

Research, Measurement, and Evaluation in Corporate Communications: Alternatives to ROI

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Presentation objectives

1. For public relations practitioners
2. Better public relations through research and measurement
3. New and traditional
4. No mechanics
5. Alignment
6. Role in building organizational value



1 What exactly is ROI?



Why ROI?

- Fundamental to decision-making
- Common language
- Communications/PR need for clearer metrics



What is ROI?

Return

$$\text{ROI} = \frac{(\text{Total € Earned} - \text{Total € Invested})}{(\text{Total € Invested})} \times 100\%$$

Investment



What is ROI?

- Results \neq ROI
- 576 news stories \neq ROI
- 57,423 unique visits \neq ROI
- 176,000 fans \neq ROI
- 12% increase in brand awareness \neq ROI



When to use ROI?

- **Only** when you can measure:
 - € invested
 - € earned, saved, or avoided



Total value of PR > ROI

Total Value of PR > ROI

Total Value of PR = Tangible + Intangible

Total Value of PR = Near-Term + Lasting



PR builds intangibles

- Public opinion
- Customer experience
- Brand equity
- Corporate reputation
- Customer loyalty
- Employee engagement
- Partner relationships
- License to operate / regulations



2 Begin with theory

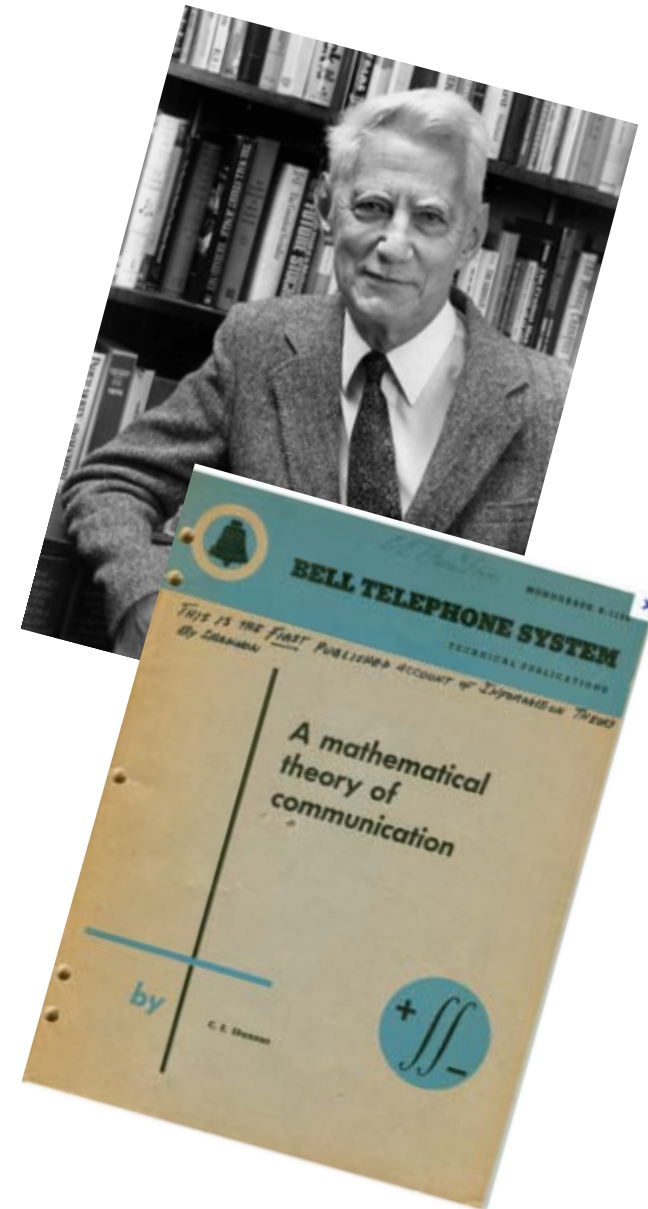


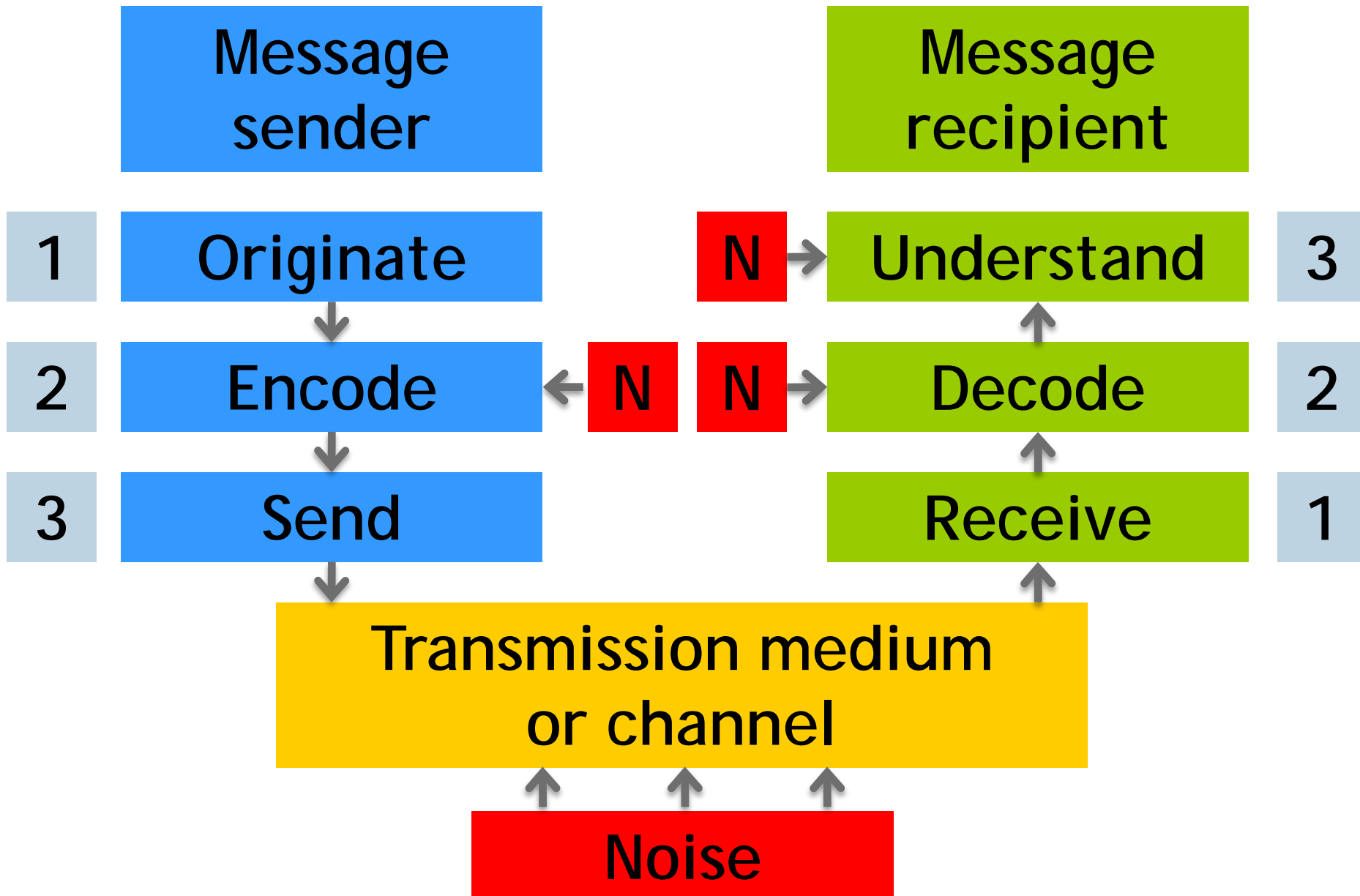
Information theory

- Prof. Claude Shannon



- Communications theory
- Public relations theory







2 Translate to practice

Sender

Originate

Encode

Send

Transmission
channel

Activities

Outputs

Recipient

Receive

Decode

Understand

Act

Reception

Outtakes or
PR outcomes

Business results



3 A standard framework for PR program measurement



Activities

- What did you do?
- Control by PR
- Visible
- Operational efficiency
 - Staff time
 - Budget
- Use: PR group, CFO

Activities

Outputs

Reception

Outtakes

Comms results

Business results



Outputs

- Message availability to target audiences
 - Media analytics
 - Social media analytics
 - Other (events, etc.)
- Correlate with activities
- Use: Within PR group

Activities

Outputs

Reception

Outtakes

Comms results

Business results



Reception

- Handle PR outputs
- Manipulate outputs
- Involvement with outputs
- Correlate with activities
- Is this engagement?
- Use: Within PR group

Activities

Outputs

Reception

Outtakes

Comms results

Business results



Outtakes

- Cognitive change

Activities

Outputs

Reception

Outtakes

Comms results

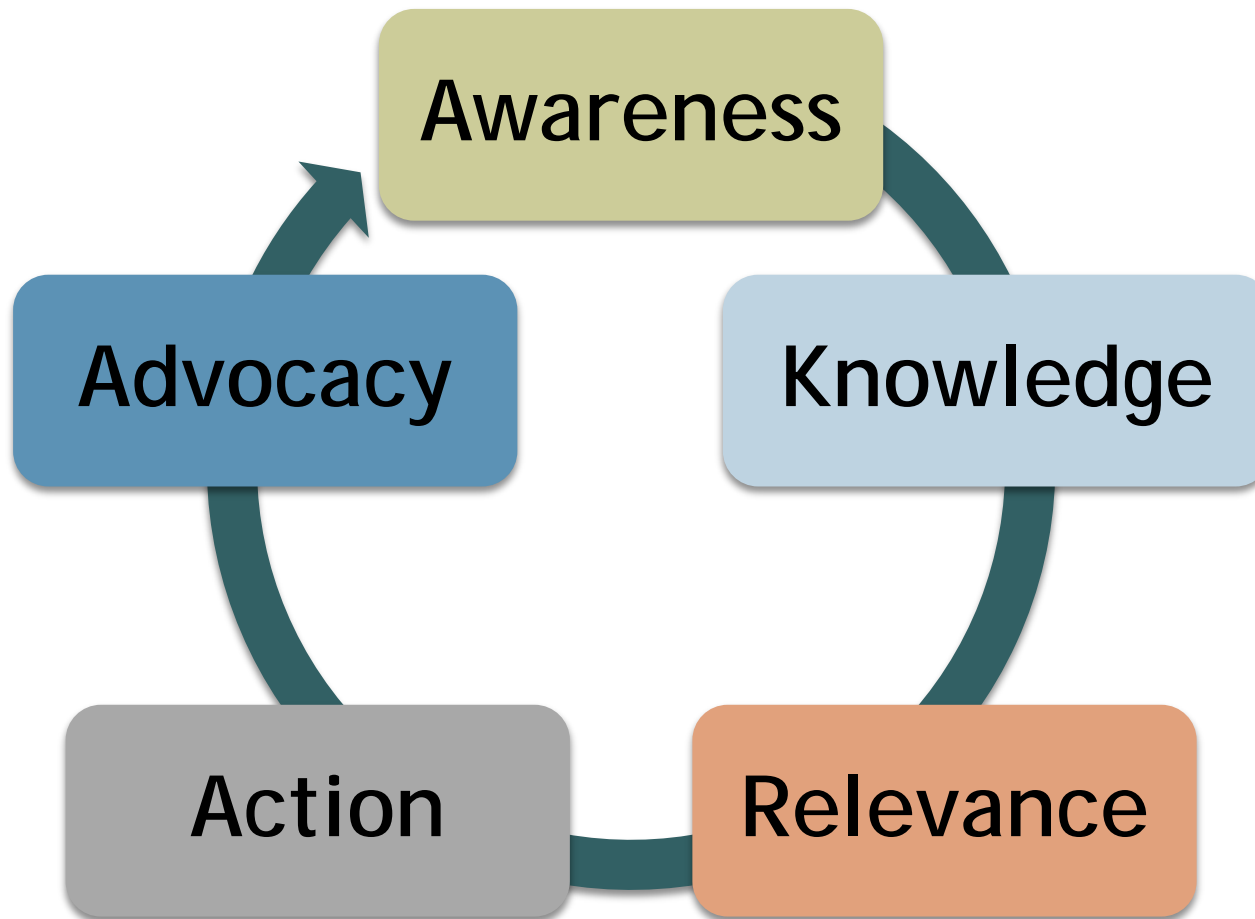
Business results



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From David Michaelson & Don Stacks,
"Standardization in Public Relations Measurement
and Evaluation," *Public Relations Journal*, 2011.

Outtakes





Outtakes

- Cognitive change
 - Awareness
 - Understanding
 - Perceptions
 - Advocacy
- Use: CMO, marketing and communications executives

Activities

Outputs

Reception

Outtakes

Comms results

Business results



Communications results

- Specific, desired behaviors
- Precursor to business value
- Link to outcomes, etc.
- Use: CMO, marketing and communications executives

Activities

Outputs

Reception

Outtakes

Comms results

Business results



Business results

- Tactical, consumer results
- Strategic business results
- ROI
- Statistical methods
- Use: CEO, CMO, business unit leaders

Activities

Outputs

Reception

Outtakes

Comms results

Business results



4 Putting measurement into practice



Step 1

- Define business goals
- Link PR objectives to business goals



Step 2

- Select measurable objectives
 - Specify the audience(s)
 - Specify desired audience-specific outcomes
 - Ends or outcomes, not means
 - Time frame



Step 3

- Select metrics



Outputs	Outtakes	Outcomes	Business results
<ul style="list-style-type: none"> ■ Press releases ■ Journalist briefings ■ Reporter contacts ■ News stories ■ Messages ■ Impressions ■ Media value ■ Events ■ Analyst receptions ■ Customer case studies ■ Executive speaking ops 	<ul style="list-style-type: none"> ■ Awareness ■ Comprehension ■ Message retention ■ Attitude ■ Perceptions ■ Intentions 	<ul style="list-style-type: none"> ■ Behaviors ■ Purchases ■ Votes ■ Employee job applications ■ Support or advocacy ■ Inflate tires ■ Change smoke alarm battery ■ Visit museum 	<ul style="list-style-type: none"> ■ Sales ■ New customers ■ Customer loyalty ■ Lower customer acquisition costs ■ Employee retention ■ Permission to open a factory ■ Lower accident rates



Step 4

- Set quantitative targets

Unacceptable	Acceptable	Superior
Not worthwhile	Worthwhile	Extremely worthwhile
< Satisfactory	Satisfactory	> Satisfactory
Fail	Pass	Superior
F	C	A
Less than expected	Expected	More than expected



Step 5

- Measure



Step 6

- Analyze
- Index the results
- Evaluate
- Recommendations for improvement
- Report
 - Dashboard
 - Evaluation matrix
 - Balanced Scorecard



Dashboard

Smartphone Word-of-Mouth Scorecard — Jan. 7, 2009 WRAP UP



EMPLOYEE

Ambassadors Signed Up Thru eCircular

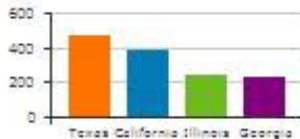


TOL (Talk Out Loud)	To Date	Change
Clicks to eCircular	16,887	+ 236 +
Completed survey/opted-in as TOL ambassadors	5,133*	+ 25 +
Moms (43%)	1,430	+ 14 +
Non-Moms (55%)	1,713	+ 11 +

*State by state breakdown on next page

eCircular	To Date	Change
Unique page views	16,367	+ 236 +
Total page views	24,053	+ 455 +
Forwarded to friends	698	+ 7 +
Clicks to AT&T Moms Blog	1,509	+ 13 +

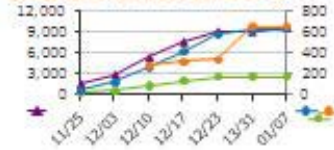
States With The Most TOL Ambassadors



Page 1 of 3

FACE-TO-FACE

Consumers Reached (Cumulative)



Face-to-Face	To Date	Change
Presentations	172	+ 0 +
High traffic events	19	+ 1 +
Consumers reached	9,631	+ 672 +
Ambassadors recruited	619	+ 2 +
Surveys completed	990	+ 0 +
Renewal/offer signups	830	+ 0 +

AT&T Mobility Survey Results

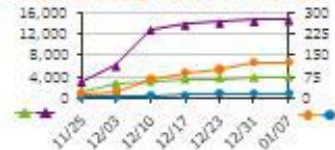


With how many friends will you share today's information?



SOCIAL MEDIA

AT&T Moms Blog Views (Cumulative)



Moms Blog	To Date	Change
Visitors	2,869	+ 72 +
Posts	17	+ 0 +
Comments	128	+ 1 +
Page views	14,818	+ 193 +
Average visit in minutes	2:08	+ N/A +

Other Blog Outreach	To Date	Change
Blogs reached out to	35	+ 0 +
Twits sent out	78	+ 1 +
Reach of Twitter	2,090	+ 0 +

BlogHer "Sponsored Conversation" Sweepstakes (12/4-31):

BlogHer	To Date	Change
Page views	4,392	+ 424 +
Unique page views	3,343	+ 313 +
Avg. time on page	2:05	+ N/A +
Enricha	391	+ 93 +
Ad unit impressions	4,584,823	+ 510,181 +

Louisiana	11	Virgin Islands	2
Maine	1	Virginia	10
Maryland	16	Washington	26
Massachusetts	11	West Virginia	7
Michigan	141	Wisconsin	26
Minnesota	17	Wyoming	1
Mississippi	26	Northern Mariana Islands	26
Missouri	118		

Page 2 of 3

Word-of-Mouth Scorecard, Additional Info — Jan. 7, 2009 WRAP UP



EMPLOYEE - CONTINUED

TOL Ambassadors by Age (Thru 1/6)



TOL Ambassadors by Age & Gender Compared to All Employees

Employee Demographics	TOL Ambassadors	AT&T Employees
Age	1,327	N/A
Male (78%)	1,038	N/A
Female (22%)	289	N/A
Age	1,310	N/A
18-24	3%	4%
25-33	11%	10%
34-40	21%	21%
41-50	21%	21%
51-60	21%	21%
61+	21%	21%

TOL Ambassadors by Target Segment

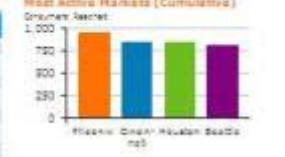
Segment	TOL Participants
Moms with smartphones	878
Moms with basic cell phones	881
All Parents	2,869
Moms with i/i/a ages 18-24	882
Moms with i/i/a ages 25-33	272
Self-reported 18+	1,016
Self-reported 18+	110

FACE-TO-FACE

Local Activity Scorecard (Thru 1/6)

Market	Presentations	Ambassadors	High Traffic	Consumers
Atlanta	11	49	1	778
Austin	8	40	1	460
Boston	7	35	1	402
Chicago	10	18	1	558
Denver	10	40	1	588
Detroit	10	40	1	608
Los Angeles	10	40	1	708
Los Angeles	10	40	1	840
L.A., CA	10	40	1	521
Miami	8	37	1	582
New York	10	40	1	688
Philadelphia, PA	10	40	1	688
Phoenix	10	40	1	611
Seattle	10	40	1	618
San Diego	10	40	1	401
Total	172	830	18	888

Most Active Momists (Cumulative)





Evaluation matrix

The Evaluation Matrix						
Activities	What Measured	Input or Output	Time Frame	Target Number	Index Threshold	Weight for Balanced Scorecard
Digital Communications						
Microsite content	Number of Pages	Input	Before launch	20	80/125	3%
	Average messages delivered per screen	Input	Before launch	2	75/150	3%
	% of pages with interactive features	Input	Before launch	50%	75/125	3%
	% of pages with clear emotional appeal	Input	Before launch	90%	75/110	3%
	% of pages with connection to climate change	Input	Before launch	50%	75/125	3%
Microsite traffic	Unique visitors to URL	Output	Per quarter	50,000	50/150	10%
	Unique visitors to consumer landing page	Output	Per quarter	50,000	50/150	5%
	Unique visitors to business landing page	Output	Per quarter	50,000	50/150	3%
Microsite Video	% of visitors who watch complete video	Output	Per quarter	10%	65/125	3%
Flash Tutorial	Number of users	Output	Per quarter	10,000	65/150	3%
Share Widget	Number of users	Output	Per quarter	10,000	65/150	3%
Monthly E-mail	Number of subscribers	Output	Per quarter	5,000	65/200	3%



Balanced scorecard

CUSTOMER-PERSPECTIVE

Metric name	IBIS customer satisfaction survey (project-based): Overall satisfaction score on completed projects		
Description	Total percentage answering one of the top two rating scale responses		
Formula	Question: Rate the Internet, Broadcast, and Image section in the following areas (Scale: excellent / good / fair / poor / very poor): 1. → Overall satisfaction with the project.		
Rating	Exceeds target	> 60%	> Benchmark % + 10%
	Meets target	50% ~ 60%	Benchmark % to benchmark + 10%
	Below target	< 50%	< Benchmark %
Frequency of update	Annual		
Data source	IBIS customer satisfaction survey (project-based)		
Owner	IBIS		
Additional information			

Metric name	IBIS customer satisfaction survey: "Recommend" score on completed projects		
Description	Total percentage answering one of the top two rating scale responses		
Formula	Total percentage answering one of the top two rating scale responses You recently worked with the Internet, Broadcast, and Image section of the Division of Communications on a project. We would like your honest feedback on our work so that we can deliver the best service to our partners and colleagues. 1. If someone at UNICEF asks for your advice about a similar project, how likely would you be to recommend that they work with the Internet, Broadcast, and Image section on the project? (Scale: extremely likely / likely / somewhat likely / not very likely / not at all likely)		
Rating	Exceeds target	> 60%	> Benchmark % + 10%
	Meets target	50% ~ 60%	Benchmark % to benchmark + 10%
	Below target	< 50%	< Benchmark %
Frequency of update	Annual		
Data source	Print and language customer satisfaction survey (project-based)		
Owner	Print and language section		
Additional information			



Balanced Scorecard

Objectives	Measures	Update frequency	Type	Data provider	2008 result	2009 result	2009 target
Customer perspective							
Produce and distribute video, audio, Web, photo, or multimedia materials to meet UNICEF requests and external customer needs.	SURVEY - IBIS customer satisfaction survey (project-based): Overall satisfaction score on completed projects.	Quarterly	Total top two score %	Survey			60% (tentative)
	SURVEY - "Recommend" score on completed projects.	Quarterly	Total top two score %	Survey			60% (tentative)
	SURVEY - Broadcaster survey: Overall customer satisfaction score.	Annual	Total top two score %	Survey			60% (tentative)
	# clips ordered through NewsMarket of stories released in last six months.	Quarterly	Count	IBIS	6,450		6,450
	# videos delivered to UNIFEED.	Quarterly	Count	IBIS	230		230
	# video/audio plays on unicef.org	Quarterly	Count	IBIS	430,000		430,000
	# video/audio plays on social media sites	Quarterly	Count	IBIS	1,400,000		1,400,000
	# photos downloaded from image site (UNICEF users)	Quarterly	Count	IBIS			TBD
	# photos downloaded from image site (external users)	Quarterly	Count	IBIS			TBD
	# sessions on unicef.org	Quarterly	Count	IBIS	18,450,000		18,450,000
"Go to" source for turning substantive content issues into compelling multimedia stories.	Total # session pageviews	Quarterly	Count	IBIS	87,700,000		87,700,000
	# average session depth (pageviews per session)	Quarterly	Count	IBIS	4.75		4.75
	SURVEY - IBIS customer satisfactory survey: "Multimedia expertise" score.	Annual	Total top two score %	Survey			60% (tentative)
Internal process perspective							
Expertise in producing and distributing video, audio, web, photo and multimedia materials to high professional standards.	# videos produced (including PSAs, video web clips and others)	Quarterly	Count	IBIS	500		500
	# audio produced including reports, programs, and others)	Quarterly	Count	IBIS	100		100
	# text news stories	Quarterly	Count	IBIS	700		
	# field office sites launched	Quarterly	Count	IBIS	15		15
	# completed Web projects	Quarterly	Count	IBIS	60		60
	# translated words managed	Quarterly	Count	IBIS	2,000,000		2,000,000
	# photo research requests fulfilled (online and offline)	Quarterly	Count	IBIS	5,880		5,880
	# photo essays produced	Quarterly	Count	IBIS	13		13
Build UNICEF web and multimedia capacity through training provided to headquarters, RO/FO.	# photos acquired into the photo library	Quarterly	Count	IBIS	2,050		2,050
	# reddit users trained	Quarterly	Count	IBIS	220 (100 HQ, 120 FO)		220 (100 HQ, 120 FO)
Complete section admin tasks in accordance with UNICEF policies and procedures.	% of advance request documentations returned due to incomplete paperwork	Quarterly	%	Director's Office			0%
	% of contract request documentations returned due to incomplete paperwork	Quarterly	%	Director's Office			0%
Facilitate and guide the creative process with client teams.	SURVEY - IBIS customer satisfactory survey: "Develops creative solutions" score.	Annual	Total top two score %	Survey			60% (tentative)

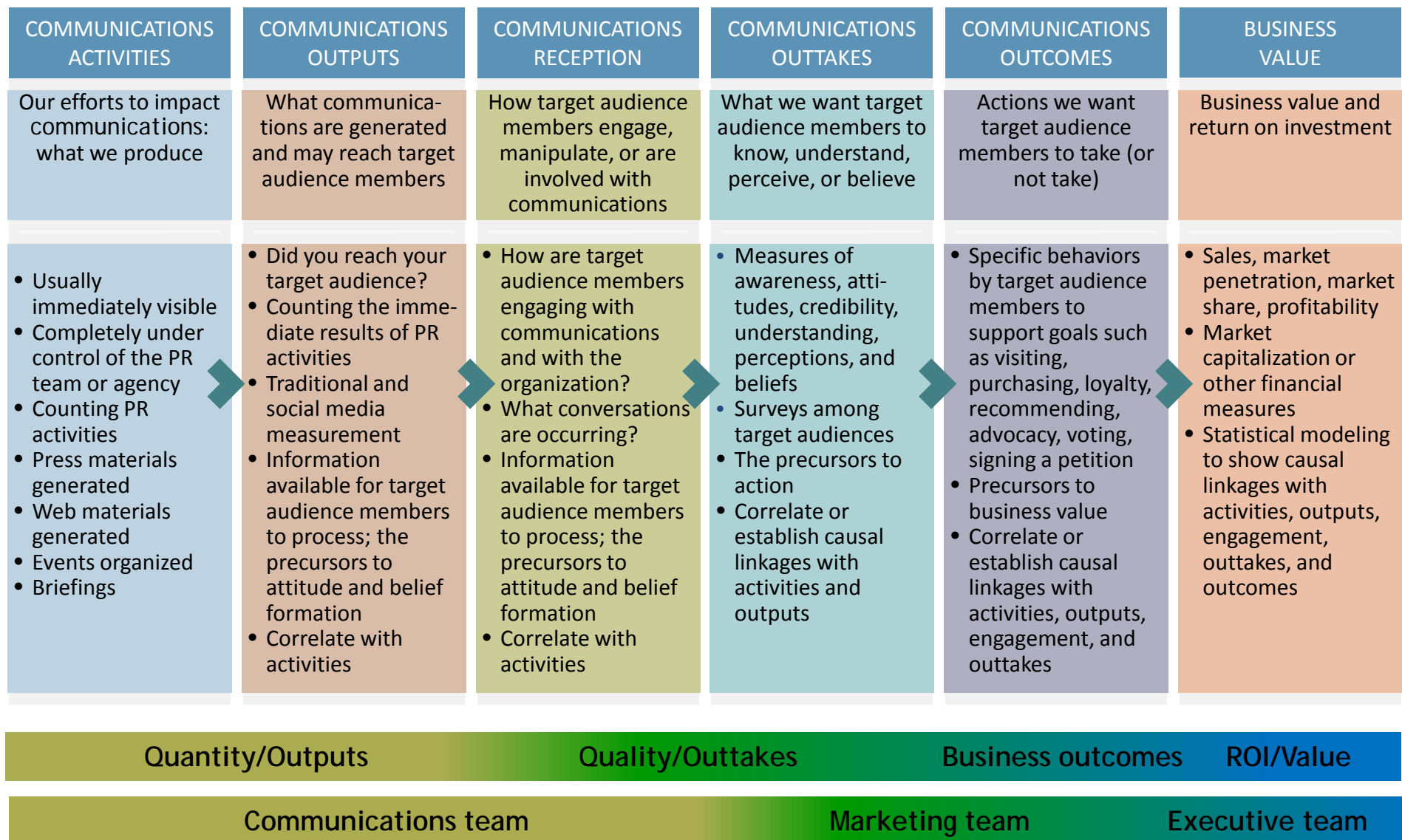


Summary

- Set goals
- Set measurable objectives
- Measure at multiple levels
- Set targets
- Build consensus
- Evaluate
- Report
- Recommendations



Communications measurement process



Predictive analytics

A series of horizontal lines in shades of gray and white, extending from the left edge of the slide and ending on the right, creating a modern, layered effect.



The situation today

- Companies monitor traditional and social media...
 - But don't know what media messages actually change opinions and drives behaviors



The situation today

- Companies probe the marketplace via surveys and media listening platforms, but ...
 - Cannot look ahead
 - Risk getting blindsided

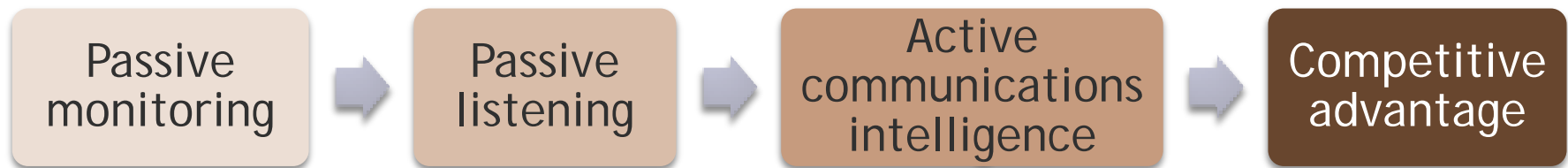


The situation today

- Monthly measurement reports give a look backwards, but ...
 - Cannot evaluate possible scenarios



Today's challenge



- Analyze past data
- Understand what really drives change
- Link social / traditional media to business outcomes
- Build systems to give a look ahead
- Facilitates responsive management



Case studies



Toyota recall crisis



Consumer sentiment about the economy



Teenage smoking behavior



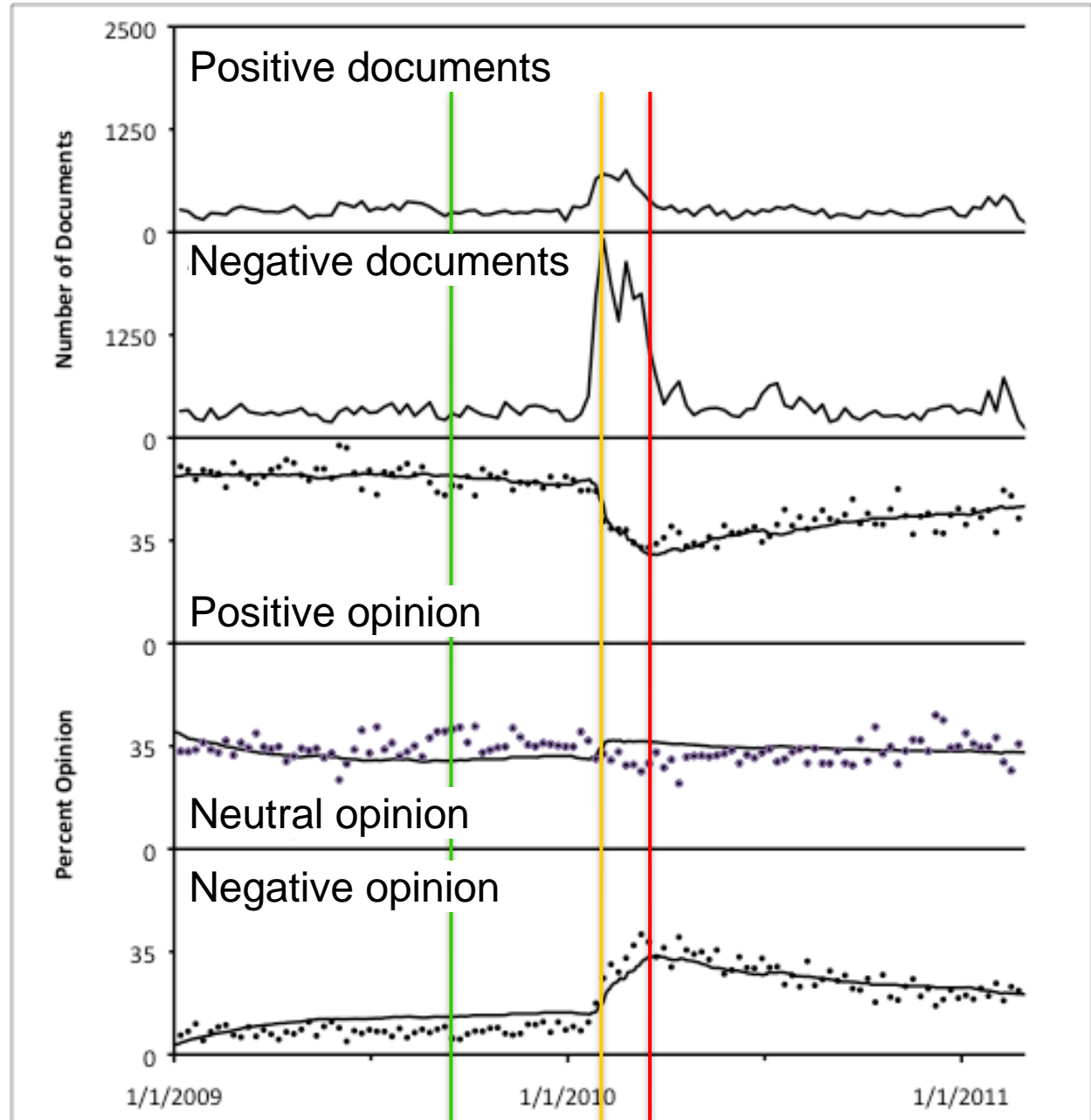
1. Toyota recall crisis

- Key questions
 1. What shapes opinion about the Toyota brand?
 2. Can we predict brand reputation from media?
- Data
 - Predictor variables
 - News, online, blogs, forums ... no broadcast
 - Dependent variable
 - Brand reputation



All media
 $R^2 = 0.84$

- Survey
- Model





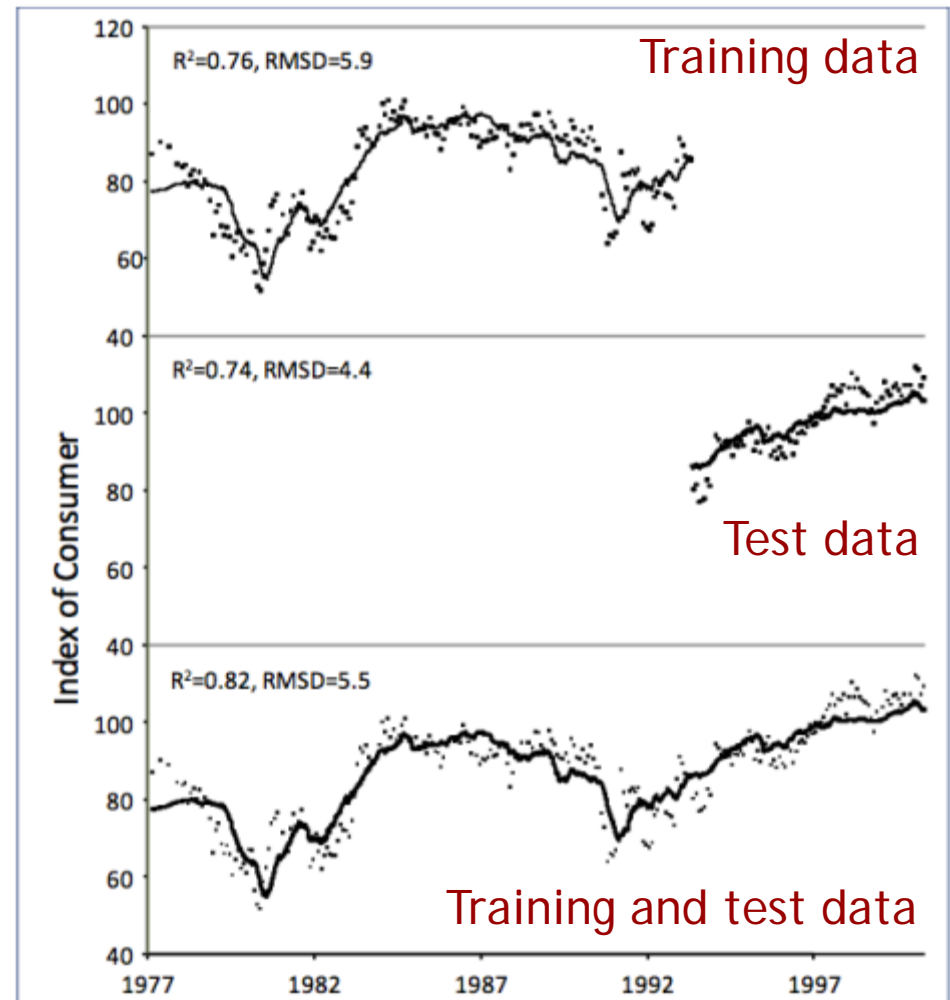
2. Consumer economic sentiment

- Key questions
 1. What shapes consumer opinions about the economy: media or marketplace experience?
 2. Can we predict consumer sentiment from media alone?
- Data
 - Predictor variables:
 - AP wire and *Washington Post*
 - Dependent variable:
 - University of Michigan Consumer Sentiment Index
 - 1977 to 2007



Key results

- We can predict based on media alone
- Models based work over long time period
- Media play primary role in shaping opinion about their economic well-being
- Shelf life of information near zero





3. Teenage smoking

Key questions

- Can we predict teenage smoking behavior from media alone?
- Does public policy affect smoking behaviors?
- Do anti-smoking campaigns work?

Data

- Predictor variables:
 - Newspapers, Google newsgroups
 - 10 messages
 - Cost per pack
- Dependent variable:
 - Monitoring the Future nationwide surveys (<http://monitoringthefuture.org/>)
- 1991 to 2002

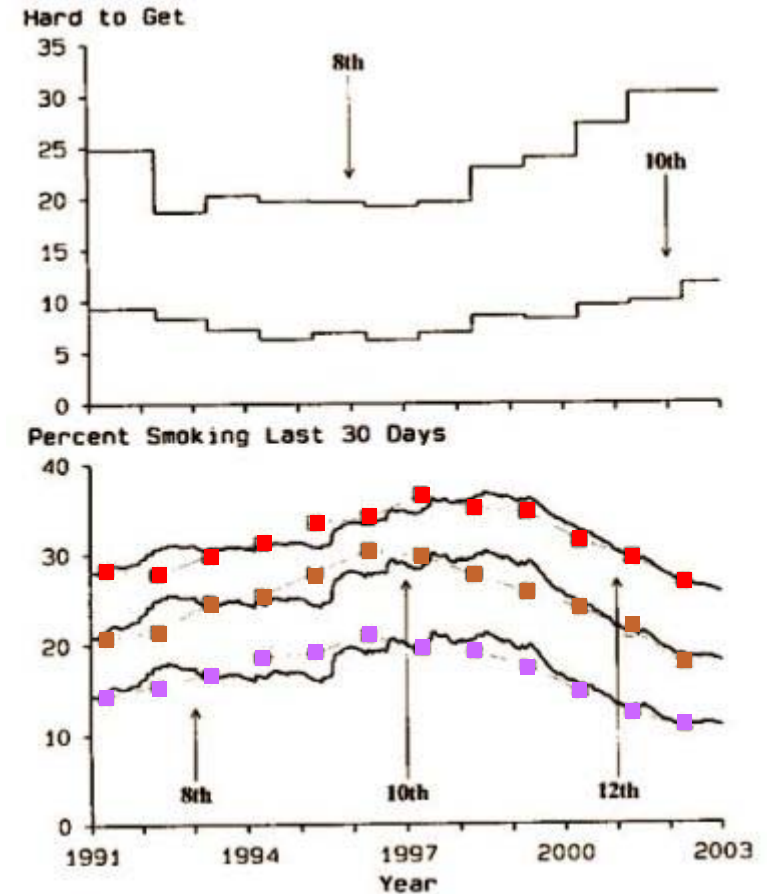


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Key results

- We can predict behaviors based on media alone
- Cost improves prediction
- Attitude that cigarettes are hard to get improves prediction
- Anti-smoking campaigns and policy changes work



■ Reported smoking

— Predicted smoking

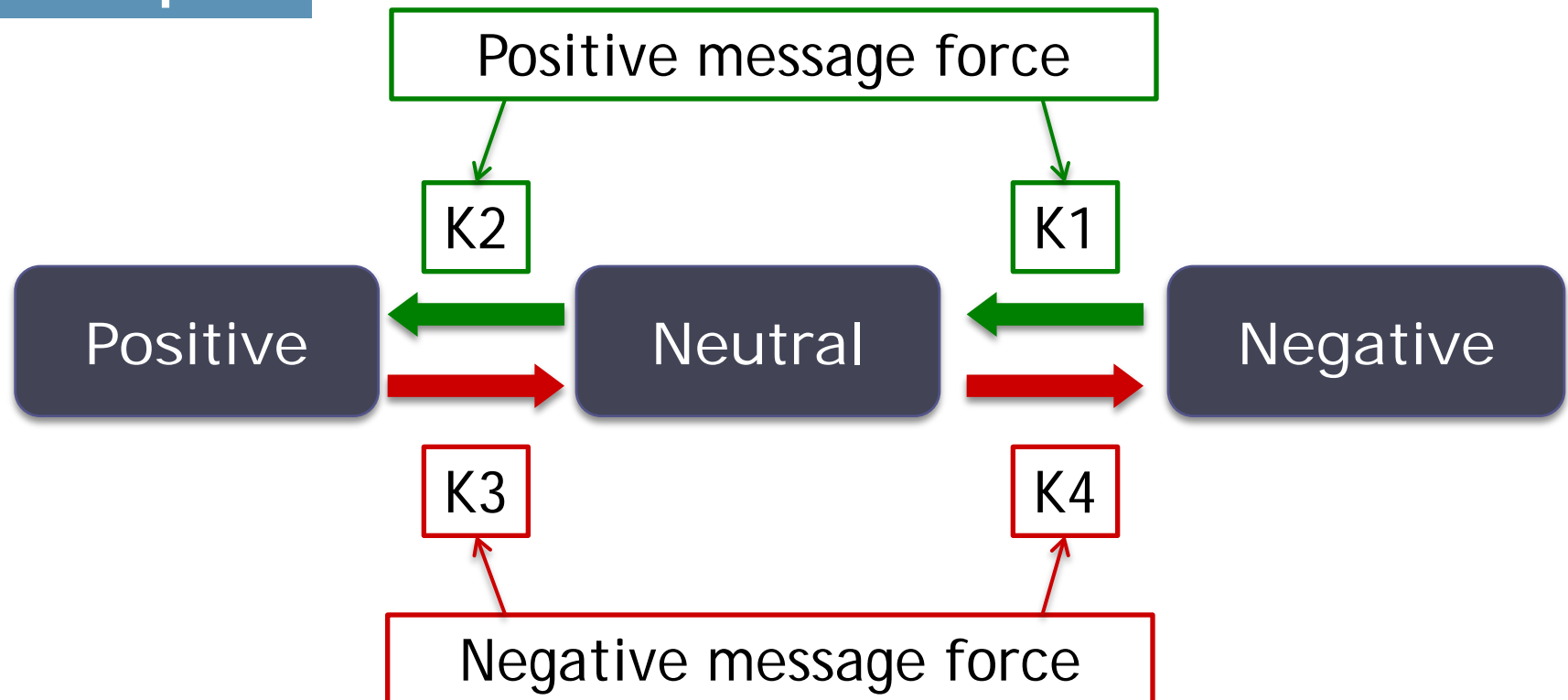


The InfoTrend™ Model



Powerful yet simple: basic structure

Step I





Minimal ideodynamic model

$$F_G(t) = k \sum_i C_{i,G} \exp(-p(t - t_i)) + \epsilon_G(t)$$

$$\frac{dI_G}{dt} = F_G(t)(1 - I_G) - F_B(t)I_G.$$

$$I_G(t) = \frac{\int F_G(t) e^{\int (F_G(t) + F_B(t)) dt}}{e^{\int (F_G(t) + F_B(t)) dt}} + \frac{c}{e^{\int (F_G(t) + F_B(t)) dt}}$$

Recruitment term

Defection term

$$B_{G,t} = B_{G,t-1} + k'_2 * G_{G,t} * B_{C,t-1} - k'_2 * G_{C,t} * B_{G,t-1}$$



Data requirements

Predictor variables

- Multi-channel
- Sentiment scores
- Messages tagged

Outcome variables

- Survey data
- Behavioral data
- Business data
- Must show change



Concluding remarks



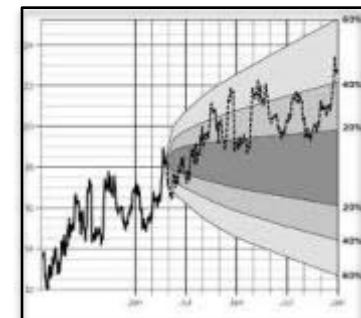
What have we learned?

- Media → Outcomes
 - Sentiment
 - Messages
- But ... random variability
 - What does this mean for communications>



Prediction and forecasting

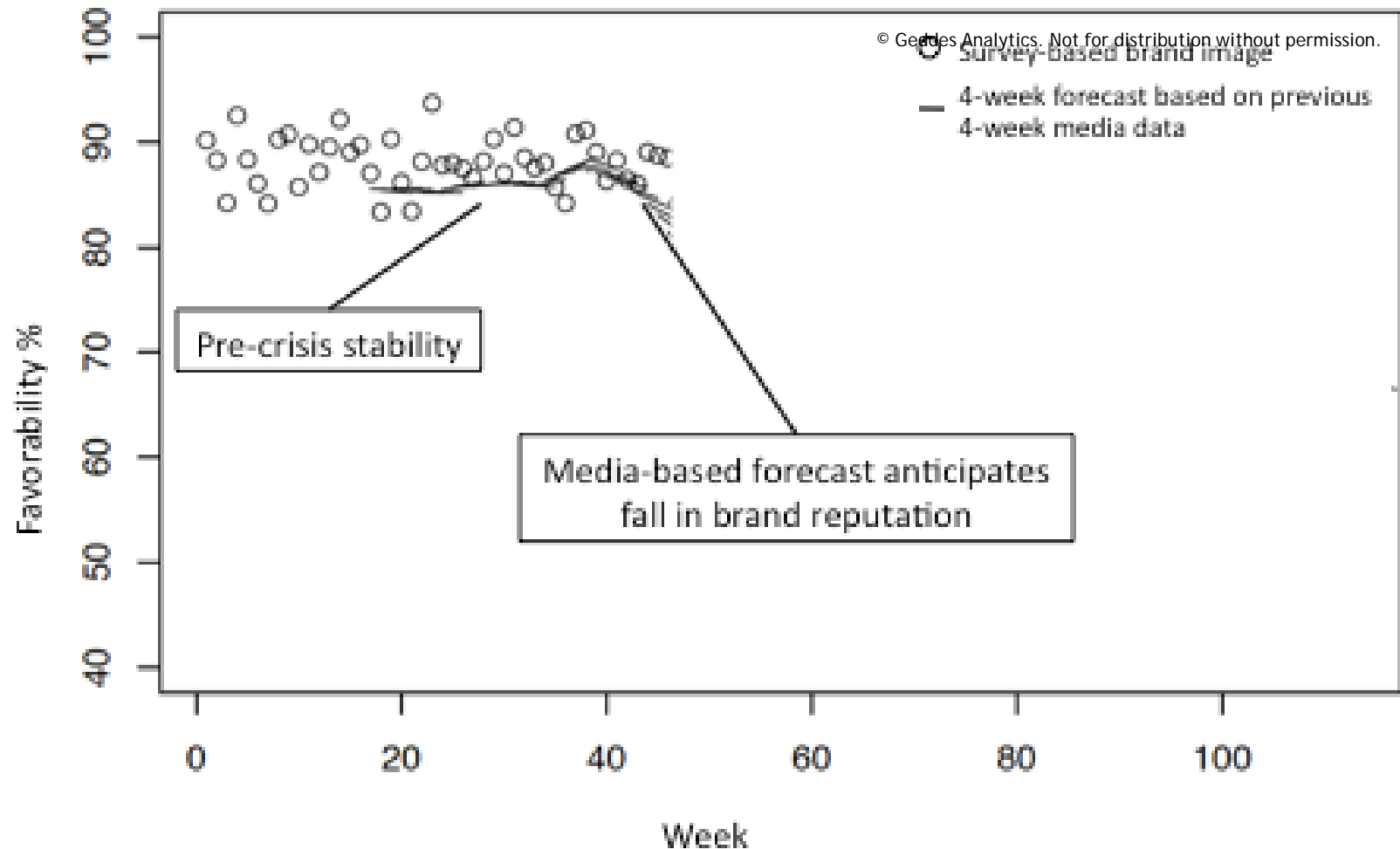
- Early enough to take action
- Probable vs. improbable
- Scenario planning and simulation
- Strategic responsiveness



- Michael Raynor. 2007. *The Strategy Paradox: Why Committing to Success Leads to Failure*. New York: Doubleday.



Prediction and forecasting





5 Questions?

