INDUSTRY ANALYSIS OF TV COMMERCIALS: DO COMPANIES REFLECT AUDIENCE PROFILES?

Michal Novák (michal.novak@vse.cz)
University of Economics, Prague, Faculty of Management, Czech Republic

Tomáš Kincl (tomas.kincl@vse.cz)
University of Economics, Prague, Faculty of Management, Czech Republic

Martin Luštický (martin.lusticky@vse.cz)
University of Economics, Prague, Faculty of Management, Czech Republic

Abstract

Purpose – The purpose of the paper is to explore one of the CEE media markets to determine whether different audience profiles reflect the various industry structures of the commercials aired.

Design/methodology/approach – The article is based on data from a complete TV commercials dataset (n = 2,303,435) from 2013. The cosine similarity measurement is used to quantify the mutual similarity.

Findings – The results indicate that there are only minor differences in the TV commercial industry structure between TV channels while audience targeting is only implemented by a very few thematic channels.

Research limitations/implications – The main limitation is in the lack of data for other countries. Further research of other countries would provide a more general overview of strategic approaches to advertising placement.

Originality/value – The paper contributes to media marketing management research by showing that the differences in the distribution of TV commercials (n = 2,303,435) among different TV channels are smaller than expected.

Keywords – Television, Commercial, Targeting, Differentiation, Distribution, Audience Profile

Paper type – Research paper

INTRODUCTION

Media plays an important role in society. Television (TV) is generally recognized as the most powerful advertising media that delivers information and entertainment to immense audiences (Kotler and Keller, 2011). However, major changes in the quality and quantity of consumer information, due to new technologies, has led to the fragmentation of existing media and audiences (Iyer et al., 2005). With the emergence of new technologies and media, consumers change their media habits, switch to new alternatives and use more and more multiple information channels (Danaher and Rossiter, 2011). Consumers feel overwhelmed, mistreated and disrespected, as they have a multiplicity of choices leading to a diminishing amount of trust and confidence (Zoratti and Gallagher, 2012). Therefore, marketers also need to change their behavior in media planning to become more relevant and to precisely target fragmented audiences (Iyer et al., 2005). This problem is similar in all traditional media such as print, outdoor and radio as well as in new media (Danaher et al., 2010, Yao and Mela, 2011).

The media environment has become more complex with increased fragmentation and audience autonomy (Napoli, 2011). The audience fragmentation signifies that the mass audience, which was once concentrated on three or four viewing options, has become more widely distributed (Webster, 2005). Media proliferation, driven largely by new technologies, fragmented the market into thousands of media vehicles. Still, 50% of media budget is spent on television advertising (Mediaresearch, 2014). Even though a fragmented market brings more choices, greater opportunities and media channel selection to media consumers it also presents a huge challenge to marketers. Communication is more effective when the marketing message is delivered via channels and with attributes preferred by targeted audiences so the message needs to be adjusted accordingly (Danaher and Rossiter, 2011, Rice et al., 1998).

The Czech Republic, as well as the Baltic Countries, were one of the first CEE countries to adopt governmental digital strategies (2004 and 2006) and fully switch to digital broadcasting later (2010 and 2012) (KPMG, 2010). Digitalization of TV broadcasting has dramatically changed the whole industry. Mass audiences have been eroded in favor of specialized alternatives and audience fragmentation is one of the most widely observed consequences of the digitalization process (Coyle and Siciliani, 2013, Webster and Ksiazek, 2012). In context with the infrastructure building, a shift towards direct-to-home services (satellite television) (Stuart, 2013, Verlini, 2009) was recorded in CEE countries. This sparked a massive expansion of TV channels and commercial competition has since intensified. There are now more specialized and highly focused niche channels with a tightly defined target audience. These niche channels are available to the general population (i.e. 98% of the Latvian population can access the Viasat package of high definition TV channels in their native language), even though they do not have a mass audience profile.

Audience targeting is a process wherein marketers attempt to place their advertising message in a channel where it is most likely to be received by its target market members (Nelson-Field and Riebe, 2011). The objective is to avoid the inefficiency of sending a marketing message to a non-targeted audience (Baron and Sissors, 2010, Kotler and Keller, 2011) and, therefore, fail to increase the competitiveness of the company. The resources saved could be used for other types of marketing communication and thus precise audience targeting is the most effective way to seek cost efficiency (Foley et al., 2005). Imprecise targeting also leads to an

excessive amount of commercials on TV where consumers can be confused or overloaded (Becker and Murphy, 1993).

Advertising time on TV channels is usually sold in gross-rating-point (GRP) packages. GRP measures the size of an audience reached by a specific media vehicle and equals the product of the percentage of the target audience reached by a commercial multiplied by the frequency of people viewing the advertisement in a given campaign. A GRP of 100 signifies a commercial reached the equivalent of the 100% target audience. This means that all members of the targeted population have viewed the commercial and that 25% of the population have also viewed four commercials (Farrelly et al., 2005).

The costs of advertising media are based on quantitative and qualitative factors (i.e. cost per person reached, overall reach potential). However, the total expenditure on producing and purchasing a commercial is not the most important media-selection factor. Marketers prefer to consider the possibility of targeting a specific audience and audience reach (the number of people who will view a commercial) (Nowak et al., 1993). Thus, media owners need to precisely state the audience profiles of their TV channels and propose that they are able to deliver greater impact and efficiency among certain market segments (Nelson-Field and Riebe, 2011). Furthermore, it is usually much cheaper to place a commercial on highly differentiated TV channels with a smaller but well-defined audience than on undifferentiated and mass-oriented TV stations. Therefore, marketers should diversify between different media profiles and reflect their audiences in the media selection (Abratt, 1999). If so, TV channels with different audience profiles need to have a different distribution of commercials among industries. Therefore, the following research question can be formulated:

Q1: Is there a difference between TV channels in the distribution of commercials from different industries?

RESEARCH DESIGN AND METHODOLOGY

Since more than a half of all media expenditure is spent on TV advertising, this study is limited to television advertising only. Complete data for TV commercials from 2013 was obtained from the Mediaresearch research agency, which provides comprehensive media monitoring for the entire advertising market in the Czech Republic. Monitoring is carried out in accordance with product categorization based on the segmentation of NACE EU/CZ (Eurostat, 2008) economic activities and slightly modified to better fit the media market. Data for commercials is categorized by the industry in a hierarchical tree. There are 23 sections on the main level according to the main industries. The industry tree consists of a further five levels, where the final and most detailed categorization includes more than 1,500 different sections. Some industries are represented by only a few commercials. For example, the number of commercials aired from group A was only a few dozen, which is less than 0.1% of the commercials aired on each channel. Most other groups also contain only a few commercials aired on each channel. On the other hand, there are four groups, which together represent almost 90% of all commercials aired. These groups are C – Foods, Drinks, E, Other Processing Industry, L – Information and Communication Activities and M – Finance and Insurance. Therefore, the following analysis only focuses on these four main categories (groups) and their sub-classes.

The data contains commercials from 23 Czech TV channels. The channels are represented by four different advertising sales agencies. The TV channels are shown in Table 1.

Table 1 – Czech TV Channels by Czech Media Groups (source: own research)

Media Group	TV Channels
Media Master	ČT1, ČT2, ČT24, ČT Sport, TV Barrandov
Nova Group	Nova, Nova Cinema, TV Fanda
FTV Prima	Prima family, Prima COOL, Prima love
At Media	AXN, CS Film, CS Mini, Disney Channel, Film+, MGM, Minimax, National Geographic Channel, Óčko, Spektrum, Sport 1, Universal Channel

Some TV channels were excluded from the analysis since they were discontinued or transformed into a different channel in 2013. The data set includes 2,303,435 commercials aired in 2013. Table 2 shows the audience profiles of these selected TV channels published on their websites.

Table 2 – Audience Profiles published for Selected TV Channels (source: channel websites)

Channel name	Proclaimed focus and targeting
ČT1	• **orientation to the Czech audience** • **journalism** • **emphasis on fun and especially original series production**
ČT2	• alternative channel for different target groups • audience with high incomes and education, middle-aged men
ČT24	• news channel broadcasting 24 hours a day • regular news service from the fields of politics, economy, regions, culture, sport • audience especially men with higher education, between 25 and 44 years old, with higher occupational status, experts from different fields, people who are described as "early adopters"
ČT4	• sports channel broadcasting 24 hours a day • audience predominantly younger and middle-aged male population, higher education, actively pursuing an agenda, actively seeking information about sport
TV Barrandov	• channel for the entire family • market leader in the 4–9 target group
Nova	• mix of own strong local fiction and non-fiction productions • news formats, daily soaps, romantic TV series, crime series, sitcoms, hobby magazines, cooking shows, TV film series depicting major social issues • leader in 15+
Nova Cinema	• films and series addressing 15-54 target group
TV Fanda	• top foreign series, shows, documentaries, sport events and movies targeted at young male viewers
Prima COOL	• movies, series, documentaries, sports and entertainment programs largely from abroad
Prima family	• fun for the whole family • news, current affairs, movies, original series and foreign documentary and entertainment programs
Prima love	• channel for all women (Women's Club) who want to have fun while watching the best series, shows and movies
AXN	• action channel – popular Hollywood premiere series, exclusive sci-fi, adventure and action movies • attractive to groups of young active people who like to follow the current trends
CS Film	• Czech and Slovak films • 186 films a month • series of documentary films, magazines, films about films
Disney Ch.	• family entertainment – Walt Disney • mix of animated and live-action series, movies, music videos • focus primarily on boys and girls aged 2 to 16 years old
CS Mini	• children's TV channel (3-12) • Czech and Slovak children movies and educational series
Film+	• Czech film classics and popular world cinema movies • the best of contemporary European works with quality Czech dubbing
MGM	• selected films from the MGM film library, the largest modern film library in the world
Minimax	• children's TV channel • cartoon and animated shows and series in the Czech language • mainly focused on preschool and school age children
National Geographic Channel	• documentaries that offer a whole new view of science, technology, history, wildlife and many other topics • for curious viewers who are interested in the world around us
Óčko	• first Czech thematic television focusing on contemporary music and lifestyle • emphasis on contemporary modern Czech and Slovak music and current foreign hits
Spektrum	• documentary and lifestyle channel • documentaries in the genre panels focused on nature, science, lifestyle, history, culture and travel
Sport 1	• strongly profiled sports channel • shows the biggest European football competitions, NHL, boxing, tennis • addresses the specific, difficult to hit target group of active young people
Universal Channel	• award-winning series, blockbuster movies

The data was transformed into the contingency table where the rows represent each TV channel and the columns represent the number of commercials from a given industry on

a selected TV channel. Since the number of commercials aired on TV channels differs by orders of magnitude, the table was recalculated to relative shares (the sum of each row is 100%, which represents all commercials aired on a given channel).

Each TV channel is described by a series of numbers representing the relative share of the commercials aired on a given channel. A comparison of the rows then enables to answer the research question. However, a methodology related question arises about the selection of the correct method for comparison. To equate the data as statistical distributions is questionable since the data is not continuous, i.e. the Kolmogorov–Smirnov test for the equality of continuous distributions cannot be used, and contains many values close to zero (the chi-square goodness of fit test is also questionable. The data is perceived as vectors representing each TV channel and the cosine similarity measurement was computed to quantify the similarity (or dissimilarity) of the channel vectors. Cosine similarity measures the similarity between two vectors by finding the cosine value of the angle between them. For a pair of A and B vectors, the cosine similarity is given by:

$$\text{similarity } (\vec{a}, \vec{b}) = \frac{\vec{a} \cdot \vec{b}}{|\vec{a}||\vec{b}|} \qquad (1)$$

The cosine of the angle between two vectors determines whether two vectors are roughly pointing in the same direction. Thus, the cosine of the angle is a measure of similarity between vectors. Computed similarity ranges from −1 meaning exactly the opposite, to 1 meaning exactly the same, with 0 usually indicating independence, and in-between values indicating intermediate similarity or dissimilarity. The cosine angle between 0 and 1 means the vectors are related in some way (Garcia, 2006). Cosine similarity has been widely used in high-dimensional data analysis (Yang, 1994). The analysis was conducted using Rapidminer software which is an open-source tool for data-mining (Mierswa et al., 2006).

RESULTS

The four industries comprised of 23 economic activities represent almost 90% of all commercials aired. These sections are C – Foods, Drinks, E, Other Processing Industry, L – Information and Communication Activities and M – Finance and Insurance. These four categories consist of 27 sub-classes (sub-industries), which were further analyzed. Sub-classes were compared using a cosine similarity measure. Each TV channel is represented by a vector which describes the distribution of commercials aired among 27 sub-industries (Mediaresearch, 2011).

Table 3 shows the cosine similarity between each channel. Cells were shaded to better represent the values. Values closer to the value of 1 are lighter; values approaching the value of 0 are darker.

Table 3 – Cosine Similarity Values between TV Channels in Second Level Sub-Categories of the Four Main Industries Advertised (C, E, L, M) (source: own research)

Media Master	Nova Group	FTV Prima	AT Media

Group		ČT sport	ČT1	ČT2	ČT24	TV Barrandov	Nova	Nova Cinema	TV Fanda	Prima	Prima COOL	Prima love	AXN	CS Film	CS Mini	Disney Ch.	Film+	MGM	Minimax	Nat. Geo. Ch.	Óčko	Spektrum	Sport 1	Universal Ch.
Media Master	ČT sport		0,55	0,66	0,20	0,49	0,50	0,49	0,70	0,39	0,41	0,37	0,50	0,56	0,33	0,33	0,50	0,42	0,30	0,53	0,58	0,67	0,62	0,49
	ČT1	0,55		0,96	0,75	0,53	0,53	0,50	0,57	0,49	0,47	0,48	0,45	0,48	0,41	0,43	0,43	0,38	0,43	0,44	0,54	0,50	0,44	0,46
	ČT2	0,66	0,96		0,73	0,49	0,51	0,50	0,62	0,46	0,46	0,45	0,48	0,50	0,35	0,39	0,45	0,40	0,39	0,45	0,58	0,56	0,50	0,47
	ČT24	0,20	0,75	0,73		0,03	0,04	0,03	0,08	0,02	0,02	0,02	0,05	0,04	0,02	0,03	0,02	0,03	0,02	0,02	0,07	0,07	0,02	0,03
Nova Group	TV Barrandov	0,49	0,53	0,49	0,03		0,97	0,96	0,81	0,95	0,95	0,94	0,90	0,91	0,87	0,93	0,90	0,87	0,93	0,90	0,91	0,85	0,87	0,93
	Nova	0,50	0,53	0,51	0,04	0,97		1,00	0,89	0,98	0,98	0,97	0,95	0,96	0,76	0,87	0,94	0,91	0,89	0,94	0,96	0,92	0,93	0,97
	Nova Cinema	0,49	0,50	0,50	0,03	0,96	1,00		0,89	0,98	0,98	0,97	0,96	0,96	0,75	0,86	0,95	0,93	0,88	0,95	0,96	0,92	0,94	0,97
	TV Fanda	0,70	0,57	0,62	0,08	0,81	0,89	0,89		0,82	0,83	0,81	0,85	0,88	0,51	0,62	0,86	0,78	0,64	0,87	0,91	0,93	0,92	0,86
FTV Prima	Prima	0,39	0,49	0,46	0,02	0,95	0,98	0,98	0,82		1,00	1,00	0,94	0,94	0,74	0,88	0,94	0,92	0,91	0,94	0,95	0,88	0,90	0,97
	Prima COOL	0,41	0,47	0,46	0,02	0,95	0,98	0,98	0,83	1,00		1,00	0,96	0,95	0,74	0,89	0,96	0,94	0,92	0,95	0,96	0,90	0,92	0,98
	Prima love	0,37	0,48	0,45	0,02	0,94	0,97	0,97	0,81	1,00	1,00		0,94	0,94	0,72	0,87	0,95	0,92	0,90	0,94	0,94	0,88	0,90	0,97
AT Media	AXN	0,50	0,45	0,48	0,05	0,90	0,95	0,96	0,85	0,94	0,96	0,94		0,99	0,68	0,84	0,99	0,99	0,86	0,98	0,97	0,96	0,97	0,99
	CS Film	0,56	0,48	0,50	0,04	0,91	0,96	0,96	0,88	0,94	0,95	0,94	0,99		0,66	0,81	0,98	0,96	0,82	0,99	0,96	0,97	0,98	0,99
	CS Mini	0,33	0,41	0,35	0,02	0,87	0,76	0,75	0,51	0,74	0,74	0,72	0,68	0,66		0,95	0,65	0,68	0,93	0,64	0,68	0,58	0,61	0,70
	Disney Ch.	0,33	0,43	0,39	0,03	0,93	0,87	0,86	0,62	0,88	0,89	0,87	0,84	0,81	0,95		0,81	0,84	0,99	0,80	0,82	0,72	0,76	0,85
	Film+	0,50	0,43	0,45	0,02	0,90	0,94	0,95	0,86	0,94	0,96	0,95	0,99	0,98	0,65	0,81		0,97	0,83	0,99	0,96	0,96	0,98	0,99
	MGM	0,42	0,38	0,40	0,03	0,87	0,91	0,93	0,78	0,92	0,94	0,92	0,99	0,96	0,68	0,84	0,97		0,86	0,96	0,92	0,92	0,93	0,98
	Minimax	0,30	0,43	0,39	0,02	0,93	0,89	0,88	0,64	0,91	0,92	0,90	0,86	0,82	0,93	0,99	0,83	0,86		0,81	0,84	0,73	0,77	0,87
	Nat. Geo. Ch.	0,53	0,44	0,45	0,02	0,90	0,94	0,95	0,87	0,94	0,95	0,94	0,98	0,99	0,64	0,80	0,99	0,96	0,81		0,95	0,96	0,98	0,99
	Óčko	0,58	0,54	0,58	0,07	0,91	0,96	0,96	0,91	0,95	0,96	0,94	0,97	0,96	0,68	0,82	0,96	0,92	0,84	0,95		0,96	0,97	0,97
	Spektrum	0,67	0,50	0,56	0,07	0,85	0,92	0,92	0,93	0,88	0,90	0,88	0,96	0,97	0,58	0,72	0,96	0,92	0,73	0,96	0,96		0,99	0,95
	Sport 1	0,62	0,44	0,50	0,02	0,87	0,93	0,94	0,92	0,90	0,92	0,90	0,97	0,98	0,61	0,76	0,98	0,93	0,77	0,98	0,97	0,99		0,97
	Universal Ch.	0,49	0,46	0,47	0,03	0,93	0,97	0,97	0,86	0,97	0,98	0,97	0,99	0,99	0,70	0,85	0,99	0,98	0,87	0,99	0,97	0,95	0,97	

The results indicate that there are two specific groups of channels. One group consists of ČT sport, ČT1, ČT2 and ČT24 channels. These channels belong to the national broadcasting company (Czech Television). All four channels are serviced by the same media agency and commercials on these public channels are limited by law (since October 2011, commercials on public channels are restricted to 0.5 % of daily broadcasting time). A second group consists of the Disney Channel, Minimax and CS Mini. These three channels are very similar to each other (cosine similarity ≥ 0.93), although specific in comparison to other channels. These three channels focus on children as their target audience and the distribution of commercials reflects such specificity.

The other TV channels are quite similar with the small exception of a new channel, TV Fanda, which mainly targets young men. Such similarity was not expected since the channels are represented by several media agencies. Moreover, some channels with completely different audience profiles are very similar in terms of the distribution of commercials (channels from the AT Media group are perceived as "niche" or "selective" channels – e.g.

Óčko is a music channel, AXN and Film+ focus on movies and National Geographic, Spectrum and Discovery are science, travel and educational channels).

Such results indicate that the determining factor that influences the distribution of commercials among industries is neither the audience profile nor the advertising sales agency representing the channel. The analysis of four main industry categories and their second level sub-categories did not provide any conclusive results. Therefore, the third category level (consisting of 79 different sub-industries) has been analyzed.

Table 4 shows the cosine similarity between each channel. The cells are again shaded to better represent the values. Values closer to the value of 1 are lighter; values approaching the value of 0 are darker.

Table 4 – Cosine Similarity Values between Each TV Channel in Third Level Sub-Categories of the Four Main Industries Advertised (C, E, L, M) (source: own research)

		Media Master					Nova Group			FTV Prima			AT Media											
		ČT sport	ČT1	ČT2	ČT24	TV Barrandov	Nova	Nova Cinema	TV Fanda	Prima	Prima COOL	Prima love	AXN	CS Film	CS Mini	Disney Ch.	Film+	MGM	Minimax	Nat. Geo. Ch.	Óčko	Spektrum	Sport 1	Universal Ch.
Media Master	ČT sport		0,49	0,61	0,18	0,44	0,50	0,48	0,71	0,42	0,42	0,40	0,52	0,57	0,17	0,23	0,51	0,44	0,22	0,55	0,61	0,69	0,65	0,51
	ČT1	0,49		0,91	0,78	0,43	0,43	0,41	0,50	0,41	0,39	0,41	0,37	0,41	0,21	0,27	0,36	0,32	0,29	0,39	0,47	0,41	0,40	0,39
	ČT2	0,61	0,91		0,76	0,42	0,45	0,43	0,55	0,38	0,39	0,37	0,42	0,42	0,26	0,30	0,39	0,35	0,30	0,41	0,53	0,48	0,47	0,40
	ČT24	0,18	0,78	0,76		0,03	0,04	0,03	0,06	0,01	0,02	0,02	0,03	0,02	0,02	0,04	0,01	0,01	0,02	0,02	0,07	0,03	0,02	0,02
	TV Barrandov	0,44	0,43	0,42	0,03		0,96	0,94	0,80	0,94	0,94	0,93	0,88	0,90	0,82	0,90	0,89	0,87	0,91	0,89	0,88	0,85	0,86	0,91
Nova Group	Nova	0,50	0,43	0,45	0,04	0,96		1,00	0,88	0,97	0,98	0,97	0,95	0,96	0,68	0,82	0,95	0,92	0,85	0,94	0,95	0,92	0,93	0,96
	Nova Cinema	0,48	0,41	0,43	0,03	0,94	1,00		0,88	0,98	0,98	0,97	0,96	0,96	0,65	0,81	0,95	0,94	0,84	0,95	0,95	0,92	0,93	0,97
	TV Fanda	0,71	0,50	0,55	0,06	0,80	0,88	0,88		0,82	0,82	0,81	0,85	0,88	0,43	0,57	0,86	0,79	0,58	0,87	0,91	0,93	0,92	0,85
FTV Prima	Prima	0,42	0,41	0,38	0,01	0,94	0,97	0,98	0,82		1,00	1,00	0,96	0,95	0,65	0,83	0,96	0,94	0,87	0,95	0,94	0,89	0,91	0,97
	Prima COOL	0,42	0,39	0,39	0,02	0,94	0,98	0,98	0,82	1,00		0,99	0,97	0,96	0,67	0,85	0,96	0,95	0,89	0,95	0,95	0,90	0,92	0,98
	Prima love	0,40	0,41	0,37	0,02	0,93	0,97	0,97	0,81	1,00	0,99		0,95	0,95	0,64	0,82	0,95	0,94	0,86	0,94	0,93	0,88	0,90	0,97
AT Media	AXN	0,52	0,37	0,42	0,03	0,88	0,95	0,96	0,85	0,96	0,97	0,95		0,98	0,61	0,81	0,98	0,99	0,83	0,98	0,96	0,96	0,97	0,99
	CS Film	0,57	0,41	0,42	0,02	0,90	0,96	0,96	0,88	0,95	0,96	0,95	0,98		0,58	0,77	0,98	0,96	0,79	0,99	0,95	0,97	0,97	0,99
	CS Mini	0,17	0,21	0,26	0,02	0,82	0,68	0,65	0,43	0,65	0,67	0,64	0,61	0,58		0,94	0,59	0,61	0,91	0,58	0,59	0,52	0,54	0,61
	Disney Ch.	0,23	0,27	0,30	0,04	0,90	0,82	0,81	0,57	0,83	0,85	0,82	0,81	0,77	0,94		0,78	0,82	0,99	0,77	0,77	0,70	0,72	0,81
	Film+	0,51	0,36	0,39	0,01	0,89	0,95	0,95	0,86	0,96	0,96	0,95	0,98	0,98	0,59	0,78		0,96	0,80	0,99	0,95	0,95	0,97	0,99
	MGM	0,44	0,32	0,35	0,01	0,87	0,92	0,94	0,79	0,94	0,95	0,94	0,99	0,96	0,61	0,82	0,96		0,84	0,96	0,92	0,92	0,93	0,98
	Minimax	0,22	0,29	0,30	0,02	0,91	0,85	0,84	0,58	0,87	0,89	0,86	0,83	0,79	0,91	0,99	0,80	0,84		0,78	0,79	0,71	0,73	0,84
	Nat. Geo. Ch.	0,55	0,39	0,41	0,02	0,89	0,94	0,95	0,87	0,95	0,95	0,94	0,98	0,99	0,58	0,77	0,99	0,96	0,78		0,94	0,96	0,98	0,99
	Óčko	0,61	0,47	0,53	0,07	0,88	0,95	0,95	0,91	0,94	0,95	0,93	0,96	0,95	0,59	0,77	0,95	0,92	0,79	0,94		0,96	0,98	0,96
	Spektrum	0,69	0,41	0,48	0,03	0,85	0,92	0,92	0,93	0,89	0,90	0,88	0,96	0,97	0,52	0,70	0,95	0,92	0,71	0,96	0,96		0,99	0,95
	Sport 1	0,65	0,40	0,47	0,02	0,86	0,93	0,93	0,92	0,91	0,92	0,90	0,97	0,97	0,54	0,72	0,97	0,93	0,73	0,98	0,98	0,99		0,96
	Universal Ch.	0,51	0,39	0,40	0,02	0,91	0,96	0,97	0,85	0,97	0,98	0,97	0,99	0,99	0,61	0,81	0,99	0,98	0,84	0,99	0,96	0,95	0,96	

Delving deeper into the hierarchical structure of advertisement sub-categories brought no change to the previous results. The conclusion remains that there are very few differences between Czech TV channels in the distribution of commercials from different industries.

DISCUSSION AND CONCLUSION

The results indicate there are smaller differences in the distribution of commercials among the TV channels than expected. Only three main groups of channels based on TV commercial differentiation were identified. The first group consists of the four channels of the Czech national broadcasting company − ČT1, ČT2, ČT sport and ČT24. These channels are different in their published audience profiles − ČT24 is a news channel, ČT2 represents the "alternative stream" and ČT sport is a sports channel; they are more similar to each other than to the other channels in the research sample, although not because of different audience profiles but mainly due to the legal restrictions on commercials on these national and publicly financed channels.

The second identified group of channels includes the children's channels, CS Mini, Minimax and Disney Channel. Children are a very specific audience and this is reflected in the distribution of the commercials aired. This supports the hypothesis that thematic channels have a different distribution of commercials to address their specific audience. The last group of all remaining channels consists of channels with very diverse characteristics and audience profiles. Nova and Prima family are mass channels (with the highest share of the TV viewing population) with full coverage of the Czech population. TV Fanda and Prima COOL focuses on young men while Prima LOVE focuses on the female audience. Nova Cinema, AXN, CS Film, Film+ are movie channels and the remainder are thematic channels with various focuses and a share of less than 1% of the audience. Nevertheless, the results indicate there is almost the same distribution of commercials across the industries on these various channels.

The first reason is that companies do not take the different audience profiles into account when deciding to place a commercial. Targeting has benefits for both viewers and advertisers. Because targeting enables advertisers to more easily determine user preferences and purchasing habits, the ads will be more interesting to consumers. With targeted advertising, firms advertise more to consumers who have a strong preference for their product. This allows the company to eliminate advertising to consumers whose preferences do not match a product's attributes (Iyer et al., 2005). As a result, the targeting of advertising leads to higher profits. Companies are well aware that precise audience targeting is the most effective way to (cost) efficiency (Foley et al., 2005) and therefore to the overall competitiveness of the company.

The reason is that there is simply too much advertising on TV and it is not possible to administer the broadcasting of so many commercials on an individual level. The number of TV channels has more than doubled in recent years (due to the digitalization of TV). Even if the amount of time dedicated for commercials is limited by law (no more than 0.5% of broadcasting time for Czech national TV company; no more than 12 minutes per hour for commercial TV companies) there are almost three million commercials aired per year (2013, Czech Republic). Therefore, media companies seek to sell whole packages of advertising space. This reduces the administrative overhead and enables to include less attractive channels or broadcasting times in the bundle. This creates a tradeoff between GRP maximization (high levels of population reach), more precise targeting and CPP minimization (Cost per Point – the cost of reaching one rating point of the targeted audience). The marketers demand a

specific time on a specific TV channel to reach the targeted audience; however, the account managers push hard to get the lowest CPP possible. To get lower CPP, the companies must accept less attractive times or channels with an unsuitable audience and thus their targeting is less effective. This is further influenced by the constantly accelerating pace of processes and contracts between companies and media agencies (e.g. former 3–5 year advertising tenders are now a maximum of 1–2 years). These reasons have led to a proportional change in the advertising spending from TV, radio and other traditional media to new electronic media (Emarketer, 2014, Cheong et al., 2014, Gambaro and Puglisi, 2013). These new media vehicles provide precise targeting based on behavioral characteristics and also provide more transparency in terms of efficiency (Evans, 2009).

The proliferation and fragmentation of the media has led the advertising market into this plight. Many new TV channels have emerged and more companies are willing to target their audiences. The media market is on the edge of manageability. The pressure on low CPP and bundling advertising space causes unreasonable ineffectiveness when targeting suitable audiences. There should be a debate initiated to adjust the media market processes to comply with corporate communication strategies and to support companies' business objectives once again.

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