

# Persuading with Big Data

Keep it simple

Gary Peacock
Author of Persuading for Results



Persuading with Big Data – Keep it Simple

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# Contents

Introduction	4
Why use data to persuade?	6
How can you use data to persuade?	8
How can you persuade your audience to act?	15
Summary: Persuading with Big Data – Keep it Simple	21
Questions to Challenge You	22
References	23



#### Chapter

### Introduction

There is no doubt that big data is coming. No, let me correct that: big data is here and growing at an exponential rate. Especially considering the first computer was invented in 1946, just 70 years ago.

#### How much big data are we generating?

As executives and senior managers are getting bombarded with numbers and data, we try to understand what this means.

In 2012, IBM stated that 2.5 exabytes (EB) were generated every day – that's 2.5 billion gigabytes (GB). For each of the seven billion people in the world, we are generating 0.4GB every day.

The goal is to turn data into information, and information into insight.

Carly Fiorina

#### **Global Internet Traffic** (historical and forecast)

Year	Global Internet Traffic
1992	100 GB per day
1997	100 GB per hour
2002	100 GB per second
2007	2,000 GB per second
2015	20, 235 GB per second
2020	61, 386 GB per second

### How much data created in a day?

- 500 million tweets
- 4 million hours of YouTube video uploaded
- 3.6 Billion Instagram Likes
- 4.3 Billion Facebook messages posted
- 6 Billion Google searches

With so much data being created it is no wonder we are all so confused.

Data is becoming the new raw material of business.

**Craig Mundie, Microsoft** 

#### 2016 What happens in an INTERNET MINUTE? facebook **NETFLIX** 69,444 WhatsApp 701,389 Hours Facebook watched logins 150 MILLION 20.8 MILLION+ **Emails Sent** You Tube Messages **UBER** 1.389 2.78 MILLION Uber Video Views Rides tinder 972,222 527,760 Photos Shared 51,000 2.4 MILLION App Downloads ... App Store From Apple 38,052 \$203,596 Hours of Music 120+ amazon Spotify New Linkedin 1.04 MILLION 38,194 Posts to Accounts 347,222 Vine Loops **New Tweets** Instagram Linked in EXCELACOM ©2016 Excelacom, Inc.

With so much data available now, what are we going to do with all the data? How can we use it to persuade?



### Why use data to persuade?

With so much data now being created, companies need more than ever to understand and manage their data analytics.

It is not just the volume but the complexity of data being collected that makes it tempting for senior managers to leave the analytics and interpretation to the experts. This is dangerous, as data without business insights is a waste of scare resources – money and time, and a missed opportunity to find your competitive advantage.

Executives must be able to clearly articulate the purpose of the analyses which can be translated into action, so insights gained from data can be used throughout the organisation. If an organisation is clear on the purpose of its data and the uses the data will be put to, then the insights unleashed by analytics can define and improve performance.

#### How do you define the purpose of the data?

To define the purpose you must first ask the right questions of your data. Clarity is essential. Good questions are:

- · How can we reduce costs?
- How can we increase revenues?
- How can we improve the productivity of each member of our team?
- How can be improve the quality of outcomes for patients?
- How can we radically speed out time to market for product development?

Align these questions to functions or departments, through to actual business examples. Find out where the value lies.

Use your questions to determine your purpose before you start to collect your data and you will achieve an impact sooner.

You can have data without information, but you cannot have information without data.

**Daniel Keys Moran** 



#### Change the perspective

Change the perspective to find new insights from your data, think very small and very big.

Data can be used to identify needs for new products and services, as we see from the hugely successful companies like Apple and Google. However, companies can also identify small points of difference which they can amplify and exploit. If an organisation systematically combines these small improvements across bigger processes or multiple processes, the payoff can be exponential.



#### Collect data from numerous sources

Data can come in many different shapes and sizes, some appear less useful than others. However, do not just dismiss data out of hand because you can't use it in a spreadsheet calculation. Free-text reports can provide many useful insights for improving your business, especially when used in conjunction with more traditional data analytics.

Combining different sources of data can make insights even sharper. Too often organisations drill down in a single set of data, completely ignoring other data sets and what could be gleaned if analysed together. When you look at two data sets side by side, key insights can become clear through the overlap.

If analyses are run in silos, then the outputs only work in one silo and insights are limited. Running analyses across silos will give richer insights and produce better results for the whole organisation.

#### Make the analyses useful?

Even if you get dynamic insights that could change the way your business works, these insights can't speak for themselves. Often analysts fall short in articulating what they have achieved, producing information that decision makers find too complicated to understand and therefore do not use.

Analytics need to be consumable and humans respond better to information that provides clear findings and shows actionable next steps.

Your analytics team needs to include individuals who know how to present the data findings in a way that managers can use them to influence their business decisions.

### How can you use data to persuade?

We already hold large quantities of data about our customers, and this amount is going to increase.

Most people still analyse their data using excel, and then use power point to persuade, both internally and externally. But, when people try to persuade using data, most people don't persuade, they dissuade!

Experience is the name everyone gives to their mistakes.

Oscar Wilde

#### What do we mean by dissuade?

Well, spreadsheets have allsorts of shading, allsorts of fonts in allsorts of colours. Added to this are plenty of bold and plenty of black lines. All this is then pasted in to one slide.

Most spreadsheets have tens, sometimes hundreds of numbers. So you end up asking yourself: What's the message of this slide?

Presenters will often take 15 minutes or more explaining each slide, and the audience are left confused and bored by the complexity, colour and commentary. Our time is too busy to work even harder to understand and then be persuaded by someone else's data. So, as a presenter your job is to simplify before you persuade. If most presenters are poor at presenting with data, then big data just brings us bigger problems.





The most successful companies will not be the companies with the most data, but the companies who can analyse the data to provide useful insights and then present this in a clear and persuasive way. You must be more effective at presenting with data than your competitor.

**1 Data** Ways of expressing things

**2 Information** Arranging data into meaningful patterns

**3 Knowledge** Apply and productively use information

**4 Wisdom** Discerning use of knowledge

Source: Stan Davies & Jim Bodkin, The Monster Under The Bed

One way to quickly analyse and present key findings from data is to use the software: Wordle.

#### Wordle



#### One message

Only use one message for each slide, table or graph. The clearer you can make your message the easier it will be for your audience to understand and therefore be persuaded by your data.

Use less black and more white space for your messages and give a summary for each point you are trying to make.

There are more responses from Queensland  Differences In Sample percentages: State		
State	2009	2007
QLD	27%	7%
SA	23%	24%
VIC	20%	34%
WA	17%	17%
NSW	7%	14%
NT	5%	0%
Not Identified	2%	0%
Percentages may not	add to 100% because of rounding	



#### More responses from QLD

Differences In Sample percentages: State

	Sample Perce	entages
State	2009	2007
QLD	27%	7%
SA	23%	24%
VIC	20%	34%
WA	17%	17%
NSW	7%	14%
NT	5%	0%
Not Identified	2%	0%

Create tables better and faster:

Tables can be used as alternatives to long lists of bullet points, especially when there is a pattern to the information.

#### Make them less black

Eliminate vertical lines

Insert narrow empty columns

Insert narrow empty rows

Insert horizontal lines above a column of numbers

#### Make your message clear

Put your message in the first row

Have the table contents in a subtitle

# Use Text boxes Benefits Line them up Group them Can show logic Use lines to show groups Can show complex arguments

Sometimes the data is clearer as a graph

In many industries, companies monitor market share carefully to check for competitive actions in the marketplace.

Look at the table next and answer this question: Has the market share between grocery and pharmacy changed?

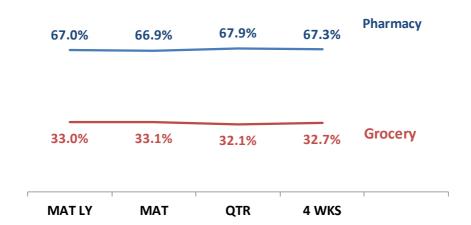
#### Category Share over different timescales

	MAT LY	MAT	QTR	4 WKS
Total Grocery Pharmacy	100%	100%	100%	100%
Pharmacy	67.0%	66.9%	67.9%	67.3%
Grocery	33.0%	33.1%	32.1%	32.7%

Contrast your experience with the table, by looking at the graph below. Answer the same question: Has the market share between grocery and pharmacy changed?

#### Market Share Is Steady between Channels

Category Share (21/12/2015)



With graphs, as with tables, to make the data clearer use more white space. So, remove the gridlines whenever possible. Change the axis to give you the scales you want and put on only the labels you want to emphasise. Change the colour, font and size to enable you to get your message across. Remember to put the message in the heading and only use one message per graph.

#### Make your message clear.

For some more examples of how to make your graphs clearer take at look at the video below by Cole Nussbaumer Knaflic: "Storytelling with Data". There are some great examples between 4.30 and 7.00 minutes.

Storytelling with Data

#### Colour

Colour is a powerful tool that can enhance any presentation. Research shows that colours can evoke an emotional response and make your message more memorable and persuasive. However the psychological impact of colour can also ruin your persuasive message, so think carefully about your choice of colour.

A simple but effective technique to make a presentation to a company more persuasive is to use the colours they use in their branding or in their in-house presentations. This makes your message more persuasive because it seems to fit with how they do business and improves your rapport with them. But when matching colours make sure you use the correct colours. A simple and free tool that will save you hours when searching for colours is called 'instant eyedropper'. This is included in some microsoft packages.



Colour has been proven to persuade, and research shows that colour persuades by:

- Accelerating learning, retention and recall by 55 to 75%
- Improving and increasing comprehension by up to 73%
- Increasing willingness to read by up to 80%
- Increasing motivation and participation by up to 80%
- Selling products and ideas more effectively by 50 to 83%





A person who is gifted sees the essential point and leaves the rest as surplus.

**Thomas Carlyle** 

To make your data come alive, find the essential point and concentrate your story on that. Hans Rosling teaches global health and uses visualization to make his data come alive.

The Joy of Stats



## How can you persuade your audience to act?

Even with access to all the data in the world, and analytics that provide the most practical insights – if you can't present these findings in a persuasive way that will get your audience to act, then it is a waste of resources.

To get your audience to act you need to remove any doubts that they have. Cialdini is an expert on persuasion and has identified six principles you can apply in your persuasion.

(Source: Presuasion, Robert Cialdini 2016)

Purpose	Cialdini Tool
Build Relationships	<b>Like</b> People like people who are like them Look for similarities
	<b>Reciprocity</b> People feel obliged to repay gifts and favours
Reduce Uncertainty	Social Proof People follow the lead of other similar people Use peer power when you can
	Authority People defer to experts Expose your expertise; do not assume it is self-evident
Motivate to Act	Scarcity People want more of what they can have less of Highlight unique benefits and exclusive information
	Consistency People align their behavior with small commitments Make their commitments active, public and voluntary

So, when you have a critical presentation, how can you be sure that it has a heartbeat – and will persuade your audience to act?

Your presentation may be critical because: winning the sale is budget-critical or convincing the audience is career-critical. In these situations use this process to review if your presentation has a heartbeat to persuade.

#### Review process:

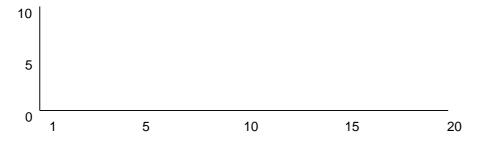
- 1. Ensure you are clear about what you want.
- 2. Ensure you include only essential content.
- 3. Ensure you create a compelling case.



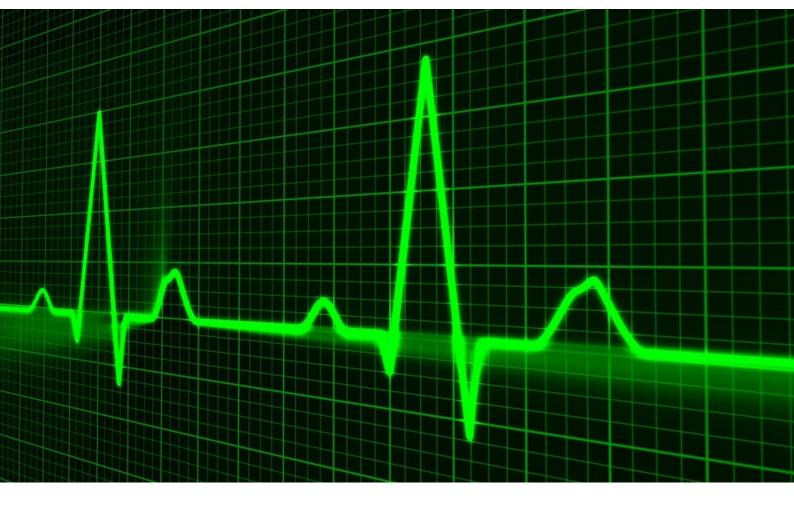
Faced with a choice between changing our mind and defending our position, most people get busy defending their position.

John K. Galbraith

Try using the ECG monitor for persuasion:



The ECG monitor for persuasion is used to check the heartbeat of your presentation. Assume you have 20 slides, draw a graph as shown above – a horizontal line with numbers 1-20, one for each slide, and a vertical line from 0-10 where 0 is neutral (or boring) and 10 is exciting or emotional.



#### So, how do we use it?

Look at typical slides, the most common is text and bullet points. How would you rate that? There is only one score we can give: zero. Nobody every says, "Please show me another slide of bullet points."

Many presentations contain numbers, a spreadsheet filled with tiny numbers, with black lines around each number. How would you rate that? How is your audience supposed to know which numbers are important? Even if you bold the **Total Column**, there is still so much black on the screen that the audience will just give up. Copies of spreadsheets, of numbers in slides, score: zero.

Some people will be about to give themselves a score greater than zero because they use colour in their spreadsheets. However, too much colour is just as confusing as all black. So, only use it to **make your message stand out**.

Everybody gets so much information all day long that they lose their common sense.

**Gertrude Stein** 

#### So, what can you do?

One way to make your presentation more exciting is to add emotion to your logic, or add right brain thinking to left brain thinking. With whole brain thinking we ask and answer four questions. From the left brain we ask, what? And how? Then from the right brain, who? And why?

In many presentations we use only logic and only answer the left brain questions, what and how? To give our presentations a heartbeat we need to answer some right brain questions too.

Left	What?
Brain	How?
Right	Who?
Brain	Why?



#### Who?

This question covers two elements:

- · Who will be affected
- Who will be involved

Talking about specific people and showing pictures of people adds some emotion and right brain thinking to our presentation.

#### Why?

This is often the most neglected aspect of presentations.

Senior managers are often quick to answer What and How, while the audience is distracted asking themselves the question:

Why do we need to do anything?

The why question has gained some attention by Simon Sinek and his book: *Start with Why: How Great Leaders Inspire Everyone to Take Action.* 

There is a summary of the book in the TED talk below. Just 18 minutes long and nearly 17 million views, so well worth a look.

**How Great Leaders Inspire Action** 



From a practical perspective, to include right brain thinking and to trigger emotion, ensure you connect to the big picture: what is happening with customers and competitors. Also, connect with long-term objectives. What is your strategy? What are your goals beyond this financial year?

Answer the why question in your first two slides. If you do this well, then the audience is enthusiastic to hear the answers to the what question and the how question.

Using visuals throughout and answering the who question will sprinkle the spice of right brain thinking and emotion throughout your presentation. So, adding right brain thinking gives you a presentation with a heartbeat.

The essential difference between emotion and reason is that reason leads to conclusions, while emotion leads to action.

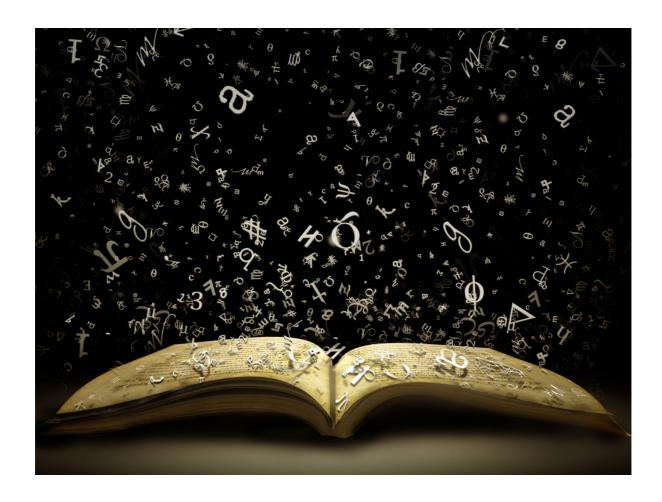
**Neurologist Donald Galne** 



To really motivate your audience to act, you need to connect with them through stories. Make your presentation of data more compelling, use this compendium of resources from HBR to help you with that.

#### **HBR Insights**





Data are just summaries of thousands of stories – tell a few of these stories to help make the data meaningful.

Chip & Dan Heath



# Summary: Persuading with Big Data – Keep it Simple

Big data is here and the amount created continues to increase at an exponential rate. What are you going to measure? What are you going to use the data for? How are you going to use the data to persuade?

#### Ask the right questions?

Determine what you want to use your data for, so you can make sure that you are measuring the right information and searching for specific answers. The amount of data collected now by organisations' is like a black hole – don't get sucked in, have a plan and stick to it.

Hiding within those mounds of data is knowledge that could change the world.

**Atul Butt, Stanford** 

#### Keep it Simple

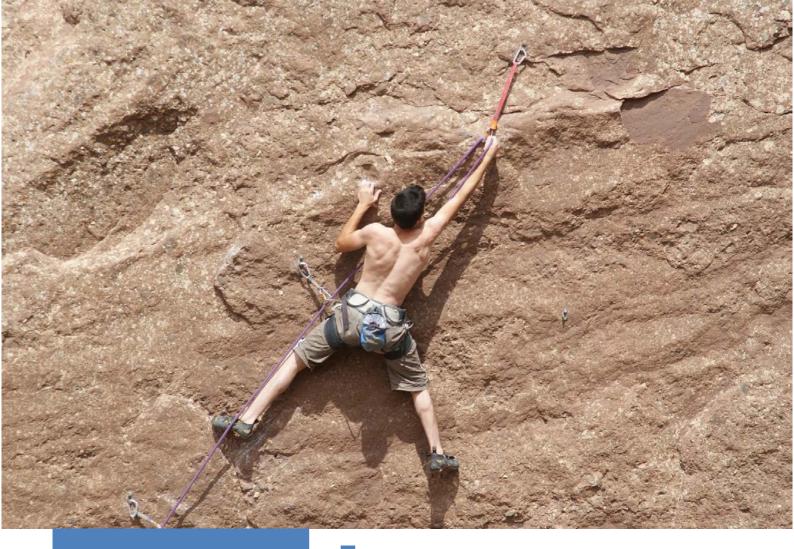
With all the data you have collected you will find valuable insights that you can use to help your customers improve their businesses and you can use this to build your strategic relationships with them.

However to gain the insights and be able to use the information to persuade your best customers – keep it simple. Remember, just one message at a time and have lots of white space using colour and bold fonts just to emphasise your message.

Also remember to add some emotion and right brain thinking to your presentations, so they have a heartbeat. Images and quotes are the easiest, most powerful way to do this.

For more insights on effectively persuading for results read the book by Kozicki and Peacock, *Persuading for Results*:

Persuading for Results



If you can't explain it simply, you don't understand it well enough.

Albert Einstein

### Chapter Questions to Challenge You

- 1. What is the message of your data? What do you want the reader to do?
- 2. If you print the data in black and white, is the message clear?
- 3. What's the purpose of your data? What question are you trying to answer?
- 4. How many numbers do you have on each slide? How many matter?
- 5. How many colours do you have on each slide? Can you reduce the number of colours?
- 6. Are you creating information (arranging data into meaningful patterns) or just dumping data?
- 7. What are you trying to do: Build relationships, reduce uncertainty or motivate to act? How can you use the pairs of Cialdini tools to be more persuasive?
- 8. How are you communicating to the right brain? Are you answering two questions: Who and Why?
- 9. How can you add emotion to your presentation?

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#### The Problem

More than 200 years ago, someone said: "Water, water everywhere and not a drop to drink." Today, he would say Data, data everywhere and not an insight to drink. Already we are drowning in data. A 2014 EMC study claimed that if a byte of data were two litres of water, then the average house would be full in 10 seconds. However, by 2020 the average house will be full in just two seconds. So, if we and our customers are not to drown in data we must find ways to Persuade With Data.

#### The Future

With data, we should use as our guide another 200 year old quote: "What is written without effort is in general read without pleasure." To Persuade With Data, we need to understand some principles and see some examples - good and bad. If we present data so that the message leaps off the page, we will save time because we will persuade people much faster. As the avalanche of data continues, the skill of Persuading With Data will get more valuable every day.

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