



# Using Sentiment Analysis to Make Net Promoter Programs More Actionable

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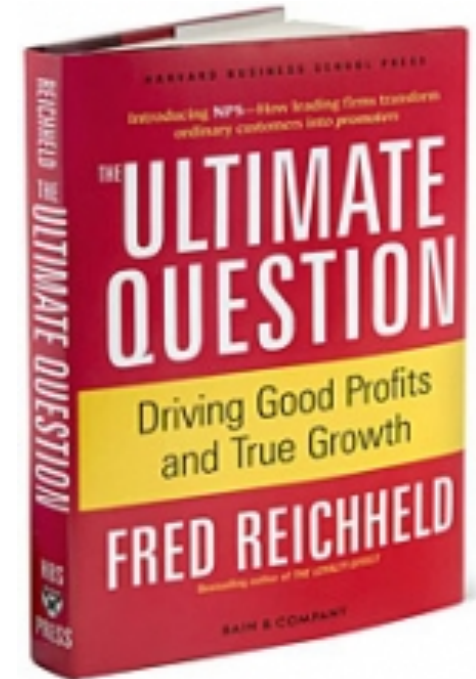
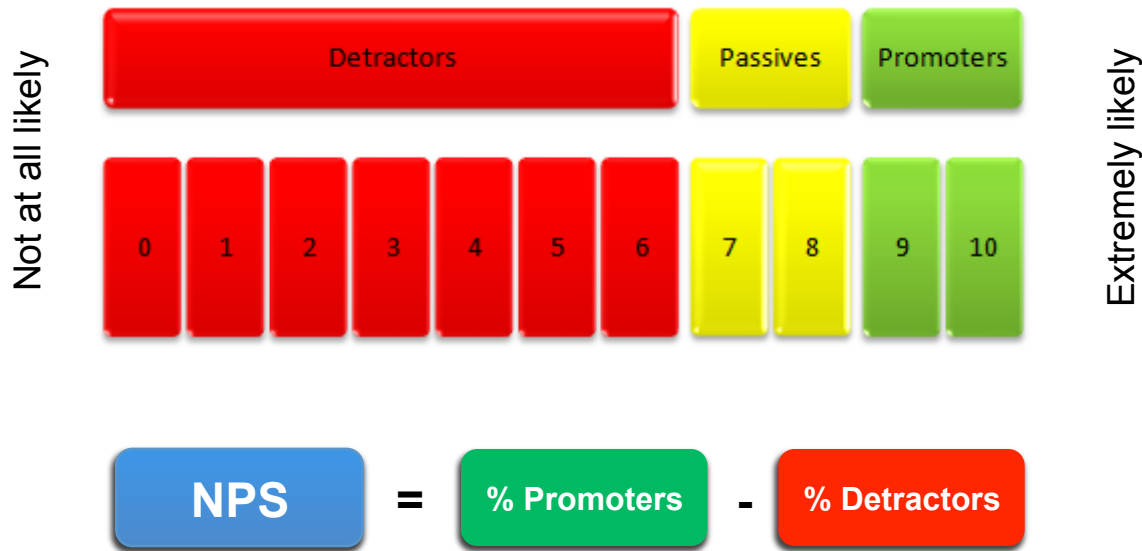
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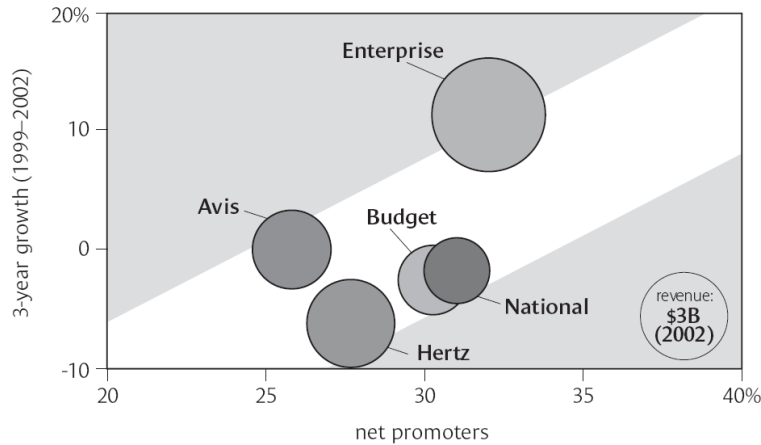
# What is Net Promoter?

How likely is it that you will recommend our service to a friend or colleague?

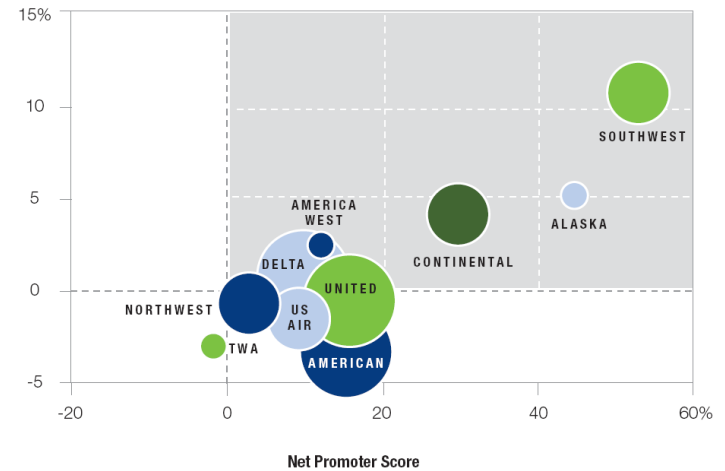


# Why is it a big deal?

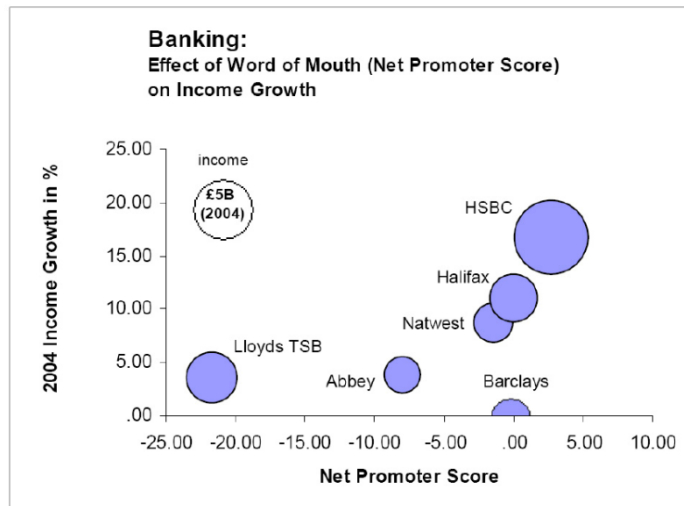
## Car Rentals



## Five Year Revenue Growth

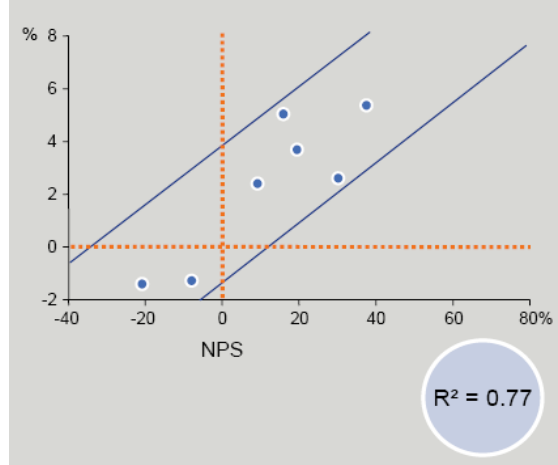


## Banking: Effect of Word of Mouth (Net Promoter Score) on Income Growth



## US Life insurance

### CAGR revenues 1999-2003



# How do you make it actionable?

- **Client:** Large Retail Bank
- **Context:** Ongoing tracking programs
- **Focus:** Survey about recent experience (branch, contact center, online) in order to improve the customer experience.
- **Situation:** Organization embraced the simplicity and ease of understanding NPS.... However, they lacked the diagnostics needed to drive the necessary improvements, and had to keep the survey battery short and concise.

# 1) Use open end question and text analysis to provide the needed diagnostics

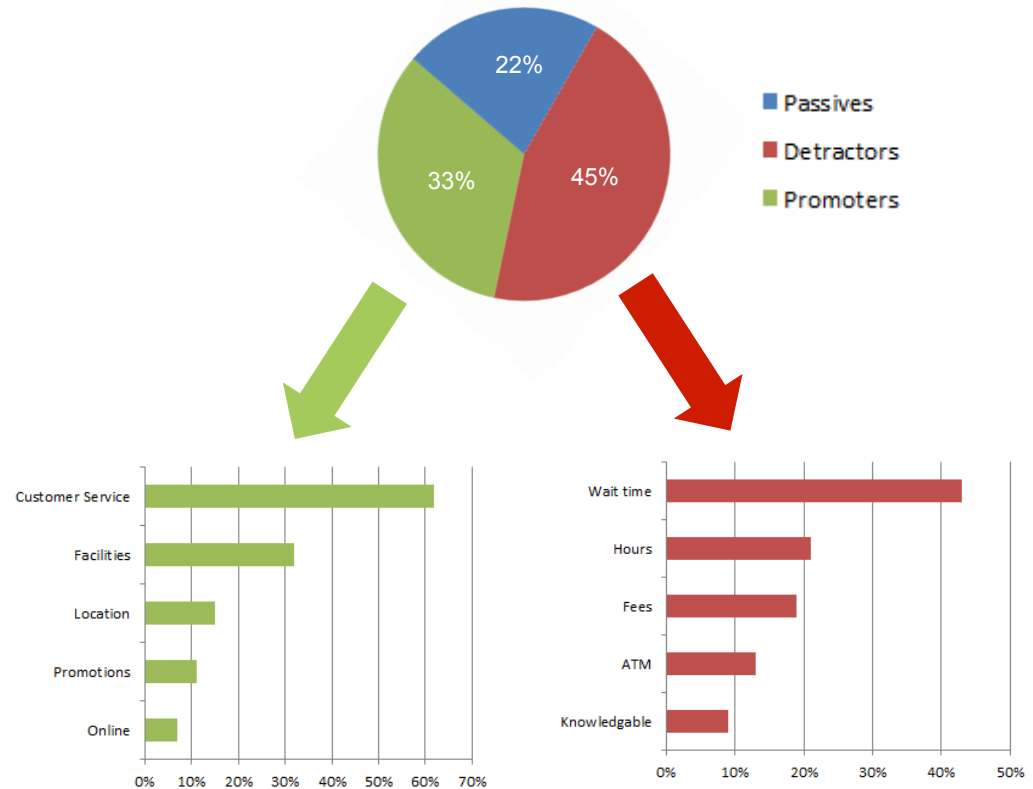
*Simple to answer, keeps the survey short, but still rich with insights.*

## Customer NPS Segments

“Based on your most recent experience, how likely are you to recommend us to your friends or colleagues?”



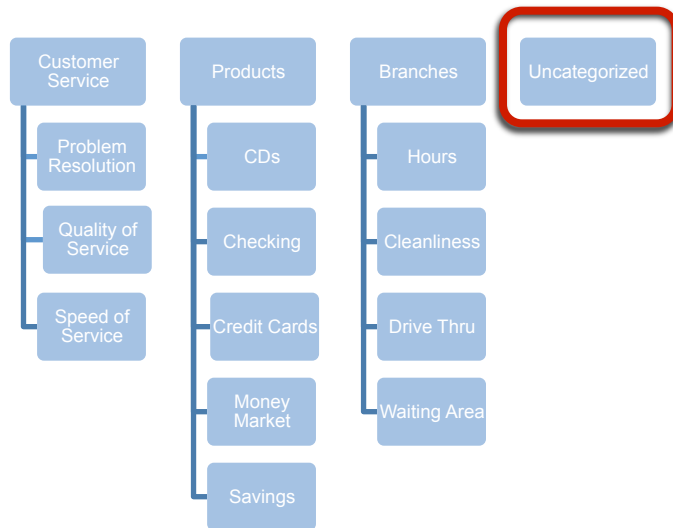
“Why did you give the score that you did?”



## Diagnostic categories

## 2) Review the “uncategorized” verbatims to ensure we’re not missing something major

*NVA verbatims are expected, but a spike could signal something’s happening.*



*“I saw the story about the CEO, and I for one am shocked. What does that say about your company??”*

- Typical target: No more than 30% (typically much less)
- Can vary from project to project
- Periodic review needed
- Spike can suggest new issues cropping up

# 3) Test for False Positives to ensure changes are “real”

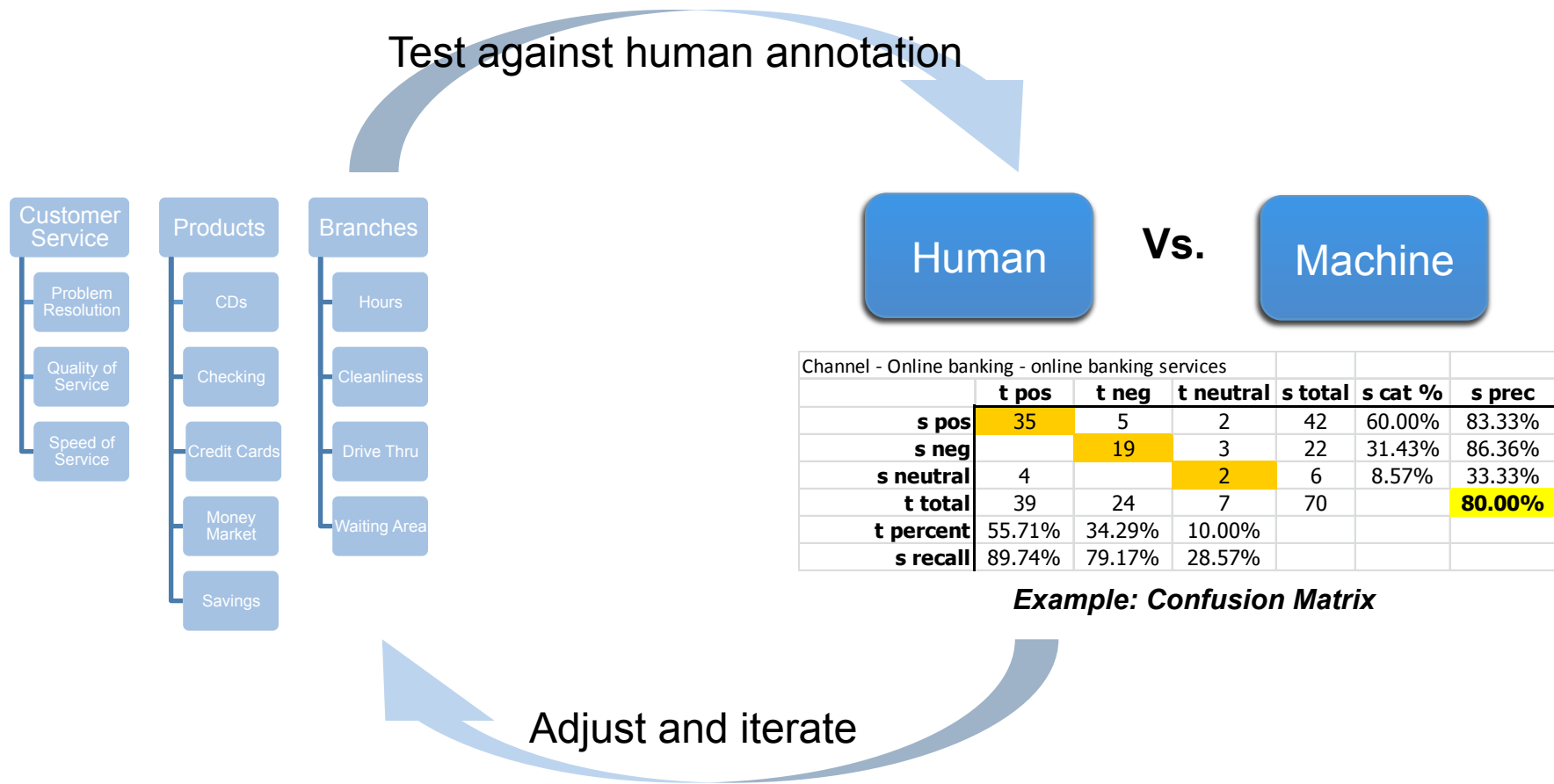
*Watch for noise seeping in to the results, especially for ambiguous categories.*

- Typical target: 15% or less
- Approach: Crowd-sourced double annotation
- Note: Relatively straightforward unless concepts are hard to understand

Concepts	Stats	Comments
Feature	%Noise	Key events, changes needed, etc.
account_statements	6%	
atm	9%	
b2b	1%	
branch_facilities	17%	
community_involvement	11%	Based on conversations, this will serve as baseline moving forward (e.g. verbatims too generic to further classify)
competence_training	5%	
competitors	8%	
convenience	1%	
credit_check	12%	Based on conversations, this will serve as baseline moving forward (e.g. verbatims too generic to further classify)
customer_service	16%	Based on conversations, this will serve as baseline moving forward (e.g. verbatims too generic to further classify)
fees	4%	
language	4%	
marketing	10%	
non_tellers	7%	
online	5%	
phone_support_automated	5%	
phone_support_live	3%	
policies	10%	
problem_resolution	12%	Based on conversations, this will serve as baseline moving forward (e.g. verbatims too generic to further classify)
products	2%	
reward_programs	14%	Based on conversations, this will serve as baseline moving forward (e.g. verbatims too generic to further classify)
sales_process	9%	
security	0%	
service_transaction	0%	
tellers	0%	

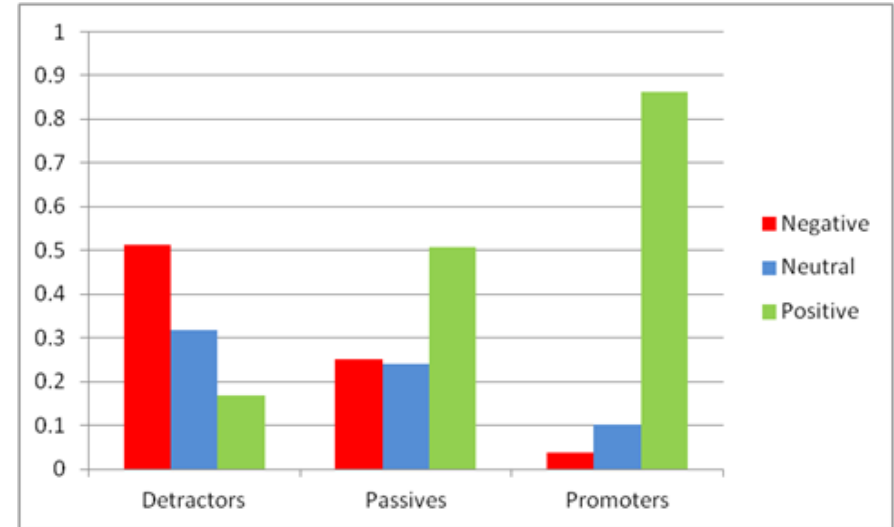
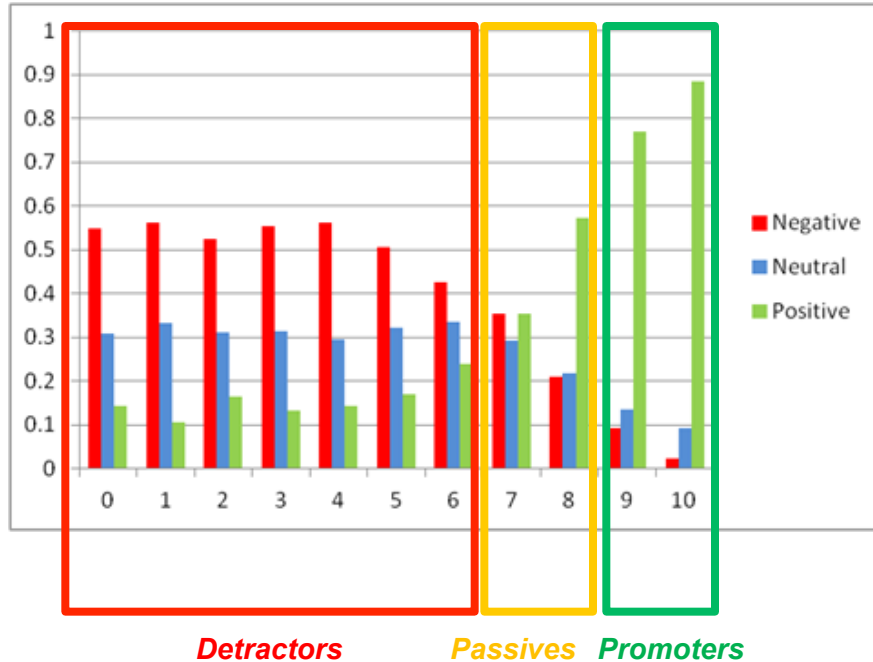
# 4) Ensure sentiment scores are accurate enough to guide prioritization

*We use an iterative human annotation approach to test precision and recall of the sentiment, with an overall precision target of 80% or better with reasonable recall.*





# So how well does sentiment match to NPS?



- Directionally tracks quite well
- Focusing on the negative sentiment items addresses concerns of detractors and passives
- Useful for focusing improvement efforts

# What kinds of things did we learn?

*Looking at top NEGATIVE issues for DETRACTORS highlights some top issues to deal with.*

- **Customers frequently complain of problems experienced during ATM transactions. The highest frequency problems, check rejection and misread deposit amounts, continue to drive Detractor scores.**
  - “I went to a teller because the ATM would not accept my check deposit. The teller was very efficient and professional; the 5 was for the ATM malfunction.”  
Jul 6, 2012 – Western Region, Detractor “5”
  - “It is of great discomfort to deposit cash without a slip or envelope with which to actually prove the amt. I put in the ATM. My cash deposits were miscounted and not returned.  
Jul 5, 2012 - Eastern Region, Detractor “2”
  - “Even though the teller was quick and very nice I was annoyed that the ATM would not accept my check for the correct amount. It kept reading the check as \$6.20 when it was for \$620.00.”  
Jul 26, 2012 – Western Region, Detractor “2”

# What kinds of things did we learn?

*By looking at the distribution across NPS segments for our categories, we can understand what make people PASSIVES vs. PROMOTERS or DETRACTORS.*

- **Limited branch hours seems to cause an inconvenience, but not a strong enough reaction to turn people into DETRACTORS.**
  - *“Because the bank closes at 4 which is not convenient to many, many people who work and they only have two late nights which is only until 6:00 and most people work until 5:00 and then have a commute.”  
Apr 24, 2012 – Eastern Region, Passive “8”*
  - *“The fact that it is only open late on Fridays. Other banks are open every night till 6 PM. Since I work until 5 PM, I have to plan to go only on Fridays after work. That is sometimes an inconvenience.”  
May 10, 2012 – Western Region, Passive “8”*

# What kinds of things did we learn?

*Within any given category, we still find suggestions for improvements from PROMOTERS.... Having an analyst review these comments is key to understanding the full context.*

- **Sentiment within the *Mobile Banking* category is generally positive, but specific complaints (or suggestions for improvement) such as low deposit limits and improving the user-interface provide clues for how to turn PASSIVES into PROMOTERS, or to reinforce a good experience.**
  - *“I am a Premium Customer who had to go to your branch to make a deposit. I would have preferred to use my iPhone App to make the deposit saving me the trip but the limits are way too low.”*  
Jun 28, 2012 – Western Region, Passive “8”
  - *“I wish the new app made it easier to deposit checks. You have to hunt for the deposit feature. It should be front and center.”*  
Jun 7, 2012 – Western Region, Promoter “9”

# In Summary

- **Net Promoter is a valuable methodology, but requires diagnostics to make it actionable.**
- **Using open-end survey responses can provide the diagnostics and a concise, positive customer experience**
- **We must use a rigorous approach to ensure the diagnostics are solid:**
  - Develop a comprehensive taxonomy
  - Watch the “Uncategorized” verbatims
  - Test for “False positives”
  - Use iterative human annotation to test sentiment precision and recall
- **Once set up, various types of analysis reveal useful insights that companies can take action on to improve their NPS scores.**



# Thank You!

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