

Bolt
BOLT PROJECTS HOLDINGS

INVESTOR
PRESENTATION
July 2025



CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements within the meaning of the federal securities laws. All statements other than statements of historical facts contained in this communication, including, without limitation, statements regarding the Company's planned cost reductions, financial outlook, expected market opportunity and market acceptance, the Company's business strategy and plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "believe," "budget," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "might," "plan," "possible," "potential," "predict," "project," "should," "strive," "will" or the negatives of these terms or variations of them or similar terminology.

Forward-looking statements involve a number of risks, uncertainties, and assumptions, and actual results or events may differ materially from those projected or implied in those statements. Important factors that could cause such differences include, but are not limited to: the Company's history of net losses, ability to achieve or maintain profitability in the future; the Company's ability to continue as a going concern; the Company's ability to meet the continued listing requirements of Nasdaq could result in a delisting of its common stock; the Company's ability to execute its business plan and adequately control its expenses or raise additional capital on favorable terms, if at all; the Company's ability to generate sufficient cash to service its debt obligations; the Company's dependence on sales of b-silk™ and xl-silk™ products; the Company's reliance on a single or limited manufacturing partners and manufacturing facilities; costs of and availability for b-silk™ and xl-silk™ and the Company's future products that are out of the Company's control; pricing pressures if the Company's costs of producing b-silk™ and xl-silk™ materially increase; the Company's limited experience in marketing and selling b-silk™ and xl-silk™; market acceptance of from consumer product companies; the Company's ability to protect adequately its patents and other intellectual property assets; government regulations and private party actions relating to the marketing and advertising of cosmetic products that include b-silk™, xl-silk™ or other products the Company develops may restrict, inhibit or delay its ability to sell such products; and the other risks and uncertainties discussed under the caption "Risk Factors" included in the included in the Company's prospectus on Form 424(b)(8) filed with the SEC on October 2, 2024, as such factors may be updated from time to time in its other filings with the SEC, including, without limitation, the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2024, which are accessible on the SEC's website at www.sec.gov and the Financials section of the Company's website at www.boltprojectsholdings.com.

The Company cautions you against placing undue reliance on forward-looking statements, which reflect current beliefs and are based on information currently available as of the date a forward-looking statement is made. Forward-looking statements set forth herein speak only as of the date they are made. The Company undertakes no obligation to revise forward-looking statements to reflect future events, changes in circumstances, or changes in beliefs, except as otherwise required by law.

Market and Industry Data and Forecasts

In this presentation, we present certain market and industry data and data. This information is based on third-party sources, which we believe to be reliable, however, we have not independently verified data from these sources and cannot guarantee their accuracy or completeness. Additionally, some data in this presentation is based on our good faith estimates, which are derived from management's knowledge of the industry, independent sources and assumptions. Similarly, we believe our internal research is reliable, however, such research has not been verified by any independent sources. Our estimates involve a number of assumptions which are necessarily subject to risks and uncertainties and are subject to change based upon various factors, including those discussed under "Forward-Looking Statements" above. These and other factors could cause our future performance, total addressable market and market expectations to differ materially from our assumptions and estimates.

THE
BEST
DAYS
ARE
AHEAD
OF US

At Bolt, we believe that the best days of our planet are ahead of us.

Because where some see a tree, we see a template.
Where some see a flower, we see a framework.
Where some see a spider's web, we see a solution.

This is where billions of years of evolution meets
the newest advances in biotechnology.

Where we unlock nature's blueprints and cultivate materials that are
more beneficial to people and this amazing ecosystem we call home.

This is the recipe for a more promising future.
And we'll be supplying the ingredients.

Inspired by nature.
Propelled by science.

Driven to create way better materials for a way better world.



BOLT IS
PIONEERING
A NEW
GENERATION
OF BIOTECH
INGREDIENTS
FOR THE BEAUTY
AND PERSONAL
CARE INDUSTRY

By harnessing the power of nature's materials, we create scientifically advanced, clean, biodegradable, luxurious ingredients that are designed to help beauty brands meet their customers' demands for performance and sustainability.

Over the last decade and with more than \$300M invested, Bolt has decoded over 20,000 natural materials, scaling a variety from bench, to pilot, to fully commercialized.

Our products and processes are highly proprietary protected by an intellectual property portfolio anchored by 75 granted patents and 114 pending patent applications.

Many of our materials are actively moving through the innovation pipeline and, we believe, are primed for commercialization.



OUR PLATFORM

A collection of patented materials built on shared technology and functional benefits, designed to streamline development and offer versatile solutions to common industry challenges.

OUR TECHNOLOGY

Bolt's first commercialized tech is our Vegan Silk Technology Platform, which includes b-silk™ and xl-silk™ ingredients.

OUR IP

Bolt is built on intellectual property. This starts with our 75 granted patents and 114 pending patents, continues through our trade secrets and know how developed by making product for 14+ yrs, and culminates in our valuable trademarks that create ingredient brands.



BOLT'S VEGAN SILK TECHNOLOGY PLATFORM

Efficacious alternatives to silicone elastomers with 20+ proven functional benefits —

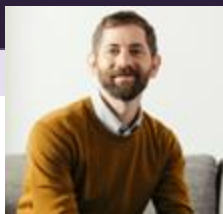
Made through fermentation, our vegan silks are collection **complex polypeptides** that act as a **lightweight, film-forming alternative to silicone elastomers** — a commonly used ingredient under increasing regulatory and consumer scrutiny due to concerns about their impact on human health and the environment.

Our platform of vegan silks deliver **20+ clinically-proven benefits**, are **fully bio-based**, and **biodegradable**, providing formulators the ability to incorporate them into products **without trading efficacy for regulatory compliance**.



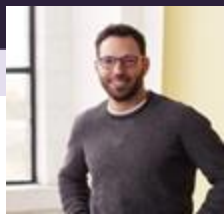
BOLT PROJECTS HOLDINGS TEAM & LEADERSHIP

Dan
Widmaier, PHD
Co-Founder and CEO



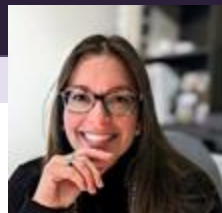
Ph.D. in Chemistry (UCSF); has led Bolt since 2009 across tech, scale, and fundraising.

David Breslauer,
PHD
Co-Founder and CTO



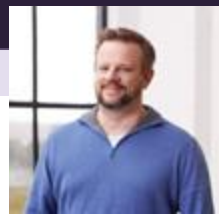
Bioengineering Ph.D. (UC Berkeley/UCSF); leads innovation with deep expertise in biomaterials, including silk.

Cintia
Nardi
President, COO



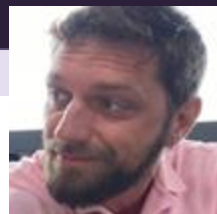
With 25+ years in beauty and personal care (Unilever, Estée Lauder), leads strategy, operations, and go-to-market at Bolt. She drives the company's mission to turn breakthrough material innovation into scalable, sustainable solutions for the beauty and personal care industry.

Randy
Befumo
CFO



Former CFO of Eventbrite (IPO); 15+ years in investment research and capital markets at Legg Mason.

Paul
Slattery
General Counsel



Experienced GC for high-growth, regulated startups; ex-Quinn Emanuel litigator with deep IP and regulatory focus.

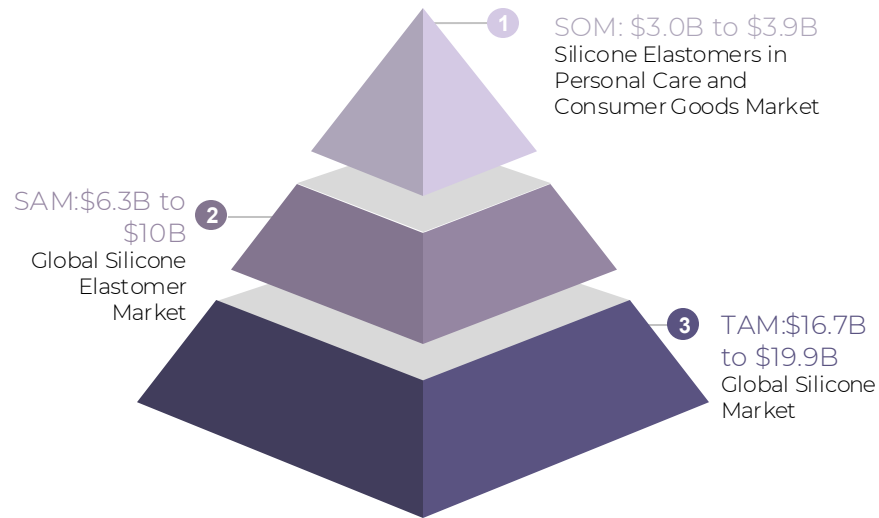


VEGAN SILK'S MARKET OPPORTUNITY

We compete in a \$3B+ market that requires new solutions.

- + Vegan Silk materials have a wide range of applications and are designed to both replace silicone elastomers **and** other functional ingredients in cosmetic formulations.
- + Silicone elastomers alone represent a \$3B+ market opportunity where regulatory constraints and consumer preference are accelerating the demand for sustainable solutions. Active ingredients add even more.
- + Regulatory pressures, including European Union zero-waste regulations by June 1, 2027 (Regulation (EU) 2023/2055, and Regulation 2024/1328), and consumer preferences are forcing brands to reconsider their reliance on silicones and seek biotech-driven solutions like b-silk™ and xl-silk™

SILICONE MARKET OVERVIEW





THE PROBLEM

Heavily Regulated "Forever Chemicals"

Silicone elastomers face EU bans by 2027 over microplastic and biodegradability concerns.

Bio-based Alternatives Fall Short

Bio-based or bio-degradable substitutes often compromise performance and can't meet premium formulation standards, specially when it comes to film forming properties.

Bio-Based Innovation Comes at a Cost

Traditional biomaterials firms face high costs and complex scale-up due to capex-heavy infrastructure, limiting agility and driving high burn rates.

THE SOLUTION

A Clean Replacement for Silicones and Harsh Chemicals

Bolt's bio-based, bio-degradable, non-GMO, Vegan Silk technology offers 20+ clinically proven benefits across all beauty categories.

Performance + Sustainability in One Molecule

Bolt's Vegan Silk Technology act as a breathable film former and delivers shine, texture, and product stability without sacrificing efficacy.

Scalable, Capital-Light Manufacturing

+10 years of process continues improvement, manufacturing trade secrets and fully outsourced GMP production enables cost-efficient scale and high-margin flexibility.

VEGAN SILK'S GROWING MARKET PRESENCE

Bolt has
validated
multiple
applications for
vegan silk —
with products in
market across
categories

- + 2021: b-silk™ launched in Vegamour's GRO Shampoo & Conditioner.
- + Q3 2024: Featured in Freaks of Nature™ mineral sunscreen.
- + Q4 2024: Used in Haus Labs color cosmetics launch.
- + Q1 2025: Formulated into Goddess Maintenance Co.'s Biotech Blowout hair mask.
- + Q2 2025: BF Brands released Mderm + Silk moisturizer, highlighting vegan, biodegradable, plastics-free claims.
- + Q1 2026: A major haircare brand plans to adopt the platform for enhanced performance and differentiation.



SALES CYCLE DRIVEN BY INDUSTRY ESTABLISHED PROCESSES

Beauty and
Personal Care
offers
sustained
demand with
long lead times
to launch

- + Sales cycles for cosmetic ingredients typically **span 8–24 months** due to regulatory requirements.
- + **Brand-specific launch timelines** can further extend the time to ingredient adoption.
- + **b-silk™ has shown strong results**, with consistent efficacy and consumer satisfaction across launches.
- + **Order volumes are expected to grow** as our platform of vegan silk products expand within existing customer portfolios.
- + **Proven performance** is driving adoption, attracting new customers through successful market launches

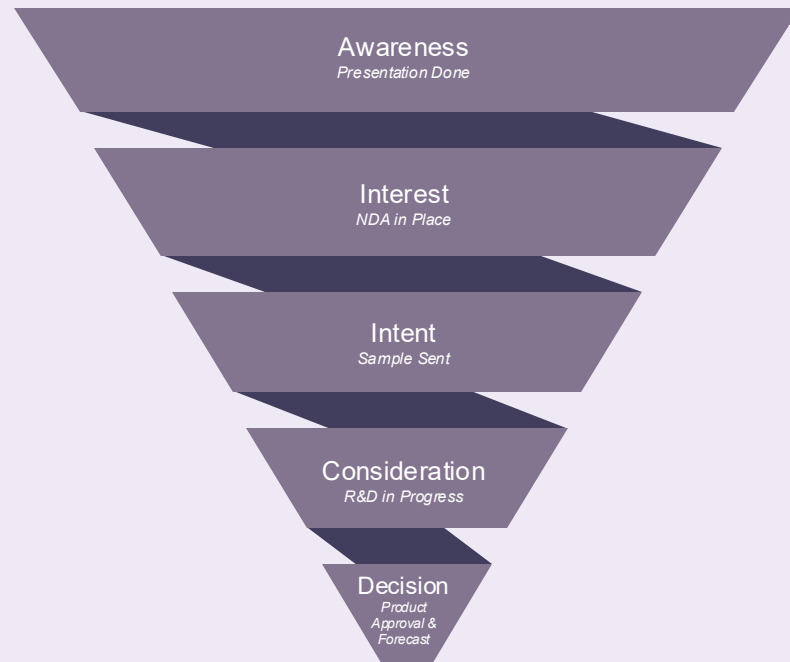




BOLT'S TARGETED SALES PROCESS—

- + Identification and qualification of brand customers that could benefit from Bolt's platform offerings
- + Engaging in a discovery process to align with their needs
- + Delivering material samples for research & development of new or existing commercial products
- + Brands finalize formula development and initiate regulatory & safety testing, and claim validation
- + Brand allocation of new products into marketing calendar
- + Bolt delivers materials for production
- + Brands begin production and initiate go-to-market strategy

SALES FUNNEL FOR QUALIFIED LEADS



A PROPRIETARY INGREDIENT BACKED BY A PROPRIETARY BIO-MANUFACTURING PROCESS

- + **Over a decade of development**, with successful tech transfer across 10+ CMOs.
- + **Fully outsourced manufacturing** with a leading GMP bio-manufacturer, focused on efficiency and scalability.
- + **Achieved 65%+ cost reduction** over 3 years, with further double-digit savings expected in 2025.



BOLT'S PROCESS ENCAPSULATED

Modeling of
polypeptide
sequences

Computational
protein design
of novel
materials

Reprogramming
yeast to produce
the desired protein

Utilize white
biotechnology
(fermentation) to
produce the protein

Purification and
refining process to
obtain the
final product



BOLT'S INNOVATION & COMMERCIALIZATION PIPELINE



- + Bolt has **invested over \$300M over the past decade** to develop a broad range of biomaterials.
- + This deep experience in silk and related technologies provides a rich foundation to **expand our Vegan Silk Technology Platform** and **launch new platforms** more rapidly.
- + Our current focus is **optimizing our technology** and **expanding our silk offering** with specific target benefits by segment.
- + We **execute R&D through external partnerships**, including our ongoing collaboration with Ginkgo Bioworks.
- + This model allows us to **innovate without major capex**, while accessing top-tier infrastructure and biotech talent.

BOLT'S INNOVATION PIPELINE





ATTRACTIVE GROSS MARGINS AT SCALE

Revenues — Sales and deliveries may vary by quarter due to customer launch timing. Traction is best measured over the trailing 12 months.

Gross Profits — At scale, b-silk™ and xl-silk™ are expected to deliver 60%+ gross margins, supporting long-term profitability.

Operating Expenses — Our lean, professional team keeps fixed costs low. We expect to scale operations without significant overhead increases.

Adjusted EBITDA — With a stable cost base, incremental gross profit is expected to drive positive Adjusted EBITDA over time.

LONG TERM MODEL

Gross Margin
60%

R&D % of Sales
13%

S&M % of Sales
15%

G&A % of Sales
12%

Adjusted EBITDA
Margin
20%



BOLT PROJECTS HOLDINGS

FINANCIAL RESULTS & PROJECTIONS

(In Thousands)

	2023	2024	2025*	2026*
Sales	\$3,441	\$1,373	\$4,500	\$9,000
Gross Profit	(\$1,405)	(\$93)	\$500	\$1,000
R&D	\$9,632**	\$6,245	–	–
S&M	\$866**	\$1,989	–	–
G&A	\$18,757**	\$33,281	–	–
Adjusted EBITDA***	(\$20,332)***	(\$11,438)***	–	–

* Estimate

** Certain expenses previously recorded as G&A have been reclassified to R&D or S&M. This classification adjustment was made to better reflect the nature of the expenses in accordance with U.S. GAAP. There was no impact on our total expenses, net income (loss), or earnings per share.

*** See slide 15 for additional information about non-GAAP financial measures and slide 14 for a reconciliation of Adjusted EBITDA

**** Projections shown align with public guidance. Internal model figures are different but excluded only available upon signing NDA.



BOLT PROJECTS HOLDINGS ADJUSTED EBITDA RECONCILIATION

(In Thousands)

	2023	2024
GAAP net loss	\$(57,720)	\$(65,393)
Interest expense	3,503	1,504
Depreciation	1,088	2
EBITDA	\$(53,129)	\$(63,887)
Non-GAAP adjustments:		
(Gain) loss on lease termination	319	(2,015)
Lease, property and equipment impairment	21,559	–
Loss on extinguishment of convertible notes	–	26,359
Non-cash fair value remeasurements of convertible notes, warrant, and share-based liabilities	565	(1,519)
Bridge note issuance costs	3,527	11,460
Restructuring costs	3,973	–
Stock-based compensation	643	18,164
Loss on supply agreement termination	2,211	–
Adjusted EBITDA	\$ (20,332)	\$ (11,438)



Join Us in Redefining Beauty with Biotech

Bolt Projects Holdings is pioneering the future of beauty and personal care through proprietary, biodegradable biomaterials. Our Vegan Silk Technology Platform offers clinically validated, water-compatible alternatives to silicone elastomers—meeting rising demand for high-performance, sustainable ingredients. Backed by 75+ granted patents, strategic partnerships (including Ginkgo Bioworks), and a growing list of brand launches, Bolt is positioned to lead the category.

Contact Us

- Randy Befumo, CFO rbefumo@boltthreads.com
- Website: www.boltprojectsholdings.com





NON-GAAP FINANCIAL MEASURES

In addition to the financial measures presented in this release in accordance with U.S. Generally Accepted Accounting Principles ("GAAP"), the Company has included certain non-GAAP financial measures in this release, including EBITDA and Adjusted EBITDA. The Company's non-GAAP financial measures should not be considered as an alternative to net income (loss) as a measure of financial performance or any other performance measure derived in accordance with GAAP and should not be construed as an inference that the Company's future results will be unaffected by unusual or non-recurring items. EBITDA is defined as net income (loss) adjusted for interest expense and depreciation. Adjusted EBITDA is defined as net income (loss) adjusted for interest expense and depreciation and amortization, (gain)/loss on lease termination, loss on supply agreement termination, lease, property and equipment impairment, loss on extinguishment of convertible notes, non-cash fair value remeasurements of convertible notes, warrant and share-based liabilities, bridge note issuance costs, restructuring costs and stock-based compensation. For a reconciliation of the historical non-GAAP financial measures herein, see slide 14. The Company defines free cash flow as net cash provided by (used in) operating activities less payments for capital expenditures.

Reconciliations of the non-GAAP financial measure guidance herein to the most directly comparable GAAP financial measures cannot be provided without unreasonable efforts and are not provided because of the inherent difficulty in forecasting and quantifying certain amounts that are necessary for such reconciliations and certain other items reflected in our reconciliation of historical non-GAAP financial measures, the amounts of which could be material.