

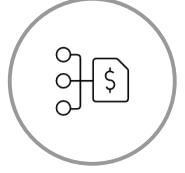
MOTIVATION



Market Intelligence: Accenture utilizes internal data and surveys for market insights



The Pulse of Change: Recurring survey capturing executive views on trends



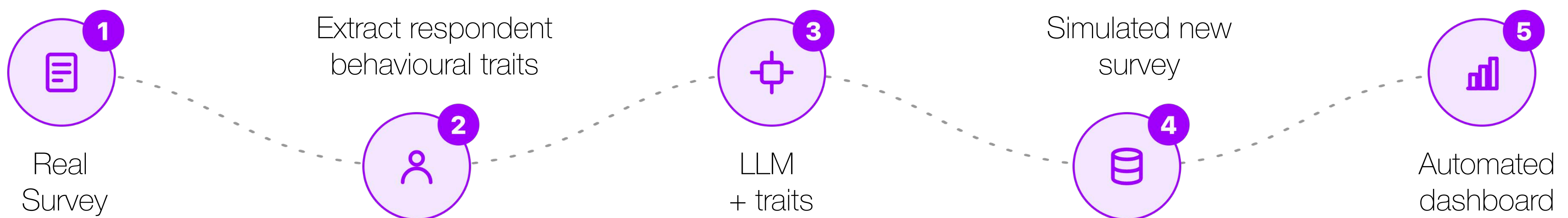
Cost of New Waves: Requires significant budget and lengthy research cycle

DATA & OBJECTIVE

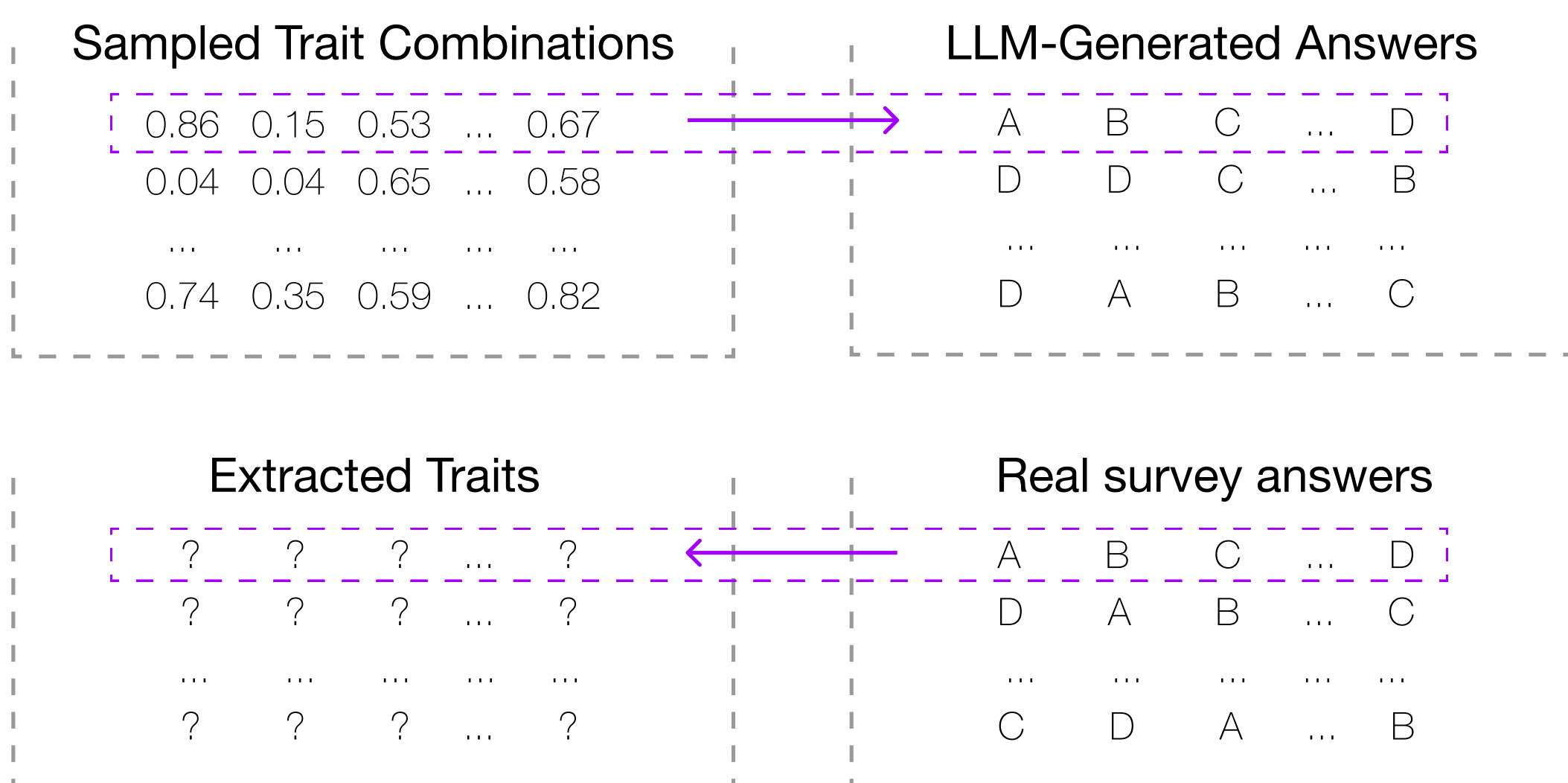
Two Pulse of Change Waves: January and June 2026 executive surveys with demographic profiles and multiple-choice responses

Extending the Value of Past Surveys: Enable Accenture to select a population, ask new relevant questions, and rapidly explore emerging market hypotheses

OVERVIEW: We extract each respondent's behavioral traits from a past survey to faithfully condition an LLM's simulation of how they would answer new unseen, relevant questions



METHODOLOGY



- 1 **Start from a real multiple-choice survey**
- 2 **Define the behavioral traits.** Define continuous traits grounded in behavioral science, each ranging from 0 to 1. (Risk tolerance, optimism, ...)
- 3 **Sample the training dataset.** Sample different trait combinations and use them to condition an LLM to answer the original survey
- 4 **Extract the traits.** Find the trait combination from the training dataset whose generated answers best match each respondent's real answers

$$\hat{j}(r) = \arg \max_{j \in \{1, \dots, M\}} \sum_{q \in S_r} \tilde{P}_{j, (q, a_q)}, \quad \hat{t}(r) = t(\hat{j}(r))$$

EVALUATION & RESULTS

Within-wave: Leave one question out → Predict it from remaining answers (Baseline: Unconditioned LLM)

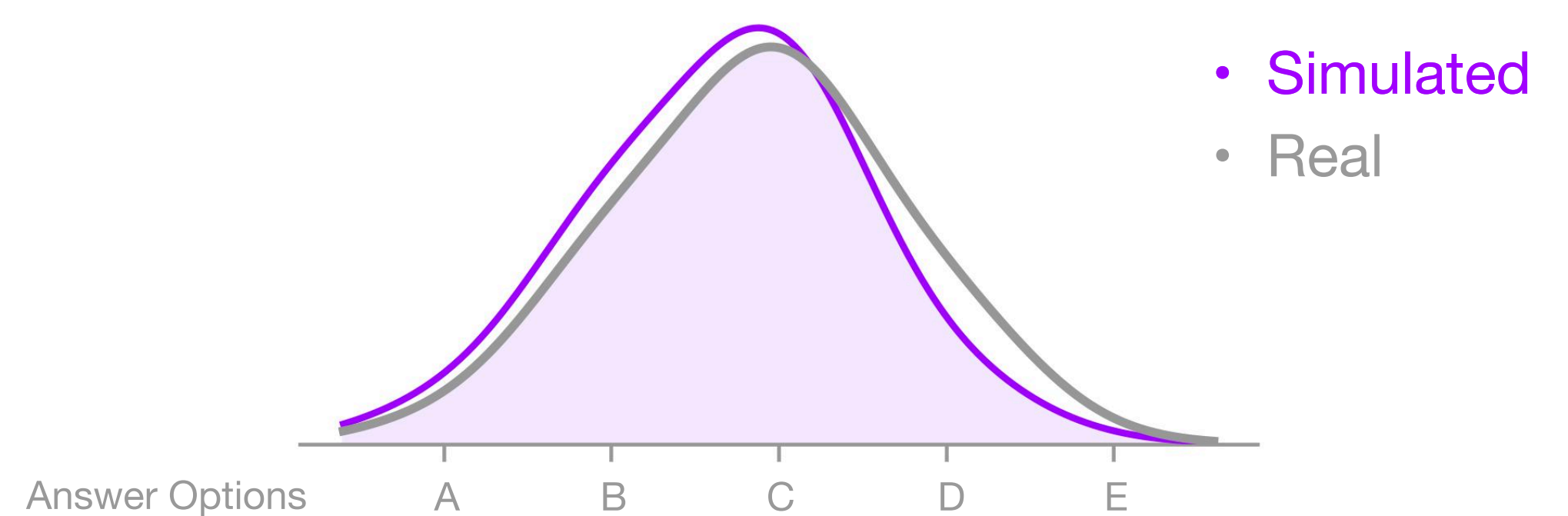
- Mean AUC ↑ : 0.61 (baseline 0.50)
- Mean accuracy ↑ : 25.5% (baseline 23.9%)
- SD accuracy ↓ : 21.1% (baseline 30.5%)

Cross-wave: January wave → Simulate June → Compare demographic slices (Baseline: Uniform distribution)

- Mean TV ↓ : 25% (baseline 36%)
- Effect Replication ↑ : 85% (baseline 0)

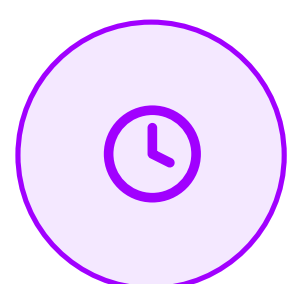
Real vs. synthetic response distribution

For a representative new question, prior-wave personas achieve **90% overlap** with the real distribution (10% TV), versus 62% for a uniform baseline (38% TV)

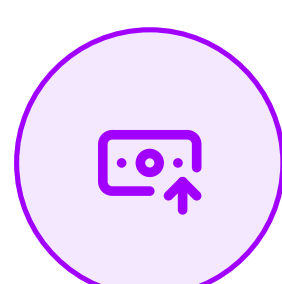


IMPACT

An app that turns a costly, **months**-long survey cycle into automated insights in a few **days**



+90% expected
speed to insights



40 to 60%
expected savings

