



**GS FINANCIAL SERVICES  
CONFERENCE 2017**

*DECEMBER 2017*

# EXECUTIVE SUMMARY

*UNIQUE FRANCHISE, SIGNIFICANT OPPORTUNITIES, DEFINED STRATEGY AND GOALS*



## Mission

We bring together ingenuity, integrity, and insights to deliver markets that accelerate economic progress and empower people to achieve their greatest ambitions.



## Strategy

Leverage our market technology and information analytics expertise across our global capital markets customer base.



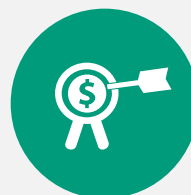
## Results

**\$2.4** Billion LTM net revenues<sup>1</sup>

**75%** Recurring/subscription revenues<sup>2</sup>

**50%** EBITDA margin in 2016

**27%** 5-Yr average annual TSR<sup>3</sup>



## Targets

**Mid-single digit organic growth**

*Across non-transactional segments*

*Over medium term (3-5 years)*

- Market Technology: mid to high single digits
- Information Services: mid single digits
- Corporate Services: low single digits

*We target to deliver double digit total shareholder return (TSR)*

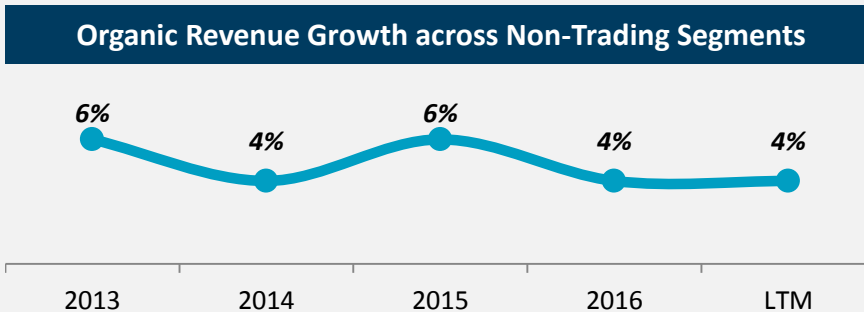
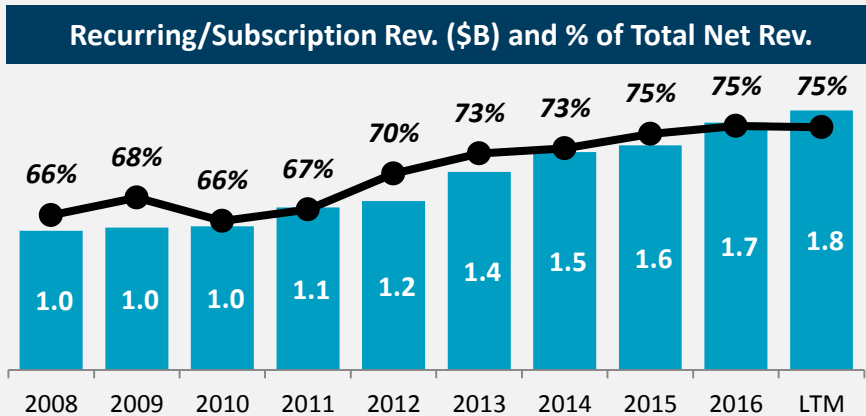
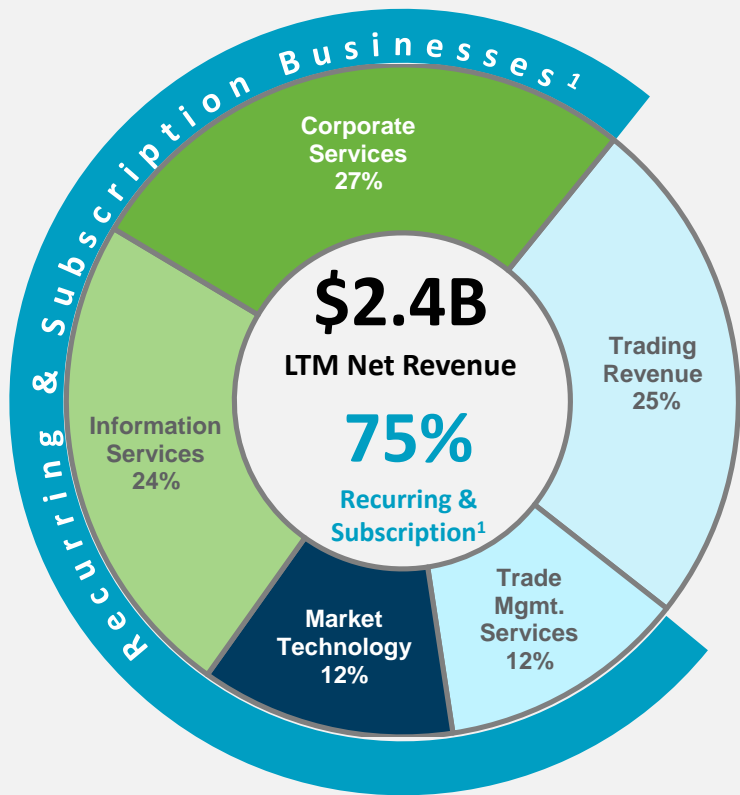
<sup>1</sup>Represents revenues less transaction-based expenses.

<sup>2</sup>Represents LTM revenues from our Corporate Services, Information Services and Market Technology segments, plus our Trade Management Services business.

<sup>3</sup>5-year annual total shareholder return through 10/31/17.

# NASDAQ'S RECURRING BUSINESS MIX

FROM LEADING TECHNOLOGY, CONTENT AND CONNECTIVITY



Medium-Term (3-5Yr) Organic Revenue Growth Outlook

MARKET TECHNOLOGY	INFORMATION SERVICES	CORPORATE SERVICES	NON-TRADING SEGMENTS (IS, MT, CS)
Mid to High Single Digits	Mid Single Digits	Low Single Digits	Mid-Single Digits

<sup>1</sup>Represents LTM revenues from our Corporate Services, Information Services and Market Technology segments, plus our Trade Management Services business.

# EVOLUTION OF INDUSTRY CREATES OPPORTUNITY

## Marketplace Economy

Increasingly commerce is being transacted via electronic marketplaces and financial institutions are seeking to digitize processes to gain efficiencies.



## Data Explosion

A “trillion sensor” economy creates new real-time data sources, new investment processes and need for new analytic capabilities.



## Evolution of Investment Management

Alternative investment and financing options are becoming more accessible, creating new opportunities and challenges.



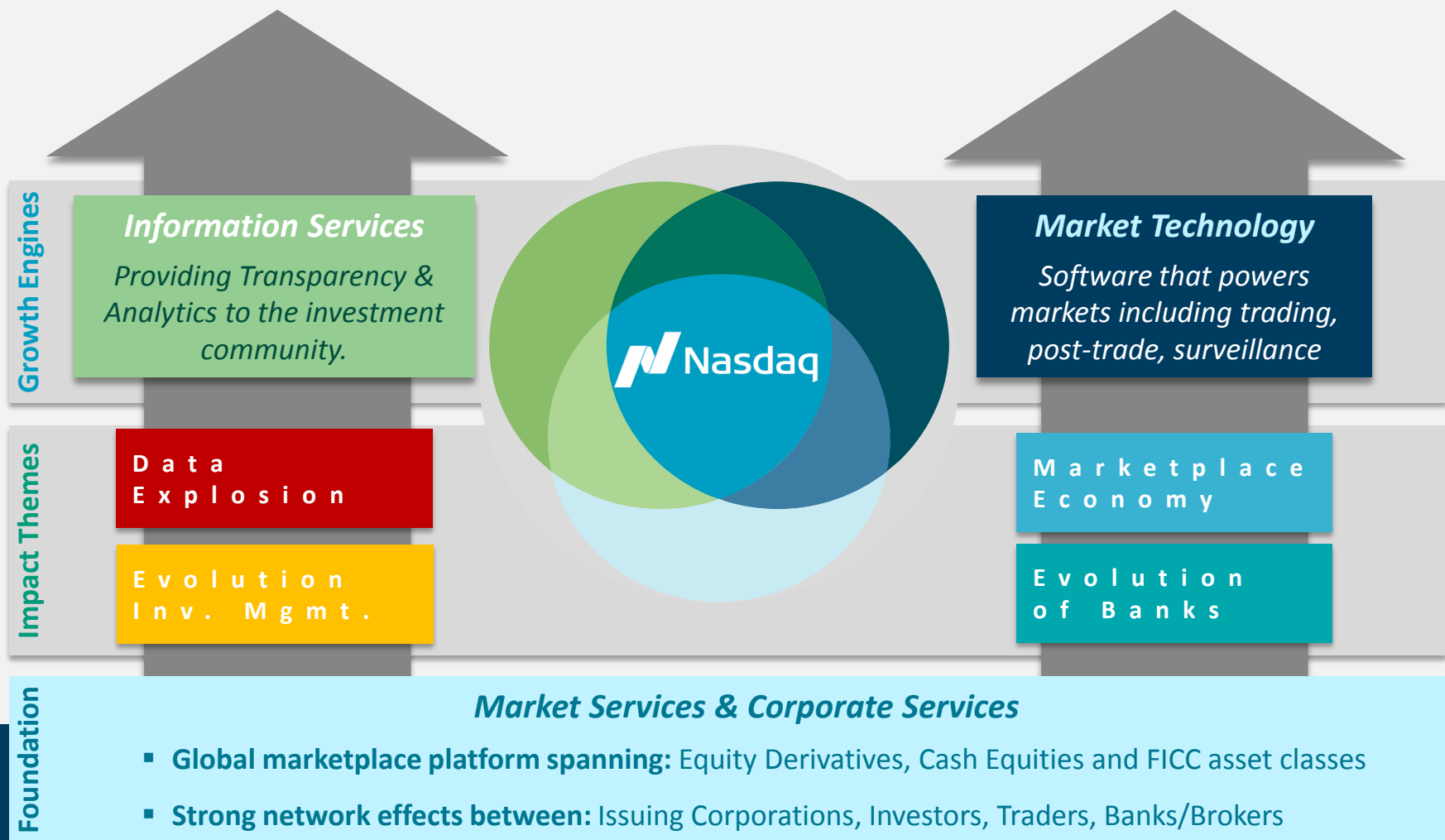
## Banks Embrace Change as They Evolve

Banks will succeed by leveraging technology & scaled client network, and will manage costs by outsourcing non-differentiating capabilities and processes.



# NASDAQ'S STRATEGY & ORIENTATION

*LEVERAGE OUR MARKET TECHNOLOGY AND INFORMATION ANALYTICS EXPERTISE  
ACROSS OUR GLOBAL CAPITAL MARKETS CUSTOMER BASE*



# OPTIMIZE INVESTMENT CAPITAL AND RESOURCES

*MAINTAINING RESILIENT FOUNDATION WHILE INVESTING IN GREATEST OPPORTUNITIES*

Increase  
Resources  
For  
Growth



Increase Investment In Our  
Strongest Growth Assets

Continue To Invest In New  
Opportunities  
With High Potential

**Sizable, defined opportunities  
that leverage our foundation:**

Market Technology  
Information Services  
NPM/NFX

Sustain  
Our  
Foundation



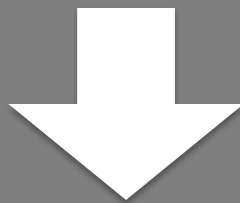
Sustain Investment  
in Core Assets

Focus On  
Operational Excellence

**Nasdaq's leading marketplaces  
and listings franchises:**

Market Services  
Corporate Services

Optimize  
Slower  
Growth  
Businesses



De-emphasize resources  
and capital allocation

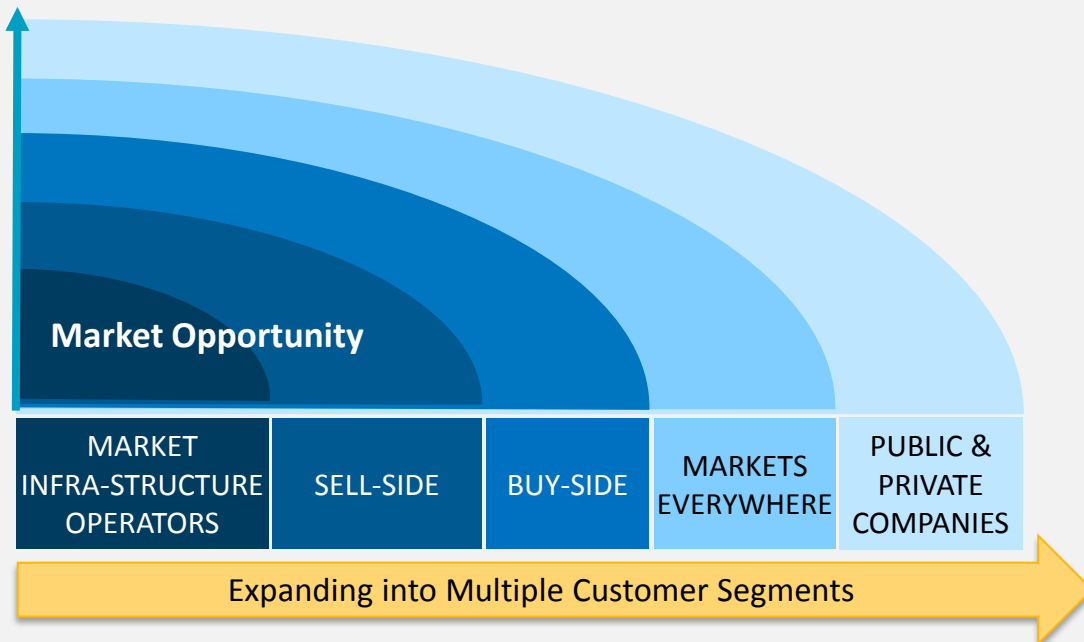
Focus On Efficiency

**Capital/resources can be  
released for reinvestment  
towards higher returns:**

Business unit sub-segments

# MARKET TECHNOLOGY

## LEADING TECHNOLOGY PROVIDER LEVERAGING MARKET CORE



### Investing In

- Nasdaq Financial Framework (NFF)
- SMARTS product and customer expansion
- Deeper surveillance and behavioral capabilities through Sybenetix

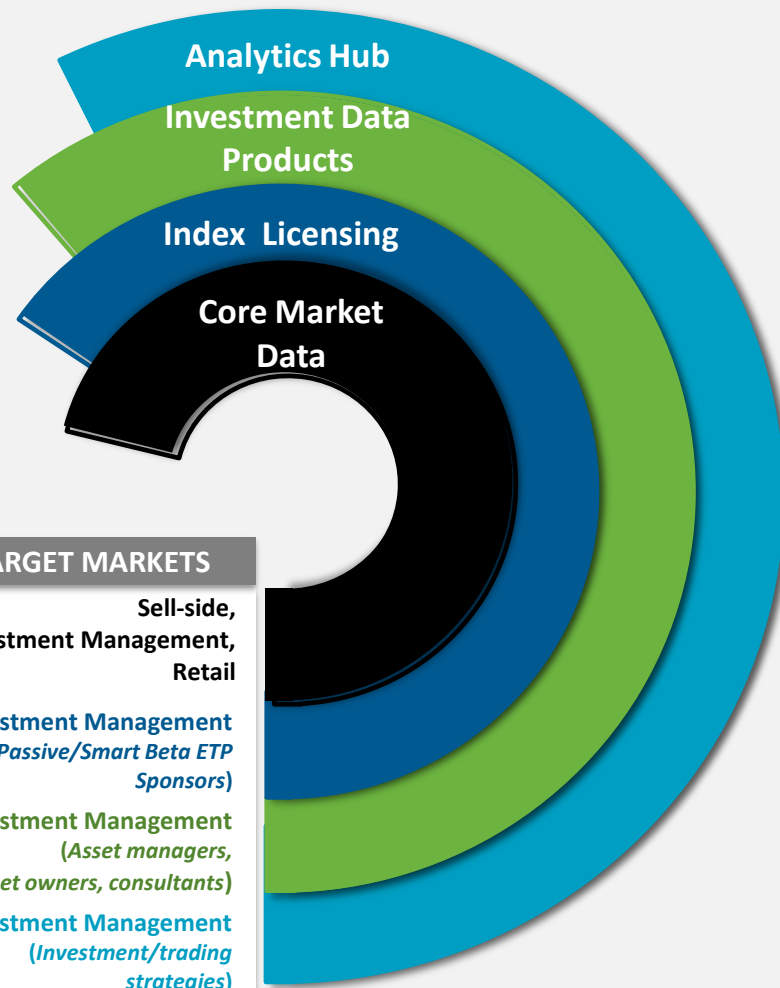
### Service Delivery Model

- Moving from deployed software to a Platform-as-a-Service over time as cloud capabilities and market acceptance mature

Growth Opportunities				
Add New Exchange Clients and Expand Services to Existing Exchanges	SMARTS Trade Surveillance & Reg Tech Growth	Launching SMARTS Buy-side	Non-Financial Market Transaction Applications	Bwise GRC Growth
Mandates with New Regulators	Host Single-Dealer Trading Platforms	Leverage Sybenetix Behavioral Analytics	Non-Financial Surveillance Opportunities	

# INFORMATION SERVICES

## EXPANDING OUR VALUE PROPOSITION



## GROWTH DRIVERS

### Analytics Hub

**Proprietary/3<sup>rd</sup>-party data sets with powerful analytics**

- Expect to expand number of products on platform from single digits at launch to dozens by first year, broadening appeal
- Growth driven by addition of customers

### Investment Data Products

**Information clearinghouse for the institutional buy-side**

- Investment Managers need better measurement and transparency to win mandates from asset owners
- Geographic and private-asset expansion opportunities

### Index Licensing

**Licensing proprietary benchmark and smart-beta indices**

- Benefits from passive and smart-beta secular flows
- Opportunity to increase share from higher contribution of smart-beta segment, robust product creation pipeline

### Core Market Data

**Information used to navigate our leading marketplaces**

- Continue line extension
- Geographic expansion of core trading data distribution
- Periodic pricing adjustments



# MARKET SERVICES

*A RESILIENT BUSINESS WITH STRATEGIC ASSET CLASSES AND GEOGRAPHIC EXPANSION OPPORTUNITIES*



*RELENTLESS COMMITMENT TO TECHNOLOGY,  
MARKET QUALITY AND SERVICE*

## TACTICAL OPPORTUNITIES TO BUILD ON STRATEGIC ASSETS

### Equity Derivatives

- Capitalize on multiple options exchange medallions
- Emphasis on the positioning of our exchanges across the various client segments

### Cash Equities

- Expand Auction-on-Demand service from Nordic centric to a Pan-European solution
- Leverage Nasdaq Financial Framework to strengthen our platforms

### FICC

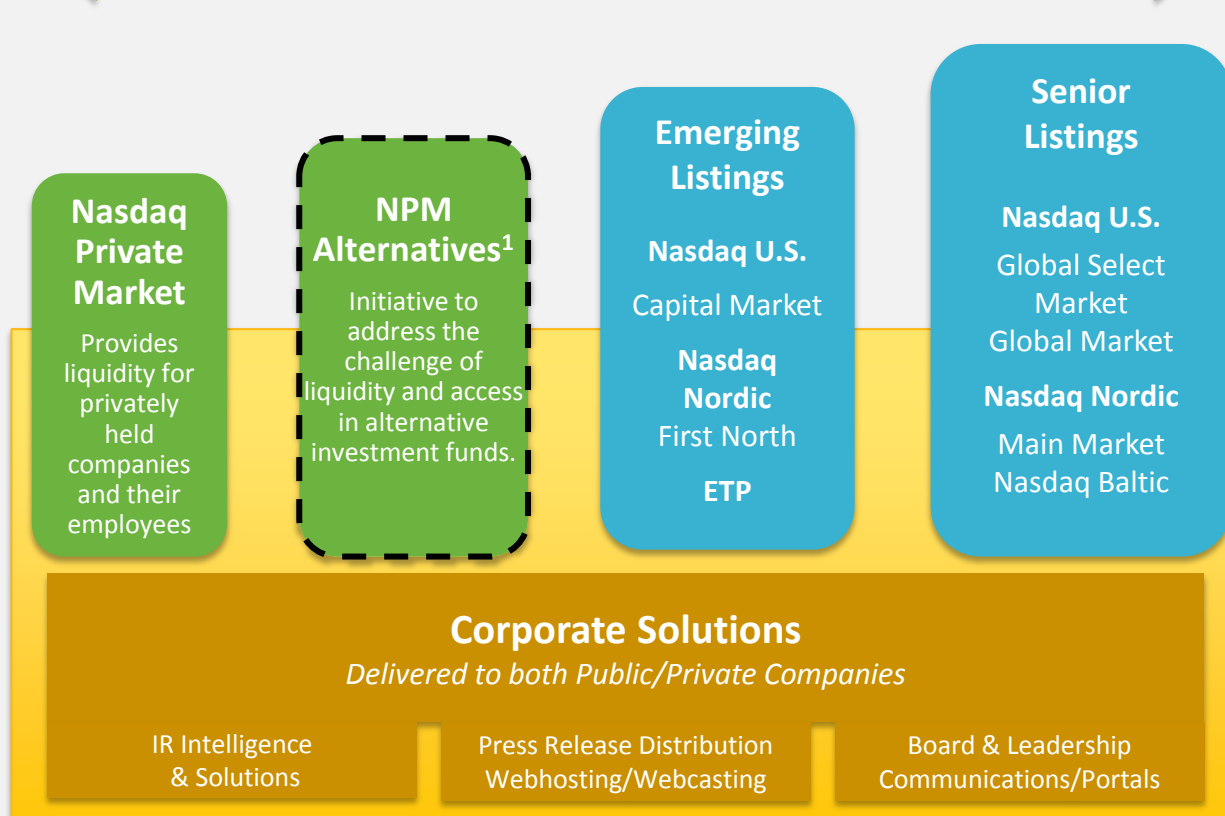
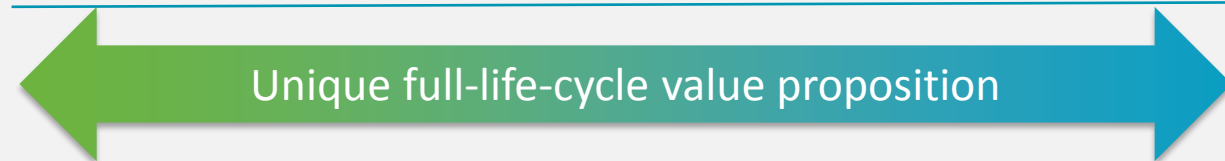
- Expand energy/commodity product suite
- Auctions and midpoint matching for liquidity events
- Increase geographical coverage for bond listings

### Trade Management Services

- Expand point-of-presence locations globally
- On premise cloud-based solutions

# CORPORATE SERVICES

## A LEADING PROVIDER TO CORPORATES: CORE MARKET ECOSYSTEM CONSTITUENT



### Growth Opportunities

Continuing to improve the competitive positioning of our U.S./Nordic listing franchises to enable continued share gains

Bringing unique cross-product functionality to Corporate Solutions offerings to facilitate deeper and broader relationships

Leverage NPM and our regulatory/technology expertise to solve liquidity/distribution challenges in private space

<sup>1</sup>NPM Alternatives is a new initiative announced in 2017

# NASDAQ 2017 EXECUTION PRIORITIES

## 1 Enhance Competitive Positioning

### Market Services:

- Increased share in US Options, Equities
- NFX: 3Q17 ADV 192k, +33% YoY, OI 3.3M

### Information Services:

- Launched Analytics Hub
- \$154B Index AUM at 9/30/17, +31% YoY

### Corporate Services:

- Nordic IPOs on record pace

### Market Technology:

- Strong sales of NFF

## 2 Complete Integration of Acquisitions

### Market Services

- Completed CX Canada and ISE migrations successfully
- Delivering efficiencies to customers

### Corporate Services

- Integrated Marketwired/ GlobeNewswire

### Financial Targets:

- Achieved \$60m YE2017 target ahead of schedule

## 3 Commercialize Disruptive Technologies

### Blockchain:

- Capabilities imbedded in Nasdaq Financial Framework
- Announced providing DLT MVP for SIX Swiss Exchange's OTC structured products business
- Nasdaq Linq integrated payment solution with Citi

### Cloud:

- Utilize across Corporate Solutions
- Utilize in Nasdaq Private Market

### Machine Intelligence:

- Analytics Hub
- Corporate Solutions

Progress

Opportunities

### Market Services:

- Nordic Equities Auction On Demand

### Information Services:

- Expanding Analytics Hub offering

### Market Technology:

- Buy-side Smarts offering

### Corporate Services:

- NPM Alternatives

### Market Services:

- Nasdaq CXC exchange license

### Corporate Services:

- Integrate board portal platforms

### Financial Targets:

- \$10-\$20m in additional synergies identified for 2016 acquisitions

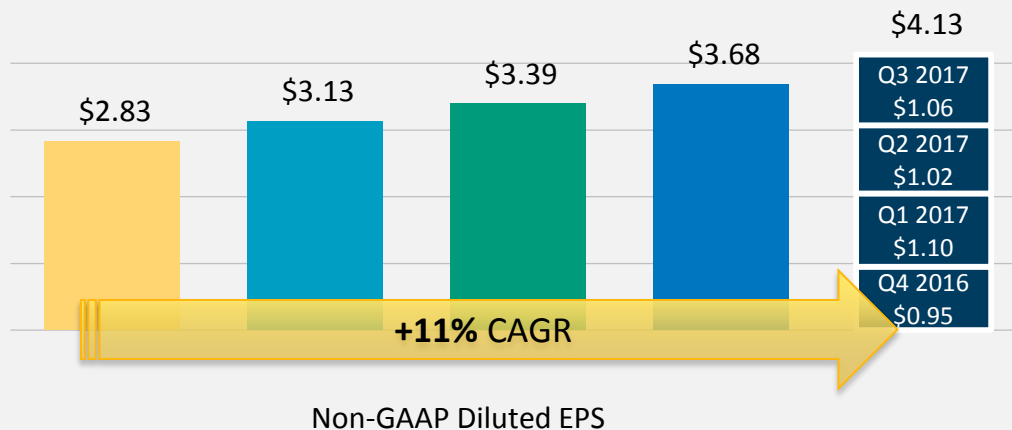
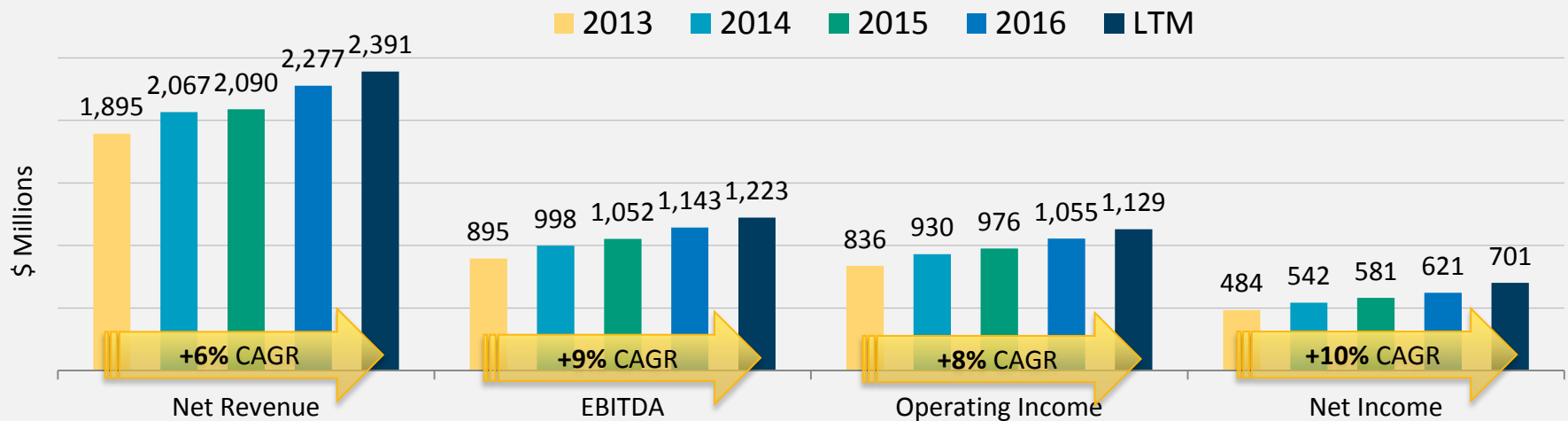
### Cloud:

- NFF as a cloud solution

### Machine Intelligence:

- eComms buy-side compliance and holistic surveillance
- Voice command in Corporate Solutions

# REVENUE, EBITDA, OPERATING AND NET INCOME<sup>1</sup>



## Operating Income Margin Trends

Segment	2013	2014	2015	2016	LTM
Information Services <sup>2</sup>	75%	74%	71%	71%	72%
Corporate Services	23%	22%	25%	25%	27%
Market Technology	19%	20%	24%	25%	23%
Market Services	48%	52%	54%	54%	54%
<b>Total Nasdaq<sup>3</sup></b>	<b>44%</b>	<b>45%</b>	<b>47%</b>	<b>46%</b>	<b>47%</b>

1. EBITDA, operating income and net income reflect non-GAAP results. Please refer to the Appendix for a complete reconciliation of U.S. GAAP to non-GAAP numbers.
2. Information Services' margins reflect allocation of costs that support the operation of various aspects of Nasdaq's business, including Market Services, to units other than Information Services.
3. See our non-GAAP schedule on slide 29.

# OUR CAPITAL ALLOCATION APPROACH

## A Proactive Methodology For Success

### Capital Invested To Foster Growth

### Capital Returned to Shareholders

#### Organic Growth Capital

**Consistent allocation to R&D initiatives (\$40-\$50M)**

Funding dependent on achieving operating and financial milestones

#### Strategic & Tactical Acquisitions

**Strategic acquisitions**

High financial return potential over medium-longer term

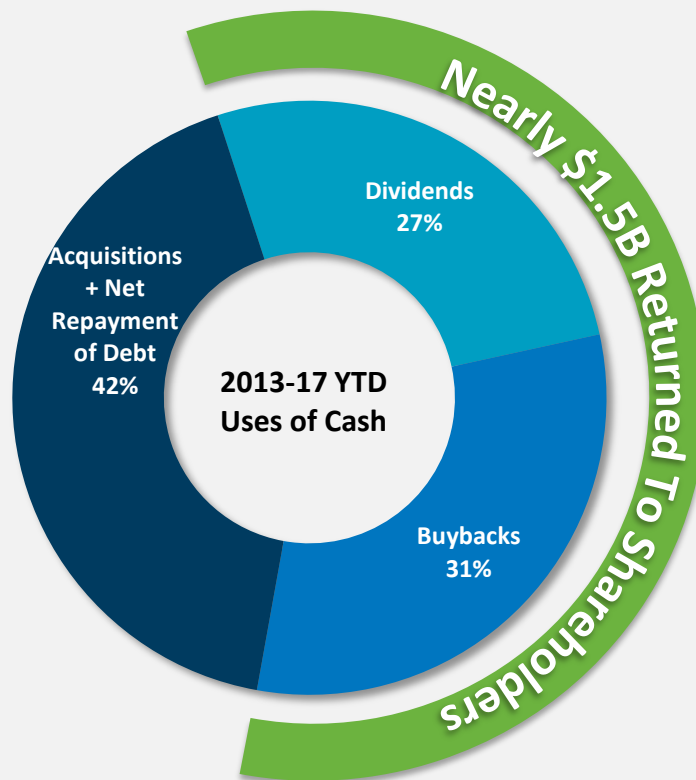
**Tactical acquisitions**

Financial return focus over short-medium term

#### Venture Capital

**Small, but strategic investments**

Emerging technology aligned to strategy & operations



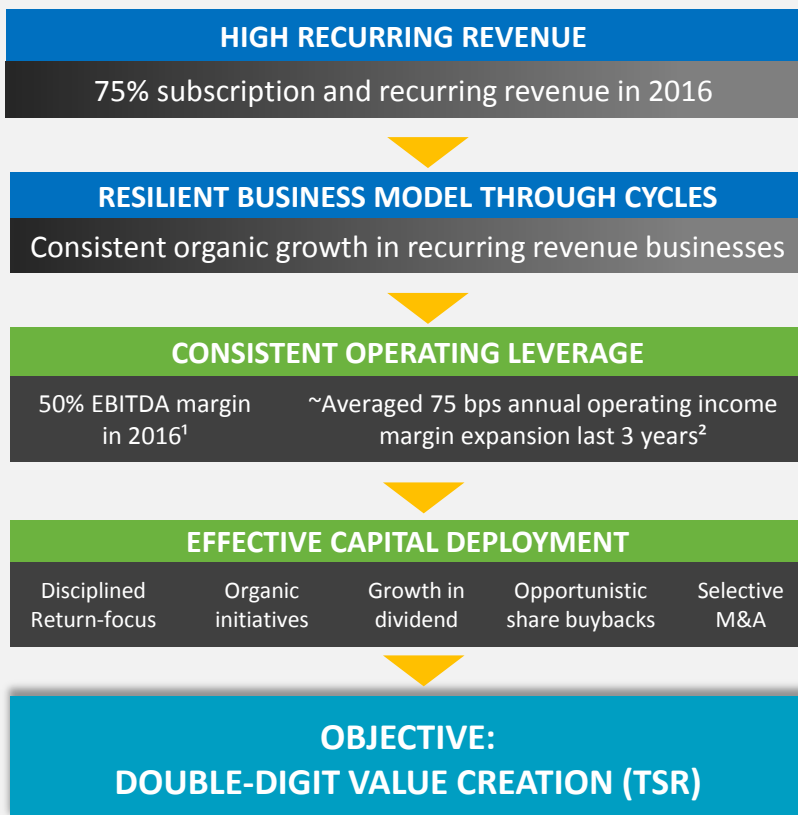
Grow dividend as income and cash flows increase

Buybacks focused primarily on offsetting equity issuance

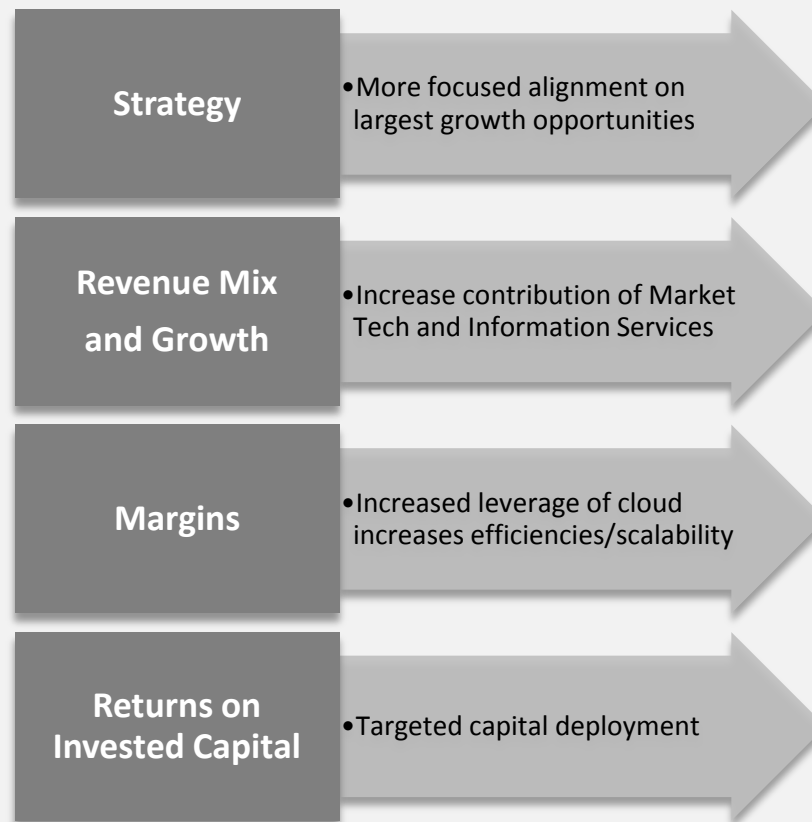
Deleveraging from >3x to "mid-2"x Debt/EBITDA by 1H 2019

# PROFITABLE GROWTH DRIVES VALUE CREATION

## Consistent Double-Digit Value Creation Ambition



## Focus on Improving Valuation-Sensitive Fundamentals



<sup>1</sup>Please see page 26 for EBITDA reconciliation.

<sup>2</sup>Non-GAAP operating margin increased from 44% in 2013 to 46% in 2016. Please see page 29 for reconciliation of U.S. GAAP operating income to non-GAAP operating income.