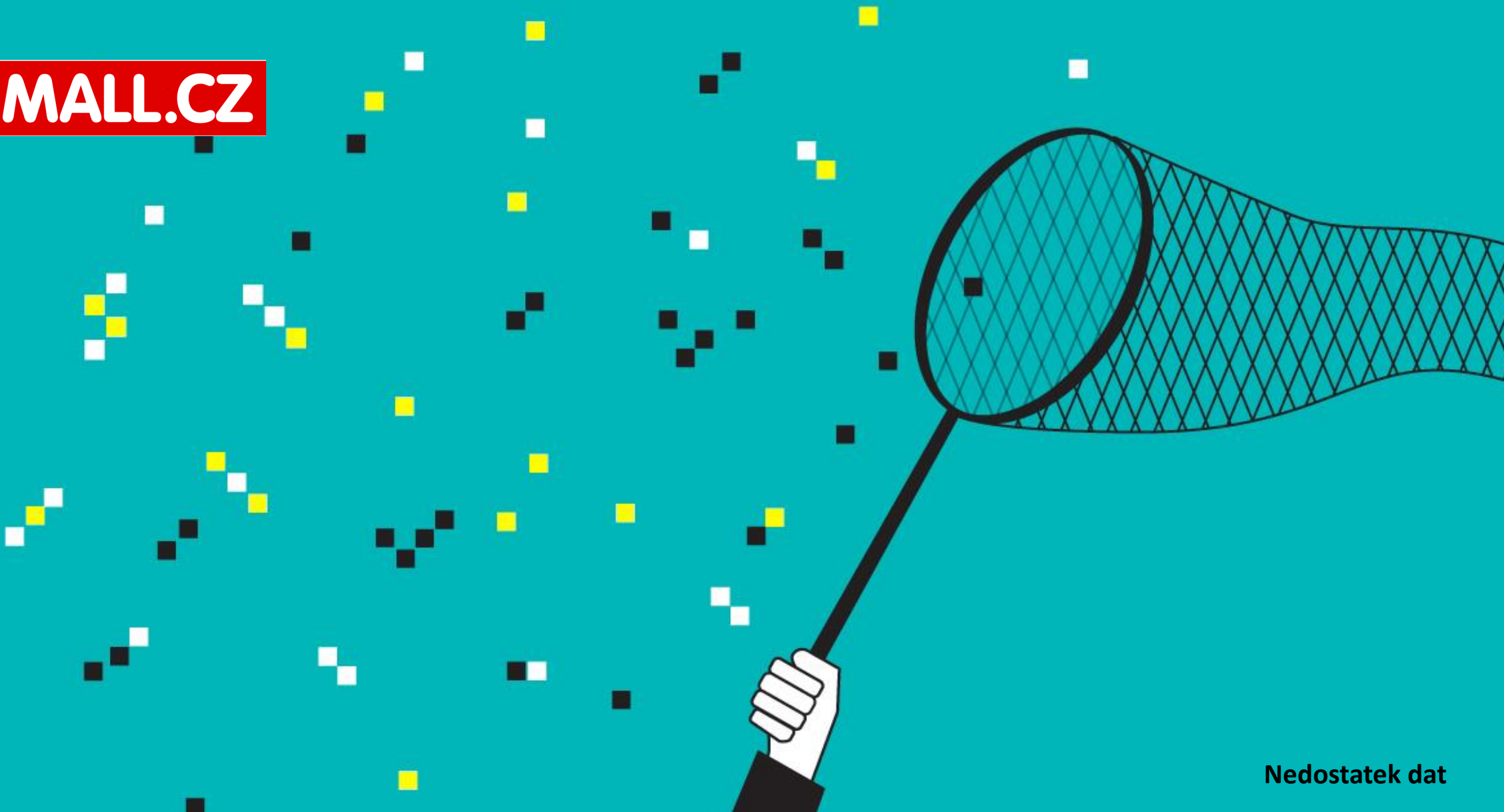




Proč nedělat A/B testování (drafts and experiments)

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Nedostatek dat

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Požadavky vedení

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Nelze použít drafts and experiments

TOO BUSY

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Automatizace

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facebook



GLAMI



Mailing

Display

Jak tedy testovat a vyhodnocovat?

Ruční bidding x tROAS

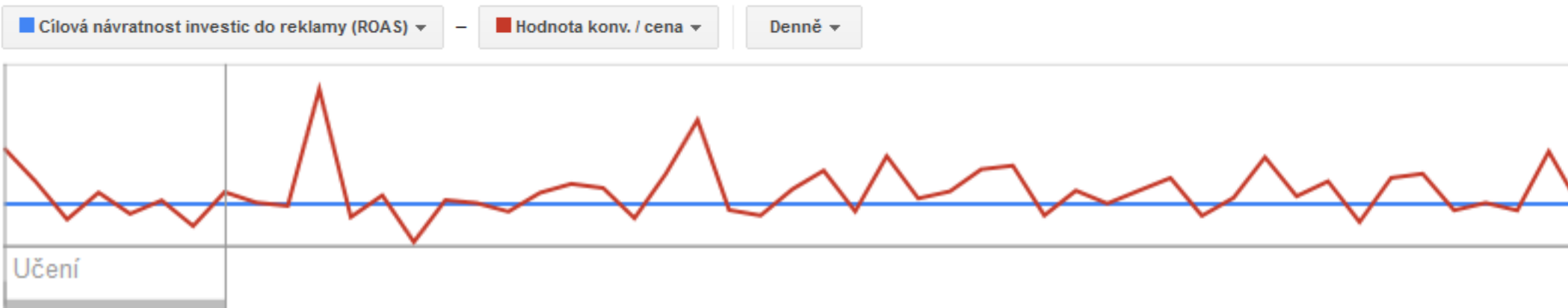
Co jsme testovali

- Ruční bidding x tROAS u dynamického remarketingu

Očekávání

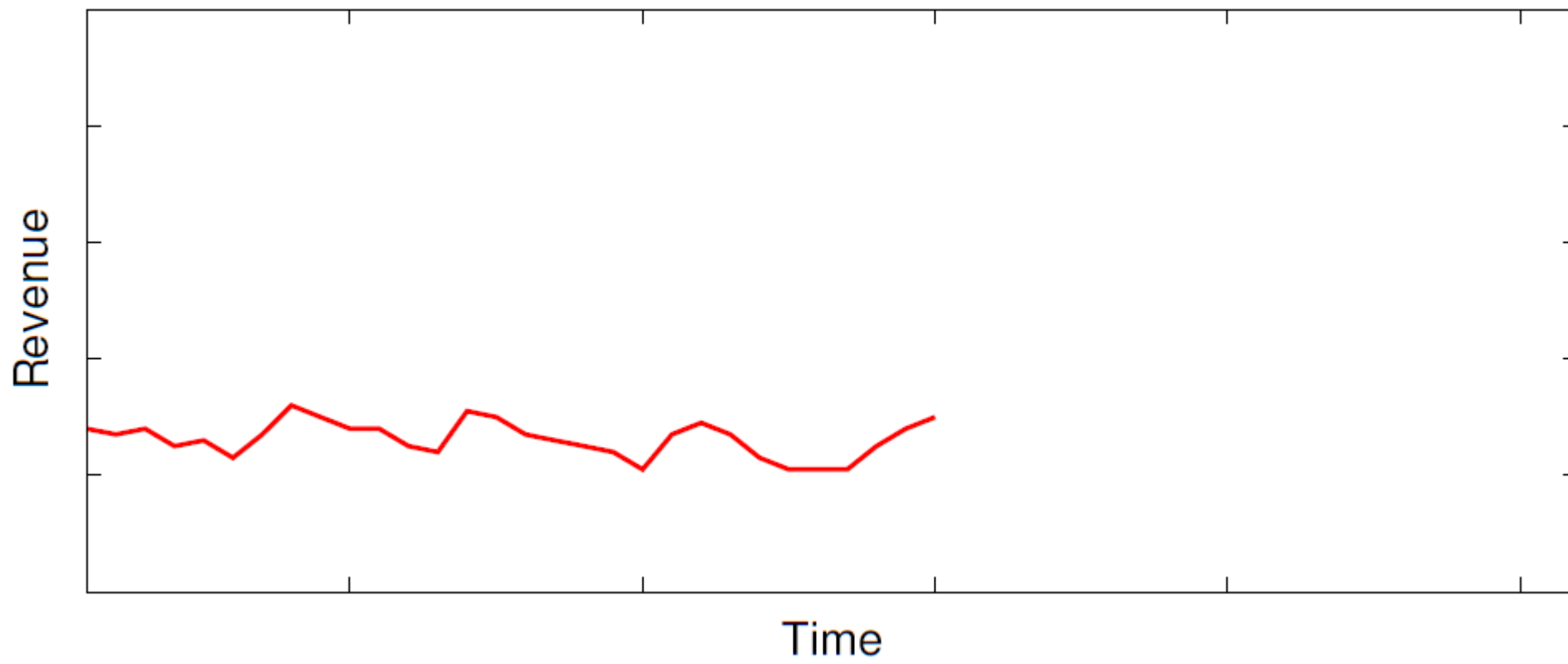
- Ušetření času
- Využití více signálů při biddingu (OS, zařízení, prohlížeč,...)
- Navýšení revenue při zachování ROAS

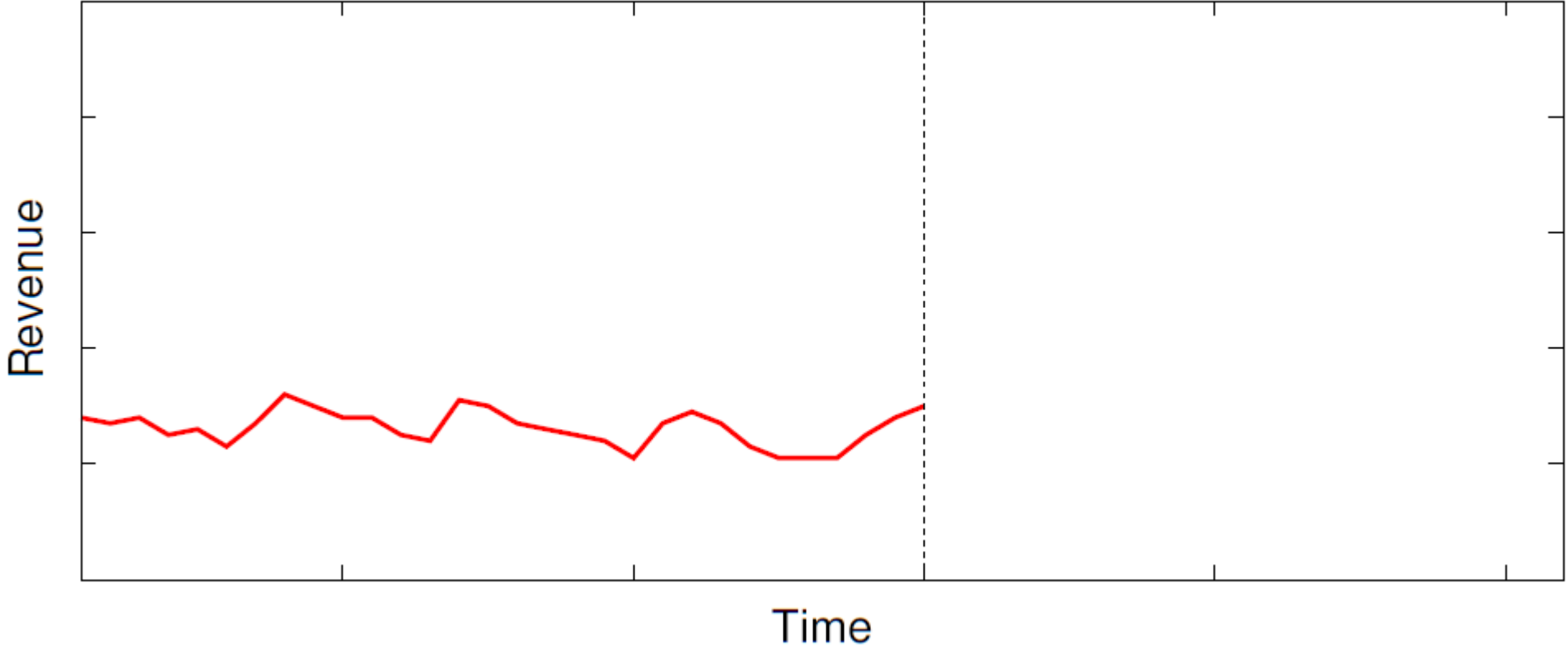
Výsledek

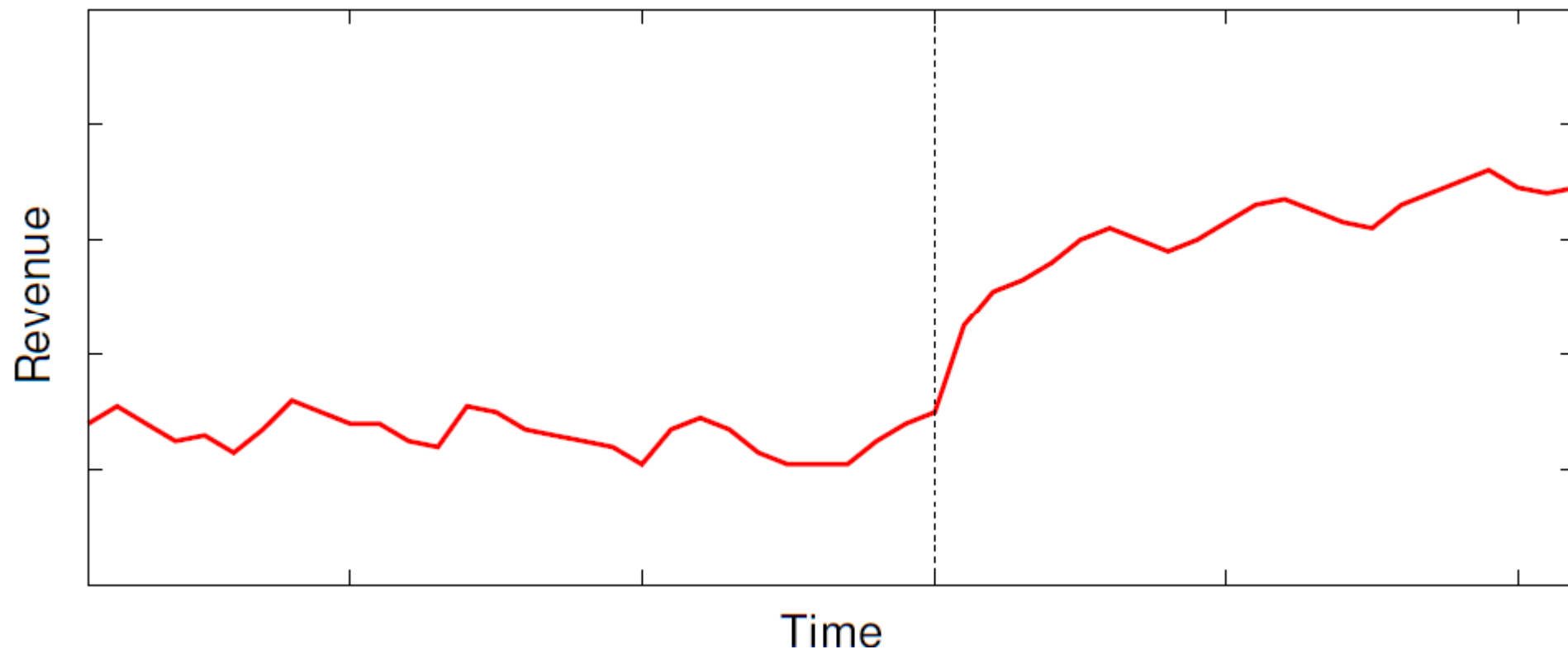


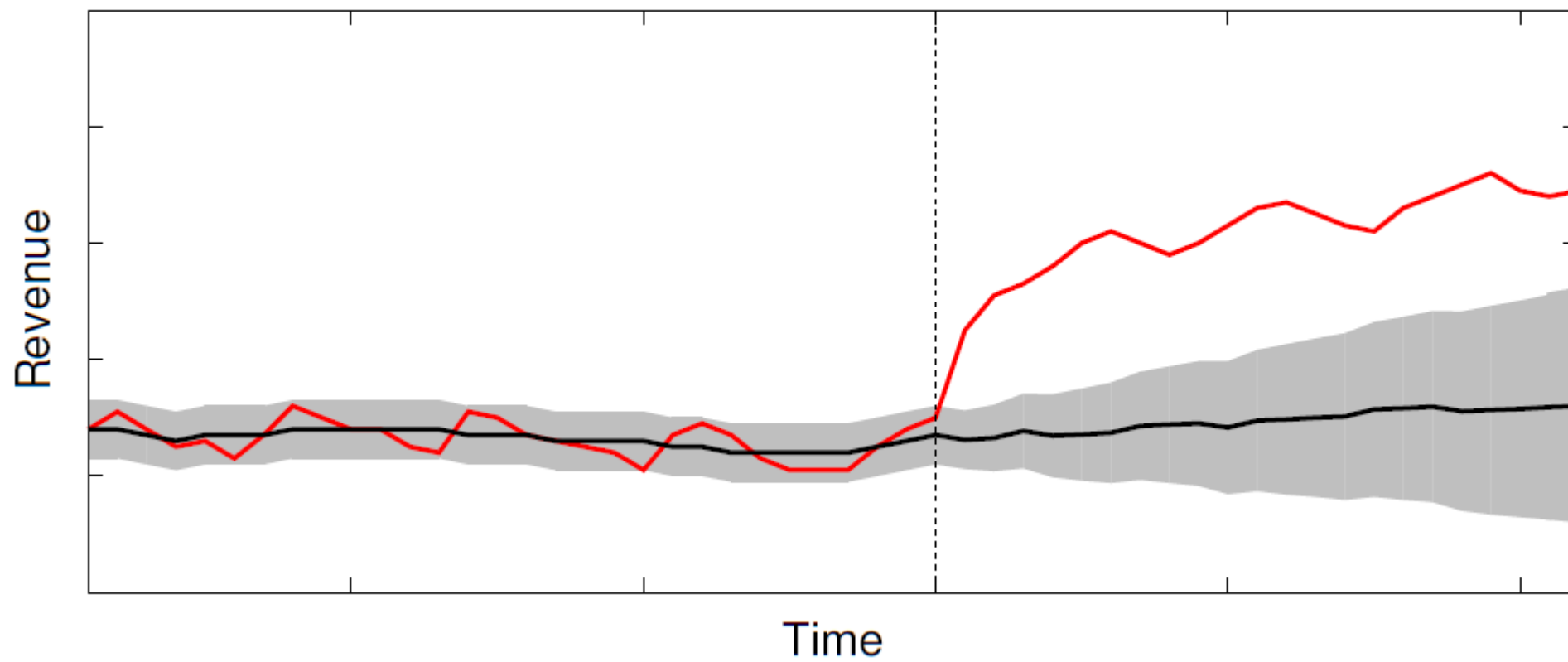
ROAS	Tržby
21%	114%

Causal Impact









Co jsme testovali

- Bidding na Heuréce
- Optimalizaci na revenue x optimalizaci na marži

Očekávání

- Navýšení hodnoty marže při stanoveném max. PNM
- Přesnější bidding

Výsledek?



Optimalizace na revenue (PNO) x optimalizace na marži (PNM)

Metric	Test baseline 95% Int.		Test Actuals	Increment	Global Relevance (increment caused by test)
Revenue				(+11%)	YES
GM				(+14%)	YES
GM (%)				4%	SEMI-YES
Costs				(+6%)	YES
PNO (%)				-13%	YES
PNM (%)				-24%	YES

PNO = mkt. cost / revenue

PNM = mkt. cost / GM

GM = revenue – cost

Causal Impact

Co si odnést?

- Testujte
- Hledejte způsoby, jak co nejlépe testovat
- Jasně si definujte cíl, postup a metodiku testu
- Hypotézy jsou pouze hypotézy
- Konzultujte
- Netestujte hlouposti

Příloha o Causal Impact



Time series experiments help assess what performance would have been without the intervention (e.g., bid increase)

Google offers a free package to enable time-series experiments

The screenshot shows the GitHub repository page for CausallImpact. At the top, there is a 'View on GitHub' button with the GitHub logo. Below this, the title 'CausallImpact' is displayed in a large font, followed by the subtitle 'An R package for causal inference in time series'. There are two download buttons labeled 'tar.gz' and '.zip'. The main content area contains two sections: 'What does this package do?' and 'What are the underlying assumptions?'. The first section explains that the package implements a structural Bayesian time-series model to estimate the causal effect of an intervention. The second section states that valid conclusions require strong assumptions, and the package assumes that the outcome time series can be explained by a set of control time series that were not affected by the intervention.

Choose an Advertising Intervention:

example: Increased or Decreased Ad Spend

Chose a Time Series:

example: Conversions or Clicks

Use a Model to Infer Causality:

Use R package to analyze how a “time series” could have evolved after the intervention if it hadn’t taken place

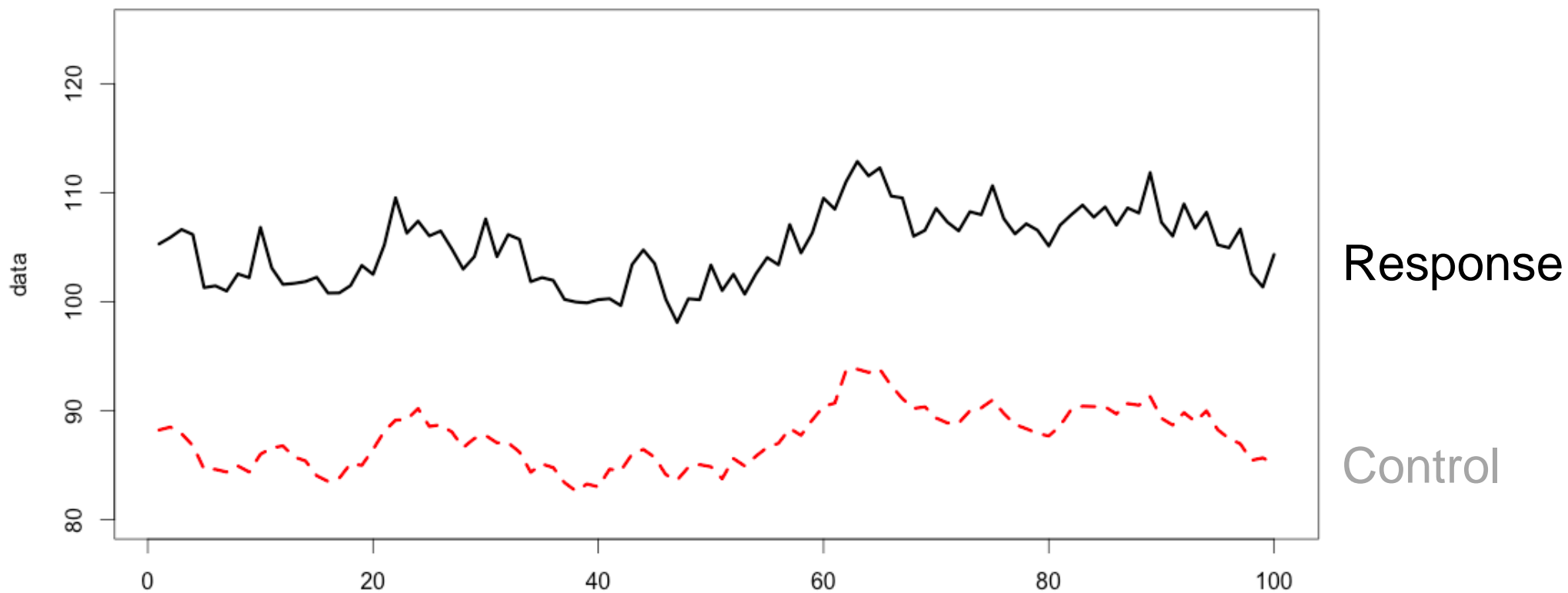
Captures impact of multiple channels (Search, Display, Video)

<http://google.github.io/CausallImpact>

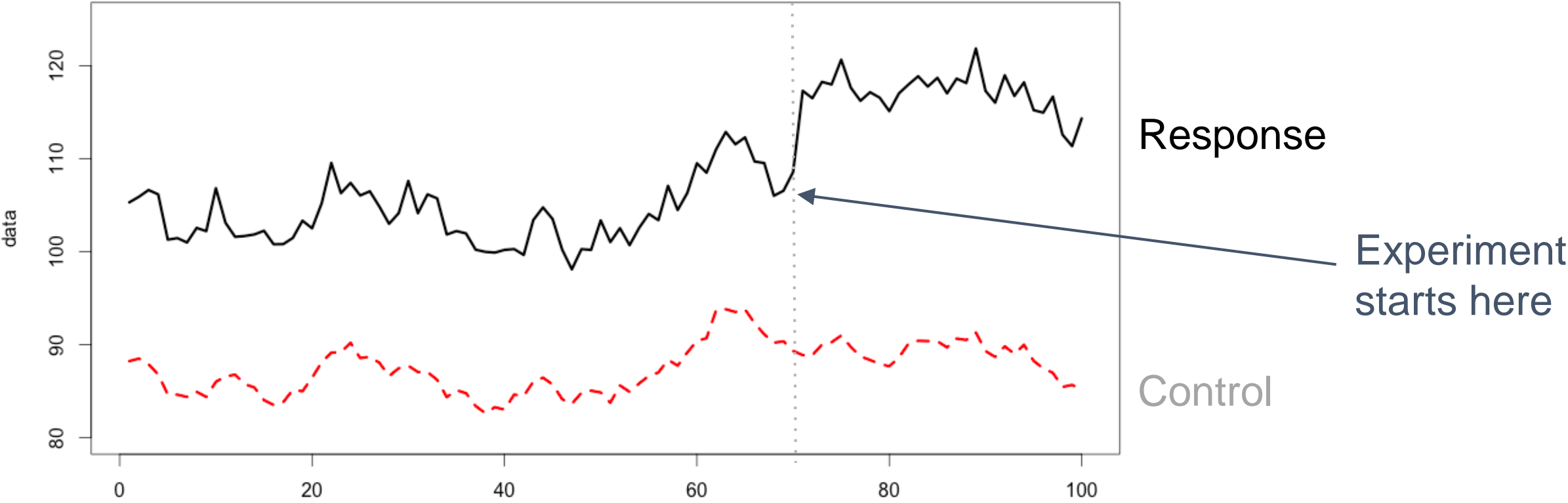
Causal Impact: methodology

1. Select a response metric, e.g. revenue
2. Increase spend in a response geo
3. Change nothing in control regions
4. Use control regions to train a model and predict the counterfactual response metric during the test period
5. Compare prediction to observation

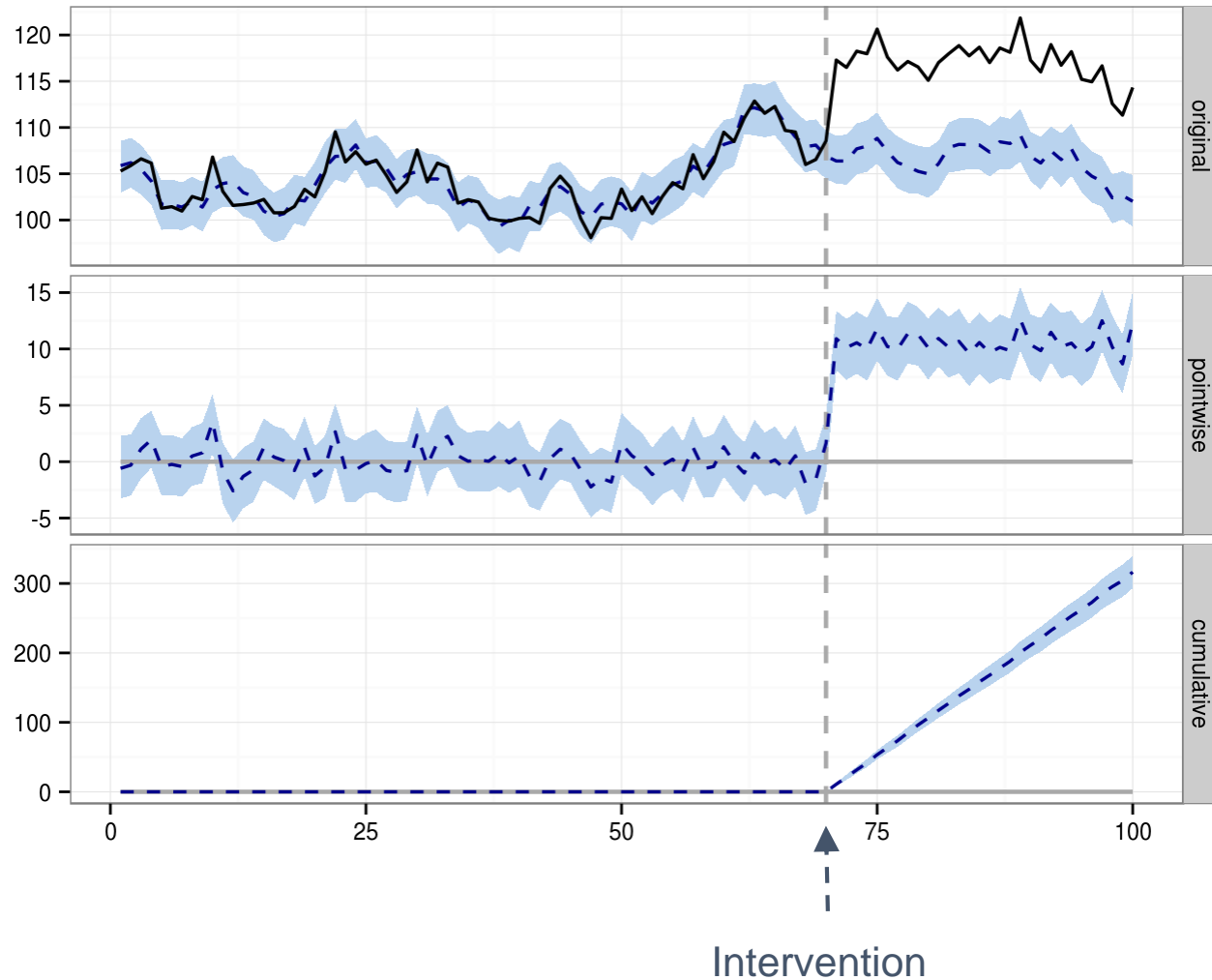
Causal Impact: a simple example



Causal Impact: a simple example



Causal Impact: output



The black line is the observed response metric. The dashed blue line is the predicted response metric. The banding is the confidence interval of the prediction. This panel simply plots the observed response minus the model prediction. (the residuals) Here we plot cumulative residuals—the total effect of the intervention