Modelling readership figures for B2B and Niche Magazines (B2B&NM)

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Agenda

1. Introduction

2. Developing the model

3. Evaluating the model

4. Final remarks

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1. Introduction

Media Currency Measurements

- **Newspaper**
- **Magazines**
- **Radio**
- **TV**
- **Internet & mobile**

- ***B2B Magazines and niche magazines?***

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The B2B & Niche Magazine market

- In 2013, TNS Gallup and the association of B2B Magazines and Niche Magazines ("Fagpressen") started to discuss how we could better document the readers.

- Circulation: **From 510 to 425.000 copies**. The association of B2B&NM ("Fagpressen") has 221 members where ***192*** carry ads (2014).

- <u>Unique qualities:</u>
  - A very important source of information about products & services.
  - Decision makers and opinion leaders.
  - Half of the population reads B2B & NM monthly.

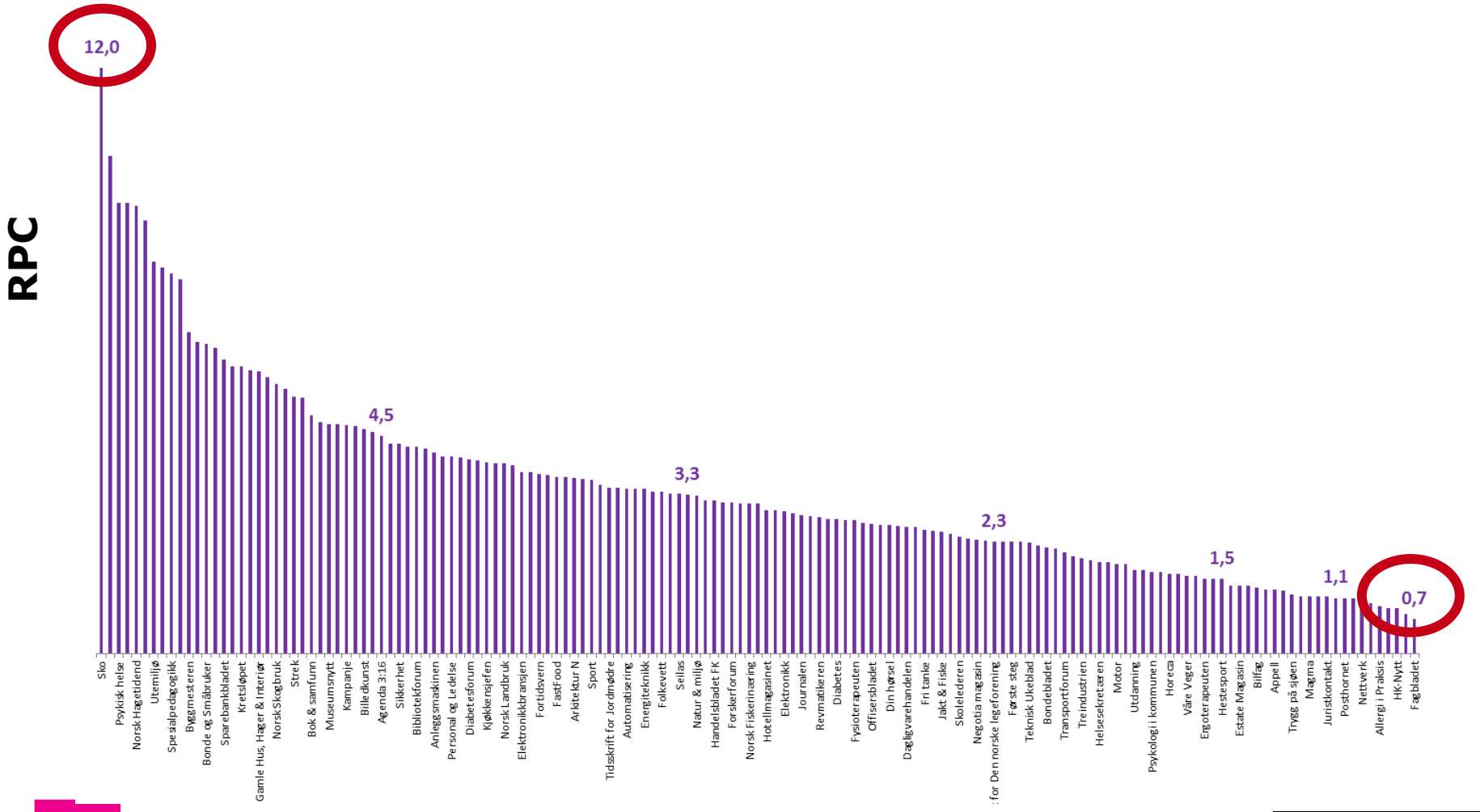
Measuring B2B&NM

- In general, we measure the number of readers for magazines through a survey with a representative sample of the population.
- Most of the B2B&NM have a small circle of readers and readership surveys among the population will be too expensive.

TNS Gallup has developed three approaches for documentation of the B2B&NM:

1. Incorporation of general questions about readership of B2B&NM in the **TGI**. The readership figures for NRS for newspapers and magazines are reported in the same software.
2. Development of **surveys among subscribers**.
3. Building a **model that estimates an average issue readership** for each magazine. The model is based on experience from earlier readership surveys and the circulation figures for each magazine.

Readers Per Copy (RPC) for B2B&NM: From 0,7 to 12



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Relationship between circulation and reading

- **"Vi i Villa"** has only 1 reader per copy
  - Free subscription
  - Distributed to persons in housing
  - Not accessible other places

- **"Illustrert vitenskap"** has 12 readers per copy
  - General field of interest
  - Content relevant for a long time
  - Often passed along to other households
  - Accessible other places

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Variables that may explain RPC

- **Scope of interest**: General *vs.* specific/niche interest
- **Freshness of the content**: News *vs.* "long life-time"/historic content
- **Categories**: Agriculture, manufacturing, construction, catering, transport, finance, public sector, health, culture, leisure etc.
- **Professional or hobby/interest**: B2B magazines linked to a profession or an industry *vs.* hobby/interest
- **Type of distribution**
  - Subscription, membership subscription, single copy sale and/or free subscription/distribution
  - Distributed directly to private person or to a company/organisation
- **Access for readership**: Reception area of companies, cafeterias, hospitals, cafes, waiting rooms, libraries etc.

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2. Developing the model

Building the model

- The model is developed in close relationship with the association of B2B & NM. The association has detailed knowledge of all of the magazines and the relationship between readers and circulation.

- With the use of **84 readership figures** from previous readership studies along with other accessible and relevant variables, we have created a model that can estimate an average issue readership for all of the members in the association of B2B & Niche Magazines.

- This model is applied to estimate readership figures for the magazines which are not measured in other surveys.

Various analyses

- Accessible data are used to determine which composition of variables that can explain the variation/change in the average issue readership figure in the best possible way.

- Implementation of various bivariate and multivariate analyses:
  - Frequency tables
  - Scatter plots
  - Cross tabulations
  - Correlation
  - Bivariate regression
  - Multivariate regression
  - Interactions between variables
  - Data transformation

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Goodness of fit and significant variables

- The final model obtained an R-square value of **94%** which indicates that the model explains the variation of the data very well.

- The following variables are included in our model:
  - Total circulation figure
  - Type of distribution
  - Mixture of distribution types
  - Professional or hobby/interest
  - The category “Agriculture and Fishing”
  - Two interaction variables between the explanatory variables

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Explanation of variables in the model

Readership figures (AIR)	Measured AIR from 2007, 2009 or 2013. Logarithmic transformed to obtain a higher linearity between AIR and circulation.
Total circulation	Total circulation from 2007, 2009 or 2013 transformed into logarithmic scale
Amount of paid subscribers	Amount of paid subscribers
Amount of membership subscribers	Amount of membership subscribers of an association or organisation
Professional or hobby/interest:	B2B magazines linked to a profession or an industry vs. hobby/interest Three categories: Professionals, branch or interest/hobby. The parameter "professional magazines" is an explanatory variable in the model.
A mix of distribution	A magazine is coded as "mixed distribution", if none of the distribution types exceed 65 % of total distribution.
Industry categories	"Agriculture and Fishing" or not
Two interaction variables	A model with to important explanatory variables (total circulation and type of magazine) were developed. Based on the residuals for each magazine, we created two new category variables. They are called interaction variables.

Contribution of each explanatory variables in the model

Total circulation	30 %	(positive effect)
Amount of paid subscription	19 %	(positive effect)
Amount of membership subscription	1 %	(positive effect)
Professional or hobby/interest:	9 %	(negative effect)
A mix of distribution	7 %	(negative effect)
Industry categories	7 %	(negative effect)
Two interaction variables	27 % (1 is positive and 1 is negative)	

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3. Evaluating the model

Estimated readership figures by using our model

- The model has estimated a new readership figure for the 66 of the B2B & Niche Magazines used in the model, based on their distribution for 2013. We then have the opportunity to compare estimated figures with the measured.
- Any change in distribution over the latest years will change the estimated readership figure.
- Other discrepancies is due to either a changed situation for the magazines over the years, "errors" of earlier measured readership or distribution figures, or that the model does not explain 100%.

- The model has estimated a readership figure for the remaining **85** magazines based on their distribution for 2013.

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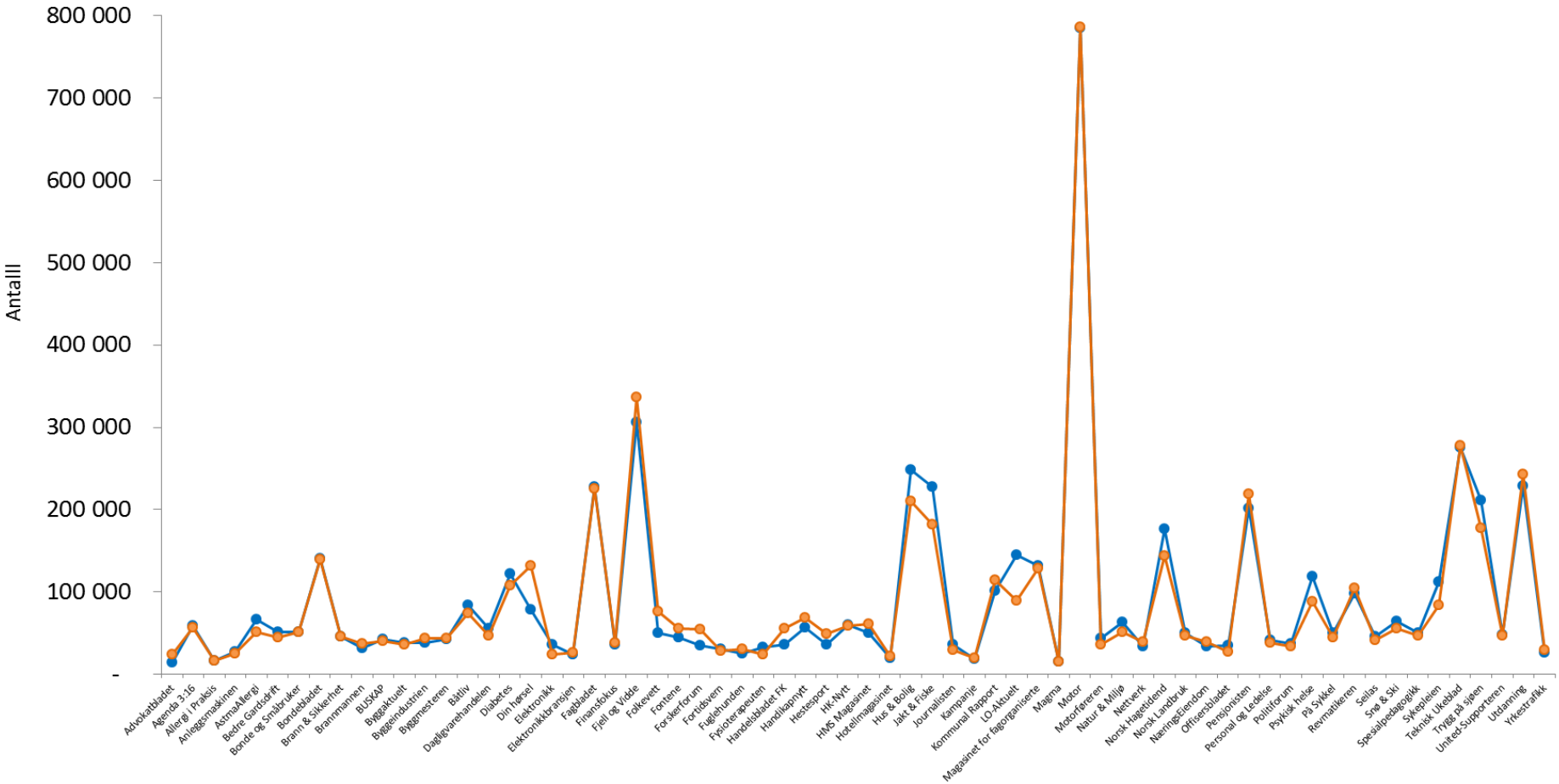
Measured and estimated readership figures: The model explains 94% of the variation



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Source: The measured figures are from different **years** – from 2007, 2009 and 2013 and they have been collected with different **methods** and **institutes**.

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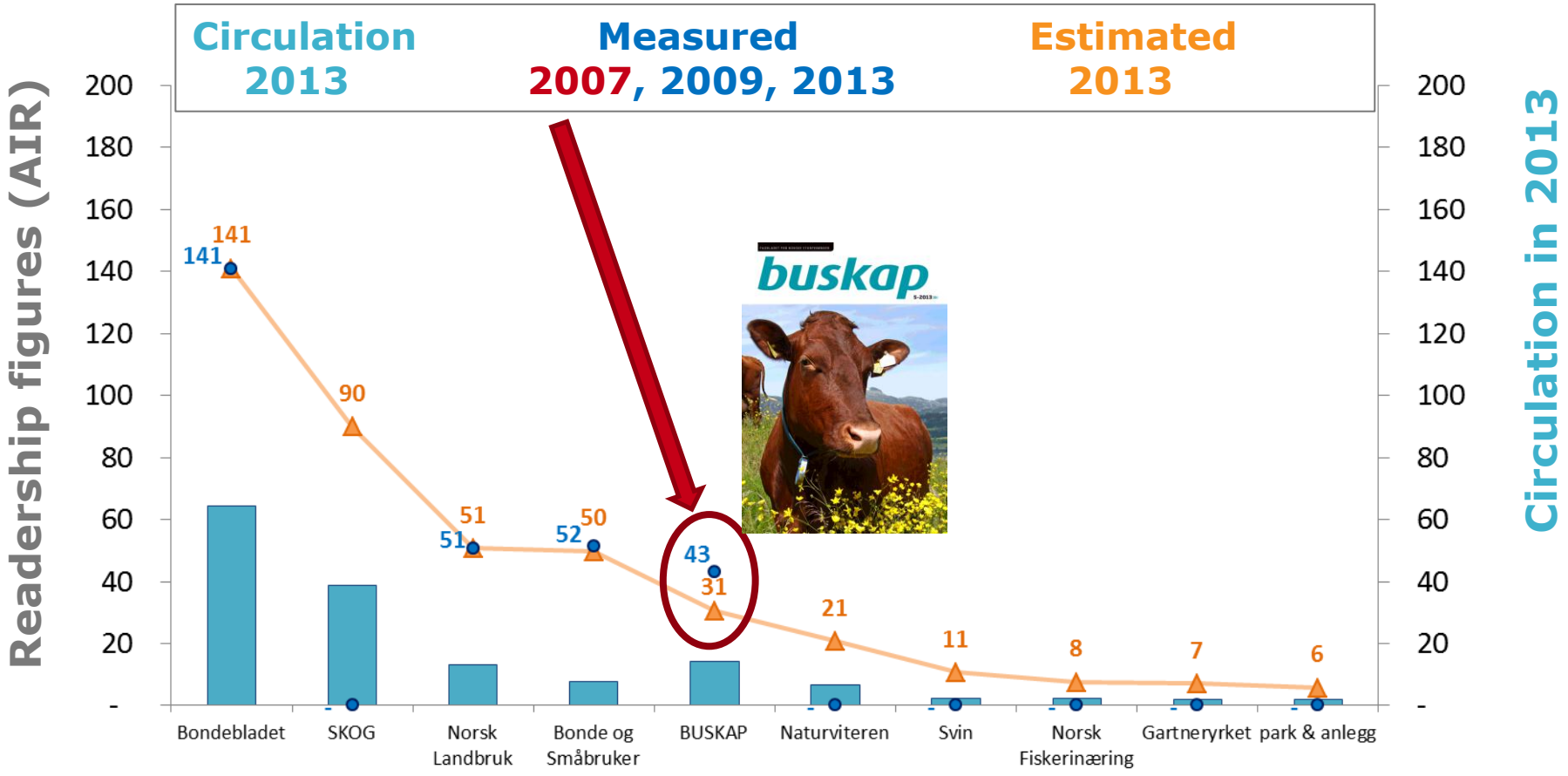
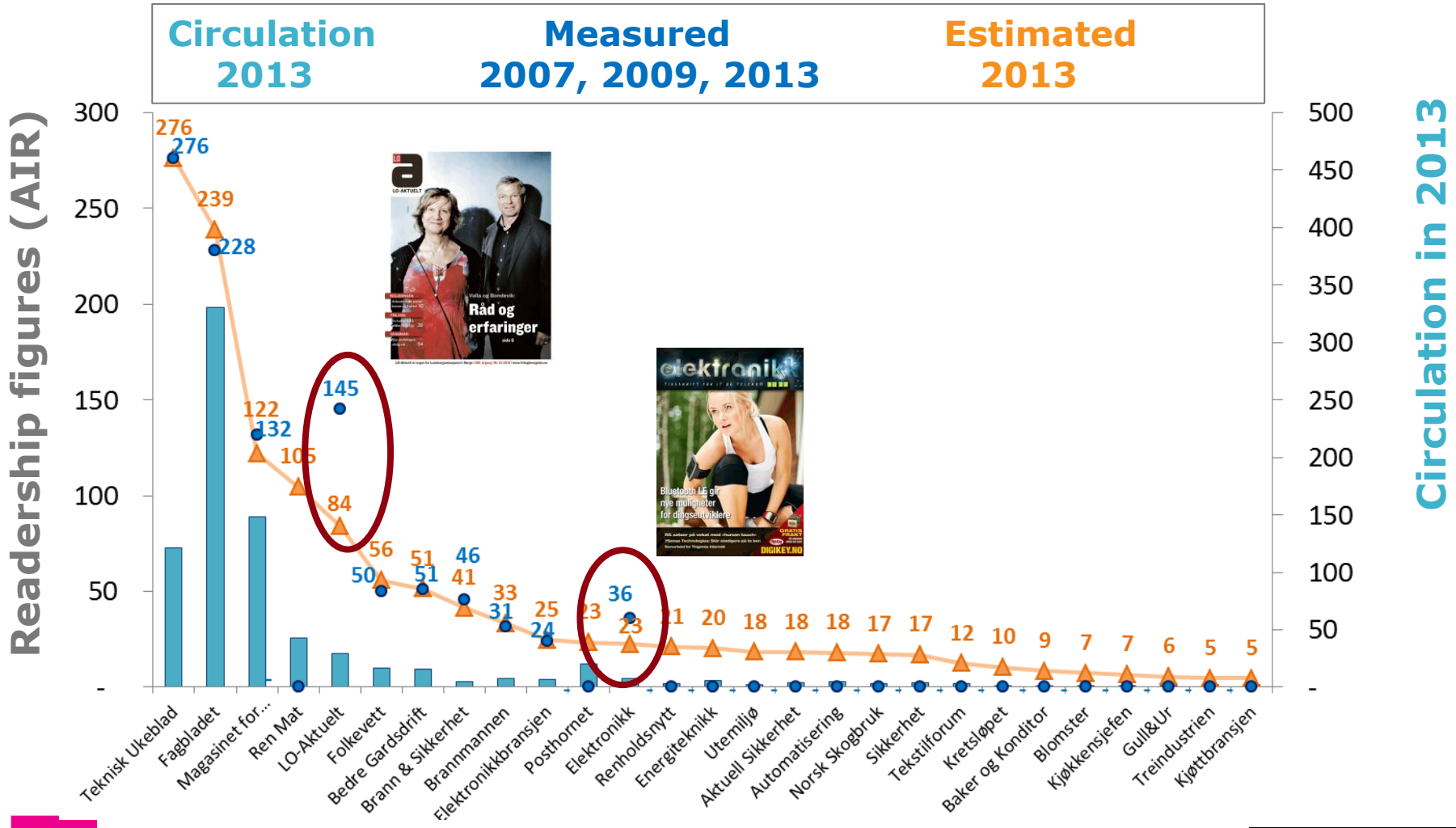
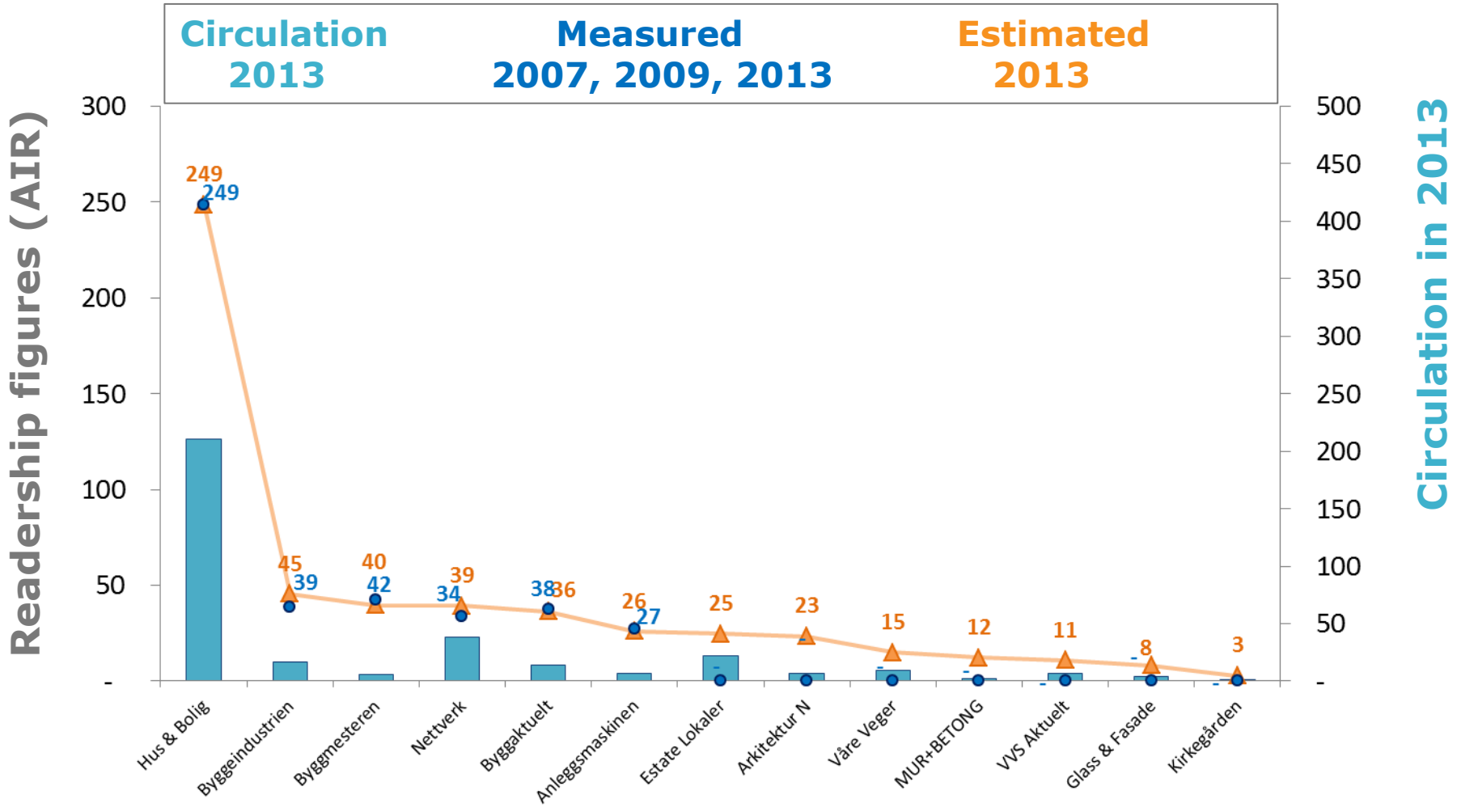
Measured and estimated readership figures: Category 1: Agriculture and fishing



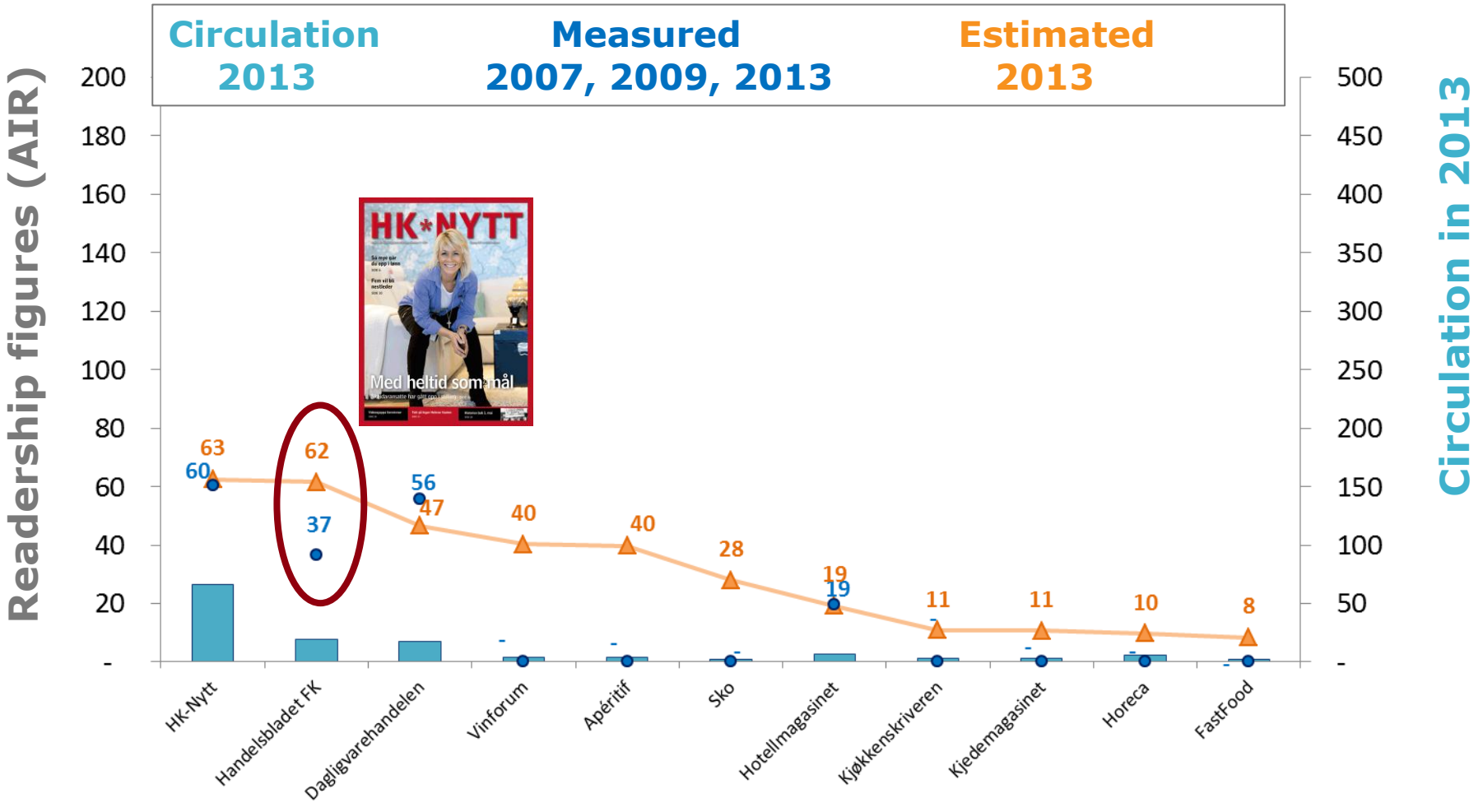
Measured and estimated readership figures: Category 2: Industry & Engineering



Measured and estimated readership figures: Category 3: Construction



Measured and estimated readership figures: Category 4: Trade, hotel & catering



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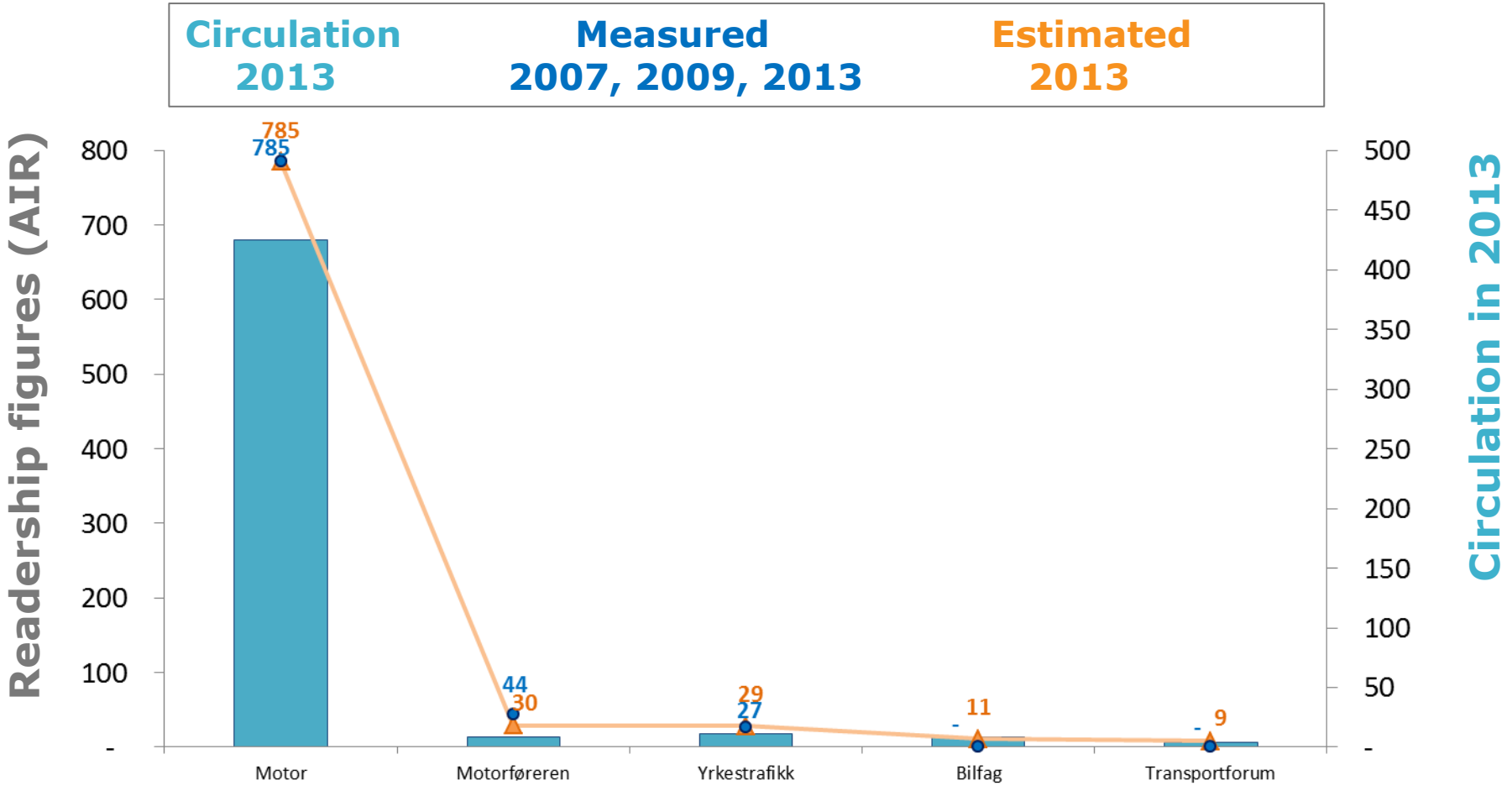
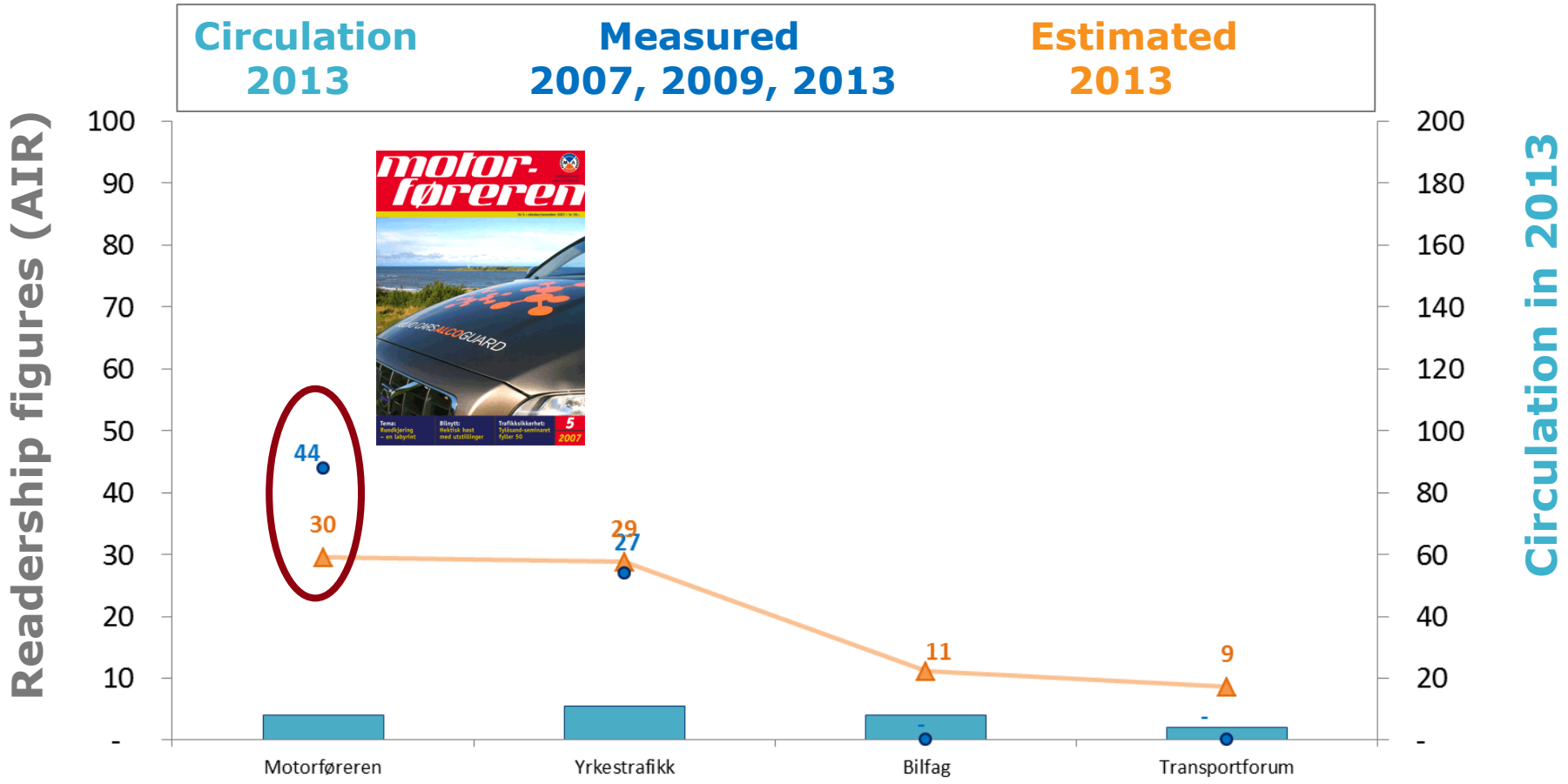
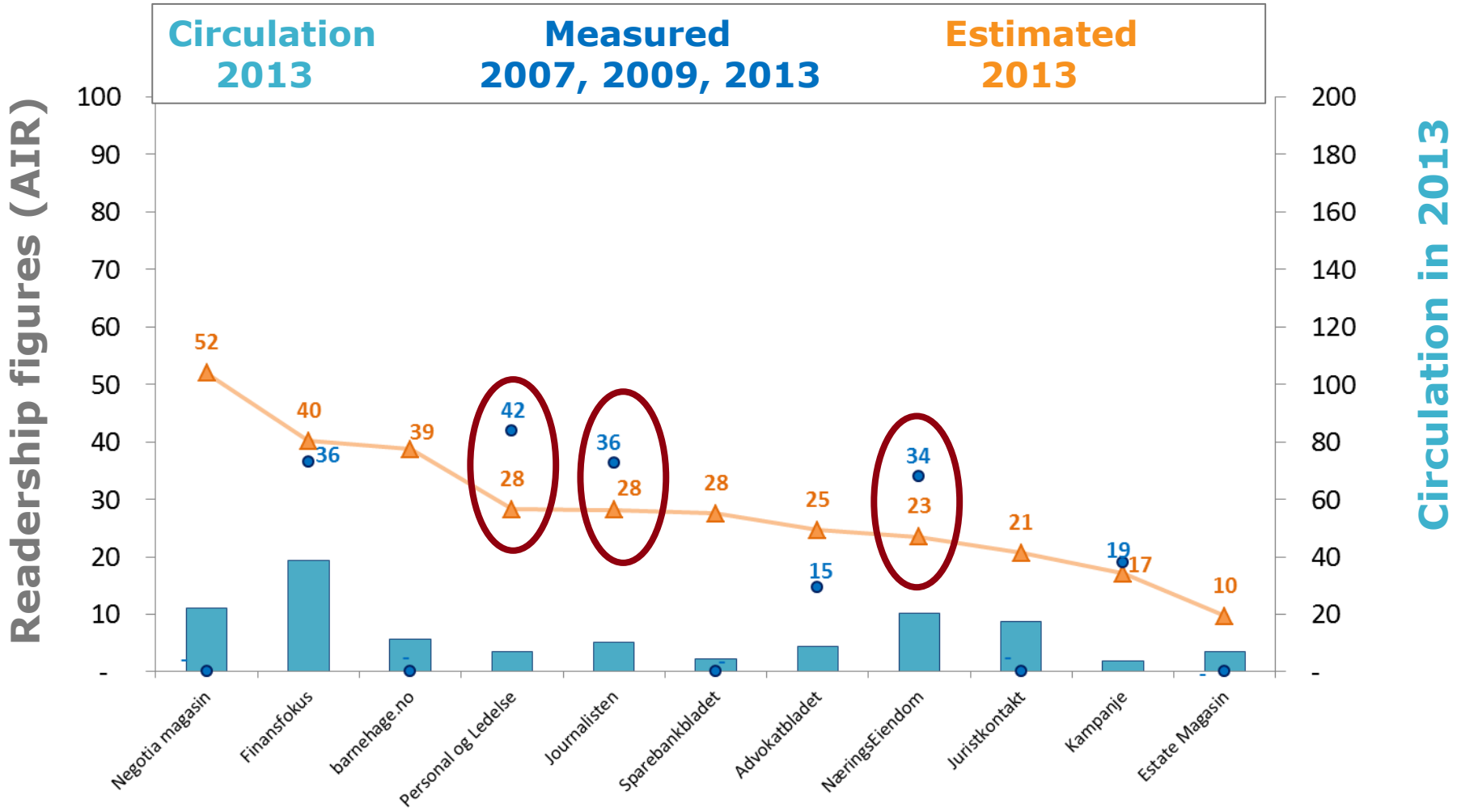
Measured and estimated readership figures: Category 5: Transport (1)



Measured and estimated readership figures: Category 5: Transport (2)



Measured and estimated readership figures: Category 6: Services, finance etc.



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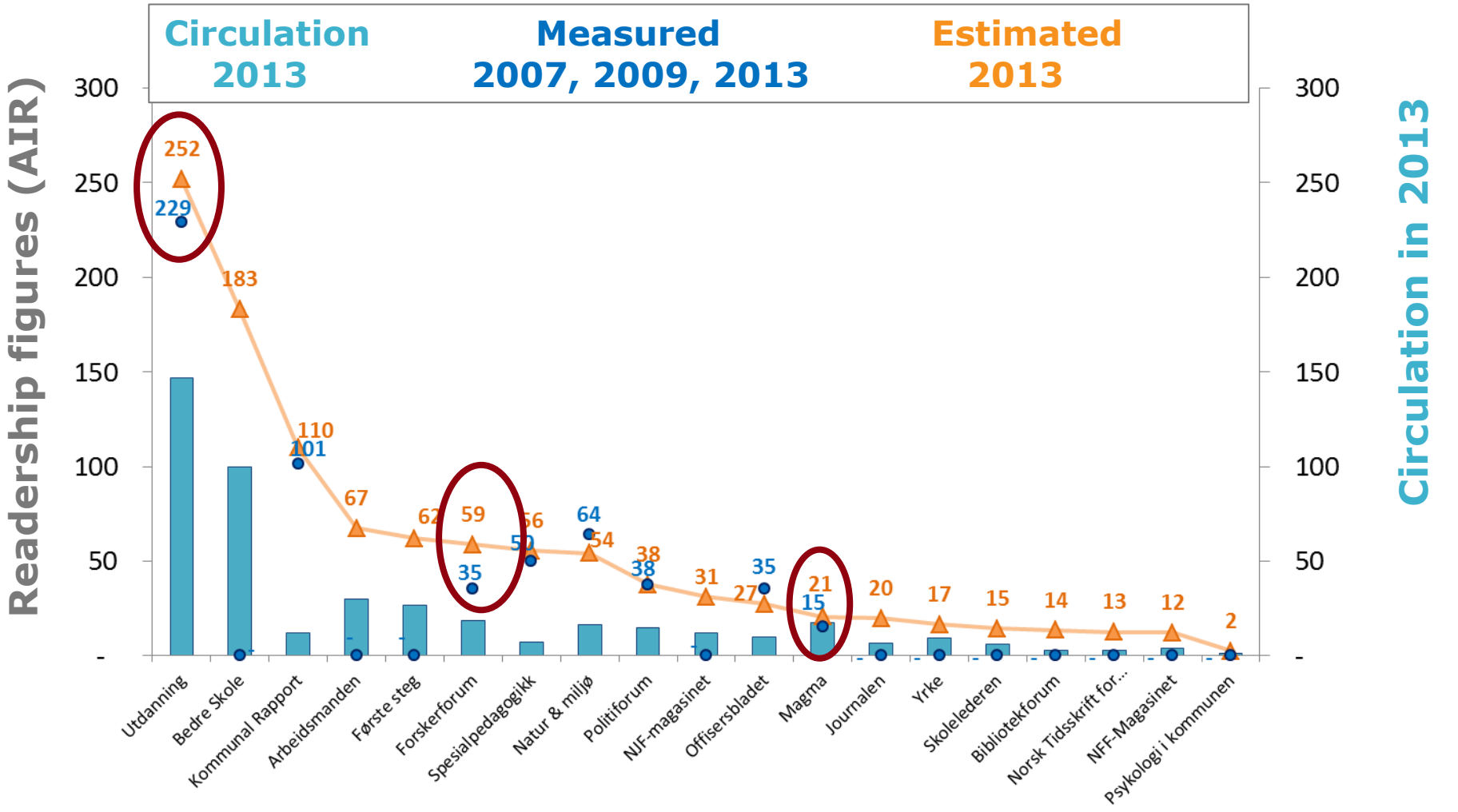
Measured and estimated readership figures: Category 7: Public sector & teaching



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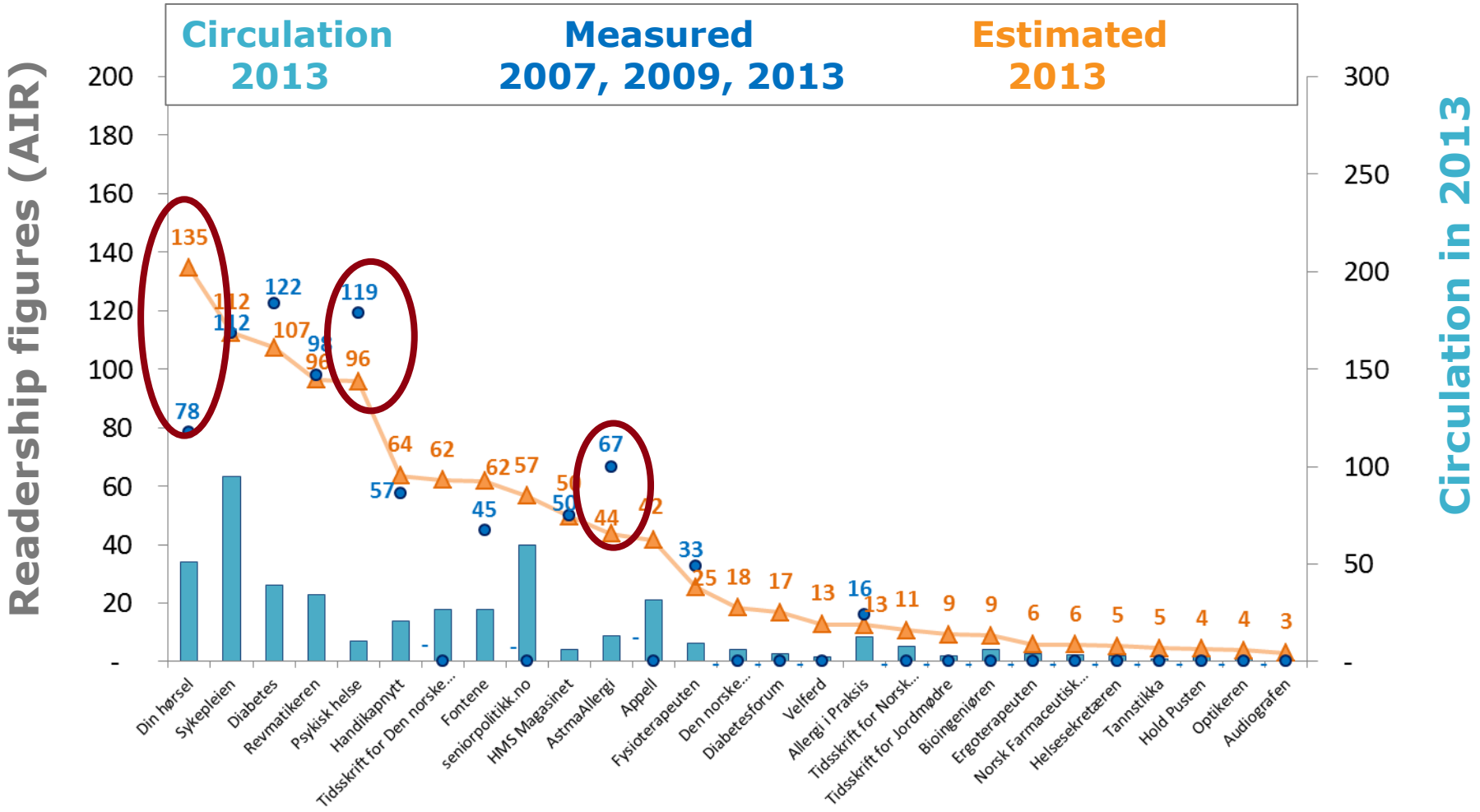
Measured and estimated readership figures: Category 8: Health



4. Final remarks

Summary

- We have developed a model estimating readership figures which explains 94% of the variation.
- When we compare measured readership figures with estimated figures we find a very high consistency. Most of the deviations between measured and estimated figures can be explained by change in the circulation and type of distribution from the year the latest readership figures were collected.
- The Board of Fagpressen (B2B & NM) has applauded the model.
- The media agencies think this is the right way forward.
- The model and the figures will be launched in the autumn.

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Future perspectives

- Modelling figures for ultra local newspapers.
- Economic regression and the digital transformation challenge the research for the print industry.
- Modeling of readership figures could be a simple approach in new markets where there are less money for classical media research.
- Media research trends:
  - From single source → Multi Media analyses
  - Data integration and modelling
  - Big Data

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Thank you !

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