taking Facebook advertisement as a useful strategy to attract customers. Just in a few years, it has

become a part of promotional mix of the firms to create awareness in target areas and influence customers mind. Because of its popularity, businesses are placing their ads on Facebook for creating awareness and influencing buying behavior. Some businesses like HP, have adopted Facebook as a crucial part of business activities to stay close with customers in competitive environment. Vahl (2011) highlights the businesses magnetism towards Facebook and mentions that Facebook revenue from businesses advertisements reached approximately \$ 5.6 billion in 2016.

Companies are spending a sizable portion of their budget on advertising their products/services. Through advertisements which accompany interesting information, firms attempt to influence customers' buying behavior favorably. Facebook is also being used for the very reason as the firms believe that their advertisement may catch customers' attention and action (favorable purchase decisions). Companies struggle to differentiate their products/services to create values for their customers. Advertising is used to create products/services differentiation in customers' mind (Hussainy et al, 2008). Advertisers are aware of the importance of brand value development strategy and the benefits it may offer by effectively influencing customers mind. This is because often customers have association with specific brands and emotional values these brands have for them. This urges the advertisers to create emotional values for their viewers through advertisement on the media like Facebook.

Literature review

Advertising is the core idea that is presented in non-personal ways to create purchase intention. Srinivasa (2008) defines advertisement as "the sharing of information about products in a non-personal way usually paid by a sponsor through different media". Similarly, Ayanwala et al (2005) define it as "a non-personal paid form of communication, where ideas, concepts, products/services and information are promoted through media (visual, verbal and text) by an identified sponsor to persuade or influence behavior". Bishnoi & Sharma (2009) emphasized the inherent characteristics of advertisement and suggested that popularity is the aim of advertisement.

Facebook is type of social media, where people with common interest shares their ideas and comments in a virtual environment (Weber, 2009). Facebook advertising enables customers to share their experience, ideas, interest and useful information about a brand. Facebook advertising is useful in the sense that it is interactively helpful in collecting feedback and demographic information of targeted customers. In current business environment, Facebook advertising is an effective source to reach targeted customers (Sendberg, 2010). Facebook advertising provides the opportunity to build up a brand and engages with customers on a large social network. Facebook advertising is done to create likeness, attraction and influence buying behavior in a positive way. Attitude-towards-the ads, is an interesting theory of advertising often used to understand the buying behavior. Effective advertisement influences the attitude towards brand and finally leads to purchase intention (Goldsmith & Lafferty, 2002). Ideally, consumers buying behavior is the products purchase decision (Adelaar et al, 2003). Social media (viz. Facebook) has become a marketing channel to reach target market. According to a study, "Expand your Brand Community Online" social media

has become a significant marketing channel to reach directly targeted customers and engages them with company brands (Hanlon et al, 2008). E.g. Audi (German auto company) and Dunkin' Donuts (American consumers' product company) are using social media for direct interactions with customers. Audi has established corporate relations with their fans on Facebook (Wasserman, 2011). Similarly, Proper Cloth (New York based company) has created its page on Facebook to post news of their business and pictures of clothes. All its Facebook fans receive their updates in seconds on their Facebook pages. These leading brands have collected consumers on a single platform (i.e. Facebook) and keep them updated at lower cost. According to Lukka and James (2014), Facebook is an effective source to market products in a personal way. Facebook has enabled marketers to customize their advertisements for a specific groups of people. Marketers target these individuals on the basis of demographic information and mutual interests. Facebook has made it possible to reach these targeted people in cost effective and interesting way instead of traditional marketing channels.

There is a research gap exists, which our research tries to highlight, i.e. no study highlights the socioeconomic make up or profiles of Facebook users collectively that influence the purchasing behavior. Thus, this study will bring out more clarity to the existing literatures and help in establishing more credibility.

Research objectives and methodology

Research objectives: All objectives are based on Facebook users profile, viz. to know and to evaluate the impact of socioeconomic profile of Facebook users on: (1) mode of shopping; (2) frequency of purchase; (3) type of goods purchased; (4) amount spend for purchase of goods. The study variables are mode of shopping, frequency of purchase, type of goods purchased and amount spend for purchasing of goods.

Research methodology: The research is action-based study as such the work falls in the ambit of applied research methods. The study has two main constructs, viz. (1) *socioeconomic profile* of Facebook users and (2) *purchasing behavior*. The first construct represented by 7 variables, viz. (1) gender; (2) age; (3) education; (4) marital status; (5) residence; (6) occupation and (7) income. The second construct is influenced by 4 variables, viz. (1) mode of shopping; (2) frequency of purchase; (3) type of goods purchased and (4) amount spent on purchasing. All variables related to socioeconomic profile are independent variables and rest of the variables are study variables. For instance, 'gender' is independent variable and 'mode of shopping' dependent variable. So, the regression equation for this relation could be as (1.1.1):

$$\text{Mode of Shopping Behavior} = \alpha + \beta (\text{gender}) + e \quad (1.1.1)$$

The hypothesis for this regression equation could be H_a : *Gender influences mode of shopping*. The null hypothesis obviously turns out to be H_0 : *gender doesn't influence mode of shopping*. For a composite hypothesis, please, look at formula (7) below.

Sampling procedure: For this study a multistage sampling method was adopted. The research has comprised of four districts of Odisha, which were selected based on good Internet connectivity. For the study a comprehensive questionnaire was constructed covering 14 variables related to impact of Facebook advertising. Besides socioeconomic

variable related questions about respondents, different issues related to the purchasing decisions were also addressed. While conducting the survey, due care was given to the respondents of different walks of life, who are well versed with Facebook advertisements are targeted. A total of 1000 questionnaires (250 in each district) were administered through Facebook and WhatsApp groups. A total of 865 questionnaires were considered to be fit for the analysis.

Hypotheses: This section brings emphasize on hypothesis for the study. The *aim of the research* is to find and assess the impact of socioeconomic profile of Facebook users on various traits of purchasing behavior.

H₁: Socioeconomic profile of Facebook users impact mode of shopping.

H₂: Socioeconomic profile of Facebook users impact frequency of purchase.

H₃: Socioeconomic profile of Facebook users impact type of goods purchased.

H₄: Socioeconomic profile of Facebook users impact money spent on purchase.

Statistical techniques: Given the aim and the objectives the study needs linear regression along with *MANOVA* to test the hypotheses. Each hypothesis needs a simple linear regression in order to get tested. Whereas, to test the multivariate variance the study might need *MANOVA*. The methods could be as below.

Simple linear regression: Given a model function such as (1.1.2):

$$Y = \alpha + \beta X + e \quad (1.1.2)$$

Formula (1.1.1) is known as the classical model function for simple linear regression, whereas formula (1.1.2) is the expression for the constant. The slope or coefficient can find as (1.1.3) - (1.1.6).

$$\hat{\alpha} = \bar{Y} - \hat{\beta}' \bar{X} \quad (1.1.3)$$

$$\hat{\beta}' = \Sigma [(x_i - \bar{x}) \times (y_i - \bar{y})] / \Sigma (x_i - \bar{x})^2 \quad (1.1.4)$$

$$t = (\hat{\beta}' - \beta) / S_{\beta} \sim t_{n-2}, \text{ where } S_{\beta} = (1/(n-2)) \Sigma \hat{e}_i^2 / \Sigma (x_i - \bar{x})^2 \quad (1.1.5)$$

It might be possible to assess if the relationships between any two variables significant or not with the help of formulas (4) - (5) once upon realizing the expected values such as $\hat{\alpha}$ and $\hat{\beta}'$ from formulas (2) - (3). Coming to the study, the hypothesis *H₁* brings emphasis on testing the relationships between socioeconomic profile of Facebook users and mode of shopping. Both variables measured in ordinary level. The model (1.1.1) can be as (1.1.6):

$$\text{Mode of Shopping} = \alpha + \beta (\text{socioeconomic profile}) + e \quad (1.1.6)$$

It is possible to test relations with the help of *t statistic* as in formulas (1.1.4) - (1.1.5).

Statistical tools: They are important for statistical analysis. Two of the packages namely *R base* along with *diagram* were used to perform linear regression and for visualization. *R base* has sufficient mechanisms to perform linear regression analysis. However, the package *diagram* is used to plot the structure diagrams. The structure diagram is composed of set of nodes for both dependent and independent variables. The nodes were shown as rectangles and relationships were shown with single headed arrows. The color of the arrow represents significance of relationships, which are deemed to be significant, if the color of the arrow is red otherwise not.

Analysis and interpretation

The analysis is organized by the output obtained through *R* for simple linear regression. The data first verified to check normality of the data. *Shapiro-Wilk test* is chosen to test the multivariate normality of the data. Every model has two outcomes, i.e. the first is the regression output and the second is a visual. The regression output has certain important statistics along with *P Values*, which were interpreted at respective significance levels.

The following is the normality test. `shapiro.test(s.df[,2:26])`

Shapiro-Wilk normality test

data: s.df[, 2:26]

W = 0.08159, p-value < 0.02134

The following is the regression summary for Gender vs. Study variables
`summary(gend.lm)`

Call: `lm(formula = s.df[, 2] ~ s.df[, 8] + s.df[, 9] + s.df[, 10] + s.df[, 11], data = as.data.frame(s.df.ch))`

Residuals:

Min	1Q	Median	3Q	Max
-0.76527	-0.04580	0.04994	0.16844	0.44037

Coefficients:

Estimate / Std. Error / t value / Pr(> |t|)

(Intercept) 2.55467 0.07948 32.143 < 2e-16 ***

s.df[, 8] -0.46163 0.03266 -14.133 < 2e-16 ***

s.df[, 9] -0.52792 0.06649 -7.939 1.73e-13 ***

s.df[, 10] 0.47208 0.05361 8.806 8.02e-16 ***

s.df[, 11] -0.10804 0.02015 -5.363 2.36e-07 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2872 on 190 degrees of freedom

(105 observations deleted due to missingness)

Multiple R-squared: 0.6713, Adjusted R-squared: 0.6643, F-statistic: 96.99 on 4 and 190 DF, p-value: < 2.2e-16.

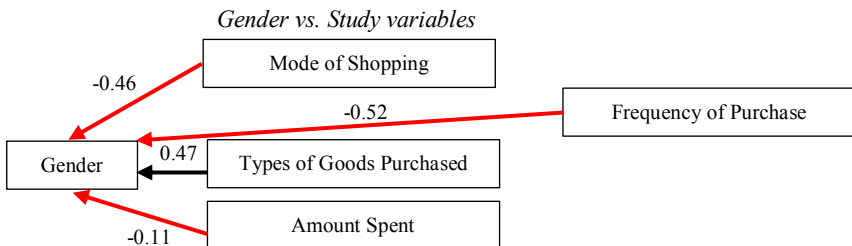


Figure 1.1.1: Structure diagram for Gender vs. Study variables

Source: calculated by authors

Gender has significant relationship with mode of shopping, frequency of purchase and amount spent (*Figure 1.1.1*).

The following is the regression summary for Age vs. Study variables
summary(age.lm)

Call: lm(formula = s.df[, 3] ~ s.df[, 8] + s.df[, 9] + s.df[, 10] + s.df[, 11],
data = as.data.frame(s.df.ch))

Residuals:

	Min	1Q	Median	3Q	Max
	-1.6293	-0.3226	-0.2451	0.3453	1.6619

Coefficients:

Estimate / Std. Error / t value / Pr(> |t|)

(Intercept) 8.49741 0.21487 39.547 < 2e-16 ***

s.df[, 8] 0.70883 0.08830 8.027 1.01e-13 ***

s.df[, 9] -0.70994 0.17977 -3.949 0.00011 ***

s.df[, 10] -1.02543 0.14493 -7.075 2.79e-11 ***

s.df[, 11] -0.90810 0.05446 -16.674 < 2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.7764 on 190 degrees of freedom

(105 observations deleted due to missingness)

Multiple R-squared: 0.8219, Adjusted R-squared: 0.8181, F-statistic: 219.1 on 4
and 190 DF, p-value: < 2.2e-16.

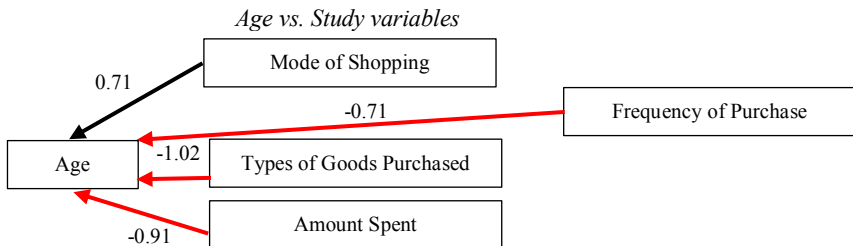


Figure 1.1.2: Structure diagram for Age vs. Study variables

Source: calculated by authors

Age has significant relationship with frequency of purchase, amount spent and types of goods purchase ([Figure 1.1.2](#)).

The following is the regression summary for Education vs. Study variables
summary(edu.lm)

Call: lm(formula = s.df.ch[, 3] ~ s.df.ch[, 8] + s.df.ch[, 9] + s.df.ch[, 10] +
s.df.ch[, 11], data = as.data.frame(s.df.ch))

Residuals:

	Min	1Q	Median	3Q	Max
	-1.7508	-1.0025	0.0397	0.5721	3.2070

Coefficients:

Estimate / Std. Error / t value / Pr(> |t|)

(Intercept) -0.375487 0.477065 -0.787 0.4323

s.df.ch[, 8] 0.854237 0.328240 2.602 0.0101 *

```
s.df.ch[, 9] 0.001174 0.273800 0.004 0.9966
s.df.ch[, 10] 0.177068 0.098723 1.794 0.0747 .
s.df.ch[, 11] 0.957771 0.167032 5.734 4.46e-08 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Residual standard error: 1.338 on 168 degrees of freedom Multiple R-squared: 0.2333, Adjusted R-squared: 0.215, F-statistic: 12.78 on 4 and 168 DF, p-value: 4.199e-09.

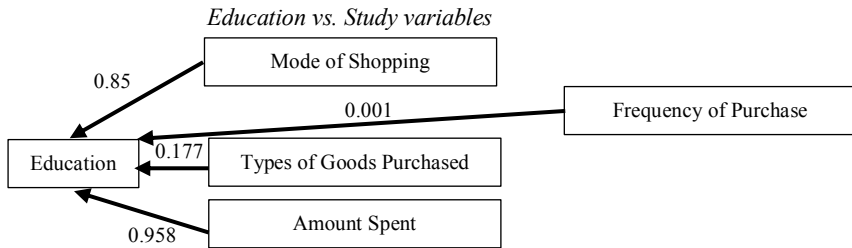


Figure 1.1.3: Structure diagram for Education vs. Study variables

Source: calculated by authors

Education has no significant relationship with mode of shopping, frequency of purchase, types of goods purchase and amount spent (*Figure 1.1.3*).

The following is the regression summary for Marital Status vs. study variables summary(ms.lm)

```
Call: lm(formula = s.df.ch[, 4] ~ s.df.ch[, 8] + s.df.ch[, 9] + s.df.ch[, 10] +
s.df.ch[, 11], data = as.data.frame(s.df.ch))
```

Residuals:

Min	1Q	Median	3Q	Max
-0.52373	-0.02706	0.04774	0.12912	0.32009

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	2.14323	0.07961	26.921	< 2e-16 ***
s.df.ch[, 8]	-0.19499	0.05478	-3.560	0.000483 ***
s.df.ch[, 9]	-0.08137	0.04569	-1.781	0.076734 .
s.df.ch[, 10]	-0.03540	0.01647	-2.149	0.033103 *
s.df.ch[, 11]	0.15618	0.02787	5.603	8.47e-08 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2233 on 168 degrees of freedom Multiple R-squared: 0.4229, Adjusted R-squared: 0.4092, F-statistic: 30.78 on 4 and 168 DF, p-value: < 2.2e-16.

Marital status has significant relationship with mode of shopping, frequency of purchase 7 types of goods purchases (*Figure 1.1.4*).

The following is the regression summary for Residence vs. Study variables summary(res.lm)

```
Call: lm(formula = s.df.ch[, 5] ~ s.df.ch[, 8] + s.df.ch[, 9] + s.df.ch[, 10] +
s.df.ch[, 11], data = as.data.frame(s.df.ch))
```

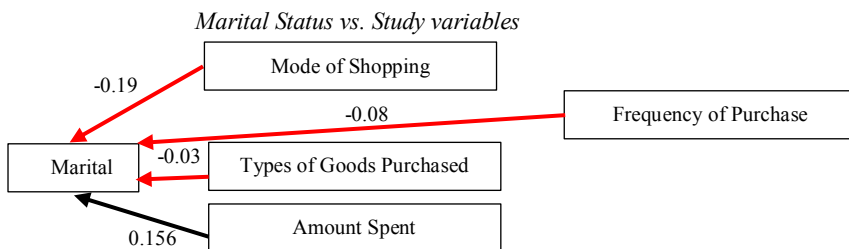


Figure 1.1.4: Structure diagram for Marital Status vs. Study variables

Source: calculated by authors

Residuals:

Min	1Q	Median	3Q	Max
-0.51990	-0.19742	-0.07527	0.26581	0.67407

Coefficients:

Estimate / Std. Error / t value / Pr(> |t|)

(Intercept) 0.54832 0.13586 4.036 8.25e-05 ***

s.df.ch[, 8] -0.13735 0.09348 -1.469 0.1436

s.df.ch[, 9] 0.17537 0.07798 2.249 0.0258 *

s.df.ch[, 10] 0.18512 0.02812 6.585 5.60e-10 ***

s.df.ch[, 11] 0.19397 0.04757 4.078 7.01e-05 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.3811 on 168 degrees of freedom Multiple R-squared: 0.4356, Adjusted R-squared: 0.4221, F-statistic: 32.41 on 4 and 168 DF, p-value: < 2.2e-16.

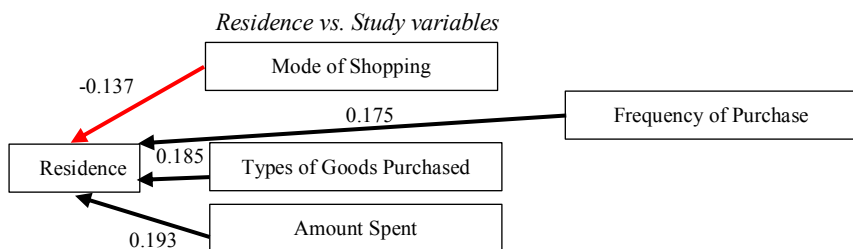


Figure 1.1.5: Structure diagram for Residence vs. Study variables

Source: calculated by authors

Residence of users has only significant relationship with mode of shopping ([Figure 1.1.5](#)).

The following is the regression summary for Occupation vs. Study variables.
summary(occ.lm)

Call: lm(formula = s.df.ch[, 6] ~ s.df.ch[, 8] + s.df.ch[, 9] + s.df.ch[, 10] + s.df.ch[, 11], data = as.data.frame(s.df.ch))

Residuals:

Min	1Q	Median	3Q	Max
-1.71580	-0.39111	0.01292	0.68477	0.97297

Coefficients:

Estimate / Std. Error / t value / Pr(> |t|)

(Intercept) 7.03876 0.30985 22.717 < 2e-16 ***

s.df.ch[, 8] -2.07704 0.21319 -9.743 < 2e-16 ***

s.df.ch[, 9] 0.40403 0.17783 2.272 0.0244 *

s.df.ch[, 10] 0.30279 0.06412 4.722 4.90e-06 ***

s.df.ch[, 11] -0.98424 0.10849 -9.073 3.01e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.8692 on 168 degrees of freedom Multiple R-squared: 0.6607, Adjusted R-squared: 0.6527, F-statistic: 81.79 on 4 and 168 DF, p-value: < 2.2e-16.

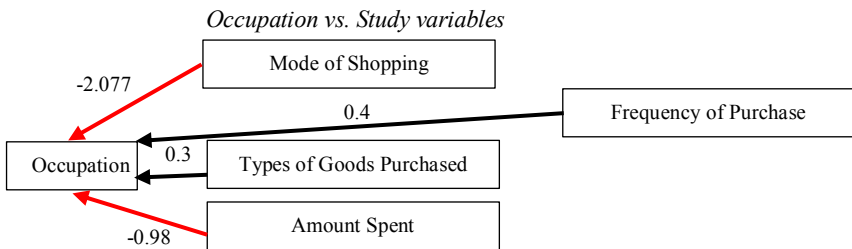


Figure 1.1.6: Structure diagram for Occupation vs. Study variables

Source: calculated by authors

Occupation of users has significant relationship with mode of shopping and amount spent (*Figure 1.1.6*).

The following is the regression summary for Income vs. Study variables summary(inc.lm)

Call: lm(formula = s.df.ch[, 7] ~ s.df.ch[, 8] + s.df.ch[, 9] + s.df.ch[, 10] + s.df.ch[, 11], data = as.data.frame(s.df.ch))

Residuals:

Min	1Q	Median	3Q	Max
-0.91377	-0.21138	-0.06825	0.50378	0.58087

Coefficients:

Estimate / Std. Error / t value / Pr(> |t|)

(Intercept) -0.63414 0.16402 -3.866 0.000158 ***

s.df.ch[, 8] 0.77326 0.11285 6.852 1.32e-10 ***

s.df.ch[, 9] -0.14313 0.09414 -1.520 0.130285

s.df.ch[, 10] 0.21259 0.03394 6.263 3.05e-09 ***

s.df.ch[, 11] 0.79021 0.05743 13.760 < 2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.4601 on 168 degrees of freedom Multiple R-squared: 0.6363, Adjusted R-squared: 0.6276, F-statistic: 73.48 on 4 and 168 DF, p-value: < 2.2e-16.

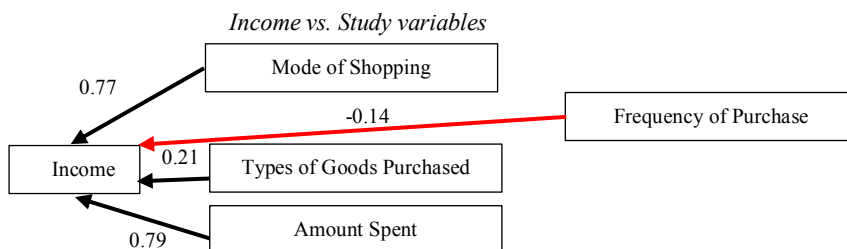


Figure 1.1.7: Structure diagram for Income vs. study variables

Source: calculated by authors

Income has significant relationship with frequency of purchase only ([Figure 1.1.7](#)).

CONCLUSION

The study suggests that gender, age and marital status are those socioeconomic profiles mostly affected by highest number of study variables. Residence and occupation are moderately affected by study variables. Income of respondents is affected by only frequency of purchase, whereas education of respondents is not affected by the study variables. This is highlighting that education has a very little influence in Facebook profiles of consumers. Facebook use is not at all affected by education. Advertisements are viewed mostly by word of mouth publicity or sharing messages.

Futuristic research direction: This study is only highlighting the socioeconomic profiles of Facebook users, so it can also have extended to other social media platforms to know the reality. Also, this study is done in a smaller geographical region. It can also be done on a larger region. Further research is needed by inclusion of all popular social media and coverage of all major dimensions of purchasing behavior.

1.2 SOCIAL MEDIA ADVERTISING IN BANKING SECTOR IN GEORGIA

Introduction

Media is influencing all sector, especially banking (Andriole, 2010). The media involvement into creation of the advertising campaign of the banking sector of Georgia, the results of cooperation and consumer reactions have been repeatedly studied. Every stage of the media development, its influence on business, advertising and social development in common requires in-depth studies and a certain analysis (Crosier, 1999). Everyday life is unimaginable without the information received through advertising, as our society constantly exists in the world of advertising (Doyle & Stern, 2006) What is advertising? How do people perceive advertising? What is its function? The answers to these and other questions define the essence and purpose of advertising. Based on a simple definition, advertising is a way of bringing a product to the society (Farese, Kimbrell & Woloszyk, 1997). American social critic Vance Packard deemed advertising as "the art of targeting at the head and hitting the wallet" (noted by Fill, 2002; Hart, 1995), Franklin and Roosevelt gave

an interesting assessment of the advertisement to the society long time ago as follow: "If I could start my life afresh, I would predominantly devote it to advertising, i.e. a purposeful effect on consumers. Advertisement is a paid form of communication, which is formulated as advertiser-media outlet-consumer (Grankvist, Kollberg & Person, 2014). Through media outlets advertising is capable to help consumers form their own opinions and make choice on this basis (Johns & Perrot, 2008). Nowadays, in the special literature, advertising is considered as an essential component of marketing and a tool of market competition (Vemuri, 2010). The advertising is the process, where an organization, product, idea and sales are promoted; it is very important tool to inform consumers about the parameters, price, usage rules and sales location of a product (Hughes & Young, 2008). Demands for technological innovations regularly increase; innovations and remote services, such as Internet banking, mobile banking, self-service machines are being introduced; the ATM system has developed. (Pry, 2010). Like the banking services worldwide, in the near future the banking business of Georgia is planning to introduce contactless payment services, which have been approved in the United States (Jashi & Khakhutaishvili, 2012). Soon the branches of banks may not exist in Georgia like in the Czech Republic and all services may be provided through the Internet. This is a difficult process. Some experts suggest that a lot of time and human as well as financial resources are needed (Mowlana & Wilson, 1990). The success of each new service is greatly dependent on the right advertising campaign, which is undoubtedly related to the correct, well-organized cooperation between the banking sector and media outlets (Narver & Slater, 1990). Advertising in media is a source of public awareness and education.

Literature review

Our research includes the views of theorists and experts, who are observing and studying banking, advertising tools and the degree of cooperation of consumers and media involvement. Information, books and research outcomes are constantly updated. Various resources have been applied for studying and analyzing the aforementioned issue. Consequently, we have got acquainted with new outcomes of the research and evaluations of Georgian (Surguladze, 2009; Todua & Mgebrishvili, 2009) and foreign experts (McLuhan & Gordon, 2003; Mitic & Kapoulas, 2012). Online resources, survey and outcomes of the previous studies and published works have been used.

Research methodology

To achieve the aim of the research and to find out, how social media advertising effect on banking business quantitative, as well as qualitative methods have been used. Due to the significance of the issue, various media outlets of Georgia including the print media, TV, radio and Internet outlets have been studied. Consequently, the received information has been summarized up on the basis of the qualitative method. Face-to-face interviews have been held with advertising agents, journalists, banking and media experts proceeding from the importance of the issue. The paper includes the analysis of their positive and negative evaluations, as well as their vision. Evaluations of banking advertisements, media outlets and consumer relations in social networks have been studied.

Research strategy

At present, due to the development of various platforms, advertising in the traditional media has been reduced. Advertising itself is vital for media outlets. We suggest to look over a graphic representation of the indicators of sponsorship and advertising of banks (*Figure 1.2.1*).

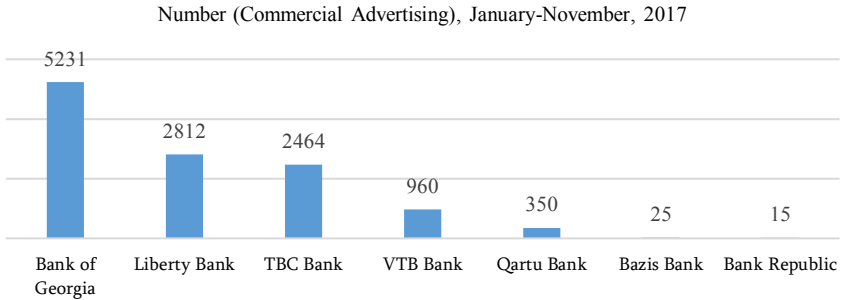


Figure 1.2.1: Analysis of Georgian banks advertising

Source: researched by authors

The former journalist and founder of an advertising agency Andrew Essex provides an excellent evaluation of the past and present of advertising in traditional media outlets in his book "The End of Advertising: Why It Had to Die, and the Creative Resurrection to Come." as follow "This is the lesson advertisers must follow to add value in the future. What we need is better content from brands, and not just product placement, which screams of inauthenticity" (cited by Surguladze, 2009).

Functioning of business-oriented media outlets does not have a long history; accordingly, the number of professional business publications or business programs is relatively small on the Georgian media market. We have made a comparison between the media outlets working on business themes in Georgia: "Banks and Finances", "National Business", "New Merchant", "Ecopalitra", "Business Resonance", "Business News", "Business and Legislation", "Business Courier", "Capital", "Radio Merchant". It is essential for people employed in the business sector to get new information regularly about the events of this area and their competitors. Information texts and news are prepared in media outlets in accordance with these demands. The demand for this type of information and subsequently for media outlets is based on the demand for business itself. Business media outlets are mainly focused on business and cover the information it needs. We can say that media outlets earn their living. Business media have occupied a special, increasingly developing segment. Today we are living in a media-centered society and the development of the business media is directly proportional to business development. The society expresses interest in the current developments and the business media are trying to satisfy this interest. According to the estimates of some experts (37%), business media are spontaneously developing (Advertising Analysis of Banks from <http://wom.ge>). The main problem is the lack of professionalism of media representatives and the business isolation.

"The level of the business media development is very low. Today there is predominantly popular business media in Georgia, i.e. publications and programs, which are understandable and acceptable to the mass society. More precisely, this is the media that works on popular business themes. In fact, deep professional interest, coverage and varied topics are not yet visible. This is also natural, because the market does not demand this product yet" (Maziashvili, editor of the newspaper "New Merchant", from <http://wom.ge>).

Innovative advertising formats such as video, paid content, natural advertising will stimulate the growth of global media advertising by 14% in 2019, as some experts (42%) predict. Based on the data of Zenith, media advertising will constitute 50.4% of expenditure on online advertisements by 2019. According to their report, video advertising will be increased by 21% annually and advertising in social networks will be increased by 20%. It is pointless for companies to plan TV and online video advertising separately, as these two types do not replace, but complement each other. In accordance with the same report, by the end of 2018, global expenditure on advertising will increase by 4.1% and total \$558 billion. In 2019, the expenditure is expected to increase by 4.2%.

The statistics of the banking advertisement (*Figure 1.2.2*) on TV has an interesting indicator. Based on the statistics of the *IPM Research*, the leader is *Bank of Georgia*, which provided 12425 advertisements in total including sponsorship and commercial advertising. Next is *Liberty Bank* with 6528 advertisements (both types) and *TBC Bank* with 4265 advertisements. In the banking category the number of sponsorship and commercial advertisements totals 27109, the chronometry for both types of advertisements is 381588 seconds. *Bank of Georgia* has occupied most time in TV advertising in terms of all types of advertisements. It is the leader with 184234 seconds and the chronometry of commercial advertisements of 118982 seconds. The chart shows the banks chronometry of advertisements for both types of advertising. During this period, according to the official prices, 8 275 557 US dollars was spent on TV advertisements by banks.

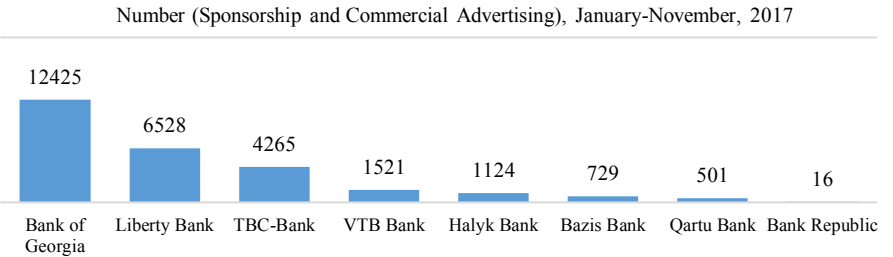


Figure 1.2.2: Analysis of TV advertising by Georgian banks
Source: researched by authors

Online advertising is becoming very popular worldwide and its market is growing day-by-day. The outcomes of the statistical and sociological studies, which carry out regularly in different countries, are quite impressive. Is this field developed in the banking sector of Georgia and do the Georgian banks prefer online advertisements?

Admittedly, the Georgian online advertising is far from the global levels. However, the studies show that in Georgia this type of advertising has great prospects for the development of the banking advertisement. Online advertising is expected to gain more popularity; it is characterized by unique effectiveness compared to other media.

Another important issue is to determine whether the information of advertisement and provided by commercial banks is relevant to the truth (Figure 1.2.3), and whether the information of advertisements in media and the Internet (TV, radio, print media, social media, external advertising and various Internet portals) meets the interests of consumers. As a result, a positive trend has been revealed: consumers received more information through online advertisements in comparison with previous years. A typical trend has been revealed in relation to informative advertising campaigns: banks do not offer 0% installment advertisements to the society. Now this information is spread by technology stores and, as a result, customers find themselves in the so-called credit trap. Advertisements of the banking sector may seem quite impressive at first sight, but they do not really protect the interests of consumers.

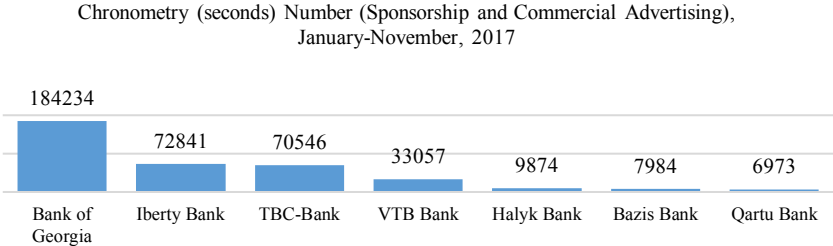


Figure 1.2.3: Analysis of advertising chronometry by Georgian banks

Source: researched by authors

Fortunately, nowadays banks spend huge resources on marketing. However, sufficient information is not provided to increase consumer awareness. It should be noted that banks keep the interest rate at a minimum level, for instance, loans from 11%, effective interest rate from 14%, it means that banks do not give loans at a lower rate. The minimum level of the loan interest rate offered by several banks does not correspond to reality, since, in fact, loans are rarely provided at this rate. Consumers feel confused, insulted and deceived when they go to the bank and find different reality (the loan with a much higher rate).

Indicators of research

The positive indicator of the research shows that through various stimulating actions commercial banks encourage consumers to use bank products more actively due to the bonus programs, gift cards and various offers. This information is quickly spread by media outlets. The active advertising campaign of installments and the easiness of providing loans have been revealed. Recently providing loans has been made more difficult by the legislation: consumers are required to confirm their income, when they ask for the loan. This has led to reduction of loans and installments from

banks (Jaser, 2010). Bank advertisements focus on 0% installment, as it were oriented to the consumers' convenience. However, it is accompanied by commission expenses which are not indicated and specified, and it increases the effective interest rate and instead of 0% loan the consumer gets one of the most expensive credit products. The consumer is disappointed by the advertisements spread in media outlets.

Another significant problem is that most journalists have empirical views on business, economics and banking sector. Almost none of the educational institutions provide future journalists with proper knowledge of this area. Furthermore, neither media nor business takes care of their professional development. Business media publishers do not invest in trainings for correspondents. We must admit that the lack of professionalism is particularly obvious in business media. Journalists are required to have a deep knowledge in the business area. In one article everything should be discussed comprehensively. Business is a field based on certain tendencies, i.e. nothing happens without a reason. Everything needs to be analyzed and discussed. In Georgian media there is a lack of such texts and plots. Media provide consumers only with information and do not offer an overview and analysis of economic sectors. Efforts are made, but there is a lack of professionalism. Journalists have no knowledge of economics, terminology and do not have statistics neither Western nor Georgian. They do not know current trends of the modern world development. None of the business publications work in this regard. Experts (33%) suggest that the business-oriented media is not interesting at this stage.

The demand for low-quality news and PR on the part of business is related to unqualified PR-specialists to a certain degree. It is known that overseas companies spend about 70% of their profit for the large-scale PR development and media strategies. This culture is at a rather low level in Georgia and companies demand to spread only image-oriented articles in media. An interesting situation is observed in the Georgian business media outlets. Some of them paint everything in dark colors, whereas the others argue that everything is fine. It is very difficult to create a realistic picture on the Georgian business development. Unfortunately, Georgian business media consumers cannot receive a realistic information about the business sector. Professional image makers and journalists read the truth between the lines, whereas ordinary consumers face with serious problems in this respect.

Naturally, the decrease or increase of advertising revenue has a relevant effect on the business media development, as it depends on advertising revenue. Throughout the world, the main media income comes from advertising. In the countries, where the free press has a great tradition and better developed, 70-80% of media revenue comes from advertising. The only way to develop the Georgian business media is to improve the investment environment. Another problem of business media and general media is the failure of the marketing service. Success is based on good marketing. Good media products are expensive and the purchasing culture of such products has not developed in Georgia yet. Media are developing at the expense of business in Georgia. This is usual phenomenon. Naturally, high quality media are not cheap. In the media space there is the biggest demand for the electronic media, specifically TV, on the part of business. Consequently, business spends more money in this