

Marabu

Marabu's R&D Transformation: How a Leading Inks Company Built their Lab of the Future



Marabu, a global leader in specialty inks and coatings, partnered with Albert to build a digital foundation for scientific innovation. Together, they transformed how research is done—from fragmented tools and workflows to a connected, future-ready environment.

100%

of R&D projects now run within Albert

+40,000

structured test data points captured

+6,000

AI-ready formulas

7,880

real-time inventory items with lot-level traceability

Over 90%

of inventory entries now include SDS

235

Safety Data Sheets (SDS) auto-generated

88%

success rate on Albert Breakthrough gloss formulation candidates





An Inflection Point for the Industry

Marabu has always been known for the precision and quality of their inks, serving industries from automotive to fine art. As the industry evolved, Marabu recognized a critical opportunity: to lead in the era of digital R&D.

Rather than react to tightening regulations or increasing complexity, leadership made a forward-looking decision to pursue [digital transformation](#). They envisioned a future in which innovation is accelerated through better data, connected workflows, and new technologies like automation and AI.

This wasn't about replacing scientists with systems. It was about empowering scientists with tools designed around how they work best, enabling smarter decisions, faster iterations, and stronger collaboration across sites.

From Vision to Implementation: A Culture of Empowerment

Marabu's journey began with a commitment from leadership to digital transformation. They sent a clear message that this would be a company-wide evolution, not just a software rollout. And crucially, they built a culture where everyone was empowered to collaboratively shape this evolution.

Stefan Würtemberger, Head of IT, and Dr. Thorsten Lifka, Head of R&D, led the initiative. Together, they brought together IT, R&D, regulatory, and operations to align technology and process.

This collaborative approach included:

- | Project managers from R&D, IT, and Regulatory
- | Site-level champions to lead adoption
- | Scientists empowered to rethink workflows from the ground up

What followed was a redefinition of how Marabu works.

“We made the strategic decision to invest in digitalization, with Albert as the foundation. Then, we invited teams across R&D, IT, and Regulatory to help build the broader vision: What additional tools will support your work? How should we reimagine our workflows to take full advantage of this transformation?”



Stefan Würtemberger, Head of IT
Marabu Inks

Enablers of Success

Cross-functional buy-in from scientific, IT, and regulatory leads

Technology aligned with workflows, not the other way around

Future-facing infrastructure including HoloLens, ERP integrations, and robotics

A culture of ownership, where innovation didn't stop with the rollout—it accelerated



Building the Lab of the Future with Albert

Albert became the digital backbone of Marabu's Lab of the Future: a flexible, extensible platform that centralizes how scientists manage formulas, track materials, document experiments, and share results across teams and sites.

Structured, Streamlined Formulation

Marabu scientists now develop new inks using live inventory and reusable templates. Every formula is connected to test results, regulatory status, and raw material availability—making innovation faster and more repeatable.

6,000+ structured formulas captured in an AI-ready format, enabling reuse and optimization with Albert Breakthrough AI.

Live inventory-linked formulation ensures chemists build only with available materials—reducing delays and improving material efficiency.

Albert Notebook serves as a searchable R&D knowledge base, accelerating iteration and eliminating duplication across teams.

Pre-built task templates streamline property testing workflows, cutting test setup time by over 50%.

Linked formulation and testing data creates a closed-loop workflow, feeding real-time insights into reporting and model training.





Real-Time Inventory & Compliance

Inventory has shifted from a static system to a dynamic, regulatory-compliant foundation for R&D.

7,880+ lot-tracked items with full traceability across sites, down to the raw material level.

Over 90% of inventory items now include compliant SDS, with over 235 SDSs auto-generated.

ERP pricing integration ensures scientists always see up-to-date material costs inside Albert.

Inventory status synced with tasks and formulas, reducing waste and improving planning.

Project Management & Data Integrity

R&D project execution is now real-time, transparent, and standardized across the organization.

| **100% of R&D projects** now run entirely within Albert.

| **10% reduction** in average project duration and 15% reduction in time from first formulation to first prototype.

| **Hundreds of reports generated**, giving leadership live visibility into progress and bottlenecks.

| **10% more projects shared across global teams** using shared data templates, unifying execution across Europe and Asia and enabling consistent experimentation and results.

| **Live dashboards replace spreadsheets**, helping teams plan proactively and spot delays early.

| **Structured data capture** ensures every experiment feeds into reporting, Albert Breakthrough AI, and compliance.





Automation & Machine Learning

Marabu has laid the foundation for increasingly intelligent and automated labs—with Albert at the core.

| **First robot integration** underway to automate formulation workflows.

| **Custom Color Matching App** built using Albert APIs to streamline pigment selection.

| **HoloLens and Beamers** enhance lab workflow visibility and tech-assisted operations.

| **Albert Breakthrough AI** predicts optimized formulations—candidates showed **88% likelihood** of meeting gloss targets.

| **Equipment integrations** feed real-time lab data directly into Albert, reducing manual entry and enabling model training.

Looking Ahead: Defining the Future of Color

Marabu's digital transformation has laid the foundation for something far greater: a future where scientists are fully empowered to focus on science. With Albert, routine tasks are automated, data is structured and accessible, and collaboration is seamless across global teams. As the knowledge base constantly grows, scientists can make better, faster decisions—improving quality, speed, and costs all at once. From robotic workflows to AI-powered formulation, every new piece of technology is designed to amplify the chemist's expertise.

Moving forward, Marabu is doubling down on this vision. The next phase will bring deeper AI integration, expanded automation, and even closer alignment across R&D sites. But the goal remains the same: to create an environment where chemists have more clarity, more context, and more time to explore bold ideas. Because at Marabu, the Lab of the Future isn't defined by technology—it's defined by the people it empowers.

Curious what this would look like in your lab? [See Albert in action.](#)

