

UNLEASHING THE LIMITLESS POTENTIAL OF THE CREATIVE MIND



# SAFE HARBOR

This presentation and the accompanying oral commentary contain “forward-looking” statements that are based on our beliefs and assumptions and on information available to us as of the date of this presentation. All statements other than statements of historical facts contained in this presentation, including statements regarding our future results of operations and financial position, including our customer lifetime value, strategy and plans, market size and opportunity, competitive position, industry environment, potential growth opportunities and our expectations for future operations, are forward-looking statements. The words “believe,” “may,” “might,” “objective,” “ongoing,” “will,” “estimate,” “continue,” “anticipate,” “design,” “intend,” “expect,” “could,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “would” or the negative version of these words and similar expressions are intended to identify forward-looking statements. This presentation also contains non-GAAP financial measures. We have provided a reconciliation of such non-GAAP financial measures to the most directly comparable measures prepared in accordance with U.S. GAAP in the Appendix to this presentation.

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# Company Overview

James R. Scapa • Founder, Chairman and CEO



## OUR VISION



**To transform product design and organizational decision making  
by applying simulation, optimization and high performance computing  
throughout product lifecycles**



# INVESTMENT HIGHLIGHTS

**Broad software suite** to design and optimize complex, highly engineered products

Well-positioned to gain share in **large, growing markets**

**Global blue-chip customer base** across industries

Powerful business model drives **high engagement & retention**, and **high recurring revenue**

Attractive combination of **scale, profitable growth**, and **margin expansion** opportunities



# ALTAIR AT A GLANCE

*Long heritage of solving some of the most challenging engineering problems*



**\$313M**

FY16 Revenue



**\$31 M**

FY16 Adjusted EBITDA



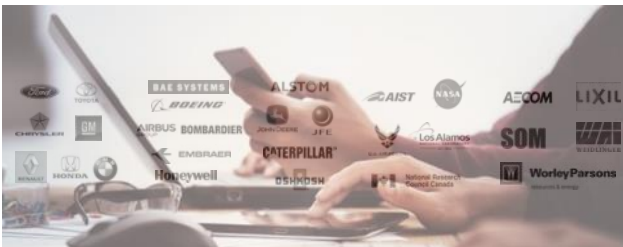
**Tens of Thousands**

of Global Users



**2,000+**

Engineers, scientists, and creative thinkers



**5,000+**

Customer installations globally



**69 offices**

in 24 countries

# OUR BUSINESS

## Software



**FY16 Revenue  
% of total**

**\$260M**  
**83%**

### Offerings

- Simulation / Digital Twin platform
- Simulation-driven Design
- High Performance Computing (HPC)
- IoT Platforms and Visual Analytics

**HyperWorks®**

**solidThinking®**

**PBS Works™**

**carriots®**

## CES



**\$48M**  
**15%**

Long-term ongoing  
engineering, design and  
development expertise

## Innovation



**\$6M**  
**2%**

**toggled®**

**WEYV™**



# PRINCIPAL DRIVERS OF GROWTH FOR SIMULATION

Fundamental **transformations** in product engineering

Increasing **sophistication and fidelity** of simulation technologies

**Democratization** of simulation

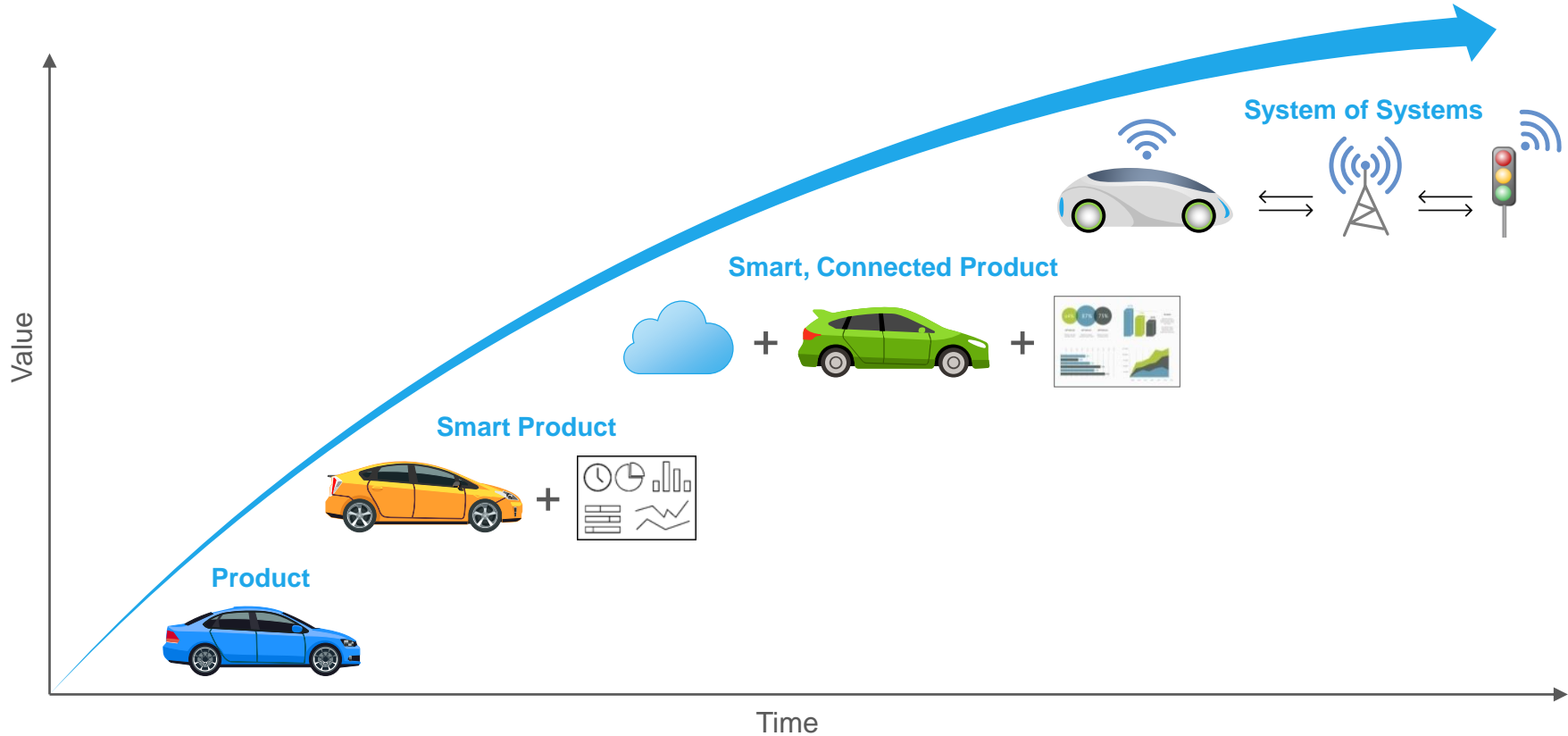
An emerging paradigm of **simulation-driven design**

Expanding scope of simulations to **“Digital Twins”**

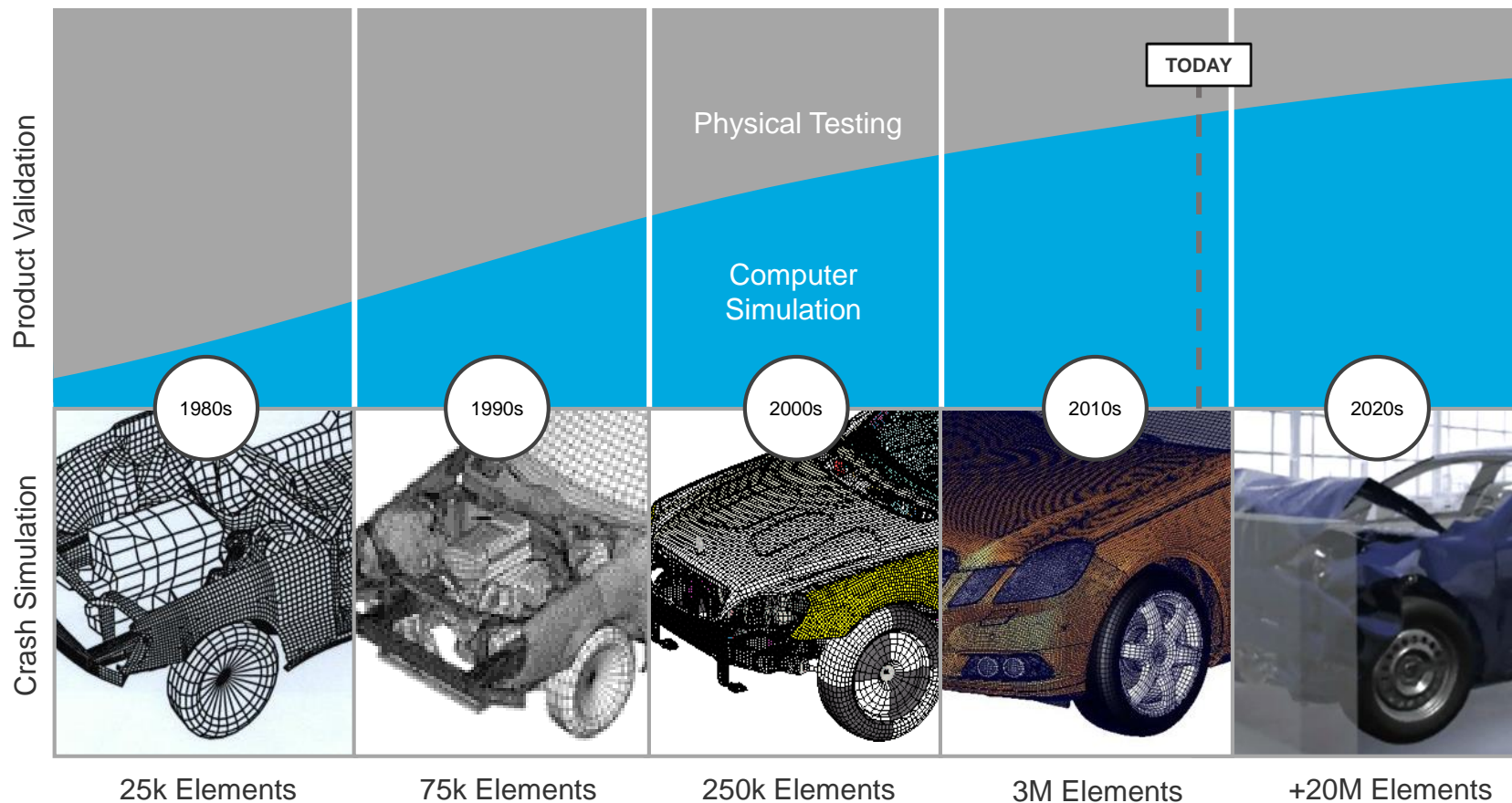




# EVOLUTION OF PRODUCT COMPLEXITY



# SIMULATION INCREASINGLY COMPLEX, DISPLACING PHYSICAL TESTING



# EVOLUTION OF SIMULATION-DRIVEN DESIGN

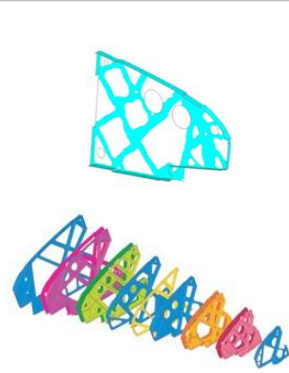
Product Design



1980s



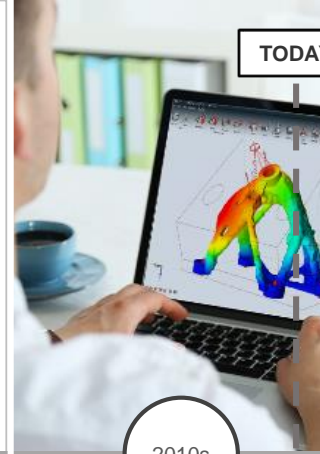
1990s



2000s

3D CAD

2D CAD &  
Manual Design



2010s

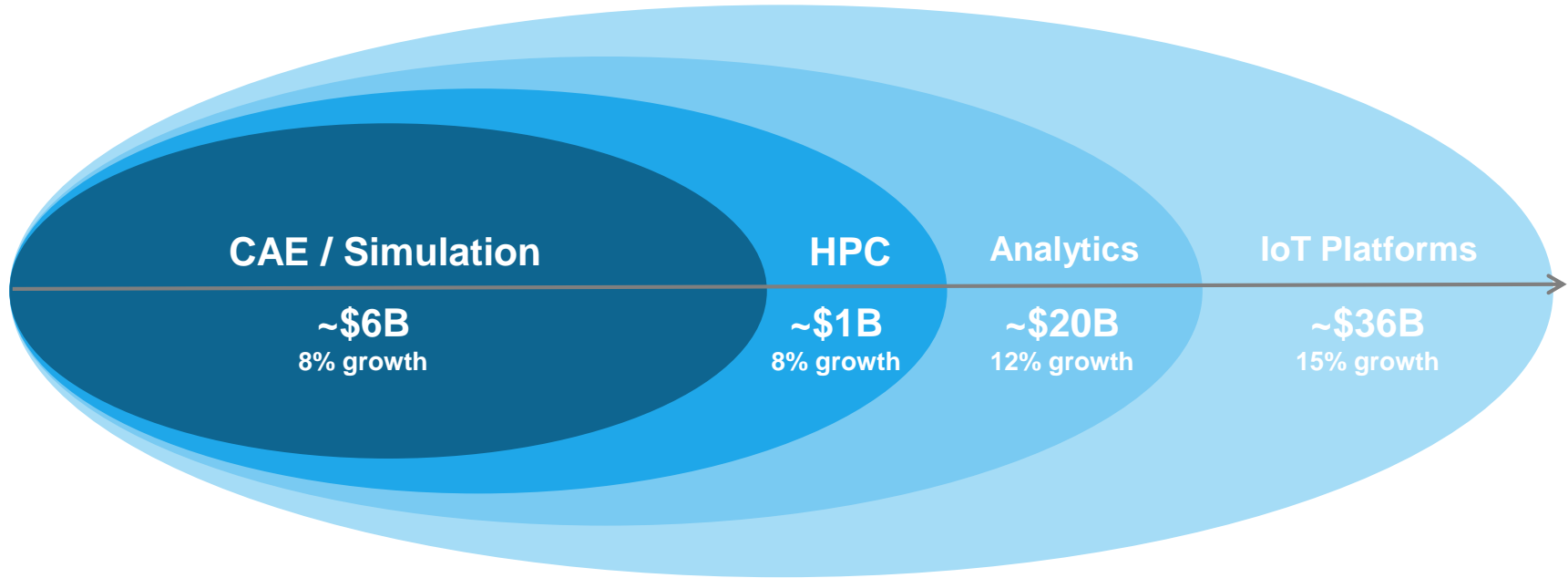


2020s

Simulation-driven  
Design



# WAVES OF CHANGE ARE EXPANDING OUR MARKET OPPORTUNITY



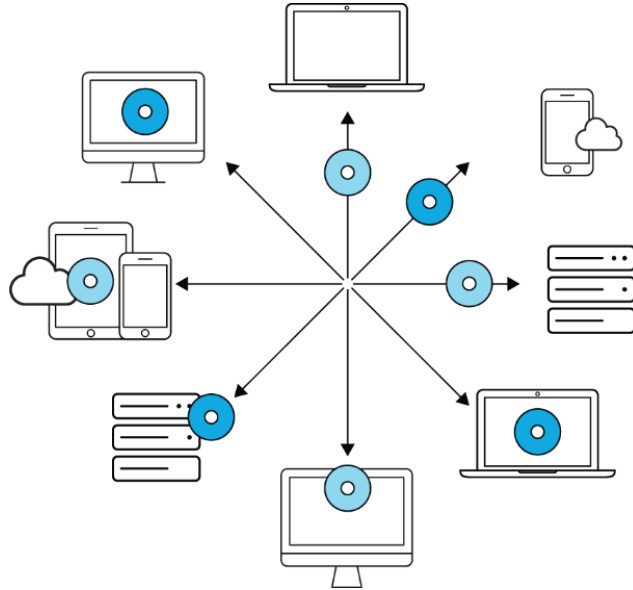
CIMdata expects the CAE market, “will be one of the more rapidly growing segments within the tools sector of PLM over the next five years, and forecasts that this market sector will exceed **\$7.8 billion in 2021**, with an **8.1% CAGR**.”

**“We are truly in the era of simulation-driven engineering.”**



# DIFFERENTIATED UNITS-BASED SUBSCRIPTION LICENSING MODEL

*Results in high retention, visibility and recurring revenues*



Customers purchase a pool of **shareable units**

Users draw units to utilize **ANY product** across **ANY location**

Units return to the pool after use and become **available to all users**

**Average customer uses ~15 products**





# ONE COMPREHENSIVE PLATFORM FOR SIMULATION NEEDS

HyperWorks®

solidThinking®

carriots®

PBS Works®

30+

Altair Applications

150+

Partner Products

~15

Average  
products used

1

Units-based  
Licensing Model

## Modeling & Visualization

HyperMesh

HyperCrash

HyperView

SimLab

HyperGraph

MotionView

## Solvers & Optimization

OptiStruct

WinProp

RADIOSS

Flux

AcuSolve

HyperStudy

Feko

MotionSolve

Multiscale Designer

## Simulation-driven Design

Evolve / Thea

Inspire

Click2Cast

Click2Extrude

Click2Form

Compose

Activate

Embed

## IoT & Analytics

Platform

Analytics

Digital Twin  
Gateway

## HPC

Professional

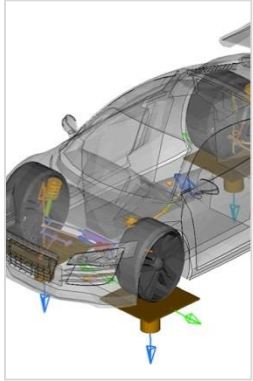
Access

Cloud

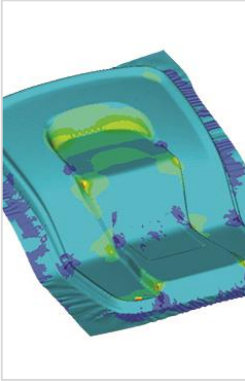


# BROAD PORTFOLIO OF SOLVERS ACROSS MULTIPLE PHYSICS TYPES

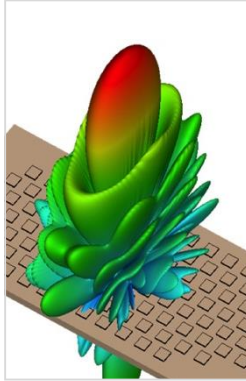
*Interconnected, smart products demand optimization across multiple physics to create cutting-edge designs*



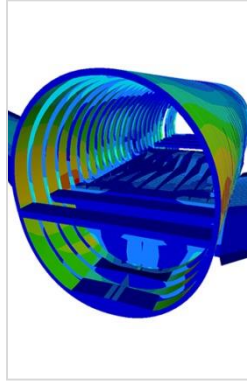
Systems  
Simulation



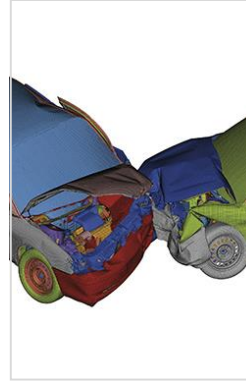
Manufacturing  
Simulation



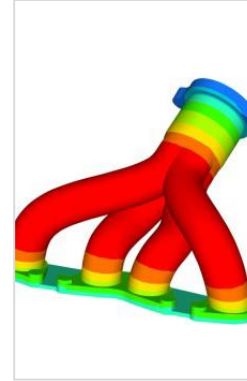
Electro-  
Magnetics



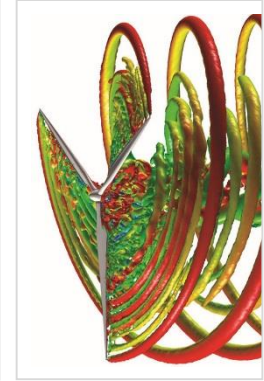
Structural  
Analysis



Crash, Safety,  
Impact & Blast



Thermal Analysis

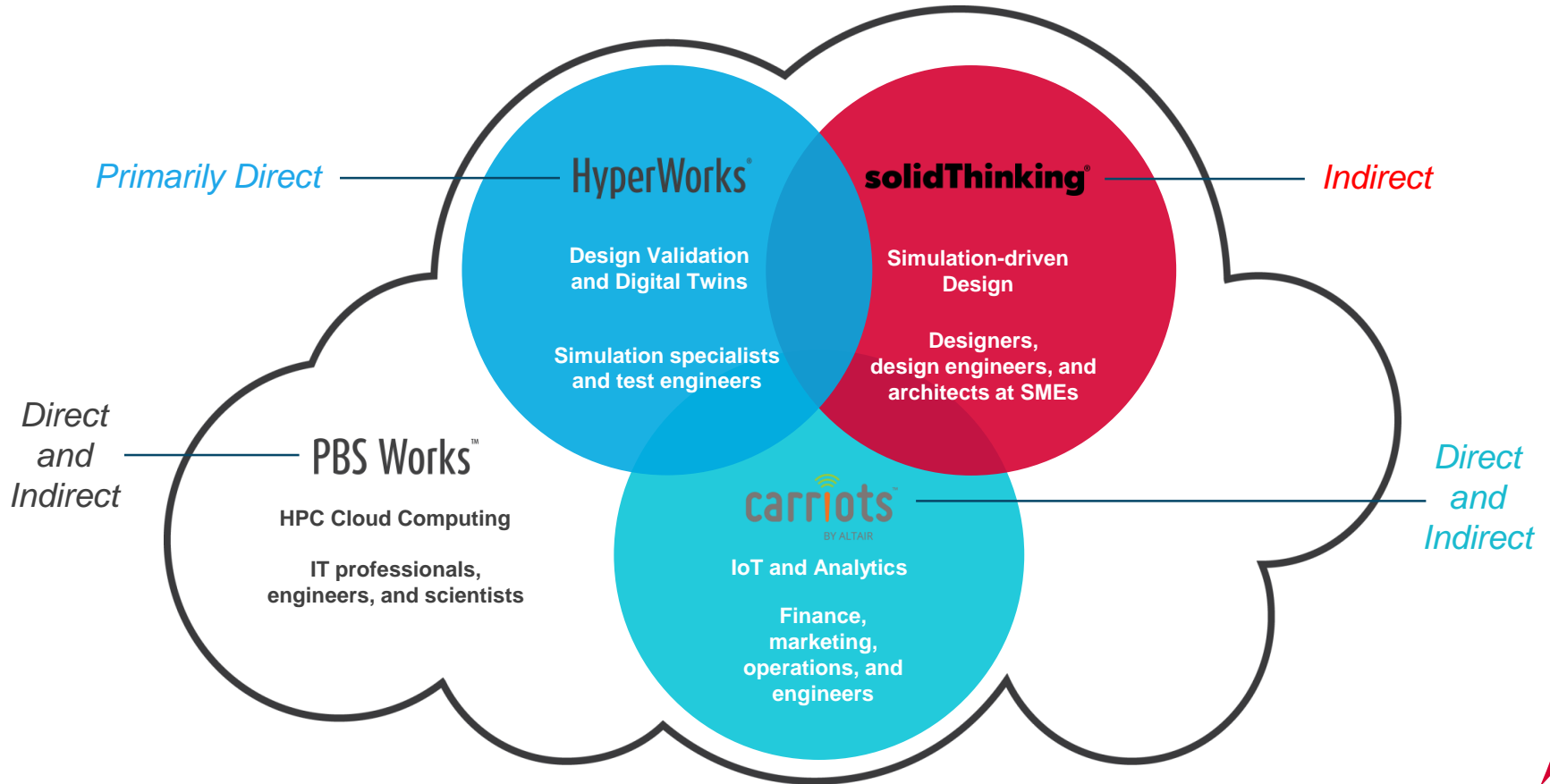


Fluid  
Dynamics

Altair is driving the multi-physics optimization opportunity



# OUR MARKETS, BRANDS, AND USERS



# GLOBAL BLUE-CHIP CUSTOMER BASE ACROSS INDUSTRIES

## Automotive



## Aerospace



## Architecture



## Consumer Goods



5,000+ customers globally

No customer >3%  
of Software billings

15 out of top 15  
auto manufacturers

10 out of top 10  
aerospace manufacturers

Decades-long relationships

## Energy



## Government



## Heavy Equipment



## Life / Earth Sciences



# WHY WE WIN

Breadth of Simulation Portfolio
































Leading Simulation Performance

Open Architecture

Units-Based Subscription Model

Deeply Loyal and Sticky User Base

Our Innovation DNA

CAE Market Landscape						
	Breadth of Simulation Portfolio	Simulation & Optimization Performance	Open Architecture	Strategic engineering services	Units-based Subscription Model	IoT & Analytics
 Altair						
<b>Competitor 1</b>						
<b>Competitor 2</b>						
<b>Competitor 3</b>						
<b>Competitor 4</b>						





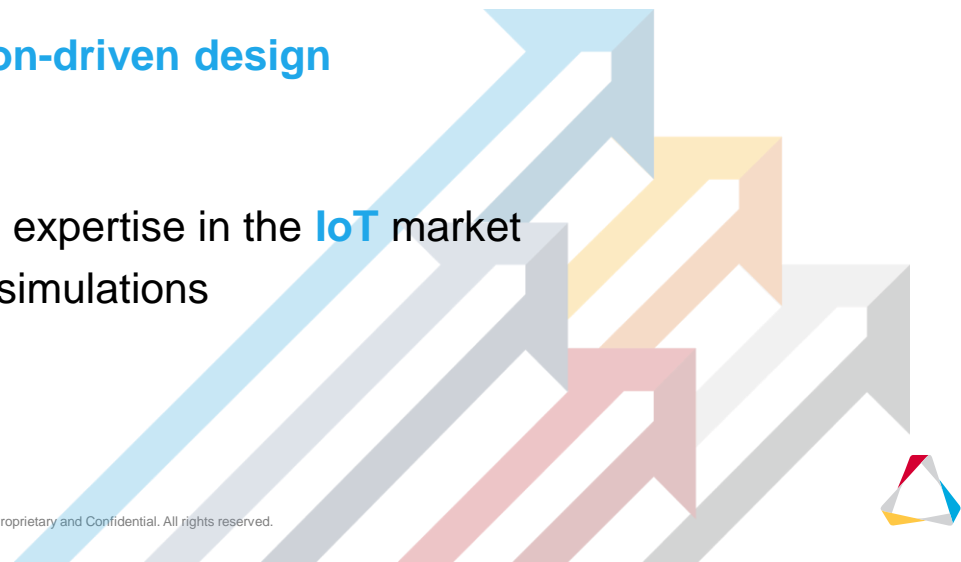
# SOFTWARE GROWTH OPPORTUNITIES

Grow market share for **solvers** and the expanding **cloud HPC** market

Build awareness and traction for our **model-based design** software solutions

Disrupt the traditional market with **simulation-driven design**

Leverage our customer portfolio, scale, and expertise in the **IoT** market with **platform, analytics, and digital-twin** simulations



# SOFTWARE GROWTH STRATEGIES

Increase software usage within our **existing customer base**

Invest in our **direct sales force** and **indirect sales channels**

Continue to invest in **R&D**

Selectively pursue **acquisitions** and **strategic investments**



# FOUNDER-LED, WITH A DEEP BENCH OF INDUSTRY VETERANS



**James R. Scapa**  
Founder, Chairman & CEO  
(32 years)



**Howard N. Morof**  
Chief Financial Officer  
(4 years)



**Brett Chouinard**  
President  
(23 years)



**Massimo Fariello**  
Chief Strategy Officer  
(24 years)



**James Dagg**  
Chief Technical Officer  
(30 years)



**Dr. Uwe Schramm**  
Chief Technical Officer  
(21 years)



**Sam Mahalingam**  
Chief Technical Officer  
(19 years)



**Jeffery M. Brennan**  
Chief Marketing Officer  
(25 years)



**Martin Nichols**  
Chief Information Officer  
(25 years)



**Tom Perring**  
Chief Administrative Officer  
(24 years)

Years denote tenure at Altair





# Financial Overview

Howard N. Morof • CFO



# FINANCIAL HIGHLIGHTS

**Scaled business** with global presence and attractive revenue growth

**Recurring model** with high visibility and predictability

Powerful “**retain, expand, and land**” strategy

**Strong free cash flow** generation

Proven profitability with **significant operating leverage** opportunities





# POWERFUL “RETAIN, EXPAND, AND LAND” STRATEGY

## Large, attractive base



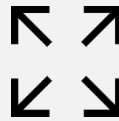
### Retain

**90%+ Recurring  
Software License Rate**

Maintain usage

Listen and respond  
to user requirements

Support, development



### Expand

**~60% of New Software Growth**

Grow usage

More engagement,  
new users, new products

Training, support,  
consulting, units-based model

## New customers & markets



### Land

**~40% of New Software Growth**

New customers

New verticals,  
high impact solutions

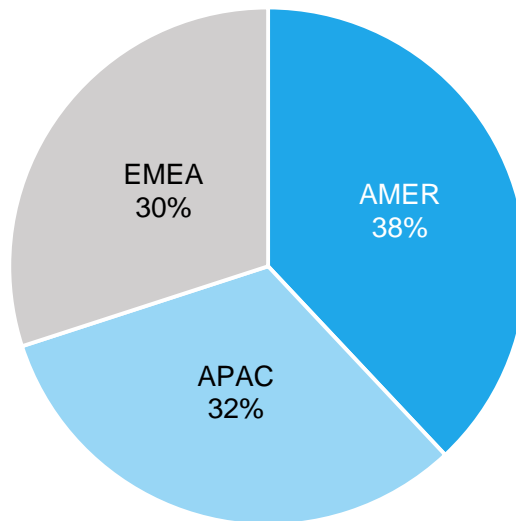
New channels and  
delivery models



# GLOBALLY DIVERSIFIED BUSINESS

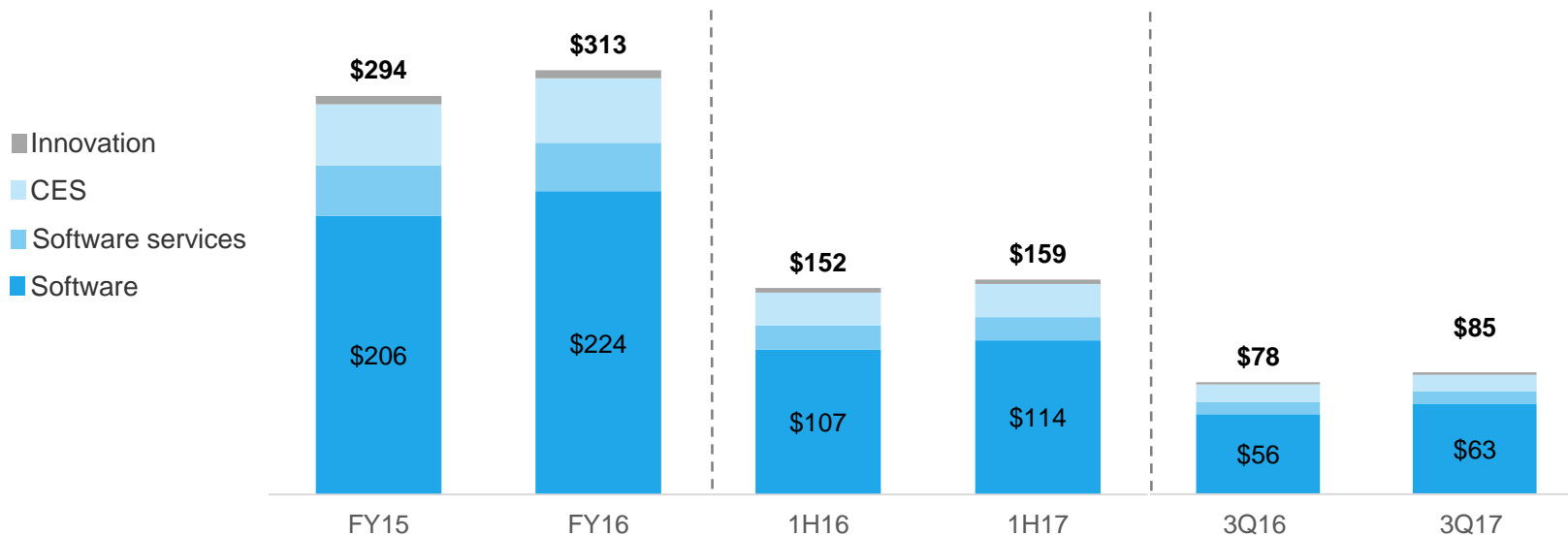
Billings Mix

**FY16: \$321M**



# ATTRACTIVE REVENUE PROFILE

	FY15 to FY16	1H16 to 1H17	3Q16 to 3Q17
Total Growth	7% CC	6% CC	9%
Software	9% CC	8% CC	13%

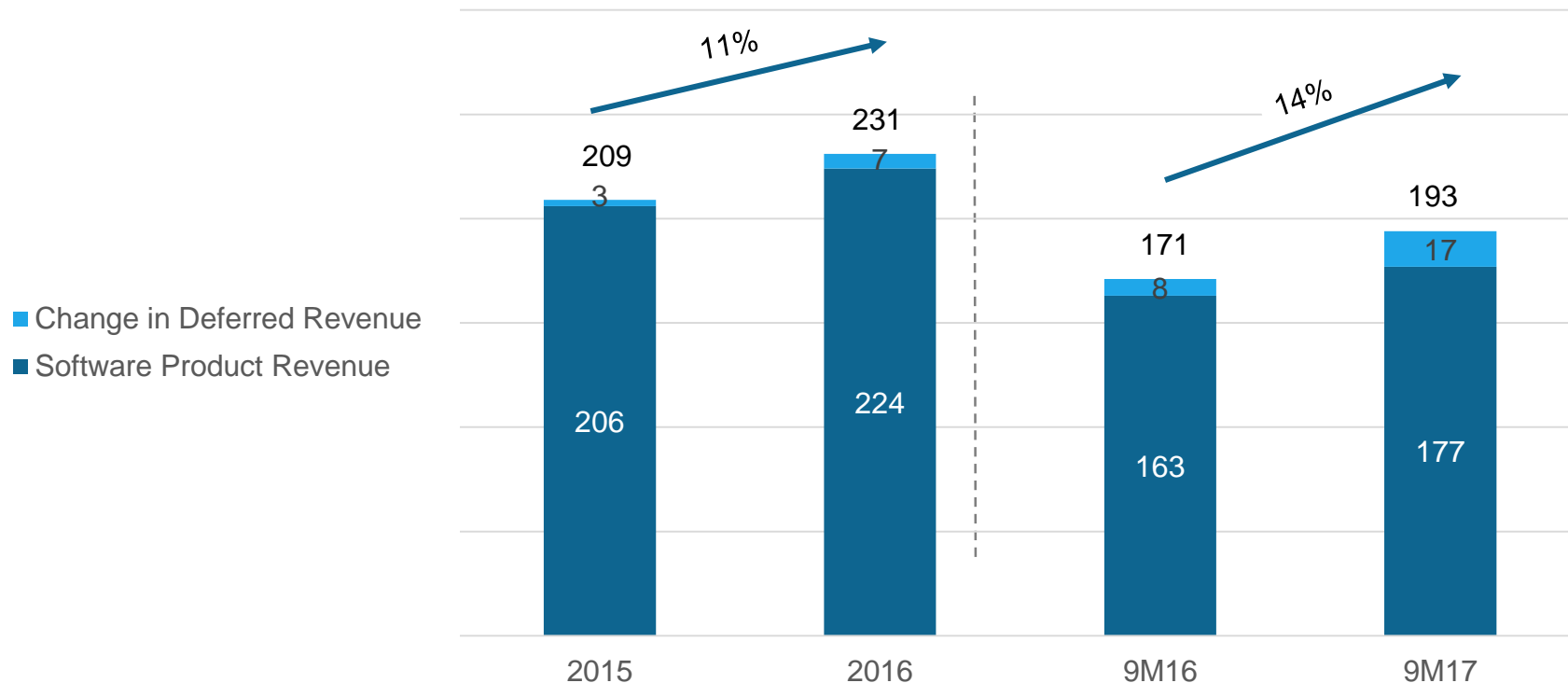


Constant currency ("CC"): Calculated from the current month activity at the prior average rate for that month. Year-to-date is the total of each month. Constant currency impact for 3Q16 to 3Q17 is not significant.



# SOFTWARE MOMENTUM

## Software Revenue + Change in Deferred Revenue (\$M)



Note: Change in deferred revenue is primarily related to software



# FY16 GROSS PROFIT MARGINS AND OPERATING EXPENSES

## Gross Profit % of Revenue

<b>Software</b>	<b>86%</b>
Software related Services	23%
CES	20%
Innovation	18%
<b>Total Gross Profit</b>	<b>67%</b>

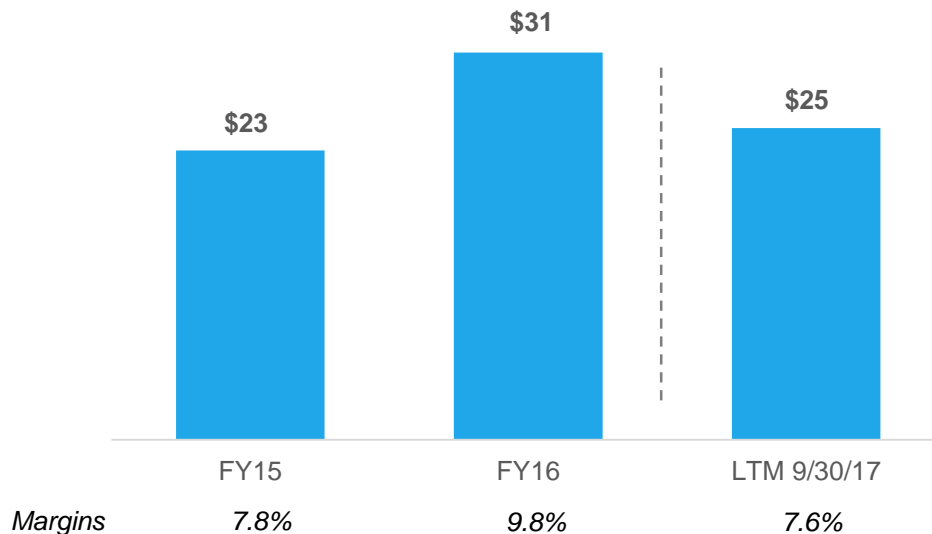
## Operating Expenses % of Revenue

Research & Development	21%
Sales & Marketing	21%
General & Administrative	15%
<b>Total OpEx</b>	<b>57%</b>

Note: Operating expense items exclude stock-based compensation and depreciation (removed from G&A); R&D net of refundable R&D tax credits



# ADJUSTED EBITDA



*LTM EBITDA impacted by:*

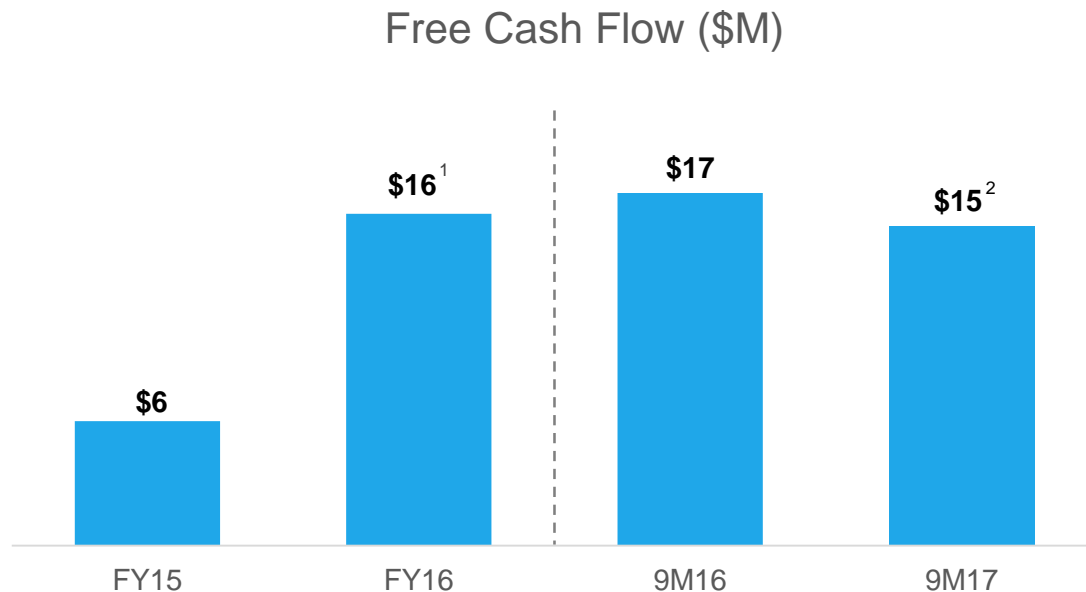
- *Strategic investments in new products*
- *Foreign currency effects*

Note: Adjusted EBITDA excludes stock-based compensation; <sup>1</sup> R&D net of refundable R&D tax credits





# STRONG FREE CASH FLOW GENERATION



Note: FCF defined as operating cash flow less capex

<sup>1</sup> Excludes non-recurring \$4M purchase of real property adjacent to corporate headquarters in 4Q16

<sup>2</sup> Adjusted for Modelis asset acquisition of \$2.0M and timing of refundable foreign R&D credit of \$2.3M



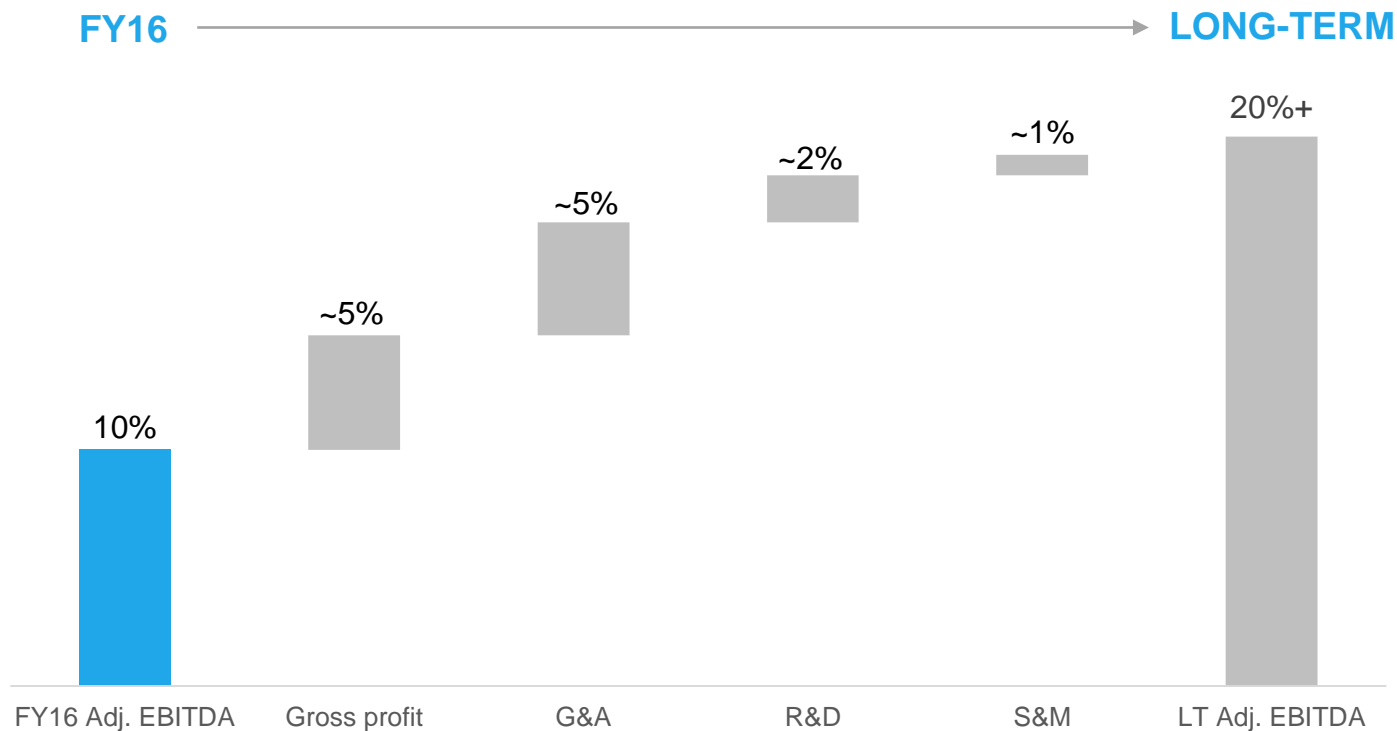
# LONG-TERM TARGET OPERATING MODEL

	FY16	LONG-TERM
Software Product % of total revenue	71%	75%+
Total Gross Margin	67%	71-73%
Research and Development	21%	19-20%
Sales and Marketing	21%	19-21%
General and Administrative	15%	9-12%
Adjusted EBITDA Margin	10%	20%+

Note: Operating expense items exclude stock-based compensation, and exclude depreciation and amortization; depreciation substantially booked within G&A; R&D net of refundable R&D tax credits



# ADJUSTED EBITDA MARGIN: FY16 TO LONG-TERM TARGET



Note: Operating expense items exclude stock-based compensation, and exclude depreciation and amortization; depreciation within G&A; R&D net of R&D grants



# STRONG BALANCE SHEET, SIGNIFICANT LIQUIDITY

<b>\$M</b>	<b>9/30/17</b>	<b><i>Pro Forma</i> 9/30/17<sup>1</sup></b>
Cash and Cash Equivalents	\$16.7	\$39.8
Total debt <sup>2</sup>	92.1	<1.0

<sup>1</sup>Pro forma calculations assume IPO net proceeds from issuance at \$13.00 per share including 1.8mm overallotment shares; proceeds used to pay down the revolver and term loan. In addition to the debt above, other obligations include deferred payment for Runtime of \$8.7M and other previous acquisitions of \$4.7M

<sup>2</sup>Total debt primarily comprised of revolving credit facility and Term Loan A and also includes <\$1.0M of capital lease and other debt



# IN SUMMARY

## Well positioned in large, growing markets

- Broad, differentiated product suite
- Levered to strong secular drivers

## Attractive financial profile

- Scaled, global and diversified
- Proven profitability with significant operating leverage

## Unique business model

- High retention, visibility and recurring revenues
- “Retain, expand and land” global blue chip customer base

## Significant organic and inorganic growth opportunities





# Appendix



# GAAP TO NON-GAAP RECONCILIATION

	FY15	FY16	9M16	9M17
Revenue	\$294,129	\$313,240	\$230,392	\$243,466
Ending deferred revenue	106,516	113,929	114,400	130,464
Beginning deferred revenue	(103,287)	(106,516)	(106,516)	(113,929)
Billings	\$297,358	\$320,653	\$238,276	\$260,001
	FY15	FY16	9M16	9M17
Net income (loss)	\$10,931	\$10,163	\$4,267	\$(39,060)
Income tax expense (benefit)	818	3,539	1,954	6,353
Stock-based compensation	597	5,132	5,050	39,302
Interest expense	2,416	2,265	1,754	1,793
Interest income and other	(191)	(249)	(81)	(2,184)
Depreciation and amortization	8,378	9,980	7,300	7,895
Adjusted EBITDA	\$22,949	\$30,830	\$20,244	\$14,099
	FY15	FY16	9M16	9M17
Net cash provided by operating activities	\$10,838	\$21,385	\$21,435	\$17,455
Capital expenditures	(5,233)	(5,444) <sup>1</sup>	(4,722)	(4,367) <sup>2</sup>
Free cash flow	\$5,605	\$15,941	\$16,600	\$13,088

<sup>1</sup> Excludes \$4M purchase of real property adjacent to corporate headquarters

<sup>2</sup> Capital expenditures adjusted for Modelis asset acquisition of \$2M



# OPERATING EXPENSE RECONCILIATION

	FY15	FY16	9M FY16	9M FY17
<b>Research and development</b>	\$62,777	\$71,325	\$53,413	\$69,198
Less: SBC	(149)	(1,370)	(1,361)	(10,495)
Less: Other operating income, <sup>1</sup>	(2,576)	(2,742)	(1,952)	(4,065) <sup>2</sup>
<i>Research and development (pre-SBC)</i>	<i>\$60,052</i>	<i>\$67,213</i>	<i>\$50,100</i>	<i>\$54,638</i>
<i>% R&amp;D margin (pre-SBC)</i>	<i>20%</i>	<i>21%</i>	<i>22%</i>	<i>22%</i>
<b>Sales and marketing</b>	63,080	66,086	49,054	58,683
Less: SBC	(109)	(775)	(763)	(6,160)
<i>Sales and marketing (pre-SBC)</i>	<i>62,971</i>	<i>65,311</i>	<i>48,291</i>	<i>52,523</i>
<i>% S&amp;M margin (pre-SBC)</i>	<i>21%</i>	<i>21%</i>	<i>21%</i>	<i>22%</i>
<b>General and administrative</b>	54,069	57,202	43,675	66,465
Less: SBC	(295)	(2,965)	(2,911)	(22,305)
Less: Depreciation	(5,754)	(6,658)	(4,948)	(4,608)
<i>General and administrative (pre-SBC)</i>	<i>48,020</i>	<i>47,579</i>	<i>35,816</i>	<i>39,552</i>
<i>% G&amp;A margin (pre-SBC)</i>	<i>16%</i>	<i>15%</i>	<i>16%</i>	<i>16%</i>

<sup>1</sup> Consists primarily of refundable tax credits associated with certain R&D activities

<sup>2</sup> Adjusted for non-recurring legal expenses

