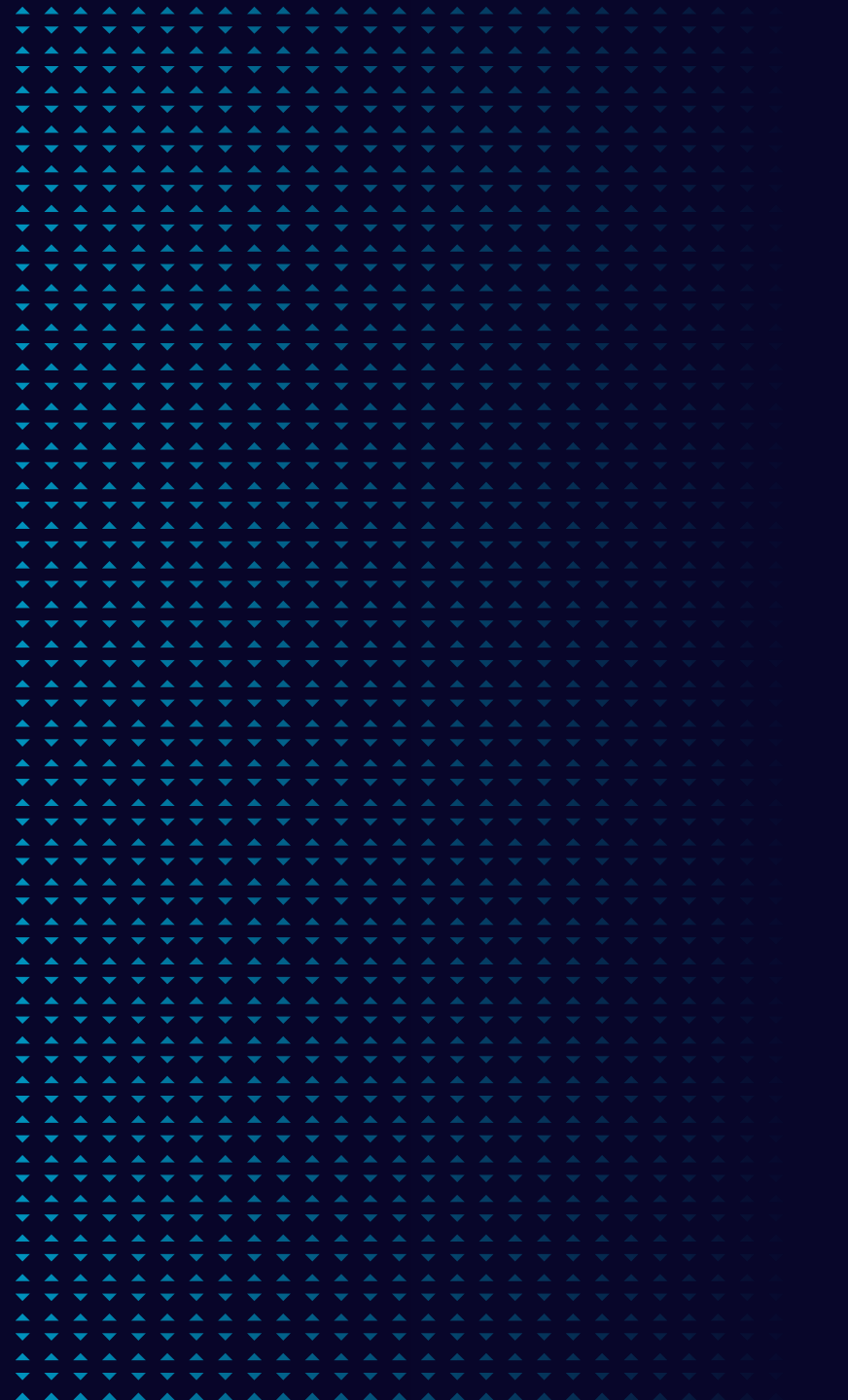




# Investor Day

November 8, 2022





# Introduction

Ed Ditmire  
Senior Vice President, Investor Relations

# Disclaimers

## Non-GAAP Information

In addition to disclosing results determined in accordance with U.S. GAAP, Nasdaq also discloses certain non-GAAP results of operations, including, but not limited to, non-GAAP net income attributable to Nasdaq, non-GAAP diluted earnings per share, non-GAAP operating income, non-GAAP operating expenses, and non-GAAP EBITDA, that include certain adjustments or exclude certain charges and gains that are described in the reconciliation table of U.S. GAAP to non-GAAP information provided at [ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation](http://ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation). Management uses this non-GAAP information internally, along with U.S. GAAP information, in evaluating our performance and in making financial and operational decisions. We believe our presentation of these measures provides investors with greater transparency and supplemental data relating to our financial condition and results of operations. In addition, we believe the presentation of these measures is useful to investors for period-to-period comparisons of results as certain items do not reflect ongoing operating performance.

The recast segment financial information for the period 2017-2022 is available on our website, <https://ir.nasdaq.com/static-files/51d92a92-df46-4482-895e-4ca2236cbe90>, and were furnished on a Current Report on Form 8-K on November 8, 2022. The segment disclosures for the periods presented on the following slides are for illustrative purposes only. Nasdaq intends to publish its fourth quarter and full year 2022 results, as well as all future reporting, in alignment with the new corporate structure described on the following slides. These unaudited segment disclosures are based on information available to management as of today and are subject to change. The final recast segment disclosure will be available in Nasdaq's Annual Report on Form 10-K for the year ended December 31, 2022.

These measures are not in accordance with, or an alternative to, U.S. GAAP, and may be different from non-GAAP measures used by other companies. In addition, other companies, including companies in our industry, may calculate such measures differently, which reduces their usefulness as a comparative measure. Investors should not rely on any single financial measure when evaluating our business. This information should be considered as supplemental in nature and is not meant as a substitute for our operating results in accordance with U.S. GAAP. We recommend investors review the U.S. GAAP financial measures included in this presentation. When viewed in conjunction with our U.S. GAAP results and the accompanying reconciliations, we believe these non-GAAP measures provide greater transparency and a more complete understanding of factors affecting our business than U.S. GAAP measures alone.

We understand that analysts and investors regularly rely on non-GAAP financial measures, such as those noted above, to assess operating performance. We use these measures because they highlight trends more clearly in our business that may not otherwise be apparent when relying solely on U.S. GAAP financial measures, since these measures eliminate from our results specific financial items that have less bearing on our ongoing operating performance.

*Organic revenue and expense growth, organic change and organic impact* are non-GAAP measures that reflect adjustments for: (i) the impact of period-over-period changes in foreign currency exchange rates, and (ii) the revenues, expenses and operating income associated with acquisitions and divestitures for the twelve month period following the date of the acquisition or divestiture. Reconciliations of these measures can be found in the appendix to this presentation.

*Foreign exchange impact:* In countries with currencies other than the U.S. dollar, revenues and expenses are translated using monthly average exchange rates. Certain discussions in this presentation isolate the impact of year-over-year foreign currency fluctuations to better measure the comparability of operating results between periods. Operating results excluding the impact of foreign currency fluctuations are calculated by translating the current period's results by the prior period's exchange rates.

## Cautionary Note Regarding Forward-Looking Statements

Information set forth in this communication contains forward-looking statements that involve a number of risks and uncertainties. Nasdaq cautions readers that any forward-looking information is not a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking information. Such forward-looking statements include, but are not limited to (i) projections relating to our future financial results, total shareholder returns, growth, trading volumes, products and services, ability to transition to new business models, taxes and achievement of synergy targets, (ii) statements about the closing or implementation dates and benefits of certain acquisitions, divestitures and other strategic, restructuring, technology, de-leveraging and capital allocation initiatives, including the stock split, (iii) statements about our integrations of our recent acquisitions, (iv) statements relating to any litigation or regulatory or government investigation or action to which we are or could become a party, and (v) other statements that are not historical facts. Forward-looking statements involve a number of risks, uncertainties or other factors beyond Nasdaq's control. These factors include, but are not limited to, Nasdaq's ability to implement its strategic initiatives, economic, political and market conditions and fluctuations, geopolitical instability arising from the Russian invasion of Ukraine, government and industry regulation, interest rate risk, U.S. and global competition, and other factors detailed in Nasdaq's filings with the U.S. Securities and Exchange Commission, including its annual reports on Form 10-K and quarterly reports on Form 10-Q which are available on Nasdaq's investor relations website at <http://ir.nasdaq.com> and the SEC's website at [www.sec.gov](http://www.sec.gov). Nasdaq undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

## Website Disclosure

Nasdaq intends to use its website, [ir.nasdaq.com](http://ir.nasdaq.com), as a means for disclosing material non-public information and for complying with SEC Regulation FD and other disclosure obligations.



# Investor Day Agenda

Time	Topic	Presenter
8:00 – 8:05	Introduction	Ed Ditmire, SVP Investor Relations
8:05 – 8:25	Strategic Overview	Adena T. Friedman, President & CEO
8:25 – 8:55	Capital Access Platforms	Nelson Griggs, President
8:55 – 9:05	Break	
9:05 – 9:35	Market Platforms	Tal Cohen, President
9:35 – 10:05	Panel #1: Leveraging Specific Technologies to Elevate Growth	Brad Peterson, Brenda Hoffman, Nick Ciubotariu, Ira Auerbach, Rob Norris
10:05 – 10:15	Break	
10:15 – 10:45	Anti-Financial Crime	Jamie King, EVP
10:45 – 11:15	Panel #2: How Nasdaq Adds Value to Clients During Economic Downturns	Phil Mackintosh, Brendan Brothers, Oliver Albers, Jeff Thomas
11:15 – 11:35	Finance and Sustainability	Ann Dennison, EVP & CFO
11:35 – 12:00	Q&A with Adena Friedman & Ann Dennison	





# Elevating Nasdaq's Growth from a Successful Strategic Pivot

Adena T. Friedman  
President and Chief Executive Officer

# Nasdaq Kickoff Video

---



# What You Will Hear Today

1

We have strategically pivoted the company and improved our performance

2

Nasdaq is now positioned to capitalize on our largest secular growth opportunities

3

Strong market position, differentiated capabilities, and a client focused alignment make Nasdaq more effective than ever

4

Executing successfully enhances our performance potential

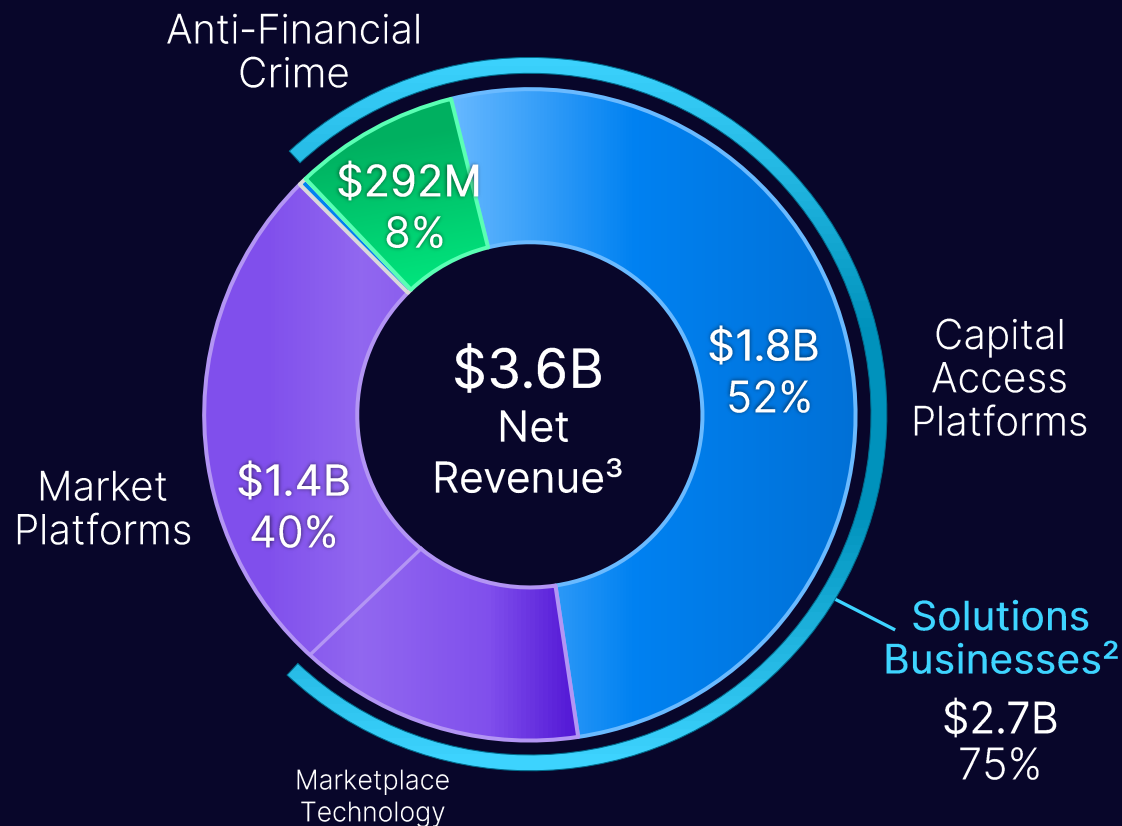
## Agenda

# Elevating Nasdaq's Growth from a Successful Strategic Pivot

- 1 Quality franchise & proven strategy
- 2 Expanding opportunities
- 3 Elevating performance

# A Scaled Financial Technology Platform Aligned to Drive Growth

(LTM'22<sup>1</sup>)



## Key Characteristics

**9% / 8%** Solutions Businesses / Total Organic Revenue Growth  
(Average of 2017-YTD'22)

**~\$2B** Annualized Recurring Rev. (ARR)<sup>3</sup>  
(3Q22)

**35%** SaaS Revenues % of ARR  
(3Q22)

**>50%** Non-GAAP EBITDA Margin  
(2017 – YTD'22)

**16%** Non-GAAP Diluted EPS CAGR  
(2017-LTM'22)

**11.5%** Non-GAAP Return on Invested Capital<sup>4</sup>  
(LTM'22)



<sup>1</sup> LTM'22 net revenues represent last twelve months ending September 30, 2022 including Other.

<sup>2</sup> Solutions Businesses include Capital Access Platforms and Anti-Financial Crime segments and the Marketplace Technology business in the Market Platforms segment.

<sup>3</sup> For all defined terms, please see the appendix of this presentation.

<sup>4</sup> See appendix for reconciliation of return on invested capital

# Nasdaq Is Aligned on a Common Strategic Framework

## Core Purpose

---

We advance economic progress for all

## Long-Term Vision

---

We will be the trusted fabric of the world's financial system

## Value Proposition

---

We deliver world-leading platforms that improve the integrity, transparency, and liquidity of the global economy

# Key Elements of Nasdaq's Strategic Evolution Since 2017

## Key Elements

---

- ▶ Enhanced the performance of existing businesses by shifting R&D focus to high growth areas
  - ▶ Released capital related to non-core businesses and re-allocated
  - ▶ Invested in technology & analytics capabilities critical to address clients' largest challenges
- 

## Notable Results

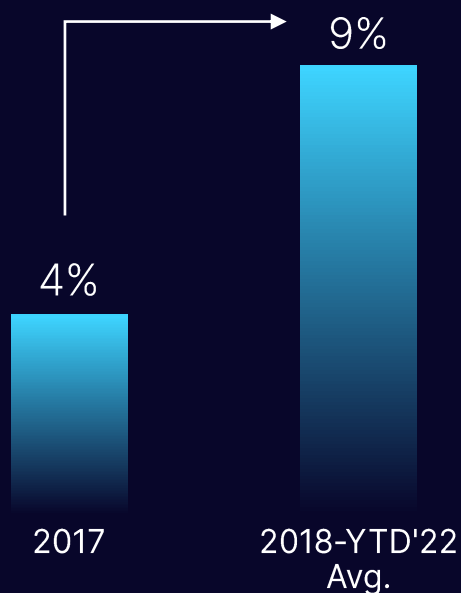
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- ▶ Accelerated SaaS and cloud offerings, created a premier AFC division
  - ▶ Divested PR and multimedia businesses, LCH ownership, Bwise, NFX and NFI
  - ▶ Acquired eVestment, Cinnober, Solovis and Verafin
  - ▶ Emphasized client success and innovation as key corporate values
-

# Execution Against our Strategy Resulted in Strong and Improved Performance over the Last Five Years

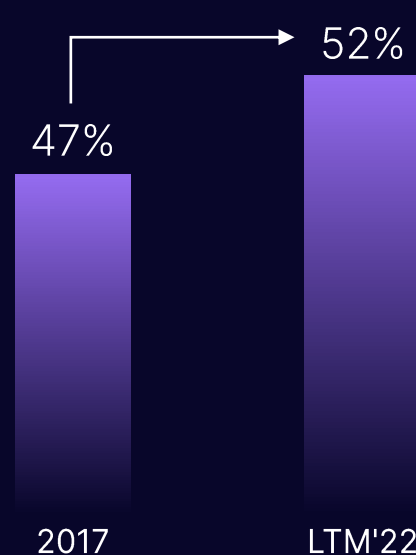
## Solutions Businesses Organic Revenue Growth

**>2x**  
Acceleration



## Non-GAAP Operating Margin<sup>1</sup>

**+500**  
Basis points increase



## Non-GAAP Diluted EPS<sup>1</sup>

**+16%**  
CAGR



<sup>1</sup> Non-GAAP reconciliations can be found at: [ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation](https://ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation).



# We Continue to Deliver Against Our Objectives

Metric	Outlook (at 2020 Investor Day)	Since Investor Day 2020
Solutions Businesses Organic Growth	6%-9% <sup>1</sup> Medium-term	13% average 2021-2022 YTD
SaaS % ARR	40%-50% by 2025	35% as of 3Q22 versus 29% in 3Q20
Annualized TSR	Double Digit (constant valuation)	23% TSR <sup>2</sup> (actual)
Enterprise Non-GAAP ROIC	≥10%	11.5% (LTM'22)

Exceeded or On Target
✓
✓
✓
✓



<sup>1</sup> Following the acquisition of Verafin in February 2021, Nasdaq's medium-term organic revenue growth outlook for the Solutions segments was raised from 5%-7% to 6%-9%.

<sup>2</sup> Actual TSR calculated from November 10, 2020 to October 31, 2022.

## Agenda

# Elevating Nasdaq's Growth from a Successful Strategic Pivot

- 1 Quality franchise & proven strategy
- 2 Expanding opportunities
- 3 Elevating performance

# Strategic Review in 2022 Yielded Several Key Results

## Review Highlights

- 1 Prioritized megatrends
- 2 Identified key internal strengths
- 3 Recognized realignment of organization needed

## Potential Impact

Focused capital allocation strategy

Better address large opportunities where Nasdaq has the right to win

Amplify growth opportunities, simplify organization

# The Three Prioritized, Industry-Shaping Megatrends Driving Growth Opportunities

## Market Modernization

- Modern APIs, cloud, machine intelligence, and micro-service architecture.
- Digital assets mature as an asset class, with defined infrastructure and regulation.

## Development of ESG Ecosystem

- ESG moves to measurable actions to satisfy consumers, regulators, investors, and employees.
- Governance and climate solutions give rise to new markets.

## Anti-Financial Crime

- Emerging technologies facilitate more criminal disruption and require increasingly sophisticated anti-financial crime protection.

# Our Realigned Organization: Three Segments Aligned to Megatrends, Simplifying Our Story and Driving Growth

## Market Platforms

Modernizing markets to amplify liquidity

- Trading Services
- Marketplace Technology



## Capital Access Platforms

Connecting Corporates and Investors

- Data & Listing Services
- Index
- Workflow & Insights



## Anti-Financial Crime

Delivering a comprehensive Anti-Financial Crime Suite

- Fraud and Anti-Money Laundering (FRAML)
- Surveillance



# More of Nasdaq Revenues Positioned in Attractive, High Growth Markets

Business	SAM Penetration <sup>1</sup>   SAM <sup>1</sup>	TAM <sup>1</sup>	Revenues LTM'22	Key Offerings
Anti Financial Crime	~4%   \$7.6B	\$18B	\$292M	<ul style="list-style-type: none"> <li>• Verafin Fraud &amp; AML (FRAML)</li> <li>• Nasdaq Surveillance</li> </ul>
Marketplace Technology <sup>2</sup>	~7%   \$3.3B	\$12.7B	\$226M	<ul style="list-style-type: none"> <li>• Market Infrastructure Operators</li> <li>• New Markets</li> <li>• Crypto Exchanges</li> <li>• Trade Execution Services</li> </ul>
Workflows & Insights <sup>3</sup>	~5%   \$10B	\$30.4B	\$460M	<ul style="list-style-type: none"> <li>• eVestment</li> <li>• Nasdaq Data Link</li> <li>• Nasdaq Fund Network</li> <li>• IR Insight &amp; Advisory Services</li> <li>• Boardvantage</li> <li>• ESG Advisory</li> <li>• OneReport</li> </ul>
Index	~17%   \$2.9B	\$6.3B	\$501M	<ul style="list-style-type: none"> <li>• Nasdaq-100</li> <li>• Thematics</li> <li>• SmartBeta</li> </ul>

<sup>1</sup> Total addressable market (TAM) based on consulting reports (including from Burton-Taylor and Opimas), public filings, and Nasdaq analysis. Serviceable addressable market (SAM) is based on internal estimates reflecting market opportunity of existing offerings.

<sup>2</sup> Refers to the Market Infrastructure Technology business only; excludes Trade Management Services.

<sup>3</sup> TAM/SAM refer to Workflow & Insights solutions within the Capital Access Platforms division.



## Agenda

# Elevating Nasdaq's Growth from a Successful Strategic Pivot

- 1 Quality franchise & proven strategy
- 2 Expanding opportunities
- 3 Elevating performance

# Elevating Nasdaq's Growth Potential – Drivers

01

Business mix improvements

02

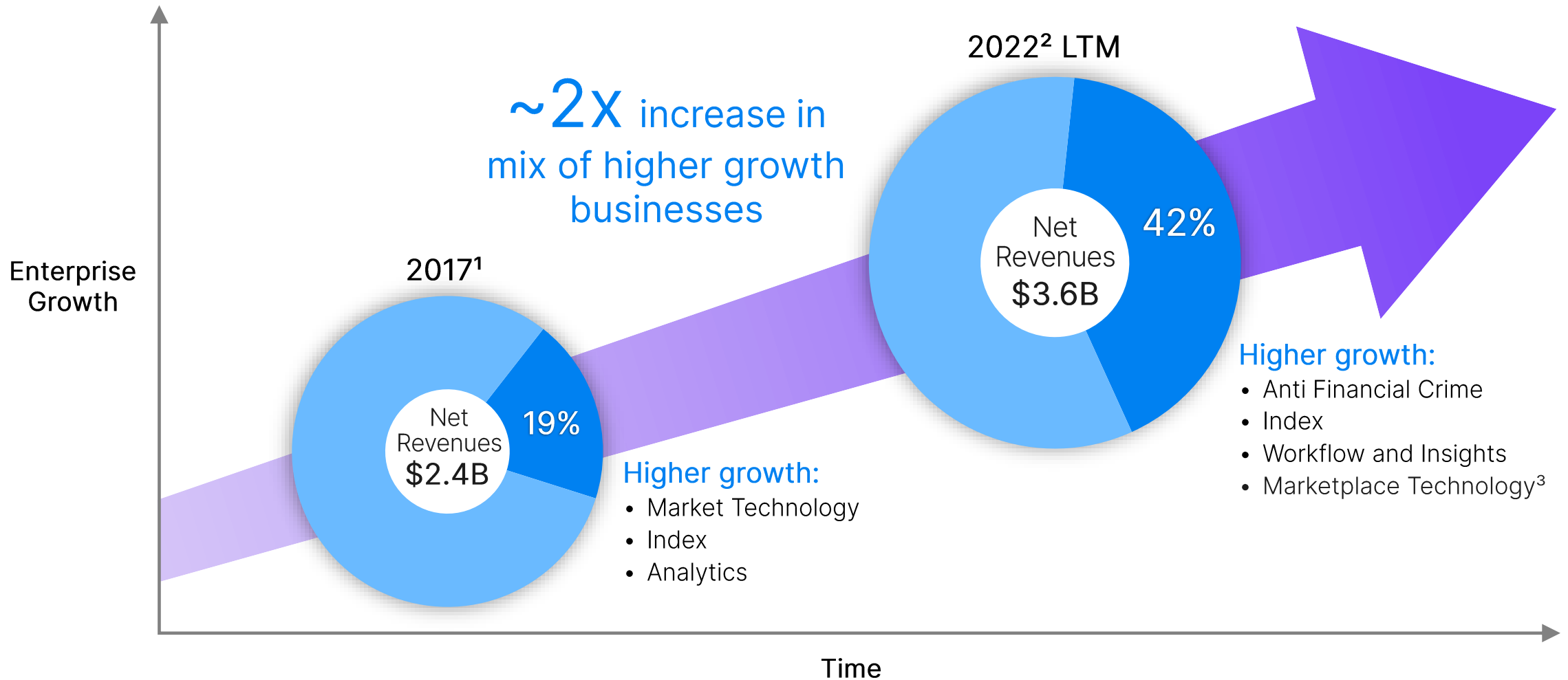
Expanding SaaS enabled technology

03

Unlocking opportunities from realigned organizational structure



# Business Mix Improvements and Improved Scale in Key Growth Markets



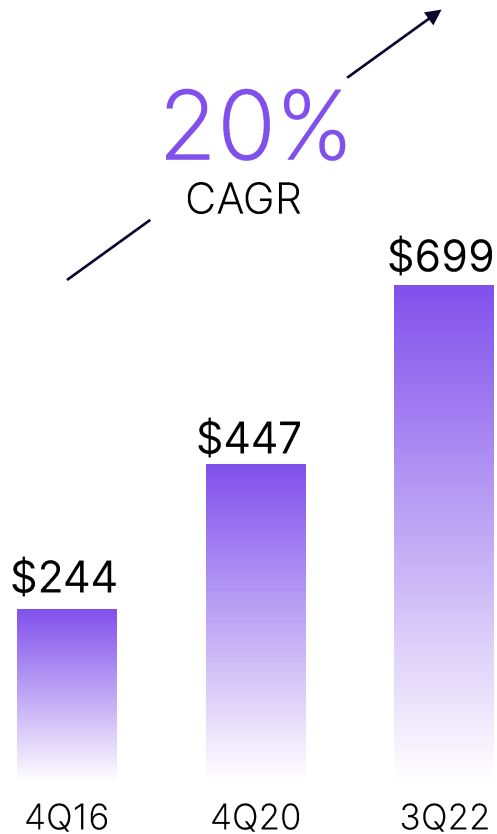
<sup>1</sup> Reflect the corporate structure through 3Q22 reporting period and prior to the September 2022 announcement of new corporate structure.

<sup>2</sup> Reflects new corporate structure announced September 2022.

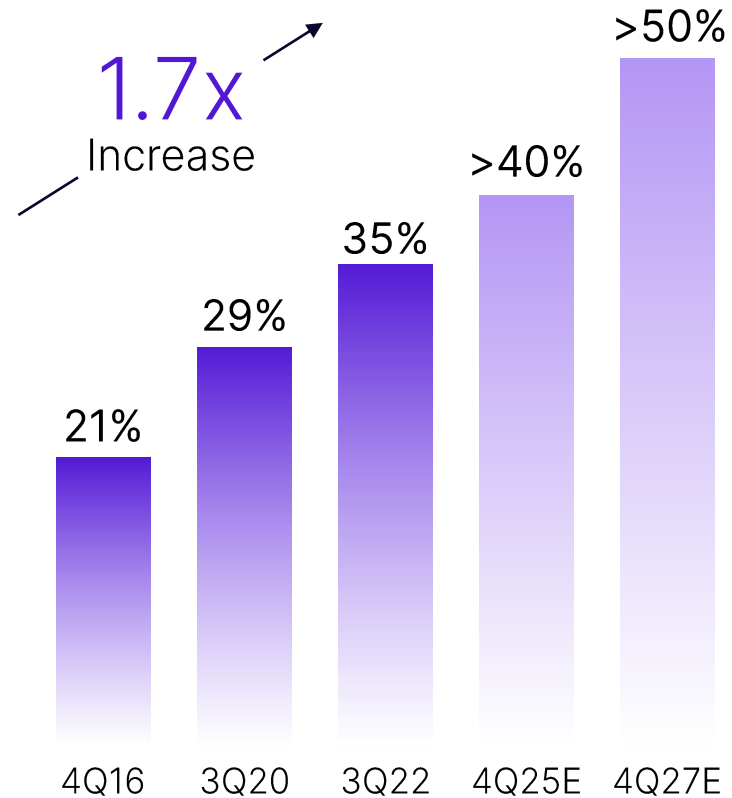
<sup>3</sup> Reflects Market Infrastructure Technology excluding Trade Management Services.

# Expanding Deployment of SaaS Model

Annualized SaaS Revenues (\$M)



SaaS % ARR



Positioning to Deliver Quality SaaS Metrics:  
Today's Starting Point

94% Gross Retention (LTM'22)

72% Non-GAAP Gross Margin (LTM'22)

38 Rule of 40 (LTM'22)



# Unlocking Growth Opportunities through the Realigned Organizational Structure

## Key Opportunities

## Actions Taken

Enhanced Client Experience and Relationships

▶ Created a simpler structure for clients to navigate while enhancing our ability to deliver value and deepen client relationships

Streamlined Sales Processes

▶ Aligned product expertise with a global salesforce to deliver holistic client solutions and better identify value add opportunities

Focused Capital Allocation

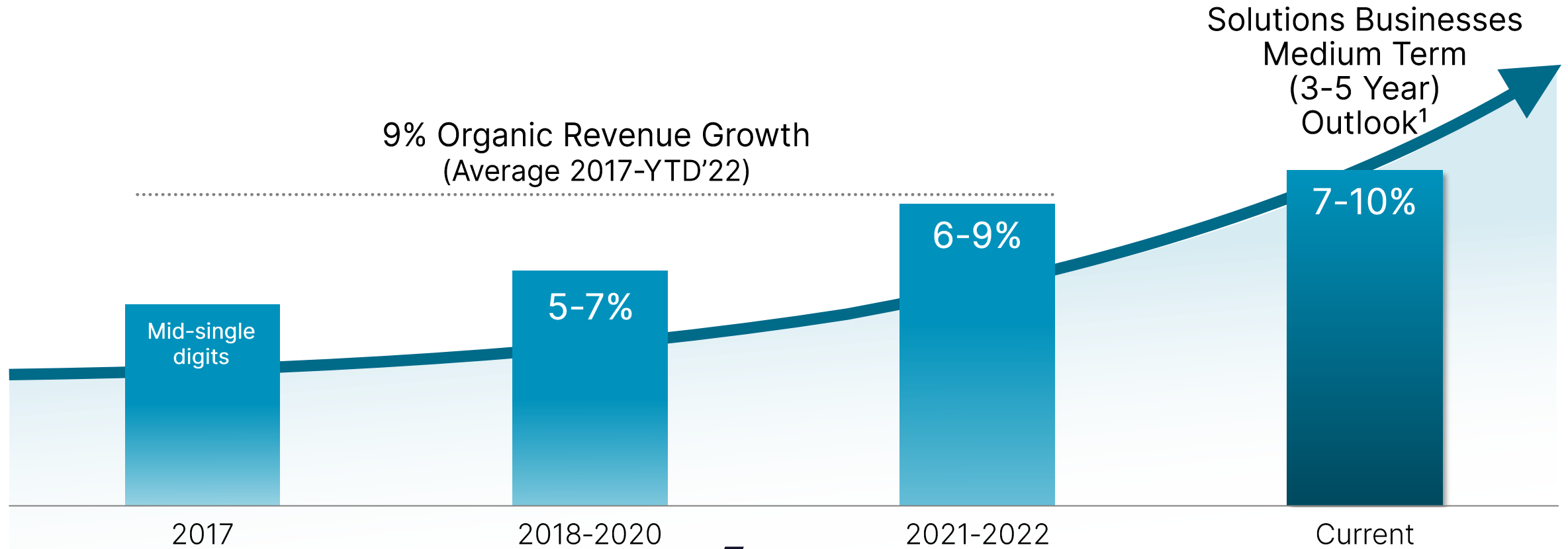
▶ Defined a focused capital allocation strategy to capitalize on megatrends

Increased Go-to-Market Agility

▶ Brought technology, product, and marketing resources into the divisions, creating a nimbler product development and go-to-market process

# Continuing to Drive Disciplined Growth

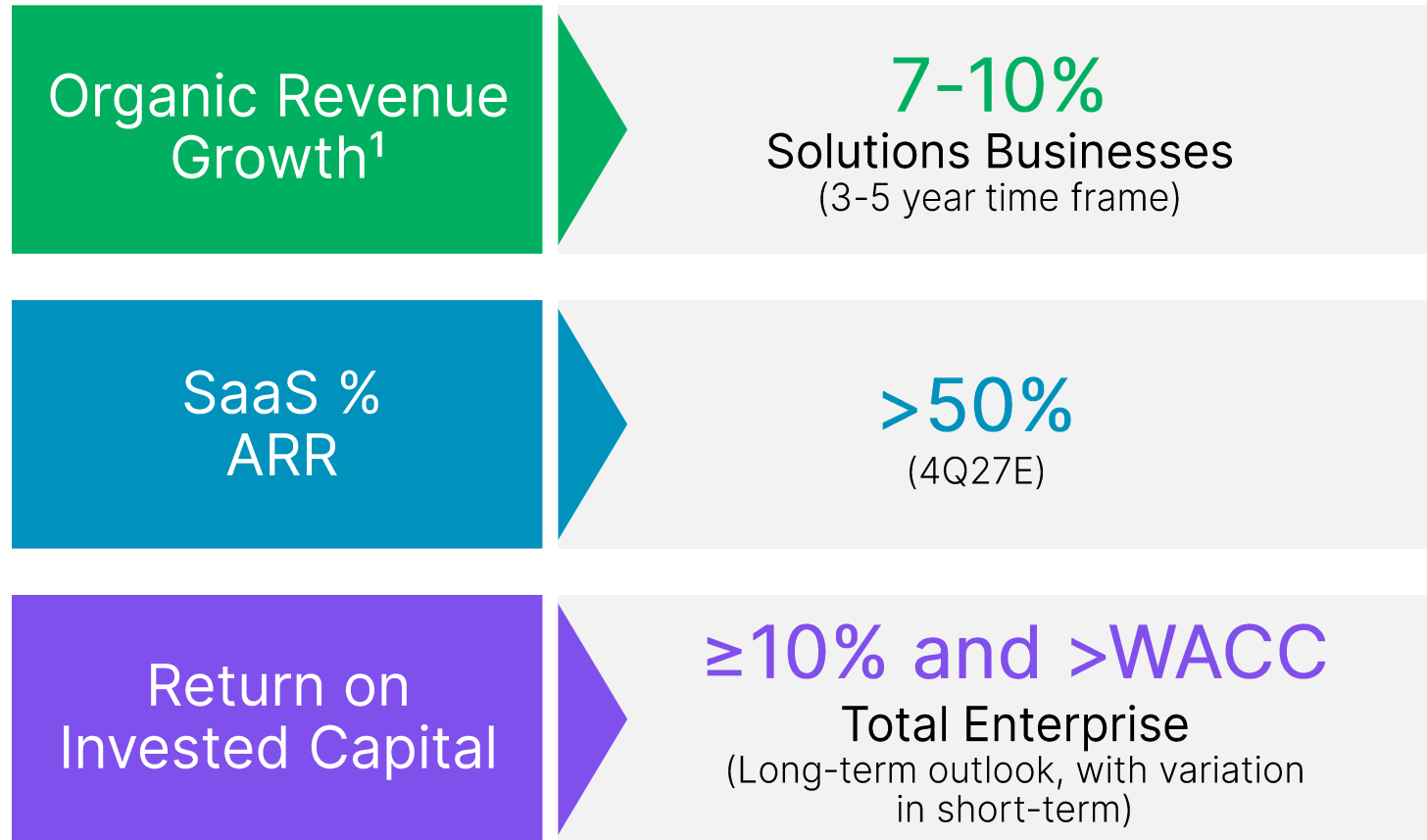
## Solutions Businesses Medium Term Growth Outlook<sup>1</sup>



<sup>1</sup> Revenue growth outlook assumes stable market backdrop.

Note: Outlook in prior periods including 2017, 2018-2020 and 2021-2022 reflect the Solutions Segments, which excluded Trade Management Services. The current outlook for the Solutions Businesses includes Trade Management Services.

# How We Measure the Success of Our Strategy



Total Shareholder Return Target  
**Double Digit TSR**



<sup>1</sup> Growth outlook assumes stable market backdrop.

# Key Messages

1

We have strategically pivoted the company and improved our performance

2

Nasdaq is now positioned to capitalize on our largest secular growth opportunities

3

Strong market position, differentiated capabilities, and a client focused alignment make Nasdaq more effective than ever

4

Executing successfully raises our growth potential



# Combining Successful Corporate and Investor Franchises to Expand Opportunities

Nelson Griggs  
President, Capital Access Platforms

## Agenda

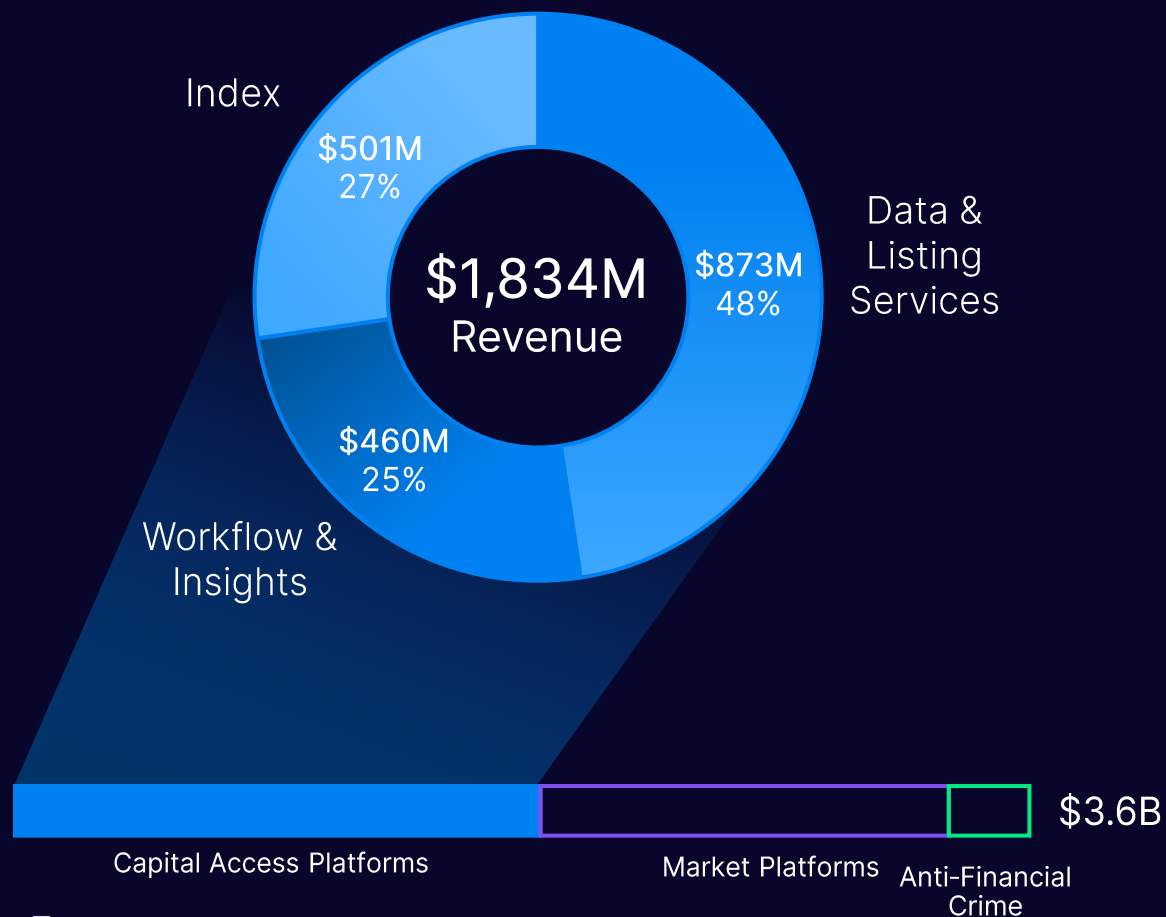
# Combining Corporate and Investor Franchises to Expand Opportunities

- 1 Strong corporate and investor franchises
- 2 Leveraging key strengths
- 3 Key priorities going forward



# At-A-Glance

## Capital Access Platforms (LTM'22)



## Key Characteristics

12%

Revenue CAGR  
(2017-LTM'22)

\$1,172M

Annualized Recurring Rev. (ARR)  
(3Q22)

\$380M

SaaS ARR  
(3Q22)

\$326M

Licensed AUM-based Revenue  
(LTM'22)

59%

Non-GAAP EBITDA Margin  
(LTM'22)



# Capital Access Platforms Contributes to Nasdaq's Strategic Framework

## Nasdaq

Core Purpose

We advance economic progress for all

Long-Term Vision

We will be the trusted fabric of the world's financial system

Value Proposition

We deliver world-leading platforms that improve the integrity, transparency and liquidity of the global economy

## Capital Access Platforms

We enable economic growth through access to capital and transparency

Being the trusted partner for investment and corporate communities to make more informed decisions

Empower our clients to effectively navigate the capital markets, accelerate their sustainability goals, and drive governance excellence



# Connecting Investors & Corporates Brings Unique Opportunities to Serve a Base of over 15,000 Clients



Unmatched Corporate Business Servicing  
**>10,000**  
Private and Public Clients



Established Investment Business Servicing  
**>5,000**  
Institution and Investment Manager Clients

# Our Position as Trusted Provider of Market Transparency Enables Us to Serve All Market Participants

## Data & Listing Services



## Index



## Workflow & Insights



IPO / Capital Raising	Critical Market Information	Passive Investing	Derivative Products	Investment Solutions	Corporate Services
<ul style="list-style-type: none"> <li>• U.S. Listings</li> <li>• Nordic Listings</li> <li>• Direct Listings</li> </ul>	<ul style="list-style-type: none"> <li>• Nasdaq Totalview</li> <li>• Nasdaq Basic</li> <li>• Nasdaq Cloud API's</li> </ul>	<ul style="list-style-type: none"> <li>• Nasdaq 100</li> <li>• Nasdaq SmartBeta</li> <li>• Global Index Data Service</li> <li>• Nasdaq Dorsey Wright</li> </ul>	<ul style="list-style-type: none"> <li>• Nasdaq 100 E-Mini &amp; Micros Futures</li> <li>• Nasdaq 100 Options</li> <li>• Insurance Solutions</li> </ul>	<ul style="list-style-type: none"> <li>• eVestment Analytics</li> <li>• Solovis Portfolio Analytics</li> <li>• Nasdaq Fund Network</li> <li>• Nasdaq Data Link</li> </ul>	<ul style="list-style-type: none"> <li>• Investor Relations Intelligence</li> <li>• Governance Solutions</li> <li>• ESG Services</li> </ul>

# Significant Achievements Since 2020 Investor Day

## Performance Highlights Over Last 2 Years<sup>1</sup>

Revenues

**+15%**

CAGR

ARR

**+10%**

CAGR

Licensed AUM-based  
Revenues

**+35%**

CAGR

Operating Income

**+19%**

CAGR

## Notable Accomplishments

**21%**

increase in  
Nasdaq-listed  
operating companies

**34%**

increase in Market  
Data international  
revenue

**80+**

New ETPs licensed  
our Indices  
globally

**29%**

increase in public  
companies buying  
two or more products

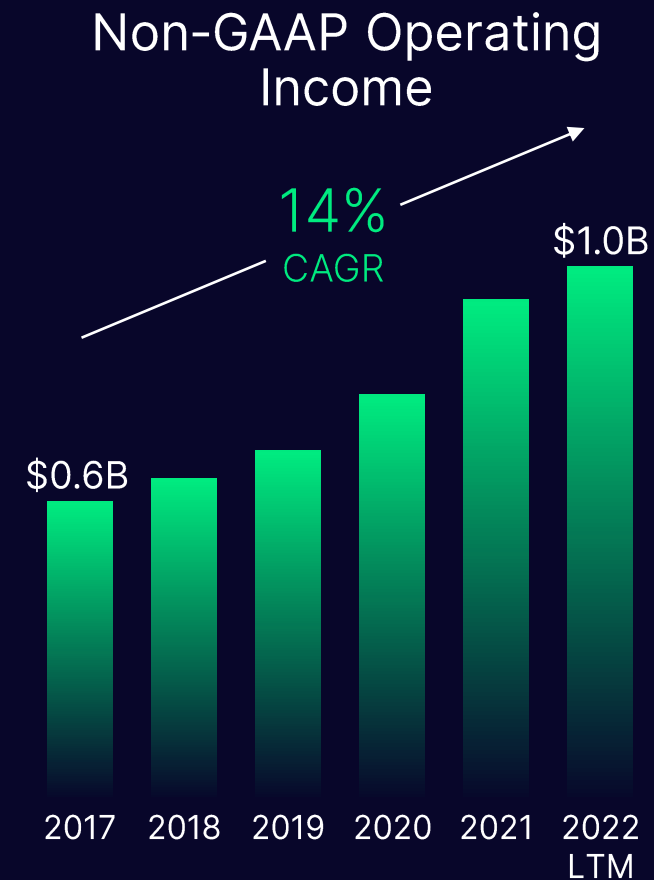
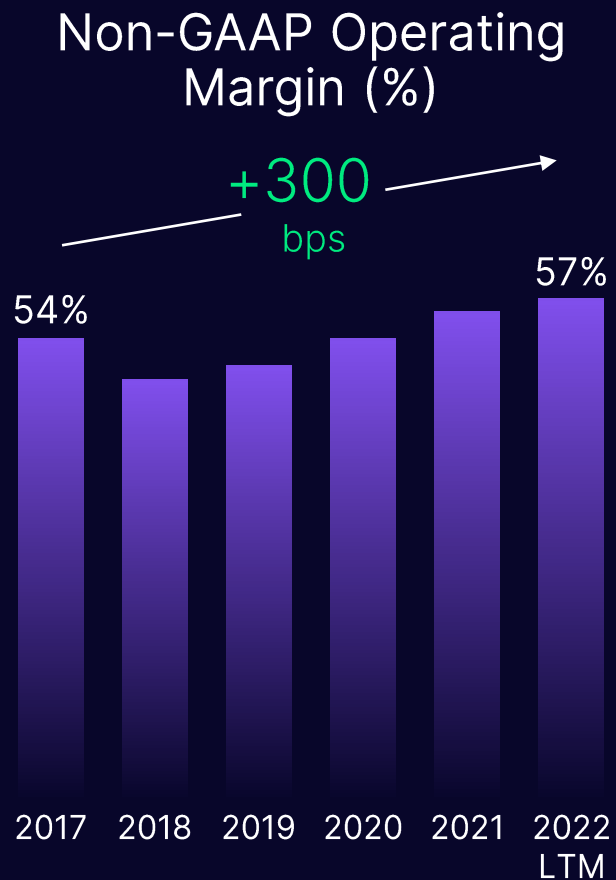
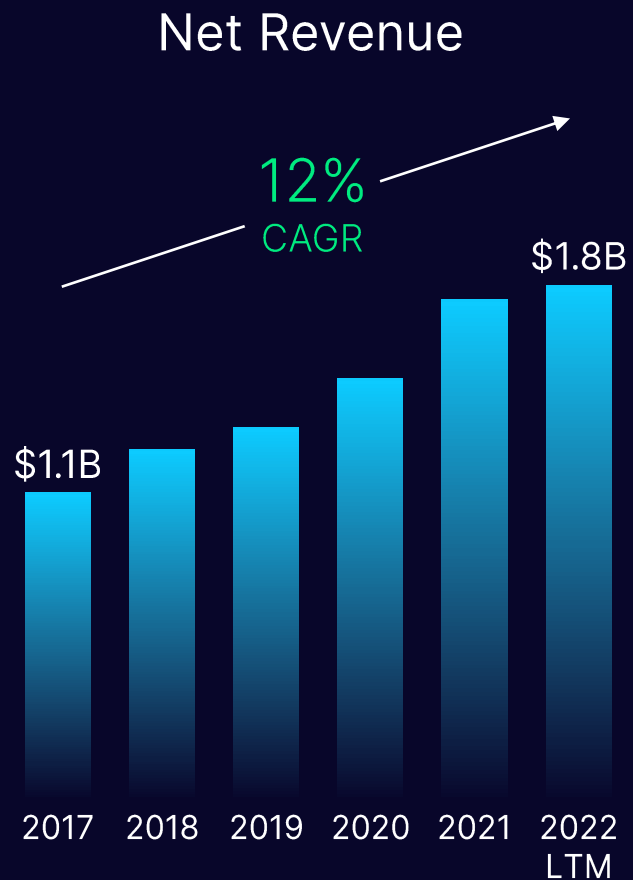
**9%**

growth in investor  
client base



<sup>1</sup> Revenues, operating income, ARR and SaaS revenues calculated over two-year period comparing the last 12 months ended September 30, 2022 to the comparable 12-month period ended September 30, 2020. Capital Access Platform revenues and operating income for the 12-month period ended September 30, 2020 was \$1,382 million and \$740 million, respectively. Capital Access Platform ARR totaled \$1,172 million at September 30, 2022 and \$960 million at September 30, 2020.

# Well-Positioned to Build on Success

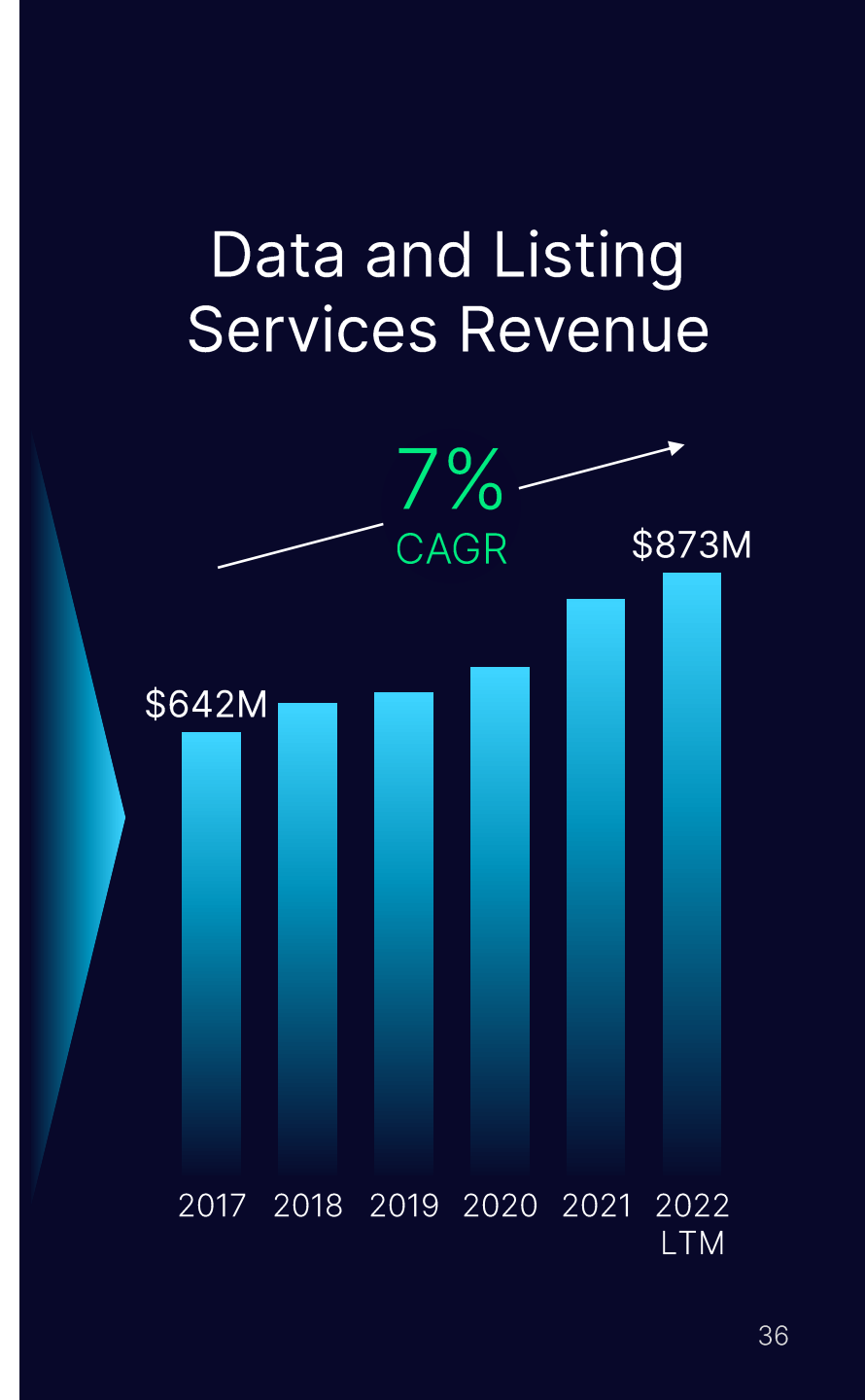
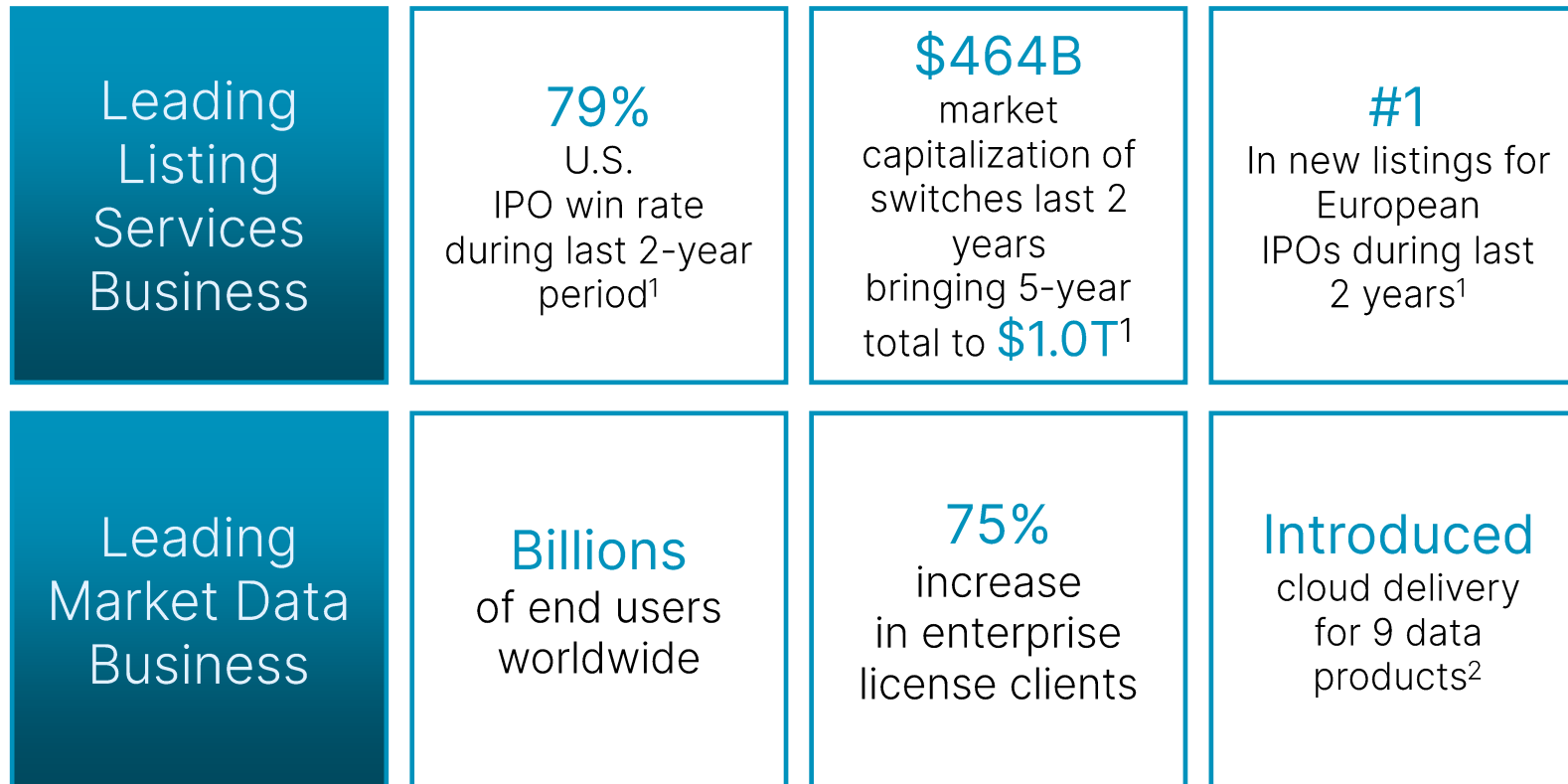


## Agenda

# Combining Corporate and Investor Franchises to Expand Opportunities

- 1 Strong corporate and investor franchises
- 2 Leveraging key strengths
- 3 Key priorities going forward

# Our Robust Data and Listings Business Create an Incredible Foundation



Note: All stats presented for the 2-year period between September 30, 2020 and September 30, 2022.

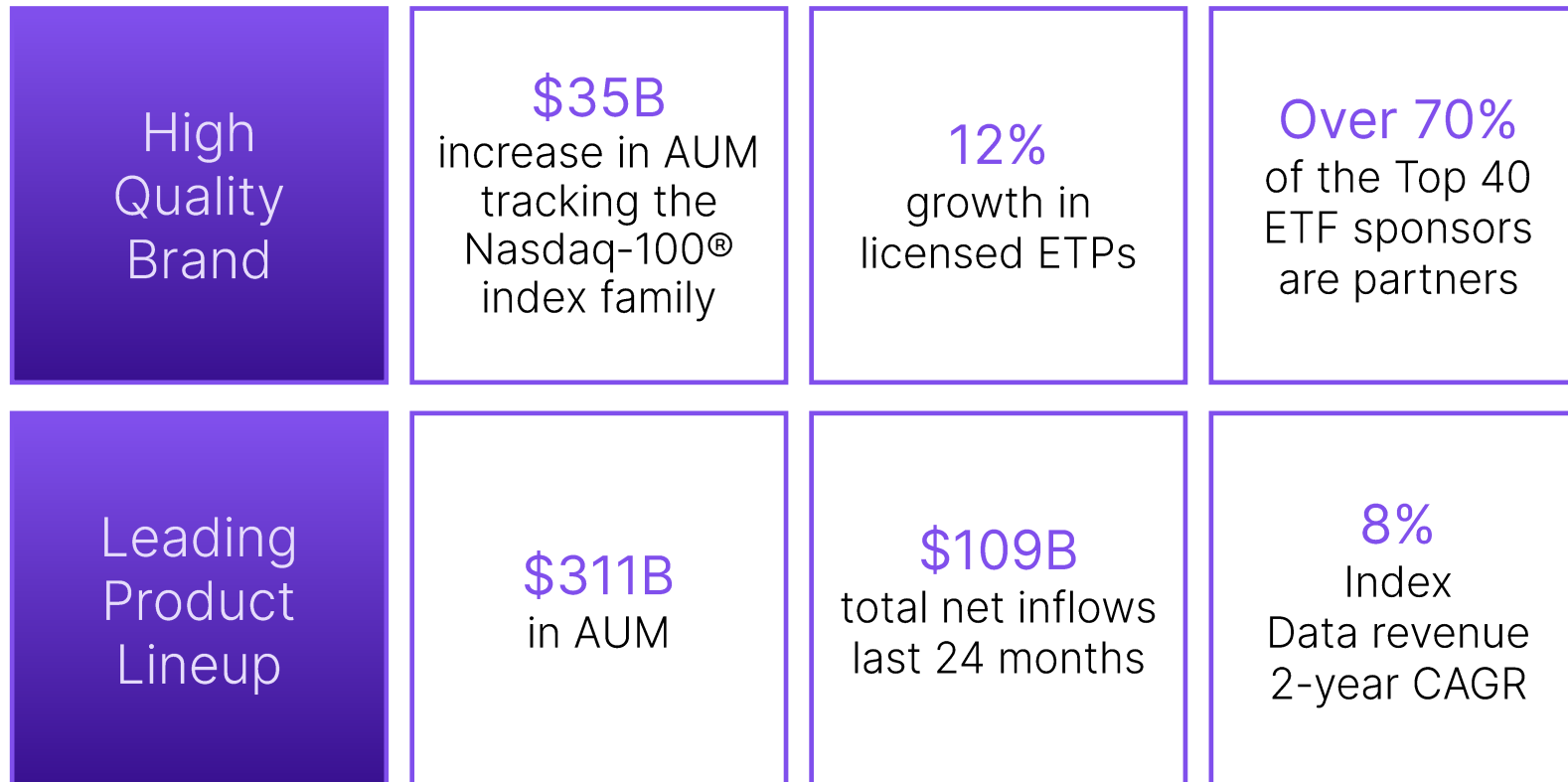
<sup>1</sup> Total switches from competing US exchanges for the period 1/1/2018 through 9/30/2022 excluding ETFs; Market value calculated based on day switch occurred.

<sup>2</sup> Reflects the following products now offered via cloud delivery: Nasdaq Last Sale Plus, Nasdaq Basic, Nasdaq TotalView, Nasdaq Canada, Indexes, NFN, Consolidated Quotes and Trades, Over-the-Counter Bulletin Board, and Historical Data for U.S. listed instruments.

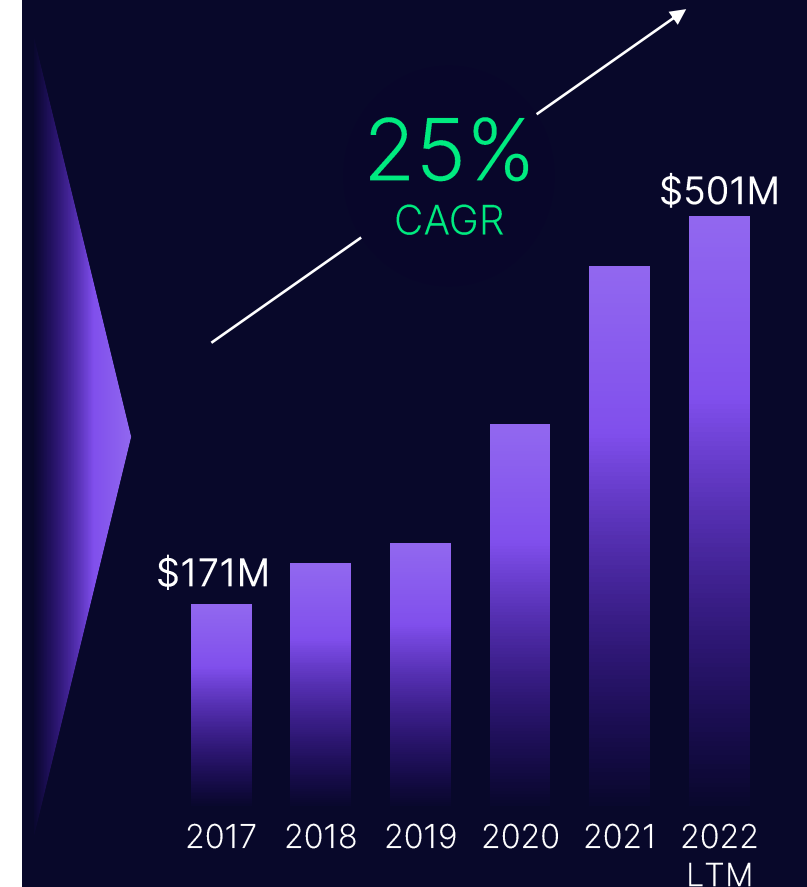




# Our High-Profile Index Brand is Driving Exceptional Long-Term Growth



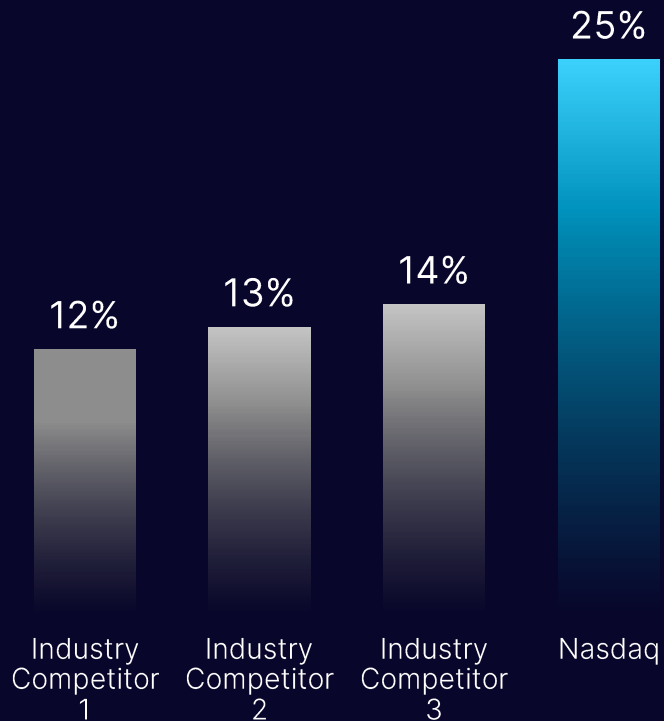
## Index Revenue



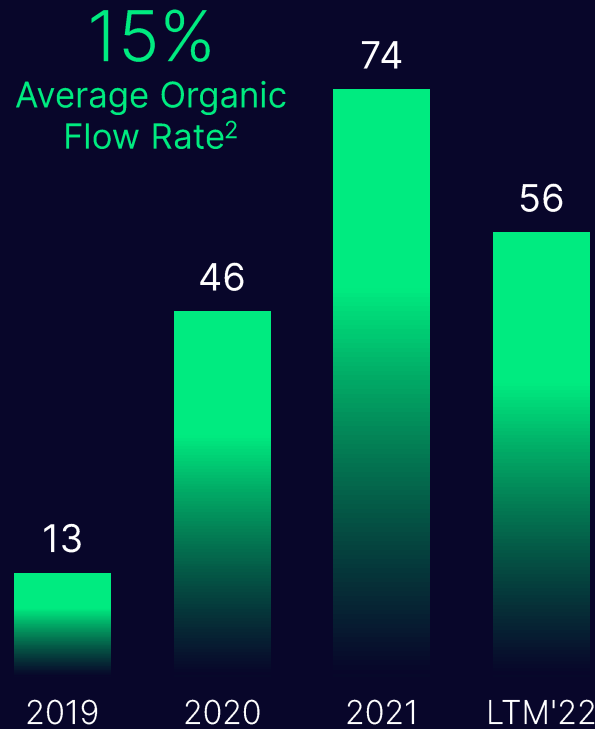
Note: All stats presented for the 2-year period between September 30, 2020 and September 30th, 2022.

# Strong Brand Driving Higher Index Revenue Growth Compared to Industry

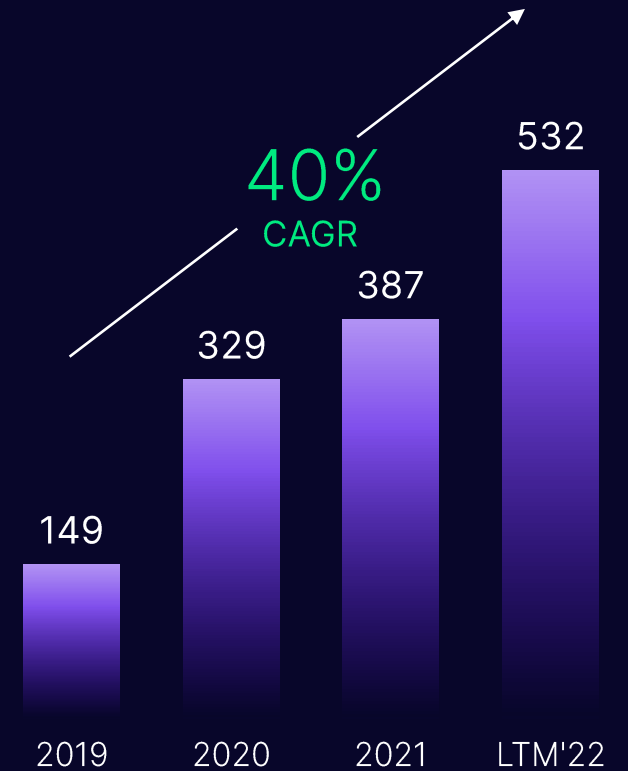
## 5 Year Index Revenue CAGR<sup>1</sup>



## Net Inflows<sup>2</sup>



## Growth in Futures Volumes<sup>3</sup>



<sup>1</sup> 5-year revenue CAGR calculated between 2016 through 2021.

<sup>2</sup> LTM'22 period through September 30, 2022; numbers in billions.

<sup>3</sup> Options and futures contracts tracking Nasdaq indexes traded on the CME; LTM period through September 30, 2022; numbers in millions.



# Bringing Transparency and Digitization to the Marketplace through Workflow & Insights

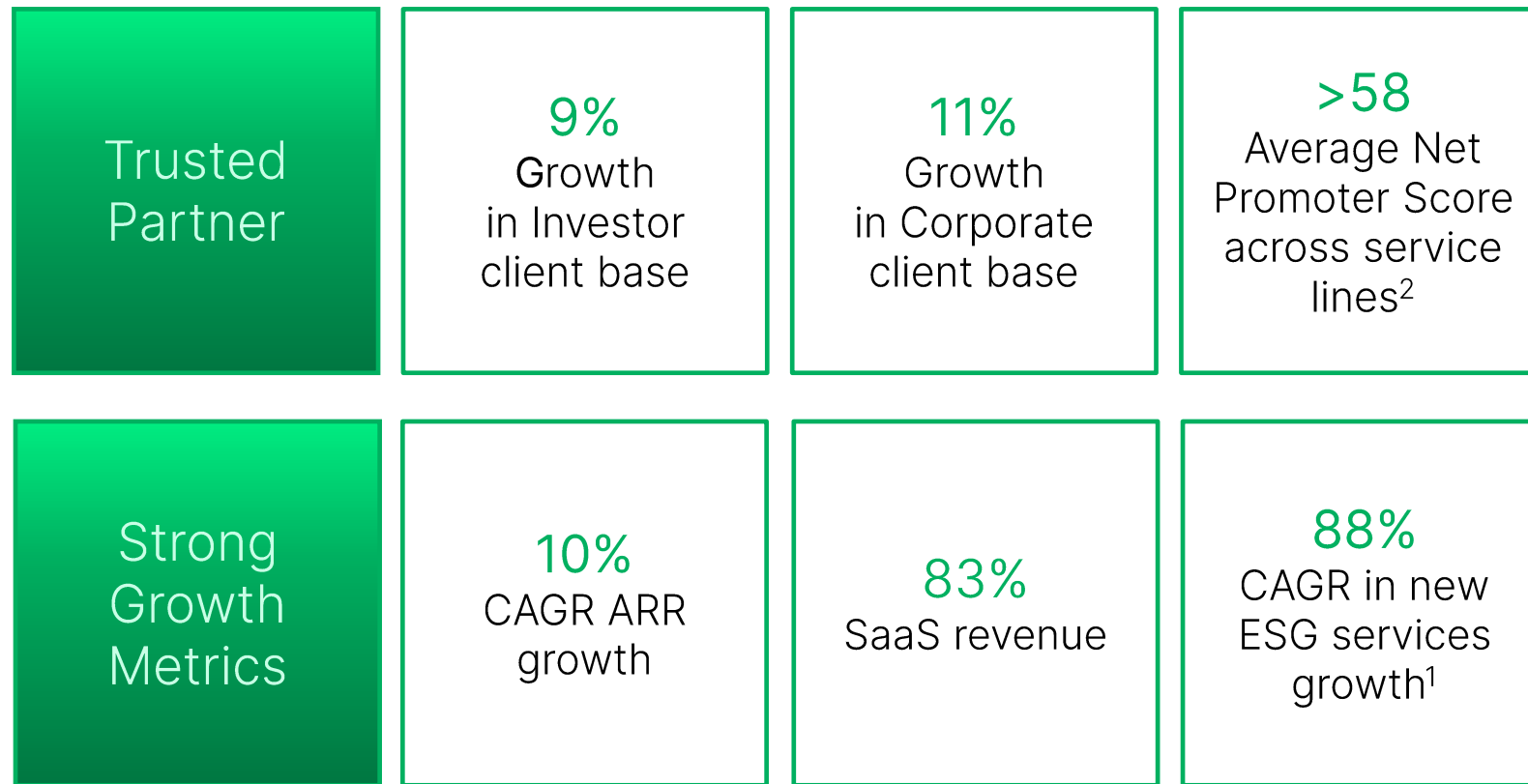


# Client Experience Video

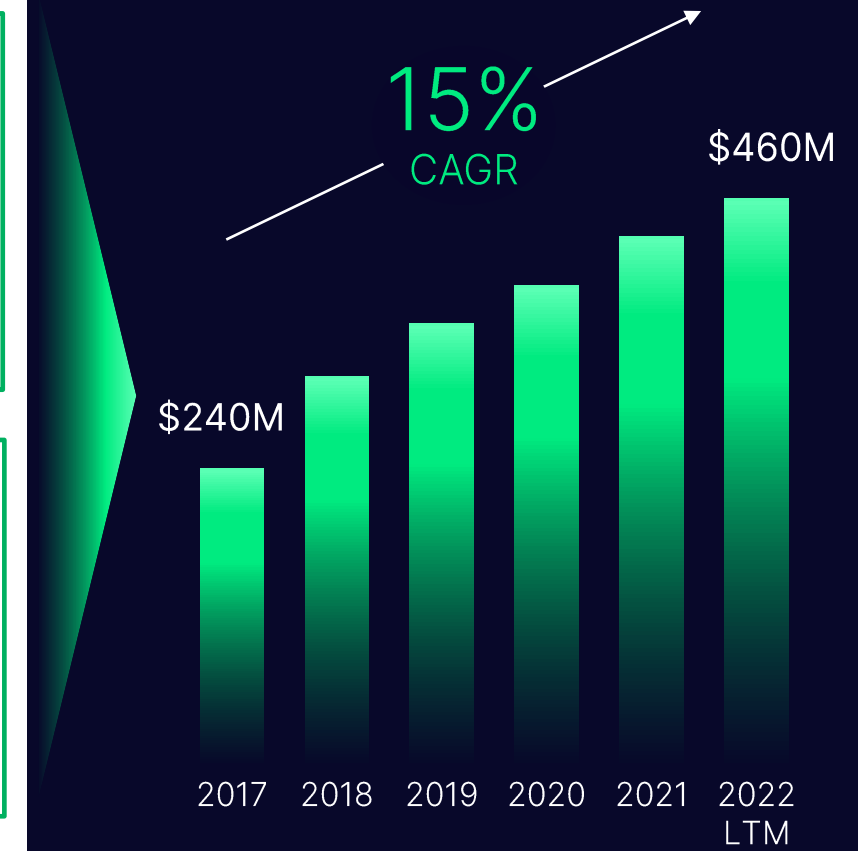
Los Angeles County  
Employees Retirement  
Association



# Our Workflow and Insights Businesses Deliver Expanding Solutions to Investors and Corporates



## Workflow and Insights Net Revenue



Note: All growth comparisons presented for the 2-year period between September 30, 2020 and September 30, 2022.

<sup>1</sup> Includes revenue growth from One Report, Metrio, and CBE

<sup>2</sup> Average amongst products reporting Net Promoter Score including eVestment, Data Link, NFN, BoardVantage, IR Insight, and Advisory Services.



# Client Experience Video

Crowdstrike



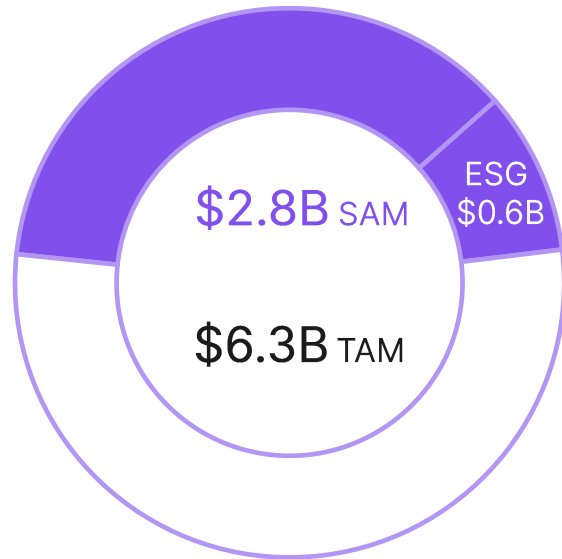
## Agenda

# Combining Corporate and Investor Franchises to Expand Opportunities

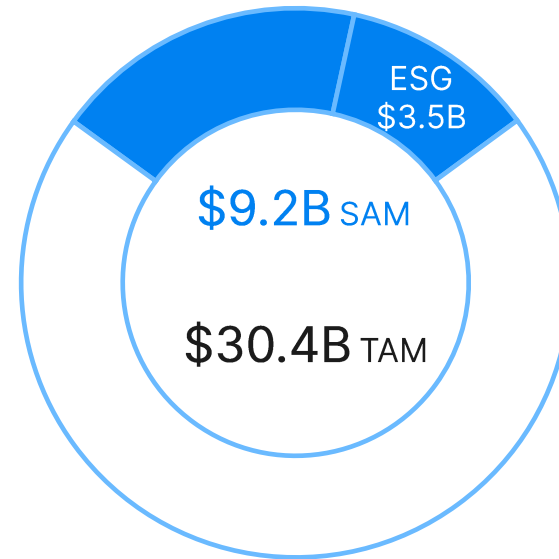
- 1 Strong corporate and investor franchises
- 2 Leveraging key strengths
- 3 Key priorities going forward

# Positioned Ourselves Against Three Sizable Secular Growth Opportunities

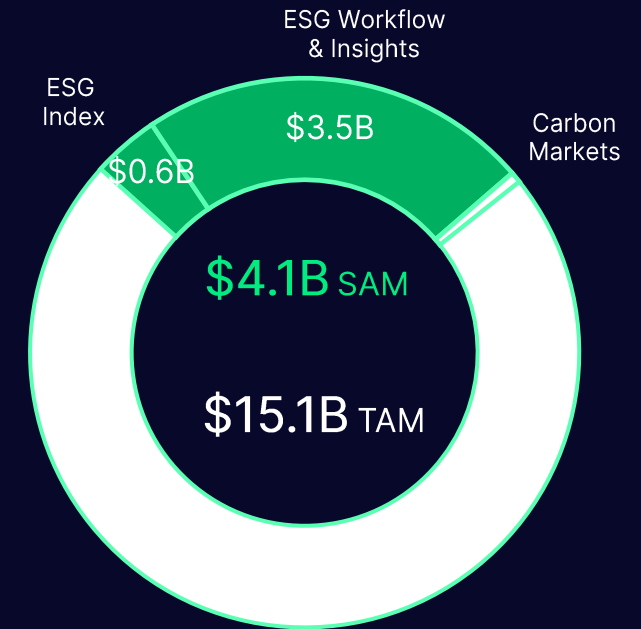
Index<sup>1</sup>



Workflow & Insights<sup>2</sup>



ESG<sup>3</sup>



\$36B+ TAM

\$12B+ SAM

~8% SAM Penetration

<sup>1</sup> TAM represents projected industry-wide index revenues.

<sup>2</sup> TAM represents the estimated market for solutions related to pre- and post-commitment workflows for allocators, distribution for asset managers, alternative data, private fund secondaries, and corporate services.

<sup>3</sup> ESG TAM and SAM are a subset of the Index and Workflows & Insights TAM and SAM; Carbon Removals (Puro.earth) represents a growth opportunity for Market Platforms as the industry matures.





# Capital Access Platforms Well Positioned to Capitalize on Industry Leading Trends



Continued  
acceleration in  
passive investing

Capitalize on raised  
prominence of index  
franchise



Rapid digitalization  
and the need for  
better workflow and  
transparency

Leveraging trusted  
relationships and market  
position to grow  
customer base



Growing ESG needs  
and objectives

Harness synergies across  
service lines to expand  
ESG offerings

# Helped by Raised Prominence of Nasdaq Index Franchise

## Initiatives

- **Launch new indexes** helped by strong brand by licensing 60 unique, differentiated products
- **Continue releasing product line extensions** of Nasdaq 100® to support market adoption of key index benchmark
- **Capture the growing ESG opportunity** by understanding of ESG requirements and needs of investors

## Outcomes

- ✓ Continue to lead the Index Industry in organic growth
- ✓ Continue to increase industry market share
- ✓ Increase diversification of revenue mix

# Leveraging Trusted Relationships and Market Position to Grow Customer Base

## Initiatives

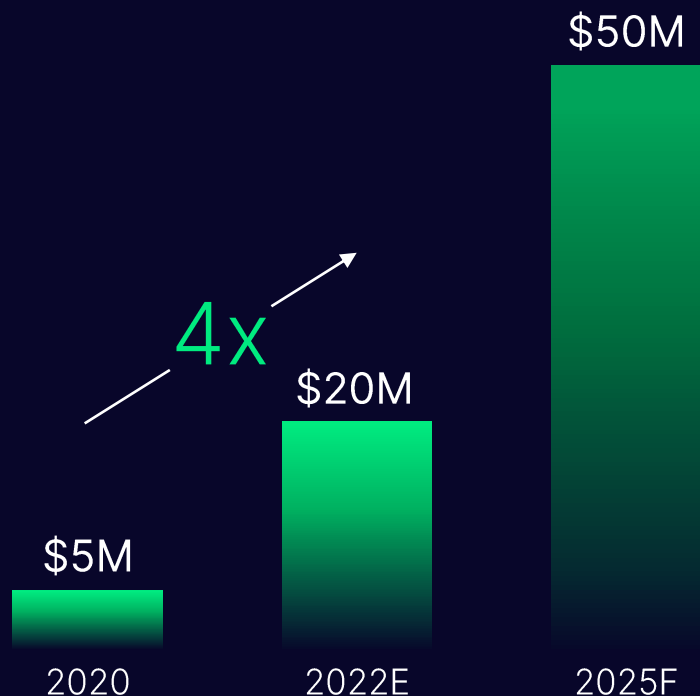
- **Institutionalize client listening** to evolve and enhance our solutions across a growing portfolio of products and customer base
- **Accelerate product adoption upsells** with cross platform integrations and targeted marketing campaigns
- **Drive international logo expansion** leveraging deep relationships with corporates and investor base

## Outcomes

- ✓ Double digit organic revenue growth
- ✓ Maintain leadership position and new products to market
- ✓ Increase products per client globally

# Progress Towards Previous ESG Goals and Ambitions Going Forward

Revenue On Track to Reach \$50M Target<sup>1</sup>



## Expanding Growth of ESG Services

- Regulatory tailwinds driving continued customer demand
- ESG Advisory services well positioned as client entry point
- Increasing subscription-based revenue from expanded ESG Reporting product offerings

# Expanding Our ESG Revenue Scope to Capitalize on the ESG Opportunity

## Enterprise ESG Initiatives

- Governance Solutions becoming more relevant as companies look to align ESG strategy with overall company strategy
- Become the leading platform for collecting, measuring, and reporting corporate ESG metrics
- Become a global leader in carbon removals through the Puro.earth platform
- Creating ESG index methodologies that allow clients to align to regulatory frameworks

## Outcomes

Achieve \$250M in ESG Revenue<sup>1</sup> by 2027



<sup>1</sup> As the opportunity to provide ESG services to our customer base expands, we now included our Governance Solutions, Index, and Puro.earth platform in our total Nasdaq Enterprise ESG outlook

<sup>2</sup> ESG services includes Workflow Tools, ESG Advisory, and Carbon Removals.



# How We Will Measure Success

## Medium-Term Organic Revenue Growth Outlook<sup>1</sup>

### Data & Listing Services

Low  
Single Digit



### Index

Mid to High  
Single Digit



### Workflow & Insights

High Single  
to Low  
Double Digit



## Capital Access Platforms

5% - 8%



<sup>1</sup> Growth outlook assumes stable market backdrop.

# Leading by Bringing Transparency to the Capital Markets

1

Strong customer base covering Corporates and Investment Managers

2

Division strategy aligned to industry leading trends

3

Clear objectives to extend service offerings to customers

# Q&A

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## Capital Access Platforms







Program will resume in 10 minutes



# Enhancing Liquidity by Modernizing Markets

Tal Cohen  
President, Market Platforms

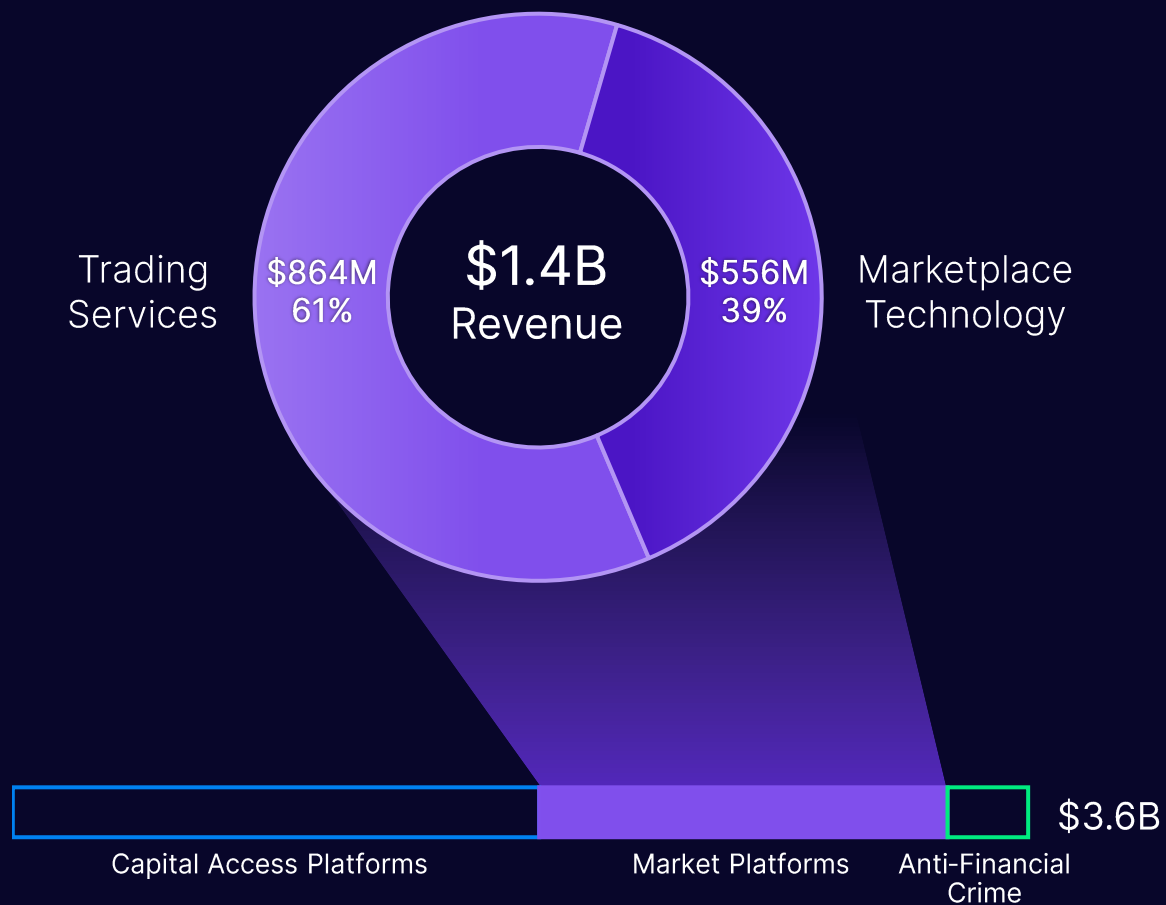
## Agenda

# Enhancing Liquidity by Modernizing Markets

- 1 A strong and consistent markets franchise
- 2 Clear vision for resilient markets
- 3 Key priorities going forward

# At-A-Glance

## Market Platforms (LTM'22)



## Key Characteristics

**\$1.4B** LTM'22 Revenue; **\$503M ARR**

**8%** Revenue CAGR  
(2017-LTM'22)

**56%** EBITDA Margin  
(LTM'22)

**#1** Provider of Marketplace Technology

**#1** Share in Nasdaq-listed equity trading  
(LTM'22)

**#1** Share in U.S. multiply-listed equity options  
(LTM'22)



# Creating an Aligned Division to Drive Scalable Growth



Marketplace  
Technology

North American  
Trading Services

European Trading  
Services

Digital  
Assets

# Market Platforms Contributes to Nasdaq's Strategic Framework

## Nasdaq

## Market Platforms

Core Purpose

We advance economic progress for all

We drive economies forward with innovative technology

Long-Term Vision

We will be the trusted fabric of the world's financial system

We modernize markets to create sustainable and trusted financial networks

Value Proposition

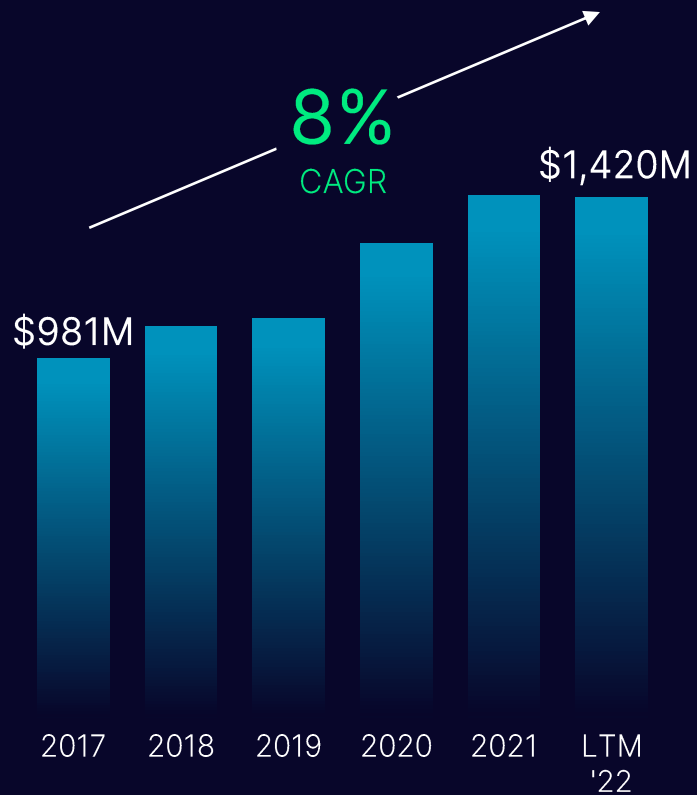
We deliver world-leading platforms that improve the integrity, transparency and liquidity of the global economy

We architect and operate the world's best markets

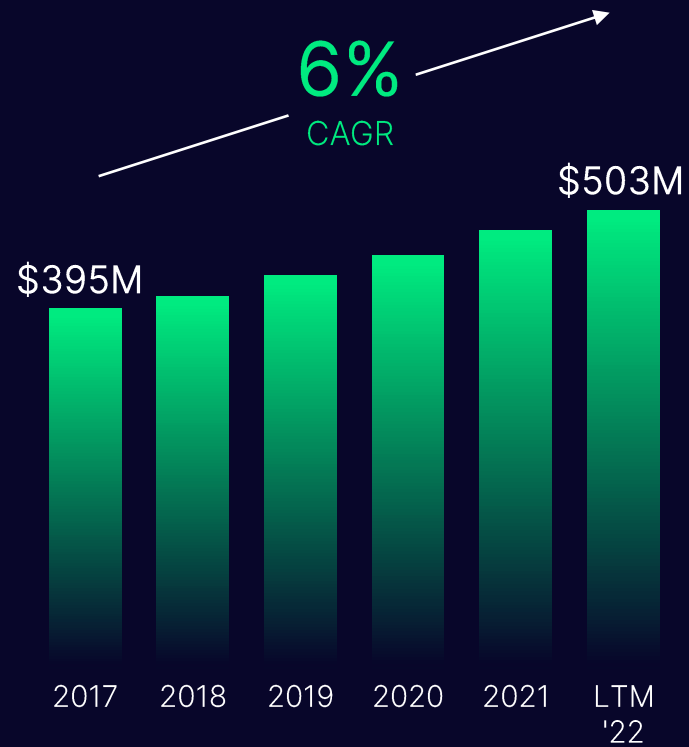


# Material Growth, Consistent Financial Performance

## Total Net Revenues



## Annual Recurring Revenues

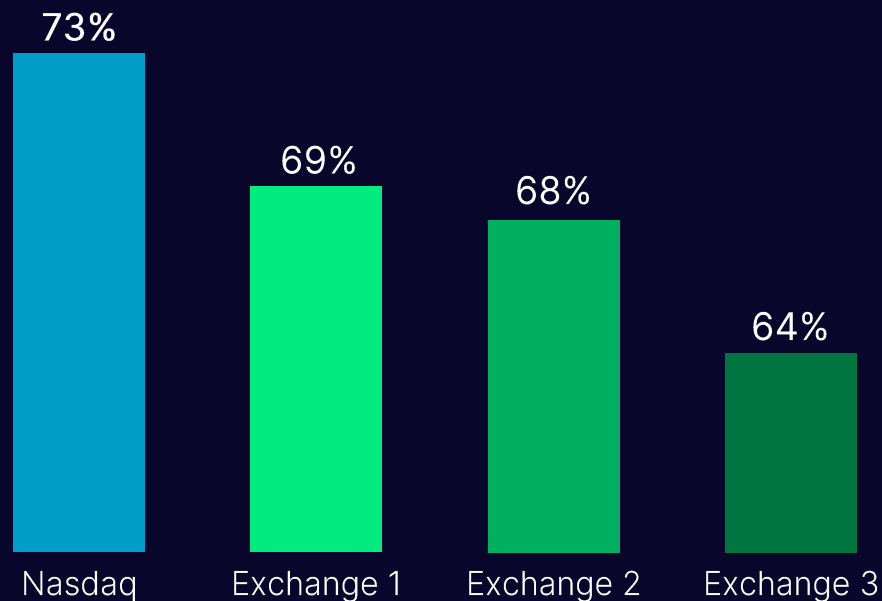


## Operating Income

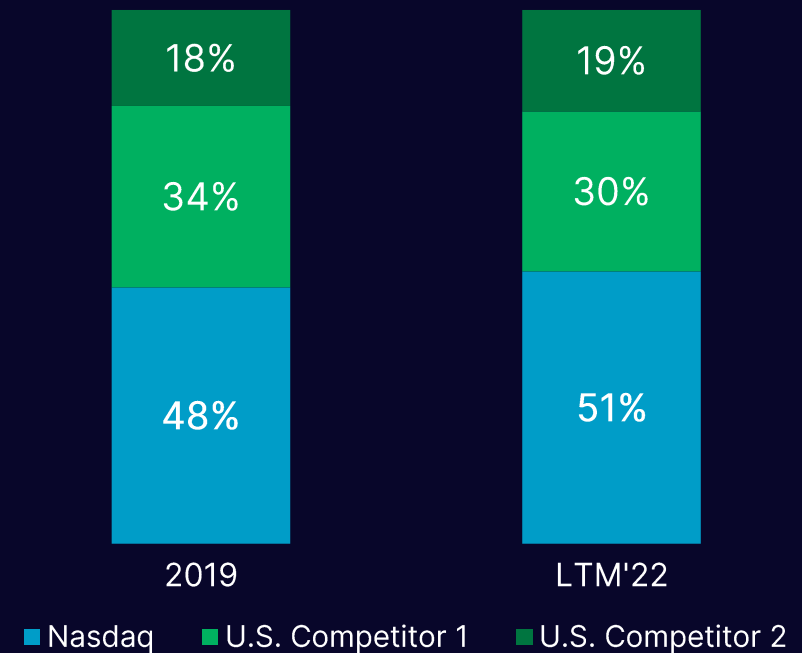


# Driving Alpha in a High Beta Environment, Outperforming Peers

## Highest Market Share in Lit Trading of Primary Listings Amongst European Exchanges<sup>2</sup>



## Largest Expansion In Share of Wallet<sup>1</sup> of U.S. Transaction Revenues Between Major U.S. Exchanges



1 Share of wallet reflects transaction revenue share of publicly reported U.S. equities and U.S. options (multiply-listed) companies.  
2 Reflects the YTD'22 period ended September 30, 2022.



# Significant Achievements Since 2020 Investor Day

## Performance Highlights Over Last 2 Years <sup>1</sup>

Revenues

**+8%**  
CAGR

ARR / SaaS ARR

**+5% / +19%**  
CAGR

Options Proprietary  
Products Revenue

**+38%**  
CAGR

Operating Income

**+9%**  
CAGR

## Notable Accomplishments

**Launched**

Second  
U.S. options market on  
Global Derivatives  
Platform, deployed  
on AWS Outposts

**15%**

Expansion of  
Marketplace  
Technology  
customer base

**Delivered**

Record  
trading revenues  
and margin

**Launched**

Nasdaq  
Digital Assets Business



<sup>1</sup> Revenues, operating income, ARR and SaaS revenues calculated over two-year period comparing the last 12 months ended September 30, 2022 to the comparable 12-month period ended September 30, 2020. Market Platforms revenues and operating income for the 12-month period ended September 30, 2020 was \$1,222 million and \$627 million, respectively. Market Platforms ARR totaled \$503 million at September 30, 2022 and \$457 million at September 30, 2020.

## Agenda

# Enhancing Liquidity by Modernizing Markets

- 1 A strong and consistent markets franchise
- 2 Clear vision for resilient markets
- 3 Key priorities going forward

# Client Experience Video

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Goldman Sachs



# Shaping Markets Of The Future

Innovation	Partner with Clients	Unique Experience and Leadership
<p>Evolve our technology into a modern, cloud-native blueprint and standardize the infrastructure of the world's markets</p> <ul style="list-style-type: none"><li>• Embrace frontier technologies to solve client problems</li></ul>	<p>Client-centric approach, meeting the needs today and tomorrow of market infrastructure operators and market participants</p> <ul style="list-style-type: none"><li>• Extensive experience moving capital markets (data) to the cloud</li></ul>	<p>Ability to lead the industry on its exciting transition to future markets</p> <ul style="list-style-type: none"><li>• Full value chain coverage enables us to shape the markets of tomorrow</li></ul>

## Unified Vision:

Modernizing markets to create sustainable and trusted financial networks

# Well Positioned to Meet Expanding, Evolving Needs of External Market Operator Clients

## Growth Drivers

Post-COVID acceleration of investments into modernization and digitalization

Broader adoption of advanced technologies require reevaluating operating models

Emergence of new markets that are cloud native increases accessibility and drives evolving client needs

Elevated activity and heightened volatility increases focus on market risks and growing demand for resilient, scalable risk management technology

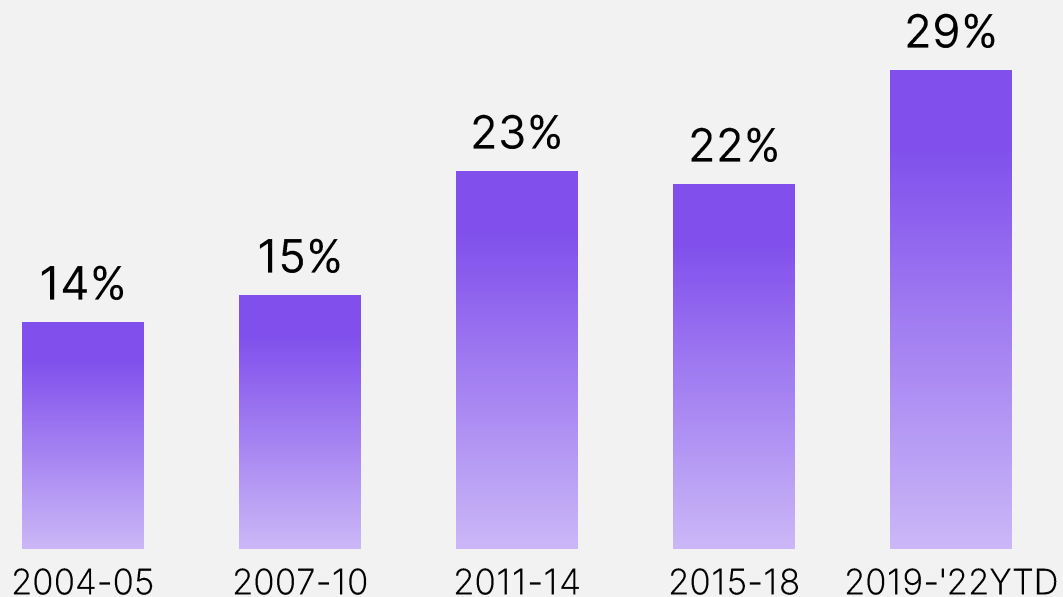
Marketplace  
Technology

\$3.3B

SAM

# Nasdaq's Own Marketplaces Leveraging Strong Demand Tailwinds

## U.S. Equity Options to U.S. Equities Volume Ratio<sup>1</sup>



## Key Growth Drivers Since December 2019

### Market Growth

U.S. and Nordic Equities Market Capitalization	+51% <sup>2</sup>
Nasdaq-listed shares outstanding	+72%
Nasdaq-listed companies	+26%
Swedish Household Equity Ownership	+20% <sup>3</sup>

<sup>1</sup> Ratio reflects Equity Options Contracts multiplied by 100 and divided by U.S. Cash Equity volume

<sup>2</sup> Source: World Federation of Exchanges and Nasdaq Data from 2019 to 2021

<sup>3</sup> Source: OECD (2021) Household Financial Assets.

## Agenda

# Enhancing Liquidity by Modernizing Markets

- 1 A strong and consistent markets franchise
- 2 Clear vision for resilient markets
- 3 Key priorities going forward

# Top Priorities to Drive Growth



Driving Marketplace Technology to Sustainable Organic Growth



Advancing the Market Ecosystem of the Future



Establishing and Scaling High Potential Businesses



# Driving Marketplace Technology to Sustainable Growth



## Outcomes

- ✓ Best-in-class product leadership
- ✓ Enhanced client success
- ✓ Increase in share of SaaS revenues
- ✓ Improvement in EBITDA margin

# Advancing the Market Ecosystem of the Future

## Initiatives

- 1 Migrate Nasdaq markets to advanced technology buoyed by AWS partnership
- 2 Flexibility, choice, and on demand capacity
- 3 Accelerate customer transformation from on-prem to SaaS & Managed Solutions

## Outcomes

ARR growth  
Increase in SaaS Revenues

# Establishing and Scaling High Potential Businesses

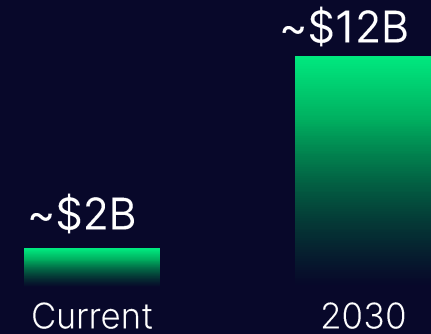
## Digital Assets

- As institutional adoption accelerates, well positioned to capture growth
- Prioritized custody and liquidity capabilities to address industry challenges around connectivity, availability and efficiency
- Establish end-to-end solution that leverages Nasdaq's existing technology to deliver Institutional grade scale and resiliency
- Greater regulatory oversight viewed as a competitive tailwind

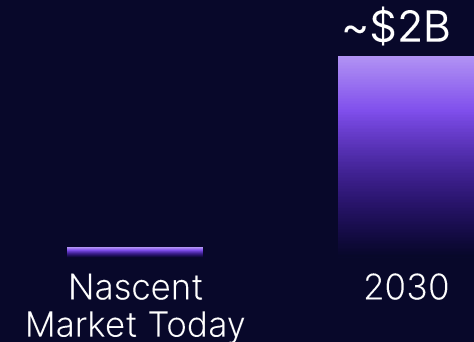
## Carbon Markets

- Establish Puro.earth as the global Standard and Registry for engineered carbon removals
- Build upon first to market with new methodologies in frontier removal processes
- Offer Carbon Market Platform via Marketplace Technology
- Global carbon leadership key component of Nasdaq's overall ESG strategy

## Digital Assets SAM<sup>1</sup>



## Carbon Markets SAM<sup>1</sup>



<sup>1</sup> Serviceable addressable market (SAM) based on consulting reports and Nasdaq analysis on growth potential

# How We Will Measure Success

Organic Growth in  
Marketplace Technology  
Revenues<sup>1</sup>

**+3-5%**

Medium-term outlook<sup>2</sup>

SaaS  
Revenue

**> 2x**

By 2025

Revenue from New Growth  
Initiatives<sup>3</sup>

**> \$60M**

By 2025



<sup>1</sup> Under the new Divisional structure, Marketplace Technology will include the Trade Management Solutions and Market Infrastructure Technology businesses.

<sup>2</sup> Growth outlook assumes stable market backdrop.

<sup>3</sup> Growth initiatives include Digital Assets, Carbon, Cloud and Options Proprietary products.

# Continuing to Modernize Markets Around the World

1

Strong, consistent financial profile

2

Supporting Nasdaq's broader business strategy through innovative solutions and adoption of new technologies

3

Unlocking global, scalable revenue opportunities

# Q&A

---

Market Platforms



# Panel #1

---

Leveraging Specific Technologies  
to Elevate Growth





Program will resume in 10 minutes





# Establishing a New Leader in High Growth Anti-Financial Crime

Jamie King  
Executive Vice President, Anti-Financial Crime

## Agenda

# A New Leader in High Growth Anti-Financial Crime

- 1 A strong Anti-Financial Crime franchise
- 2 Expanding opportunities in fast-growing market
- 3 Our strategy to increase market share

# AFC Contributes to Nasdaq's Strategic Framework

## Nasdaq

## Anti-Financial Crime

Core Purpose

We advance economic progress for all

We protect the world from financial crime

Long-Term Vision

We will be the trusted fabric of the world's financial system

We protect all the world's financial interactions

Value Proposition

We deliver world-leading platforms that improve the integrity, transparency and liquidity of the global economy

We provide SaaS solutions for Anti-Money Laundering, Fraud Detection, and Trade / Market Surveillance



# We Have Built a Global Anti-Financial Crime Leader

## Anti-Financial Crime

### Fraud Detection & AML

- Strong cloud expertise
- Analyzing data patterns across over 2,200 financial institutions
- SaaS processes at scale: nurture and customer success

+

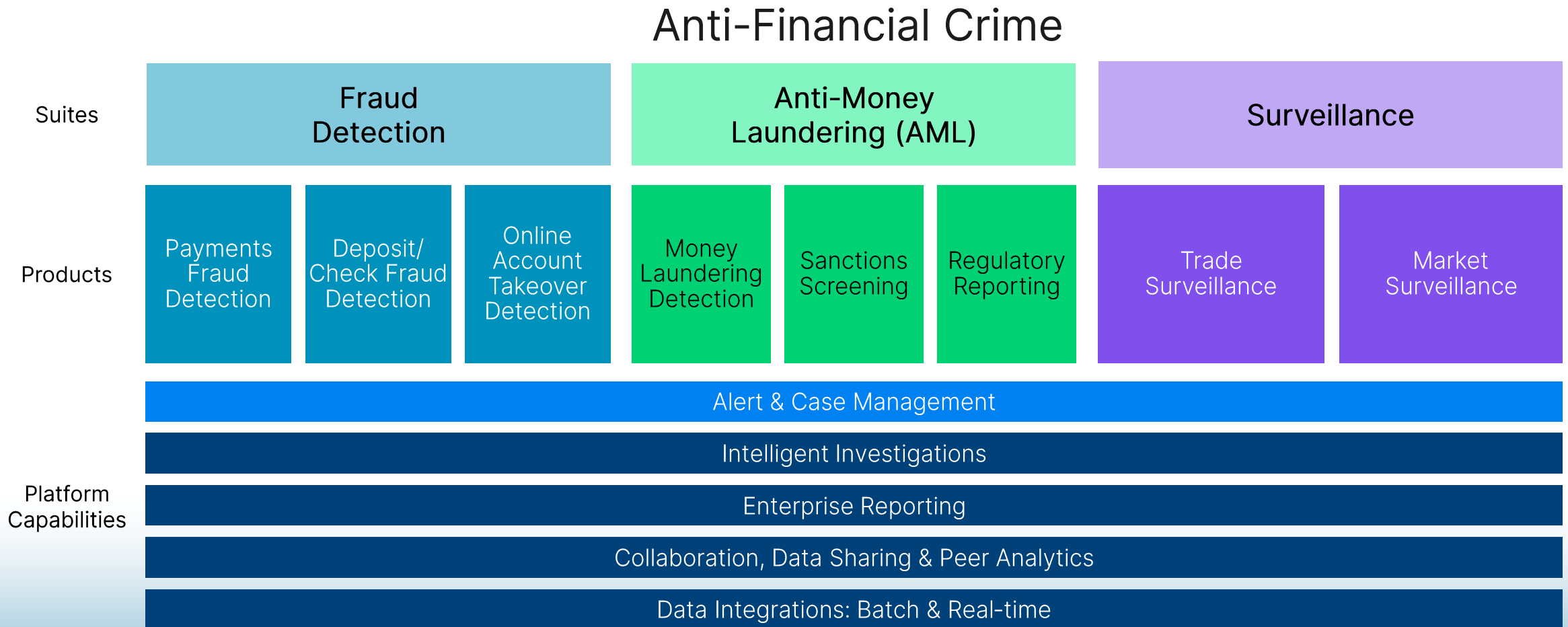
### Surveillance

- Impressive global sales and service organization
- Experience in the largest institutions in the world
- Technology solutions running at immense scale

## A Global Leader in AFC

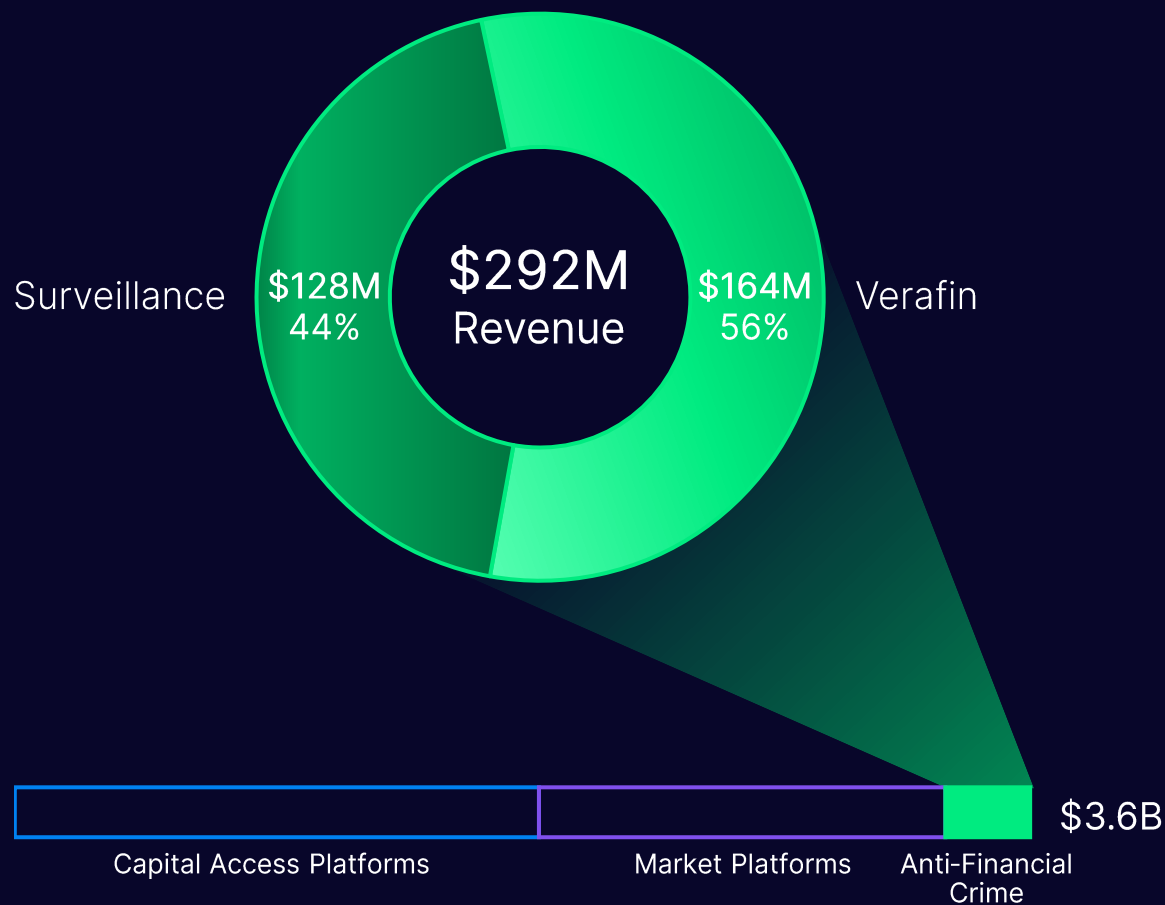
With unique and differentiated cloud-offering to increase penetration in large banks and key markets

# Comprehensive Anti-Financial Crime (AFC) Suite



# World Class SaaS Business

## Anti-Financial Crime (LTM'22)



## Key Characteristics

**\$295M** Annual Recurring Revenue (ARR)  
(3Q22)

**17%** Revenue CAGR<sup>1</sup>  
(2020-LTM'22)

**46** Rule of 40<sup>2</sup>  
(LTM'22)

**\$320M** Signed ARR  
(3Q22)

**230** Surveillance Clients (Global)  
(Q322)

**2,241** Verafin Clients (North America)  
(Q322)

<sup>1</sup> Nasdaq acquired Verafin in February 2021; 2020 pro forma are Non-US GAAP (Verafin 2020 results in accordance with ASPE) and assume Verafin included in AFC for all of 2020.

<sup>2</sup> Excludes the impact of the deferred revenue write-down related to the acquisition of Verafin.



# Significant Product and Customer Growth In Last Two Years

## Surveillance, Fraud Detection and AML: Since 2020

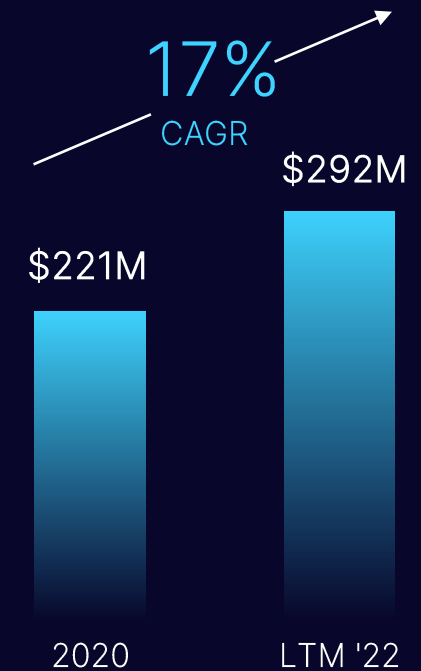
### Product Enhancements

- ➔ Payments Fraud Proof of Concept Evaluations for Large Banks
- ➔ Point Solutions for Tier 1
- ➔ Digital Asset Solutions

### Customers<sup>1</sup>



### Revenue<sup>1</sup>



<sup>1</sup> Nasdaq acquired Verafin in February 2021; 2020 pro forma are Non-US GAAP (Verafin 2020 results in accordance with ASPE) and assume Verafin included in AFC for all of 2020

## Agenda

# A New Leader in High Growth Anti-Financial Crime

- 1 A strong Anti-Financial Crime franchise
- 2 Expanding opportunities in fast-growing market
- 3 Our strategy to increase market share



# Financial Crime is a Large and Difficult Problem

Substantial Investment  
to Fight Financial Crime<sup>1</sup>

Globally  
~\$214B  
2021

Immense Magnitude  
of Funds Laundered<sup>2</sup>

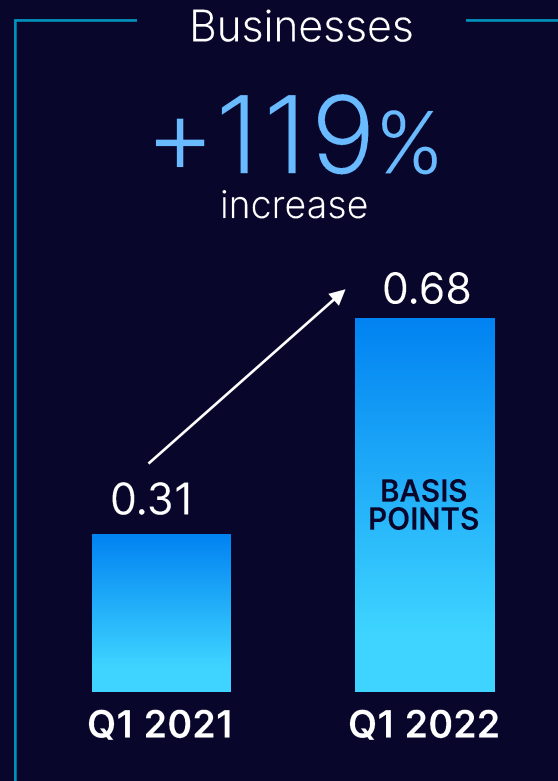
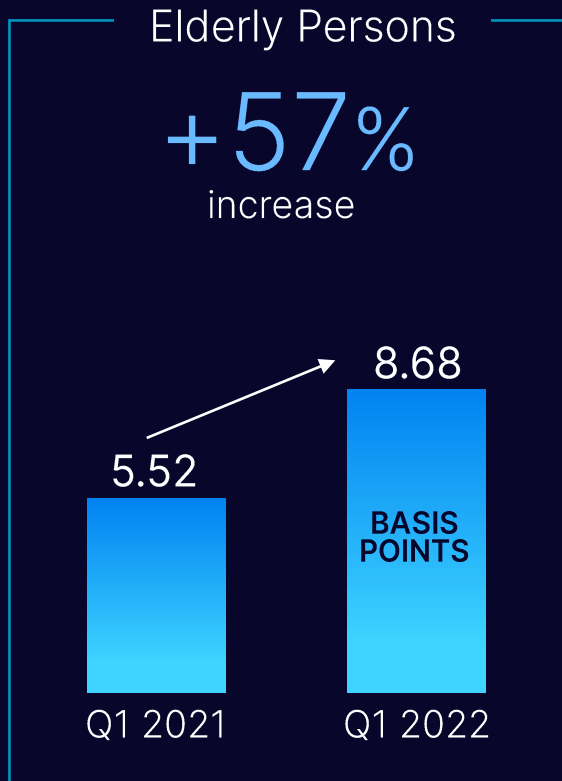
Globally  
~\$4T  
per year

Miniscule Amount  
of Funds Recovered<sup>2</sup>

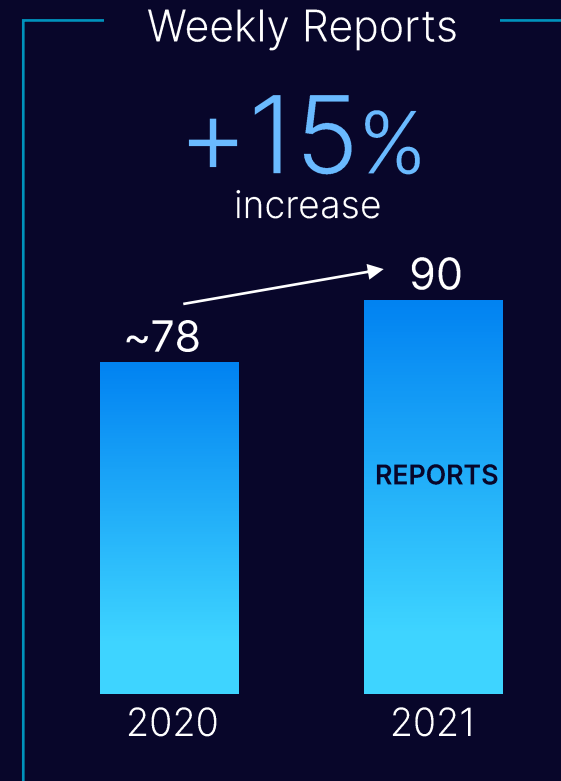
Less than  
1%  
annually

# Financial Crime is Growing Rapidly

## Attempted Wire Fraud by Value<sup>1</sup>



## Market Abuse<sup>2</sup>



## Cryptocurrency<sup>3</sup>



<sup>1</sup> Verafin Quarterly Cloud Insights: Wire Fraud Benchmarking Report | Q3 2022. Fraud value normalized by basis points. <https://verafin.com/resource/quarterly-cloud-insights-uncovered-3/>

<sup>2</sup> FCA's work on market abuse and manipulation, Financial Conduct Authority, June 2022 - <https://www.fca.org.uk/news/news-stories/market-abuse-manipulation-update>

<sup>3</sup> Chainalysis 2022 Crypto Crime Report <https://go.chainalysis.com/2022-Crypto-Crime-Report.html>

# Regulations are getting tougher.

## Fraud Consumer Protection and Payments Innovation

- Potential liability shift in consumer fraud scams such as Authorized Push Payment (APP) fraud
- Move to Faster Payments and cross-border payments creates opportunities

## Regulations and Enforcement

- AML Act of 2020 and Corporate Transparency Act (U.S.)
- Focus on spoofing and related instrument detection (OCC)
- Economic Crime and Corporate Transparency Bill (U.K.)
- Increasing investigations and enforcement actions by Securities Exchange Commission (SEC)

## Digital Asset Regulation

- Regulatory uncertainty for cryptocurrency ecosystem
- MAS, SFC, CFTC, MiCa focus on crypto, as well as pump-and-dump
- Potential changes to Travel Rule and record keeping requirements

# Client Testimonial Video

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First National Bank of  
Omaha



# Large SAMs and Strong Position in Segments

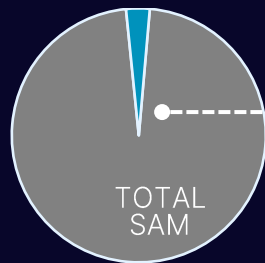
AFC

~\$18B TAM

\$7.6B SAM

~4% Market Position

## Fraud Detection + AML



3%

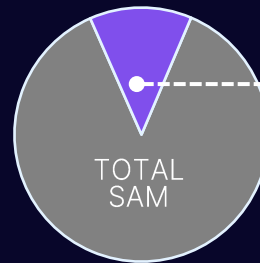
Market Position

### SEGMENTS:

Banks & Credit Unions  
 >\$1T  
 \$200B-1T  
 \$50B-200B  
 \$10B-50B  
**\$200M-10B**  
 <\$200M  
 Crypto

Leading Position

## Market Surveillance



12%

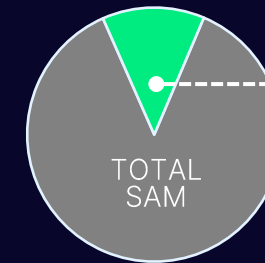
Market Position

### SEGMENTS:

T1-2 Exchanges  
 T3-4 Exchanges  
 Regulators  
 Central Banks  
 ATS/SEF/MTF  
 Carbon/ESG  
 Crypto

Leading Position

## Trade Surveillance



15%

Market Position

### SEGMENTS:

**Uber T1 Brokers**  
 T1-2 Brokers  
 T3-4 Brokers  
 Systematic HFT  
 Retail Brokerage Specialist  
 FCMs  
 Energy  
 Crypto Natives

Leading Position

<sup>1</sup> Total addressable market (TAM) is based on total tech spend from consulting reports including Oliver Wyman, Chartis and Celent, and internal analysis of the total opportunities in the market.

<sup>2</sup> Serviceable addressable market (SAM) is internal estimate reflecting value of current market opportunities based on product fit relative to total addressable market.

ATS/SEF/MTF: Alternative Trading Systems / Swap Execution Facilities / Multilateral Trading facility; ESG: Environmental, Social, and Governance; HFT: High-Frequency Trading; FCM: Futures Commission Merchant



## Agenda

# A New Leader in High Growth Anti-Financial Crime

- 1 A strong Anti-Financial Crime franchise
- 2 Expanding opportunities in fast-growing market
- 3 Our strategy to increase market share

# We Bring A Powerful Differentiated Approach...

## Leading Customer Network

- 2,200 Fraud Detection and AML customers in core market
- 230 Surveillance customers including Tier 1 banks, exchanges and regulators
- Existing relationships with Tier 1 banks
- Significant reference power in adjacent segments to drive opportunities in key markets
- Low customer churn

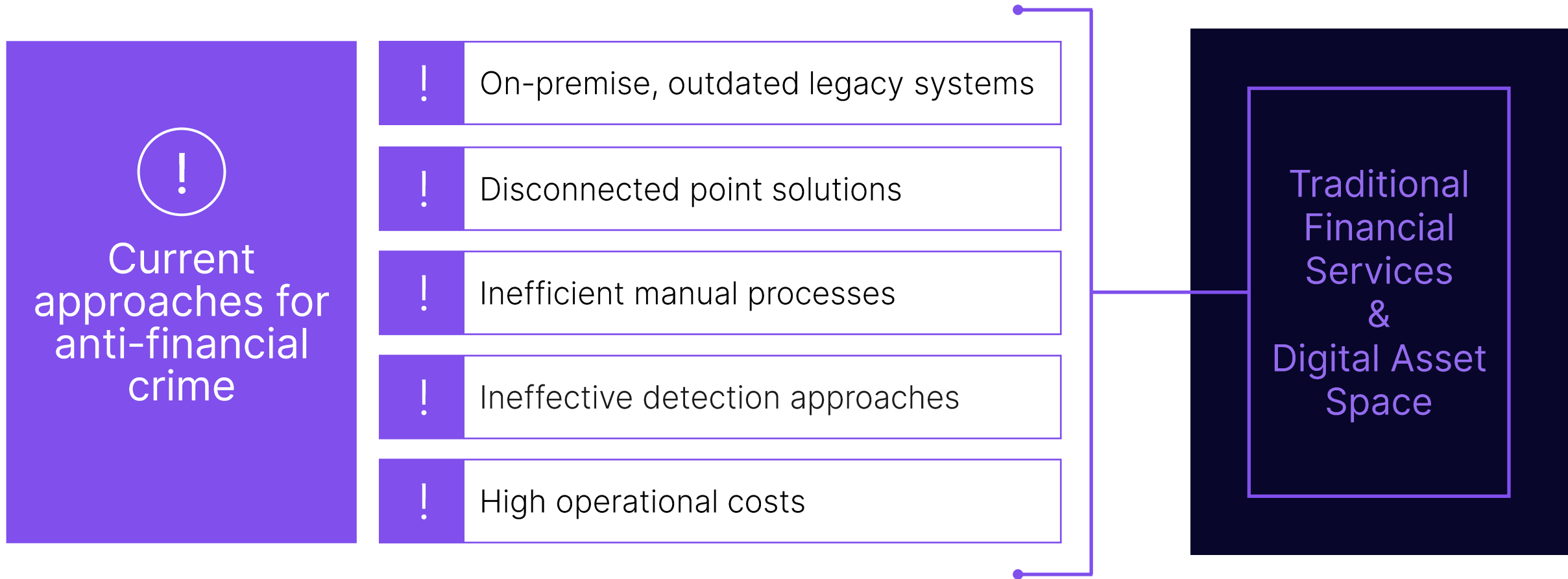
## Unmatched SaaS / Cloud-Based Solutions

- One product approach by building solutions for one market creates value for many
- Unmatched scalability and responsiveness in the cloud
- Unique consortium data approach for 10x value in fraud effectiveness and AML efficiency
- Differentiate with fiat + crypto monitoring for digital assets AFC offering

## Data-Driven Approach and Integration Expertise

- Data integration and standardization expertise
- Rich data from financial services data systems, core banking, exchange drop copies, market data, open source and third-party sources
- Data lake with immense set of rich data provides unprecedented analytical capability
- Unique counterparty data and payee analysis derived from rich data from across the cloud

# ... Provides Opportunity to Grow Share in Markets with Outdated Technology





# Clear Priorities to Advance Position in Large, Growing Market



Continue growth in smaller bank FRAML opportunities



Unlock large-bank opportunity for Fraud Detection & AML



Invest to grow in key Surveillance segments



Expand solutions with joint digital asset offering

# Continue Growth in Smaller Bank FRAML Opportunities

## Initiatives

- Drive **operational efficiency** in areas of Fraud Detection and AML operations, including lead generation and client onboarding
- Capitalize on **key growth opportunities** within segments
- **Enhance offerings and adoption** for existing customers to drive increased wallet share
- Continue to **increase customer base** and leadership in smaller bank segment

## One Product Approach for Value and Coverage

- ✓ Cloud platform enables a build once and deploy-to-many approach
- ✓ Ensures proactive response and comprehensive coverage for emerging threats and trends
- ✓ Significant opportunity for new acquisitions

# Unlock Large-Bank Opportunity for Fraud Detection & AML

## Initiatives

- **Leverage Cloud expertise** as large banks embrace move away from on-premise systems
- **Disruptive technology** and approach for fraud detection that significantly improves effectiveness
- Expand into global Tier 1s with **differentiated fraud product offering**: consortium data approach to payments fraud
- Move towards a **unified platform for AFC**: fraud detection, AML and surveillance in one platform – a unique offering in a fragmented marketplace

## Early Successes with Tier 1-2 Banks Proof of Concept Evaluations

Bank A: Wire Fraud

**50%**  
reduction

in false positive alerts

Bank B: Business Email  
Compromise Scams

**25%**  
reduction

in false positive alerts  
and

**2.5x**

improvement

in value of fraud detected

# Invest to Grow in Key Surveillance Segments

## Initiatives

- Drive increased **sales and marketing engagement** and scale teams to increase sales funnel
- Advance detection of **manipulative behaviors** in **related instruments**
- Develop a **consolidated offering** that aligns with needs of lower tier segments
- Finalize Surveillance **transformation initiatives** for cloud migration, new alerting service and new workbench platform

## Accelerate growth in Surveillance

- ✓ Strong segment focus will drive new customer growth:
  - *Tier 1 - Tier 3 Banks*
  - *Retail Brokerages*
  - *Systematic Buy-Side firms*
- ✓ Build upon strong community of over

# 230

## CUSTOMERS

including Tier 1 banks, exchanges and regulators

- ✓ Drive surveillance effectiveness & efficiency through **enhanced detection coverage** and **reduced false positive rates**.

# Expand Solutions with Joint Digital Asset Offering

## Initiatives

- Leverage the **differentiated strength of fiat + crypto monitoring** across a growing market
- **Position AFC as unique all-in-one offering** to digital asset ecosystem
  - analytics, case management, reporting
- Further **expand digital asset product capabilities** for Surveillance and AML
- Execute on **joint marketing initiatives** including thought leadership and lead generation

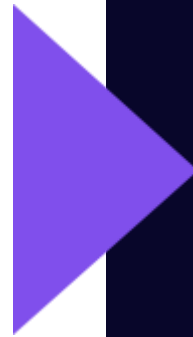
## AFC Suite for Digital Assets

- ✓ Purpose-built, cloud-based holistic suite of solutions
- ✓ Total and unmatched coverage for traditional finance (fiat) + cryptocurrency
- ✓ Deep-domain expertise in AML, Fraud Detection and Surveillance

# Strong Growth Outlook

3-5 Year  
Revenue Growth Outlook:

Anti-Financial  
Crime



Revenue CAGR

18-23%



<sup>1</sup> Revenue and expense growth outlooks assume stable market backdrop.

# Leading the Way in AFC

1

A strong franchise and global leader in Anti-Financial Crime

2

Pursuing expanding opportunities in a fast-growing market

3

We have developed clear strategies to expand market share

# Q&A

---

## Anti-Financial Crime



# Panel #2

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How Nasdaq Adds Value to Clients  
During Economic Downturns





# Supporting and Measuring the Success of Our Strategy

Ann Dennison  
Executive Vice President and Chief Financial Officer

## Agenda

# Supporting and Measuring the Success of Our Strategy

1 Strong performance

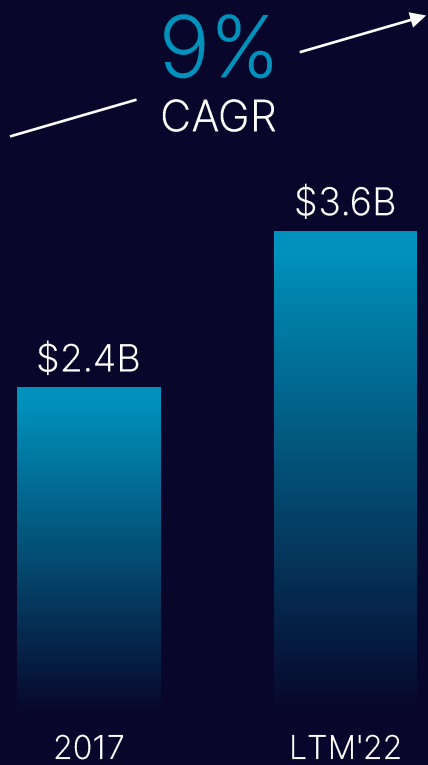
2 Proven resiliency

3 Capital allocation

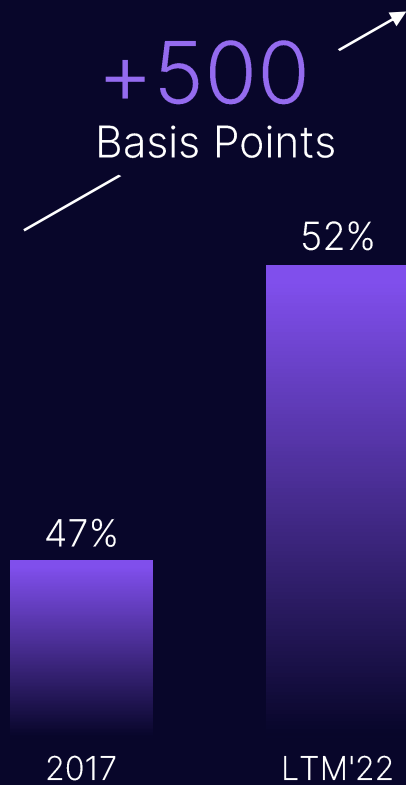
4 Clear ambitions

# Strong Track Record of Financial Performance

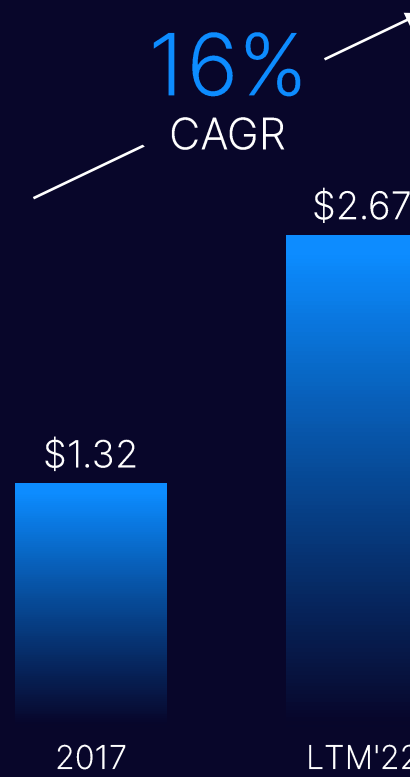
## Net Revenue



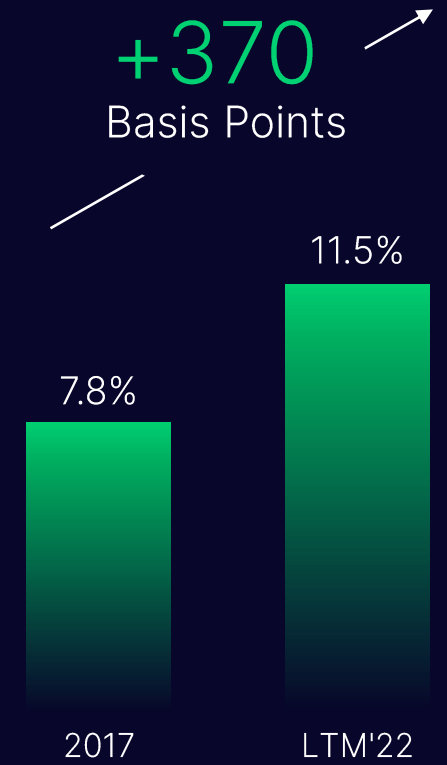
## Non-GAAP Operating Margin



## Non-GAAP Diluted EPS

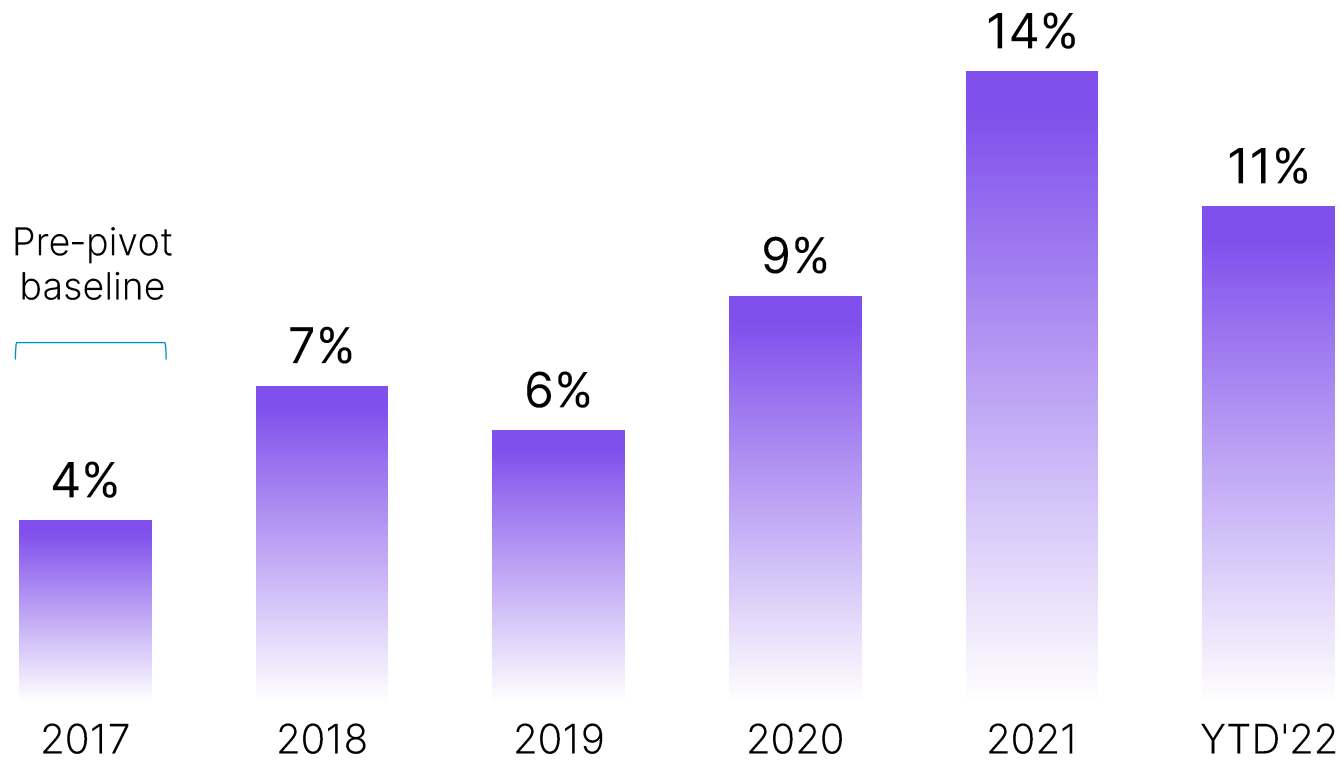


## Non-GAAP Return on Invested Capital

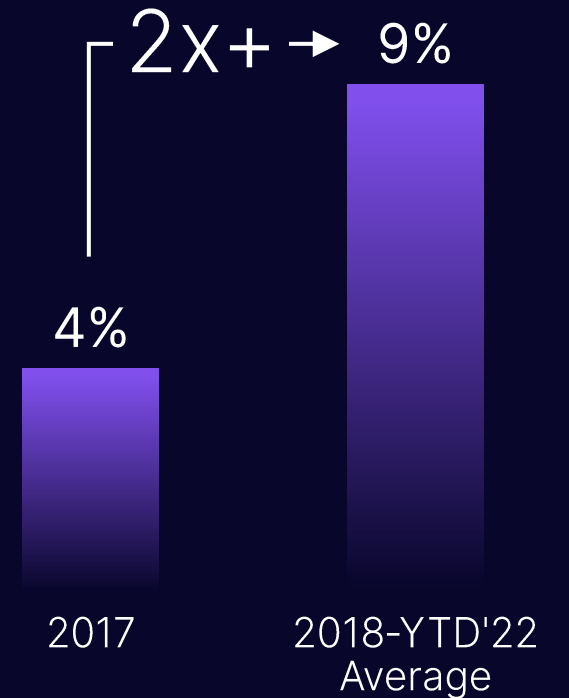


# Strategic Pivot Has Raised Our Performance Potential

## Solutions Businesses Organic Revenue Growth



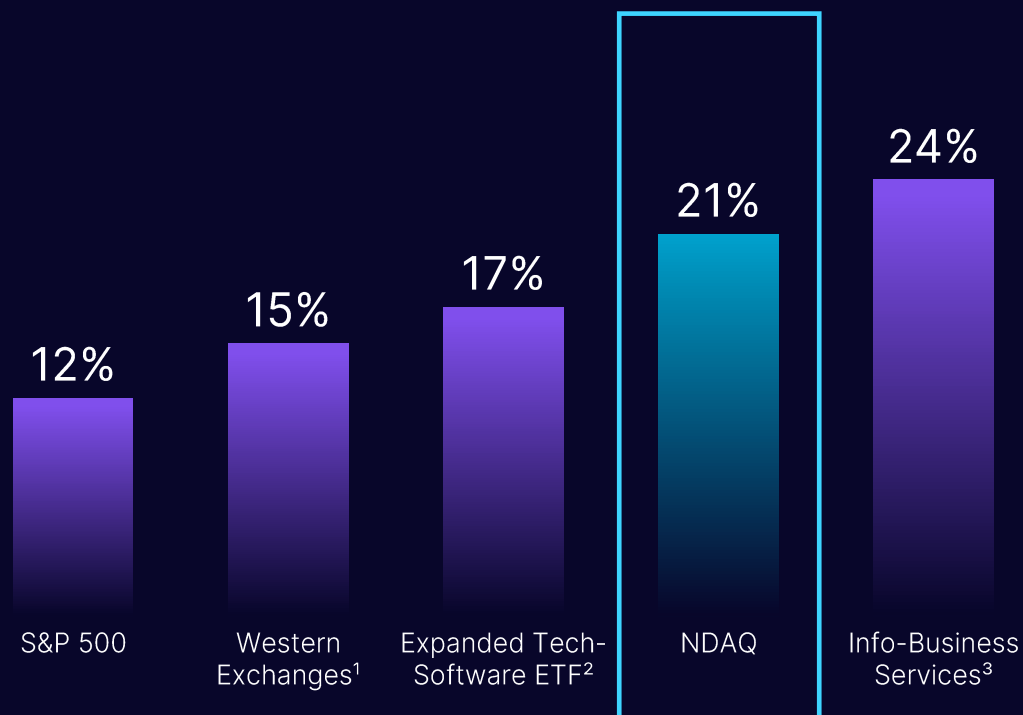
2x+ Increase in Organic Revenue Growth Rate



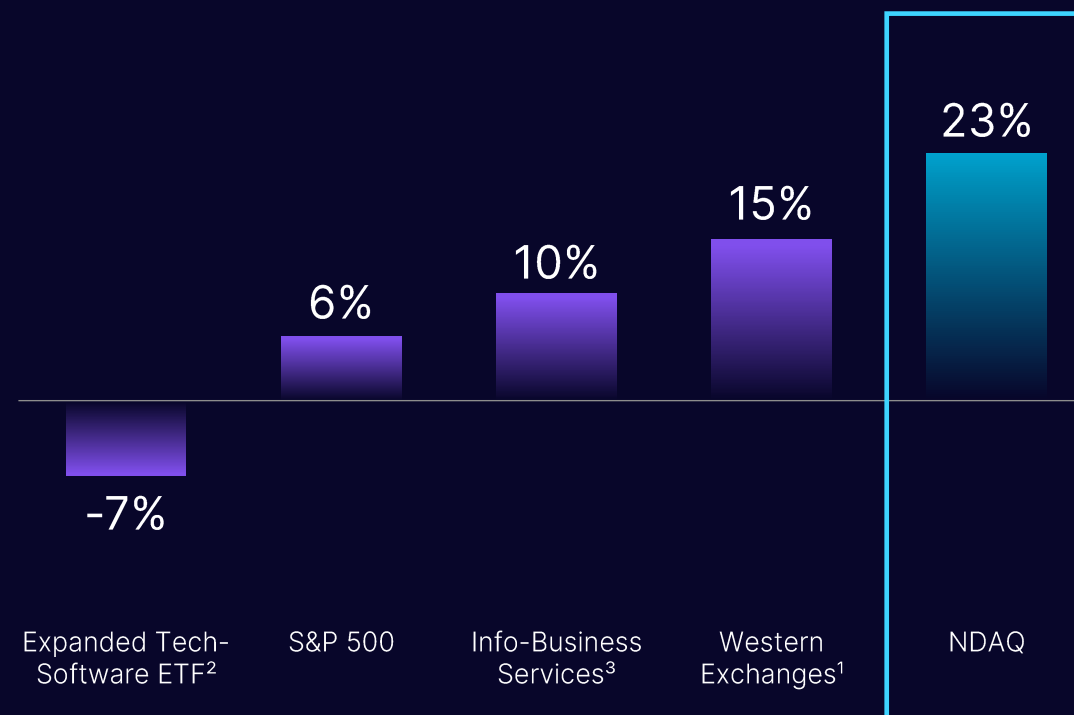
# Delivering Strong Returns to Shareholders

## Annualized Total Shareholder Return

Since January 1, 2017



Since NDAQ's 2020 Investor Day



Note: Annualized total shareholder return, or TSR, calculated from the start of 2017 to October 31, 2022, and 11/10/20 to October 31, 2022, respectively. Source: FactSet.

<sup>1</sup> Western Exchange peers include equal weighted average of CBOE, CME, ICE, DB1-DE, LSEG-GB, ENX-FR, and X-CA.

<sup>2</sup> iShares Expanded Tech-Software Sector ETF (symbol IGV).

<sup>3</sup> Info-Business Services reflects equal weighted average of BR, FDS, INTU, MSCI, MCO, SPGI, SSNC and VRSK.



# Driving Excellence Across Everything We Do

## Key Pillars

E

Minimizing our environmental footprint

S

Solidifying our position as a destination for the best talent

G

Advancing governance best practices

## Driving Change

Carbon neutral since 2018

GHG reduction targets approved by The Science Based Targets initiative (SBTi):

- Reduce Scope 1 and Scope 2 GHG emissions **100%** by 2030<sup>1</sup>
- Reduce absolute Scope 3 GHG emissions **95%** by 2050<sup>1</sup>

Increasing representation of women and under-represented minorities

Increasing the percentage of **diverse suppliers**

Increasing our **board diversity**



<sup>1</sup> Reduction versus base year of 2021.

# Earning Exceptionally Strong ESG Reputation

## Notable Recognition

Included in  
**S&P DJSI**  
(6<sup>th</sup> consecutive year)

Named to Seramount's  
**100 Best Companies**

Best Place to work for  
**LGBTQ+ Equality**

Included in **Bloomberg**  
GEI Diversity Index

## Leading Grades

MSCI ESG Rating  
**AA "Leader"**  
*C-AAA Scale*

Sustainalytics Risk Ratings  
**12.1 "Low Risk"**  
*100-1 Scale*

ISS Governance  
**#1 Rating**  
*10-1 Scale, 1 = Best*

Ecovadis  
**Gold Medal**  
designation  
*95<sup>th</sup> percentile*

## Building Positive Consensus

Nasdaq in top

# 5%

of S&P 500 constituents to have earned leading assessments from each of MSCI, Sustainalytics and ISS<sup>1</sup>



<sup>1</sup> Reflects S&P 500 constituents with MSCI ESG Rating of AA or AAA; ISS Governance QualityScore of 1 or 2; and Sustainalytics ESG Risk Rating of <20 (Low or Negligible Risk)



## Agenda

# Supporting and Measuring the Success of Our Strategy

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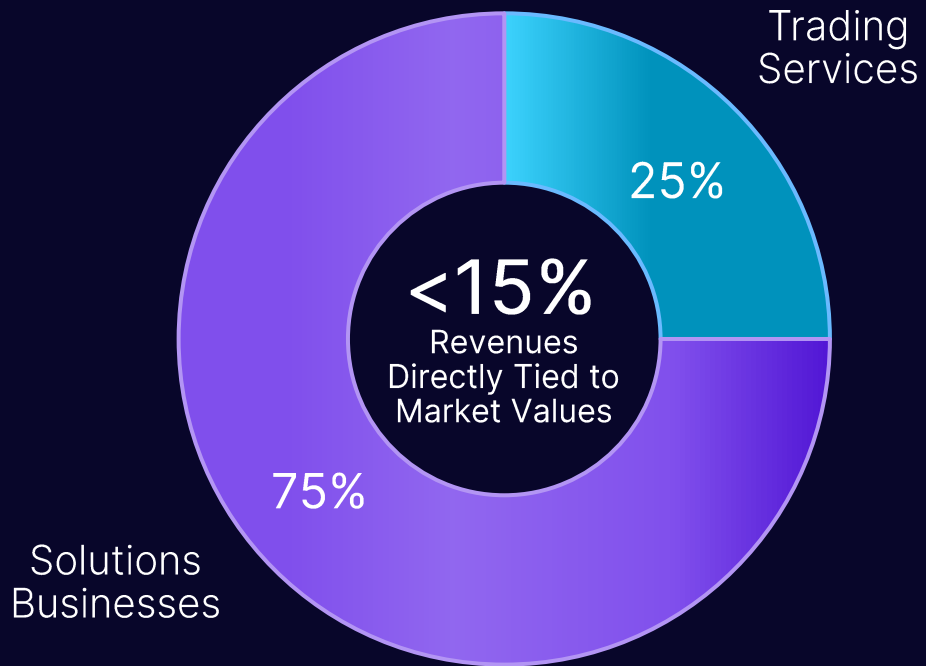
2 Proven resiliency

3 Capital allocation

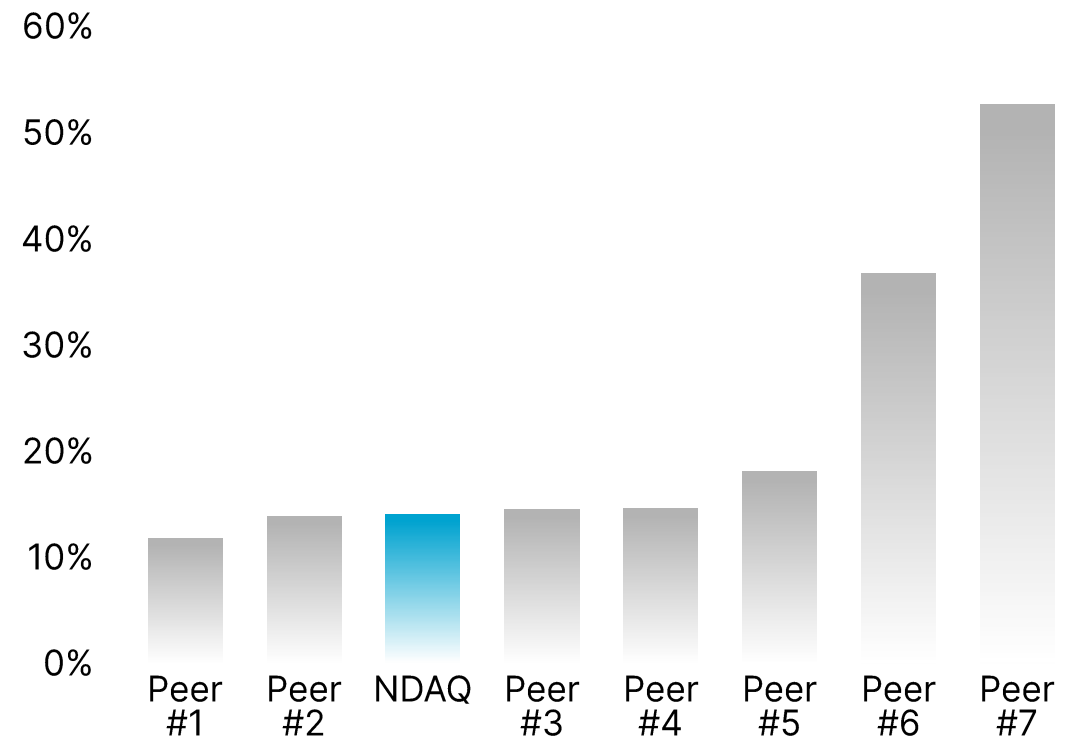
4 Clear ambitions

# Nasdaq's Businesses Are Resilient

## High % Net Revenues from Solutions Businesses



## Low EBITDA Volatility<sup>1</sup> Versus Western Exchanges<sup>2</sup>



<sup>1</sup> EBITDA standard deviation reflects the trailing eight semi-annual fiscal reporting periods, divided by the absolute value of the average of EBITDA over the same period. EBITDA reflects operating income plus depreciation and amortization. Source: Bloomberg and company reports as of last disclosed period.

<sup>2</sup> Western exchanges include: CBOE, CME, ICE, DB1-DE, LSEG-GB, ENX-FR, and X-CA.



# Responding to Today's Unique Environment

## Key Issues

▶ Inflation

▶ Possible economic recession

▶ Rising interest rates

## Actions Taken

- Responded to ensure continued high retention
- Built into 2022 expense guidance

- Client driven focus on sales and retention
- Calibrating staffing needs with client demand

- Termed out debt maturities
- Refinanced debt in advance of rising rates

## Near-Term Sensitivity

- ▶
  - 1%-2% potential impact to expense growth
  - 2%-3% of inflation related expense growth can be absorbed by product pricing adjustments
- ▶
  - Meaningful variability in transactional revenue
  - Higher likelihood of lower Solutions Businesses organic growth in short-term
- ▶
  - Very minimal exposure to floating rate debt
  - New debt to fund incremental M&A would be subject to current market rates

## Agenda

# Supporting and Measuring the Success of Our Strategy

1 Strong performance

2 Proven resiliency

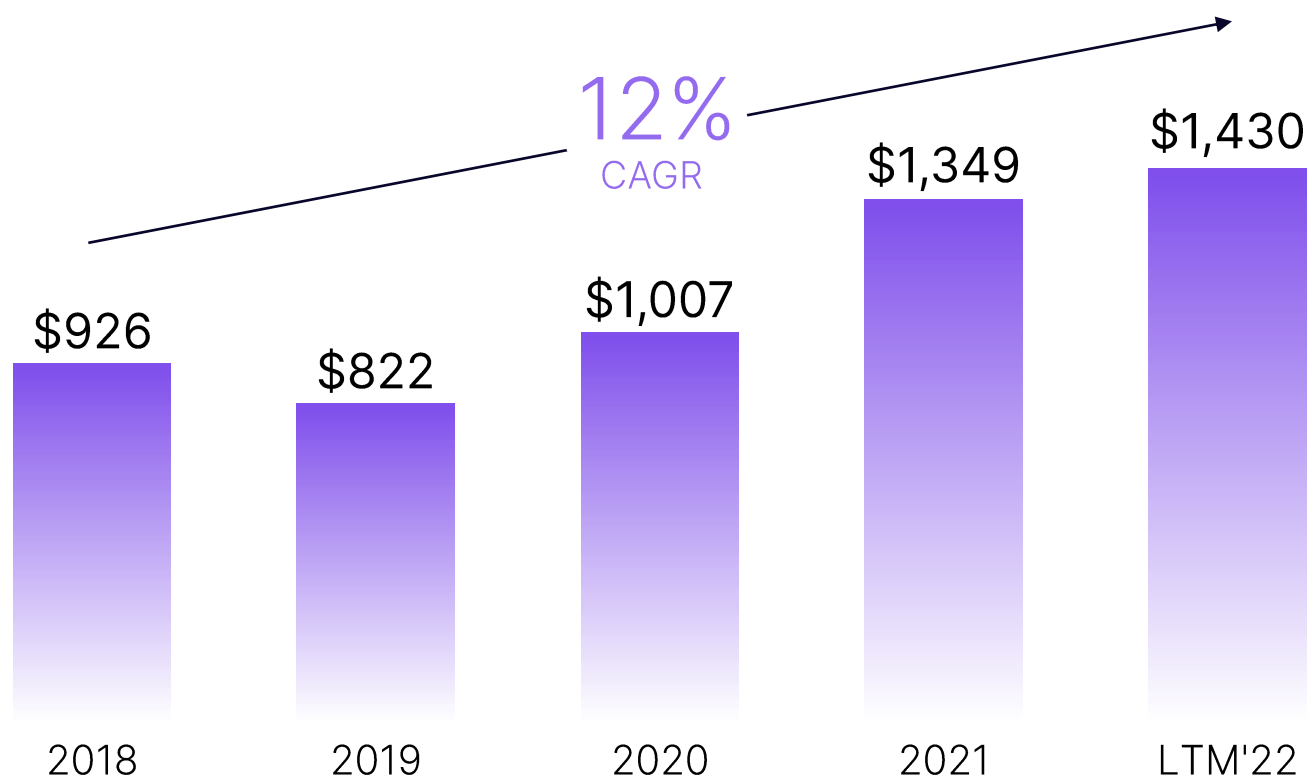
3 Capital allocation

4 Clear ambitions

# Strong and Consistent Cash Generation Engine

## Free Cash Flow<sup>1</sup>

(Ex. Section 31 fees and Verafin structuring items) in millions



## Free Cash Flow Conversion

# 106%

FCF excluding Sec 31 Fees and Verafin structuring items compared to non-GAAP Net Income (2018-YTD'22)



<sup>1</sup> Free cash flow defined as cash flow from operations less capital expenditures, net of the change in Section 31 fees receivables and excludes the impact of Verafin related tax and structuring items. Please see the appendix for a reconciliation of cash flows.

# Clear, Consistent and Proven Capital Allocation Principles

## Invest to Support Growth

Strategically aligned  
Enhance enterprise performance  
Attractive returns

$\geq 10\%$  and  
 $> WACC$   
Nasdaq enterprise ROIC long-term

## Consistent Dividend Growth

**35-38%**  
Payout ratio target 2027<sup>1</sup>

**10%**  
Dividend CAGR<sup>1</sup> last 5 years

## Share Repurchase Program

Buyback primarily to offset dilution

**~\$175M**  
Annualized average repurchases 4Q20-3Q22<sup>2</sup>

## Investment-Grade Debt Issuer

Manage leverage

**Maintain**  
Investment-grade issuer status

<sup>1</sup> Dividend payout ratio calculated annualizing the last paid quarterly dividend divided by last 12 months non-GAAP net income. Dividend CAGR reflects the last paid quarterly dividend of \$0.20 per share on 9/30/22 compared to \$0.13 per share paid five years ago on 9/30/17.

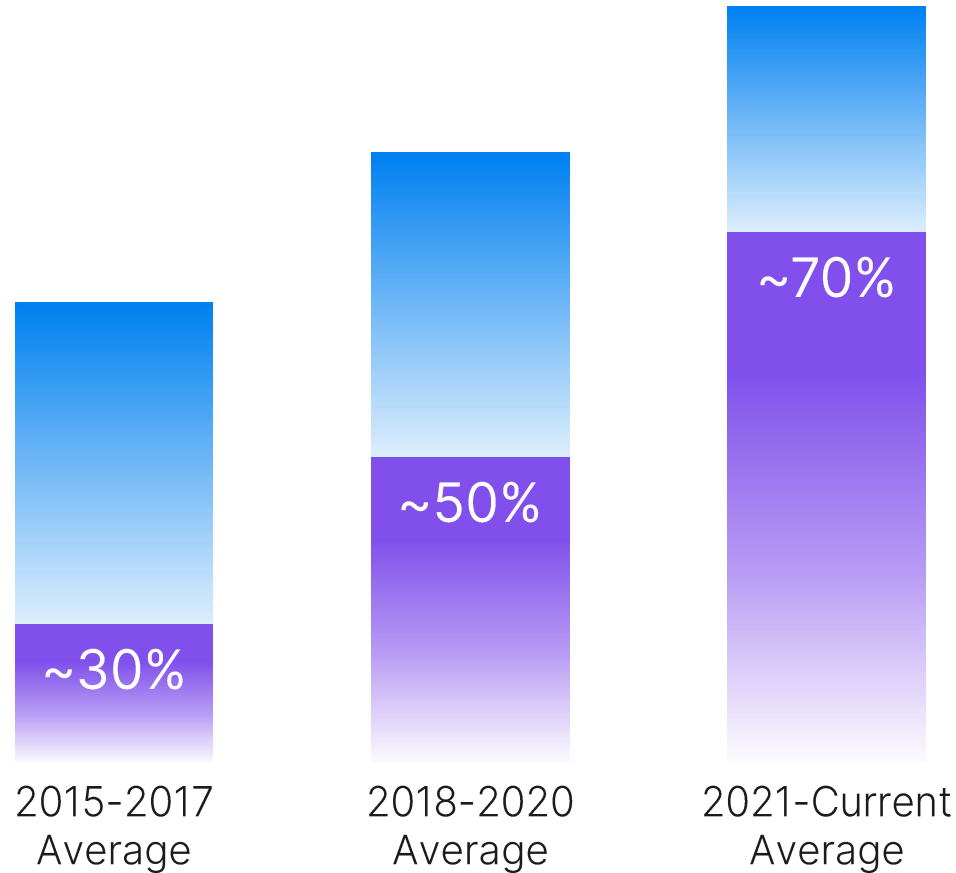
<sup>2</sup> Excludes repurchases related to offsetting the majority of the EPS dilution from the sale of NFI.

# Investing to Support Growth Objectives

Organic Investments  
% of R&D Operating Expense + Capital Expenditures

**Sustain investments**  
in our foundational marketplace core

**Accelerate investments**  
in our technology and workflows & insights businesses



## Strategically Targeted Acquisitions

2017: eVestment

- ~50% increase in ARR since acquisition

2021: Verafin

- ~50% increase in ARR and 11% growth in customers since year end 2020

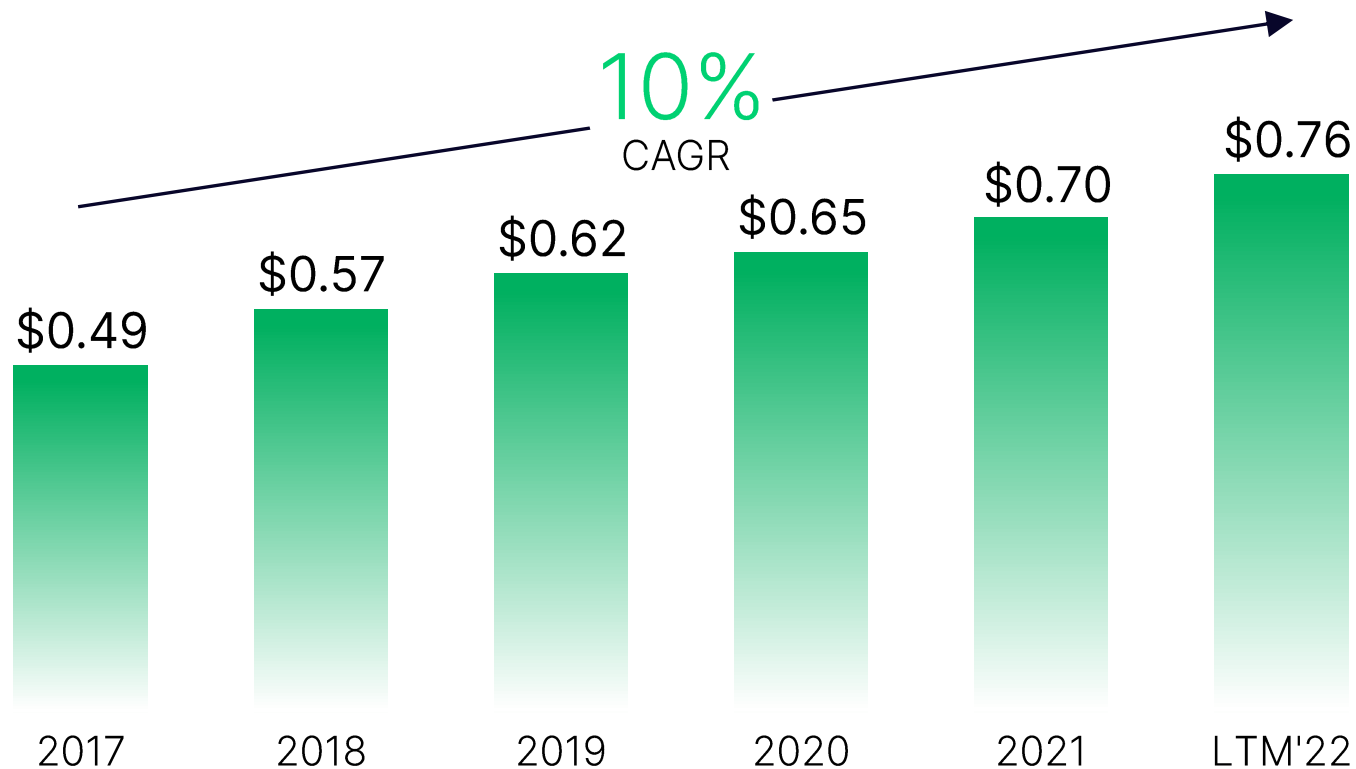
## Successful Venture Investing

- 24 investments
- Delivered top quartile VC performance
- Realizations returned all capital to date
- Investments allow Nasdaq to: 1) access new technologies, capabilities and markets; 2) catalyze new product development; and 3) reinforce our core business

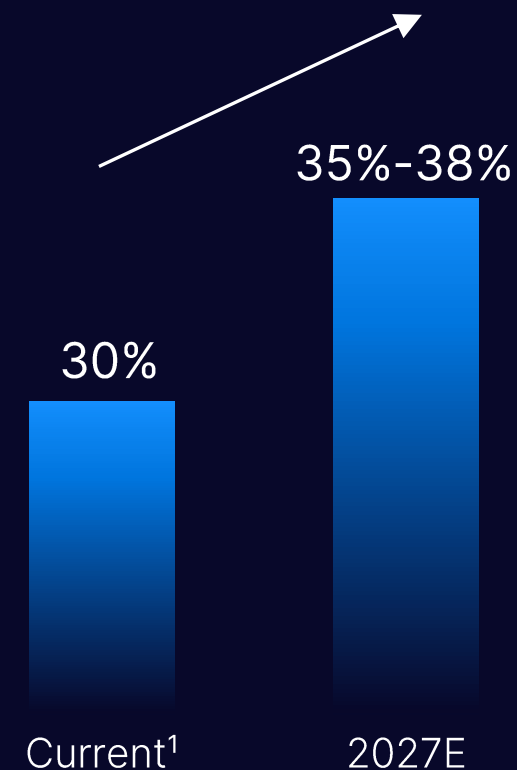


# Consistent and Compelling Dividend Growth Story

## Growth in Dividend Per Share



## Dividend Payout Ratio<sup>1</sup>



Strong income growth + rising payout ratio  
= double-digit dividend growth potential



<sup>1</sup> Dividend payout calculated annualizing the last paid quarterly dividend divided by last 12 months non-GAAP net income.



# Successfully Executing Share Repurchase Initiatives

## Share Repurchases

\$1.0B

Significant cumulative employee related share repurchases<sup>1</sup> (2017-3Q22)



~500M

Stable share count<sup>2</sup> (2017 – 3Q22)



18.6M

Repurchases to eliminate dilution from NFI divestiture



## Outlook

Maintain stable share count

Opportunistic repurchases considered when shares are especially attractive



- 1 Excludes cumulative share repurchases of \$1.6 billion due to offsetting annual issuance related to NFI and the majority of the dilution related to the NFI divestiture.
- 2 Average of years 2017-2021 and year to date 2022 through September 30, 2022.

# Strong Balance Sheet Supports Strategic Opportunities

Historical Low Leverage

2.7x

Debt to LTM EBITDA  
(10-year range of 2.2x – 3.5x)

Low Cost of Debt

2.1%

Pre-tax  
(10-year average of 3.4%)

Well-Laddered Debt Maturities

No long-term debt maturities until 2026<sup>1</sup>

## Clear Benefits

- ✓ Strong capital position provides optionality
- ✓ Our strategic priorities are well established and clearly communicated
- ✓ Low near term refinancing needs



<sup>1</sup> Nasdaq plans to refinance the December 2022 debt maturity by using cash on hand and issuing commercial paper. The company plans to reduce the outstanding commercial paper in 2023.

## Agenda

# Supporting and Measuring the Success of Our Strategy

1 Strong performance

2 Proven resiliency

3 Capital allocation

4 Clear ambitions

# Continuing to Deliver in Our Solutions Businesses

Business Segment	Organic Revenue Outlook <sup>1</sup> (3-5 years)
Anti-Financial Crime	18 - 23%
Capital Access Platforms	5 - 8%
Marketplace Technology	3 - 5%
Solutions Businesses	7 - 10%
Trading Services	Variable with market activity

SaaS Revenue  
As % of ARR Outlook  
**>50%**  
by 4Q27E



<sup>1</sup> Revenue growth outlook assumes stable market backdrop.

# Thoughtfully Investing to Drive Sustainable Growth

Metric	2017-2020	2021-22'YTD	3-5 Year Outlook <sup>1</sup>
Organic Non-GAAP Expense Outlook <sup>1</sup>	2%-4%	3%-6%	4% - 7%
Solutions Businesses Organic Revenue Outlook <sup>1</sup>	5%-8%	6%-9%	7% - 10%



<sup>1</sup> Revenue and expense growth outlooks assume stable market backdrop.

# How We Measure the Success of the Strategy

Organic Revenue Growth <sup>1</sup>	7-10% Solutions Businesses (3-5 year time frame)
Maintain Operating Leverage	4-7% Average Annual Organic Expense Growth <sup>1</sup> (3-5 year time frame)
Deliver Attractive ROIC	≥10% and >WACC Total Enterprise (Long-term outlook, with variation in short-term)
Reduce Climate Footprint	Reduce Scope 1 & 2 GHG emissions 100% by 2030 <sup>2</sup> Reduce absolute Scope 3 GHG emissions 95% by 2050 <sup>2</sup>

Total Shareholder  
Return Target  
**Double Digit  
TSR**



1 Revenue and expense growth outlooks assume stable market backdrop.  
2 SBTi targets; reduction versus base year of 2021.

# The Success of Our Strategy Will Continue to be Clearly Measurable

1

Successfully executing Nasdaq's strategy has driven strong performance

2

Nasdaq is proven to be resilient across various economic backdrops

3

Consistent capital plan supports our strategic progress as well as contributes to attractive shareholder returns

4

Our performance potential continues to increase

# Q&A

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# Feedback on Today's Event

Thank you for joining us for our 2022 Investor Day. We hope you found it informative.

Your feedback is important to us, so we would appreciate it if you could fill out a quick survey - it should take only 2-3 minutes. The answers are all anonymous.

This survey will be online for the next 5 days so we ask you to please complete it as soon as possible as we will then tabulate the results and share with our management team.

Here is the link to the survey

[https://forms.office.com/Pages/DesignPageV2.aspx?subpage=design&FormId=rWvxNGyyQ0iX-dYkZqj0wW\\_6ZFaq-IBAsfP9FsyV-4RUMkNCWVZHTUFBVFFUzFNRjAyUEIxMDY1Ti4u&Token=6b0a847cf7d948e5998b6d610083fe5e](https://forms.office.com/Pages/DesignPageV2.aspx?subpage=design&FormId=rWvxNGyyQ0iX-dYkZqj0wW_6ZFaq-IBAsfP9FsyV-4RUMkNCWVZHTUFBVFFUzFNRjAyUEIxMDY1Ti4u&Token=6b0a847cf7d948e5998b6d610083fe5e)

Or use this QR code

Thank you





# Supplemental Information

Additional non-GAAP reconciliations may be found at [ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation](https://ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation).

# Summary of Historical Financial Results

<b>NON-GAAP RESULTS <sup>1</sup></b> <b>(U.S.\$ Millions, except EPS)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>LTM' 22</b>
Solutions Businesses Revenues	\$1,572	\$1,748	\$1,894	\$2,090	\$2,499	\$2,682
Trading Services Net Revenues	541	622	583	770	882	864
Other Revenues	298	156	58	43	39	14
<b>Net Revenues</b>	<b>2,411</b>	<b>2,526</b>	<b>2,535</b>	<b>2,903</b>	<b>3,420</b>	<b>3,560</b>
Operating Expenses	1,271	1,320	1,295	1,414	1,616	1,692
<b>Operating Income</b>	<b>1,140</b>	<b>1,206</b>	<b>1,240</b>	<b>1,489</b>	<b>1,804</b>	<b>1,868</b>
Operating Margin <sup>2</sup>	47%	48%	49%	51%	53%	52%
EBITDA <sup>1</sup>	1,236	1,306	1,328	1,585	1,912	1,971
EBITDA Margin <sup>3</sup>	51%	52%	52%	55%	56%	55%
<b>Net Income</b>	<b>670</b>	<b>797</b>	<b>835</b>	<b>1,031</b>	<b>1,273</b>	<b>1,334</b>
<b>Diluted Earnings Per Share</b>	<b>\$1.32</b>	<b>\$1.58</b>	<b>\$1.67</b>	<b>\$2.06</b>	<b>\$2.52</b>	<b>\$2.67</b>
<b>Dividend Per share</b>	<b>\$0.49</b>	<b>\$0.57</b>	<b>\$0.62</b>	<b>\$0.65</b>	<b>\$0.70</b>	<b>\$0.76</b>

<sup>1</sup> Reconciliations of U.S. GAAP to non-GAAP measures are available at [ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation](https://ir.nasdaq.com/Income-Statement-Trend-Summary-and-GAAP-to-Non-GAAP-Reconciliation).

<sup>2</sup> Operating margin equals operating income divided by net revenues.

<sup>3</sup> EBITDA margin equals EBITDA divided by net revenues.



# Historical Cash Flow / Use of Cash Flow

Free Cash Flow Calculation (U.S.\$ millions)	2018	2019	2020	2021	2022 YTD	2018 - 2022 YTD
Cash flow from operations	\$1,028	\$963	\$1,252	\$1,083	\$1,212	\$5,538
Capital expenditure	(111)	(127)	(188)	(163)	(118)	(707)
Free cash flow	\$917	\$836	\$1,064	\$920	\$1,094	\$4,831
Verafin structuring items <sup>1</sup>	—	—	—	323	—	323
Section 31 fees, net <sup>2</sup>	9	(14)	(57)	106	40	84
Free cash flow ex. Section 31 and Verafin structuring items	\$926	\$822	\$1,007	\$1,349	\$1,134	\$5,238
<i>Uses of (provided for) cash flow</i>						
Share repurchases	\$394	\$200	\$222	\$468	\$308	\$1,592
Cash paid for ASR agreement	—	—	—	475	325	800
Net repayment/(borrowing) of debt	320	430	(1,912)	(409)	195	(1,376)
Acquisitions, net of dispositions and other	(380)	63	157	2,240	41	2,121
Verafin structuring items <sup>1</sup>	—	—	—	323	—	323
Dividends paid	280	305	320	350	285	1,540
Total uses of (provided for) cash flow	\$614	\$998	\$(1,213)	\$3,447	\$1,154	\$5,000

<sup>1</sup> Verafin purchase price of \$2.75B reflected certain amounts that were paid post close due to tax and other structuring items. These included a tax payment of \$221M and a purchase price holdback escrow of \$102M. The cash outflow for the tax liability is offset within Acquisitions of businesses, net of cash and cash equivalents acquired within investing activities, leading to no impact on the total change in cash and cash equivalents and restricted cash and cash equivalents for the year ended December 31, 2021.

<sup>2</sup> Net of change in Section 31 fees receivables of \$(10) million in 2018; \$9 million in 2019; \$35 million in 2020; \$(56) million in 2021; \$40 million in 2022 YTD; and \$18 million in 2018- 2022 YTD.



# Solutions Businesses Organic Growth

(U.S.\$ millions)			Total Variance		Organic Impact		Other <sup>1</sup>	
	Current Period	Prior year Period	\$M	%	\$M	%	\$M	%
3Q22	\$677	\$627	50	8%	61	10%	(11)	(2)%
2Q22	673	616	57	9%	68	11%	(11)	(2)%
1Q22	664	586	78	13%	70	12%	8	1%
4Q21	668	572	96	17%	66	12%	30	5%
2022 YTD	2,014	1,829	185	10%	194	11%	(9)	(1)%
2021 <sup>2</sup>	2,511	2,102	409	19%	288	14%	121	6%
2020 <sup>3</sup>	2,124	1,927	197	10%	173	9%	24	1%
2019 <sup>3</sup>	1,927	1,785	142	8%	115	6%	27	2%
2018 <sup>3, 4</sup>	1,825	1,649	176	11%	114	7%	62	4%
2017 <sup>3, 4, 5</sup>	1,843	1,731	112	6%	74	4%	38	2%

Note: The sum of the percentage changes may not tie to the percent change in total variance due to rounding.

<sup>1</sup> Other impact includes acquisitions, divestitures, and changes in FX rates.

<sup>2</sup> Solutions businesses revenues are not recast for the Broker Services wind down that occurred in 2022.

<sup>3</sup> Solutions businesses revenues are not recast for the NPM contribution and NFI sale that occurred in 2021 and the Broker Services wind down that occurred in 2022.

<sup>4</sup> Solutions businesses are not recast for the Bwise enterprise governance, risk and compliance software platform, which was sold in March 2019.

<sup>5</sup> Solutions businesses are not recast for the Public Relations Solutions and Digital Media Services businesses, which were sold in mid-April 2018.



# Total Organic Revenue Growth

	<i>(US\$ millions)</i>		Total Variance		Organic Impact		Other <sup>1</sup>	
	Current Period	Prior year Period	\$M	%	\$M	%	\$M	%
3Q22	\$890	\$838	52	6%	77	9%	(25)	3%
2Q22	893	846	47	6%	76	9%	(29)	3%
1Q22	892	851	41	5%	51	6%	(10)	1%
4Q21	885	788	97	12%	78	10%	19	2%
2022 YTD	2,675	2,534	141	6%	199	8%	(58)	(2)%
2021	3,420	2,903	517	18%	386	13%	131	5%
2020	2,903	2,535	368	15%	350	14%	18	1%
2019	2,535	2,526	9	-%	83	3%	(74)	(3)%
2018	2,526	2,411	115	5%	188	8%	(73)	(3)%
2017	2,411	2,276	135	6%	52	2%	83	4%

Note: The sum of the percentage changes may not tie to the percent change in total variance due to rounding.

<sup>1</sup> Other impact includes acquisitions, divestitures, and changes in FX rates.

# Segment EBITDA

	LTM' 22
Market Platforms net revenue	\$1,420
Market Platforms operating income	\$742
Depreciation	\$59
Market Platforms EBITDA	\$801
Market Platforms EBITDA margin	56%
Capital Access Platforms revenue	\$1,834
Capital Access Platforms operating income	\$1,045
Depreciation	\$35
Capital Access Platforms EBITDA	\$1,080
Capital Access EBITDA margin	59%
Anti-Financial Crime net revenue	\$292
Anti-Financial Crime operating income	\$73
Depreciation	\$9
Anti-Financial Crime EBITDA	\$82
Anti-Financial Crime EBITDA margin	28%



# Non-GAAP Return on Invested Capital

We define return on invested capital, or ROIC, as non-GAAP net operating profit less amortization of acquired intangibles, adjusted for tax, divided by invested capital. The income tax adjustment reflects the effective non-GAAP tax rate during the period. Invested capital is defined as the aggregate of the average of debt and equity, less average of cash & equivalents and investments. ROIC is not a measure of financial performance under U.S. GAAP and should not be considered a substitute for return on assets, net earnings or total assets as determined in accordance with GAAP and may not be comparable to similarly titled measures reported by other companies.

<i>(U.S.\$ millions)</i>	2017	LTM'22
Non-GAAP operating income	\$1,140	\$1,868
Amortization of acquired intangibles	(92)	(172)
Non-GAAP tax rate	34%	23%
Income tax adjustment	(351)	(398)
Net operating profit after tax (a)	697	1,298
<b>Invested Capital</b>		
Average debt	3,905	5,650
Average equity	5,654	6,120
Average cash & cash equivalents	(390)	(302)
Average investments	(240)	(157)
Average Invested Capital (b)	8,929	11,310
Return on Invested Capital (a / b)	7.8%	11.5%





# Defined Terms

**ARR:** ARR for a given period is the annualized revenue derived from subscription contracts with a defined contract value. This excludes contracts that are not recurring, are one-time in nature, or where the contract value fluctuates based on defined metrics. ARR is currently one of our key performance metrics to assess the health and trajectory of our recurring business. ARR does not have any standardized definition and is therefore unlikely to be comparable to similarly titled measures presented by other companies. ARR should be viewed independently of revenue and deferred revenue and is not intended to be combined with or to replace either of those items. ARR is not a forecast and the active contracts at the end of a reporting period used in calculating ARR may or may not be extended or renewed by our customers.

**Solutions Businesses:** Revenues from our Market Platforms, Capital Access Platforms, and Anti-Financial Crime segments.

**Net Revenues:** Revenues less transaction-based expenses.

**AUM:** Assets Under Management.

**ETP:** Exchange Traded Product.

**NFI:** Nasdaq's former U.S. Fixed Income business, which was sold in June 2021.

**NPM:** Nasdaq Private Market.

**Net Promotor Score (NPS):** A measure used to gauge customer loyalty, satisfaction and enthusiasm with a company or product or service.

**New Logo Clients:** New clients that have not previously transacted with Nasdaq.

**Rule of 40:** Reflects the sum of year over year revenue percentage change plus EBITDA margin over last 12 months.



# Investor Day

November 8, 2022

