Government 10: Quantitative Political Analysis

Sean Westwood

An evaluation of me and my work

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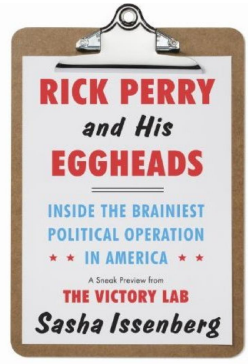
- How to interpret the results of a statistical analysis
- How to identify the strengths and weaknesses of different research designs
- How to conduct statistical analysis
- **How to work with data**

Why this class

- Understanding statistics opens doors...

Doing (meaningful) work for campaigns



Jobs

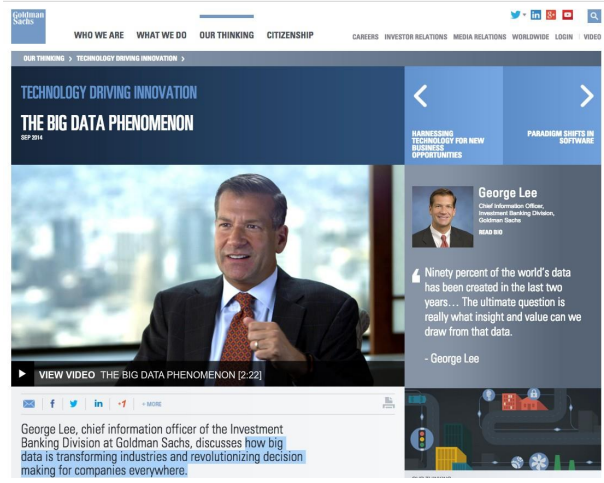

Goldman Sachs
WHO WE ARE
WHAT WE DO
OUR THINKING
CITIZENSHIP
CAREERS
INVESTOR RELATIONS
MEDIA RELATIONS
WORLDWIDE
LOGIN
VIDEO
OUR THINKING › TECHNOLOGY DRIVING INNOVATION ›
TECHNOLOGY DRIVING INNOVATION
THE BIG DATA PHENOMENON
SEP 2014
HARNESSING TECHNOLOGY FOR NEW BUSINESS OPPORTUNITIES
PARADIGM SHIFTS IN SOFTWARE
George Lee
Chief Information Officer, Investment Banking Division, Goldman Sachs
READ BIO
Ninety percent of the world's data has been created in the last two years… The ultimate question is really what insight and value can we draw from that data.
- George Lee
VIEW VIDEO THE BIG DATA PHENOMENON [2:22]
+ MORE
George Lee, chief information officer of the Investment Banking Division at Goldman Sachs, discusses how big data is transforming industries and revolutionizing decision making for companies everywhere.

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TABLE 2. The Effect of Credit Claiming and Advertising on Constituents

Condition	Identify Name	Delivering Money	Passing District Legislation	Legislator Feeling Thermometer
Advertising	0.87	3.99	3.96	50.32
	[0.81, 0.93]	[3.77, 4.21]	[3.73, 4.19]	[46.22, 54.43]
Credit Claiming	0.90	4.49	4.51	56.01
	[0.83, 0.96]	[4.26, 4.71]	[4.27, 4.74]	[51.75, 60.27]
Control	0.58	3.68	3.72	45.16
	[0.51, 0.64]	[3.46, 3.91]	[3.49, 3.96]	[40.97, 49.35]

This table shows that credit claiming messages are more effective at cultivating support than advertising messages. Each row contains the conditions: the top row is the advertising condition, the middle row is the credit claiming condition, and the bottom row is the control condition. The columns contain the outcome variables. Each entry is the corresponding condition's average for the dependent variable, with a 95 percent confidence interval below this average. The first column contains a manipulation check, demonstrating that our study increases name recognition, evidence subjects received our treatments. The second and third columns demonstrate that claiming credit increased the impression that legislators were effective at delivering money to the district and passing legislation beneficial for the district. The fourth column shows that credit claiming messages cultivated more support for the legislator.

(Grimmer, Messing and Westwood 2012)

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TABLE 1 The Power to Propose Legislation Increases Vote Share for Members of the Government

	Dependent Variable: Vote Share		
Variable	**Coef.**	**R.S.E.**	**p**
Government * Power to Propose	3.70	1.49	.01
Government Member	−0.02	0.92	.99
Power to Propose	−0.98	0.74	.18
Year = 2006	0.07	0.63	.90
Previous Vote Share	0.82	0.03	.00
Constant	7.89	1.92	.00
N	404		
R^2	0.61		
Root MSE	6.30		

Note: Ordinary least squares (OLS) regression of vote share on variables shown. All p-values are two-tailed. Standard errors are clustered on Members of Parliament. The linear combination of Power to Propose and Government * Power to Propose is 2.73 percentage points (95% CI 0.29, 5.17). This shows that members of the government who are randomly granted the right to propose legislation on average earn 2.73 percentage points more vote share than those government members who are not.

(Loewen et al. 2013)

Course details

Book

- *Data Analysis for Social Science: A Friendly and Practical Introduction* by Elena Llaudet and Kosuke Imai.

Approach

Before class:

Approach

Before class:

- Complete the reading

Approach

Before class:

- Complete the reading

During class:

Approach

Before class:

- Complete the reading

During class:

- Work on class exercises

Approach

Before class:

- Complete the reading

During class:

- Work on class exercises
- Work on problem sets with my help

Course details

Tools:

- Canvas (problem set submission)

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Class components:

- 40% Problem sets
- 15% Midterm Exam
- 20% Final Exam
- 10% Quizzes
- 15% Class Participation

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- Problem sets due Sunday @ 11:59 PM

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- Submit your work as a compiled PDF (I will show you how to do this)

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- B+ course median.

The threshold for a B+ will be set to the median course grade.

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- All students with a grade above an 84% will receive either an A or an A-, while those below will receive a B+, B, etc.

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- After sorting by grade, the median is an 84%.
- All students with a grade above an 84% will receive either an A or an A-, while those below will receive a B+, B, etc.
- Based on past versions of this class I do not expect to issue grades below a B- to anyone who **does the coursework and comes to class**.

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- I will not help with code that was obviously generated by AI.
- I will not consider as correct approaches to answering a problem that were not taught in this course.

Advice (and a pep talk)

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Absesense:

- If you have to miss for something unavoidable, please talk to me *before* you miss class. I very much understand that life happens!

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- Let's seek detente: many of you would rather take another class; it is hard for me to teach a class students don't like.
- But life sucks sometimes, so let's make the best of this.

You can do it

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- Be patient – this class is like learning a foreign language
- If you spend a lot of time on this class you will succeed

Big idea

- Data can help us understand politics

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- In life better skills -> better opportunities -> more money and/or happiness