


# Scaling Experimentation with AI

How Agentic-Driven Hypothesis Execution  
Unlocks Faster Digital Growth

**brillio**





Every brand organization has no shortage of ideas to improve growth. Teams continuously identify new messages to test, new experiences to optimize, and new opportunities to lift conversion, engagement, and revenue. The real bottleneck lies in execution: turning promising hypotheses into live tests quickly, consistently, and at scale.

That is where experimentation often breaks down. Teams are forced to narrow their focus and choose only one or two ideas to pursue, while the rest remain untouched. Not because they lack potential, but because testing takes time. Content teams are stretched, developers are busy, analysts are overloaded. As a result, most hypotheses never see the light of day.

# The Need for Experimentation at Scale

Brillio's AI-led experimentation approach is designed to remove that constraint. By using AI agents to do the heavy lifting across the experimentation lifecycle, Brillio helps organizations accelerate and scale how tests are identified, shaped, built, and evaluated. The result is a model that makes it possible to run more tests, improve test quality, and move through optimization cycles faster.

This includes:

- Scanning data to find insights
- Creating smart hypotheses
- Auto-generating copy, design, and even front-end code
- Analyzing test results

Taken together, these capabilities help enterprises reduce friction in the experimentation process and create a more scalable path to growth.

# AI-Led Experimentation in Action

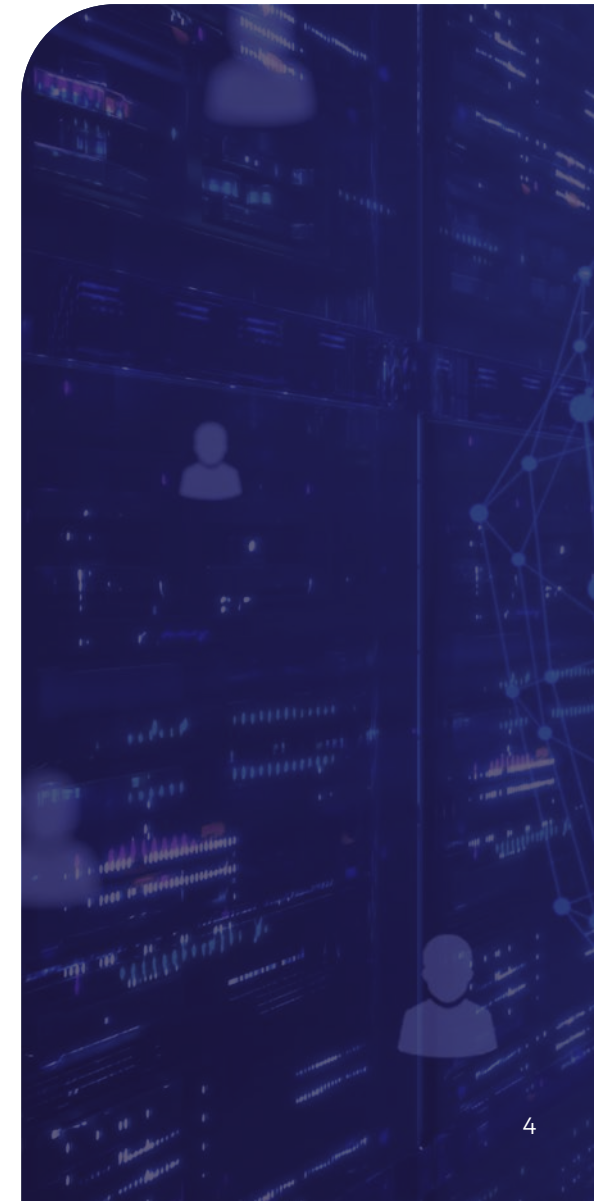
Brillio's model for AI-led experimentation is built around an agent-driven hypothesis execution flow. The process spans the full experimentation lifecycle and connects the roles of **analyst, UX, development, and evaluation** in a coordinated way.

The Insight Agent helps analysts move faster from information to opportunity by scanning available data, identifying patterns, and surfacing hypotheses that can be tested. Sitting at the front of the workflow, it supports the early stages of experimentation, especially data analysis, hypothesis creation, feasibility checks, and planning.

Once a hypothesis has been identified, the next challenge is operationalizing it. In many organizations, this is where experimentation slows down again, as UX and development teams must translate ideas into assets, page changes, or coded experiences. Brillio addresses this through **AI-led Design**, which supports UX through change visualization, and **AI-led Development**, which helps accelerate coding and configuration.

Experimentation does not end when a test goes live. Its value is realized when results are interpreted clearly and translated into next actions. That is the role of the **Evaluation Agent**, which handles execution and evaluation.

Together, these capabilities create a connected experimentation engine where insight creation, test design, build, and measurement move as part of one continuous flow rather than disconnected handoffs. This agent-led model is already helping brands accelerate experimentation and convert insights into measurable business outcomes.



# Enhancing Purchase Journeys for a 20% Higher Conversion Rate

Brillio partnered with a global beauty and cosmetics company to improve purchase journeys across two consumer brands. By combining web analytics, experiment design, creative wireframes, and technology support for ongoing test execution, Brillio helped turn customer and performance insights into actionable experimentation.

The engagement generated:

**\$3.2M**

in incremental revenue from test outcomes

**20%**

higher conversion rate

**11**

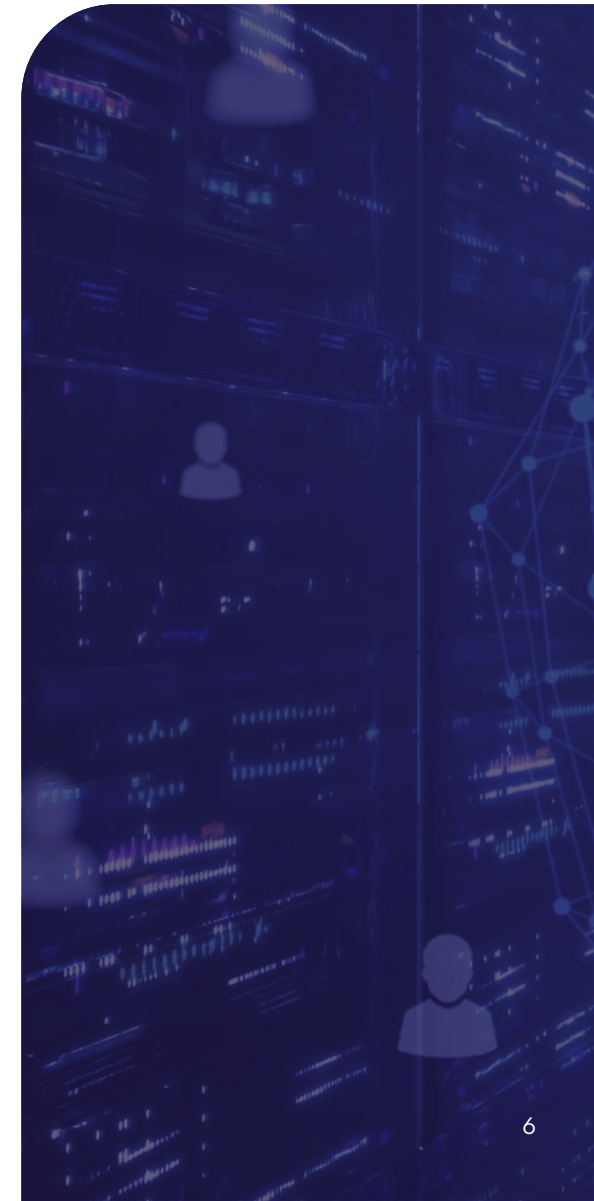
A/B tests implemented

# From Bottleneck to Growth Engine

When experimentation depends entirely on stretched teams and disconnected workflows, only a small number of ideas ever get tested. But when AI agents help carry the load across insight generation, hypothesis creation, design, development, and evaluation, the process becomes far more scalable.

That shift matters. It means more ideas can be tested. It means stronger hypotheses can be built from real data. It means organizations can move faster through cycles of learning and optimization. And ultimately, it means experimentation can become a true growth engine rather than a constrained function.

Brillio's model shows how AI can be applied not as a standalone capability, but as a practical enabler across the entire experimentation lifecycle, helping enterprises unlock faster, smarter, and more scalable growth.



## ABOUT BRILLIO

**Brillio is a digital technology services company that drives AI-first engineering and design-led experiences for global enterprises.** Born digital in 2014, its consulting-led services span Customer Experience, Data & AI, Product Engineering, and Digital Infrastructure. With an industry-leading NPS of 71, Brillio accelerates time to market through its proprietary BrillioOne.ai platform, powered by AI-ready talent with deep domain expertise. Brillio is the official Digital Transformation Partner and the official Data and AI Services Provider of Atlassian Williams Racing. Brillio partners with leading technology providers including Microsoft, AWS, Google Cloud, Salesforce, Adobe, Databricks, and Snowflake and operates with 6,000+ “Brillians” across 15 global delivery centers. Consistently recognized as a Great Place to Work® since 2021, Brillio blends innovation, talent, and purpose to deliver measurable outcomes for clients and fulfilling careers for employees.



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