

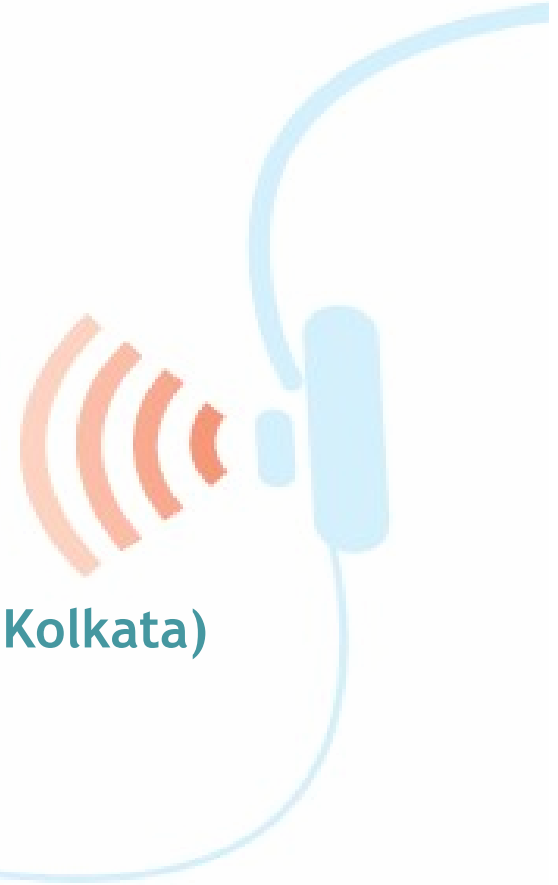


Radio Establishment Survey - Universe Update 2011



RAM Universe Update - 2011

- Necessity of Universe Update
- Detailed Objectives
- Methodology employed
- Top-Lines of Universe Changes
 - ➔ All RAM Market (Mumbai, Delhi, Bangalore & Kolkata)
- Panel control Variables



Necessity of Universe Update

- The population represented in each market reported by RAM, organically could change either in size or structure.
 - Growth in FM Radio penetration
 - Accessibility of FM radio through different devices
 - Population growth across markets
 - Organic change in demographics
- Therefore the need for universe estimates is to:
 - Capture the above listed dynamic changes across each market
 - Arrive at the Panel control variables



Objectives in Detail

- To monitor...
 - Ownership of radio
 - FM penetration
 - Radio listenership
 - Interaction with other media (viewing habits, readership)
 - Devices used for radio and non radio music listening
 - Household demographics
- To arrive at universe estimates for FM radio by different demographics.
- To arrive at parameters that influence radio listenership.
- To reassess the existing panel for recruitment and replenishment.



Methodology for Radio Establishment Survey 2010

- **Time Line:**

- Base line study conducted in June - August 2010 to establish latest demographic proportions and Universe changes

- **Sample Per City:** 3000

- **Methodology:**

- Random Sampling

- Face to Face Interviews using a structured questionnaire

- Single Member per Household

- 500 starting points for each market.

- 6 interviews around each starting address - Right Hand Rule

- Selection of respondent using KISH Grid



Methodology for Universe Update: An Example

Week 1, 2007

FM Owning Universe in Market XYZ: 50,00,000 Individuals

Step 1: Apply Estimated Census CAGR from 2007 - till Jan 2011 for Market XYZ -> 30%



Week 1, 2011

FM Owning Universe in Market XYZ: 65,00,000 Individuals

Step 2: Estimate Demographic Proportions from Establishment Survey



All 12-19	All 20-24	All 25-34	All 35-44	All 45 +
18	14	25	19	24

Therefore Universe Estimate for All 25-34 in Market XYZ is:
 $25 \% \times 65,00,000 = 16,25,000$ individuals

Total Population vs. FM Penetration - 2007 vs. 2011

MUMBAI, DELHI, BANGALORE & KOLKATA



FM penetration has been maximum in Delhi Market and Minimal in Kolkata market

  Total Population (All 12+)

  FM Penetration

Mumbai

Delhi

Bangalore

Kolkata

51%

70%

59%

88%

71%

87%

63%

64%

7347

11655

6723

16321

14349

16674

11396

18523

3646

5274

7851

8740

5131

6050

12375

13583

2007 (Figures in 000s)

2011 (Figures in 000s)

2007 (Figures in 000s)

2011 (Figures in 000s)

2007 (Figures in 000s)

2011 (Figures in 000s)

2007 (Figures in 000s)

2011 (Figures in 000s)

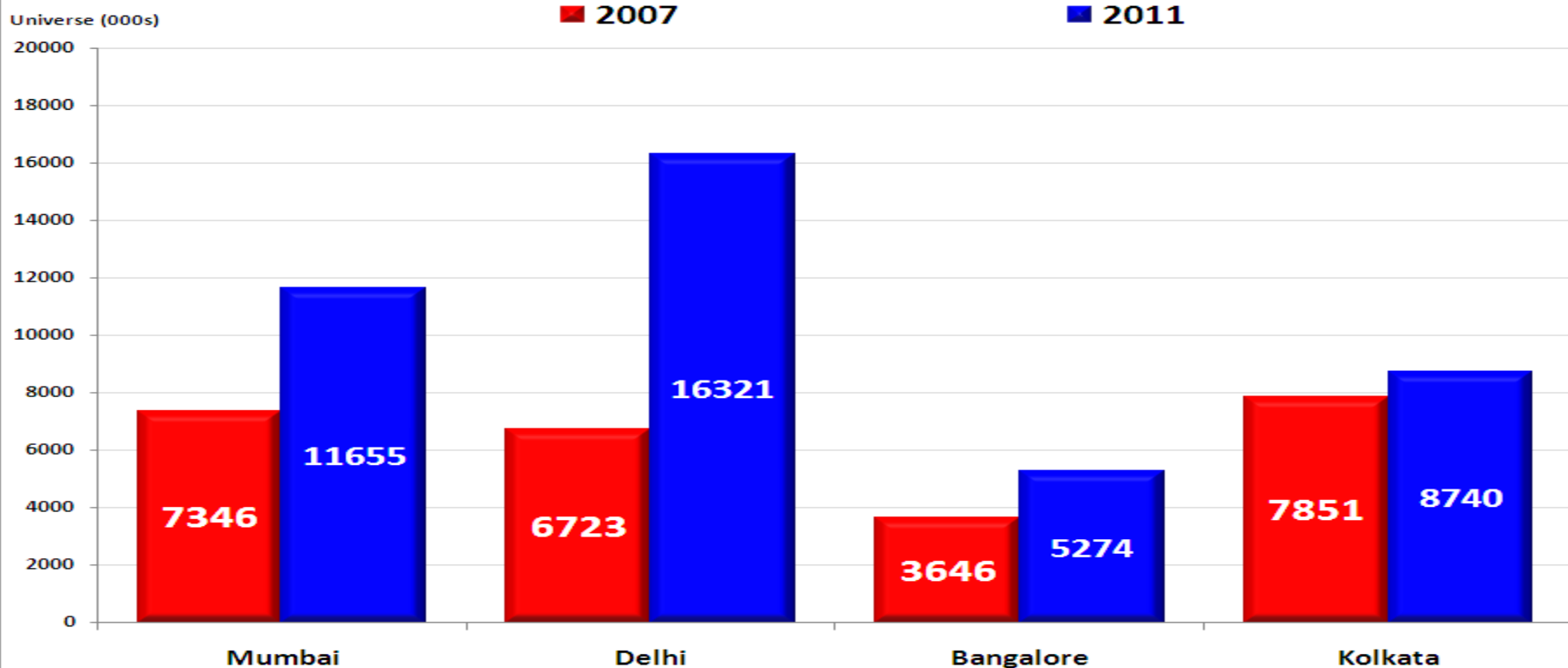
Change in Overall Universe Numbers

MUMBAI, DELHI, BANGALORE & KOLKATA



Delhi has observed maximum increase in FM penetration as compared to other RAM markets

RAM Universe Update - RAM Markets - 2007 vs. 2011



Source: RAM Baseline TG:: All 12+ RES Period: Apr-May 2007 & June - July 2010 Market: Mumbai, Delhi, Bangalore & Kolkata



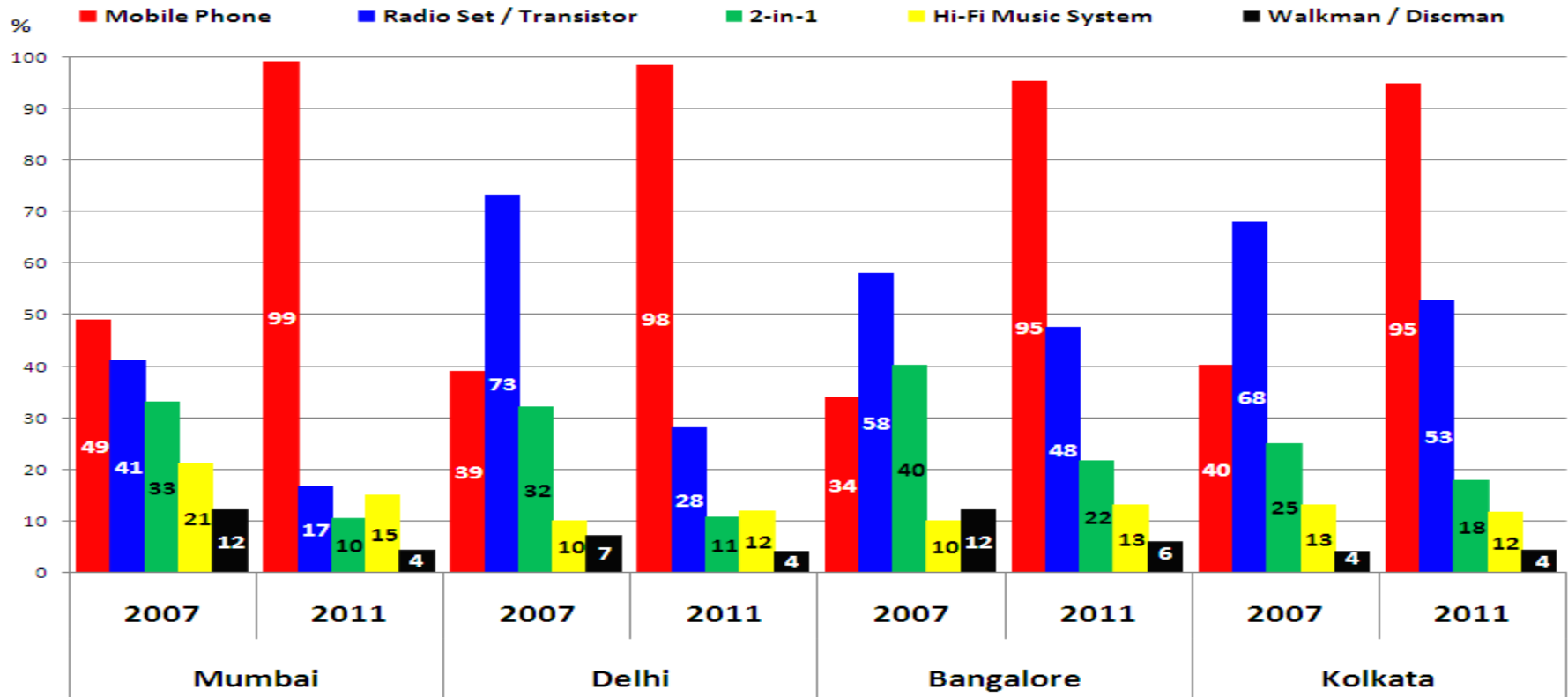
Devices Owned by FM Owners -2007 vs. 2011

MUMBAI, DELHI, BANGALORE & KOLKATA



Mobile Phones ownership among the FM owners has significantly increased whereas other radio devices like radio sets, 2 in 1, etc have witnessed a fall.

Devices Owned - RAM Markets - 2007 vs. 2011



Source: RAM Baseline

TG:: All 12+

RES Period: Apr-May 2007 & June - July 2010

Market: Mumbai, Delhi, Bangalore & Kolkata



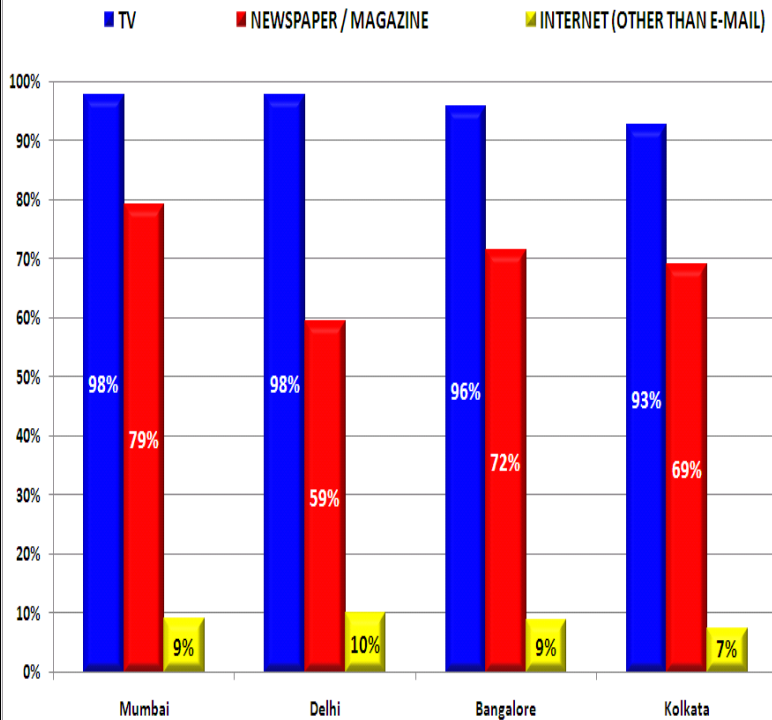
Consumption of FM Owners among Other Media

MUMBAI, DELHI, BANGALORE & KOLKATA



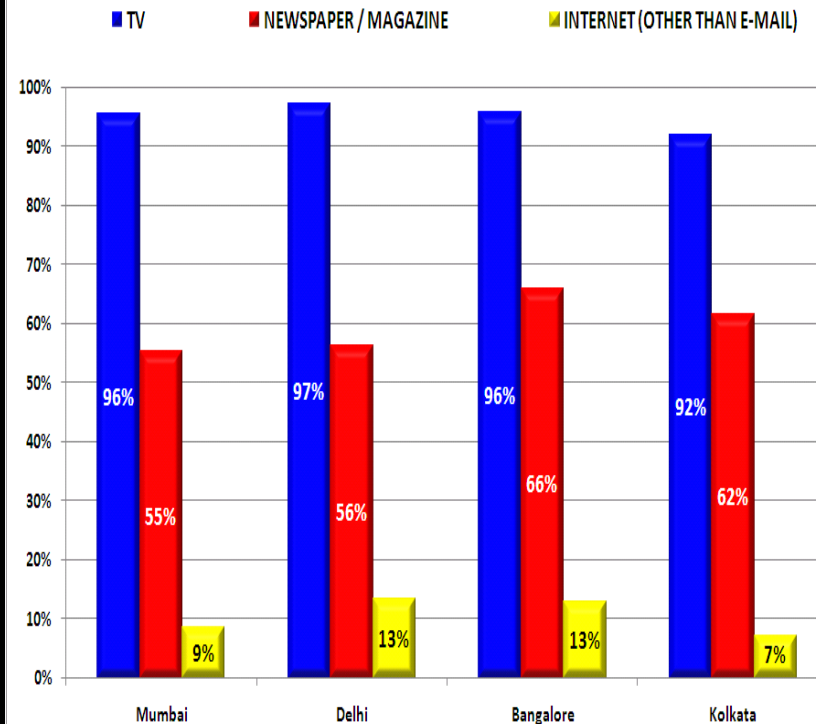
FM Owners duplication with TV has been maximum and access to Newspaper / Magazine in last one week has seen a fall across all RAM markets

Other Media Consumption of FM Owners - Accessed Last Week for All Markets - 2007



Source: RAM TG: All 12+ RES Time Period: Apr-May 2007 Market: All 4 Markets

Other Media Consumption of FM Owners - Accessed Last Week for All Markets - 2011



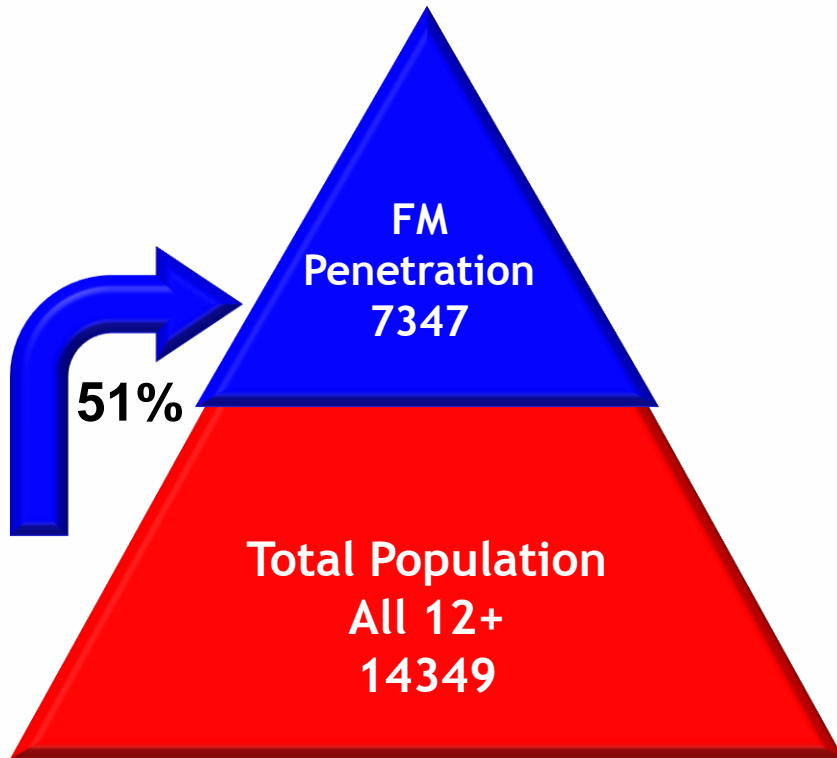
Source: RAM TG: All 12+ RES Time Period: June - July 2010 Market: All 4 Markets

Findings of Radio Baseline Study

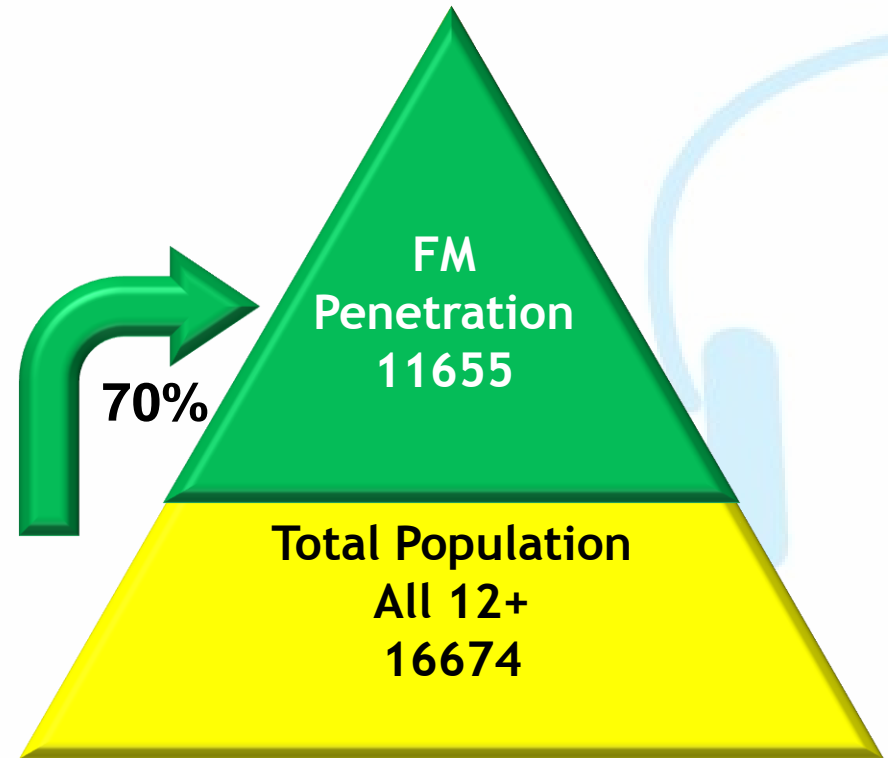
MUMBAI



FM Penetration in Mumbai Market



2007
(Figures in 000s)



2011
(Figures in 000s)

Number of FM Devices Owned

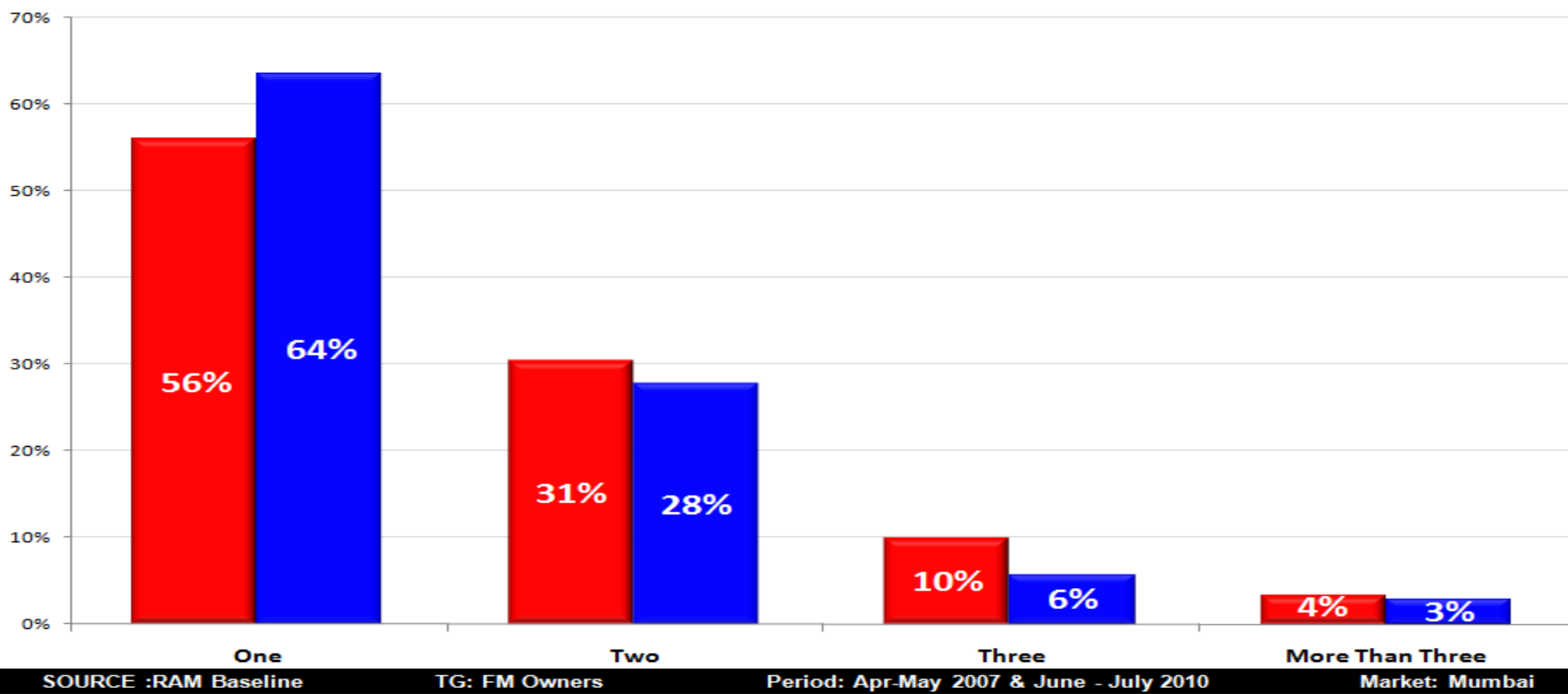


Listeners owning only 1 device has seen an increase from 56% in 2007 to 64% in 2010

Number of FM Devices Owned - Mumbai 2007 vs. 2011

■ 2007

■ 2011

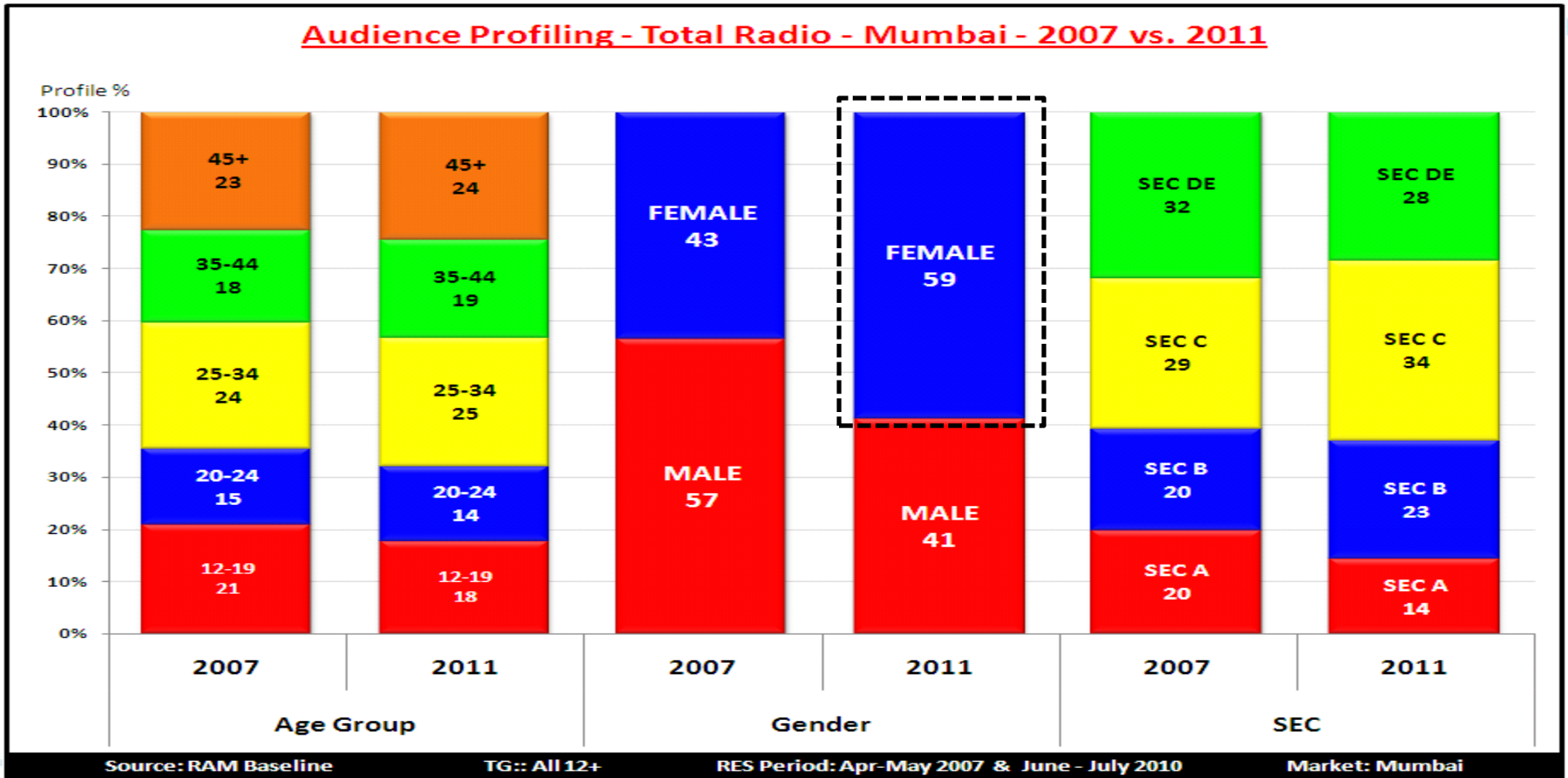


Audience Profiling - FM Owners



Female audiences have observed significant gain in overall audience composition in Mumbai market

Audience Profiling - Total Radio - Mumbai - 2007 vs. 2011



Source: RAM Baseline

TG:: All 12+

RES Period: Apr-May 2007 & June - July 2010

Market: Mumbai

** All Age group and SEC have witnessed minimal changes as compared to 2007*



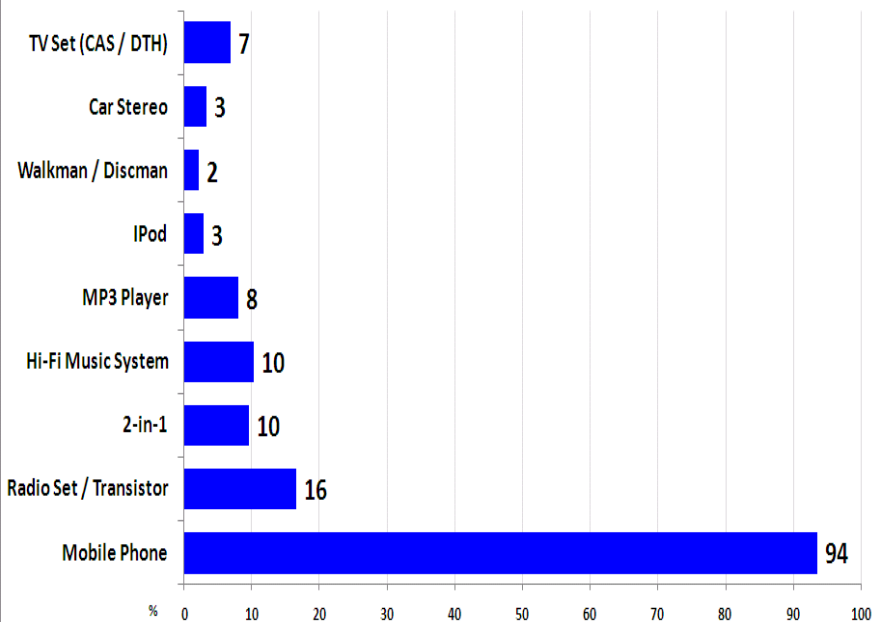
Music on Radio vs. Music on Other Devices



Majority of the radio listening is preferred on Mobile Phones whereas TV sets are used maximum for non radio music.

Devices used for Radio Listening - Mumbai 2011

Base: FM Owners



Source: RAM Baseline

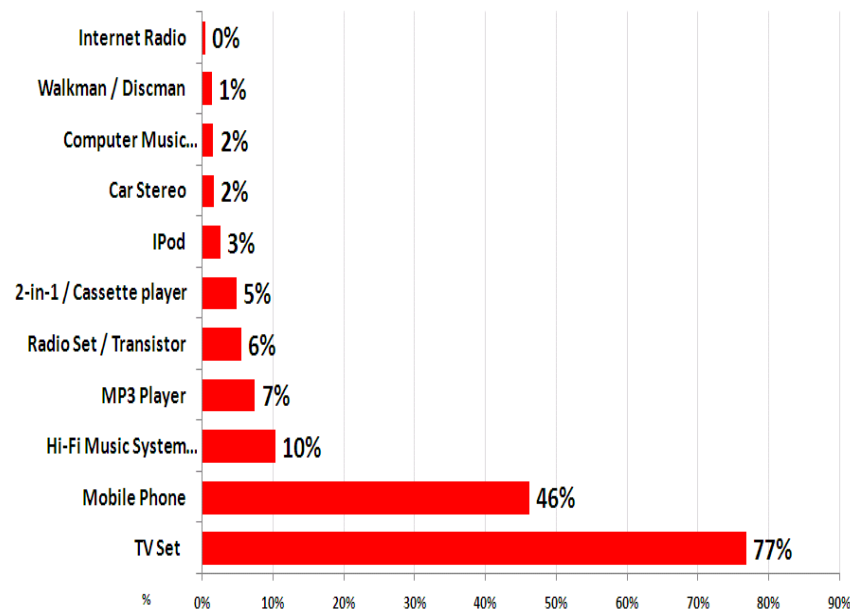
TG: All 12+

RES Time Period: June - July 2010

Market: Mumbai

Device Used for Non Radio Music - Mumbai 2011

Base: FM Owners



Source: RAM Baseline

TG: All 12+

RES Time Period: June - July 2010

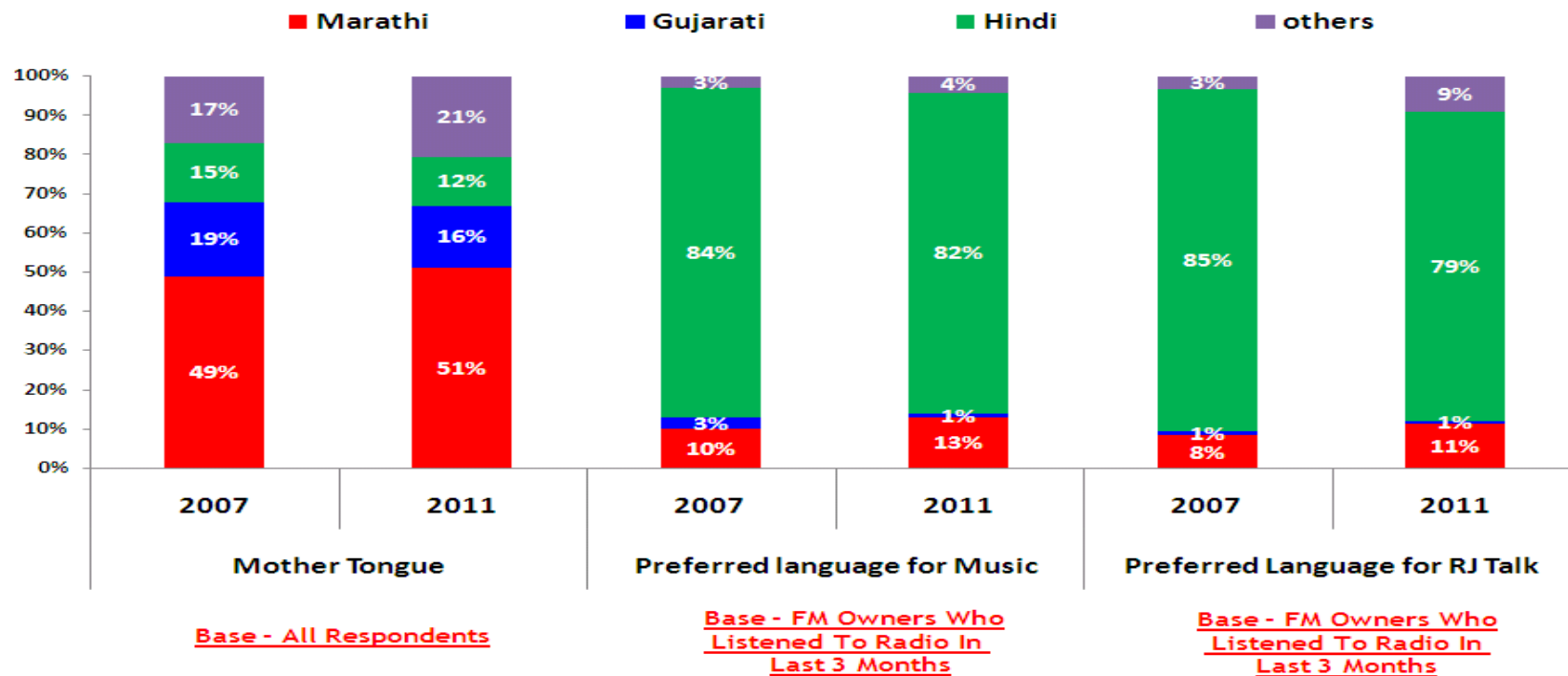
Market: Mumbai

Language Preferences



Majority of the listeners in Mumbai prefer Hindi as a language for music and RJ talk.

Language Preference in Mumbai



Source: RAM Baseline

TG:: All 12+

RES Period: Apr-May 2007 & June - July 2010

Market: Mumbai

* Preference for Music and RJ Talk in Marathi has witnessed increase.



Key Insights - Mumbai Market

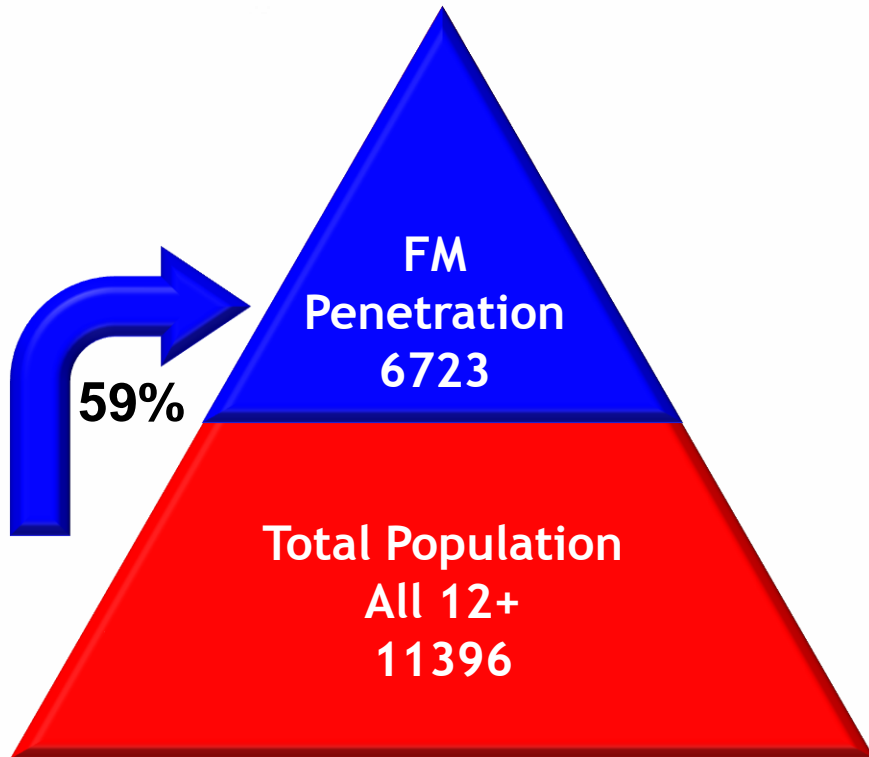
- FM Penetration in Mumbai market has observed an increase from 51% in 2007 to 70% in 2011. (New Universe - 11.66 Mn)
- 51% of FM owners have Marathi as their Mother Tongue whereas more than 80% of them prefer Hindi for Music and RJ Talk.
- Preference for music and RJ Talk in Marathi has seen an increase as compared to 2007.
- Among FM Ownership, Female audience has witnessed significant increase from 43% in 2007 to 59% in 2011.
- 64% of the FM owners have access to FM only through single device.
- Majority of Radio listening has been preferred through Mobile phones whereas TV sets are preferred maximum for Non Radio Music.

Findings of Radio Baseline Study

DELHI

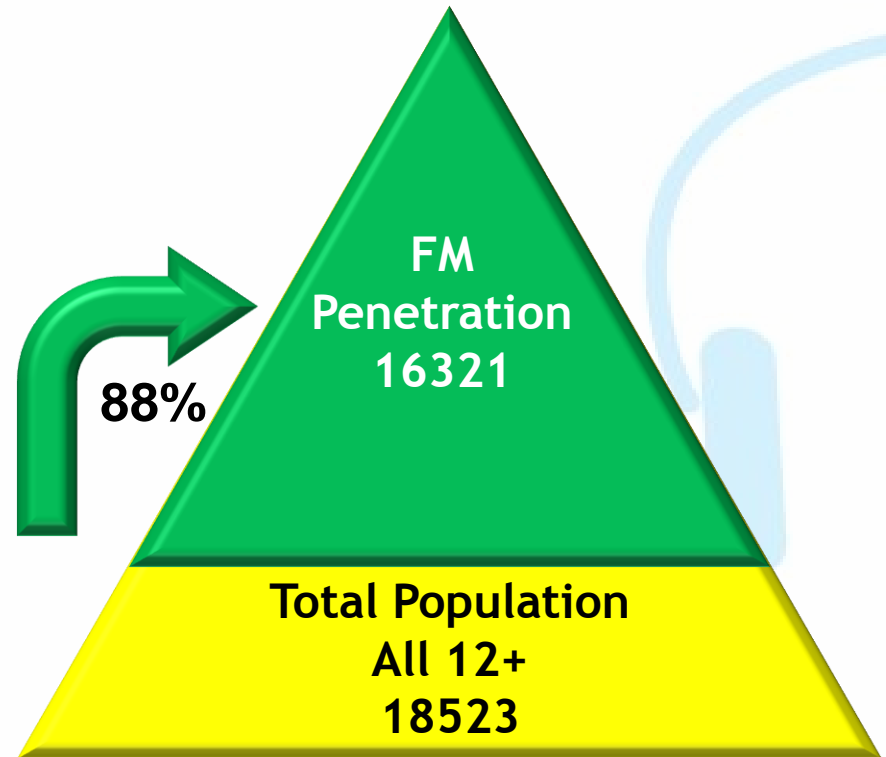


FM Penetration in Delhi Market



2007

(Figures in 000s)



2011

(Figures in 000s)

Number of FM Devices Owned

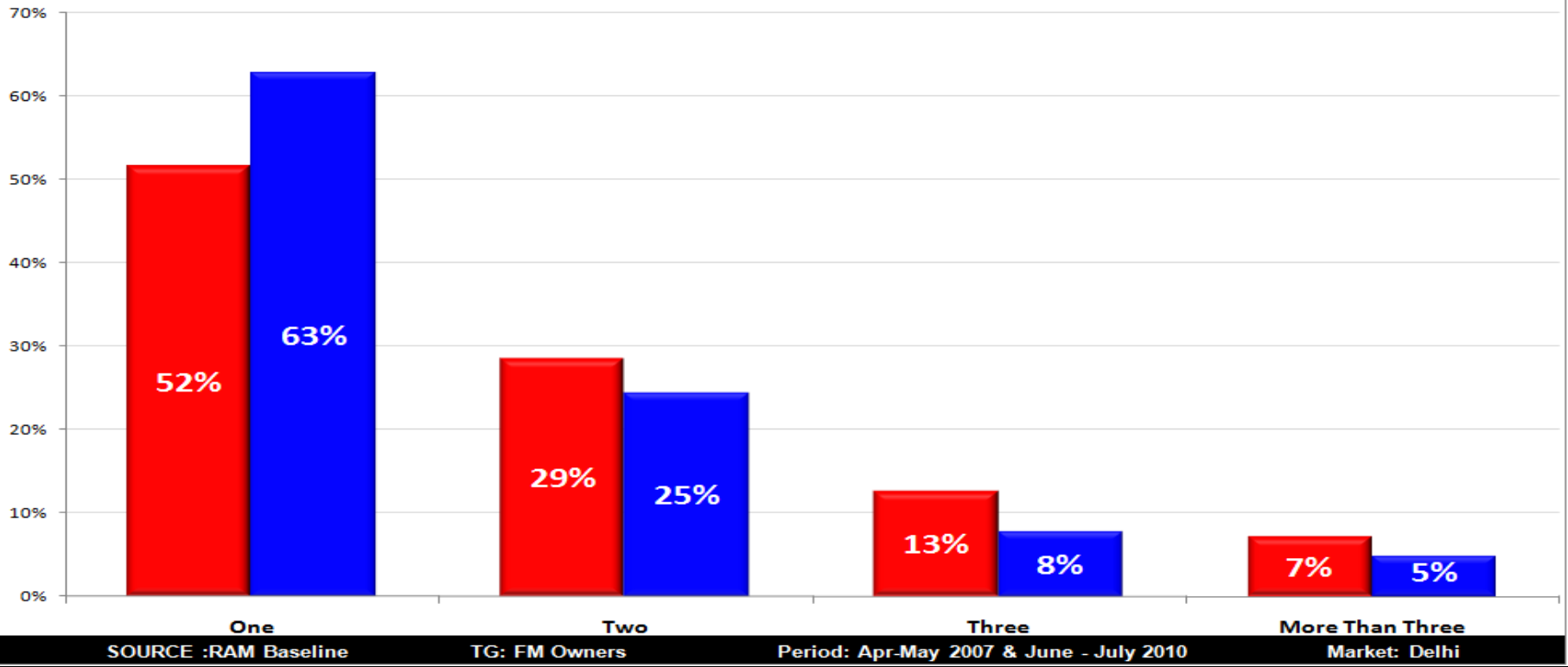


Listeners owning only 1 device has seen an increase from 52% in 2007 to 63% in 2010

Number of FM Devices Owned - Delhi 2007 vs. 2011

■ 2007

■ 2011

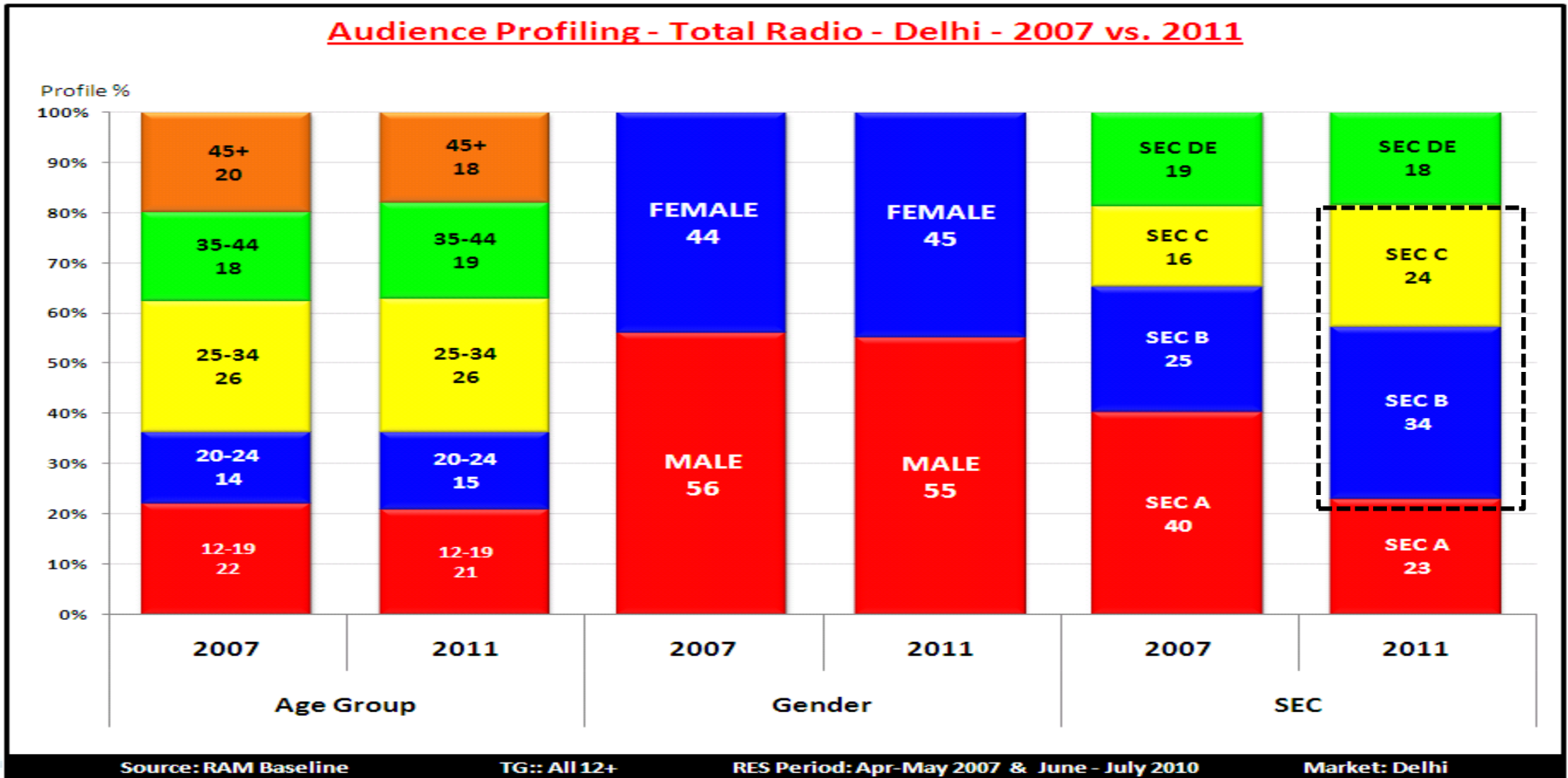


Audience Profiling - FM Owners



Delhi market observed significant increase in its SEC BC audience composition as compared to 2007.

Audience Profiling - Total Radio - Delhi - 2007 vs. 2011



Source: RAM Baseline

TG:: All 12+

RES Period: Apr-May 2007 & June - July 2010

Market: Delhi

** All Age group and Gender wise audience composition have witnessed minimal changes as compared to 2007*



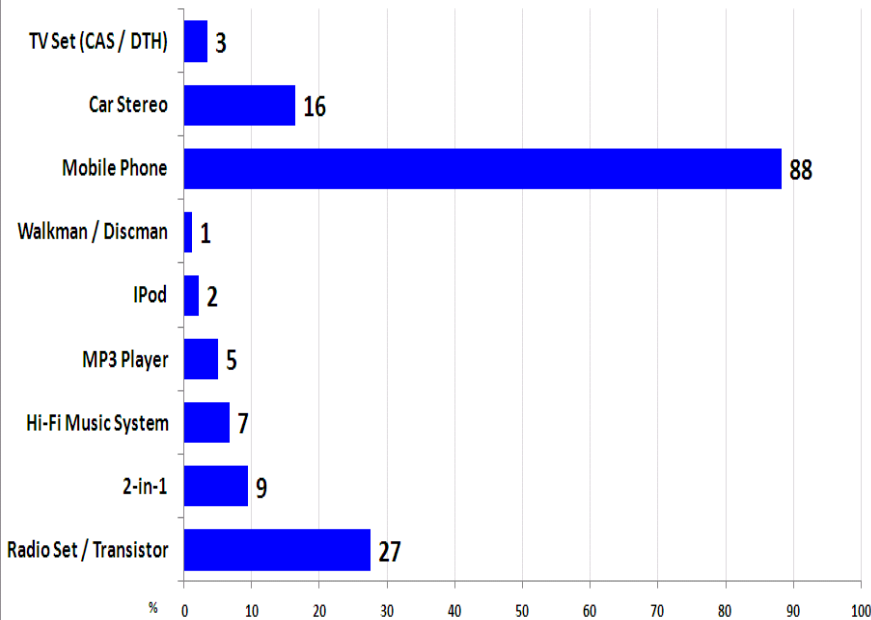
Music on Radio vs. Music on Other Devices



Mobile phones has been used maximum for radio and non radio music listening

Devices used for Radio Listening - Delhi 2011

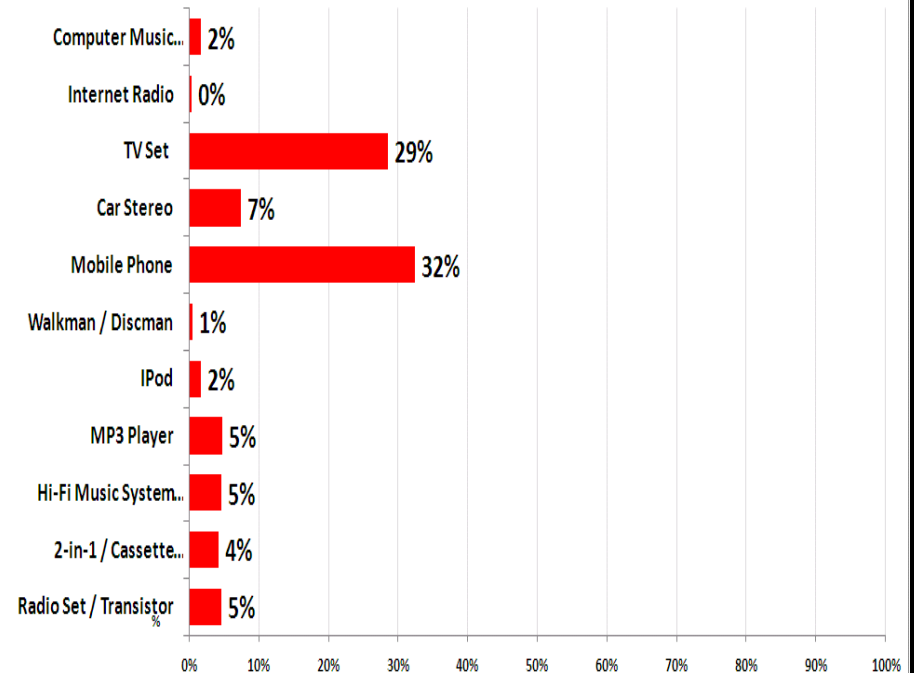
Base: FM Owners



Source: RAM Baseline TG: All 12+ RES Period: June - July 2010 Market: Delhi

Devices used for Non Radio Music- Delhi 2011

Base: FM Owners



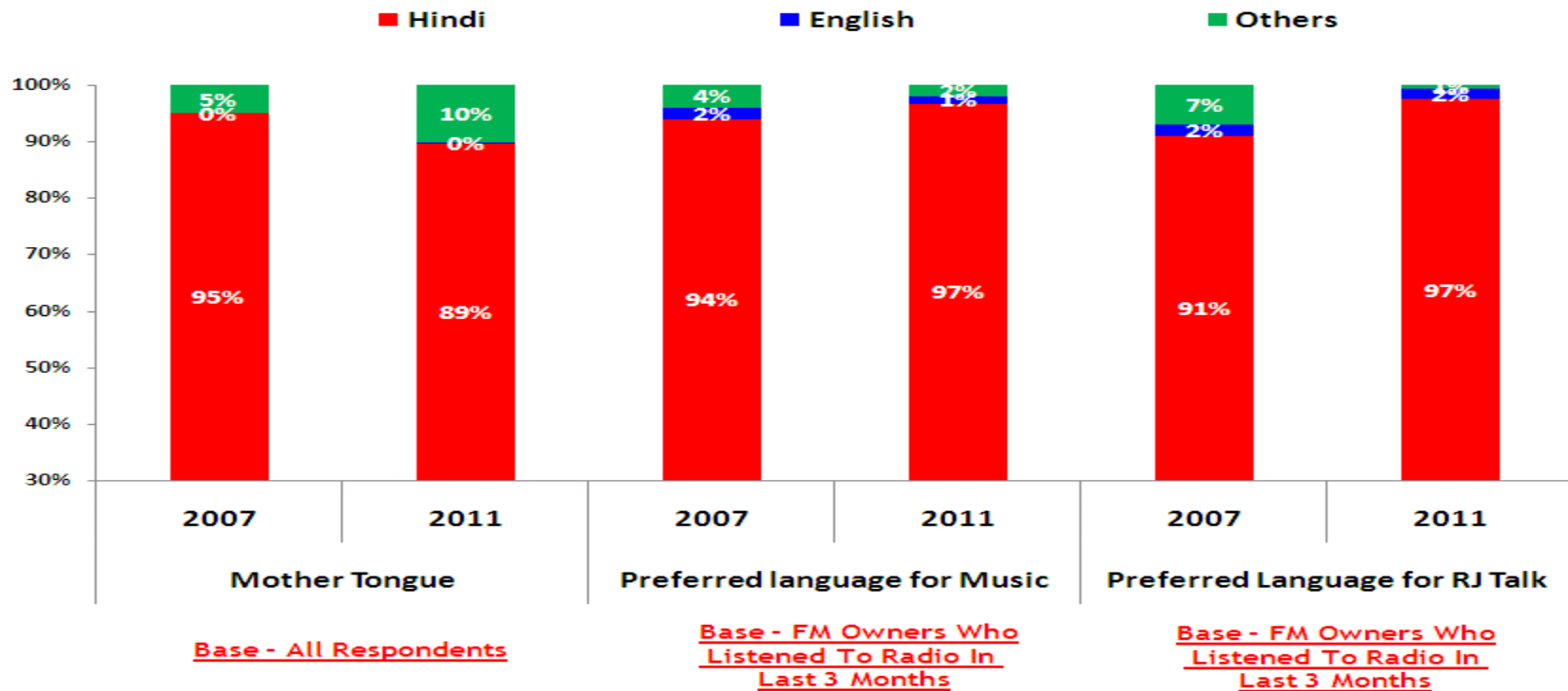
Source: RAM Baseline TG: All 12+ RES Time Period: June - July 2010 Market: Delhi

Language Preferences



Hindi language w.r.t Mother Tongue has observed a fall whereas preference for Hindi Music and RJ Talk has seen an increase in Delhi market.

Language Preference in Delhi



Source: RAM Baseline

TG:: All 12+

RES Period: Apr-May 2007 & June - July 2010

Market: Delhi



Key Insights - Delhi Market

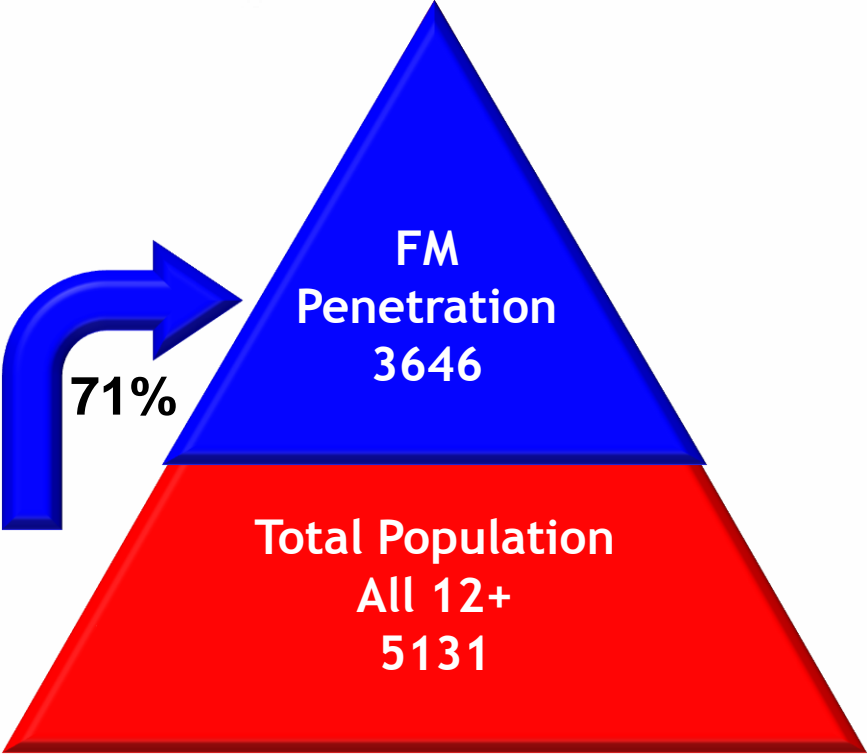
- FM Penetration in Delhi market has observed a significant increase from 59% in 2007 to 88% in 2011. (New Universe - 16.32 Mn)
- 97% of FM Owners prefer Hindi Music and RJ Talk whereas Hindi w.r.t Mother Tongue has seen a fall as compared to 2007.
- FM ownership among SEC BC has witnessed significant increase from 41% in 2007 to 58% in 2011.
- 63% of the FM owners have access to FM only through single device.
- Majority of Radio and Non Radio listening has been preferred through Mobile phones.

Findings of Radio Baseline Study

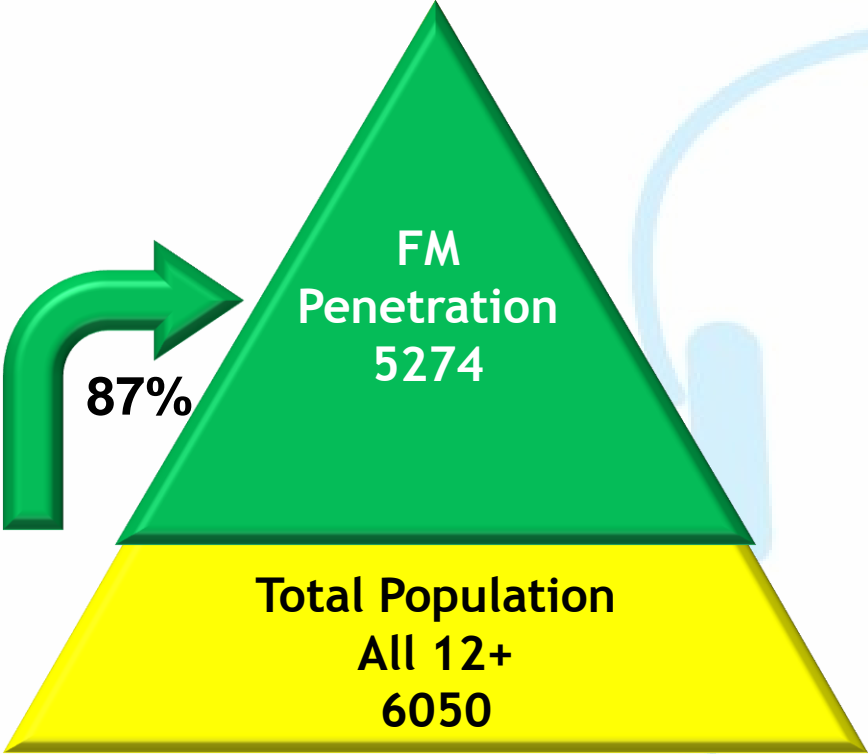
BANGALORE



FM Penetration in Bangalore Market



2007
(Figures in 000s)



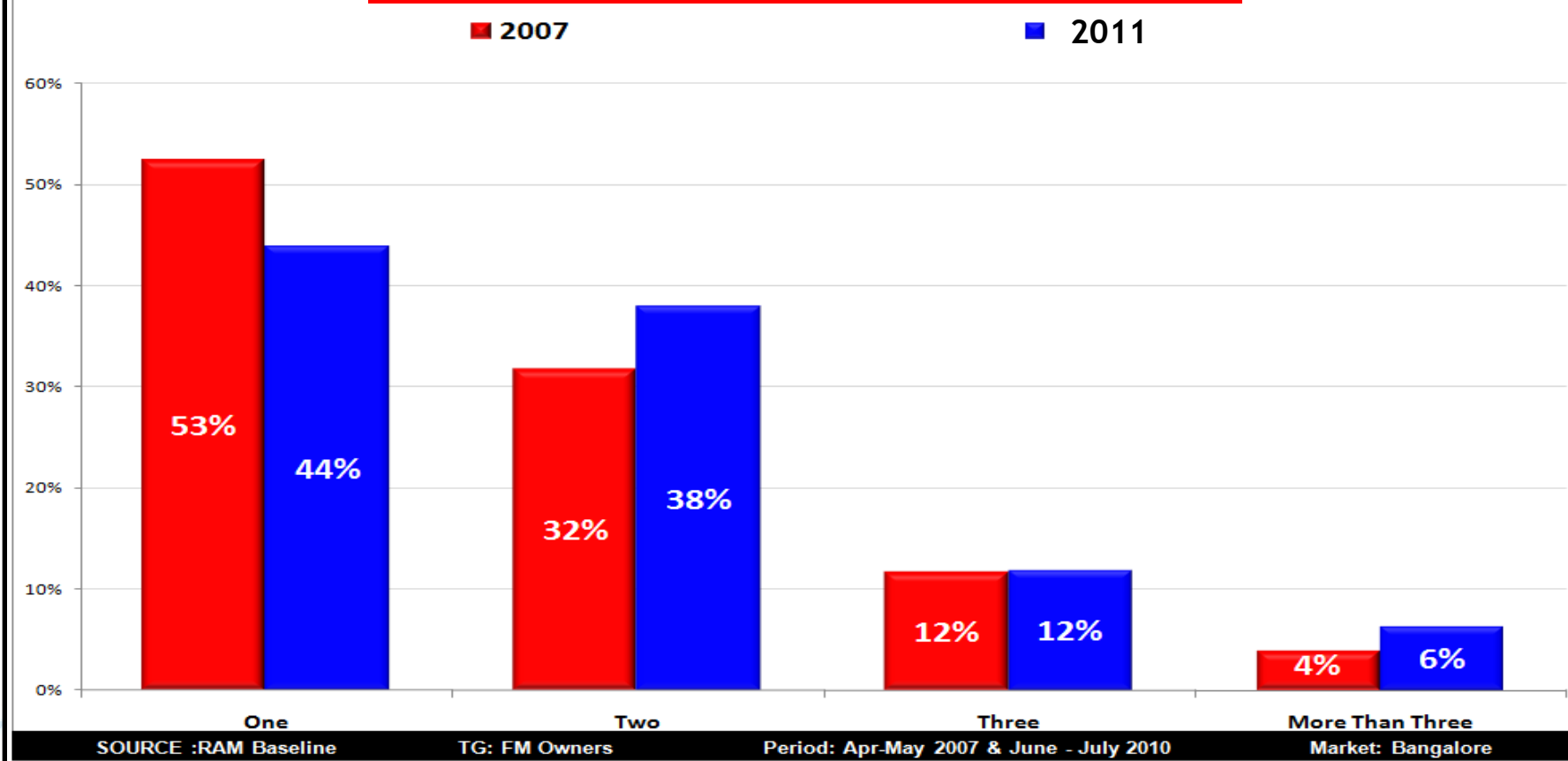
2011
(Figures in 000s)

Number of FM Devices Owned



Bangalore is the only market which observes heavy number of listeners owning two devices (38%) for radio listening

Number of FM Devices Owned - Bangalore 2007 vs. 2011

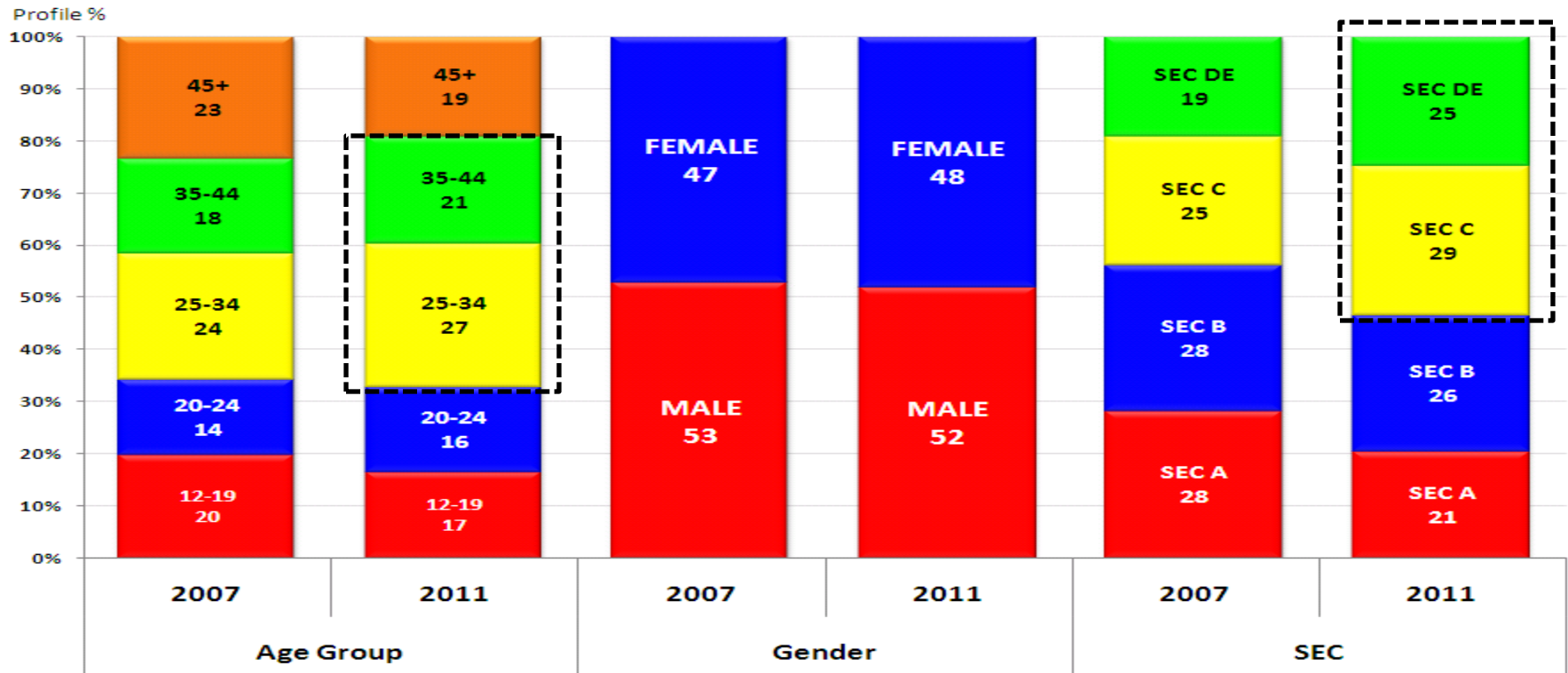


Audience Profiling - FM Owners



Bangalore market observed increase in its All 25-44 and SEC C & D/E audience composition as compared to 2007.

Audience Profiling - Total Radio - Bangalore - 2007 vs. 2011



Source: RAM Baseline

TG:: All 12+

RES Period: Apr-May 2007 & June - July 2010

Market: Bangalore

Male and Female audience composition have remained similar for Bangalore Market.



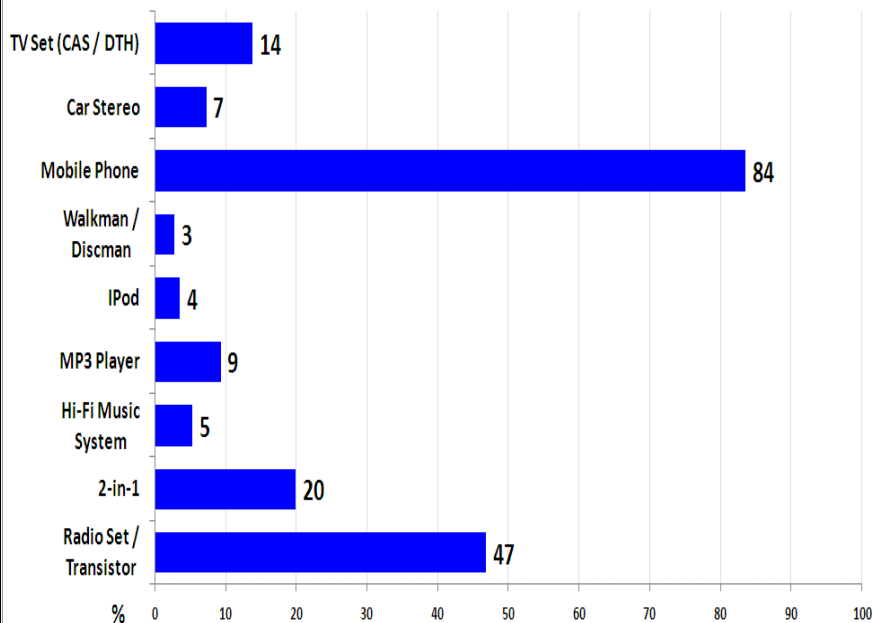
Music on Radio vs. Music on Other Devices



Majority of the radio listening is preferred on Mobile Phones whereas TV sets are used maximum for non radio music.

Devices used for Radio Listening - Bangalore 2011

Base: FM Owners



Source: RAM Baseline

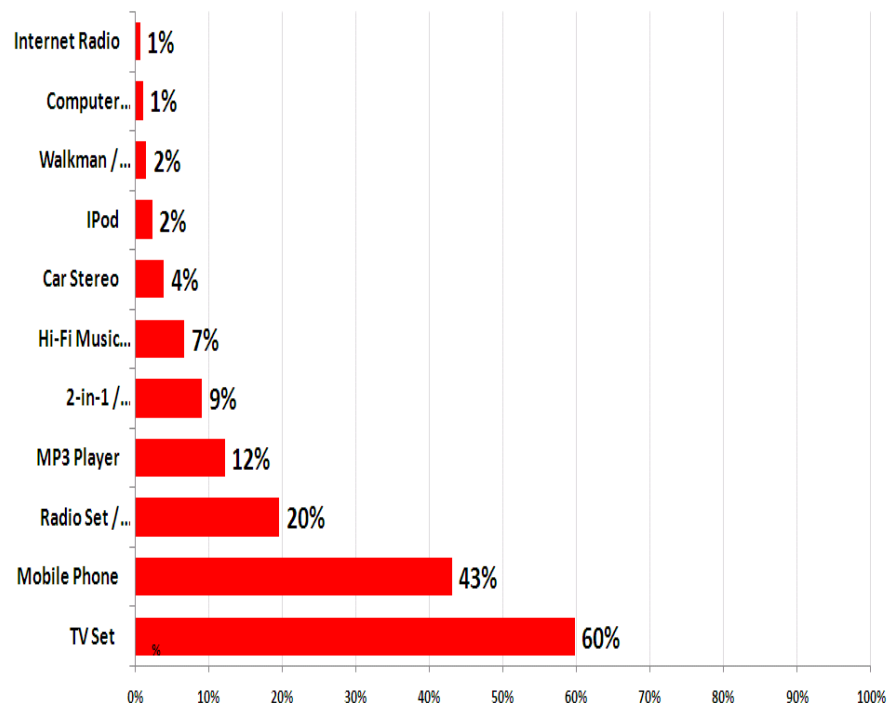
TG: All 12+

RES Time Period: June - July 2010

Market: Bangalore

Devices used for Non Radio Music - Bangalore 2011

Base: FM Owners



Source: RAM Baseline

TG: All 12+

RES Time Period: June - July 2010

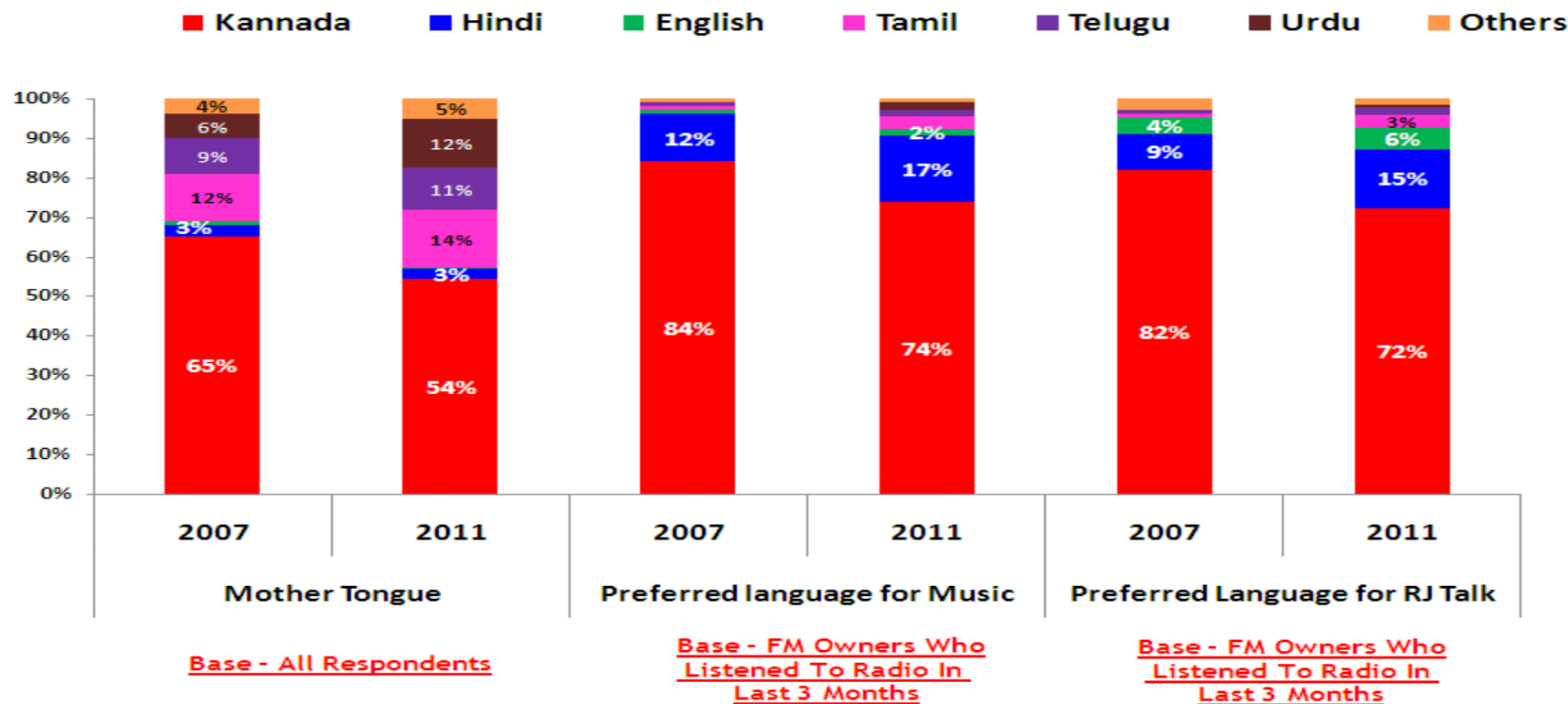
Market: Bangalore

Language Preferences



Kannada music and RJ Talk is preferred maximum but has witnessed decline with respect to 2007.

Language Preference in Bangalore



Source: RAM Baseline

TG:: All 12+

RES Period: Apr-May 2007 & June - July 2010

Market: Bangalore

* Preference for Hindi Music and Hindi RJ Talk has been increased as compared to 2007



Key Insights - Bangalore Market

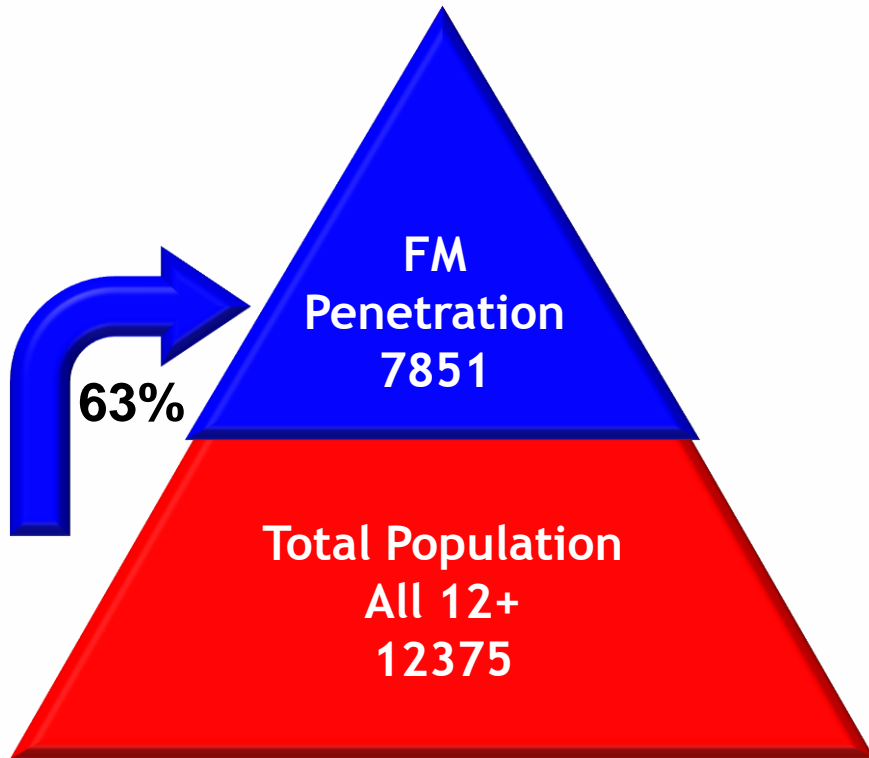
- FM Penetration in Bangalore market has observed an increase from 71% in 2007 to 87% in 2011. (New Universe - 5.27 Mn)
- 54% of FM owners observe Kannada as their Mother Tongue and also more than 70% of them prefer Kannada for Music and RJ Talks
- Preference for Hindi Music and Hindi RJ Talk has witnessed increase as compared to 2007.
- Bangalore market observed increase in its All 25-44 and SEC C D/E audience composition as compared to 2007.
- 44% of the FM owners access to FM through single device whereas 38% of them access through 2 devices.
- Majority of Radio listening has been preferred through Mobile phones whereas TV Sets are preferred maximum for Non Radio Music.

Findings of Radio Baseline Study

KOLKATA

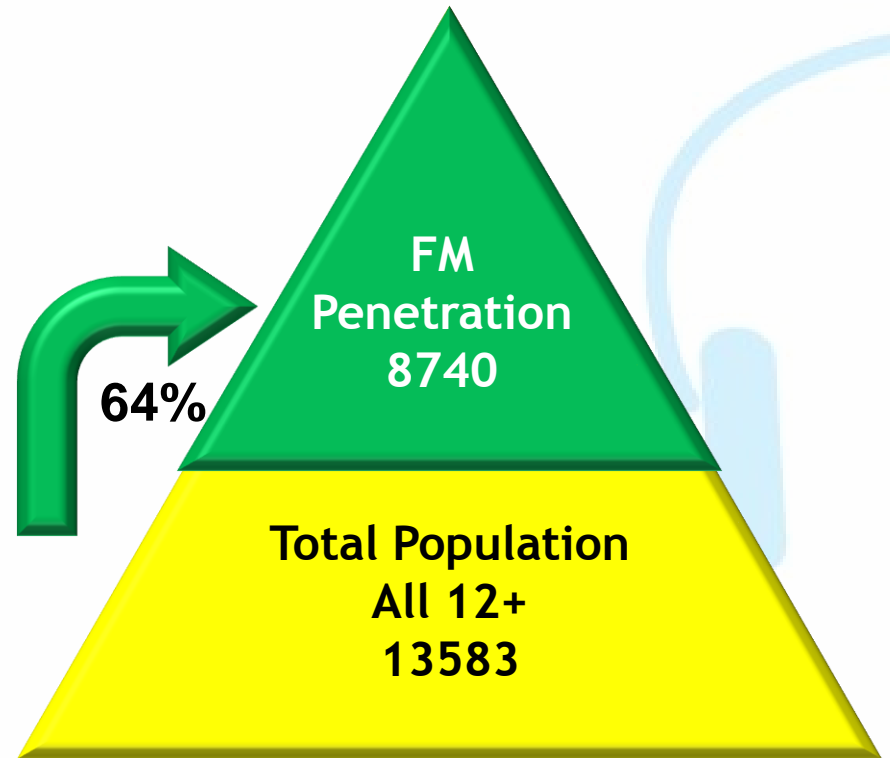


FM Penetration in Kolkata Market



2007

(Figures in 000s)



2011

(Figures in 000s)

Number of FM Devices Owned

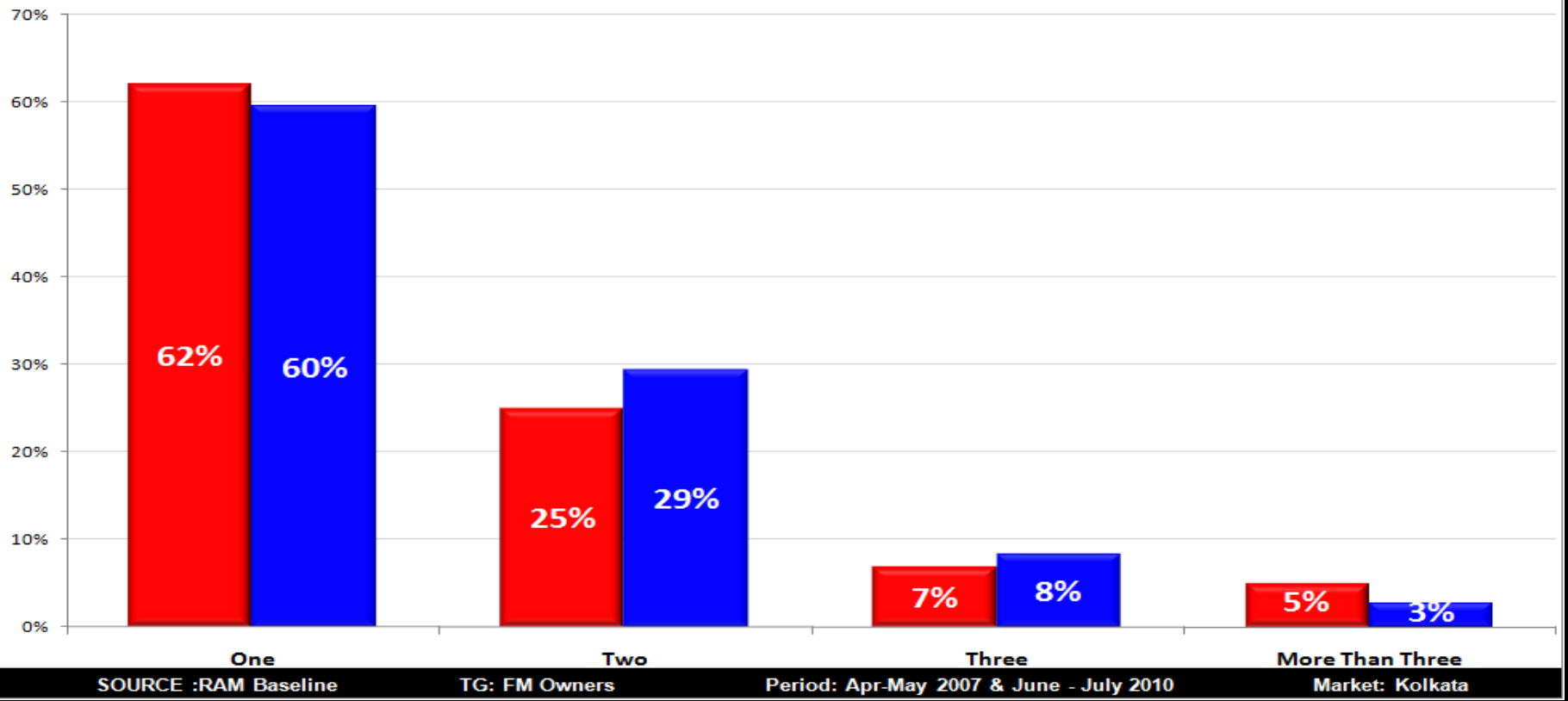


Majority of the listeners have access to FM only through 1 device

Number of FM Devices Owned - Kolkata - 2007 vs. 2011

■ 2007

■ 2011

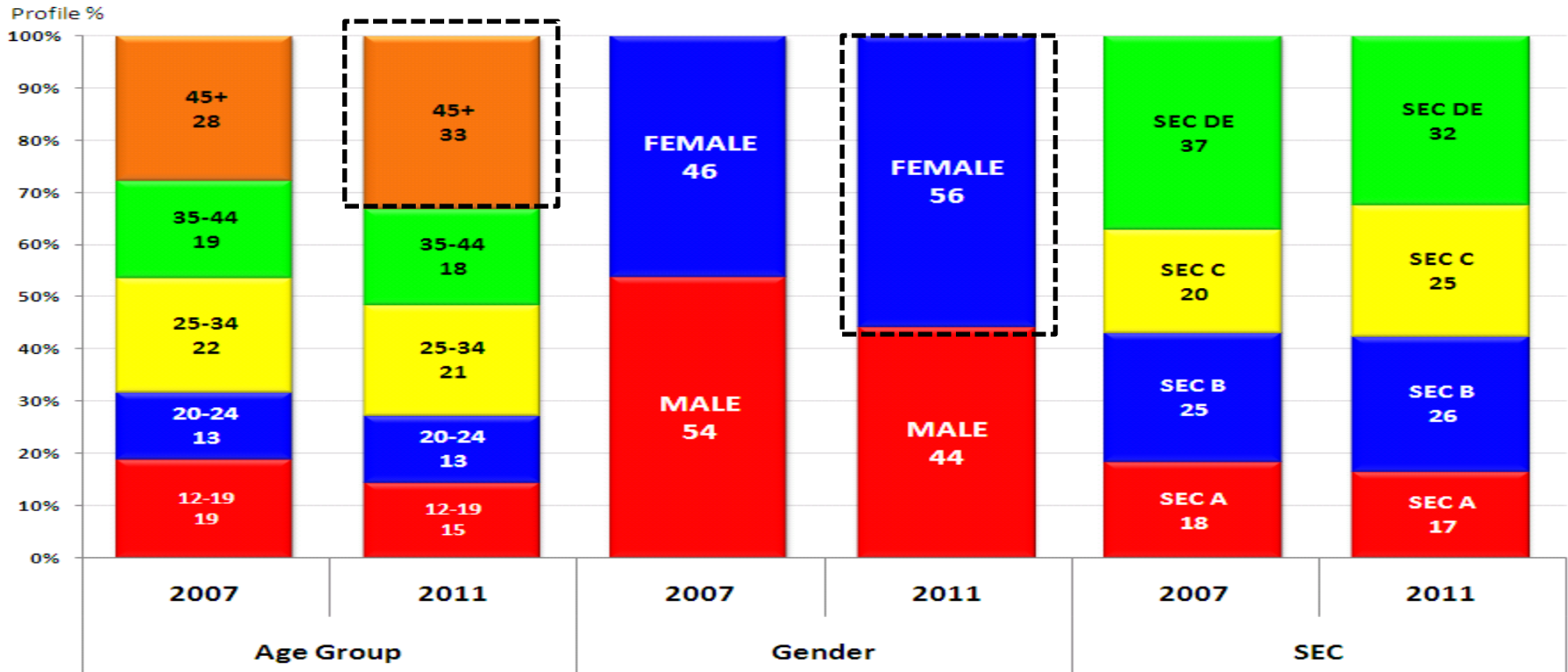


Audience Profiling - FM Owners



Kolkata market observed increase in its All 45+ and Female audience composition as compared to 2007.

Audience Profiling - Total Radio - Kolkata - 2007 vs. 2011



Source: RAM Baseline

TG:: All 12+

RES Period: Apr-May 2007 & June - July 2010

Market: Kolkata



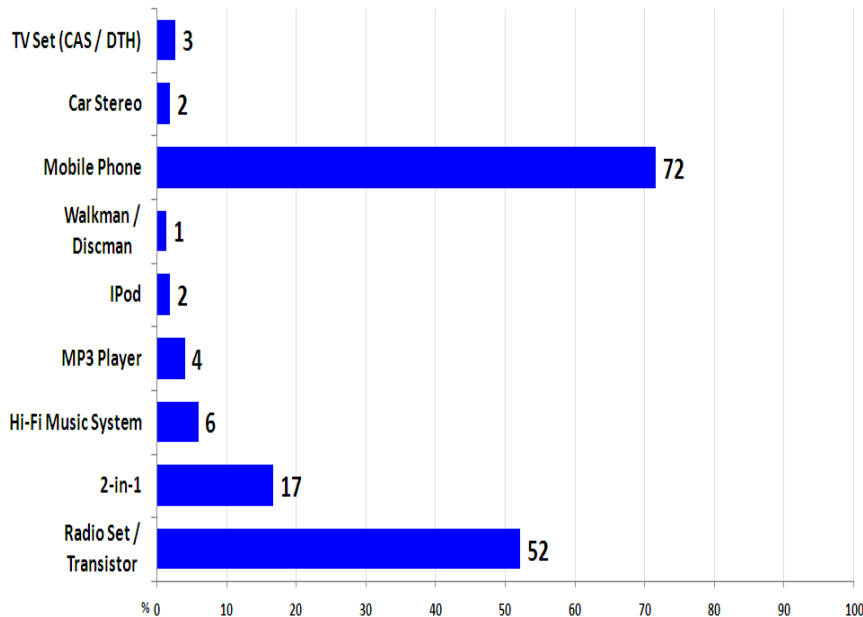
Music on Radio vs. Music on Other Devices



Mobile phones followed by Radio Set/ Transistors has been preferred maximum for Radio Listening whereas TV sets are used maximum for non radio music.

Devices used for Radio Listening - Kolkata 2011

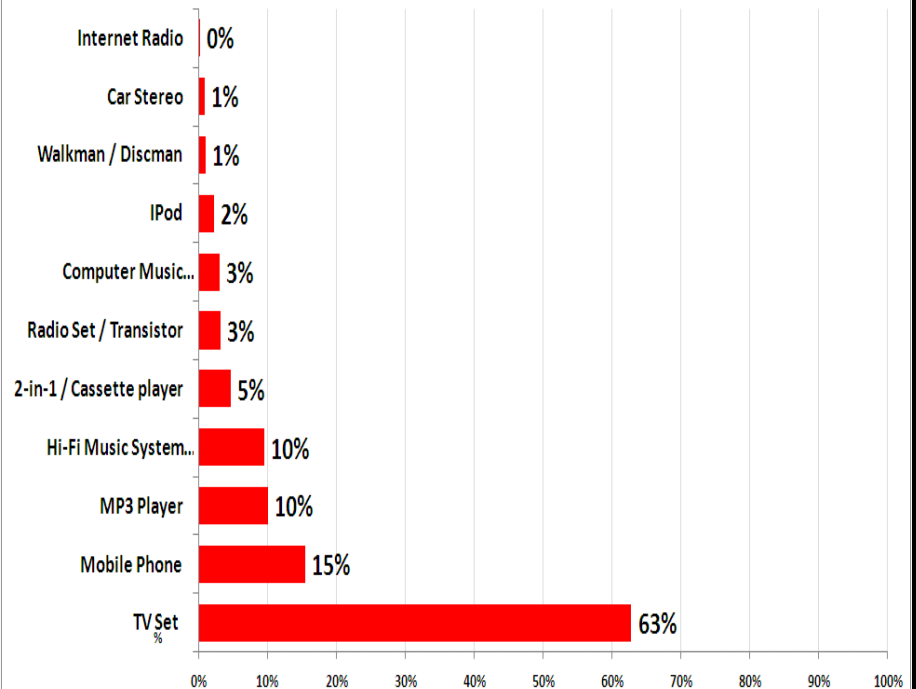
Base: FM Owners



Source: RAM Baseline TG: All 12+ RES Time Period: June - July 2010 Market: Kolkata

Devices used for Non Radio Music- Kolkata 2011

Base: FM Owners



Source: RAM Baseline TG: All 12+ RES Time Period: June - July 2010 Market: Kolkata

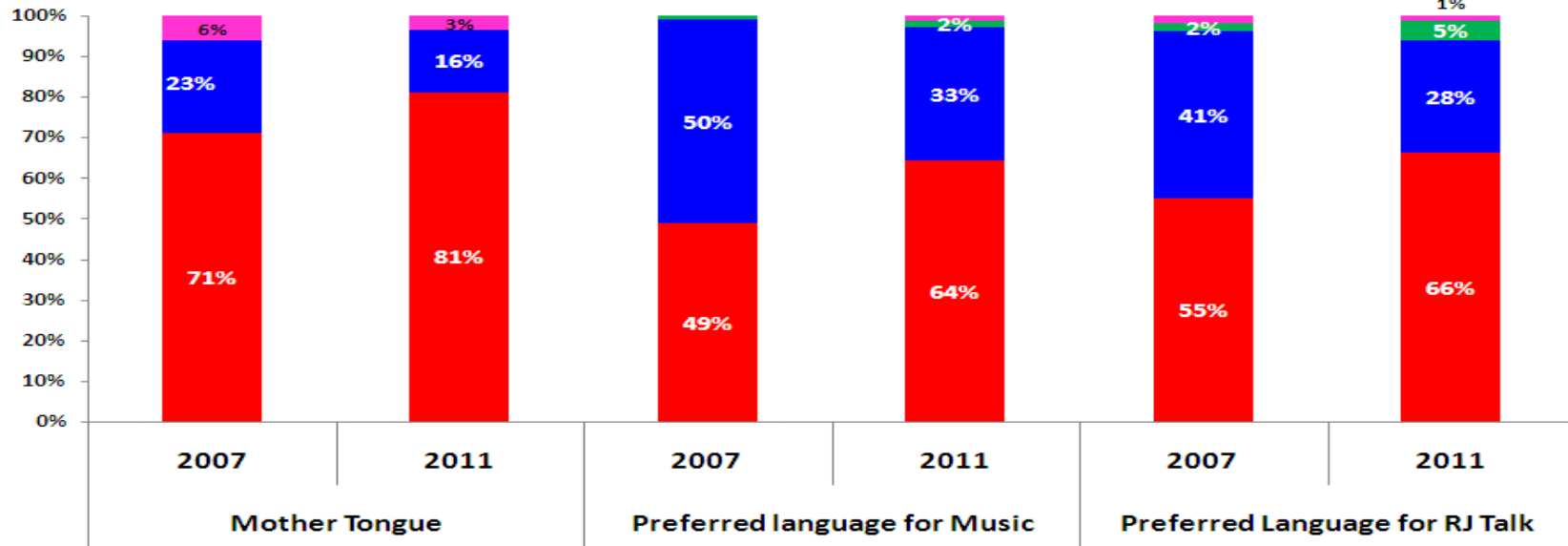
Language Preferences



Majority of the listeners in Kolkata witness Bengali as its Mother Tongue and also preference for Bengali music and RJ talk has increased as compared to 2007.

Language Preference in Kolkata

■ Bengali ■ Hindi ■ English ■ Others



Base - All Respondents

Base - FM Owners Who Listened To Radio In Last 3 Months

Base - FM Owners Who Listened To Radio In Last 3 Months

Source: RAM Baseline

TG:: All 12+

RES Period: Apr - May 2007 & June - July 2010

Market: Kolkata



Key Insights - Kolkata Market

- FM Penetration in Kolkata market has observed minimal increase from 63% in 2007 to 64% in 2011. (New Universe - 8.74 Mn)
- 81% of FM owners observe Bengali as their Mother Tongue whereas apart from Bengali, more than 30% of them prefer Hindi for Music and RJ Talk.
- Kolkata market observed increase in its All 45+ and Female audience composition as compared to 2007.
- 60% of the FM owners have access to FM only through one device.
- Majority of Radio listening has been preferred through Mobile phones and Radio Transistors whereas TV Sets are preferred maximum for Non Radio Music.

CART Analysis

(Classification And Regression Tree)



Control parameters

- *Primary Control parameters*
 - ➔ Essentially the weighting parameters
 - SEC
 - Age
 - Gender
- *Secondary Control Parameters*
 - ➔ Not used for weighting but used to align the panel to represent the universe
 - Geography - a key parameter to be considered in panel selection
 - CART analysis used to determine other secondary parameters
 - ➔ To be controlled at the overall panel level (not at cell level)

Objective:
**To Find out what variables
are most associated with
Radio Listening**



Methodology

- Use Time Spent on Radio as the Dependent Variable
- All other variables captured in RAM as the potential explanatory variables
- Use CART (Classification and Regression Tree) analysis to arrive at priority variables that are associated with radio listening
- Each market analyzed separately

Results for Mumbai



Controls for Radio Listening in Mumbai

1. Preferred language of Listening
2. Household Size
 - 1-3, 4+ individuals
3. Time Spent watching TV (H,M,L)
4. Mode of transport to work/study
 - Walking vs Others
5. Ownership of portable media player
 - ipod, mp3, walkman



** Earlier Controls : Ownership of portable radio, Intensity of TV viewing,*

Results for Delhi



Controls for Radio Listening in Delhi

1. Preferred language of Listening
2. Time Spent watching TV (H,M,L)
3. Ownership of Two-Wheeler
4. Household Size
 - 1-3, 4+ individuals
5. Access to internet connection



***Earlier Controls : Time Spent on Music through non-radio device,
Intensity of TV viewing***

Results for Bangalore



Controls for Radio Listening in Bangalore

1. Presence of Children
2. Preferred language of Listening
3. Time Spent watching TV (H,M,L)
4. Ownership of portable media player
 - ipod, mp3, walkman

Earlier Controls : Time Spent Travelling, Ownership of portable radio, Time Spent listening to music through non-radio device, household Size, Intensity of TV viewing



Results for Kolkata



Controls for Radio Listening in Kolkata

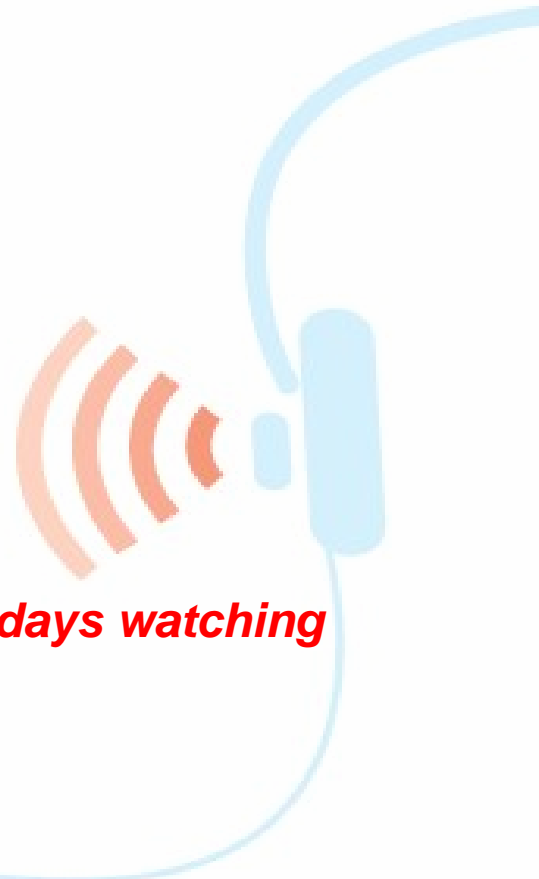
1. Household Size

→ 1-3, 4,5,6+ individuals

2. Time Spent watching TV (H,M,L)

3. Preferred language of Listening

Earlier Controls : Preferred language of listening, No. of days watching TV



Common Control Parameters across 4 Markets

- Preferred language of Listening
- Time Spent Watching TV (H,M,L)
- Household Size



Implication of Universe Update

RAM Panel:

RAM Panel would be gradually aligned to the recent panel control variables derived from CART analysis. It would have minimal changes as majority of the control variables were part of the Panel Designing in 2007.

RAM Software Users:

If you have promo plan which is crossing over the universe change weeks, you will need to split the plan & evaluate it over two different universe periods (e.g. If your campaign is scheduled to air between 15th Dec 2010 to 15th Jan 2011, you will need to gather R&F for the period 15th Dec -1st Jan 2011 (up to week 53, the last week of 2010) & 2nd -15th Jan 2011 Jan 2011 individually (from week 1, the first week of 2011))

THANK YOU

