

INNOVATIVE TECHNOLOGY-BASED WAYS TO RUN ENGAGEMENT SURVEYS

Data science meets employee surveys

Issues with current engagement surveys

Businesses are finding numerous issues with the way surveys have traditionally been done

1. Not frequent enough
2. Single scoring leads to issue distortion
3. Aggregation reduces meaning
4. Does not capture the specifics (context seldom captured)
5. Lengthy or poor response planning
6. Managers are busy & have no incentive to implement any actions
7. Lot of resources & monitoring
8. Surveys get old
9. Causality not clear

“A new market has emerged: Employee feedback apps for the corporate marketplace. These tools are powerful and disruptive, and they have the potential to redefine how we manage our organizations.”

Josh Bersin, [Forbes](#), Aug 26 2015

Our offering in this market:

Workometry

Technology drivers

Several technologies have provided opportunities for engagement research

User Interface / Mobile

Big Data Technologies

Machine Learning

Automation

What's been happening in Customer Research

Large scale move from traditional survey research to a continual process of customer listening called Voice of the Customer (VoC). Data used to improve the customer

“Successful VoC programs should support a cycle of four activities that make up a closed-loop process:

- listen to customer feedback,
- interpret the resulting data,
- react to improve the experience,
- monitor results.”

Voice of the Customer cont.

VoC focuses on capturing needs.

A customer need is a description, in the customer's own words, of the benefit to be fulfilled by the product or service.

Source: [Voice of the Customer, Gaskin, Griffen et al, MIT](#)

Key themes of the new employee feedback tools

Many of the changes that we are seeing in employee research follow parallel changes in customer research

1. Qualitative research
2. Shorter, vertical one-topic surveys
3. Segmentation analysis
4. Social media
5. Pulse surveys
6. Collaborative platforms
7. Text analytics
8. Glassdoor & public data

Types of survey

Several firms are building a more holistic set of employee feedback surveys. Typically these approaches combine three elements:

Regular 'pulse' surveys: quarterly, monthly even

Employee lifecycle feedback

Self-service feedback, launched by manager

AUTOMATION

Using technology to improve the survey analytics process

Survey process is too long: automate

Technology / automation makes analysis:

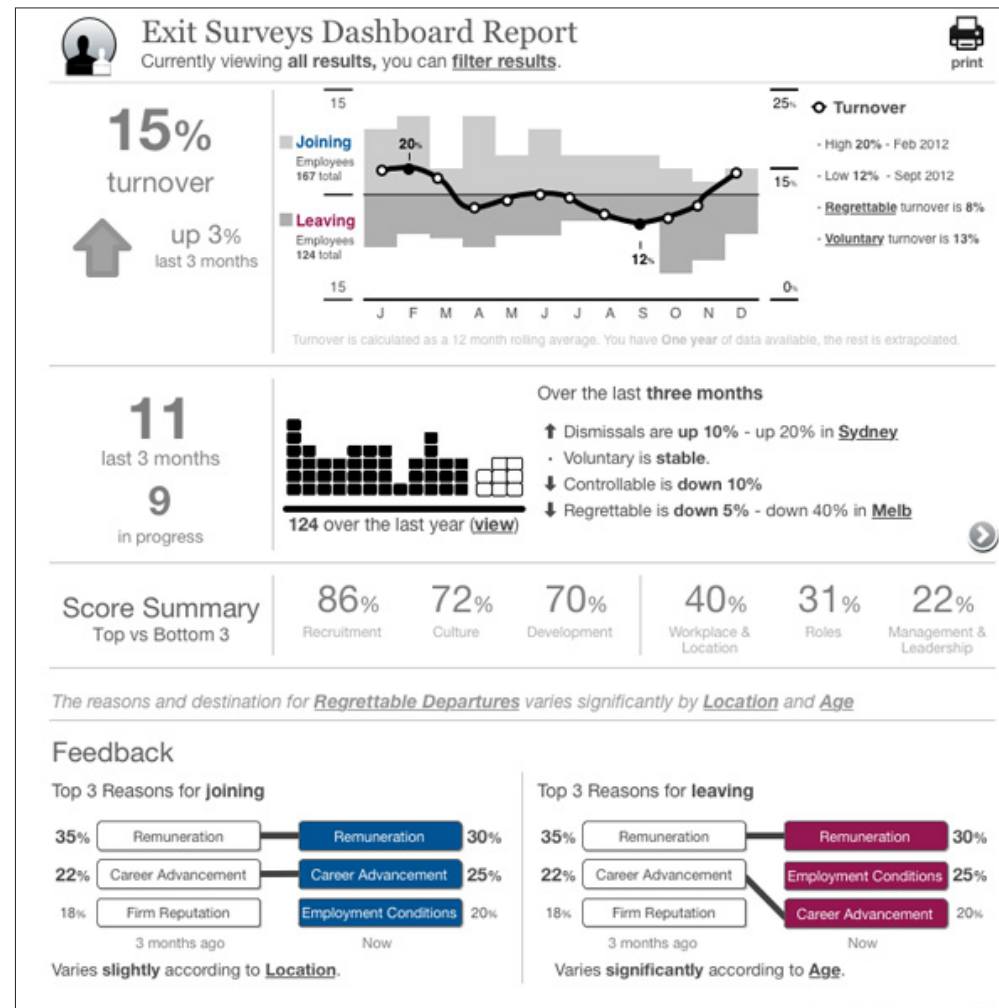
1. Reproducible
2. Scalable
3. Increases quality
4. Decreases cost
5. Fast

```
1 # Set up path  
2  
3  
4 setwd("~/Google Drive/Pepsi/Pespsi Q3 2013 R/")  
5 Survey.Data <- read.csv("Survey-Data-25th-September.csv")  
6  
7  
8 # Remove non-useful columns  
9 to.drop <- c("Started",  
10             "Completed")
```

```
26 open.Text <- Data[,c(1, 31, 33, 43:44)]  
27 Demographics <- Data[,c(1, 32:35, 38, 40, 45:53)]  
28 Likert <- Data[,c(1:30, 36:37, 39, 41:42)]  
29  
30 # Create Long version of Likert  
31  
32 library(reshape2)  
33 Likert.Long <- melt(Likert, id.vars="Record.ID", variable.name="Question", value.name="Response")
```

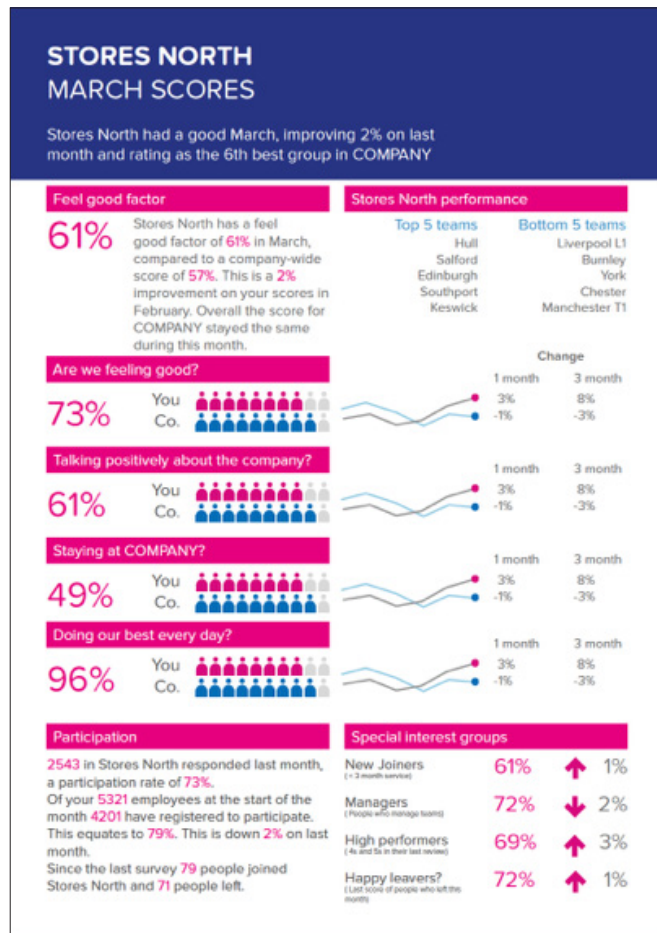
Automated reporting - dashboards

Most providers are using always-on dashboards to communicate results



Automated print reporting

Large numbers of reports can be created in moments and emailed to the manager concerned

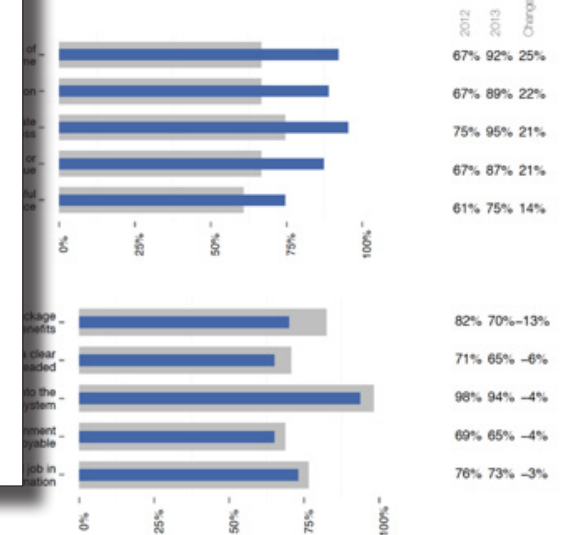


Link change in Europe

Bar chart produced to show biggest changes when comparing the selected group from the overall



29/37



Benefits of automation

Example of achieved performance at Orange Switzerland (now Salt.) presented by their CHRO at HR Change conference 2014.

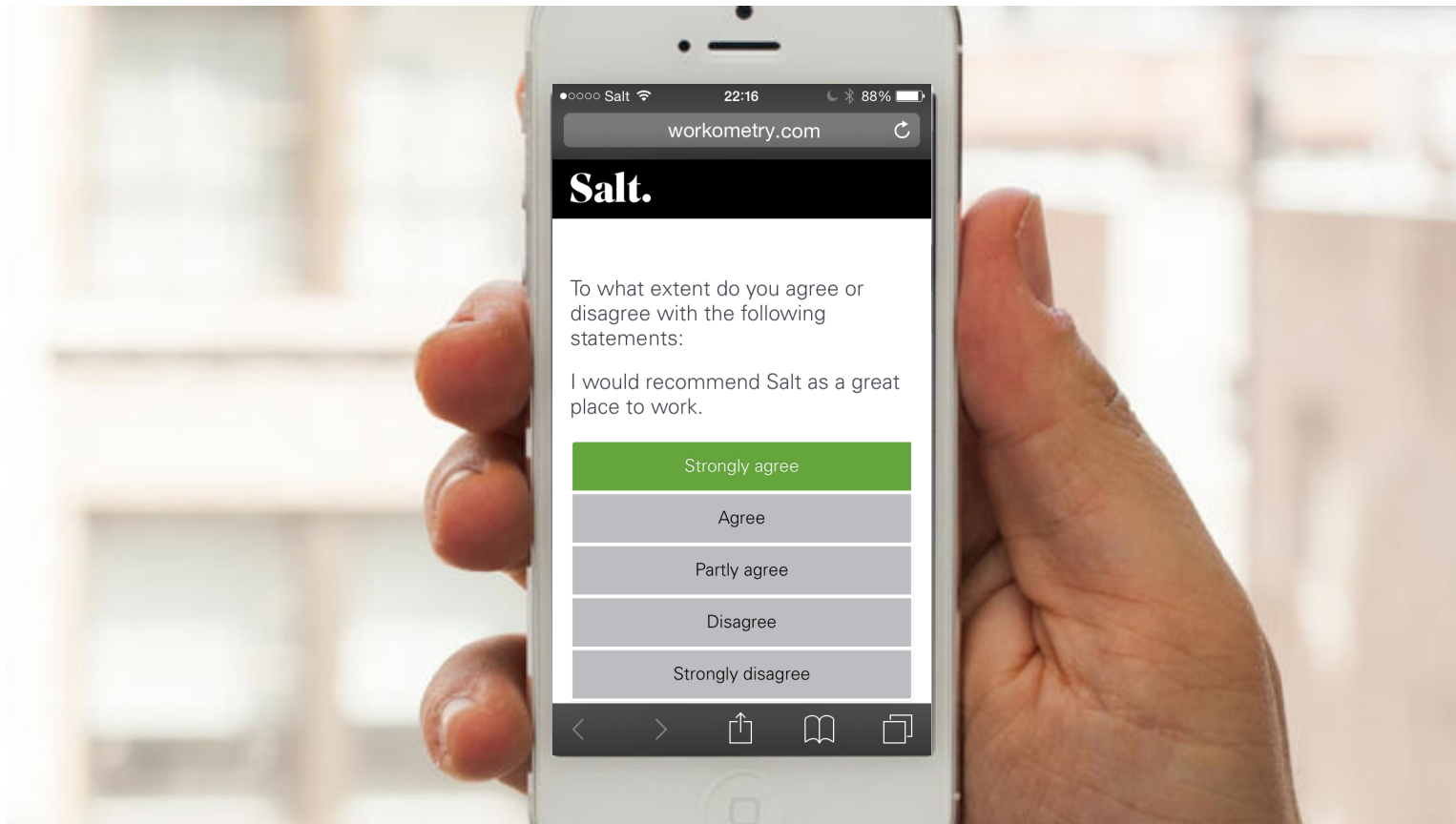
Measurement / KPI	2013	Target	Achieved
Faster report production	1 week	1 day	1 hour
Reduced error rate	10	2 / 3	1
Reduced number of manager enquiries	10	5	2

USER INTERFACE / MOBILE

The way we interact with technology has changed. This has implications to survey technology.

Mobile interfaces

We're getting to a stage where the majority of employees take the survey on a mobile device.



Research on user interfaces has implications to surveys

In a world of touch interfaces should we still use the same approaches we did in a world of pen & paper?

Body text

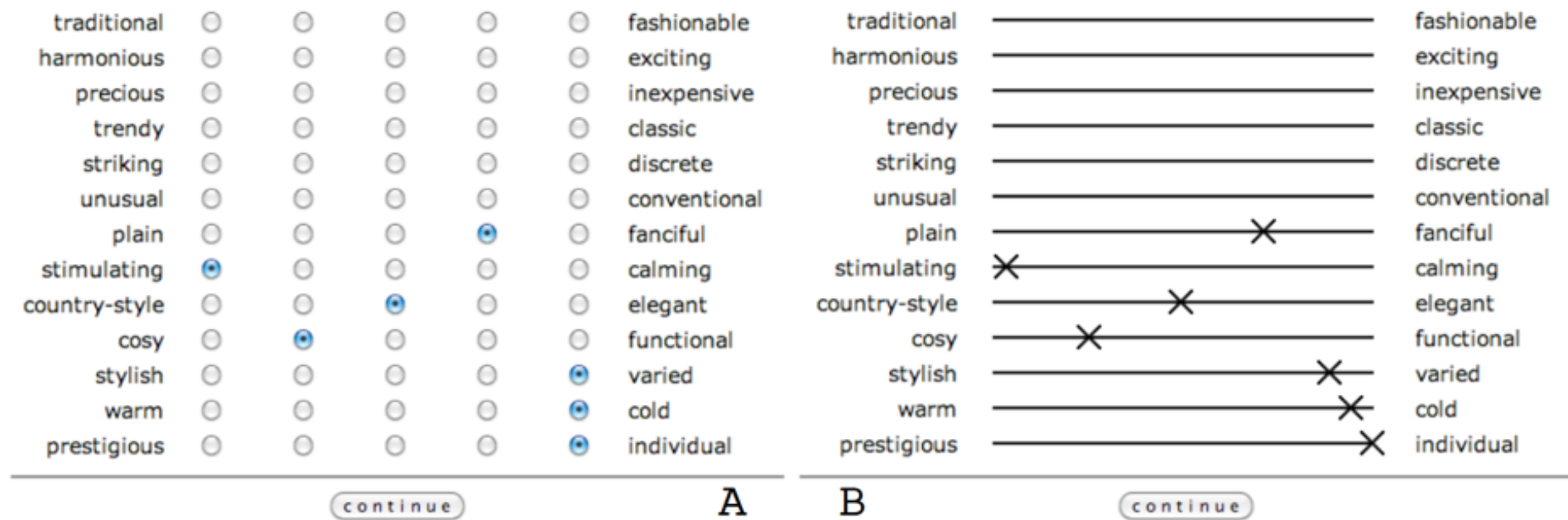


image taken from Funke & Reips; "Why Semantic Differentials in Web-Based Research Should be Made From Visual Analogue Scales and Not From 5-Point Scales" - Field Methods Vol24 No.3 August 2012

Visual analogue scales in practice

Workometry

VAS demonstration

To what extent do you agree or disagree with the following statements:

This webinar has already been very insightful.

Strongly disagree Disagree Neither agree nor disagree Agree Strongly Agree

☐ ☐ ☐ ☒ ☐

This webinar has already been very insightful. (VAS)

Strongly disagree  Strongly agree

Strongly disagree Strongly agree

Submit

BIG DATA TECHNOLOGIES

New ways of storing and accessing data is letting us do new things with survey data.

3

Combining survey and business data

The gold standard is combining data describing the individual, their behaviours and their perceptions.



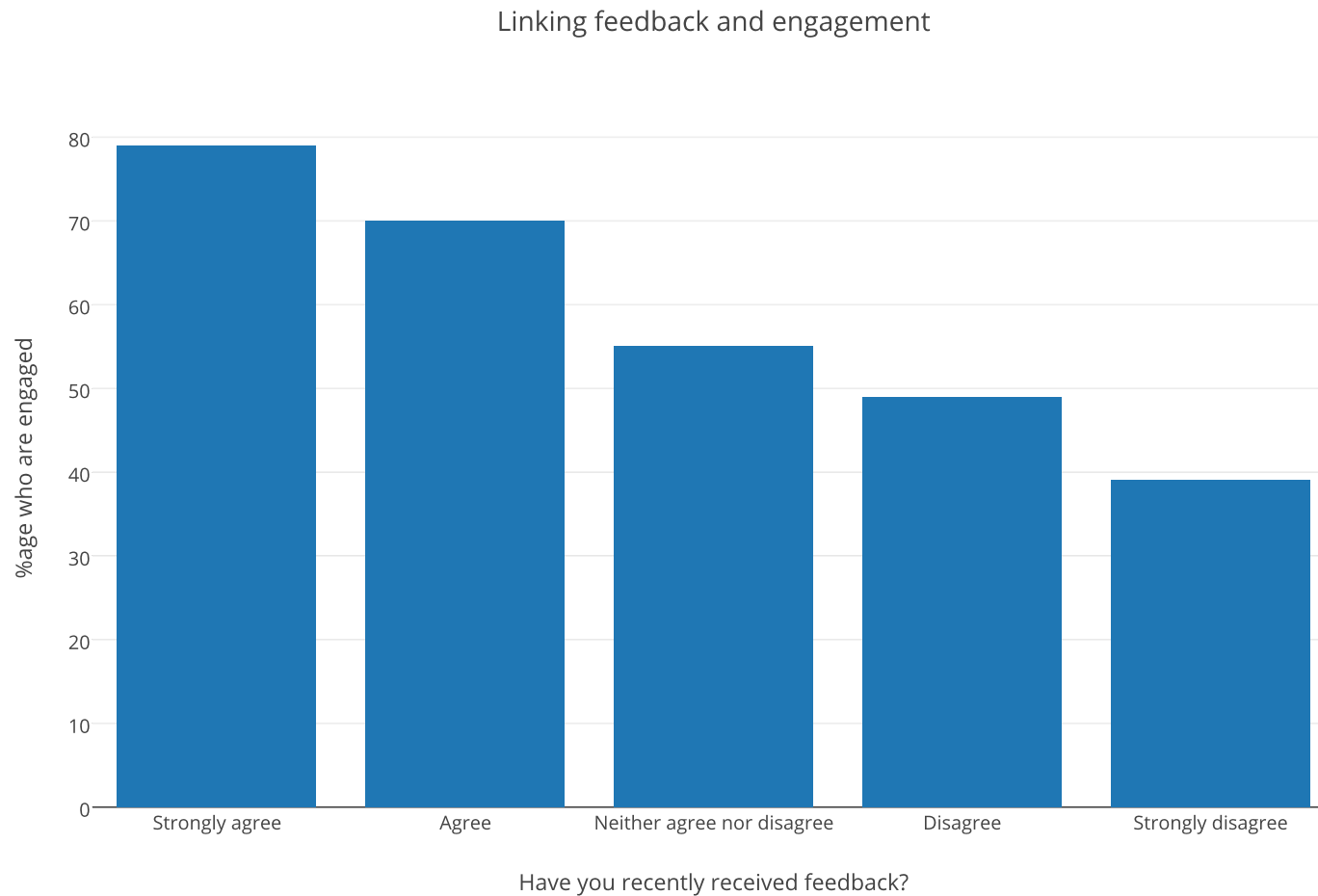
Combining survey and business data

The gold standard is combining data describing the individual, their behaviours and their perceptions.



Comparing questions across time

A simple use case is identifying patterns across different surveys



Using survey data in HR dashboards



Which group?

Who's in this group?

What are they thinking?

Network surveys / social network analysis

Tools such as polinode enable you to understand how people work together.

The screenshot shows the Polinode interface for a survey titled "Who You Work With Regularly". The user is "John Citizen". The survey progress bar indicates step 6 is active. The instruction is: "6. Please select between 5 and 10 people who you work with on a regular basis." A search bar contains the letter "a". A list of names is shown with a plus sign next to each: Alan Hill, Alice Ross, Amy Reed, Andrea James, Angela Morris, Ann Smith, Annie Gonzalez, and Anthony Simmons. A "Selections" box on the right lists the selected names: Janice Kelly, Catherine Sanchez, Betty Martin, Lois Brooks, and Richard White. At the bottom are buttons for "Cancel", "Previous", "Save Progress", and "Next".

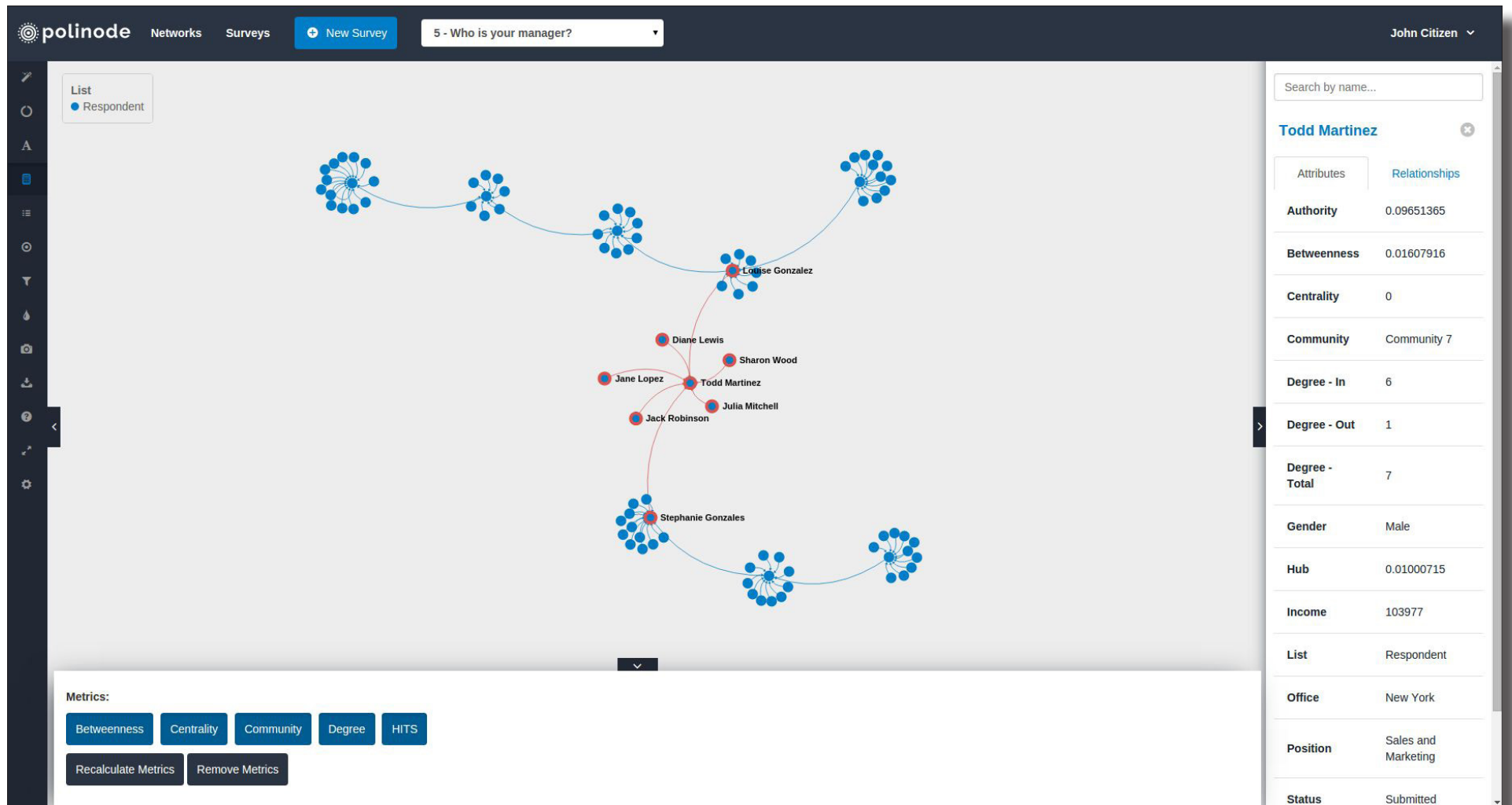
The screenshot shows the continuation of the survey, titled "Who You Work with Regularly (Continued)". The instruction is: "7. On a scale of 0 to 100 please indicate how frequently you interact with each of the people you indicated you work with regularly in Question 6." The scale is labeled "Very Little" at 0 and "A Great Deal" at 100. The survey shows the frequency of interaction for the selected people from the previous step:

Person	Frequency (0 to 100)
Betty Martin	96
Catherine Sanchez	59
Janice Kelly	79
Lois Brooks	21
Richard White	85

At the bottom are buttons for "Cancel", "Previous", "Save Progress", and "Next".

Network surveys / social network analysis

Tools such as polinode enable you to understand how people work together.



Network surveys / social network analysis

Some examples of where social network analysis has been useful

1. Mapping interaction and 'health' within small dynamic teams that are primarily offsite
2. Understanding and optimising communication, particularly cross-functional communication
3. Uncovering and resolving conflict within teams assembled from multiple organisations
4. Using network analysis in tandem with traditional engagement surveys
5. Mapping relationships between key clients and also individuals in an organisation

MACHINE LEARNING

Pattern spotting approaches that change the way we interpret survey data

4

Uses of Machine Learning with survey data

Survey data combined with HR and business data can deliver valuable insights.

Pattern spotting:
identifying complex
groups

Text analytics:
making sense of
open text

People analytics:
linking to business
outcomes

Perception data is important in modern analytics

The New York Times

Sunday Review

How Not to Drown in Numbers

MAY 2, 2015



Tim Lahan

**Contributing
Op-Ed Writer**

By ALEX
PEYSAKHOVICH and
SETH STEPHENS-
DAVIDOWITZ

BIG data will save the world. How often have we heard that over the past couple of years? We're pretty sure both of us have said something similar dozens of times in the past few months.

If you're trying to build a self-driving car or detect whether a picture has a cat in it, big data is amazing. But here's a secret: If you're trying to make

Link: http://www.nytimes.com/2015/05/03/opinion/sunday/how-not-to-drown-in-numbers.html?_r=0

Embracing open text

Text enables you to potentially replace large numbers of scale questions, identify topics not previously identified and it provides context, potentially replacing focus groups.

Body text

Everyone is leaving and getting much higher pay, but we are told we are paid at market rate. I think your data is wrong

I haven't had a career discussion in years

Management only communicates that it wants us to change

I don't see any change from last year

The new intranet is a huge improvement

Our coffee machine has been broken for ages. We have to walk 5 minutes to get a drink.

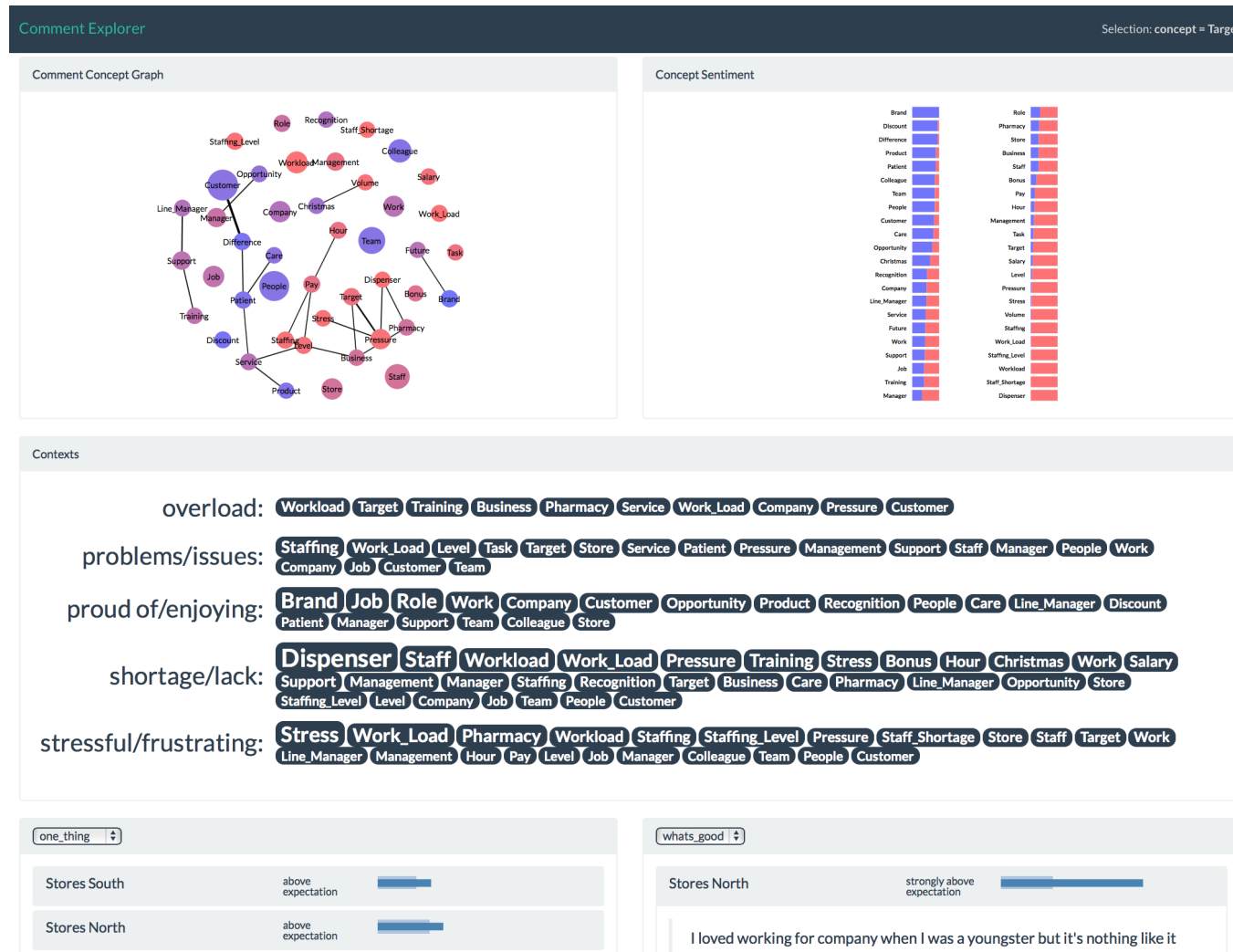
Embracing open text - text analytics

Some of the common tasks completed with text analytics

1. Pre-processing text for spelling, capitalisation etc.
2. Translation to a single language
3. Categorising comments to identify key themes or topics
4. Identifying the context in which the topics are discussed
5. Scoring for emotions / sentiment
6. Automatically routing certain topics for action

After text analytics open text can be visualised

Interactive visualisations let you navigate and make sense of large volumes of open text comments.



Open text in practice

Twitter using open text via Kanjoya's Perception product



Kanjoya and Twitter Co-Present New Model of Employee Engagement: An (Even) Better Workplace and a Competitive Advantage

April 14, 2015 • BY GERI CRUZ • Categories: [Blog](#), [Emotion Analysis](#), [Employee Engagement](#), [Employee](#)

Link: <http://www.kanjoya.com/kanjoya-and-twitter-co-present-new-model-of-employee-engagement-an-even-better-workplace-and-a-competitive-advantage/>

The People Analytics approach to using survey data

Most of our work with survey data is based on the following approach.

1. Start with the business outcome
2. What behaviours drives these outcomes?
3. Link attitudes, values, behaviours and outcomes

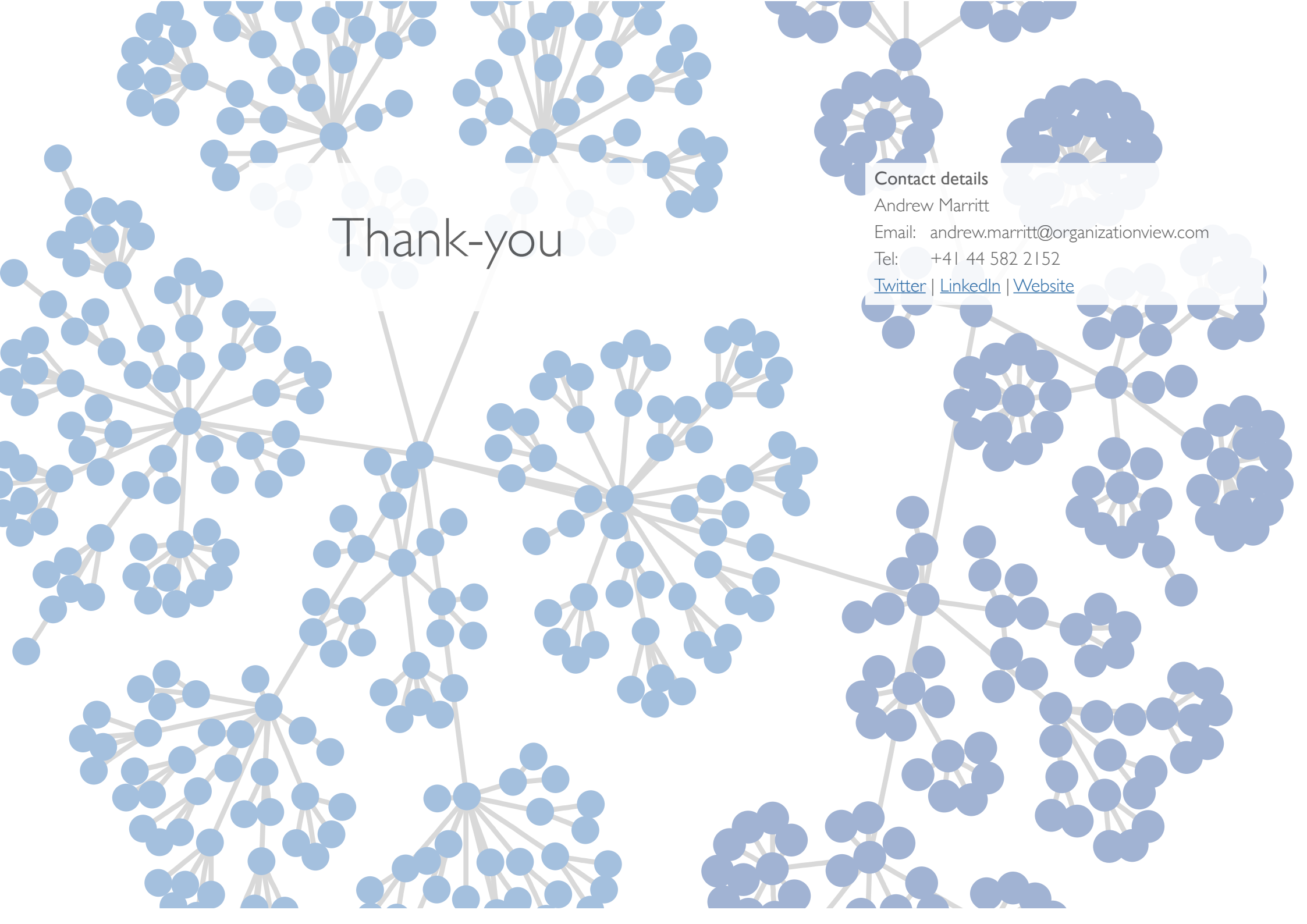
FINAL THOUGHTS

Getting the most from the new tools

How to get started

A few key lessons from our experience

- Make sure you have the right legal & contractual rights to the response-level data.
- Think of these surveys as complementing your existing survey at first.
- Start small - pick a target population.



Thank-you

Contact details

Andrew Marritt

Email: andrew.marritt@organizationview.com

Tel: +41 44 582 2152

[Twitter](#) | [LinkedIn](#) | [Website](#)