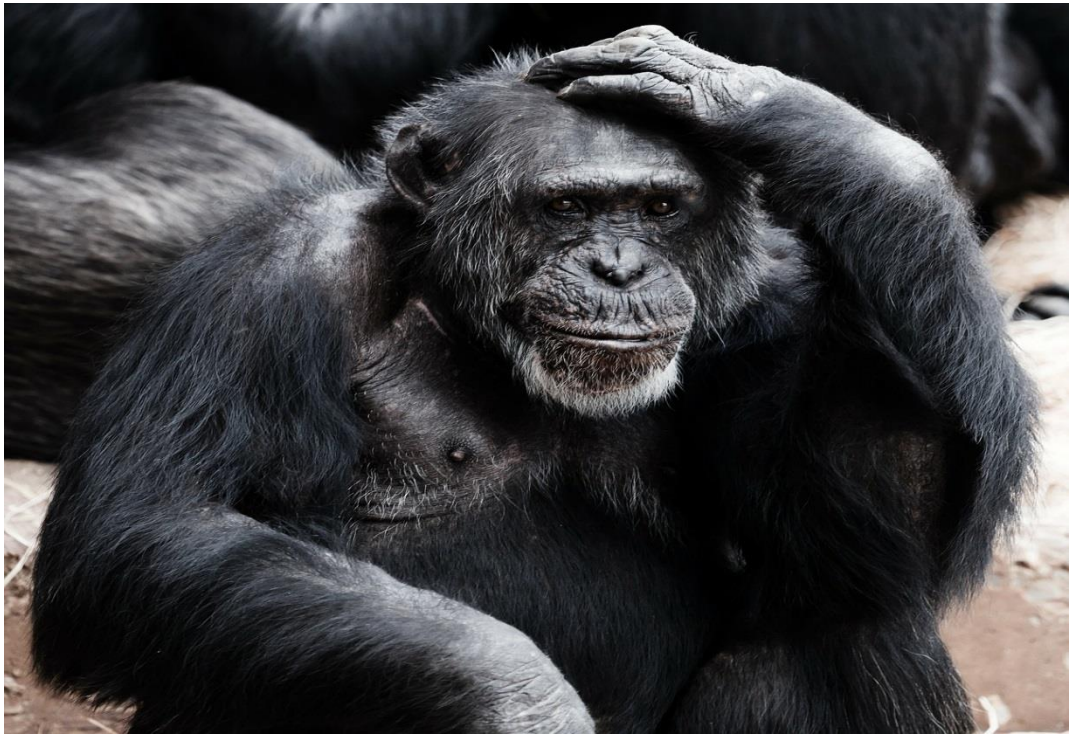
Small Data Science

Microconf EU 2015

Marc Hoffmann
mh@h-rd.org

Small Data Science

How to extract **actionable knowledge** from less or no data?



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How to leverage:

- **your HYPOTHESIS,**
- **some data, and**
- **basic psychology**

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A hypothesis is a **testable** assumption.

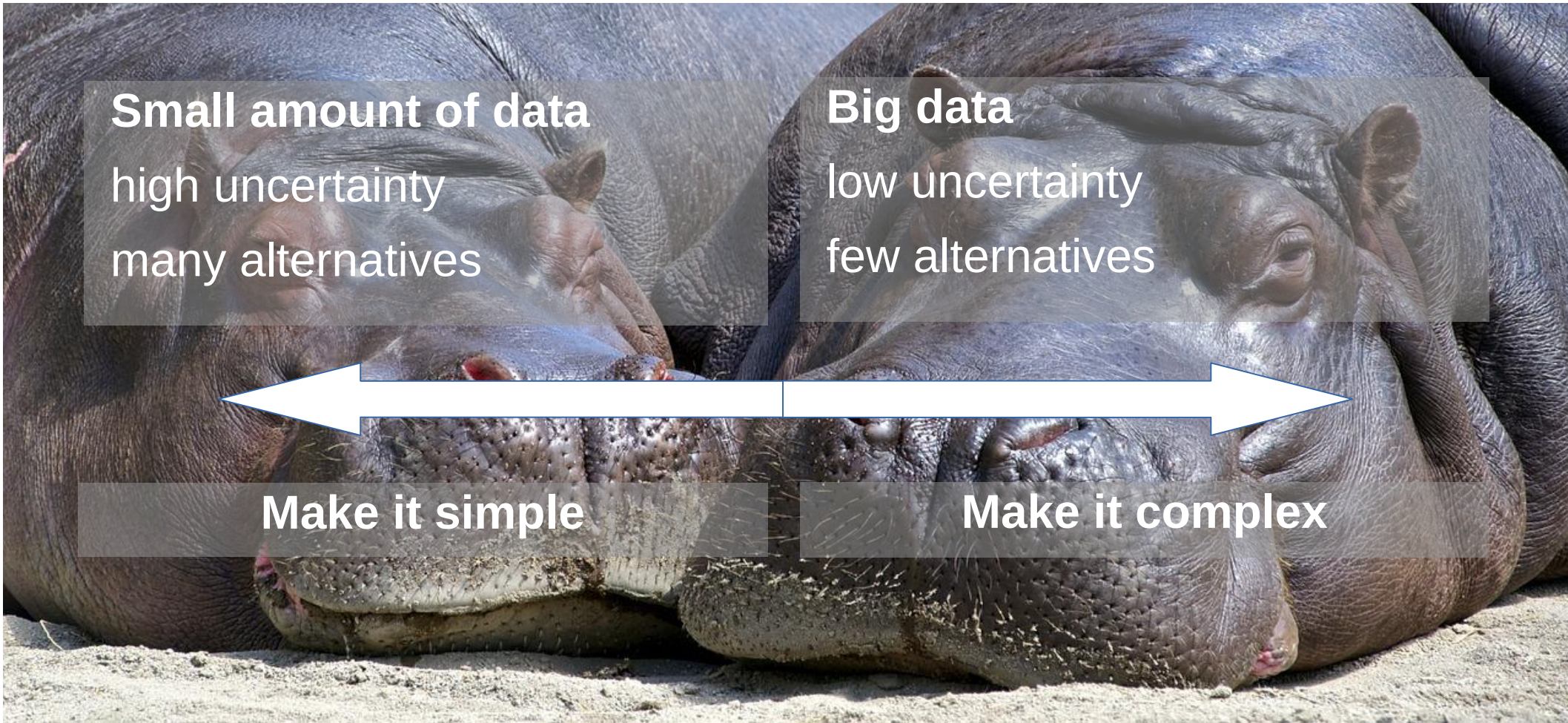
Hyp 1: Shopify shops **need** adwords help.

→ **difficult** to test, big data.

Hyp 2: Shopify shops **use** adwords help.

→ **easier** to test, see shopify marketplace!

Why Small Data Science?



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Use all background knowledge you can get.

“Solve Problems where People are already paying for solutions” (Dan Norris)

➡ **BUT offer different solution!**

Example: Wpcurve.com vs. agency

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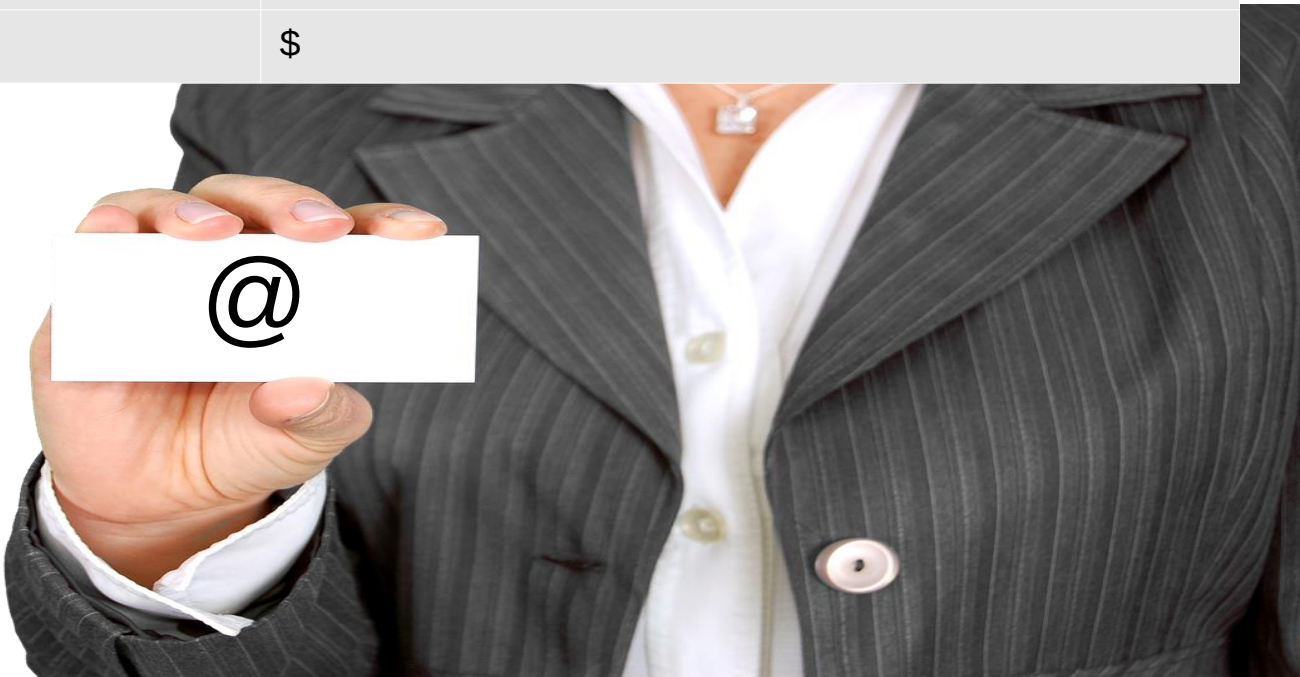
gmail	free $
mailchimp	cheap $
contsant contact	$
salesforce	$$$$$
followup.cc	$



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Reason Backwards / Pattern Matching

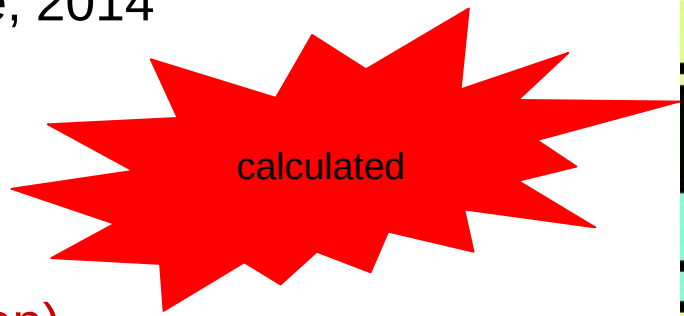
ex. appointment reminder, Patrick McKenzie, 2014

MRR ~ $6500/month, 142 accounts, …

~ 140 new customers in 2014

~ 0.7% conversion rate

→ bid up to $ 1.8 per adwords click (J. Cohen)



Can you build a business based on these numbers ?

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Use the “right” statistics

Median

for “small” samples

What’s most frequent?

1) Type of customer
2) Contract size
3) Length of contract

Mean

for “large” samples

What’s the “average”?

1) average $$
2) average age

Depends on data distribution

Fluctuates with small samples

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Heuristics

Find most important reason and ignore the rest

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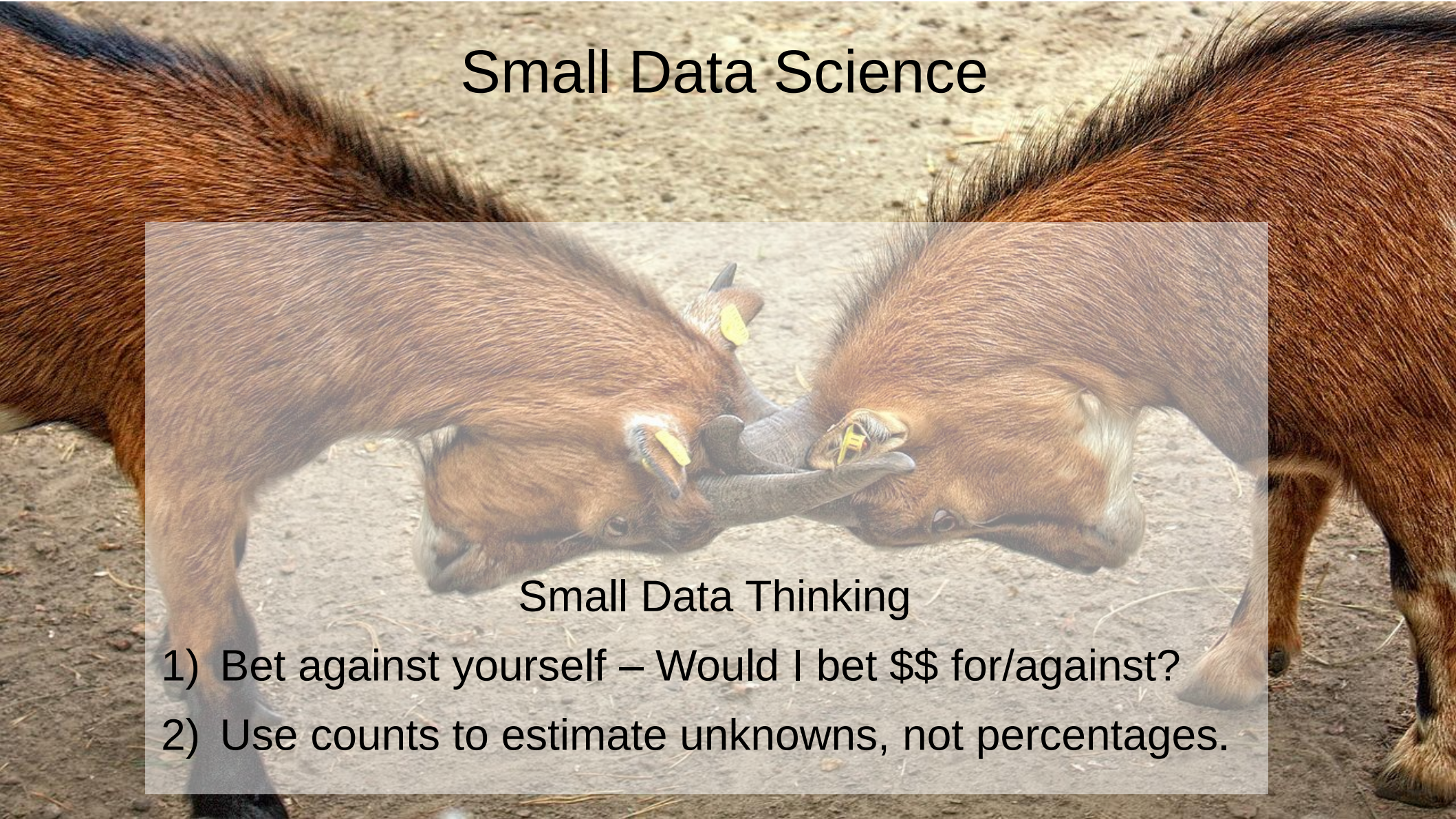

Small Data Thinking

1) Bet against yourself – Would I bet $$ for/against?
2) Use counts to estimate unknowns, not percentages.

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Slides, reading list at:

http://h-rd.org/mceu2015

Questions? I like to help, just ask the guy on the photo!

mh@h-rd.org