Zsolt VARGA – Nóra NYIRŐ

THROUGH THE KALEIDOSCOPE: MEDIA CONSUMPTION PATTERNS IN THE PARTICIPATORY CROSS-MEDIA ERA

The paper aims to identify actual media audiences of different mass- and non-mass media types through identifying those audience clusters consuming not different but differentiable media mixes. A major concern of the study is to highlight the transformation of mass media audiences when technology, digitalization and participation behaviors are able to reshape traditional audience forms and media diets, which may directly affect the traditional media value chain and in turn the thinking and decision making of media managers. Through such a kaleidoscope the authors examined media use and consumption patterns using an online self-reported questionnaire. They developed different media consumer clusters as well as media consumption mixes. Based on the results of the study the authors can state that internet use is today's main base of media consumption, and as such it is becoming the real mass media, replacing television. However this "new" media has a completely different structure, being more fragmented with smaller audience reach. At the same time, television is keeping its audience. However, there are emerging segments self-reporting non- or light television viewing. This is how the question of the viewer-television relation among different television viewer clusters evolves. At the same time only gaming exhibited demographic differentiation of audiences based on gender.

Keywords: **media consumption, media audience clusters, digital media, gaming, media management**

The audience as a whole – and particularly its members as individuals – constitutes the last piece of the value chain in media management literature. The media market value chain is changing in parallel with the changing media consumption habits of mass audiences. Although there is interdependence between the changes in media markets, technology and transforming audiences, we will examine this process from the audience perspective.

As the majority of traditional media companies (and thus media managers) still aim to reach and deal with mass audiences, we aim to identify media consumption-based audience clusters among Hungarian internet users in this paper. We have integrated gaming as a new and emerging media industry segment into our analysis. Foremost, we use an integrated approach of traditional mass media consumption and newer digital media types and then present our findings through a kaleidoscope view.

We aim to document emerging media audiences and their relation to mass media channels as well as to give an overview of the potential new segments, which provide directions for decision makers in media management.

Theoretical Background

The value chain concept and its modified version in participatory cross-media environments helps create the market context for audience segment identification. Content providers on the media market and media companies exert their influence through the packaging of pieces of individual content (e.g., articles, videos, shows, films, series, etc.) and content within and

around these (e.g., commercials, trailers). Through this sorting, selection and packaging of content, providers deliver continuous quality control and thus build up their own brand, creating brand value for their channels.

In the age of multi-channel media and multi-channel television, i.e., in the analogue world, the mass audience breaks up and group and/or individual tastes are served by numerous thematic channels (McQuail, 2000). This era began in the 1980s in the American and European markets. Content supply grows in parallel with the number of channels and a fragmentation and polarization of the audience gets under way.

The digitalization of the multi-channel model allowed access to an even broader range of media types and channels. More and more content is available, although generally still at a definite moment. For example, the entry of digital technology into the television market brought computer hardware and many television-related applications, like recording video onto hard disk by means of a digital video recorder, as well as recording concurrently live programs without the need for an additional storage device (e.g., cassette, disk, etc.) (Nyirő, 2011).

Should we emphasize the most influential mass media (regarding audience volume and advertising income) – namely television – it is worth recalling Negroponte's hypothesis (1995), formulated in the early 1990s. In his forecast on digitized media consumption Negroponte argued that the future of television is in on-demand video. In a period where each viewer has his/her own channels – which are playlists of content compiled by the users themselves – traditional television viewing will lose its justification. Time shifting would disappear as, by reaching content producers directly (be they professionals or civilians (web 2.0)), this phenomenon would only apply to live broadcasts. At the same time, his "My channel" hypothesis overlooked the transaction costs to individual viewers that are rather high as editing an own-program flow (by selecting, rating, compiling numerous available programs) would require considerable and time-consuming effort from the user. Taking into account that most viewers are far from being perfectly informed on the program flow available, transactional costs would be so high that viewers could not bear them. Thus, in practice, viewers left program editing to the channels' programming divisions.

The emergence of the participatory media culture has led to a new media paradigm, where multiplatform audiences are redefining the role of the media industry. This development needs to be analyzed in terms of multiplatform and cross-media content production, and interaction between the media industry and the audience (Noguera et al., 2013).

Media companies are changing their production and distribution routines – especially through digital platforms – because of the increasing opportunities for audience participation, in more and better ways that are still not optimized by the media. Today's media market is a co-produced landscape, within which audience and media are interchanging their roles constantly (Noguera et al., 2013).

The concept of value chain analysis covers the vertical deconstruction or disaggregation of the various processes and relationships in the industry. It is possible to technically separate the stages required in the production of any good or service. Examination is conducted by breaking the industry's activities up into a number of different stages of functions usually signifying different market players and organizations behind them: this process is called vertical deconstruction (Doyle, 2002).

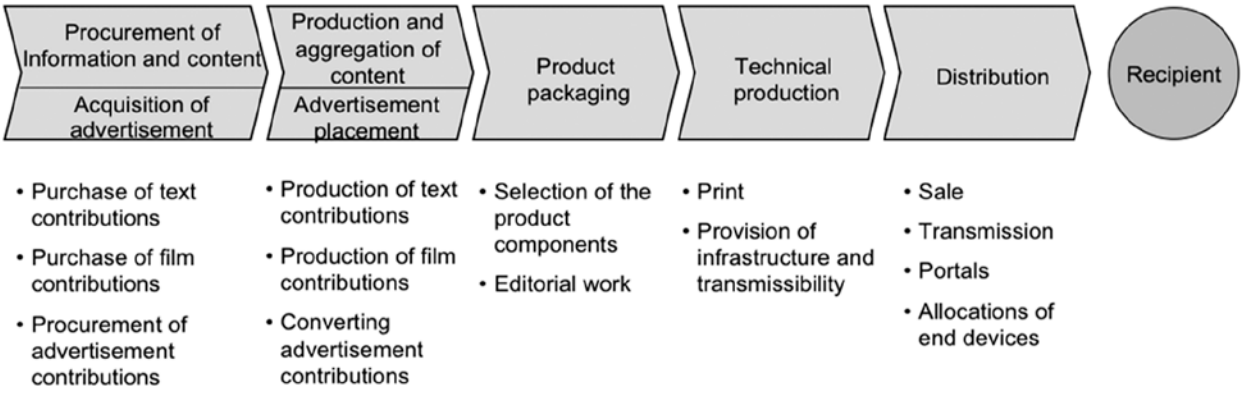
In the case of media industries, there are three stages of deconstruction in the supply or value chain. These stages are production (content creation), packaging (newspaper, magazine creation) and distribution (physical and digital). The process begins with writers, journalists, musicians and news production companies creating content for journals, newspapers or magazines. In the traditional supply chain, the producers' output takes the form of inputs for a succeeding packaging stage. Publishing houses aggregate content as well as assemble it into a media product (newspaper, magazine, news website, etc.) or service that can be sold to customers, sometimes producing the material as well. Finally, the audience receives the content through physical or electronic or digital distributors. For example, in the case of the print industry, readers get their content via subscription into their mailbox, buy it at newsstands or get it free of charge at distribution points. Recently, audiences have accessed it online via internet or mobile.

The value chain model in the convergent, cross-media environment of the media industry can be described through a more complex, five-stage model *(see Figure 1)* offered by Wirtz (2011).

The following are the first four stages in the model described: content creation or procurement; advertising acquisition; content aggregation; advertising placement. A new phase of technical production appears as even material production now requires an electronic format (e.g., book production). It is necessary to finish technical production (be it physical like printing, or a technical edition of the digital content) before distribu-

Figure 1

The value chain of the media industry (Wirtz, 2011)



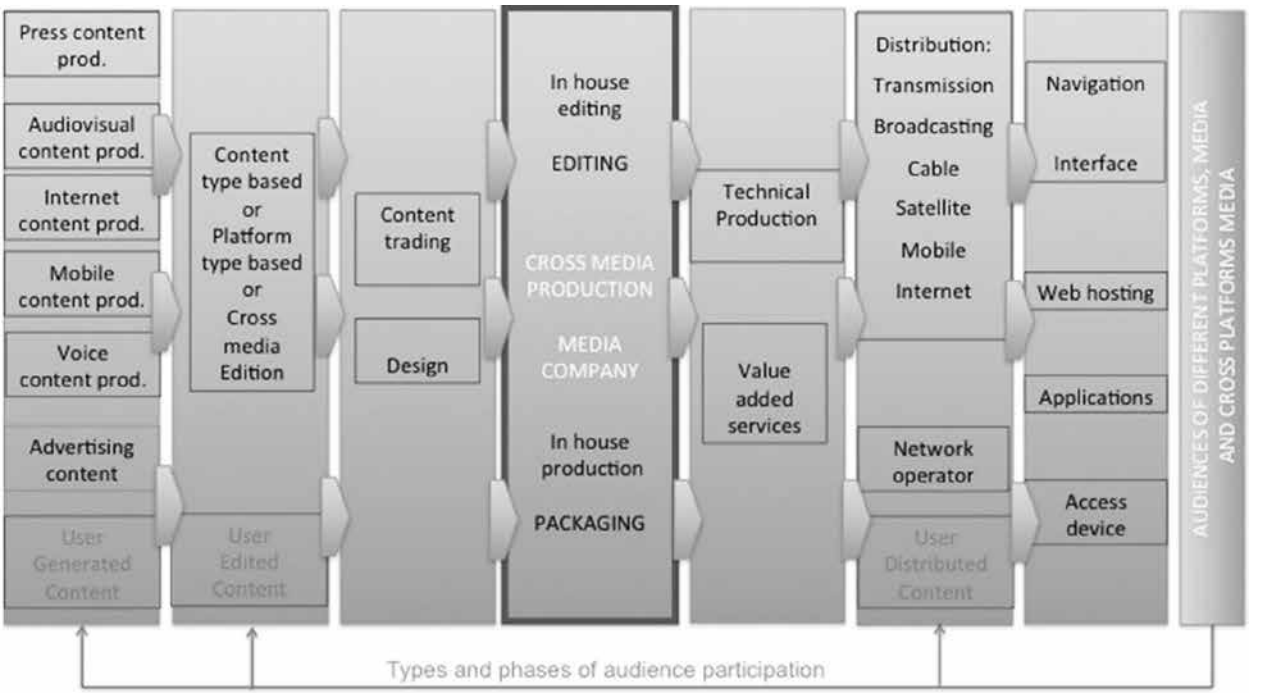
tion can begin. Media companies have several options in distribution and a wide range of platforms to deliver to recipients or the audience. With conditional access, consumers or recipients or audience members may have to pay for access to the media product and content elements at the final stage (Wirtz, 2011).

Another value chain model called the multimedia value chain model was introduced in media industries (Wirtz, 1999). Emphasis on technology driven by new stakeholders is part of the model. Such stakeholders act as value-added service providers through navigation and interfacing, thus offering tools for consumers to access media content. Sabat (2002) highlighted how the mobile wireless environment has more specialized roles and entities compared to present, traditional media companies. In order to transfer content on a mobile wireless platform it is necessary to work together with mobile wireless content service providers and network infrastructure providers as well as user interface and access device producers.

By including all the new stakeholders of traditional media companies and keeping in mind that today the production of digital (online and mobile) content is inevitable, we can consider the participatory cross-media value chain model proposed by Noguera at al. (2013). *(see Figure 2)*

Figure 2

Model of participatory cross-media publishing house value chain – including sharing and distribution by users (Noguera et al., 2013: p. 182.)



In our empirical study we have emphasized media consumption habits and patterns of the Hungarian internet user audience. We aimed to identify new clusters and the segment structure of media audiences. The identification of these segments have implications for traditional media companies as well as for cross-media companies in order that they may reshape and orient their platform mix and content mix based on the profiles of clusters.

Research questions and propositions

In this study we aimed to identify different media consumption patterns among Hungarian internet users. Based on the theoretical background as well as our previous research, our main hypothesis was that the perception of a solid, somewhat simple audience is no longer viable in the cluttered media landscape of the present.

We presumed that besides the widespread use of the internet, television will become less popular and the consumption of audiovisual content (films and series) will split according to platform. We think that the less-documented use of digital games might have an emerging role in media consumption patterns as well.

Our main research question was:

What type(s) of media audience clusters can be identified in today's participatory cross-media environment in Hungary?

In addition to the main research question we had several sub-questions and propositions regarding new audience structure and its characteristics.

We also aimed to find answers to the questions of what the main defining media types are in cases of audience clusters, and how media mixes of different clusters are structured and composed.

We proposed, however, that all clusters will reveal multimedia mix-based consumption, but that there will be one or two leading media types which drive the media consumption of the given cluster. We also presumed that gamers would appear as a clearly separate and well-identifiable cluster.

We also had a sub-question focusing on multi-screen usage, so that how and to what extent different media platform screens (tablet, PC, laptop, TV) compete and characterize audience clusters became another area of interest. We aimed to find out if there are audience segments clearly associated with one or few screens or whether they are all multi-screen users in which no clear pattern may be identified.

Data, variables and sample

Questionnaire and variables

Data collection was conducted online with a self-reported questionnaire. The questionnaire was distributed through social media channels using snowball methodology. The sample is not representative but serves as the basis for an exploratory study of the kaleidoscope view of Hungarian internet users and younger age groups.

The questionnaire consisted of four different parts: media consumption as analyzed in the current paper (17 items), a general media gratification block (9 items), a specific video game gratification block (20 items) and a demographic block (4 items).

We chose and generated the items based on a previous study (see Nyirő et al., 2012). We did not try to cover all media consumption situations, but focused on screen-related actions and emerging new media consumption habits. The items reflect the media forms and content consumed by youth. We aimed to get the most accurate data without making the process too abstract for respondents. It is clear that most of the scales are nominal; we used them as metrical scales, accepting the limits of the research.

Description of the sample

University students and various respondents reached through social networks filled out the questionnaire in May of 2012. Participation in the survey was voluntary. University students received extra credit for various courses, while others were not offered any incentives. The sample consisted of 450 respondents. However, different questions received a varying number of answers, due to incomplete answers. The university sub-sample was composed of 297 respondents, while the social network sub-sample was composed of 153 respondents. As seen below, the social network sub-sample also included a very high ratio of university students, and thus we integrated and analyzed the two sub-samples together, considering it homogenous enough for the university student age group and life stage.

There were 194 (43%) men and 256 (57%) women in the sample; the average age of respondents was 24. The youngest respondent was 17, the oldest 45. The mode of the sample was 20 (119 respondents). See Table 1 for a detailed description of the two sub-samples.

Methodology

We examined the sample's media consumption habits in three steps. First, exploratory factor analysis was used to reduce the number of variables. Then, cluster

Table 1

Description of the two sub-samples. Source: own tables

Variable	University sample		Social network sample	
	n	%	n	%
Female	172	58	84	55
Male	126	42	68	45
Student	294	99	135	89
Not student	4	1	17	11
No full time job	290	97	67	44
Full time job	8	3	85	56
Living with parents	183	61	52	34
Living alone	39	13	36	24
Living with friends	76	26	64	42
Ages: 17–25 years	285	96	59	39
Ages: 26–45 years	13	4	92	61

analysis was utilized to identify groups with different media consumption patterns. Our aim was – in line with the methodology used – to identify relatively homogenous groups in the sample based on the different forms of media consumption. We used the factor analysis approach to rally the variables that had a high correlation, thus the cluster analysis was not biased by these correlations. In addition to cluster analysis, we explored the factors with a multidimensional scaling method to understand the nature of the factors identified (Sajtos et al., 2007).

Results, discussion and limitations

Results of the factor analysis

The descriptive statistics of media consumption variables are available in the Appendix *(see Table 1).* We reduced the initial 17 items to 6 well-differentiated factors with the aid of factor analysis. The main indicators of the factor analysis were the following: KMO=0,598; the result of the Bartlett test: approximate Chi-square=929,205; degree of freedom=120; significance 0,000. The six factors explain 59,419% of the variance, which is an acceptable level. The variables are eligible for factor analysis, although their quality is mediocre. We conducted main component analysis. The correlation matrix and the main component analysis matrix are available in the Appendix *(see Table 2 and Table 3).* Variables were grouped along the six factors and one variable (book reading) was left out from the analysis. Leaving out book reading was motivated by the lack of correlation with any other form of media consumption pattern. It is likely that it was interpreted too widely, and students did not use it coherently (it might have included reading college textbooks, pulp, or serious literature as well).

New variables were formed along the factors: the longest figure of cohesive variables was taken for the new variable. We chose this method instead of the simple average because of the characteristics of the variables and our goal of measuring frequency. The new variables expressed the following consumer patterns:

- net use: internet: e-mail, browsing or active presence on social sites – *factor of online activities, expressing internet use,*
- watching TV: watching films or series on TV – *entertaining and recreational content on TV sets,*
- new entertainment forms: watching series and films but not on TV; listening to music, but not on radio – *television content and music consumption on non-traditional platforms, probably PC or laptop,*
- video gaming: gaming on mobile phone or computer (with installed games or through web browsers) – *gaming activity on a digital platform,*
- non-traditional media: board games with friends, gaming on consoles or visits to the cinema – *rarely done activities or those that are not represented in the sample, very different media compared to the prevalent ones,*
- old school media: reading a newspaper or magazine, listening to the radio – *according to the literature, media that is used by the older generation; in other words the use of traditional, long-established media.*

The factors above represent conventional audience research traditions. There is no audience research methodology for gaming as kind of media consumption. Gaming is explored only through ad-hoc research projects. In the United States of America, the Ipsos group provides detailed consumer data on product, publisher, buying and gaming levels. The gaming console is not as widespread in Hungary as it is in the USA, Western Europe or the Far East. Board games are the hobby of a small segment, and due to their characteristics, such games cannot be played often. The descriptive statistics of the new variables composed along the factors are available in the Appendix *(see Table 4).*

Results of the cluster analysis

We conducted cluster analysis to find patterns of media consumption. Our aim was to group respondents into homogenous subgroups, and so to be able to identify relevant target audiences based on their media use and media consumption patterns.

Analysis of the sample

For the first step of the cluster analysis we tested the sample for salient values. This step is necessary because these salient values might affect the clustering process. It is more difficult to identify correspondence between other elements, and these correspondences might be distorted as well. We examined the sample with single linkage, nearest neighbor method and Eudiclidean distance. Only two responses stood out at first glance, however, according to the dendogram, the degree of difference was not so much as to justify leaving out these two respondents.

Determining the number of clusters

Based on the elbow criterion, we tried to analyze two, three and four clusters (see Figure 2 in Appendix), and based on the size and standard deviation of groups we chose the four-cluster variant. We used the Ward method of cluster analysis. We did not choose the two-cluster solution because the homogeneity of the clusters was higher than for the entire sample in four out of six instances. (We found a higher number of less homogenous clusters when trying the three-cluster solution, and the four-cluster solution carried more information on television viewing and gaming.) The four-cluster solution produced clusters with decent sample sizes (196, 127, 58, 69).

Cluster centroids, standard deviations and sample sizes are summarized in Table 5 in the Appendix.

The four clusters by media use compared to the total sample can be described as follows:

Cluster 1: the largest with 196 members (43,6%), 'Gamer', almost non-TV viewer.

- not so homogenous compared to the total sample regarding internet use,
- not differentiated from the total sample regarding new media use,
- less frequent TV viewer compared to the total sample,
- notably more frequent gamer than the total sample,
- less homogenous compared to the total sample regarding the use of non-traditional media,
- no difference from total sample regarding old school media.

Cluster 2: large, with 127 members (28,3%), 'Avoider', avoids TV and gaming.

- no difference from total sample regarding internet use,
- not so homogenous compared to the total sample regarding new media use,
- less frequent TV viewer than the total sample,
- less frequent gaming than the total sample,
- no difference from total sample regarding non-traditional media use,
- no difference from total sample regarding old school media use.

Cluster 3: smaller, with 58 members (12,9%), 'Versatile', TV viewer and gamer, who is open toward old school media types as well.

- no difference regarding internet use compared to the total sample,
- no difference regarding new media use compared to the total sample,
- views TV more often than the total sample,
- does gaming more often than the total sample,
- regarding non-traditional media use, they do not differ from the total sample,
- uses old school media more often than the total sample.

Cluster 4: smaller with 69 members (15,4%), 'Prisoner of TV', TV viewer, avoids gaming.

- less homogenous in internet use compared to the total sample,
- no difference regarding new media use compared to the total sample,
- views TV more often than the total sample,
- does gaming less frequently than the total sample,
- regarding non-traditional media use, they do not differ from the total sample,
- less homogenous compared to the total sample regarding the use of old school media.

The clusters do not differ from each other regarding internet use or non-traditional media use.

Demographic description of clusters

For the nominal variables we created cross-tables. ANOVA analysis was run for age. We confronted the variables with clusters, but the significance level and/or number of cells circumvented the possibility of analysis except in one case. In the case of gender, the significance level and the number of cells were adequate. Regarding gender, the Cramer V result of 0,32 suggests a moderately strong relationship (Sig=.000). The cross-table is presented in Table 2.

Table 2

Gender and clusters cross-tables. Source: own table

			Ward Method				
			1	2	3	4	Total
Gender	women	Count	79	85	35	57	256
		% within Gender	30,9%	33,2%	13,7%	22,3%	100,0%
		% within Ward Method	40,3%	66,9%	60,3%	82,6%	56,9%
		% of Total	17,6%	18,9%	7,8%	12,7%	56,9%
	men	Count	117	42	23	12	194
		% within Gender	60,3%	21,6%	11,9%	6,2%	100,0%
		% within Ward Method	59,7%	33,1%	39,7%	17,4%	43,1%
		% of Total	26,0%	9,3%	5,1%	2,7%	43,1%
Total		Count	196	127	58	69	450
		% within Gender	43,6%	28,2%	12,9%	15,3%	100,0%
		% within Ward Method	100,0%	100,0%	100,0%	100,0%	100,0%
		% of Total	43,6%	28,2%	12,9%	15,3%	100,0%

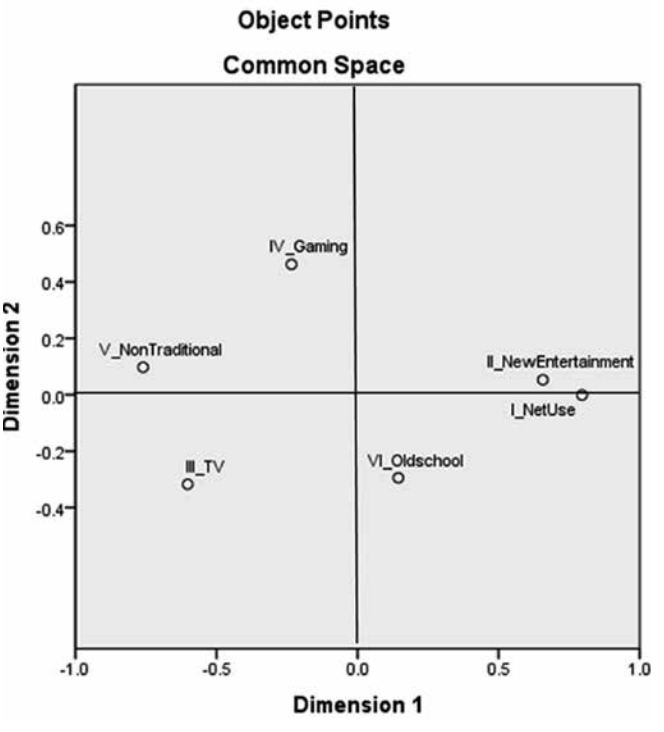
Gaming is a masculine activity and the results of proportions of clusters 1 and 4 confirm this common belief. In clusters 2 and 3 the proportion of women is larger, being 66,9% female to 33,1% male, and 60,3% female to 39,7% male respectively. Therefore, they often avoid TV and gaming simultaneously, and choose media from a wider pallet. Other demographic variables did not meet the required significance level and/or the number of the cells was inadequate, so we may conclude that no difference is identifiable based on other demographic data.

Results of multidimensional scaling

For multidimensional scaling, we used the PROXSCAL module of SPSS, creating the factors and the matrix, then measuring and depicting the Euclidean distance. We examined the previously identified six factors: net use, TV viewing, new entertainment forms, video gaming, non-traditional media and old school media. The two-dimensional fitting was good: the value of stress was 0, 0458. The alignment can be seen in Figure 3. Factors are divergent enough: the farthest are traditional media and internet, while the closest are new media forms and the internet. The first dimension expresses the frequency of use: the internet and new media forms were the most frequently used media while non-traditional media were the forms used least often. A possible explanation of the second dimension is the interactivity of the media: video games are highly interactive, while television and other old school media (radio, newspapers and magazines) can be described as lacking interactivity. Another possible explanation for the second dimension is the novelty factor of the media: in the analyzed population, television is an old medium, while internet and new media types connected with personal computers are somewhat newer, but video gaming is the most recent media form (including mobile gaming).

Figure 3

Results of the multidimensional scaling. Source: own figure



We will now answer our research question by interpreting the results. It is important to study the different media in the context of other media consumption. Distinct groups can be identified based on media consumption patterns among youth, even though given the lack of a representative sample we are unable to generalize our statements.

Avoidance of television is a new pattern among young people. While the white-collar attitude of 'living without television' might be a reason, attractive programs (films and series) are difficult to catch in the set program structure of broadcasting, and the presence of commercial breaks makes the experience annoying. For the studied group, internet and the personal computer is the primary media platform. There are two distinct ways of avoiding television, as seen by the confinement of 'Avoider' and 'Gamer' Clusters.

In the latter case, video gaming is a notable alternative and takes a leading role alongside other media in the respondents' life. For the former case, the audience avoids gaming as well as television. Both groups can be described with similar media consumption patterns regarding other media types. The role of gender is important in this case: in the 'Gamer' group, males are overrepresented, while 'Avoider' group exhibits of a higher share of women. The difference in gender has a significant role in attitudes toward video games: however, data from other cultures suggests this will change. In the United States, where video games have a longer history, the ratio of gender in gaming is more balanced (ESA, 2011).

We can differentiate a third group, the 'Versatile'. They play on digital devices and watch television more often, choosing old school media more often, while using the same amount of internet, new media and non-traditional media forms. The higher proportion of women is in line with the academic literature and audience data. Use of print media decreased less in the past few years among women than men, and is a part of this factor.

Finally, television viewing and an almost total lack of gaming characterizes the fourth group. Regarding gender, this is the most feminine of the clusters, with the highest proportion of women compared to the other clusters. In other aspects they are not different from the total sample.

Our results tally with the experiences of audience researchers: among younger age groups, women are more open toward traditional media, while men are more open toward digital technologies. Those women who are as open as men to digital technologies might choose from a wider selection of media types. We found the results of the multidimensional scaling important as well, especially the second dimension. The frequency of use or 'popularity' of media types among the young is self-explanatory. However, the distance between video games and old school media is interesting. Among young people, not only is television considered an antiquated media, but gaming is considered by some to be a real alternative for entertainment.

Limitations

The non-representative nature of the sample limits our ability to generalize the results, and the methodology of cluster analysis bears some limits as well. The steps of the cluster analysis are only one of the many different approaches that researchers might apply. The expansion of media consumption variables or use of a different scale might affect the results.

The current study is based mainly on university students' and active social network site users' responses, who lead very different lifestyles with different media consumption habits. Their lifestyle, attitudes and media behavior is different from that of the general public in many ways, thus the results of the study must be explored in other age groups and life stage groups as well.

In the future, a more detailed and metric scale should be used to measure media consumption habits, which would serve as better input data for cluster analysis. The contact of media platform and activity sets limits to generalization regardless of considerations of the qualitative results. Non-traditional media types must be reviewed, because their nature makes them very distinctive compared to other media types: some of them are expensive, time-consuming or require the presence of other people.

The recent spread of smartphones and tablets makes them an important platform that should be researched in the future as well, because they have the potential to recolor the media pallet of the audience.

Managerial Implication

The most important added value of our study is that we provide insights about media consumption changes and the mix of media use of a young age group audience. The results show that a larger grouping of audiences may be executed now, so that it is feasible to identify relevant media consumer segments as mass audience subgroups.

The identified audience segments have a few common characteristics regarding internet use. It seems that internet use is today's main base of media consumption, so the real mass media today is not television but the internet. However, we have to keep in mind that internet as a medium has a completely different structure than television and it means far more fragmented content consumption and thus smaller and fragmented audience reach. We can state that the internet as a platform and media channel is inevitable for any audience and may be the best way to reach and attract other audience types as well.

Moving on to the next "big" media, i.e., television, we face quite a different media audience picture. There are still segments that are highly dependent on television and that allocate a great deal of time to its consumption, while there are others who claim to be almost non-viewers. This means that based on television consumption self-perception the media audience has become a mixed audience. For media managers this is an important conclusion, as being in the television industry they have to keep in mind how and to what extent different audience clusters relate to television and how intensively they consume television content. We can identify different media mix usage patterns among different segments, which may give some indication for television managers on how to reach and attract those moving into less television-oriented consumption directions. Also, we can see that old school and traditional media use and consumption are present in different audience segments.

Based on the clusters' demographic characteristics we could not identify any specification of the different audience clusters, except for the relation between gender and gaming. This proves that audiences are much more content, psychographic or other pattern-related. The traditional demographic-based segmentation approach has much less relevance than believed to this point.

An overall conclusion is that the kaleidoscope of media consumption patterns provides media managers with a challenging picture and audience market: we cannot claim that there exist clear, unique and very homogenous media audiences. We are undergoing a transition in a booming digitalization era. An interesting audience segment structure is provided by cluster and MDS analysis, which may serve as an indicator of audience consumption trends, interrelations between media types, and inter- and cross media consumption habits. This is especially the case for young people in higher education, who form the foundation of future consumer groups.

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APPENDIX

Table 1

Correlation matrix of media consumption variables

	film_TV	film_nonTV	sorozat_TV	sorozat_nonTV	boardgame	movie	book	print	mobilegaming	AAAgaming	browsergaming	consolgaming	net_socialmedia	net_browsing	net_email	radio	music_nonradio
film_TV	1,000	-,045	,604	-,200	,006	,059	-,063	,054	,051	,033	-,044	,068	,054	,000	,009	,153	-,113
film_nonTV	-,045	1,000	-,121	,507	,150	,262	,015	-,050	,142	,125	-,015	,214	-,009	,019	-,036	,022	,170
sorozat_TV	,604	-,121	1,000	-,129	-,011	,038	-,019	,033	,009	-,021	,031	,034	,041	-,033	-,043	,077	-,043
sorozat_nonTV	-,200	,507	-,129	1,000	,066	,075	-,015	-,106	,213	,181	,075	,151	-,022	,021	-,065	-,100	,159
boardgame	,006	,150	-,011	,066	1,000	,218	,165	,032	,055	,132	,042	,199	-,055	-,158	-,051	-,030	-,010
movie	,059	,262	,038	,075	,218	1,000	-,025	,052	,102	,024	,006	,346	-,034	-,106	-,080	,124	-,050
book	-,063	,015	-,019	-,015	,165	-,025	1,000	,240	-,068	,021	,036	-,111	-,077	,032	,022	-,016	,056
print	,054	-,050	,033	-,106	,032	,052	,240	1,000	,057	-,001	,059	-,058	,023	,091	,064	,150	,055
mobilegaming	,051	,142	,009	,213	,055	,102	-,068	,057	1,000	,254	,245	,242	,110	,008	,031	,021	,142
AAAgaming	,033	,125	-,021	,181	,132	,024	,021	-,001	,254	1,000	,309	,203	-,052	,029	-,069	-,110	,078
browsergaming	-,044	-,015	,031	,075	,042	,006	,036	,059	,245	,309	1,000	,118	,061	,047	-,019	-,055	,071
consolgaming	,068	,214	,034	,151	,199	,346	-,111	-,058	,242	,203	,118	1,000	-,035	-,133	-,150	-,016	-,027
net_socialmedia	,054	-,009	,041	-,022	-,055	-,034	-,077	,023	,110	-,052	,061	-,035	1,000	,280	,248	,067	,136
net_browsing	,000	,019	-,033	,021	-,158	-,106	,032	,091	,008	,029	,047	-,133	,280	1,000	,472	,033	,122
net_email	,009	-,036	-,043	-,065	-,051	-,080	,022	,064	,031	-,069	-,019	-,150	,248	,472	1,000	,064	,056
radio	,153	,022	,077	-,100	-,030	,124	-,016	,150	,021	-,110	-,055	-,016	,067	,033	,064	1,000	,082
music_nonradio	-,113	,170	-,043	,159	-,010	-,050	,056	,055	,142	,078	,071	-,027	,136	,122	,056	,082	1,000

Table 2

Rotated component matrix

(n=450, KMO=0,598; described variance=59,419%)

Rotated Component Matrixa	Component					
	1	2	3	4	5	6
MediaUsagenet_email	0.809	-0.093	-0.071	-0.071	-0.003	0.02
MediaUsagenet_browsing	0.791	0.041	-0.042	0.044	-0.145	0.012
MediaUsagenet_socialmedia	0.614	0.068	0.116	0.065	-0.052	0.067
MediaUsagefilm_nonTV	0.024	0.772	-0.048	-0.036	0.312	-0.014
MediaUsagesorozat_nonTV	-0.028	0.765	-0.147	0.152	0.058	-0.192
MediaUsagemusic_nonradio	0.082	0.509	-0.07	0.194	-0.329	0.371
MediaUsagefilm_TV	0.048	-0.101	0.875	-0.003	0.078	0.061
MediaUsagesorozat_TV	-0.027	-0.082	0.869	0.039	-0.044	0.015
MediaUsagebrowsergaming	0.027	-0.098	-0.045	0.758	-0.002	0.04
MediaUsageAAAgaming	-0.043	0.102	0.009	0.704	0.097	-0.153
MediaUsagemobilegaming	0.09	0.264	0.093	0.581	0.14	0.131
MediaUsagemovie	-0.035	0.151	0.065	-0.08	0.746	0.183
MediaUsageconsolgaming	-0.106	0.176	0.122	0.264	0.625	-0.102
MediaUsageboardgame	-0.078	-0.039	-0.097	0.105	0.613	0.011
MediaUsageprint	0.053	-0.214	-0.084	0.155	0.062	0.705
MediaUsageradio	0.043	0.089	0.184	-0.198	0.058	0.697