



A division of the National Association of Manufacturers

IRI INNOVATORS 2025 SUMMIT

May 19–21 / Chicago, IL

Enabling New Business Models with AI in R&D

Nick Talken

Co-Founder and CEO, Albert Invent

Bob Olsen

VP Enterprise Growth & Partnerships, Albert Invent

Enabling New Business Models with **AI** in R&D



Nick Talken

Co-Founder & CEO

[Albert Invent](#)



Bob Olsen

VP Enterprise Growth & Partnerships

[Albert Invent](#)

Agenda

01 Introduction to Albert Invent

02 The Path to Digital Transformation

03 Industry Case studies w/ Albert

04 Discussion / Breakout

05 Recap



Our mission is to accelerate the innovation of new materials.

Global team of **140+** chemists and engineers

Empowering scientists in **50+** countries

Used by over **250** organizations worldwide



Nouryon

SOLENIS

APPLIED MOLECULES

THE WALL STREET JOURNAL.

NEWS

February 25, 2025

Backed by J.P. Morgan, Albert is transforming chemical R&D with AI-driven innovation.

The growth-equity group's latest deal more than doubles the value of the AI-driven engine for research chemists

"J.P. Morgan has deep roots and history in the Chemicals industry, dating back to 1823. We believe this technology is essential for the future of material development and how we build materials that power our lives."



Oakland, Calif.-based company uses AI and machine learning to aid chemists in the research and discovery of new formulations and materials.

The Albert R&D Platform

End-to-end AI powered platform to capture and leverage data from ideation to commercialization.

Inventory
Complete visibility and control over lab materials

ELN
An electronic lab notebook that chemists love to use

LIMS
Structure data from molecules to measurements

AI & ML
Invent faster with AI trained like a chemist

Regulatory Intelligence
Ship same-day, reduce risk, stay in compliance

Security & Development
A platform that's secure, flexible, and extensible

The screenshot shows the Albert Breakthrough AI platform interface. At the top, the logo 'albert breakthrough' is followed by the tagline 'AI trained like a chemist'. Below this, the workspace is titled 'Sunscreen Optimization' with the subtitle '100% Reef-Safe Compliance'. The workspace is divided into sections: 'Set Your Targets' (with tabs for 'Ingredient Content', 'Tested Properties', and 'Cosmetic Safety'), a table for defining target ranges for various properties like 'Oxybenzone Content' and 'Skin Irritation Score', and a 'Breakthrough Results' section showing 'AI-generated formula predictions' for 'Sample Candidates'.

Albert is built by scientists, for scientists.

Value of Being a Data-Driven Organization

Impact on R&D Businesses

(McKinsey)

DATA-DRIVEN COMPANIES

19x

More likely to be profitable

6x

More likely to retain customers

23x

More likely to acquire customers compared to their competition

EXAMPLES OF RISK REDUCTION AND INCREASED SPEED TO MARKET WITH ALBERT

Opportunity: 15%+ decrease in Operational Risks

ALBERT CUSTOMER PROOF POINT

"I would never work for a company that does not have Albert."

Senior Chemist

Opportunity: 20%+ increase in Speed to Market

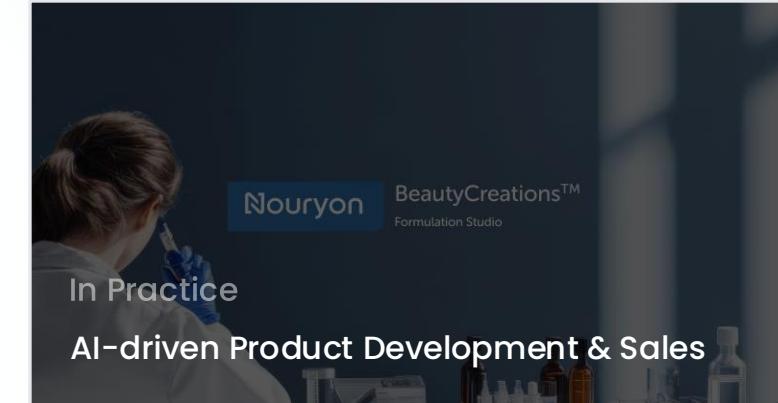
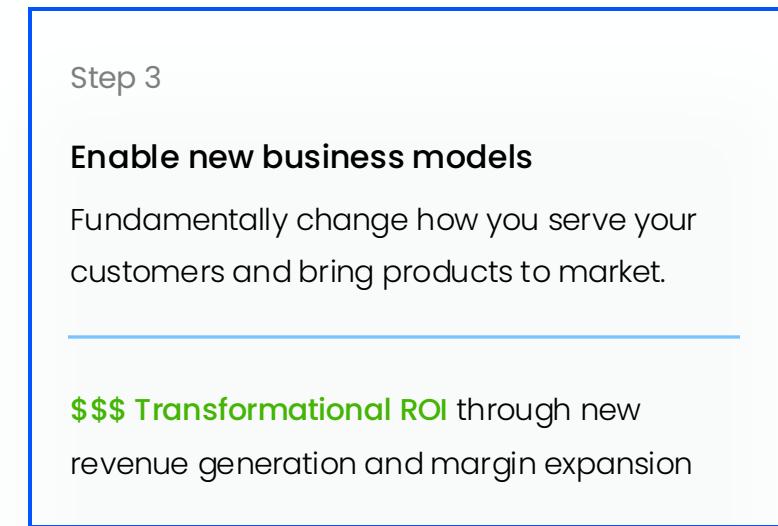
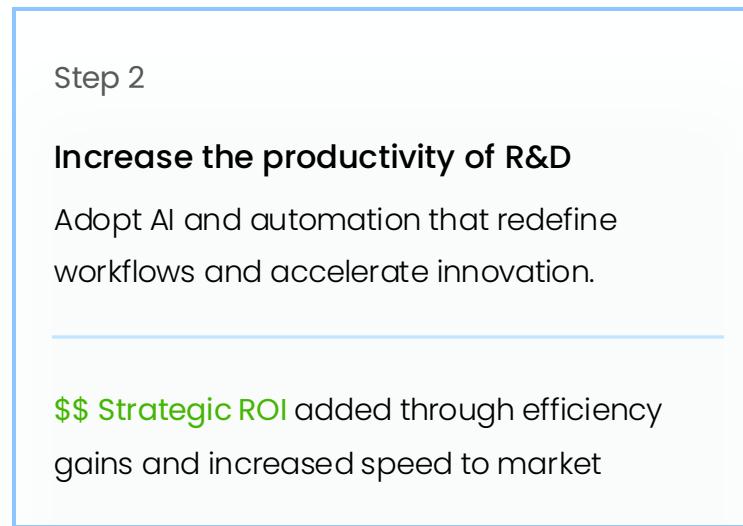
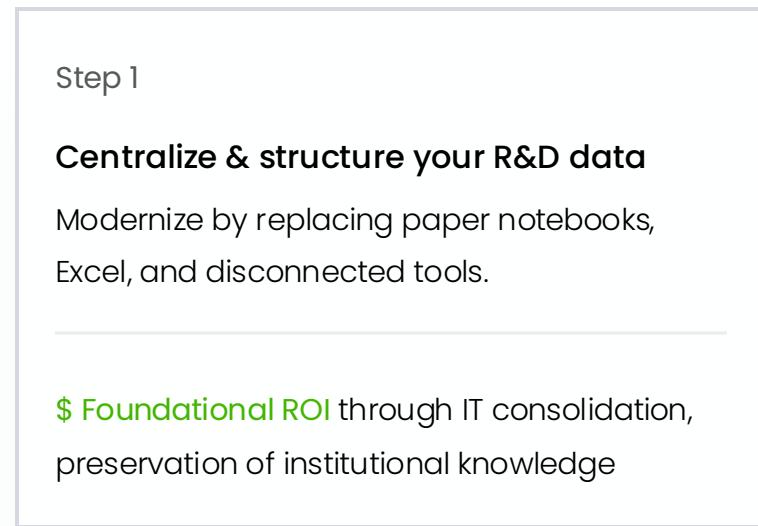
ALBERT CUSTOMER PROOF POINT

Up to 50% increase in Speed to Market, 6% margin increase with new product launches

The Path to Digital Transformation

Digitization

Digital Transformation



Henkel Centralizes Global R&D and Accelerates Innovation with Lab Automation



Henkel

Step 1 | Centralize and Structure Your R&D Data

Step 2 | Lab Automation

Henkel, a Fortune 500 global leader in adhesives and materials science, became the first major chemical company to adopt Albert and unify global R&D through a centralized digital platform—building the foundation for new workflows and accelerated innovation.

Step 1

Global Rollout

3,000+

Scientists across 142 labs, 41 countries

13M+

Clean & structured data points collected

270,000+

Products invented across 170 technologies

Step 2

Automation

60k+

Annual high throughput samples

From weeks to same-day

Reduced testing timeline

64

Net Promoter Score

“Albert is fundamentally changing the way we have invented for 145 years.”

Michael Todd, VP of Global Innovation, Henkel

“With automation, I can match the throughput of 8 people working manually—freeing me to explore new directions and unexpected formulations.”

Karen Midori, Product Developer, Henkel

Applied Molecules Uses AI to Reinvent Their Go-to-Market Motion



APPLIED MOLECULES

APPLIED MOLECULES

Step 3 | Expand market opportunities with AI

Applied Molecules used Albert Breakthrough to accelerate the development of high-performance materials—enabling broader market exploration while drastically reducing formulation time. [Automated SDS generation](#) also enables working with large customers, who had historically been unreached.

Dampening Materials

22 existing formulas referenced

30 AI-generated formulations tested

3 iterations performed in Albert

3D Printing

60 existing formulas referenced

45 AI-generated formulations tested

12 iterations performed in Albert

Development reduced from **3 months** to **2 days**

“If you gave me 5 years, I never would have tried this formula. But it worked.”

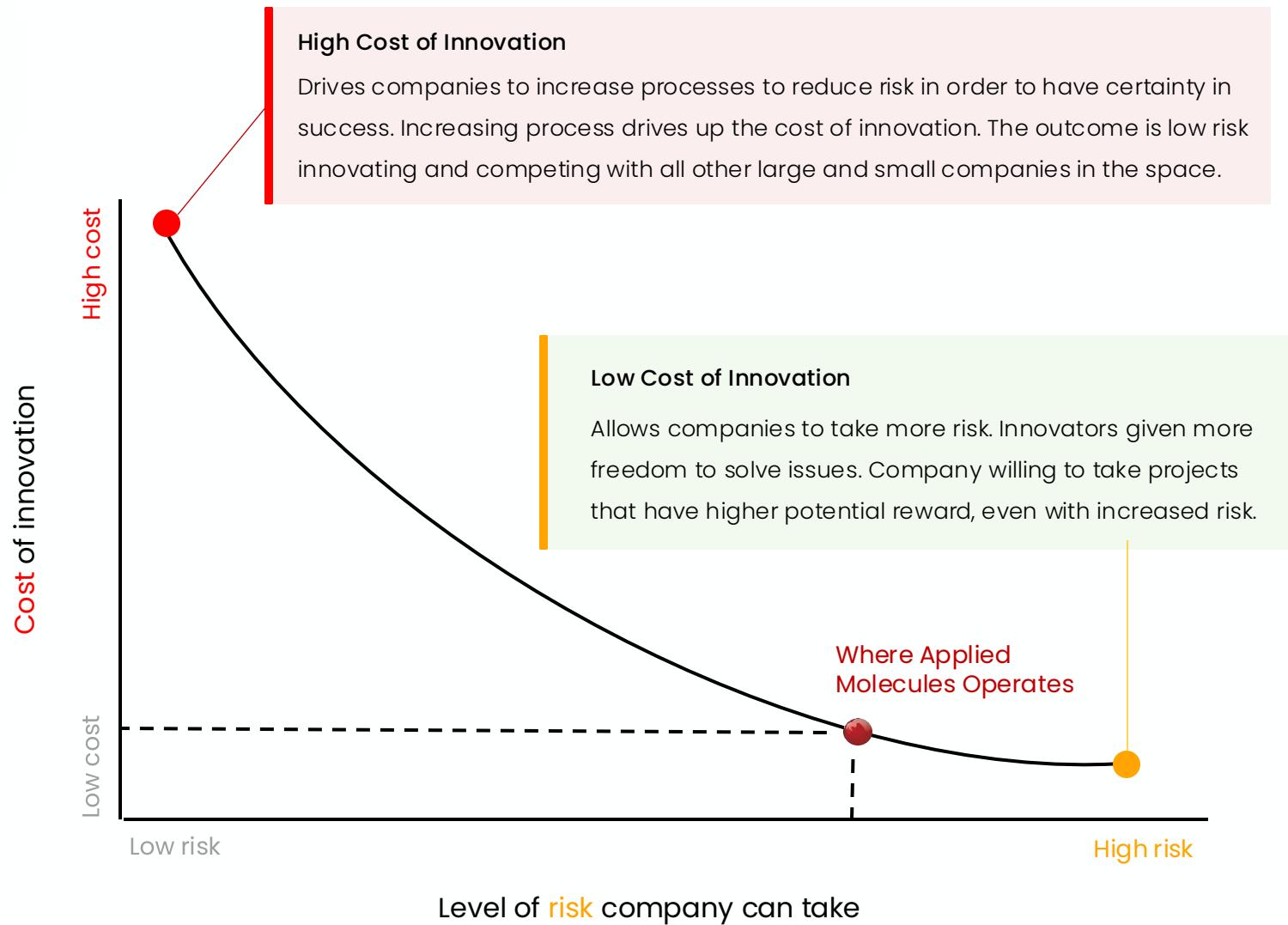
Nicholas Gripp, Senior Scientist, Applied Molecules

Applied Molecules Uses AI to Reinvent Their Go-to-Market Motion



 APPLIED MOLECULES

Step 3 | Expand market opportunities with AI



Nouryon Launches 'BeautyCreations,' an AI-Powered Formula Discovery Engine



Nouryon

Step 3 | Enabling AI Sales Agents and Market Expansion

Nouryon transformed customer engagement with Albert's AI Sales Agent — a portal to streamline how their customers (formulators) discover products, explore ingredient options, and request samples.



Smart, interactive formula discovery



Search by function, application, & more



Download product formulations



Request samples from the portal

"This initiative represents more than just a technological advancement—it establishes a new standard for supplier-formulator collaboration in the personal care industry.

Johan Landfors, CTO, Nouryon

73

Net Promoter Score

Future Looking Opportunities for New Business Models

Cross supply chain collaboration (in progress)

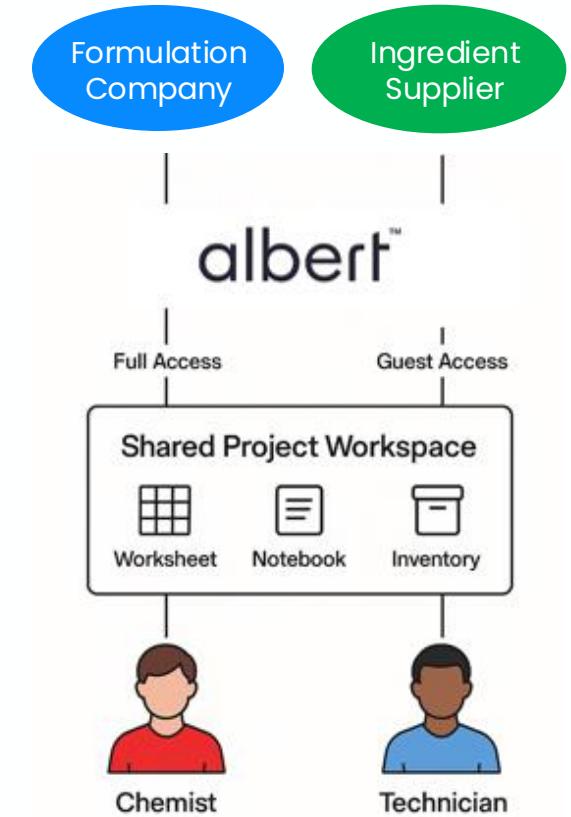
Two of the largest chemical global companies will be using Albert to collaborate in real-time

One is a [formulation company](#), and another is a [raw material supplier](#). The major goals:

- To share data and feedback on development iterations in real-time
- To allow access to learnings across the broader ecosystem within each company
- Speeding up collaboration and finding product solutions faster to create a competitive advantage for both

The largest consumer health company will be using Albert to drive vendor collaboration

Adding new functionality to collaborate across all vendors for sharing of regulatory and sustainability data (>1000 vendors)



Together, let's invent the future of chemistry.

Discussion Topic 1

Where is your organization now in its digitalization journey?

Where do you want to be? What are some challenges in reaching your R&D digitalization goals?

20 min discussion, 10 min report out

Discussion Topic 2

What are creative ways that your organization can use AI to enable new business models such as BeautyCreations?

What are some paths to getting there?

20 min discussion, 10 min report out