Research Edge Series

Sample Size: Are We Overthinking It?

VINAY THAKUR

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In Surveys, Do You Expect Precision Like...:

Measuring steel beam placement to ±1 millimeter for bridge safety?

Or detecting distant planets with small but clear signals?

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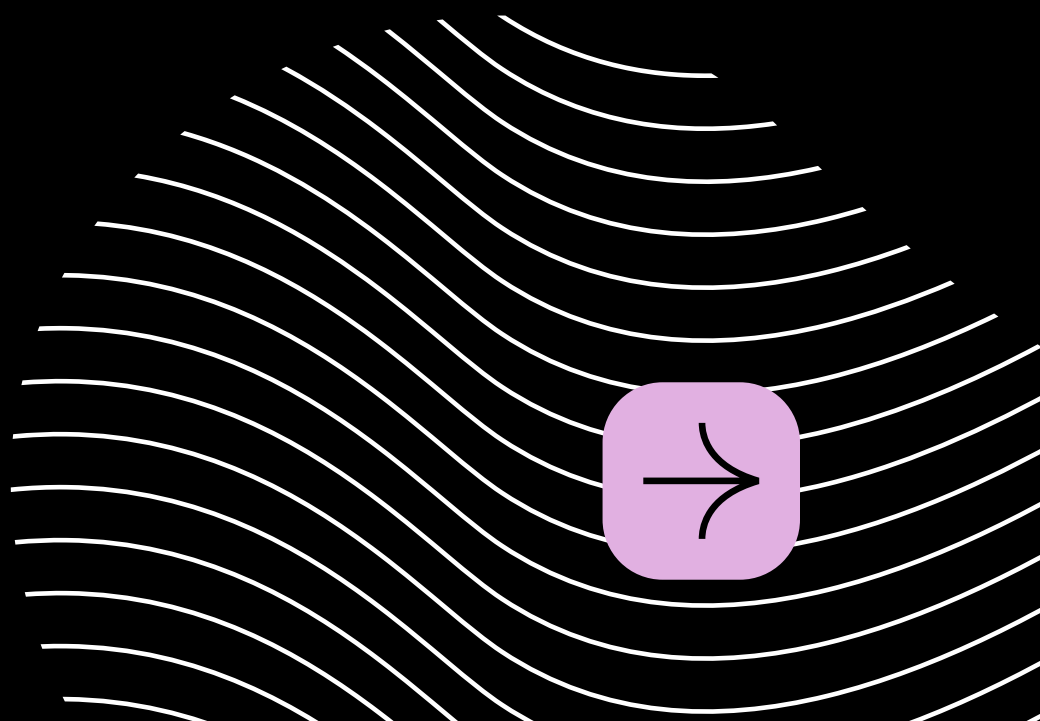

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Two Different Precision Standards

Bridge engineering: Lives depend on extreme precision to millimeters.

Planet detection: Small signal gives clear answer about existence.

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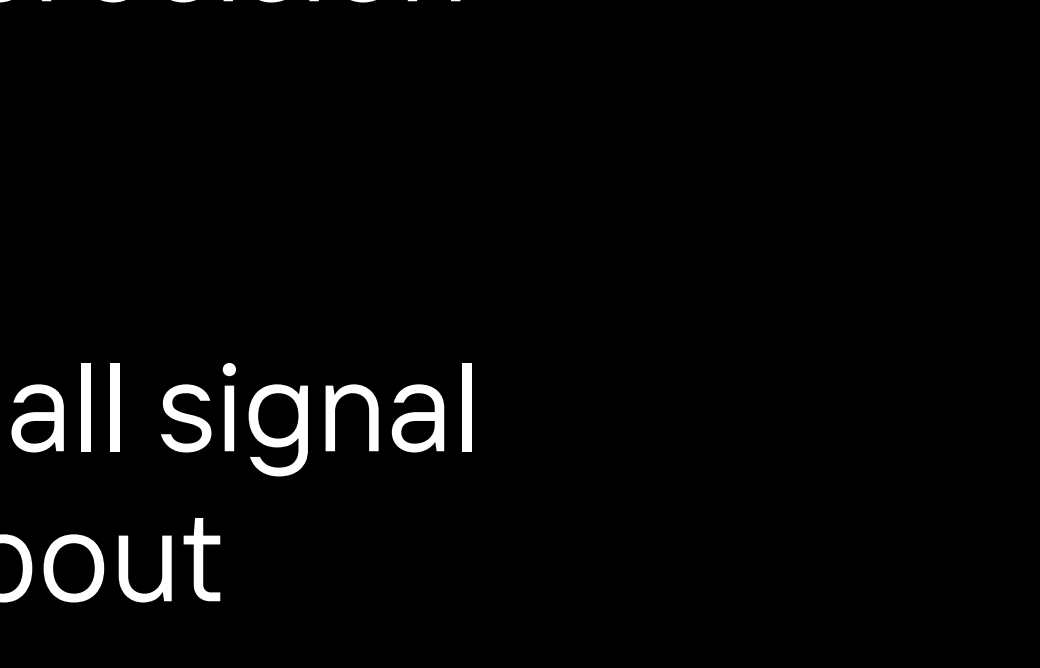

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Different Problems, Different Precision

Bridge building: Extreme precision required

Planet discovery: Clear signal detection

Same measurement principle. Completely different standards needed.

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Are We Demanding Bridge Precision?

Most people ask for bridge-level precision for simple research surveys.

Does it make sense to waste resources when planet-detection precision works perfectly?

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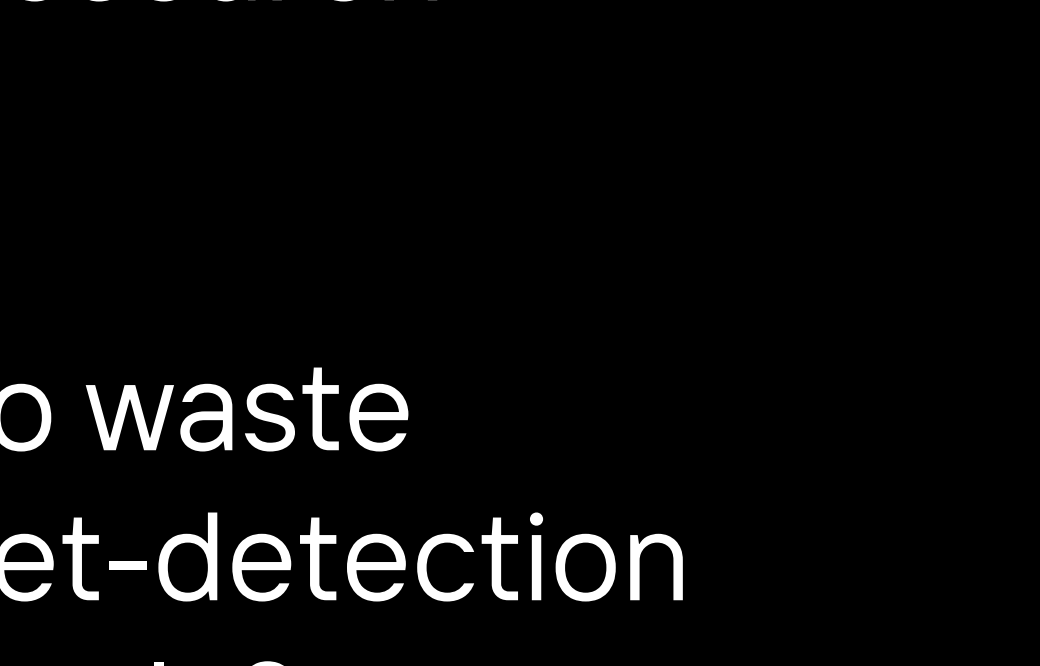

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The Population Size Myth

"India has 1.4 billion people, we need 10,000 respondent."

This thinking is statistically wrong. Population size barely matters here.

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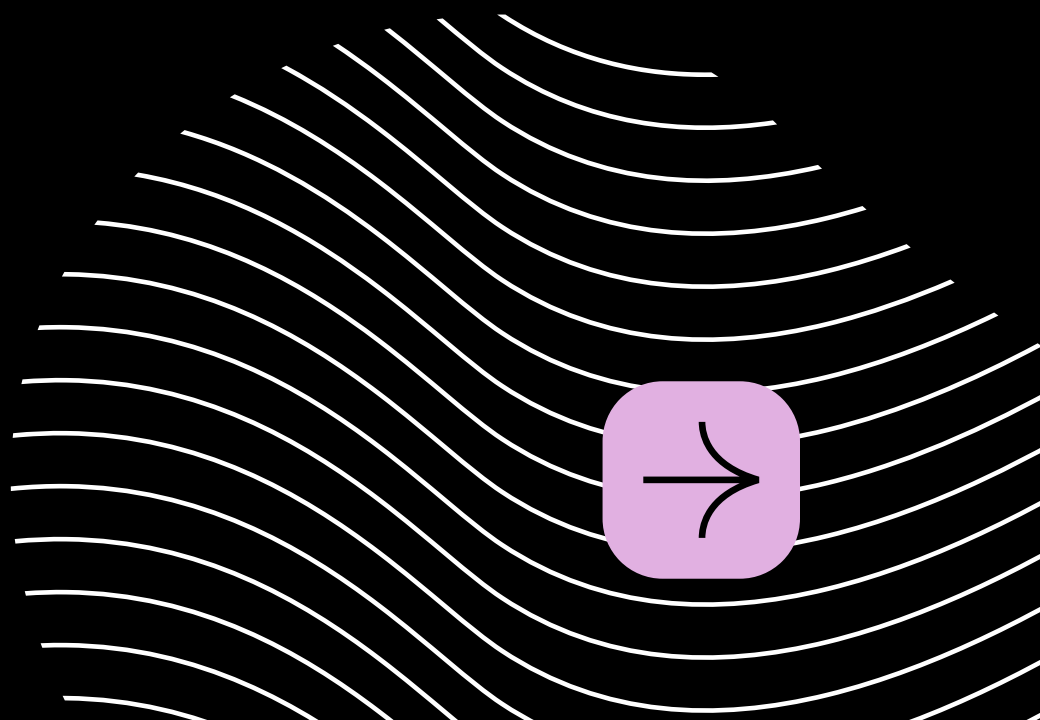

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Statistical Reality Check

1,000 people from 1 million population: Margin of error = ±3.1%

1,000 people from 1 billion population: Margin of error = ±3.1%

Same precision. Population size irrelevant.

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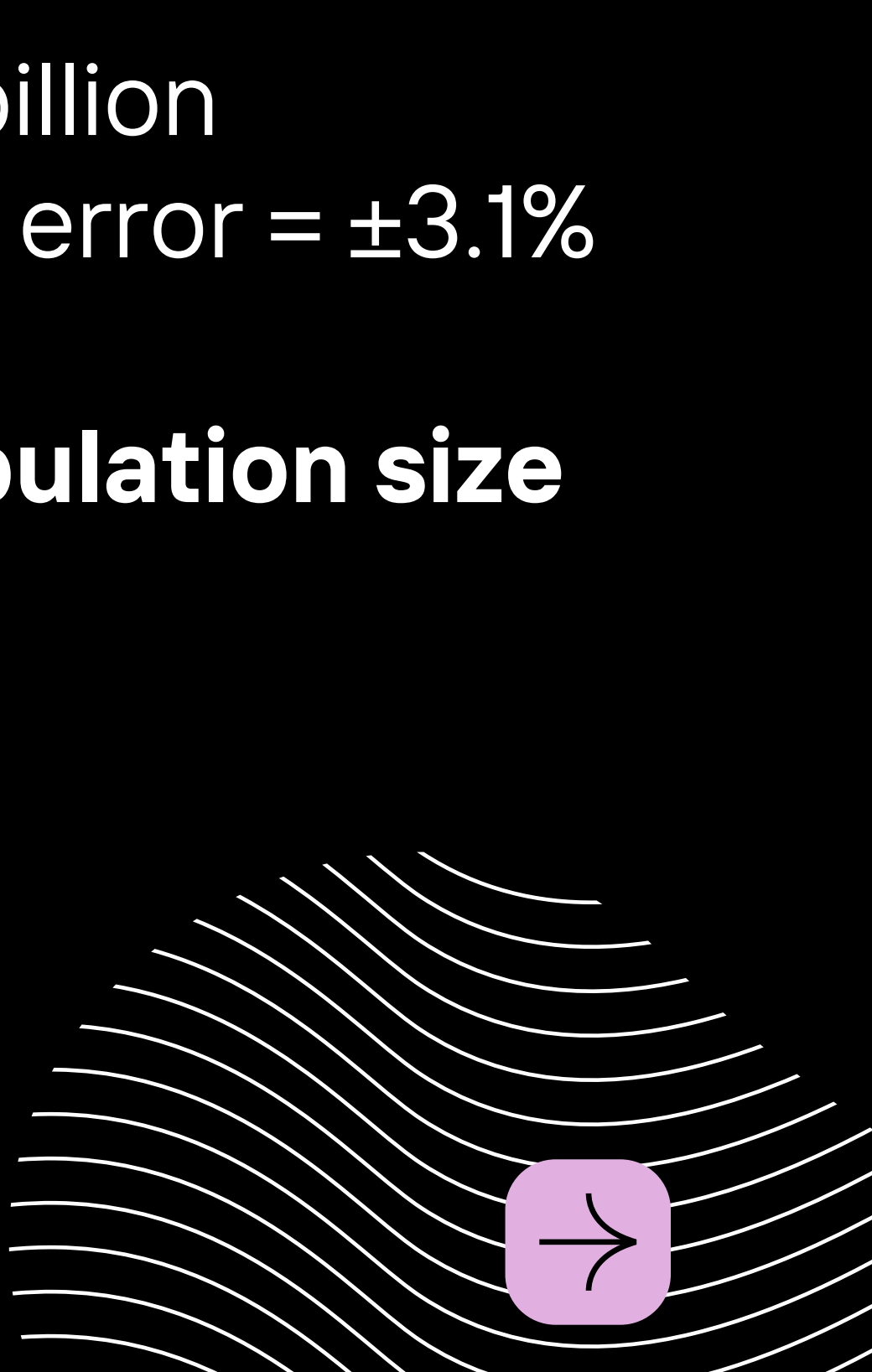

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How Samples Actually Work

With proper sampling methodology, every person has equal selection chance.

1,000 people accurately reflect the whole general population's characteristics.

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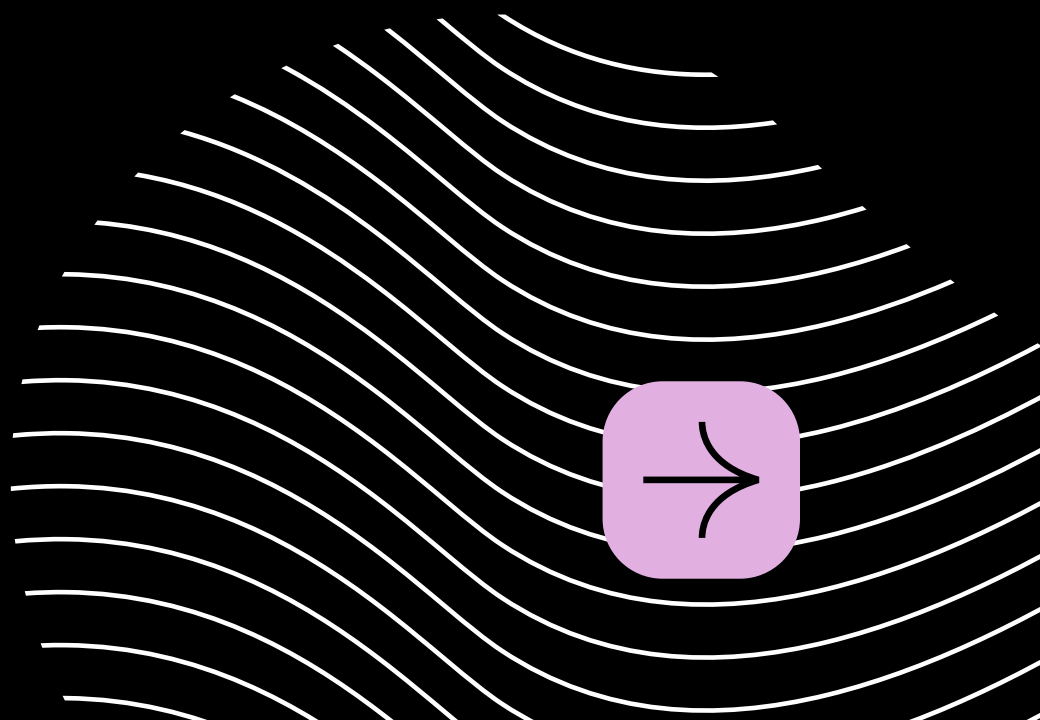

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What Really Determines Sample Size

✓ How precise you need to be ✓
How much opinions naturally vary

✓ How confident you want to be

Population size? Not so much as we emphasize.

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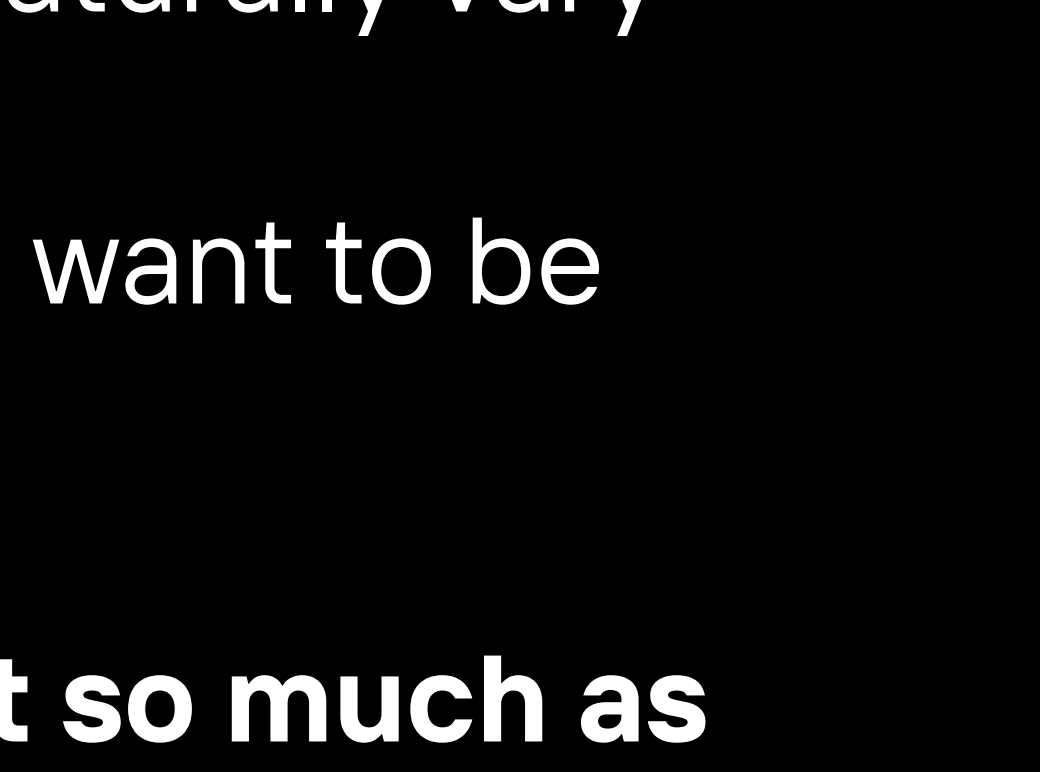

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Consumer Research Examples

Testing "Do you like this new flavor?" 300 people gives clear direction.

Studying hygiene practices across economic classes and urban/rural areas? Need 1,500+ for precise breakdowns.

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Simple Toolkit for Sample Size

Clear differences: 300-500 people sufficient

Subtle differences: 1,500+ people needed

National Incidence Check: 1,000-1,200 standard Subgroup analysis: Add 300+ per group

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Ask Research Experts

These decisions require understanding of effect sizes, confidence intervals, and power analysis.

Research methodologists bring frameworks that optimize both accuracy and resources.

Consider consulting experts who understand when 400 responses beat 4,000.

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