

D:wave

COMMERCIAL

QUANTUM COMPUTING

26TH ANNUAL NEEDHAM GROWTH CONFERENCE – JANUARY 19, 2024

D:wave

FORWARD-LOOKING STATEMENTS



Certain statements in this presentation are forward-looking, as defined in the Private Securities Litigation Reform Act of 1995. These statements involve risks, uncertainties, and other factors that may cause actual results to differ materially from the information expressed or implied by these forward-looking statements and may not be indicative of future results. Forward-looking statements in this presentation include, but are not limited to, statements regarding the future growth of the quantum industry and potential investment in quantum; the pace and trajectory of the development of quantum technology; quantum's future total addressable market (TAM); future commercial use-cases for quantum; D-Wave's expected production deployments for customers; D-Wave's anticipated progress towards achieving quantum supremacy in significant and meaningful problems; D-Wave's plans for its Advantage2™ and Advantage3™ systems, as well as its other technological innovations; the potential for increase in value of D-Wave's technology; and D-Wave's potential to obtain additional financing through the ELOC or otherwise. These forward-looking statements are subject to a number of risks and uncertainties, including, among others, various factors beyond management's control, including the potential for D-Wave's competitors to outpace its technological growth; our ability to raise funds under the ELOC or otherwise; general economic conditions and other risks; our ability to expand our customer base and the customer adoption of our solutions; risks within D-Wave's industry, including anticipated trends, growth rates, and challenges for companies engaged in the business of quantum computing and the markets in which they operate; the outcome of any legal proceedings that may be instituted against us; risks related to the performance of our business and the timing of expected business or financial milestones; unanticipated technological or project development challenges, including with respect to the cost and/or timing thereof; the performance of our products; the effects of competition on our business; the risk that we will need to raise additional capital to execute our business plan, which may not be available on acceptable terms or at all; the risk that we may never achieve or sustain profitability; the risk that we are unable to secure or protect our intellectual property; volatility in the price of our securities; the risk that our securities will not maintain the listing on the NYSE; and the numerous other factors set forth in D-Wave's Annual Report on Form 10-K for its fiscal year ended December 31, 2022 and other filings with the Securities and Exchange Commission. Undue reliance should not be placed on the forward-looking statements in this presentation in making an investment decision, which are based on information available to us on the date hereof. We undertake no duty to update this information unless required by law.

D-WAVE AT A GLANCE



ESTABLISHED PRODUCT PORTFOLIO:

- World's largest Quantum Computer
- Accessible through production-grade cloud service
- Demonstrated advantage over classical

GROWING COMMERCIAL ADOPTION:

- 1st commercial Quantum Computing company
- 30+ proven business use cases
- Initial applications moving into production

HIGH-VALUE CONSULTATIVE SERVICES:

- 20+ successful POC engagements in 18 months
- Advisory services to aid in production deployment

INDUSTRY PERSPECTIVE:

“By working with D-Wave and adopting quantum technology as part of our tech stack, we believe we can uncover an even greater collection of data-driven insights to deliver more relevant and effective marketing for our clients, at scale.”

– Philippe Krakowsky, CEO of Interpublic Group

MARKET LEADER

advantage
Quantum Annealing
Fifth generation system
5000+ qubits

Leap
Real-Time Quantum Cloud
Quantum hybrid solvers
99% up-time

Ocean
Open-Source Python Tools
Easily configurable
Simplifies use of QC & HSS

Launch
Customer PS On-Ramp
From application eval
to production deployment

STRONG CUSTOMER BASE

THOUGHT LEADERSHIP

<p>220+ U.S. granted patents 140+ Pending worldwide 60+% Annealing AND Gate</p>	<p>Top three quantum patent portfolio globally <small>(Source: GlobalData)</small></p>	<p>40 PhDs</p>	<p>Over 225 scientific papers published</p>
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CHOOSING THE RIGHT QUANTUM TECHNOLOGY



COMBINATORIAL OPTIMIZATION

Employee Scheduling
Autonomous Vehicle Routing
Peptide Design
Fraud Detection
Patient Trial Optimization

ANNEALING

AN EASIER ON-RAMP
TO QUANTUM COMPUTING

Natively optimization
Commercial today

LINEAR ALGEBRA & FACTORIZATION

Machine Learning
Cryptography
Drug Toxicity
Global Weather Modeling

ANNEALING

OR
GATE

DIFFERENTIAL EQUATIONS

Designer Drugs
New Materials
Longer-Life Batteries

GATE-MODEL

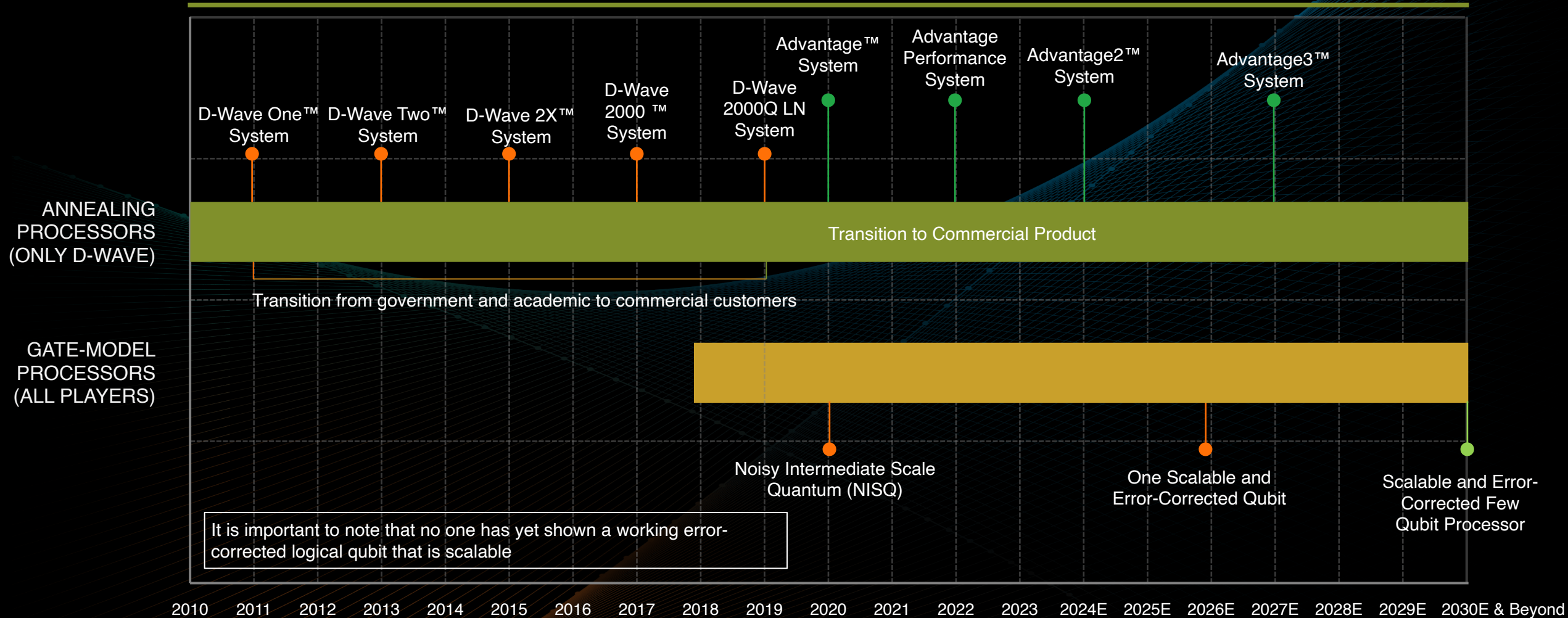
HIGHER INVESTMENT
COST & LEARNING CURVE

Suited to differential equations
7+ years to commercialization

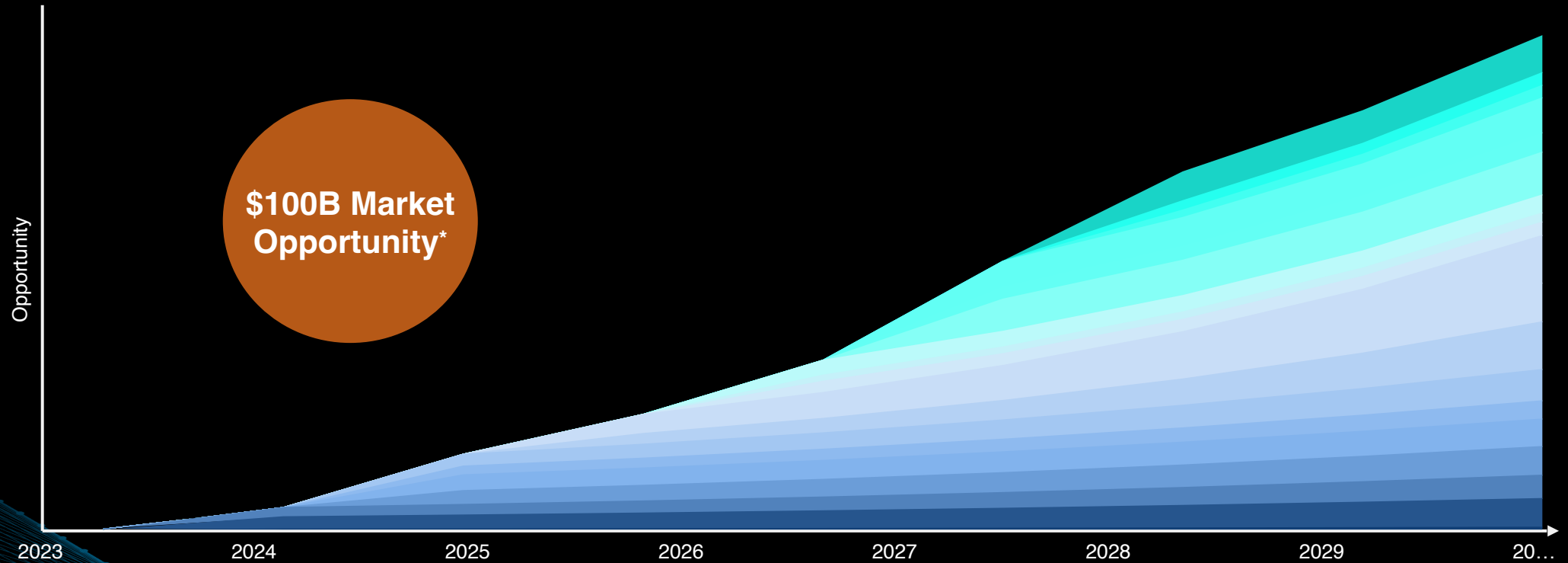
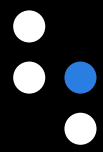
LEADING THE COMMERCIALIZATION OF QUANTUM TECH

Experimental / Research

Product Commercialization



VALUE CREATION THROUGH THE ONGOING INTRODUCTION OF NEW USE CASES



Production Application Use Cases

Scheduling & Routing

- Workforce Scheduling
- Job Shop Scheduling
- Vehicle Routing

Allocation & Risk Management

- Resource Allocation
- Customer Offer Allocation
- Portfolio Optimization
- Fraud Detection

Machine Learning

- Model Training
- Prompting Optimization
- Feature Selection

Defense & Aerospace

- Missile Defense Optimization
- Satellite Placement
- Radar Scheduling

Process & Flow

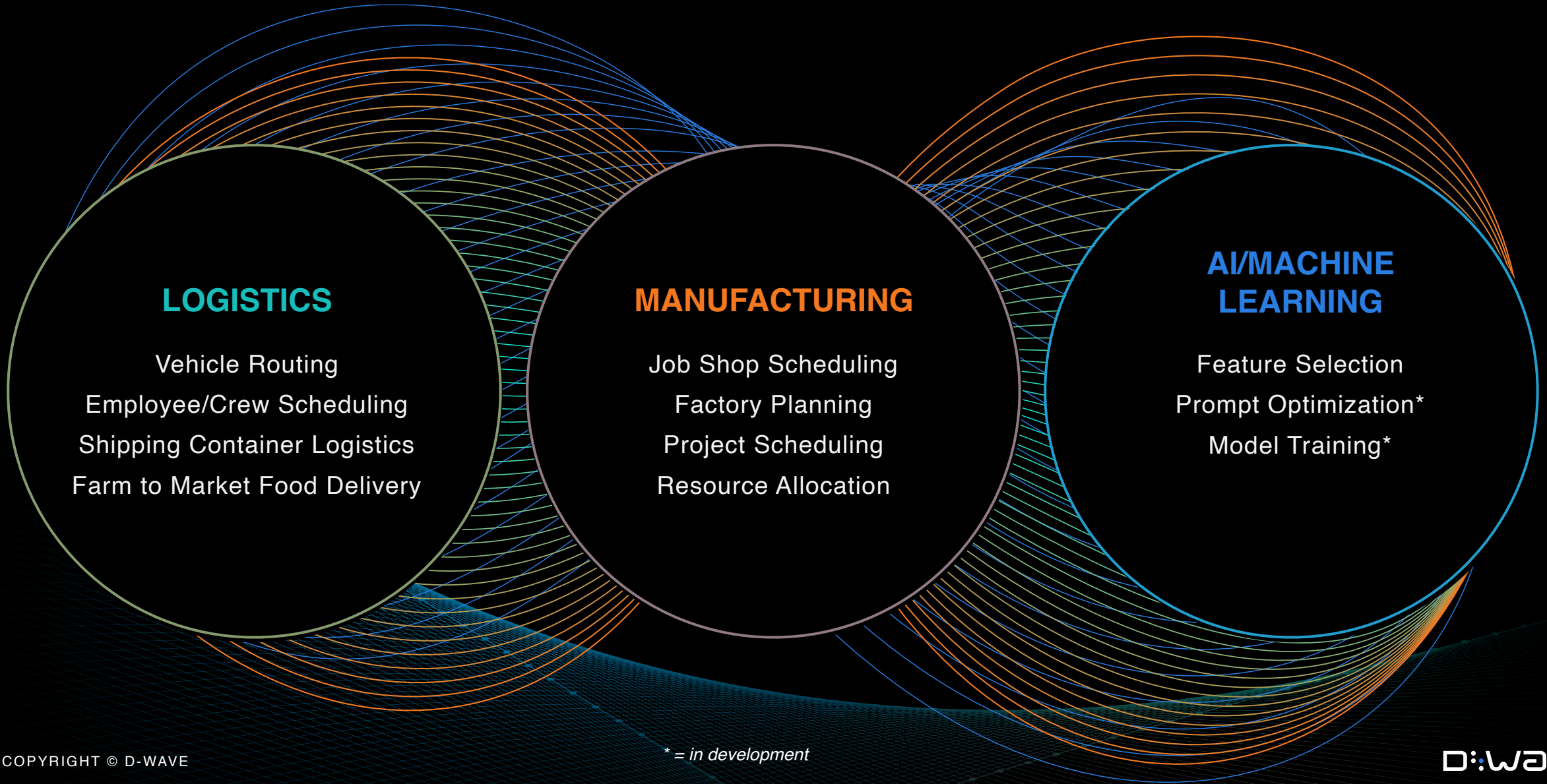
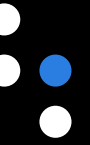
- Wireless Infrastructure Optimization
- Network Flow Optimization
- Supply Chain Optimization

Advanced Use Cases

- Drug Discovery
- Protein Design
- Energy Unit Commitment

* Based on D-Wave analysis and research from Grand View Research, Allied Market Research, Research and Markets and 360 Research Reports

FOCUS ON LOGISTICS AND MANUFACTURING FOLLOWED BY AI/MACHINE LEARNING



THERE IS STRONG ENTERPRISE DEMAND FOR QUANTUM SOLUTIONS

80% OF COMPANIES

plan to increase quantum computing (QC) commitment in next 2-3 years¹

42% OF BUSINESS LEADERS

see QC as key for logistics/supply chain management¹

31% OF ENTERPRISES

have abandoned complex problems because of time to solve²

CATALYSTS FOR ADOPTION:

business process efficiencies, increased revenue¹

BENEFITS:

speed, cost, and accuracy

1. Hyperion research
2. 451 research
3. BCG research
4. McKinsey research

33%

OF COMPANIES FORSEE ANNUAL QC BUDGETS OF \$15M OR HIGHER¹

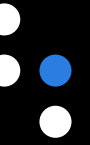
\$850B

EXPECTED TAM BY 2043³

99+

NEAR-TERM COMMERCIAL USE CASES IDENTIFIED BY EXPERTS⁴

AUTOMATED TOUR ROUTING



TASK REDUCED
FROM 12 HOURS
TO LESS THAN
ONE HOUR

IPG

Identifying optimal routes for promotional tours is critical to ensuring all client requirements and federal regulations are considered. The Interpublic Group worked with D-Wave to identify routes that reduce the costs of producing and running these tours.

D-Wave's technology was able to solve the given problem in less than an hour and is well designed to allow for an easy transition to a full production-quality application.

PRODUCTION APPLICATION DEPLOYMENTS



26

of Proofs of Concept Built for Customers



Pattison Food Group



Multiple Applications Now Moving Into Production

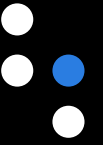


More Customer Production Deployments Expected in Next 2 Quarters



Deployments Fuel QCaaS Usage and Growth

SHAPING GOVERNMENT QUANTUM PROGRAMS FOR INCLUSIVITY AND NEAR-TERM APPLICATION SUPPORT



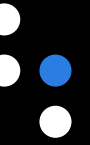
NATIONAL DEFENSE AUTHORIZATION ACT (NDAA)

- Now includes annealing, gate model and hybrid
- Tasks DoD with creating near-term quantum application pilot program

NATIONAL QUANTUM INITIATIVE (NQI)

- Includes near-term applications tested program at National Science Foundation
- Includes industry engagement & inclusivity language
- Expands to new government agencies:
 - Department of Homeland Security
 - Department of State
 - Special Operations Association of America
 - National Aeronautics and Space Agency

ENHANCED RADAR SCHEDULING



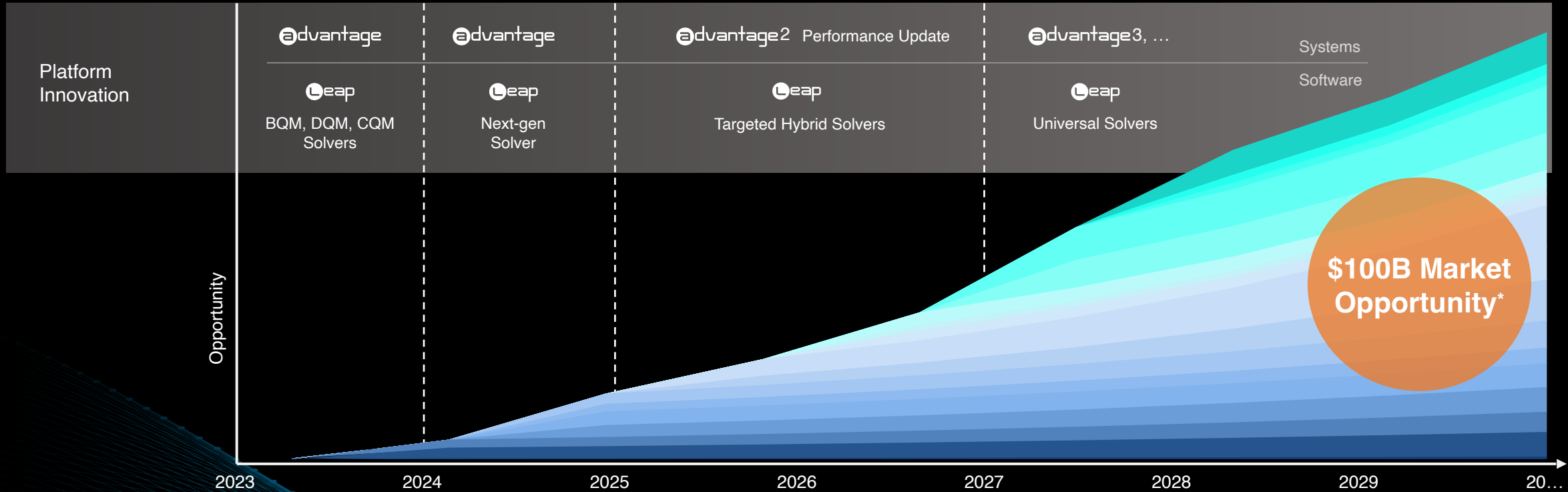
15%
INCREASE IN
RESOURCE
UTILIZATION



Davidson, a technology services company that provides innovative engineering, technical and management solutions for the Department of Defense, aerospace and commercial customers, has been working with D-Wave on several quantum-hybrid applications to advance national defense efforts.

Most recently we've built a radar scheduling application that efficiently manages the time-limited resources of a phased-array radar system, enabling scheduling of communication with moving objects. We observed enhanced resource utilization in all our test cases. On average, we achieved a 15% increase in utilization across all problem scenarios and time limits, with the highest improvement reaching an impressive 42%.

TECH DRIVING CUSTOMER USE CASES



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A PRODUCT ROADMAP BUILT TO DELIVER CUSTOMER ROI



GREATER PROCESSING POWER *ADVANTAGE2 PROCESSOR*

- Improved connectivity to address larger and more complex problems
- Improved qubit coherence to drive faster time-to-solution
- Increased energy scale to deliver more high-quality solutions
- Ability to address more complex customer optimization problems

INCREASED SOFTWARE VALUE *LEAP™ SERVICE*

- Advancement of quantum-hybrid solver software
- Improved solution quality for larger, more complex customer problems

RELIABILITY AND ACCESS *FULL STACK*

- Software and hardware enhancements to drive production-grade reliability
- Continued work on key compliance initiatives such as SOC 2 Type 2
- Expanded support for growing go-to-market initiatives

PATHWAY TO PROVING QUANTUM SUPREMACY: QUANTUM EFFECTS ACCELERATING OPTIMIZATION

MILESTONES ACHIEVED

Article

Quantum critical dynamics in a 5,000-qubit programmable spin glass

<https://doi.org/10.1038/s41586-023-05867-2>

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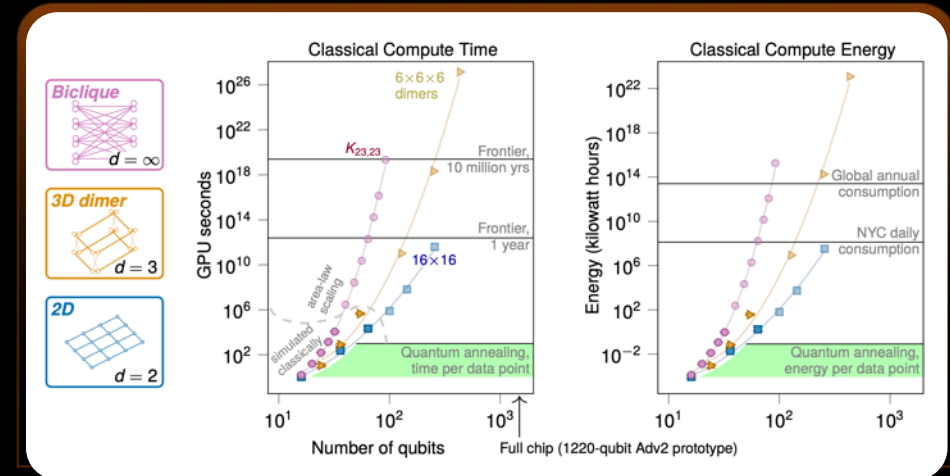
Check for updates

nature

Andrew D. King¹, Jack Raymond¹, Trevor Lanting¹, Richard Harris¹, Alex Zuoca¹, Fabio Altomare¹, Andrew J. Berkley¹, Kelly Boothby¹, Sara Ejtemaee¹, Colin Enderud¹, Emile Hoskinson¹, Shuiyuan Huang¹, Eric Ladizinsky¹, Allison J. R. MacDonald¹, Gaelen Marsden¹, Reza Molavi¹, Travis Oh¹, Gabriel Poulin-Lamarre¹, Mauricio Reis¹, Chris Rich¹, Yuki Sato¹, Nicholas Tsai¹, Mark Volkmann¹, Jed D. Whittaker¹, Jason Yao¹, Anders W. Sandvik^{1,2} & Mohammad H. Amin^{1,2}

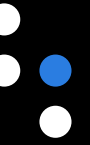
- Proven scaling performance advantage in theory and measurements of **COHERENT QUANTUM ANNEALING**
- Demonstrated with **ADVANTAGE™** quantum computers
- Demonstrated on hard **MATERIAL SIMULATION** problem instances
- Further increases in coherence time expected to translate into **GREATER PERFORMANCE ADVANTAGE**

RESEARCH NEARING COMPLETION



- Classical simulations performed on **FRONTIER AND SUMMIT SUPERCOMPUTERS AT OAK RIDGE NATIONAL LAB**
- **EXPONENTIAL ADVANTAGE** over state-of-the-art classical techniques (tensor networks, neural networks, heuristics)
- **CLASSICAL COMPUTERS TOO SLOW** for all but the smallest instances

PRODUCTION-GRADE RELIABILITY REFLECTS OUR COMMERCIAL MATURITY



Focused on delivery of **secure, reliable, and production-grade quantum tech stack at scale** and across geographies to support customers' production deployments

- Introduced **new administration features** that give customers the ability to manage their own organization and associated projects; supports rapid growth of reseller and partner programs
- Released **zero downtime deployment** features that let us introduce new software enhancements in the Leap quantum cloud service without service interruption
- Secured **SOC 2 Type 2 compliance as of December 7, 2023 becoming the first full-stack quantum computing provider to meet this achievement.** This initiative helps ensure protection of customer data and streamlines procurement for companies that require data compliance



D-WAVE QUANTUM PATENT PORTFOLIO RANKED AS 3RD LARGEST IN THE WORLD



500+ GRANTED AND PENDING PATENTS WORLDWIDE, INCLUDING:

- 220+ US granted patents
- 210+ granted and pending patents worldwide (non-US)

60%+ OF THE PORTFOLIO applies to both gate model and annealing quantum computing

Portfolio covers hardware and software, including systems, qubits and other devices, fabrication, architecture, system software, cryogenics, hybrid quantum computing, and applications of quantum computing



220+ US Granted Patents

CAPITALIZING ON TAILWINDS



SUPREMACY

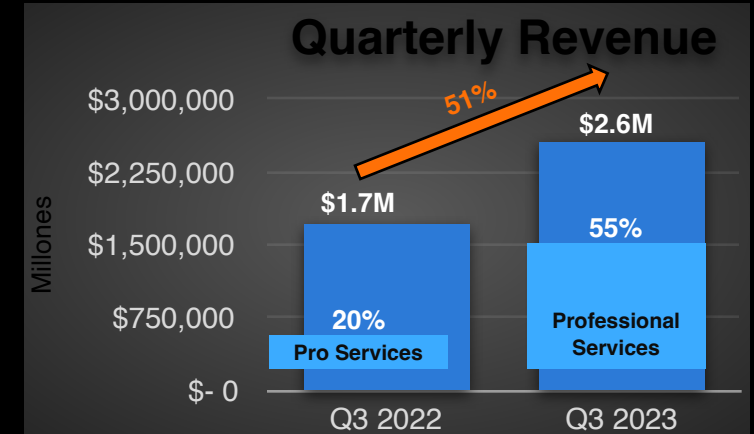
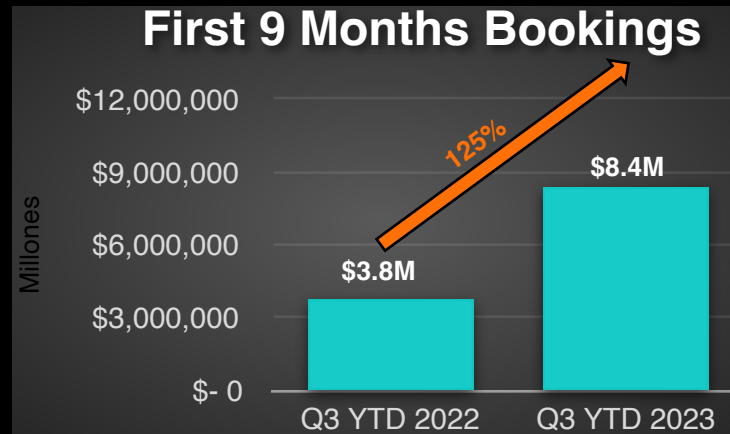
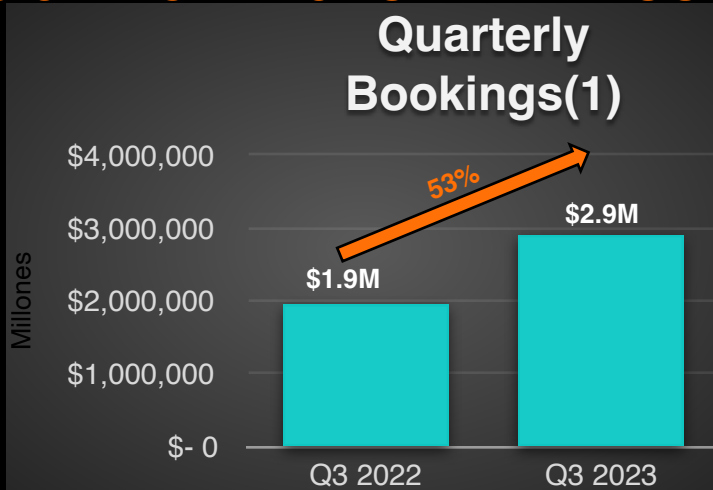
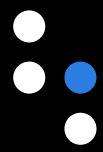
VERTICALIZATION

**GOVERNMENT
LEGISLATION**

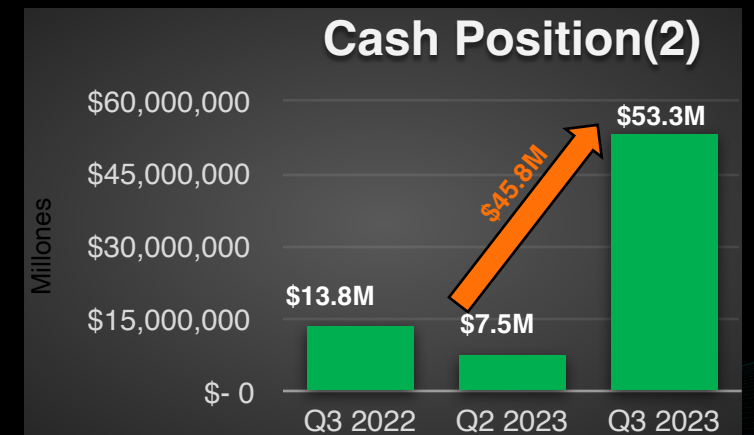
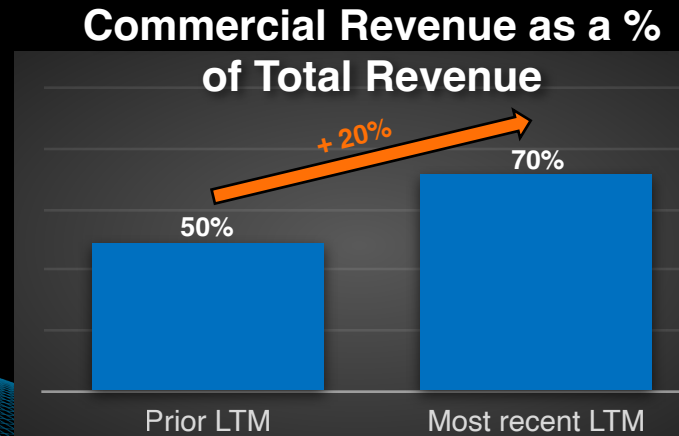
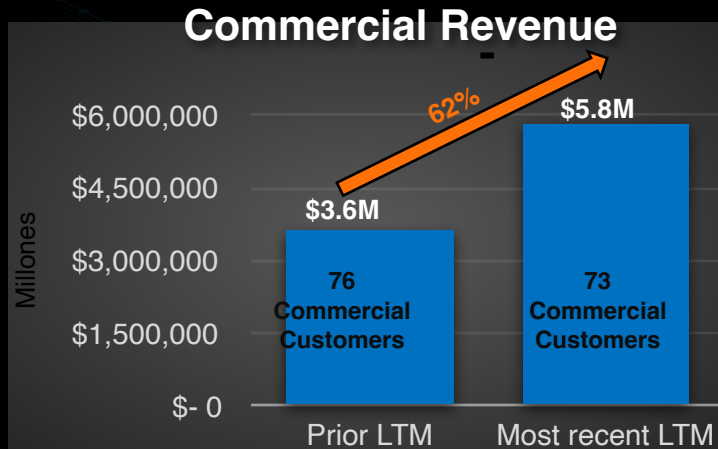
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Q3 FINANCIAL UPDATE

SIGNIFICANT GROWTH IN BOOKINGS, REVENUE, COMMERCIAL TRACTION & CASH



(1) Sixth consecutive quarter of YOY growth in bookings



(2) Additional source of liquidity is \$84.4M in remaining availability under the ELOC through October 2025, subject to a \$1.00 minimum stock price



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