RADIO LISTENERS' DOWNWARD TRENDS AND CHANGING PROFILE IN THE LATVIAN MARKET

Anda Batraga, University of Latvia
Ilgvars Rukers, University of Latvia
Jelena Salkovska, University of Latvia

Abstract. The purpose of this research is under the scope of radio marketing strategy decisions indicate main reasons, which lead to diminishing number of radio listeners in general, as well as determination of radio listeners' changing profile and forecasting future trends in the Latvian radio market. To conduct the research, regular listeners' research empirical data analyses were applied. In the article the following research methods were used: academic and industry literature analysis, radio listeners' annual researches for period from 2008 to 2017 (10 year dynamics with sample size of each research not less than 1932 respondents), and correlation analysis.

The research results reveal changing patterns and dynamics of radio listeners' profile, as well as indicate the change reasons, building strategic recommendations for both radio brand development and content ingredients for radio recovery tactics in media market.

Under the changing and cross-competitive conditions of media industry, downwarding audience trends for radio stations must be perceived as warning signals in order to take appropriate strategic measures for sustaining radio role as one of the leading media channels in the market.

Keywords: *brand, listeners' behavior, media, media strategy, radio.*
JEL code: M31, M37, L82

Introduction

Radio is one of the oldest modern media forms, which allowed to address broad audience. Radio is the first media platform, which provided live broadcasts, thus gaining enormous popularity all over the world. Radio's popularity was even sustained, despite there were couple of direct threats emerging, e.g., introduction and development of TV. For that time being it was considered a huge step forward, predicting that "Video is going to kill the radio star", but nevertheless – radio survived. Radio has also survived an era of analog and digital data devices like LPs, cassettes, CDs, iPods, USBs, and others. Radio has maintained its stable above-the-line media positions over the decades. But now there is an empirical evidence that this pattern has started to shift.

Egan (2007) points out number of radio advantages, saying that radio is relatively low-cost media, it is a portable medium and (because of the targeted audiences) can be used segmented. Egan also mention that production costs are a fraction of those for television and lead times are shorter. "In addition, radio (unlike television) enables the individual listener to create 'pictures' in their own minds, a device used extensively by both radio programme producers and advertisers. (Egan, 2007)

Altstiel and Grow (2017) also have indicated radio advantages:

1. Radio has great coverage, it's broadly accessible.
2. With radio it is possible to stimulate immediate action.
3. Advertisers know immediately if their spots are successful.
4. It can be combined with other media. Radio greatly supports TV campaigns, because radio spot recall TV visual ads.
5. Radio features segmented markets. An advertiser can personalize his messages. Radio can become a very personal medium, so one can tailor specific messages to reach specific demographics.
6. Radio personalities sell. Well-known voices have built-in credibility with key listeners' demographics.

7. Radio offers creative opportunities. It's the ultimate creative challenge to creat mental images with music, voices, and sound effects. (Altstiel, Grow, 2017).

Lufkin (2016) states that "thanks to cars, humans have nurtured a relationship with radio that's lasted more than 80 years". Lufkin (2016) implies that reason is radio ability of keeping you focuses, no matter what you do at that time, for example, listening to radio, with its hands-off format for music and news that's pre-curated by DJs, an individual can keep engaged on the task at hand, while still keeping his/her eyes on the road. Lufkin (2016) also indicates that radio sustainability is hidden under its ability to adapt to changing market conditions and shifting technological landscapes. Lufkin (2016) concludes that radio combines something new (the latest technology) with two things that are timeless: facts that people like to be entertained, and that people need to drive. It's why radio can remain popular in an age of Spotify or Pandora.

But not only radio shapes its format. Nearly all media start to lose its defined frame, introducing different products and innovations, which are no longer common characteristics to only one media. The cross-media competition is on, and uniqueness can be copied, integrated and adapted easily not only by direct competitors, but also by other media (Zelenkauskaite, 2017).

Under these changing and cross-competitive conditions of media industry, downwarding audience trends for radio stations must be perceived as warning signals, in order to take appropriate strategic measures for sustaining radio role as one of the leading media channels in the market.

The above said is extremely important knowing that for decades radio provides marketers with a variety of integrated marketing opportunities. Radio can be used in combination with other media including television, magazines, and newspapers to provide advertisers with synergistic effects in generating awareness and communicating their message (Belch, Belch, 2007).

Therefore, the purpose of this research is an indication of demographic features, which can be observed to most of radio listeners who give up their radio listening habits, as well as determination of radio listeners' changing profile and forecasting future trends in the Latvian radio market, since these aspects directly influence media planning.

We put forward the following hypotheses:

1) Radio listeners' audience in general has negative trends in Latvia;
2) There is difference between women and men radio listening habits;
3) There is drop in a younger audience, but there is an increase in other age groups;
4) There are clear and opposite radio listening trends in different demographic groups defined by age, income and education factors;

Research methodology

To conduct this research, regular listeners' research empirical data analysis was applied. The regular research data are provided by a global research agency Kantar Latvia, but modeled and processed by the authors using software Supernova. Forecasts were calculated using average growth tempo model.

In the paper the following research methods were used:

1. Academic, industry literature and scientific paper analysis from well-known data bases.
2. Radio listeners' annual researches for period from 2008 to 2017 (10-year dynamics with sample size of each research not less than 1 932 respondents).
3. Correlation analysis between empirical and theoretical models.

To prove or reject the forward put hypothesis, data analyses have been conducted from radio listeners' regular researches in Latvia. These researches are carried out on regular basis by a global network research agency Kantar Latvia (or previously Kantar/TNS) since 1993. Each year there are more than 4 000 respondents involved in

researching listening patterns of more than 30 radio stations (Kantar/TNS, 2018). Sample size of each research is 1 932 respondents or more. Respondents are correctly sampled in age groups between 12 and 74 years.

Until very spring of 2018 the only research method used was the Diary method where approximately 2,000 respondents were surveyed to obtain data for each research, and respondents were given a proper format diary where he or she had to specify which radio station on what day and during which period the respondent had listened to.

Currently in Latvia DAR method has been introduced and is used for radio audience rating analyses. Industry experts admit that the new method is more accurate, but less precise as other digital research methods. Advantages and shortcomings of each method are summarized in Table 1.

Table 1

Pros and cons of the radio rating research methods

Diary method	Day-After-Recall method	Other digital research methods
Advantages:	**Advantages:**	**Advantages:**
A higher likelihood that all cases of radio listening will be recorded, because the respondent has been warned that he or she has to pay attention to habits during the entire week A possibility to calculate weekly reach more accurately	Easier to recruit, easier to reach certain target groups Easier to achieve data control quality Less effort from respondents Experience of other countries shows that it attains higher reach indicators	United TV and radio currency Data specifications — data obtained during one minute Registers all cases of listening to radio Registers all platforms and sites of radio listening Fast data supply
Disadvantages:	**Disadvantages:**	**Disadvantages:**
More difficult to recruit, more difficult to reach certain target groups "Overestimation" or large stations, less accuracy regarding the small stations It takes more time to receive feedback about completed diaries	Fluctuations possible when modelling total weekly reach There is a risk of overseeing the short periods of radio listening (due to psychological processes, memory) Limited number of radio stations to be measured, CATI interviews due to recommended duration of the interview	High costs, less selections Individual technologies (audio matching) do not differentiate radio stations which broadcast equal content concurrently Individual technologies (watermarking) are restricted in their capacity to measure radio listening in case of intense surrounding noise

Source: Traubergs, Kronberga, 2018

Customer director of the research agency Kantar TNS, Oskars Rumpeters, additionally points out that the new DAR method shows both higher daily and weekly reach, which could be explained with a fact that this method at first asks a respondent to recall events from previous day and only then about radio listening during these routine events. Projecting of this memory helps the respondent to remember also short radio listening moments more precisely (Helmane, 2018).

Executive director of the Latvian Society of Broadcasting Organizations (LRA), Andris Kenins, admits that the new survey method provides much wider circle of respondents, which actually allows researching radio listening habits more impartially and in a greater detail. It allows evaluating the place of small niche programmes in the market, obtaining more precise and comprehensive data both about radio listening habits and place of radio in the media industry in general (Helmane, 2018).

Commercial director of joint-stock company "Radio SWH" and board member of the Latvian Advertisement Association, Filips Rubenis, believes that change of the research method is a huge step forwards, improving and developing radio audience research method. Rubenis points out that the new method proves that we as a medium have always been sure — radio listeners consume considerably more than we knew so far (Helmane, 2018).

Programme director of "Radio Skonto", Valdis Melderis, in his turn, emphasizes that "the new method shows the reach more correctly. Specific weight of radio in the media consumption is larger than believed so far" (Helmane, 2018).

Chairwoman of the board of Latvian Advertisement Association, Baiba Liepina, agrees that more accurate data on reach is achieved with the new research. Liepina comments that "results obtained can change the strategic decisions of advertisers about media groups and channels where the advertising spots should be bough. Significantly, that the results of the new radio research reveal that when using the radio as an advertisement channel, one can reach wider audience than it was believed according to data of previous research. Adopting a decision in favor of the radio, the average reach of one radio station is not that important. Total reach indicators, price per reached contact and suitability of medium for purposes of advertiser's communication are what really matters. Under certain circumstances there is a possibility that some strategic decisions could be changed regarding the choice of media channels" (Helmane, 2018).

Audience research data result in ratings, and the latest play huge role in the advertising and media industry. As stated by Berger: "Because radio stations, television stations, and networks make money by delivering audience to advertisers, the size (and nature) of the audience of these stations and shows is of crucial importance. The larger the audience (as long as the demographics are acceptable), the more a station or network can charge for running commercials." (Berger, 2011)

An aggregated data from 10 different research years from 2008 till 2017 were used, every time analyzing an autumn research data for each year, by that avoiding possible seasonal fluctuations and speculations. Afterwards, data are analyzed in the following demographic groups:

1. Audience split by gender – men and women.
2. Audience by age groups – 12 to 17, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64 and 65 to 74 years of age.
3. Audience by income levels – no income, low income (individual net income below EUR 200 a month), average income (individual net income between EUR 201 and EUR 650 a month) and high income (individual net income above EUR 650 a month).
4. Audience by education level – radio listeners with basic, secondary and higher education (university or college degree).

Other demographic aspects are not included in this research, but for further analyses the authors would suggest deeper listeners profile factors to be included in the research.

Data are visualized in charts showing different trends and dynamics over time period. There are two indicators used: either it is listeners or audience in "Reach" numbers, or it is percentage showing proportion of all radio listeners or people in a specific demographic group compared to all listeners or population in Latvia. "Reach", on the other hand, shows the total number of listeners in a specific target group per week (Kantar/TNS, 2018).

Trends are calculated by average growth tempo method (Krastins, 1998). The method implies the following steps:

1. Calculate growth tempo for each period n (τ_n) by dividing y_n with y_{n-1} (1)
2. Calculate average growth tempo coefficient (τ_{avg}) by formula:

$$\tau_{avg} = \sqrt[n-1]{\tau_2 * \tau_3 * \ldots * \tau_n} \quad (2)$$

3. Calculate each y_t value by the following formula:

$$y_t = y_1 * \tau_{avg}^{t-1} \quad (3)$$

4. Calculate also trend forecast values for next (usually) two periods (4)

e.g., y_{11} and y_{12} values in Table 2.

Table 2

Example of average growth tempo model calculations

Years	*t*	All listeners, Reach (thousands per week), *y*	Growth tempo, τ	Trend values by average growth tempo method, y_t
2008	1	1425,9	-	1425,9
2009	2	1493,4	1,047339	1418,04
2010	3	1483,5	0,993371	1410,22
2011	4	1520,6	1,025008	1402,45
2012	5	1389,8	0,913981	1394,72
2013	6	1395,2	1,003885	1387,03
2014	7	1370,2	0,982081	1379,39
2015	8	1354,4	0,988469	1371,78
2016	9	1372,8	1,013585	1364,22
2017	10	1356,7	0,988272	1356,70
2018*	11	-	-	1349,22
2019*	12	-	-	1341,78
Average growth tempo coefficient =			**0,99449**	

Source: Developed by the authors based on Krastins (1998) and Kantar/TNS (2008-2017)

Results are depicted in visual line charts by using MS Excel. Correlation coefficients are calculated for average growth tempo model theoretical values compared with empirical data from Kantar/TNS radio researches. The uniqueness behind the model – first and end values of empirical and theoretical models do match, thus trend is mathematically adjusted, in the same time not affecting trend polarity, which is defined by average growth tempo coefficient (negative trend <1, positive trend >1).

Literature Review

Since the paper reveals phenomena of decreasing numbers in radio audience in Latvia, mostly industry data are analysed in combination with marketing and communication literature by Belch, Berger, Dahlen, Lange, Smith, Egan and others. For deeper understanding of the industry, stakeholders, functions and roles in media market and economics, number of scientific and academic papers were also observed. In other words, theoretical aspects of media strategy are considered by analysing theories provided by Altstiel, Gow, Belch, Egan, Pelsmackerm Guenes, and Van der Bergh, while media and communication research methods are revealed from studies by Berger and Krastins, and expert views on media trends provided by Latvian Advertising Association, National Electronic Mass Media Council of Latvia, Helmane, Traubergs, Kronberga and Lufkin, and finally previous academic research findings available in scientific papers by Laurell, Sandstrom, Rukers, Voorveld and Zelenkauskaite.

Shifting role of radio in changing media environment from theoretical and industry perspective

Radio plays important role in media market in Latvia. According to Latvian Advertising Association (LAA), radio reaches 78.6% of total population between 15 and 74 years of age. This is the third most effective media platform how to reach audience. In comparison, TV reaches 88.8%, internet media reach 83.0% audience, and printed media reach 57.6% of all population in the mentioned age group (LAA, 2017).

Secondly, as indicated by the National Electronic Mass Media Council of Latvia (NEMMC), at the end of year 2017 there have been 55 radio stations operating in the country, out of whom 6 are public service stations, 44 commercial radio and 5 non-commercial stations (NEMMC, 2018).

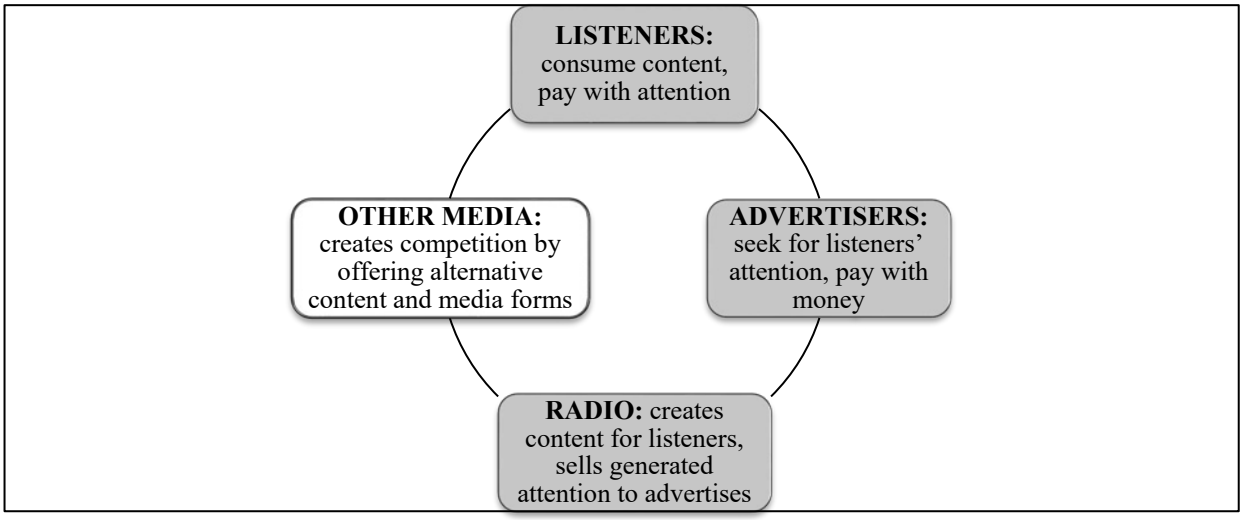
This would give 0.02 stations in Latvia per 1 000 inhabitants or 41 400 listeners per stations in Latvia. In comparison, in Lithuania it is 0.015 stations per 1,000 inhabitants or 64 300 listeners per station. It means 55% more

listeners (Rukers, 2017). In other words, radio market competition is more intense in Latvia – radio stations have to fight more intensively for each listener. That would also implies a greater number of options for advertisers where to invest their marketing budgets. In other words, by having this intense competition, sustaining permanent listeners' ratings is far more important.

Therefore, negative trends in radio content consumption volumes must ring all possible warning bells for industry professionals and managers. As described in Figure 1, there are 4 major stakeholders in the radio industry:

1. Listeners, who demand radio content (a specific radio format, music, news, shows, personalities, etc.). In order to consume the desired content, listeners must "give away" their attention.
2. Radio, which produces content demanded by listeners in a specific target group. To create the content radio pays money (to producers, copywriters, radio hosts, technicians, royalties, broadcast licensees, overheads, etc.). Money is earned by "selling" acquired listeners attention to advertisers. Listeners' attention amounts available in each radios virtual warehouse are measured by regular rating research data.
3. Advertisers are interested in buying the listeners' attention in particular target groups. Usually, they seek most cost effective ways how to reach audience by calculating cost- per-thousand and other media investment efficiency indicators.
4. There are other media like TV, internet, social networks, untraditional media, below-the-line solutions, PR and rest of advertising channels, which also seek how to reach more audience, even beyond their initial media format. Competition at this level also leads to higher indirect competition, which can facilitate drop of listeners both in the short term and in the long run.

Relationships behind radio industry stakeholder mechanism indicates a kind of vicious circle, where fluctuations affecting one of the components shall have a definite impact on the rest of them.



Source: developed by the authors

Fig.1. **Stakeholders in the radio industry**

As there are concerns about diminishing amounts of radio listeners, one can expect the following consequences:

1. Decreased number of listeners would lead to less attention to be sold to advertisers.
2. Advertisers either find alternative ways how to reach desired audience or abandon campaigns, which is less likely.
3. Either way, radio turnover shall decrease. Thus, radio shall become less competitive in the long run, since it will be required to cut costs and sustain minimum functional operations by giving up fancy things, which make content and station brand more attractive.

4. Less competitive radio leads to a lack of content quality, which would, in the end of the day, stimulate other, more loyal listeners search for content alternatives and switch to different media consumption.
5. Eventually, the above mentioned down-turning spiral will lead to situation where radio is cut out of business or put under a pressure on required substantial changes, which would reform radio to a differently new media format.
6. In the short term, other media can expect increasing profits from acquiring migrating radio audience. In case radio doesn't act fast and effectively enough, these earnings can be capitalized also in the long run, and radio phenomena from now on is admired only in history books.

A permanent decrease of radio listeners will not only have a negative impact on radio share value, but also affect advertisers, because they will be forced to reconsider current strategies. As suggested by previous researchers, radio has played an important role no only as a separate media channel, but often is exploited in cross-media campaigns, for example, combining banners and radio ads in a campaign can result in more positive affective and behavioral reactions than when using only one medium (Voorveld, 2011).

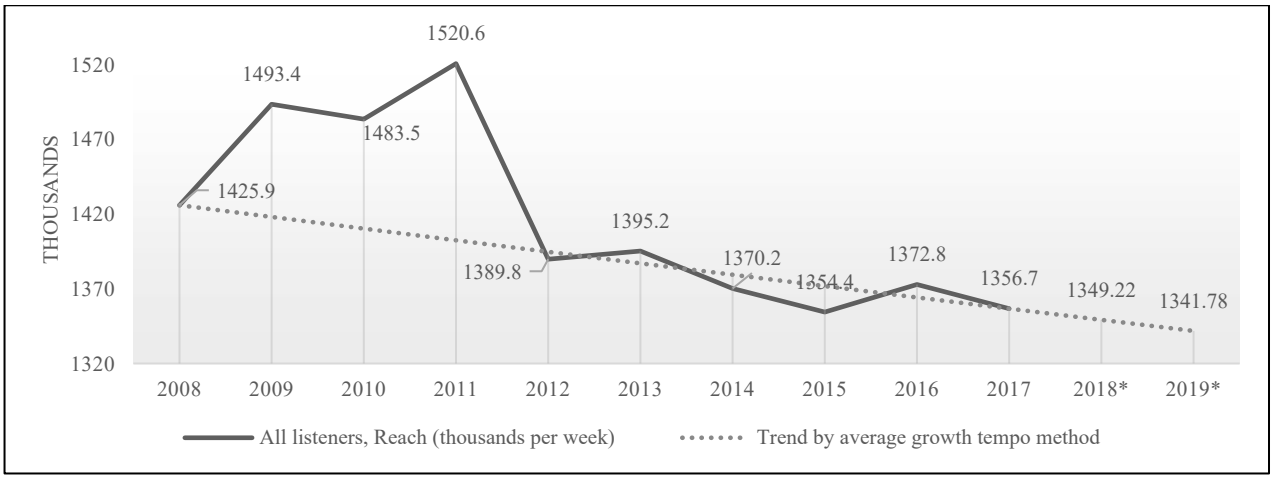
Radio listeners trend research in Latvian market

Media objectives describe the aims of planning in presenting target audience with opportunities to see and to engage with the intended message. Reach and frequency – which indicate the depth and breadth of message parameters – are the key measures of media planning success and therefore constitute the main objectives. (Dahlen et al., 2010)

In other words, reach shows number of listeners addressed, but frequency indicates repetition level of message. Pelsmacker et al. (2007) explains why a high (but not excessive) repetition level of advertising is beneficial:

1. The message gets more memorable and raises brand recall.
2. It makes attitudes more accessible and raises consumers' confidence in their attitudes, making them more resistant to attitude change and brand switching.
3. It increases the believability of the ad claim.
4. It leads to a greater top-of-mind brand awareness.
5. It functions as a signal or cue for brand quality. (Pelsmacker et al., 2007)

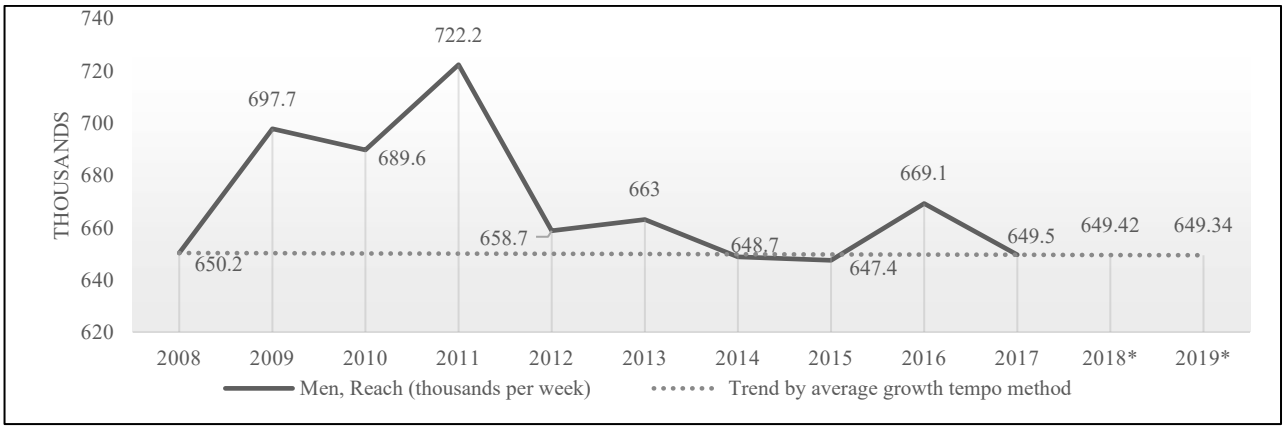
Figure 2 shows general radio audience reach in Latvia from 2008 to 2017 in the age group from 12 to 74 years. Average growth tempo model (AGTM) shows clear signs of negative trend. Correlation coefficient between empirical data and AGTM is 0.7632. Forecast for near future shows decreasing number of radio listeners. Therefore, this is an entry ground for further investigation and analyses.



Source: Kantar/TNS (2008 – 2017), aggregated and calculated by the authors

Fig.2. **Radio listening dynamics in Latvia, Age group 12 – 74 years, time period from 2008 to 2017, Reach (Thousands per week)**

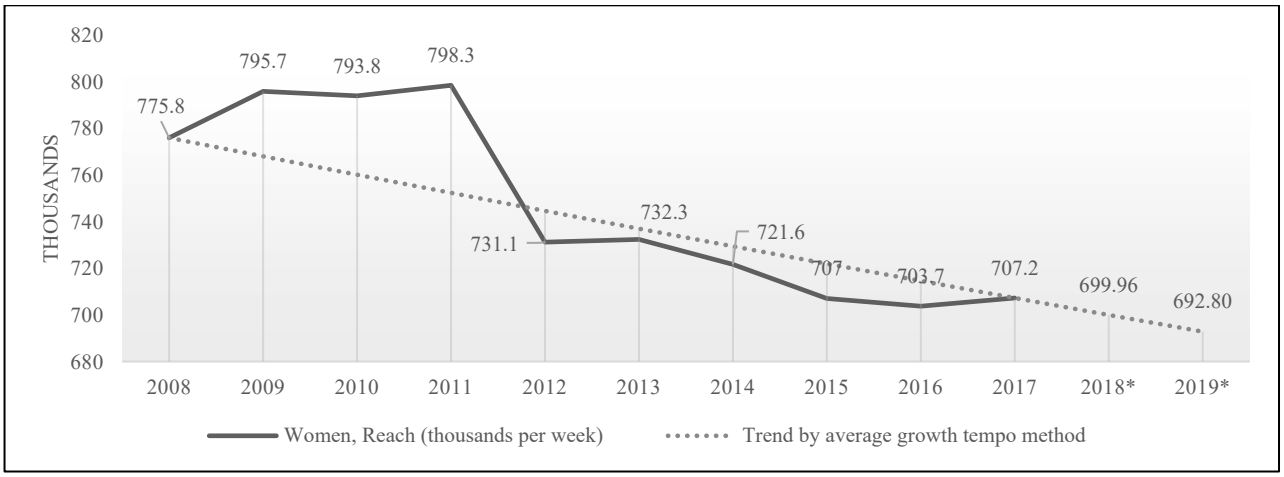
In the research the trend dynamics in men and women target groups were analyzed. Figure 3 indicates that men audience (in reached amounts), despite its early fluctuations, keeps a stable run, as revealed by AGTM. Correlation coefficient though is 0.4569, which would be considered statistically not significant enough, therefore future predictions are evaluated with less possibility.



Source: Kantar/TNS (2008 – 2017), aggregated and calculated by the authors

Fig.3. **Radio listening dynamics in Latvia, Men in age group 12 – 74 years, time period from 2008 to 2017, Reach (Thousands per week)**

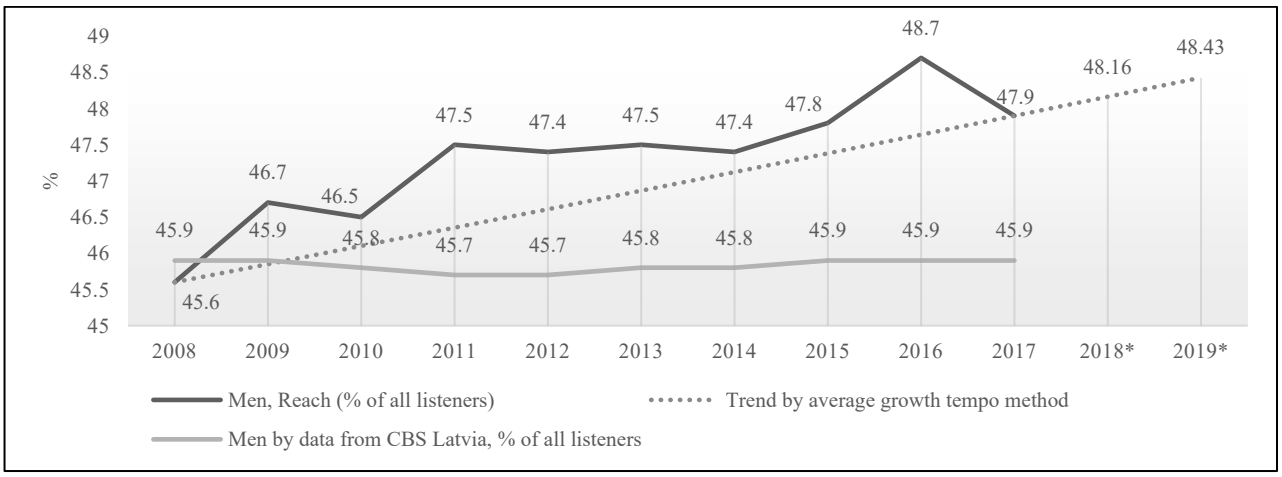
But correlation coefficient for AGTM in Figure 4, which indicates general radio listening tendencies in female audience in Latvia, is 0.8888. This is rather important, since the model shows clear trends of fast decreasing women audience for radios.



Source: Kantar/TNS (2008 – 2017), aggregated and calculated by the authors

Fig.4. **Radio listening dynamics in Latvia, Women in age group 12 – 74 years, time period from 2008 to 2017, Reach (Thousands per week)**

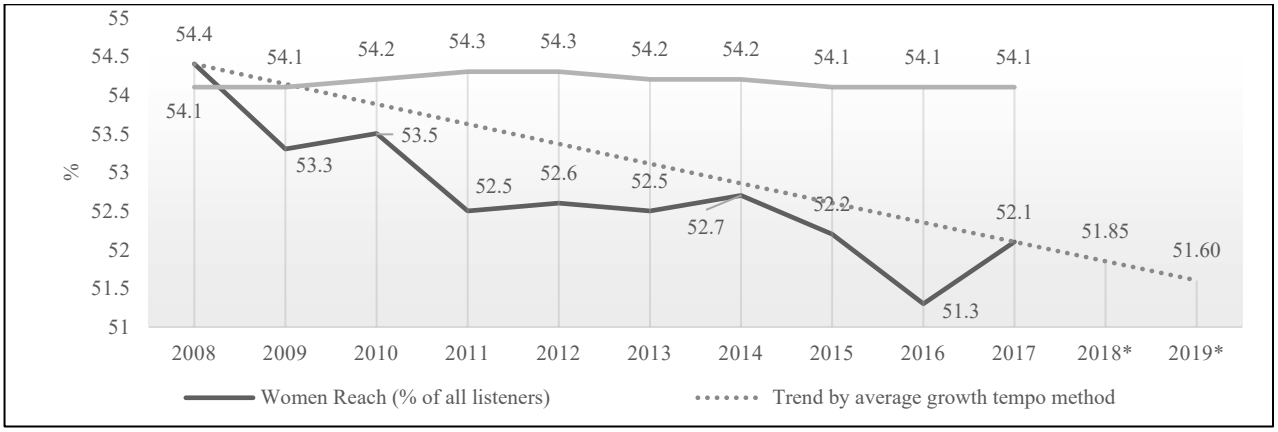
In order to get more deep analyses on a “decreasing female radio audience” phenomena, there must be expressed male and female audience in % (number of listeners in a specific demographic group divided by number of all radio listeners), as well as to add one more indicator: a proportion of the same, selected demographic group, but data provided by CBS Latvia.



Source: Kantar/TNS and CSB Latvia data (2008 – 2017), aggregated and calculated by the authors

Fig.5. **Radio listening dynamics in Latvia, Men in age group 12 – 74 years, time period from 2008 to 2017, percentage**

In Figure 5 and Figure 6, the proportion of men and women listening to radio is indicated, compared with the same proportion in general population. This is done in order to find out whether radio listeners in the specific demographic group are above or below the "normal average proportion" as indicated by the official national statistics. The, so called, "proportional evaluation" also allows to indicate if trend is or is not influenced by sudden or permanent changes in audience numbers. This approach is applied to the rest of the audience demographic profile measurements, except the ones where information from CSB Latvia is not available.



Source: Kantar/TNS and CSB Latvia data (2008 – 2017), aggregated and calculated by the authors

Fig.6. **Radio listening dynamics in Latvia, Women in age group 12 – 74 years, time period from 2008 to 2017, percentage**

Correlation coefficients for both models in Figure 5 and Figure 6 are 0.8796 and 0.8768 correspondingly, thus both models are statistically significant. From both models it can be concluded, that men listen radio more the average men population, whereas women listen radio slightly less. Besides, these trends keep getting more obvious every year, for example, in 2017 there are 45.9% men out of all population in Latvia within age group between 12 and 74 years of age, but radio listening habits for men are much more intense compared with women, who listen less than the given population average (in 2017 there are 54.1% of women in population between 12 and 74 years, but radio listening women proportion reaches up to only 52.1%).

As this trend of "lost women" for radio industry in general is significant and noticeable, it gives clear strategic hints for radio owners, managers and the rest of stakeholders as described in Figure 1. Further research would require to analyze this phenomena for each stations in the market. That would provide answers to future hypothesis that there are radio stations which do not lose women audience, and there are some which do. It would facilitate to find out

content, brand, and other factors which influence decision of choosing in favor for one or another station and/or media format.

The previously described methodology is applied also to find out trends in different age groups. Correlation coefficients for these models are following: -0.8983 (Age group 12-17), -0.9349 (Age group 18-24), 0.9109 (Age group 25-34), 0.713 (Age group 35-44), 0.7259 (Age group 45-54), 0.5889 (Age group 55-64) and -0.2127 (Age group 65-74). Even though the last one is negative, it indicates that there is no correlation, since coefficient is statistically insignificant. Therefore, the model cannot be assumed to be reasonable, but trend can be evaluated visually.

Summary of the listening trends in different age groups are gathered in Table 3. The above analyses in Table 3 give an insight of "problematic" audience and "safe and progressive" audience. The problematics are considered the ones both with negative listening trends and the ones with listening intensity below the national proportion, meaning, that radio listening habits are less likely for the specific demographic group, than it would be in assumed situation, where all demographic groups have the same radio listening demands within each group.

The conclusion is that the audience, which is increasing and above the national proportion, is in age group from 25 to 64 years of age. This broad audience keeps listening to radio content in more intense proportion than comparing to other age groups.

Table 3

AGTM Trend description summary in different age groups

Age groups	Trend slope	Comparison with national proportion	Model correlation coefficient
12-17	Negative	Below	-0.8983
18-24	Negative	Above	-0.9349
25-34	Positive	Above	0.9109
35-44	Positive	Above	0.713
45-54	Positive	Above	0.7259
55-64	Positive	Above	0.5889
65-74	Negative	Above	-0.2127

Source: Developed by the authors, based on Kantar/TNS (2008-2017) and CSB Latvia (2008-2017)

The research identifies that there are problems (from radio owners' perspective) with younger audience from 18-24 years, especially with the audience from 12 to 17 years. The authors indicate that this is another issue for the future research, revealing and analyzing factors which influence youngsters to shift away from radio consumption habits, or what aspects hold them back of radio listening.

A possible aspect to above described phenomena might be high involvement of younger population individuals in social media, because this is considered a much more innovative environment where to "hang out" rather than choosing traditional media. This is also described by another research suggesting that social media tend to favor disruptive innovation compared to traditional media. In addition, the fact that social media are much more concerned with the offering and less about the societal consequences also suggests that social media represent more uncritical communication channels compared with traditional media where a wide range of information and associations about the innovation is created and diffused (Laurell and Sandstrom, 2018).

In the research the above-mentioned methodology is applied on education perspective analyses as well as, and data are summarized in Table 4. Correlation coefficients for AGTM are following: -0.9175 (Listeners with basic education), 0.1621 (Listeners with secondary education) and 0.9496 (Listeners with higher education). Secondary education AGTM shall be considered as not statistically significant, when models for basic and higher education must be perceived with high significance.

Table 4

AGTM Trend description summary in groups with different education levels

Education	Trend slope	Model correlation coefficient
Basic	Negative	-0.9175
Secondary	Positive	0.1621
Higher	Positive	0.9496

Source: Developed by the authors, based on Kantar/TNS (2008-2017) and CSB Latvia (2008-2017)

Conclusion behind this analyses says that the less educated a person is, the less he or she listens to radio. Or, the higher level of education the more demand for radio content. From strategic perspective it gives clear indications for radio holders that leaving radio content as it is now, would lead to a total loss of young and uneducated audience in the long run. What currently the authors cannot answer is whether a young individual, who has just finished his/her basic education, does start to listen at one point radio content more intensively.

Finally, in this research the authors analyze listening trends concerning demographic groups with different individual income levels. Trends are elaborated in Table 5.

Correlation coefficients for AGTM in education level categories are following: -0.7843 (Listeners with no income), -0.1898 (Listeners with low income), -0.7509 (Listeners with average income) and 0.2456 (Listeners with high income).

Table 5

AGTM Trend description summary in groups with different individual income levels

Income	Trend slope	Model correlation coefficient
No income	Negative	-0.7843
Low income	Negative	-0.1898
Average income	Negative	-0.7509
High income	Positive	0.2456

Source: Developed by the authors, based on Kantar/TNS (2008-2017) and CSB Latvia (2008-2017)

The analyses conducted above indicates clear patterns of diminishing radio listeners. Due to the research, one can conclude that general drop in radio audience is caused by the following reasons:

1) Radio loses female audience, but increasing demand in male audience cannot compensate this drop, because men proportion in the population in Latvia are on average by 10% less;
2) Radio specifically is not attractive to young audience from 12 to 24 years, and abandoning radio as a media channel in these demographic groups keeps increasing;
3) Radio is not appealing and most suitable media channel to the audience with basic and secondary education, but admired among educated individuals;
4) Finally, only people with high individual income maintain a growing interest in radio as media and consume its content products. The rest of the income group representatives give up radio listening as time flies.

Conclusions, proposals, recommendations

In this research the following hypothesis were put forwards:

1) Radio listeners audience in general has negative trends in Latvia;
2) There is difference between women and men listening habits;
3) There is drop in younger audience, but there is increase in other age groups;
4) There are clear and opposite radio listening trends in different demographic groups defined by age, income and education factors;

The research data have proven that all of them have been confirmed. Therefore, it can be concluded that for radio professionals it must be an active time of restructuring radio development strategies, as current format, positioning, and content is outdated, and by sticking to recent approaches it is not possible to keep listeners loyal to radio media.

Additionally, one can conclude that from a general perspective the results indicate that media consumption paradigm is switching, which requires new teasers and treats for audience to follow. The research identifies and proves the problem, which radio industry is already facing. Also, there is an indication of potential scenario, what might happen with radio markets in the long run. On the other hand, to provide empirically tested strategy guidelines, a further and deeper research of the following aspects has to be conducted:

1. What are the main factors why different target segments choose radio and/or other media? In which of these aspects radio media does well, and which factors have to be improved, renewed, adapted, integrated, created and updated for audience volumes to recover?
2. What are media consumption behavior (where, how long, how, which media and why)?
3. What content makes sense and to whom?
4. What future trends and technologies have to be integrated in the future radio products, and to what extent can radio change in order not to lose reason of being defined “radio”?

Answering these questions, shall reveal reasoned strategy suggestions for radio industry owners, managers, partners and other stakeholders – how to sustain radio as one of the influencing and popular media channels among others, as it has been so far for decades.

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