

19 November 2015

WBS Information Systems & Management faculty seminar

# Data and Value: Advertising Audiences as Data-based Products



Aleksi Aaltonen  
Warwick Business School

[aleksi.aaltonen@wbs.ac.uk](mailto:aleksi.aaltonen@wbs.ac.uk)

Business Value of IT literature **(new!)**

Audience as a Product

Digital Disruptions in the Media Industry

CASE: Advertising-funded Telco

Data and methods

CDR **data** token vs. traditional measurement instrument

Analysis

Findings and Reflections

Final Speculations

# Business Value of IT Literature

Traditionally, business value is measured as various forms of economic performance and, ultimately, shareholder value (Ceccanogli et al., 2012; Kohli and Grover, 2008; Schryen, 2013; Suprateek et al., 2012)

More recently, shift to: 1) value co-creation among firms; 2) understanding internal value and the process of value creation (Kohli and Grover, 2008; Varun and Kohli, 2012).

Yet, *“the ‘real’ value of cocreation can be materialised only when the derived or invented value is shared and recognised by consumers”* (Kunsoo et al., 2012, p. 311)

Lampinen and Rajala (2014) draw from service-oriented logic (Vargo and Lusch, 2004; 2008, Lusch and Nambisan, 2015) to study value co-creation together with customers

# Audience as a Product

Commercial media subsidizes content and services to consumers, who are packaged as audiences to paying advertisers

Attention is the key resource for manufacturing the audience product

Audience measurement arrangements shape media products, content and the whole industry (Napoli, 2003: 83; Carr, 2008, Bermejo, 2009).

# Digital Disruptions in the Media Industry

New media spaces (not just TV, radio, print) – anything that attracts attention can be turned into an advertising space

Measurement data used to be expensive – now there is a deluge of detailed data on media consumption

Cutting off middle-men such as ratings agencies – anybody can run and measure an ad campaign (Bermejo, 2009)

The temporal sequence of predicting audience, sending out advertisements, measuring audience has collapsed

# CASE: Advertising-funded Telco

A startup telecommunications operator tries to deploy media business model in telecommunications industry

The company sends advertisement messages to subscribers, who get free text messages and voice call minutes in exchange

But, no sensible advertiser is ready to pay for advertising unless it knows how much and what kind audience it bought – there is no value in unknown audience and, hence, no marketable product

# Narrative\* analysis of the process of audience construction

<i>Type of evidence</i>	<i>Quantity</i>	<i>Details</i>
Observation log	62 days	13 February 2009–15 May 2009
Interviews (during the fieldwork period)	34	26 different informants
Press releases	26	November 2006–May 2010
Blog posts (on the company website)	60	November 2006–May 2010
Intranet usage statistics	335 days	July 2008–May 2009
Documents	340	Reports, intranet pages, etc.
Instant messaging logs	59	Conversations between employees
Photographs	147	Meetings, office events, etc.
<i>In-situ analysis</i>		
Weekly summaries	14	One per observation week
Tailored interview guides	34	One per interview

*How does the audience product come into existence as an entity that customers consider worth buying?*

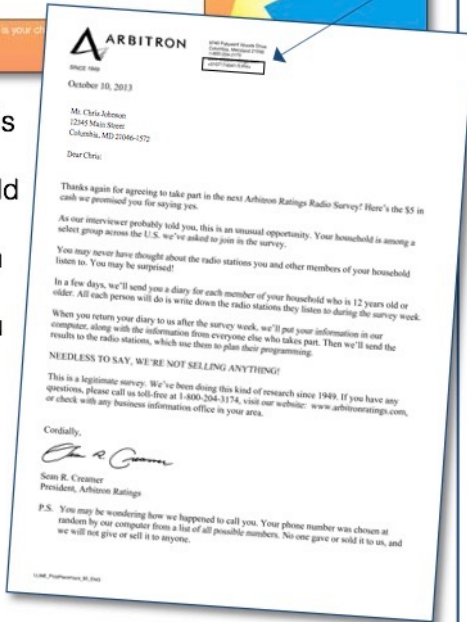
097369D2D7372762D31080000000000000000  
001;1;33668741168;3322208;6;200811010  
04923;20081101004923;20081101004923

CDR **data** token generated by a mobile  
network infrastructure



# Your Radio Ratings Diary

You have been invited to take part in the Arbitron Radio Ratings. You may have received a letter and a brightly colored box from us. This is our way of letting you know that your household has been randomly selected to participate in the radio ratings. It will contain materials for you to let radio stations and other media outlets and businesses know what you listen to.



If your diary doesn't arrive in time for the Thursday start of the radio survey, you can make sure that your listening is included. Fill out this radio ratings diary for seven consecutive days beginning on a Thursday and ending on the following Wednesday.

If you have any questions about instructions for completing a diary day page, please call us toll-free at 1-800-638-7091.

**Your input and opinions really matter!**

**Questions?** Call us toll-free at 1-800-638-7091  
**Visit our website:** [www.arbitronratings.com](http://www.arbitronratings.com)

At the top of each page fill in:

- Your phone number
- Your household ID number (from the letter we sent you)
- The date for each diary day page

### Start/Stop Times

Write the time you start listening and the time you stop listening.

### Station

- Write the call letters, dial setting, or station name. If you don't know, write the program name. If you listen over the Internet or to a satellite radio service, please include the station name or channel number.

- Mark AM or FM.

### Place

Mark where you listen to radio.

### No listening?

If you haven't heard a radio all day, mark (x) the box at the bottom of the page.

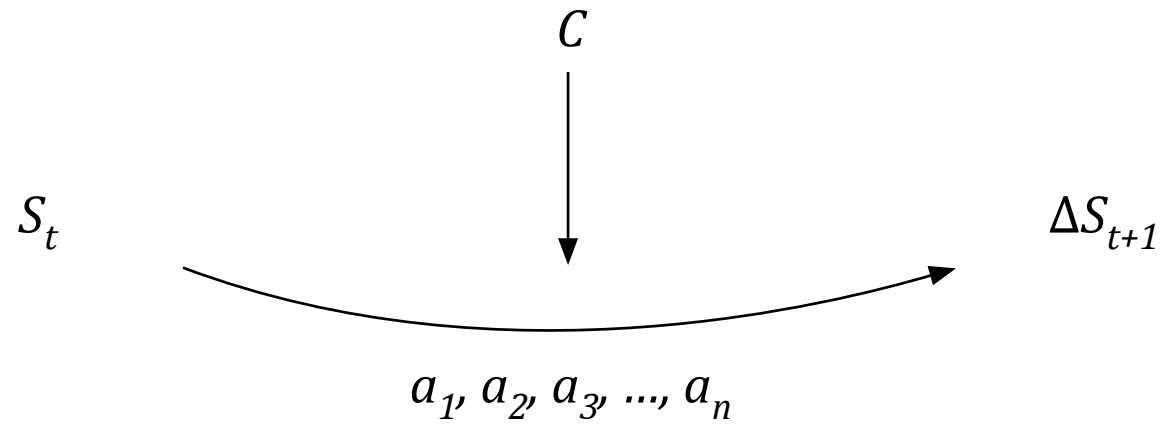
## Instructions for Completing a Diary Day Page

Phone Number: (123) 555-7890 Household ID Number: 123456  
FILL IN PHONE NUMBER FILL IN HOUSEHOLD ID

Day 1, Thursday: 2/14/13  
FILL IN DATE

	Start/Stop Times		Station Call letters, dial setting, or station name (Don't know? Use program name.)	Mark (x) one		Mark (x) one			
	Start	Stop		AM	FM	At Home	In a Car	At Work	Other Place
Early Morning (from 5AM)	5:45	7:15	KGTU		X	X			
	7:15	7:40	108.5		X		X		
	9:30	:	KEM	X				X	
Midday	:	:							
	:	:							
	:	2:00							
Late Afternoon	2:15	2:35	Alpha Satellite Radio - Ch 288					X	
	4:20	4:25	Internet - WGXP				X		
	:	:							
Night (to 5AM Friday)	7:05	9:50	Jo Cauvery Show		X				X
	:	:							
	11:30	12:15	Robin 87.5			X	X		

If you didn't hear a radio today, please mark (x) here:



*S = state of the audience*

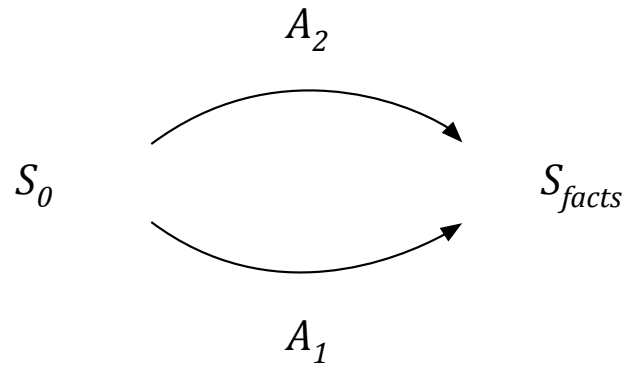
*t = time*

*C = conditions*

*a<sub>1</sub>, a<sub>2</sub>, a<sub>3</sub>, ..., a<sub>n</sub> = actions*

*ΔS = changed state as a result of action*

Notation adapted from Abell, 2004; 2009



$A_1$  = the production of metrics

$A_2$  = the use of software reporting tools

$S_0$  = data mass (e.g. CDR data token)

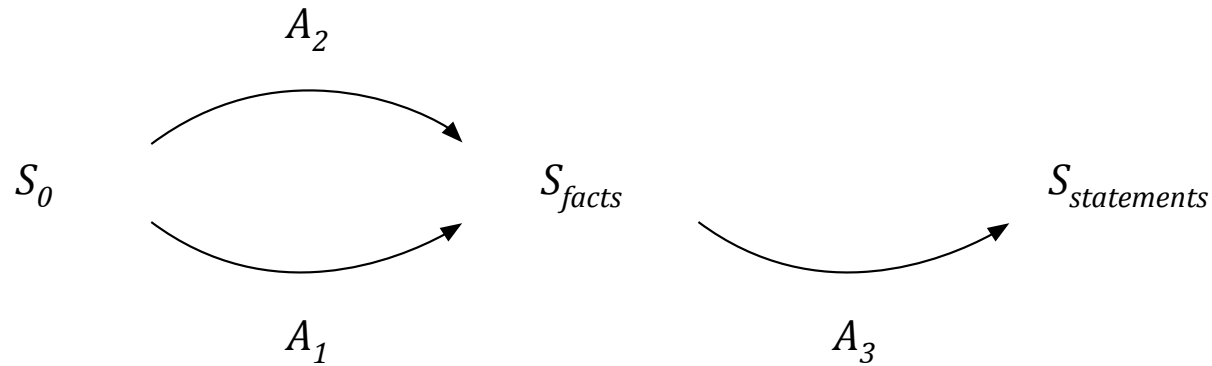
$S_{facts}$  = data-based facts (e.g. response rate)

response rate

29 %

“Member experience reporting [tool] makes it possible to filter the data in a number of different ways. MCM superimposes different views on top of each other. MCM says that he uses the data: to understand the member base, recognize misbehavior (individual user accounts can be recognized from the data), target customer relationship management operations, and to sort out malfunctions.”

Observation log



$A_1$  = the production of metrics

$A_2$  = the use of software reporting tools

$A_3$  = reporting, PR and marketing operations

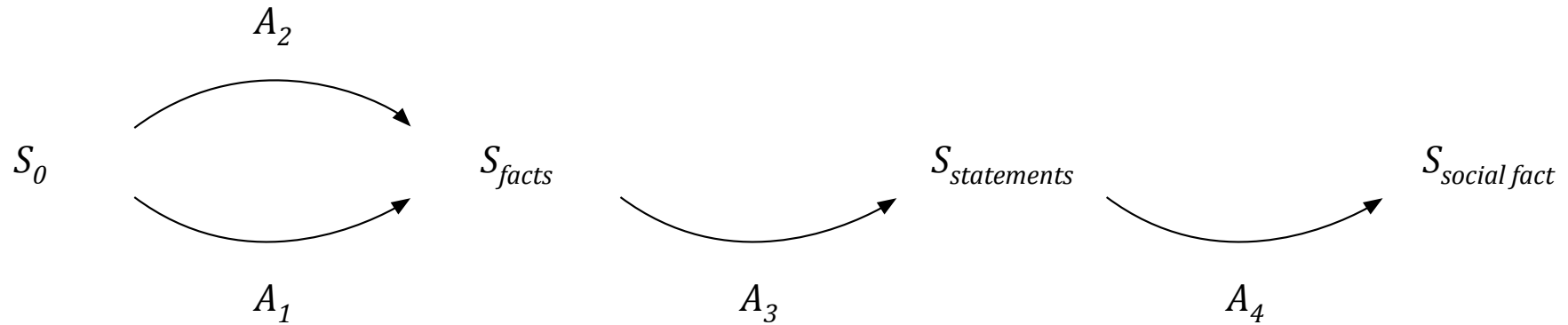
$S_0$  = data mass (e.g. CDR data token)

$S_{facts}$  = data-based facts (e.g. response rate)

$S_{statements}$  = public, verifiable statements (e.g. press release)

“[Company], the new mobile network for 16-24 year olds funded by advertising, has signed up over 100,000 members since its launch in [country] at the end of September, 2007. [...] The ad campaigns that fund the service have generated industry leading average response rates of 29%, at a time when trust in other forms of mass advertising is falling and brands are find-ing it increasingly difficult to engage with young people.”

Excerpt from a press release



$A_1 =$  the production of metrics

$A_2 =$  the use of software reporting tools

$A_3 =$  reporting, PR and marketing operations

$A_4 =$  the reproduction of company statements

$S_0 =$  data mass (e.g. CDR data token)

$S_{facts} =$  data-based facts (e.g. response rate)

$S_{statements} =$  public, verifiable statements (e.g. press release)

$S_{social\ fact} =$  audience as a social fact (e.g. analyst report)



”Brands [advertisers] have been impressed with average campaign response rates of 25 percent. The richness of the interaction between Company’s members and advertisers has also frequently been impressive. [...] This type of engagement has convinced advertisers that mobile is a viable engagement medium for their target audiences.”

Industrial analyst report

# Findings and Reflections

**The audience emerges from regular interactions** between the company, industrial intermediaries, customers (advertiser) and subscribers (consumers)

**The audience does not appear as a single momentous event,** but through recurrent audience-making events that maintain the chain of evidence and feedbacks

The data does not represent an audience but **the audience is manufactured from the data**, which requires data work to embed data-based facts into an industrial context in which they create value

# Final Speculations

The study of value cocreation should go even further to explore interactions between different stakeholders (not just firms)

Digital systems produce data that are at the heart of the value companies create for clients – not just a support for producing the ‘real’ thing

If we take digital data seriously – not just the representation of something else (Yoo, 2010) – we should study its attributes as a new kind of resource in different industries (cf. RBV)