

FROST & SULLIVAN

HEXIS LAB

2022
TECHNOLOGY
INNOVATION
LEADER

NORTH AMERICAN
INGREDIENT AND FORMULATION
DISCOVERY INDUSTRY

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Hexis Lab Limited excels in many of the criteria in the North American ingredient and formulation discovery space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Business Impact</i>
Commitment to Innovation	Financial Performance
Commitment to Creativity	Customer Acquisition
Stage Gate Efficiency	Operational Efficiency
Commercialization Success	Growth Potential
Application Diversity	Human Capital

A Changing Landscape

Over the last decade, the demand for clean-label products has grown steadily across various market segments, including cosmetics and personal care. Frost & Sullivan’s independent research reports that consumers are increasingly seeking natural, organic, and health-promoting ingredients in skincare formulations in the post-pandemic landscape¹. In parallel, sustainability continues to gain traction as a major theme driving stakeholder investment across the value chain. Frost & Sullivan analysts estimate that the global skincare market will increase by over 27% between 2020 and 2025, from \$148.3 billion to \$189.3 billion². However, addressing these emerging needs cost-effectively presents a challenge for businesses in the space, as it may lead to extended research and development (R&D) timelines and higher overall expenditures. Moreover, organizations must comply with varying regional regulatory frameworks to introduce new formulations while validating their intended benefit claims. Thus, companies must leverage innovative solutions and deploy state-of-the-art technology to boost their R&D processes’ efficiency, reduce costs, and discover suitable ingredients for new formulations that satisfy and bring value to consumers.

¹ *Trend Opportunity Profiles: Health, Wellness, and Well-Being Series* (Frost & Sullivan, August 2022)

² *Nutrition & Wellness Ingredients Outlook* (Frost & Sullivan, April 2022)

Technology Sparked by a Commitment to Make an Impact

Founded in 2013 and headquartered in Newcastle upon Tyne, United Kingdom, Hexis Lab Limited (HL) is a provider of artificial intelligence (AI)-driven ingredient and formulation R&D services. Driven by its goal of becoming “the Intel of the cosmetics and personal care industry,” the company has created a groundbreaking proprietary AI platform to help organizations design, validate, and virtually prototype novel bioactive ingredients for skincare formulations. Pro.X®’s neural engine periodically collects, curates,

“Unlike conventional methods that require months or years of extensive research and testing, the company’s computational approach enables rapid and highly accurate materials assessments for specific target applications.”

***-Hyera Hong,
Growth Advisory Consulting Analyst***

and integrates vast amounts of public and private data on factors ranging from biological materials to existing regulations, scientific articles, market reports, and social media trends to form over 100 billion relationships. Backed by top-class subject matter experts, HL leverages this technology as a consultancy tool to assist its customers in reducing costs and achieving fast go-to-market timelines in their R&D processes across three main areas: discover, test, and create. Unlike conventional methods that require months or years of extensive research and testing, the company’s computational approach enables rapid and

highly accurate materials assessments for specific target applications. Thus, instead of venturing into uncharted territory blindly, businesses can find the right ingredients and predict therapeutic outcomes at the start of the journey and within weeks.

HL offers clients enhanced control and optimization, empowering them to overcome common bottlenecks, raise standards, and become forward-looking. For instance, it allows organizations to design more efficient formulations comprising fewer elements. Using its platform’s machine learning models, the company analyzes materials’ inherent polypharmacology to detect suitable ‘smart’ ingredients that can perform multiple tasks while meeting specific criteria, such as solubility, sustainability, affordability, and cross-regional regulatory compliance. In addition to optimizing formulation efficiency, this approach facilitates and accelerates clean-label product development and validation substantially. Moreover, through HL’s AI-enabled discovery, customers can identify locally sourced materials that can successfully replace imported ones to reduce supply chain risks and costs. Additionally, clients can reduce their carbon footprint to meet the rising consumer demand for sustainability. The company supports these strategies by developing patents and publishing peer review articles, often in collaboration with its customers.

Furthermore, HL has created a pioneering phenotypic assay model to identify effective skincare formulations for individual ethnic groups. Highlighting its commitment to enabling impactful innovation, the company developed this distinctive feature by recognizing inclusivity and personalization as crucial growth challenges for the personal care industry, as most tests focus solely on Caucasian or Asian subjects. HL’s AI-based protocol offers a commercially viable pathway for enterprises in the space to transition away from one-size-fits-all products to address these unmet needs and penetrate the growing African and Middle Eastern markets. Upon publication, the assay proposal sparked remarkable engagement within the scientific community. As of September 2022, it had received over 13,000 views and 1,800 downloads since March 2020, a testament to its far-reaching relevance.

Efficient, Proactive, and Positioned for Growth

Frost & Sullivan recognizes that having a customer-centric strategy is critical for R&D service providers. Yet, having and successfully implementing a strategy is not the same. Thus, it is important to have aligned leadership and staff to implement and operationalize a strategy cohesively. HL executes its customer-centric approach effectively by combining the best attributes of a research institution and a commercial enterprise. Founded by Dr. Olusola Idowu, a complex systems specialist with over a dozen pharmaceutical

“HL executes its customer-centric approach effectively by combining the best attributes of a research institution and a commercial enterprise.”

***- Juan Ouviaña Lanz,
Best Practices Research Analyst***

and therapeutic product patents to his name, the company contains exceptional human capital. Its senior leadership comprises PhD-qualified assay testing, AI, Big Data, and dermatology experts, as well as executives with vast experience in sales, marketing, finance, and business development. Furthermore, a scientific advisory board composed of biological process engineering, biochemistry, and synthetic organic chemistry academics provides additional support to HL’s rigorous R&D operations and

publications. The company strives to maintain execution discipline in every project to deliver quality and speed while working to build trust throughout the service lifecycle to establish long-lasting relationships. Due to these best practices, HL achieves high customer retention, having sustained fruitful collaborations with some of its clients for the last five years.

Moreover, HL demonstrates high-growth potential. Its robust intellectual property portfolio upholds its pioneering technology’s competitive advantage. Frost & Sullivan anticipates rapid, widespread adoption of the company’s AI discovery platform as its first-mover status and application diversity strengthen its position on emerging opportunities. Furthermore, HL remains proactive, constantly identifying growth areas for developing innovative solutions with commercial and social value. For instance, it has created a prototype for a hair care formulation with specific hydration and sun-protection properties for women of Middle Eastern and African ethnicities, which it plans to bring to market in 2023. Frost & Sullivan is impressed with the company’s determination to bridge industry gaps by steering the development of breakthrough products generating substantial value for end consumers and believes that it will sustain its forward-looking vision and overall excellence in the coming years to achieve its outstanding growth potential.

Conclusion

Technology innovation is gradually becoming a critical success factor for the ingredient and formulation discovery industry. Yet, with many options available, market stakeholders need to leverage the most appropriate and best technology-based solutions to optimize their market impact. With its groundbreaking proprietary artificial intelligence technology, Hexis Lab Limited (HL) delivers optimal results at unparalleled go-to-market timelines. The company assists its customers across all stages of their research & development journeys, helping them reduce costs, overcome bottlenecks, and design efficient and innovative solutions to meet modern consumer demands. Due to its exceptional human capital, customer-centric mentality, and proactivity, HL is well positioned to seize new growth opportunities and solidify its place in the market for years to come.

With its strong overall performance, Hexis Lab Limited earns Frost & Sullivan's 2022 North American Technology Innovation Leadership Award in the ingredient and formulation discovery industry.

What You Need to Know about the Technology Innovation Leadership Recognition

Frost & Sullivan's Technology Innovation Leadership Award recognizes the company that has introduced the best underlying technology for achieving remarkable product and customer success while driving future business value.

Best Practices Award Analysis

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Business Impact

Financial Performance: Strong overall financial performance is achieved in terms of revenues, revenue growth, operating margin, and other key financial metrics

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at <http://www.frost.com>.

The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.

[Learn more.](#)

Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- **Innovation Culture:** Optimized Customer Experience
- **ROI & Margin:** Implementation Excellence
- **Transformational Growth:** Industry Leadership



The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)

