Innovation Through Pervasive Engineering Simulation

Investor Presentation
Q1 2019

NASDAQ: ANSS

Safe Harbor

Certain statements contained in this presentation regarding matters that are not historical facts, including, but not limited to, statements regarding our projections for the first quarter of 2019 and fiscal year 2019, as well as both GAAP and non-GAAP to exclude acquisition accounting adjustments to deferred revenue, acquisition-related amortization, stock-based compensation expense and acquisition-related transaction costs with related tax impacts); statements regarding management's use of non-GAAP financial measures; statements regarding investing in the business; statements regarding the Tax Cuts and Jobs Act; and statements regarding the intent to integrate ANSYS Discovery Live within PTC's Creo 3D CAD software are "forward-looking" statements (as defined in the Private Securities Litigation Reform Act of 1995). Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. All forward-looking statements in this presentation are subject to risks and uncertainties, including, but not limited to, the risk that adverse conditions in the global and domestic markets will significantly affect ANSYS' customers' ability to purchase products from the Company at the same level as prior periods or to pay for the Company's products and services; the risk that declines in ANSYS' customers' business may lengthen customer sales cycles; the risk of declines in the economy of one or more of ANSYS' primary geographic regions; the risk that ANSYS' revenues and operating results will be adversely affected by changes in currency exchange rates or economic declines in any of the countries in which ANSYS conducts transactions; the risk that the assumptions underlying ANSYS' anticipated revenues and expenditures will change or prove inaccurate; the risk that ANSYS has overestimated its ability to maintain growth and profitability, and control costs; uncertainties regarding the demand for ANSYS' products and services in future periods; uncertainties regarding customer acceptance of new products; the risk of ANSYS' products' future compliance with industry quality standards and its potential impact on the Company's financial results; the risk that the Company may need to change its pricing models due to competition and its potential impact on the Company's financial results; the risk that ANSYS' operating results will be adversely affected by possible delays in developing, completing or shipping new or enhanced products; the risk that enhancements to the Company's products or products acquired in acquisitions may not produce anticipated sales; the risk that the Company may not be able to recruit and retain key executives and technical personnel; the risk that third parties may misappropriate the Company's proprietary technology or develop similar technology independently; the risk of unauthorized access to and distribution of the Company's source code; the risk of the Company's implementation of its new IT systems; the risk of difficulties in the relationship with ANSYS' independent regional channel partners; the risk of ANSYS' reliance on perpetual licenses and the result that any change in customer licensing behavior may have on the Company's financial results; the risk that ANSYS may not achieve the anticipated benefits of its acquisitions or that the integration of the acquired technologies or products with the Company's existing product lines may not be successful; the risk of periodic reorganizations and changes within ANSYS' sales organization; the risk of industry consolidation and the impact it may have on customer purchasing decisions; and other factors that are detailed from time to time in reports filed by ANSYS, Inc. with the Securities and Exchange Commission, including ANSYS, Inc.'s Annual Report on Form 10-K. We undertake no obligation to publicly update or revise any forward-looking statements, whether changes occur as a result of new information or future events, after the date they were made.

ANSYS is the simulation leader

FOCUSED

This is all we do.
Leading product technologies in all physics areas. Largest development team focused on simulation

TRUSTED

97 of the FORTUNE **100** industrials

More than **45,000** customers worldwide

ISO 9001-2015 CERTIFIED

PROVEN

Member of the prestigious STANDARD &POOR'S 500

$16B market capitalization

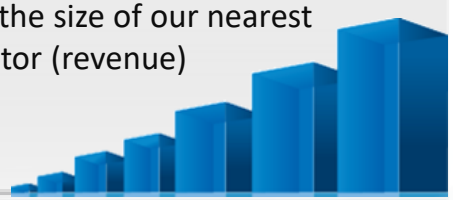
GLOBAL

3,700 employees globally

75 offices in **40** countries

LARGEST

3x the size of our nearest competitor (revenue)



INDEPENDENT

Long-term financial stability

CAD agnostic

COMMITTED

Overall customer satisfaction globally is at **89.1%** in 2018

DRIVEN

Helping customers address new market challenges: **digital exploration, 5G, additive manufacturing** and **digital twin**

World-class companies leveraging our platform





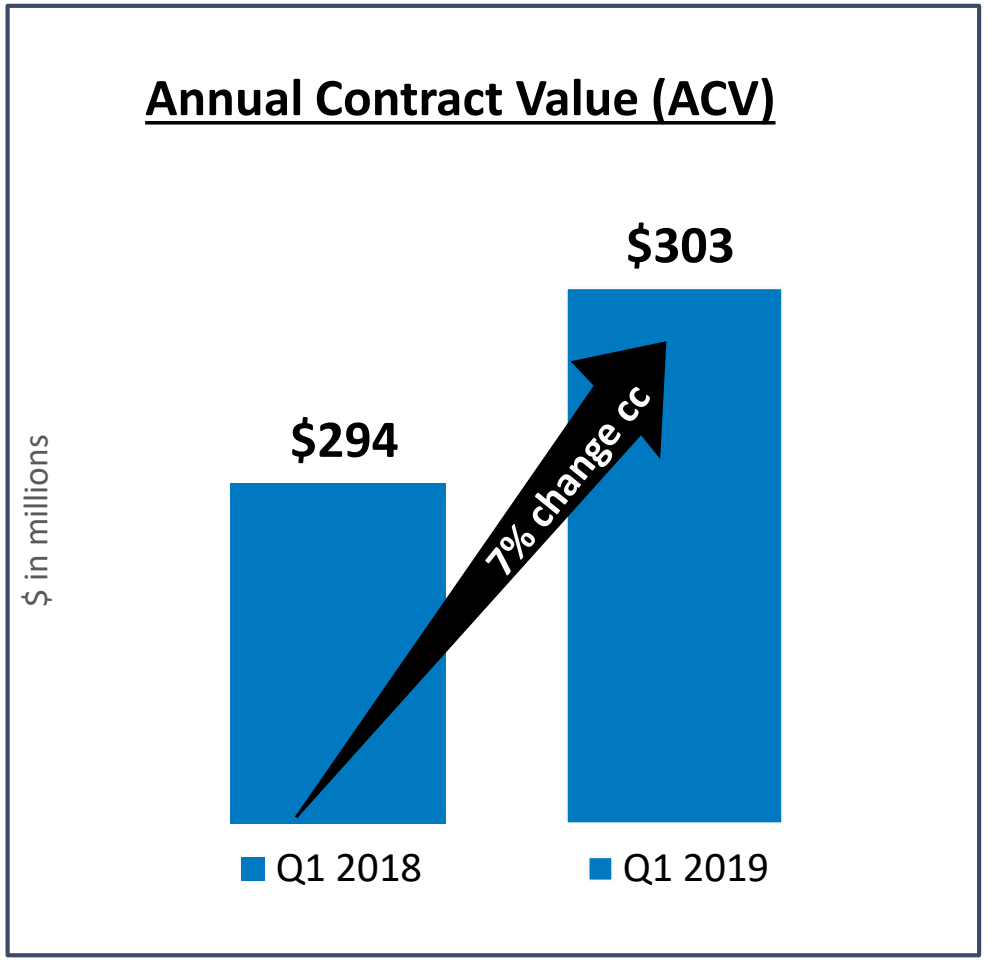


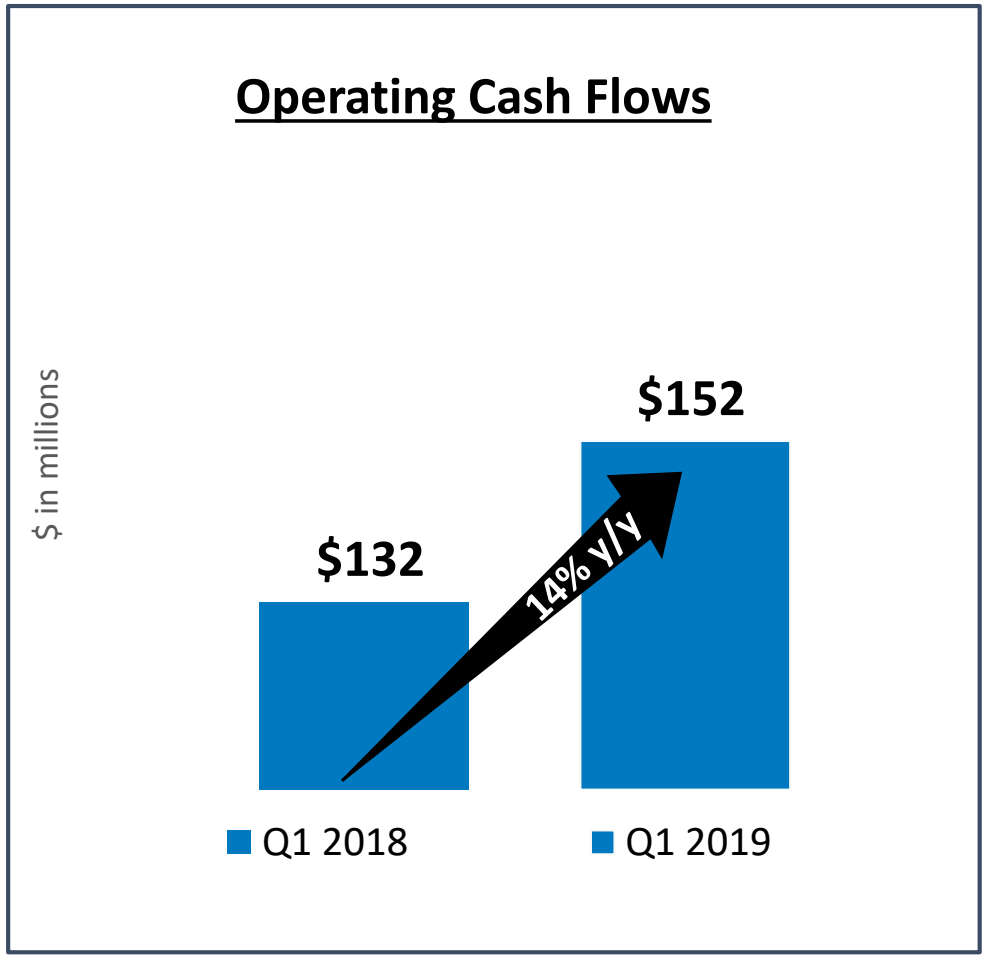


Key 2018 achievements

- Delivered on 2018 commitments
- Reported $1.3 billion in revenue (ASC 606)
- Maintained industry-leading margins for sector and software vertical
- Repurchased 1.7 million shares
- Extended technology leadership with continuous product innovation
- Broadened partner ecosystem by collaborating with Synopsys, SAP and PTC
- Ranked by Corporate Knights as one of the 100 Most Sustainable Companies

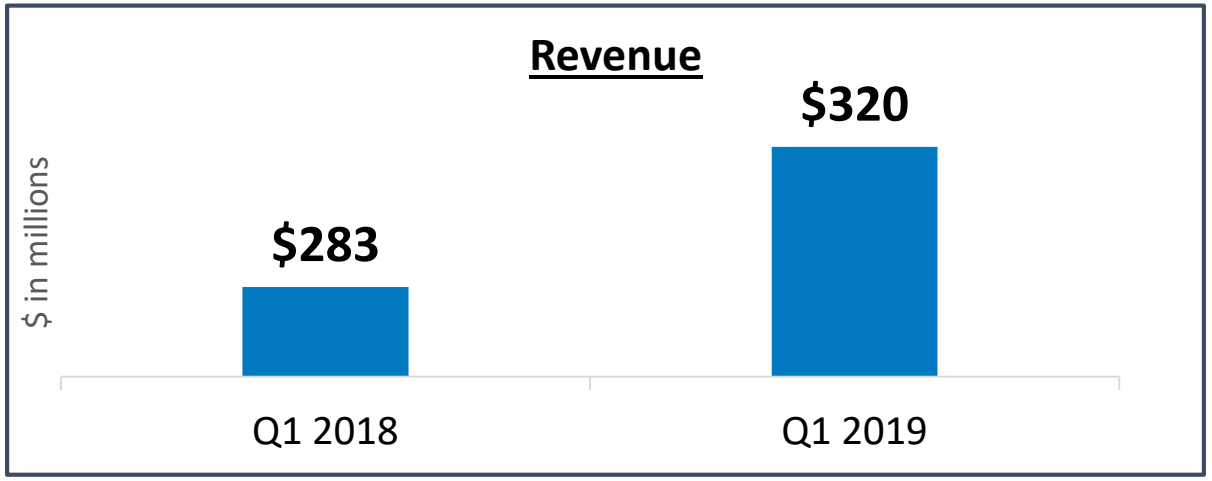
Key Financial Metrics – Q1 2019

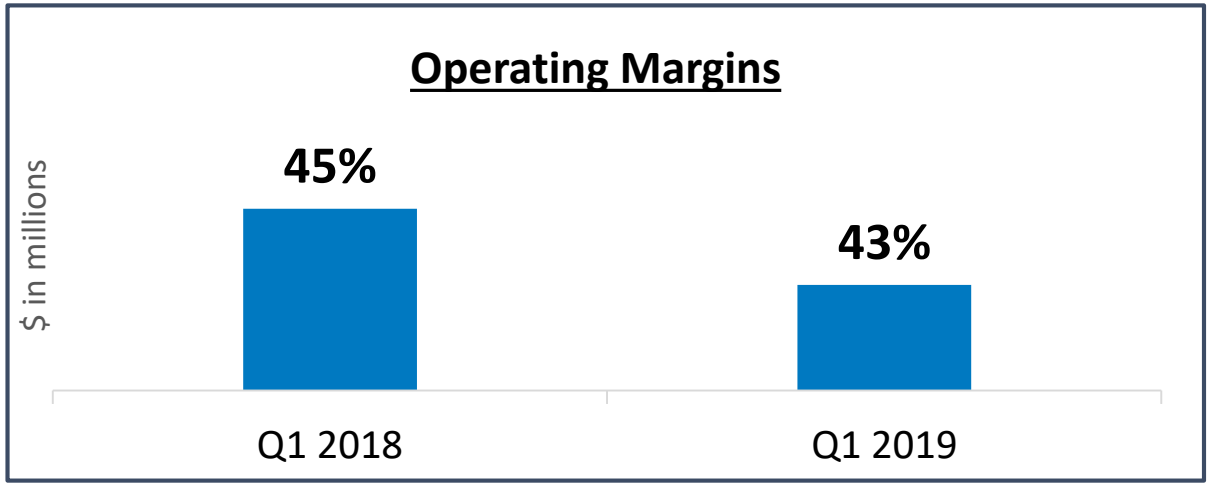


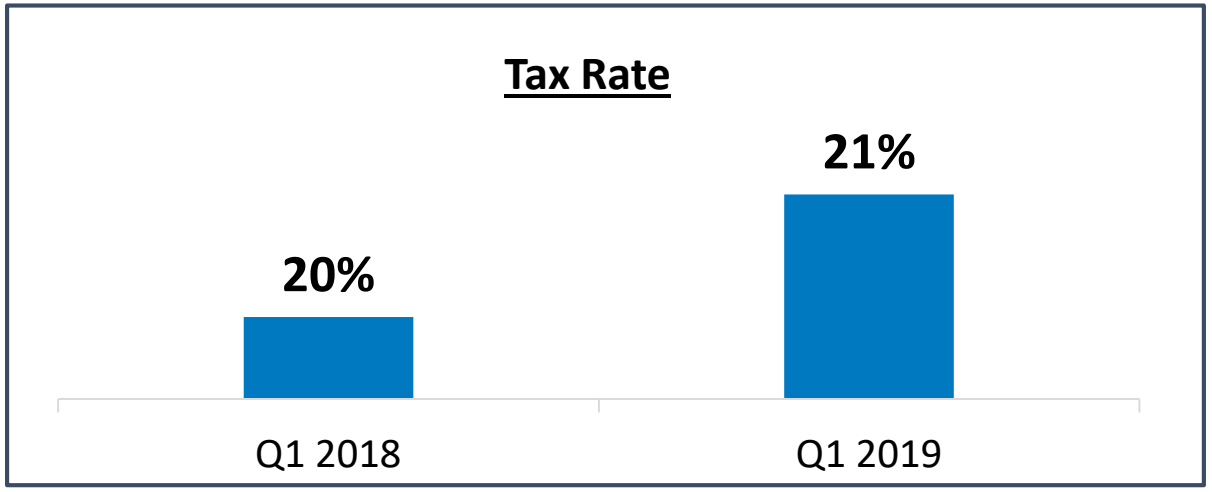


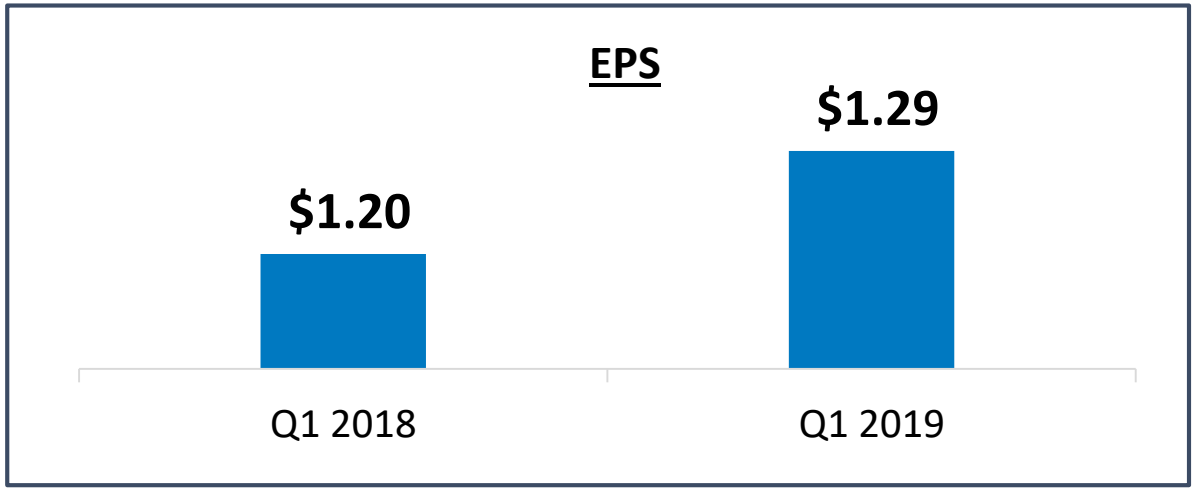
ACV is a new financial performance metric introduced in 2018. See Appendix for ACV definition. CC refers to constant currency.

Non-GAAP – Q1 2019







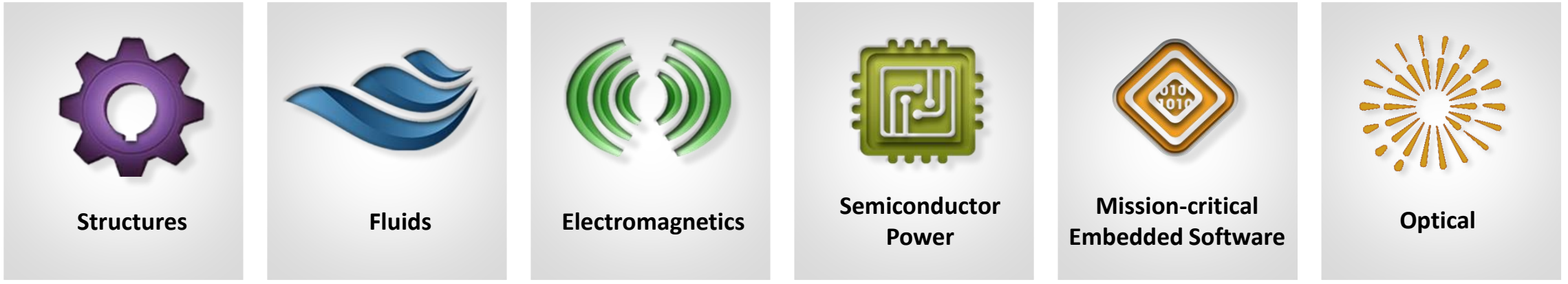


Non-GAAP – Q1 2019

Revenue	**$320M**
Operating Margin	**42.9%**
Tax rate	**21.0%**
Diluted EPS	**$1.29**
Annual Contract Value (ACV)	**$303M**

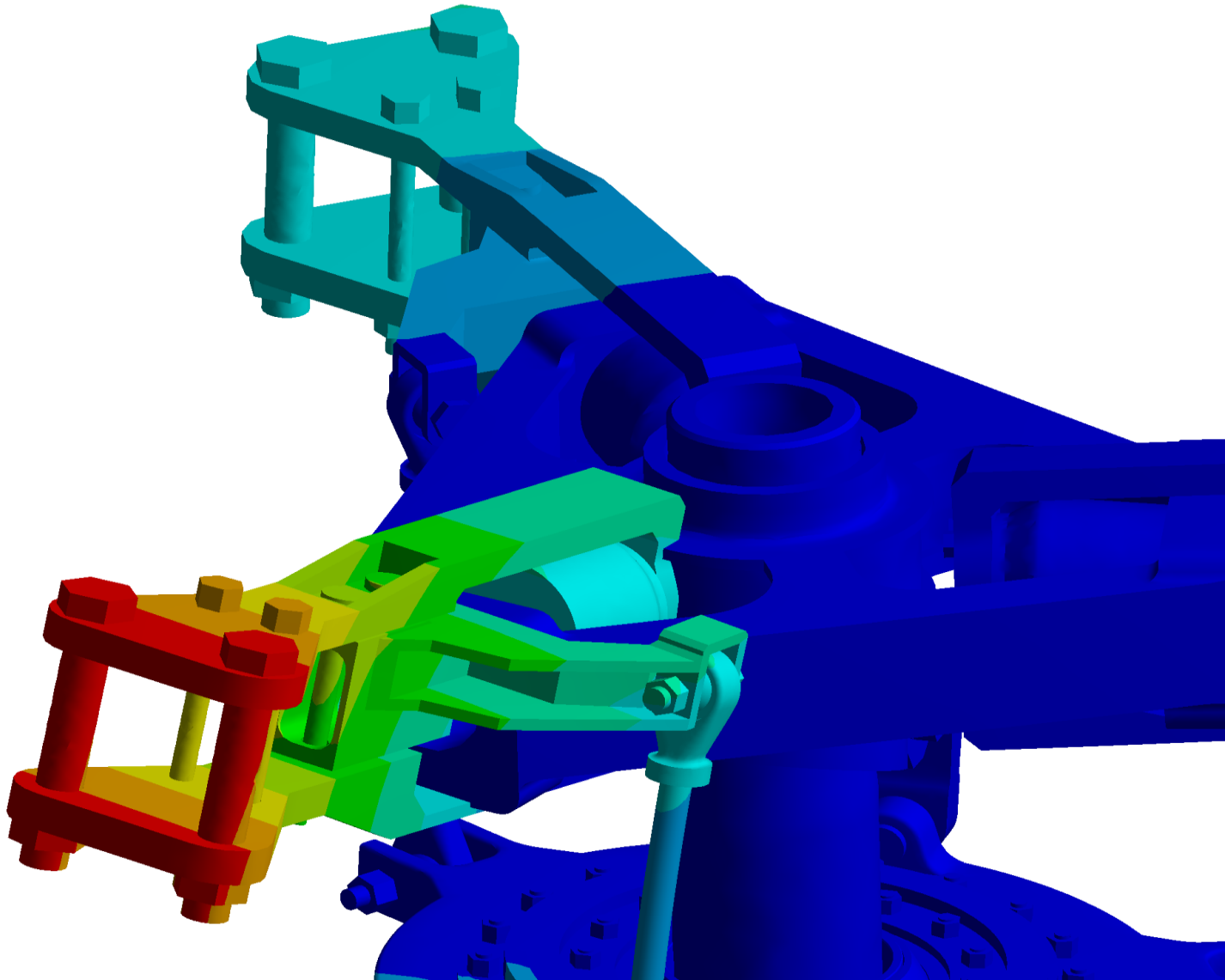
ANSYS offers the only true simulation platform with best-of-breed simulation across all major physics

Market Leader Across Individual Physics with Industry-Leading Platform



OUR MISSION

EMPOWER OUR CUSTOMERS TO DESIGN AND DELIVER TRANSFORMATIONAL PRODUCTS



Our long-term vision: PERVASIVE ENGINEERING SIMULATION

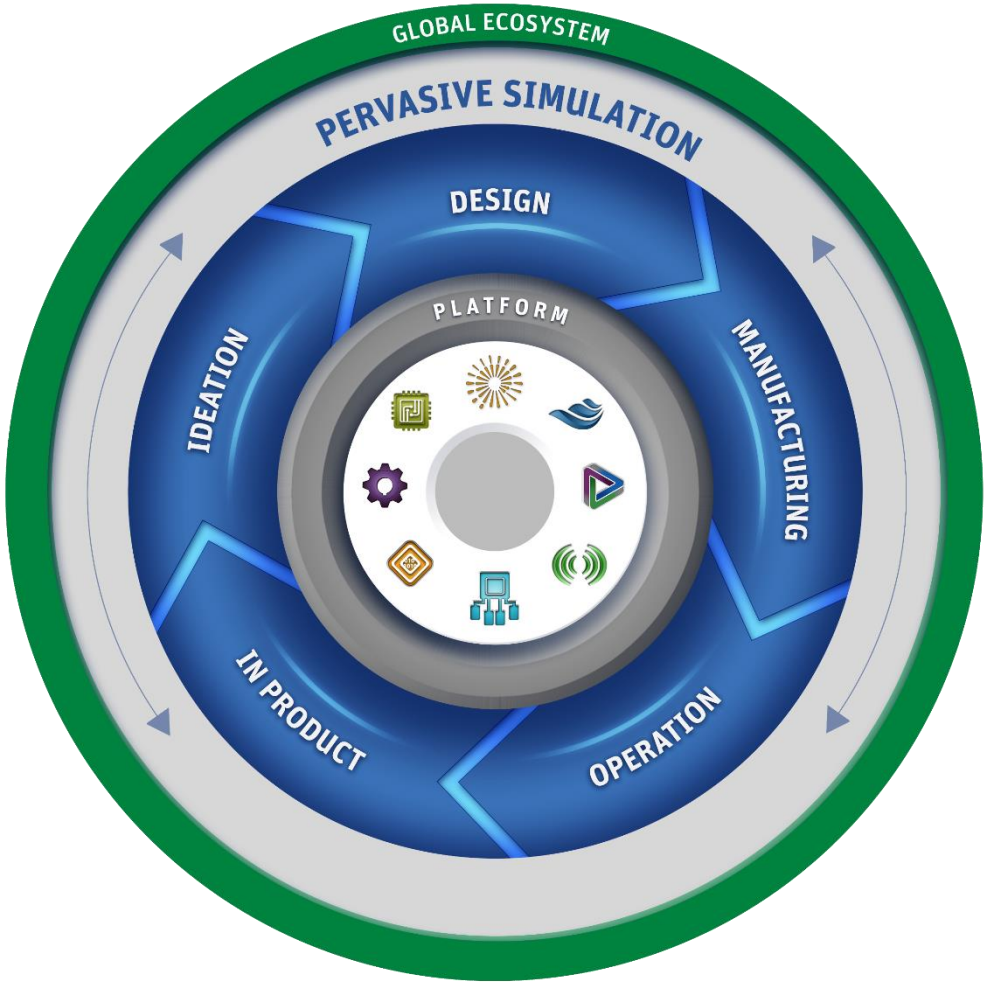
… integration across the product lifecycle on a single platform

IDEATION

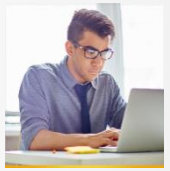
80% of costs locked in early in the design phase

IN PRODUCT

Reduce time needed to validate autonomous vehicles from 10,000 years to 2-3 years



DESIGN

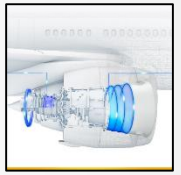


Reduce development time 9X while warranty costs 89% more likely to decrease

MANUFACTURING

Reduce weight of part by 25% through topology optimization and additive manufacturing

OPERATIONS

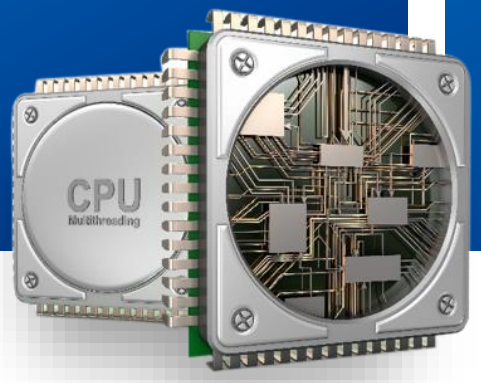


Increased performance with 10-20% reduction in maintenance costs

Our customers face increased pressure to deliver on the classic challenges

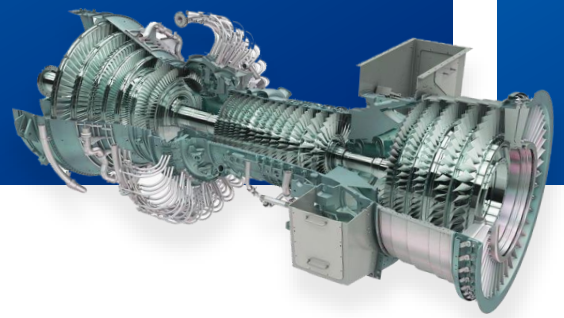
Time-to-market

↓ 30%



Cycle Times

↓ 2 years



New Product Rollouts

↑ 66%

The digital revolution is making the problem even harder

Chips are ever more complex and sophisticated

Every product will soon be connected (and smart)

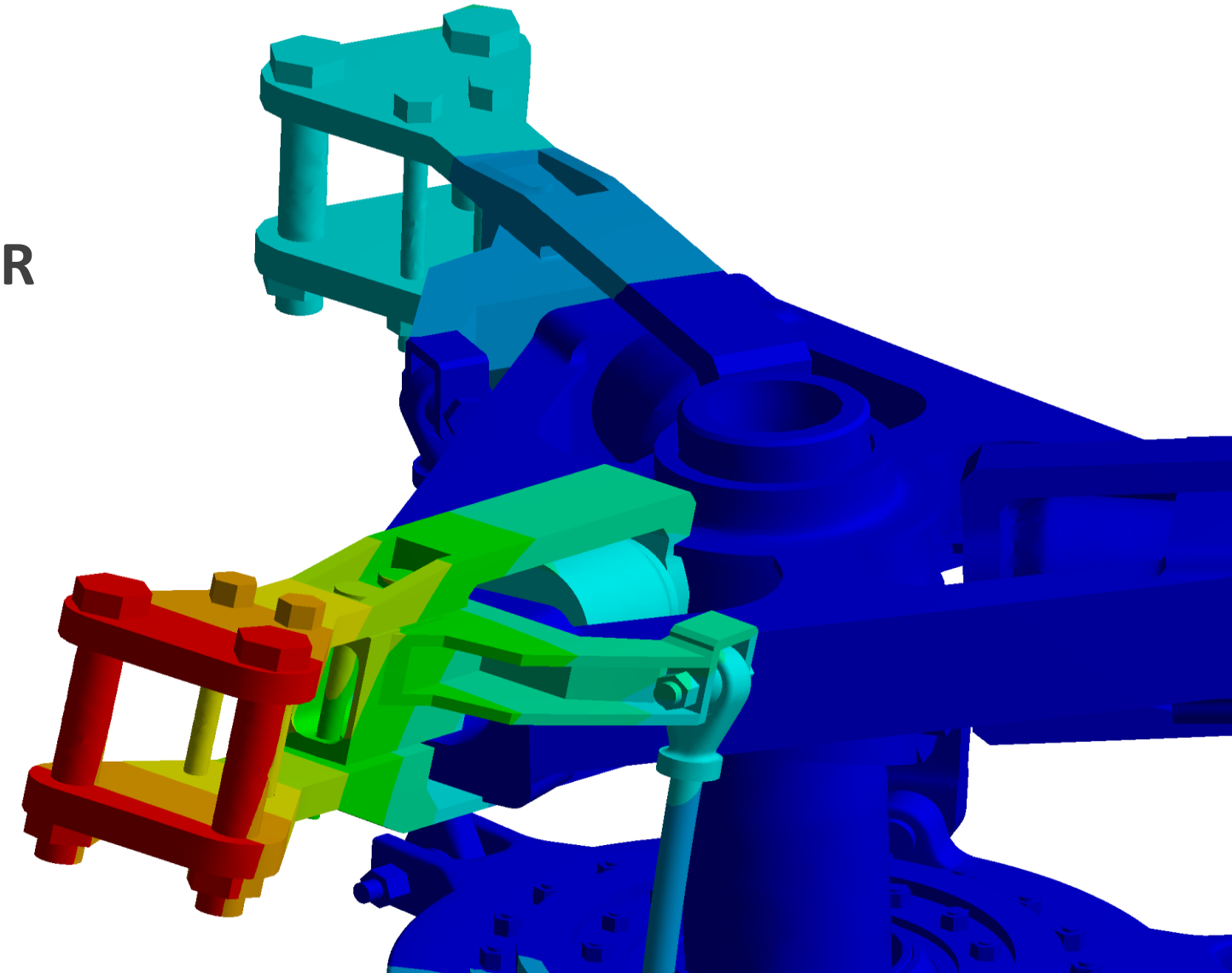
Electronics are everywhere

Additive manufacturing is transforming manufacturing

Products are made of increasingly complex composite materials

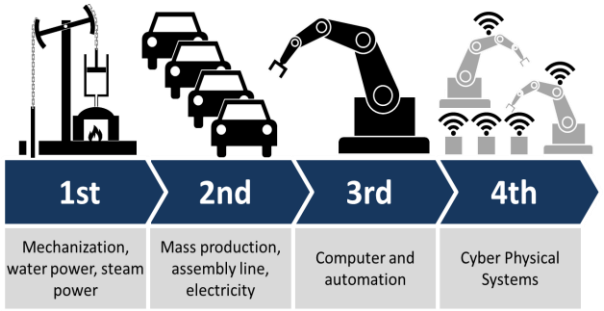
The Internet of Things is changing the way products are delivered and maintained

SIMULATION IS THE ANSWER



A time of profound industry transformation

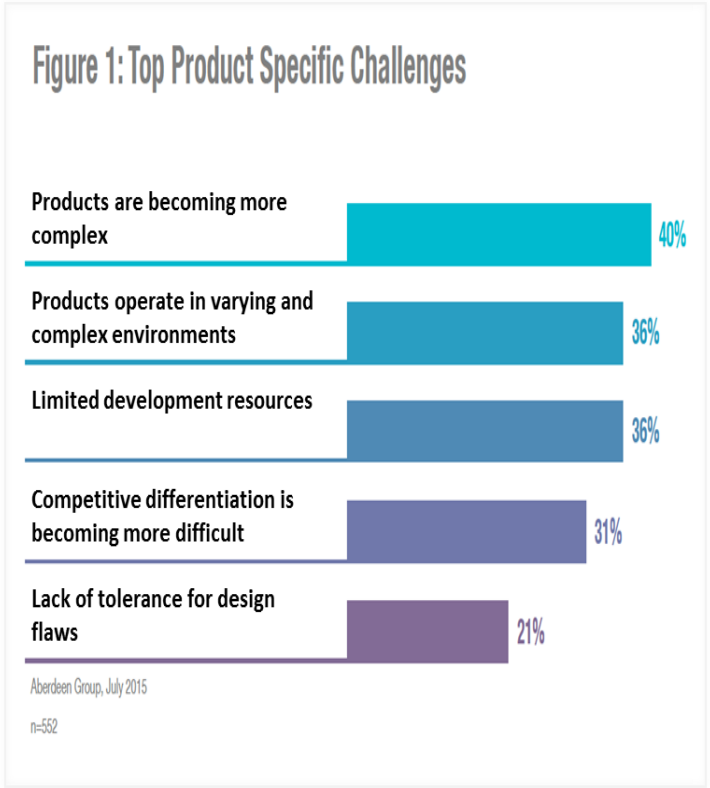
1 Greatest value creation since the industrial revolution



UBER dyson nebia GE TESLA tsmc Honeywell HYPERLOOP

+$11 trillion potential by 2025

2 Product complexity is increasing dramatically



3 Engineering simulation critical to the products of tomorrow

Top 3 technologies that will have the biggest impact on product design and development over the next 5 years?

1. Additive Manufacturing
2. Engineering Simulation
3. Advanced Materials

SIMULATION vs NO SIMULATION
Simulated Environments Experience:

Length of Development Time	▼ 9x	reduction
Overall Product Cost	▼ 4x	reduction

Simulation enables product managers to…

- Drive **INNOVATION**
- Manage **COMPLEXITY**

+

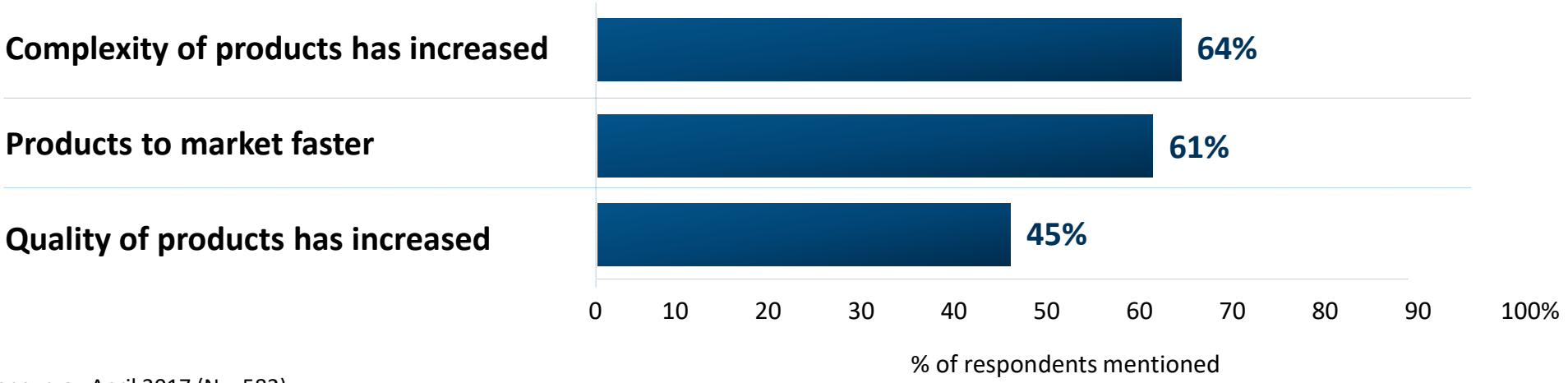
- Lower **CYCLE TIME**
- Reduce **COSTS**

+

- Increase **QUALITY**
- Eliminate **RISK**

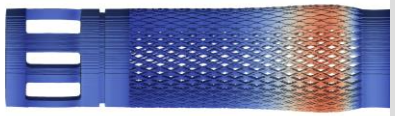
…which is driving simulation usage

Top 3 responses to: Which of the following are driving your company to use more simulation?



Source: ANSYS customer survey April 2017 (N = 582).

Customer Case Study
Additive Manufacturing Simulation Reduces Time to Market



Warpage was a problem in additive manufacturing of a filter

- In the past, trial and error methods were used to address warpage problems.
- It typically took four weeks to achieve a satisfactory part.
- Considerable costs were expended in producing many prototypes.

ANSYS Solution

- Croft engineers simulated the build in ANSYS Additive Print to diagnose problem.
- Engineers added supports to filtration mesh which reduced distortion.
- They used the automatic compensation in Additive Print to adjust the geometry to compensate for remaining distortion.

Key Results

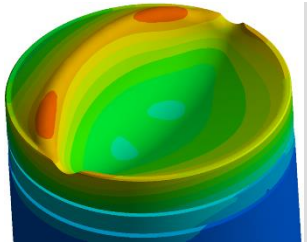
- Simulation enabled Croft to move quickly to optimize the design while minimizing number of prototypes.
- Engineers avoided many prototypes that would have been needed with traditional method.
- Design of the part has been finalized and it is moving to product launch.

"By leveraging ANSYS Additive Print in their design-to-print workflow, engineers were able to quickly generate a printable design and avoid multiple build failures, thus reducing time to market and prototyping expenses by 50 percent."

Louise Geekie
Project Manager
Croft Filters, Ltd.

1. **Time to market reduced 50%**
2. **Prototyping expenses reduced 50%**

Customer Case Study
Shortening Time to Design Automotive Engines



Two-stroke, opposed piston engines improve powertrain

- Achates Power's new engine is 50 percent more fuel efficient than today's gas engines.
- Eliminating cylinder head reduces waste heat, providing fuel economy savings.
- But piston and cylinder liner must absorb more heat, creating engineering challenge.

ANSYS Solution

- Achates engineers used ANSYS conjugate heat transfer simulation to calculate temperature of cylinder liner.
- Metal temperatures used by an ANSYS Mechanical FEA model that calculates thermal stress on cylinder liner.
- Another ANSYS Mechanical simulation predicted piston crown temperatures and thermal stress on piston.

Key Results

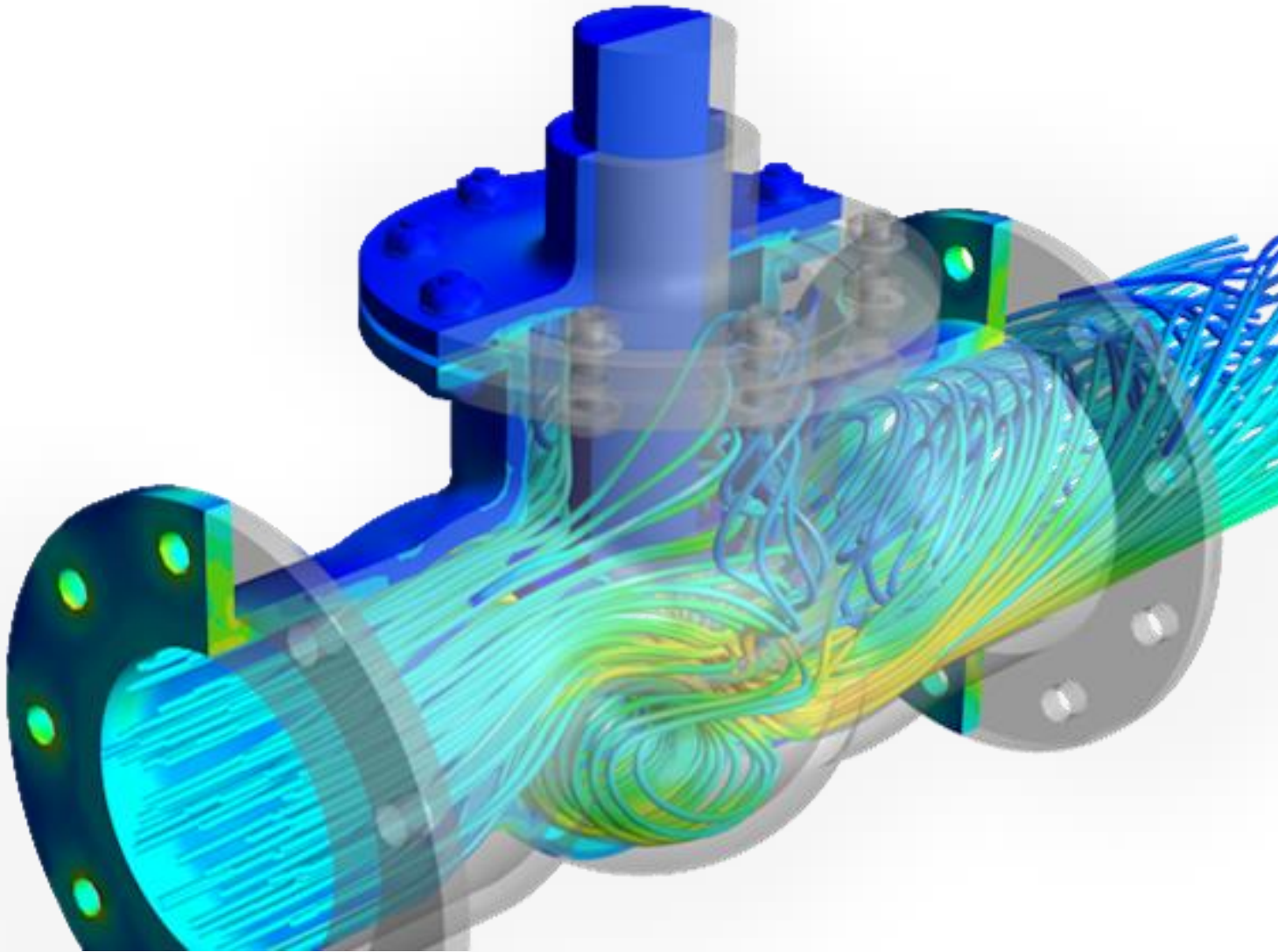
- Achates Power engineers evaluated design iterations in days instead of months using traditional design process.
- The number of hardware prototypes required to develop new engines has been reduced.
- Engineers have significantly improved engine durability.

"Intensive use of ANSYS simulation tools has enabled Achates Power to rapidly eliminate failure modes by iterating designs in days as opposed to the months that would be required if they were using a traditional design process primarily based on physical prototypes. "

Dnyanesh Sapkal
Vice *President, Mechanical Systems Engineering*
Achates Power, Inc.

1. **Time to develop new engines has been reduced by 50%.**

WHERE DOES SIMULATION GO FROM HERE?



Focusing our investments on highest priority initiatives

FOCUSED INVESTMENT

~80% of investment on core technology

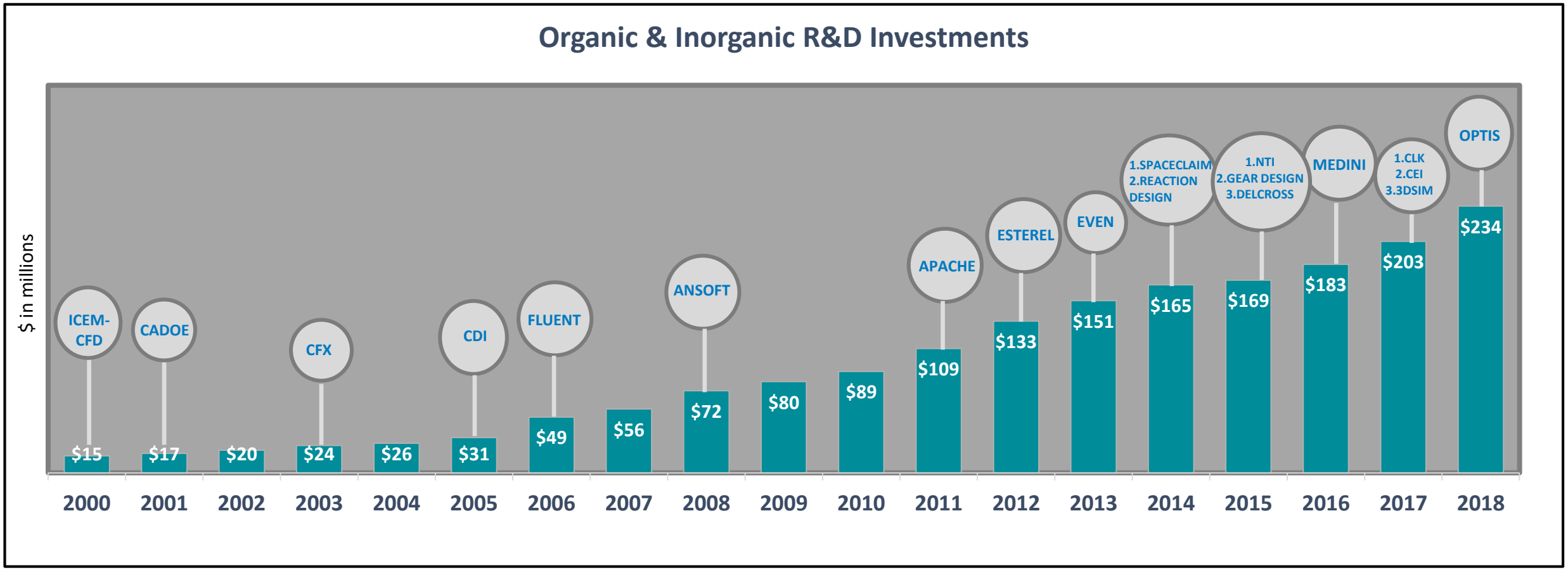
- Unparalleled & unquestioned accuracy
- Usability of broadest/deepest physics
- Unique & powerful multiphysics
- Common platform from cloud to edge

~20% of investment on next-generation technology

- Digital exploration
- Additive manufacturing
- Digital Twin/IOT
- Autonomous vehicles

ENHANCING OUR CORE TECHNOLOGY WHILE DRIVING NEXT-GENERATION INNOVATION

Our Ongoing Commitment to Invest in R&D



Source: Form 10-K. ANSYS R&D reflect organic and inorganic investments at the acquisition close date. Refer to www.investors.ansys.com for additional details on acquisitions.

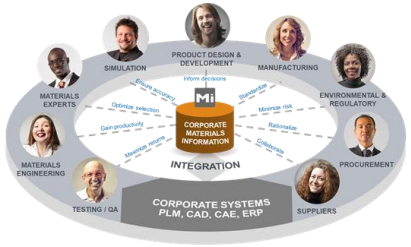
Our Ongoing Commitment to Invest in R&D

- **In Q1 2019, we acquired Granta Design and Helic for a combined purchase price of approximately $260.8 million.**
- **Both acquisitions will accelerate our technology roadmap and become a part of the ANSYS global distribution.**

Granta Design Acquired in Q1 2019

Granta Design is the premier provider of materials intelligence and materials information technology. Their solutions enable customers to control, analyze and apply critical materials data throughout the engineering process. This includes tools supporting enterprise-level materials information management, materials selection & substitution decisions, and a rich library of high-quality materials data.

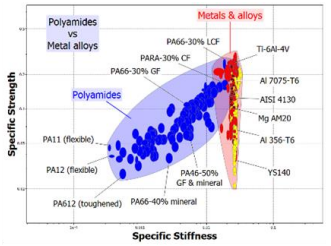
Customer Benefit:
The acquisition brings significant benefits to ANSYS and Granta customers. Materials intelligence and materials information technology grows ANSYS in an important new direction, as high-quality and comprehensive materials information is critical to accurate simulation results and overall product development.



GRANTA MI™

The leading system for materials information management in engineering enterprises

The platform for material intelligence



CES Selector™

Smart materials decisions

PC product for materials selection

CES EduPack™

World-leading resources for materials teaching in engineering, science and design

GRANTA MATERIAL INTELLIGENCE

Hundreds of clients worldwide, including Rolls Royce, Stryker, Boeing, Honeywell, Emerson, NASA, General Motors.

Headquarters: Cambridge, UK

Offices: France, Germany, United States

Employees: 180

Helic, Inc. Acquired in Q1 2019

Helic is a premier provider of software that mitigates the risk of electromagnetic crosstalk System on Chip (SoC) designs in advanced technology nodes.

Key market drivers:

- 5G, AI, IoT and cloud driving the increased use of on-chip signal frequencies over 2 Ghz
- Complex multiple silicon die in a single package: 3D-IC
- Need for robust physics-based electromagnetics solvers, with capacity to handle large number of geometries seen in semiconductor designs

Product synergy:
Direct adjacency to the ANSYS electronics and semiconductor businesses.

Customer benefit:
Comprehensive solution with Helic products and ANSYS flagship electromagnetics solvers, HFSS and SIWave, RedHawk-SC power-integrity noise analysis tool provide a comprehensive solution for on-chip, 3D-IC and chip-package-system electromagnetics (EM) and noise analysis.

ANSYS 2019 R1 delivers speed and simplicity

- Megatrends like 5G, autonomous vehicles and electrification are radically changing the product development landscape, making it difficult for companies to retain engineers who can keep pace. The new capabilities across ANSYS' entire simulation portfolio empower engineers, regardless of level of expertise. The new capabilities across ANSYS' entire simulation portfolio empower engineers, regardless of level of expertise, to simulate from beginning to end faster and maximizing their productivity.
- A new single-window ANSYS Fluent user experience improves the fluids simulation process without compromising accuracy. Mosaic meshing technology streamlines the ANSYS Fluent workflow, enabling engineers to reduce preprocessing time from several days to several hours. Parallel processing generates Mosaic-enabled Poly-Hexcore meshes up to 10x faster, so users can complete more simulations in less time.
- New to the ANSYS portfolio, ANSYS Motion is the most powerful Multibody Dynamics (MBD) tool on the market. This product, a result of our partnership with Virtual Motion, Inc. in Korea, offers a full suite of dynamics capabilities for both rigid and flexible bodies.
- In the metal additive manufacturing (AM) market, the newly released ANSYS Additive Science gives engineers an exploratory environment for engineers to determine the optimum process parameters for metal AM machines and materials
- New ANSYS Cloud offering targeted to small and medium sized businesses who benefit from HPC and lacking resources to provision in-house resources.

ANSYS Cloud – HPC as easy as it should be

Solve on the cloud from desktop apps

Web-based 3-D postprocessing

Highly optimized for ANSYS solvers

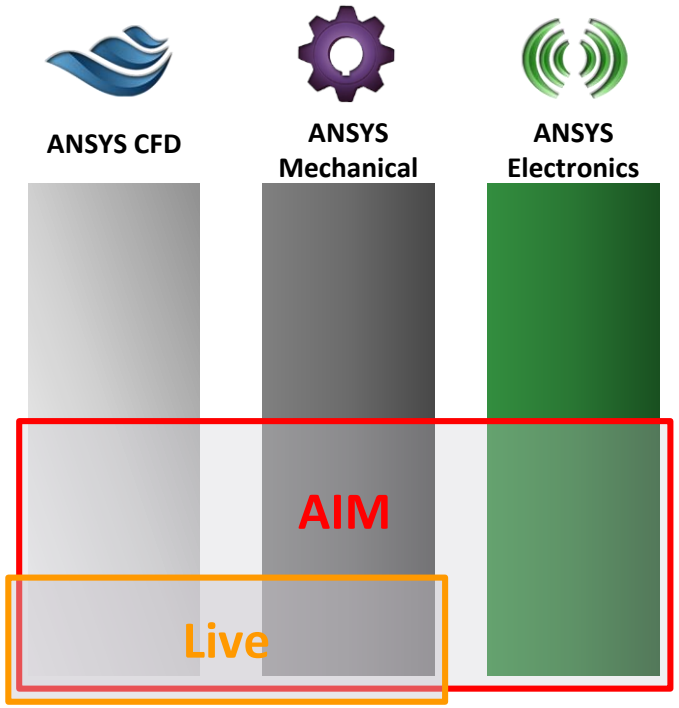
Single vendor solution for SW+HW

ANSYS Cloud Positioning

	UNIQUE VALUE PROPOSITION	TYPICAL ACCOUNT	SOLVERS REQUIRED	LICENSE PREFERENCE
ANSYS Cloud	• One click burst to cloud-HPC from ANSYS flagships - no setup or IT changes required • Highly optimized for ANSYS solvers • Free web-based post processing without having to download results • Single vendor solution with simplified usage-based pricing for HW+SW	Existing SMBs with little or no investment in HPC, and need burst capacity	Mechanical Fluent (Electronics in R2)	ON-DEMAND ANSYS Elastic Units (AEUs)
CHPs	• Support for other simulation tools besides ANSYS • Availability on private and public clouds • Custom hardware configurations and support for 3rd party tools	Existing Strategic & Enterprise	ANSYS + Other ISVs	BRING YOUR OWN LICENSE (BYOL)

Our Product Adjacencies

ANSYS Discovery family of products



Discovery AIM

- Easy to use high-fidelity simulation providing ANSYS gold-standard accuracy and speed
- Comprehensive physics

Discovery Live

- Instantaneous simulation, tightly coupled with direct geometry modeling
- Qualitative results; high accuracy is not the goal

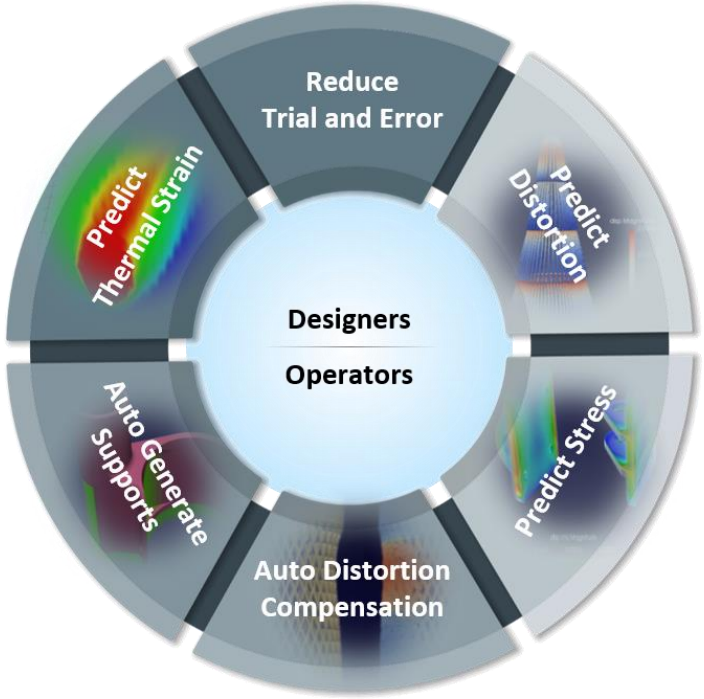
Discovery SpaceClaim

- Fast and intuitive 3D Direct Modeling to create, edit and repair geometry for concept design and simulation

Additional information located at www.ansys.com/products/3d-design/ansys-discovery-live.

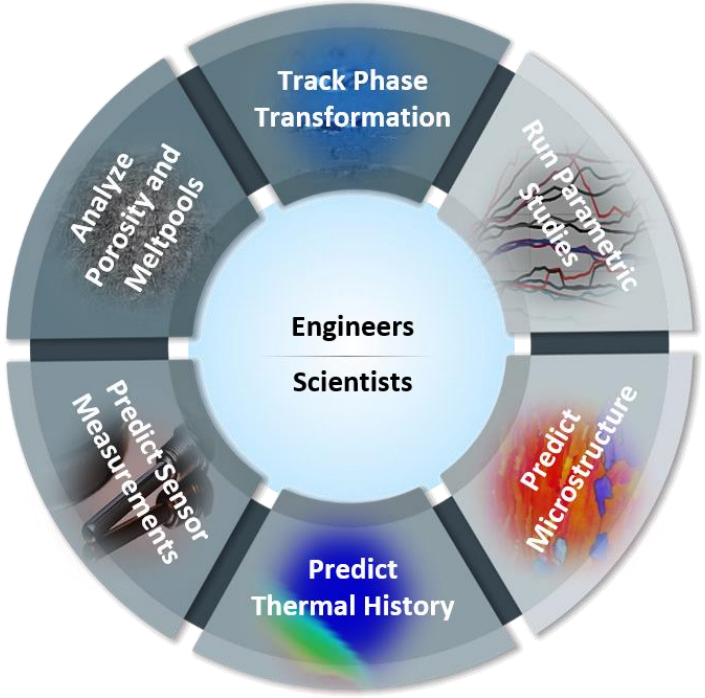
Additive - Two distinct customer groups – Two products

ANSYS Additive Print



- *Designers in aerospace, defense, auto OEMs & medical*
- *Metal AM machine operators*
- *Part manufacturing operations managers*

ANSYS Additive Suite

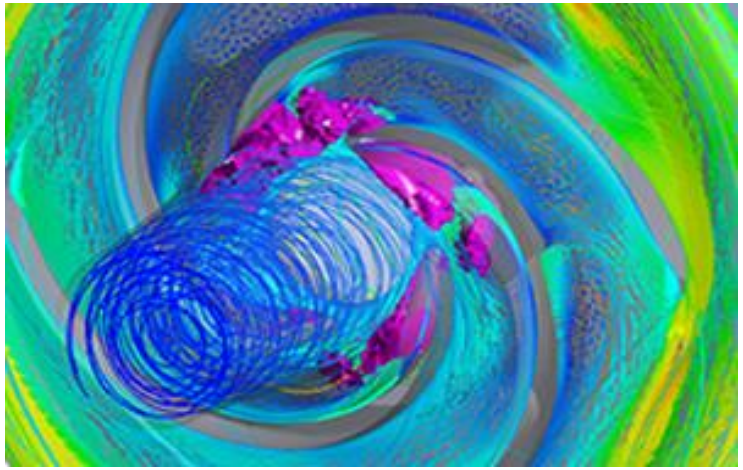


- *FEA analysts in aerospace, defense, auto OEMs & medical*
- *Owners of "part qualification" within OEMs*
- *Materials/manufacturing researchers*

Additional information located at www.ansys.com/products/structures/additive-discovery-manufacturing.

Simulation in Operations of Products: Digital Twin

- A digital twin is a real-time, virtual copy of an actual operating machine that provides insight into individual product performance and maintenance. Sensors on the machine relay data — temperature, pressure, flow rate, voltage, loading, etc. — to the digital twin, and the twin evolves in step with the machines working environment. The digital twin can predict conditions long before they happen, so you can take corrective actions during scheduled downtime, rather than making an untimely shutdown. You can also use the collected data to improve the design of next-generation products.
- A digital twin of a working product system is created when smart sensors mounted on the product are connected to a computer model of that system in near real time. The twin system reflects the current condition of the actual product and changes during operation — reflecting wear, degraded performance or shifting conditions. When simulation is added to the digital twin ecosystem, conditions that are otherwise impossible to see and assess can be revealed.
- By studying the digital twin, engineers can determine the root cause of performance problems, schedule predictive maintenance, evaluate different control strategies and otherwise work to optimize product performance — and minimize operating expenses — in near real time. Simulation is the only way to fully realize the tremendous value contained within the digital twin.



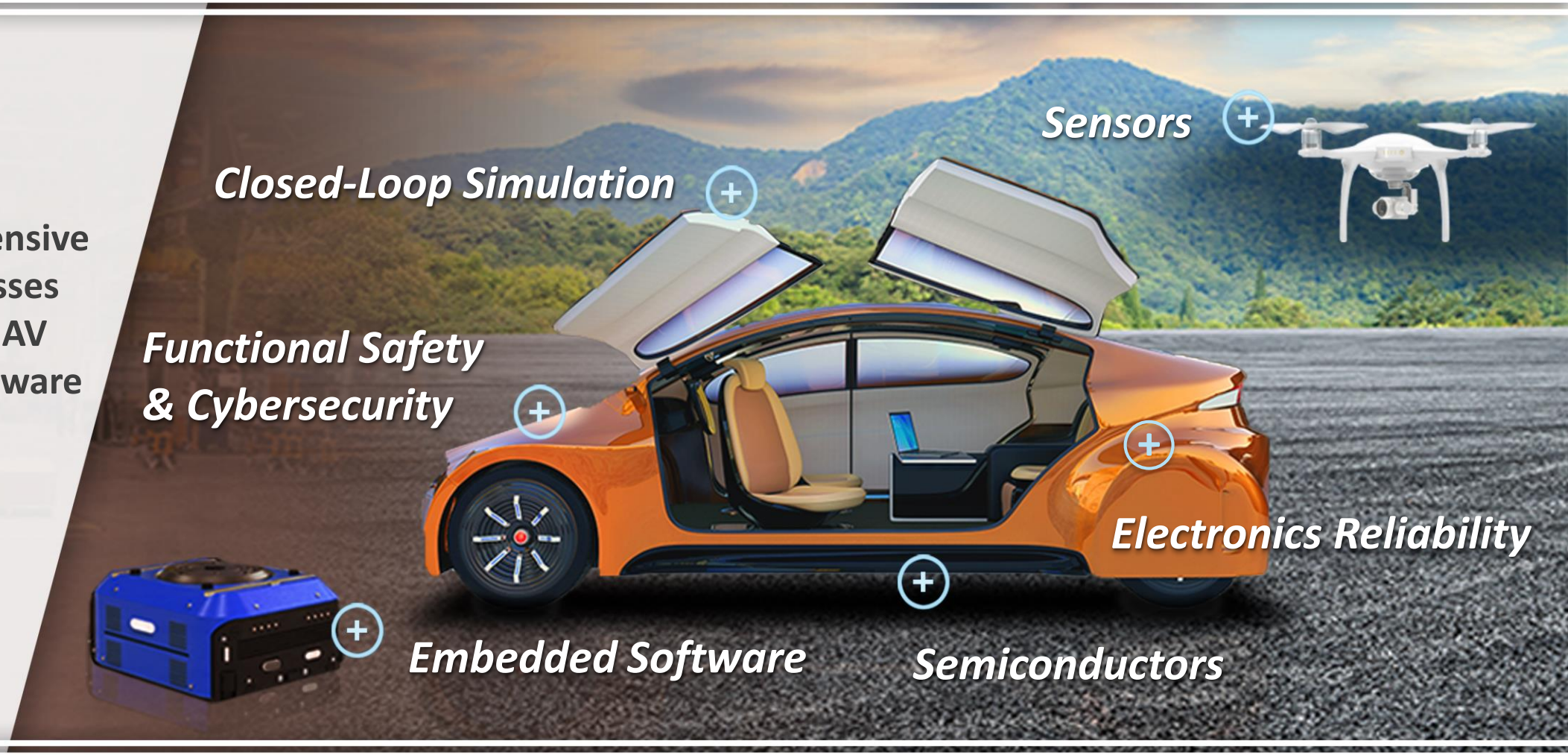
  - With the emergence of the Industrial Internet of Things (IIoT), simulation is expanding into operations.
  - The IIoT enables engineers to communicate with sensors and actuators on an operating product to capture data and monitor operating parameters.
  - The digital twin can be used to monitor prescriptive analytics and test predictive maintenance to optimize asset performance.

Additional information located at www.ansys.com/products/systems/digital-twin.

Autonomous Vehicle Simulation

ANSYS's AV Solution

ANSYS's comprehensive AV solution addresses these 6 aspects of AV hardware and software development



Additional information located at www.ansys.com/products/systems/adas

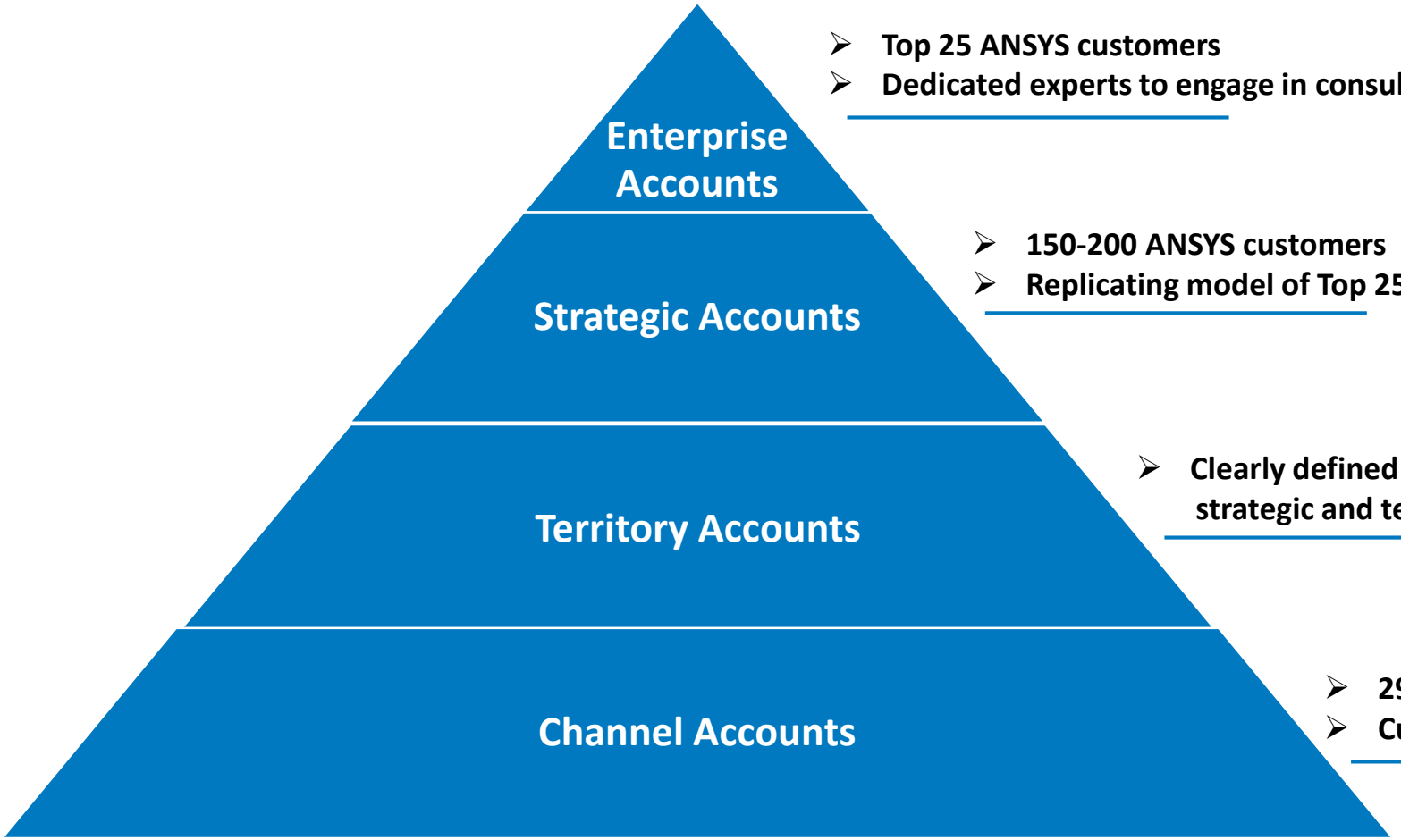
Expanding the ANSYS ecosystem through partnerships

- SAP incorporating ANSYS Twin Builder in cloud-based Predictive Engineering Insights
- Replace time-based maintenance of industrial assets with predictive and prescriptive maintenance
- Will help sell flagship products to R&D groups

- PTC embedding ANSYS Discovery Live and AIM within Creo for CAD-embedded simulation
- Improve ideation and enable designers to develop better, lower-cost products
- Will create opportunities to sell flagship products to experts / analysts

- Synopsys integrating ANSYS RedHawk with Synopsys IC Compiler for earlier signoff accuracy
- Accelerate time to market of next generation of high-performance computing, mobile and automotive products

Our go-to-market strategy is winning



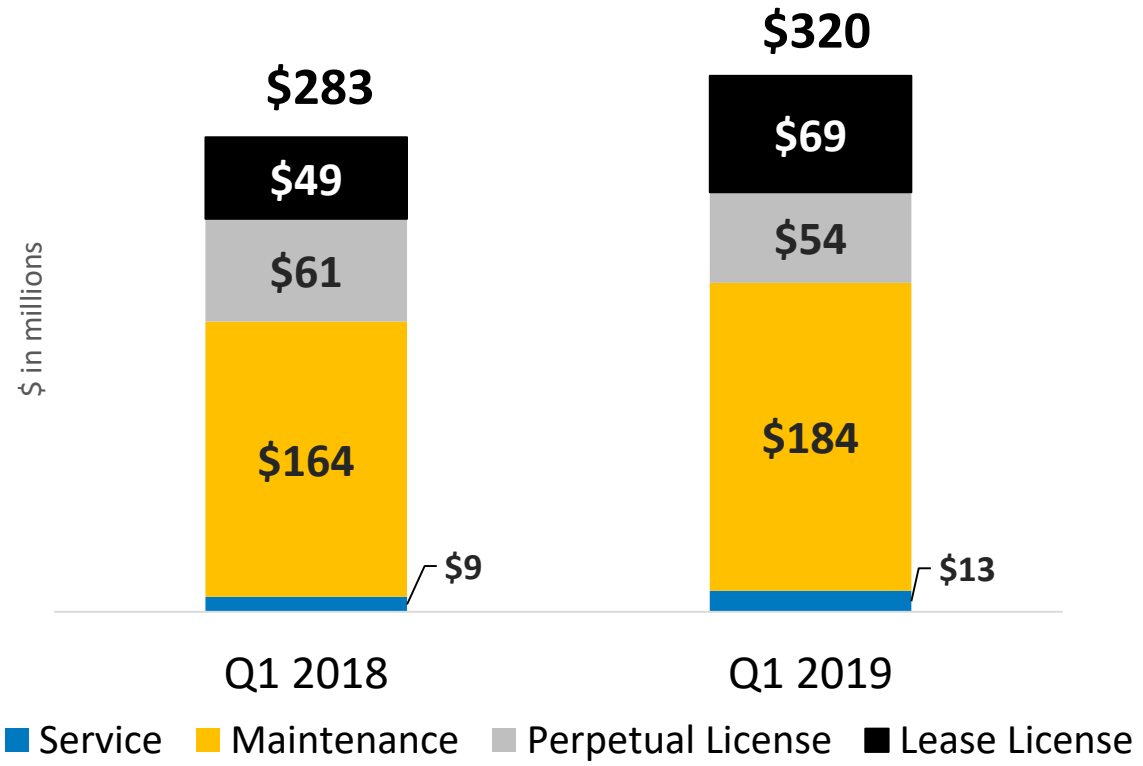
- Top 25 ANSYS customers
- Dedicated experts to engage in consultative selling

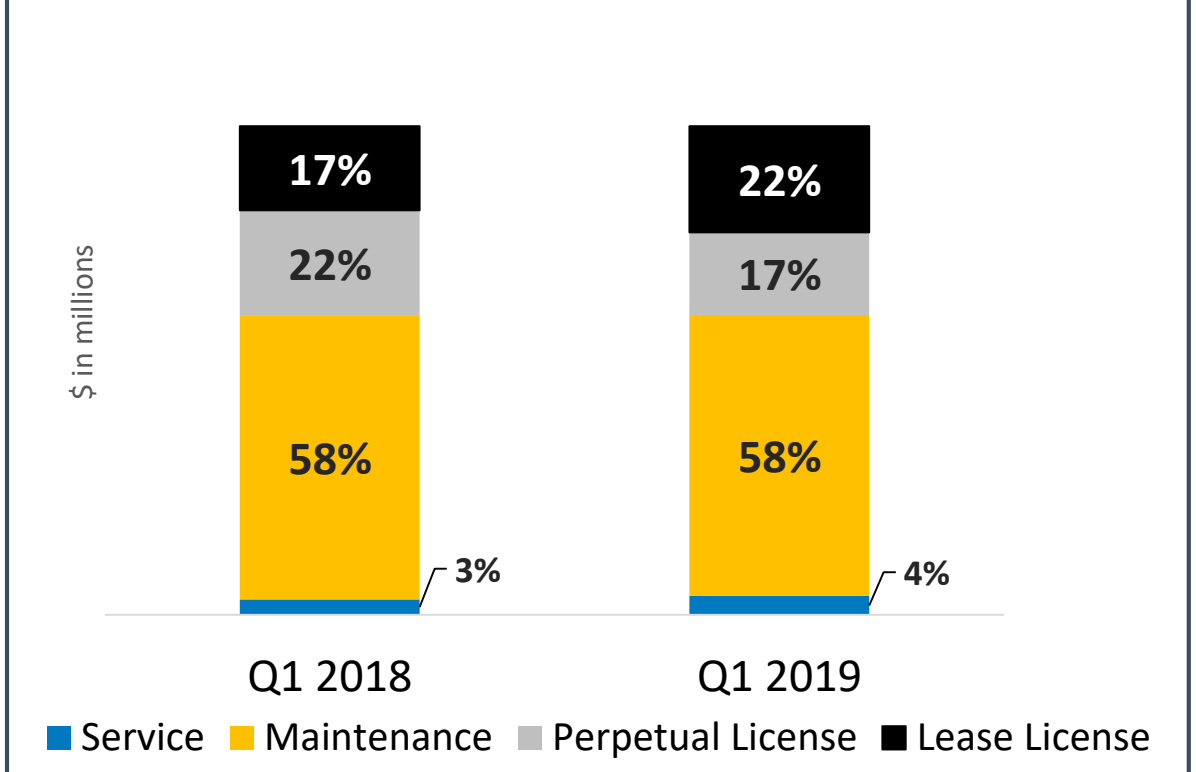
- 150-200 ANSYS customers
- Replicating model of Top 25

- Clearly defined resources between strategic and territory accounts

- 29% of revenue
- Customers <$500mn

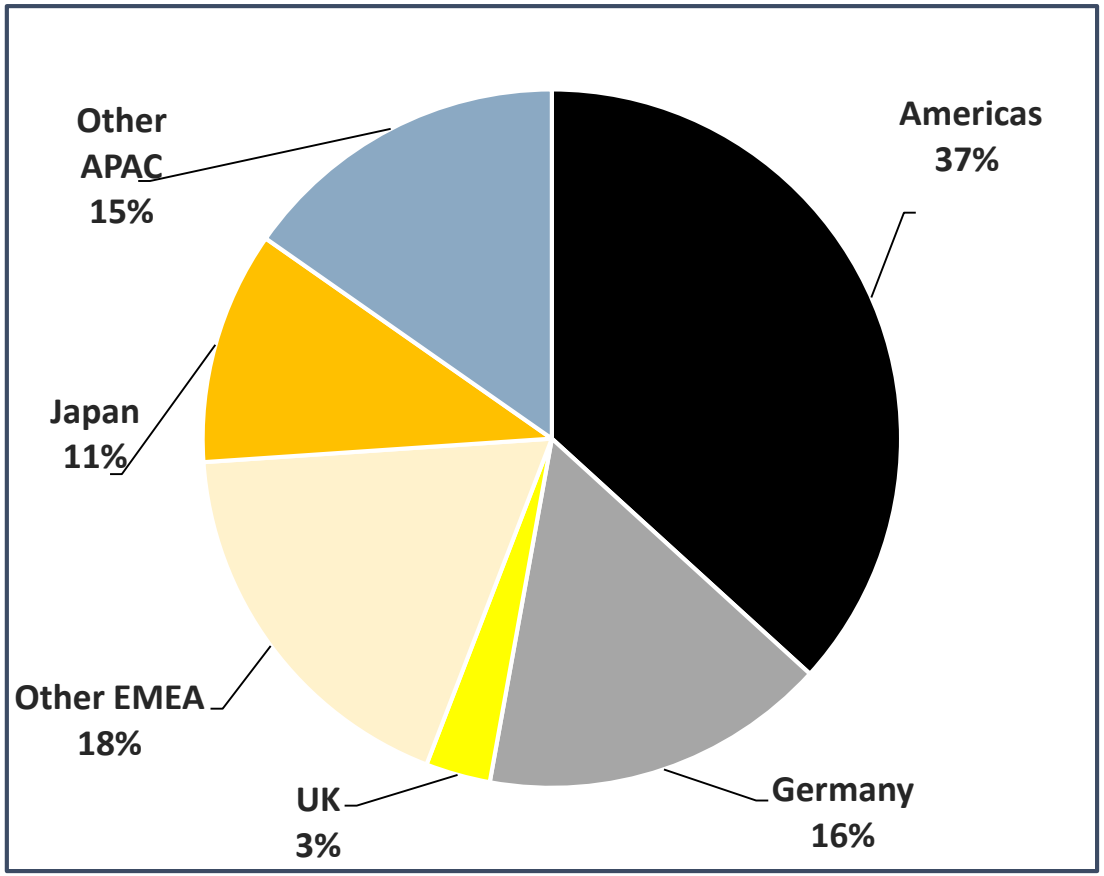
Diverse revenue sources



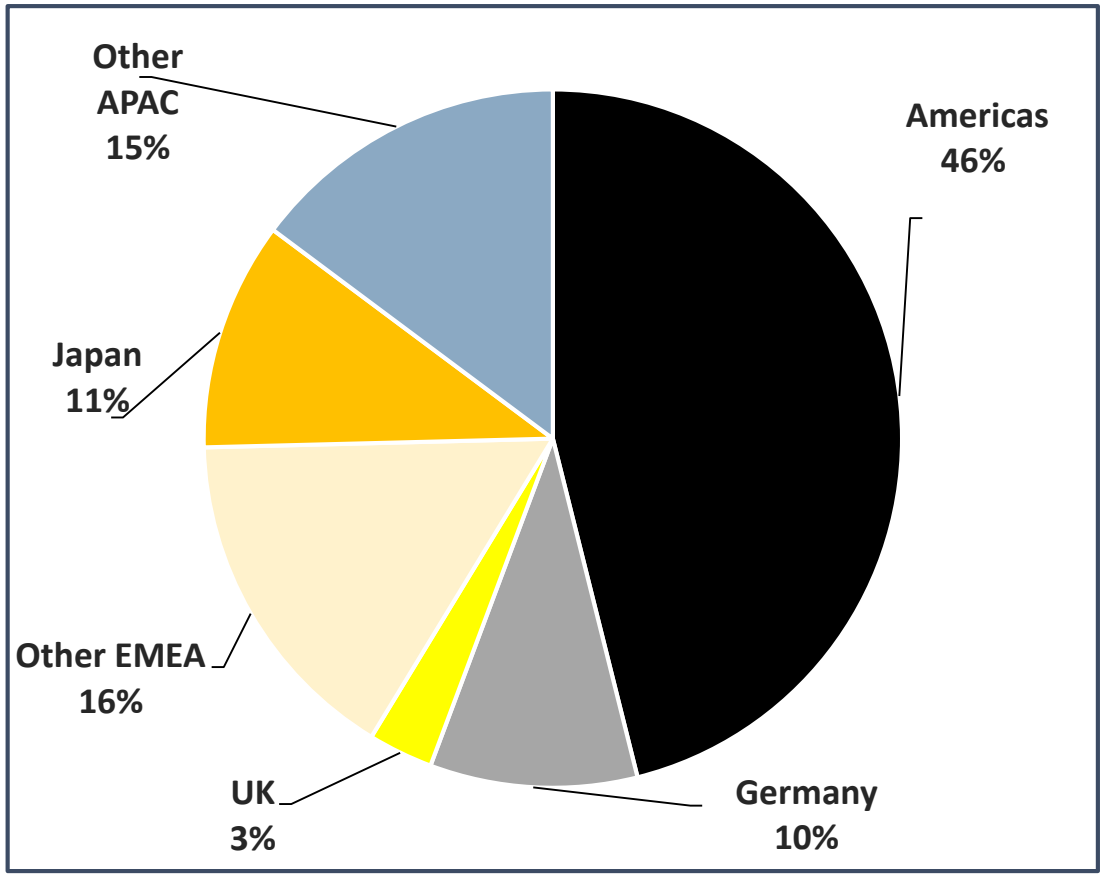


Diverse geography mix

Q1 2018 Revenue By Geography

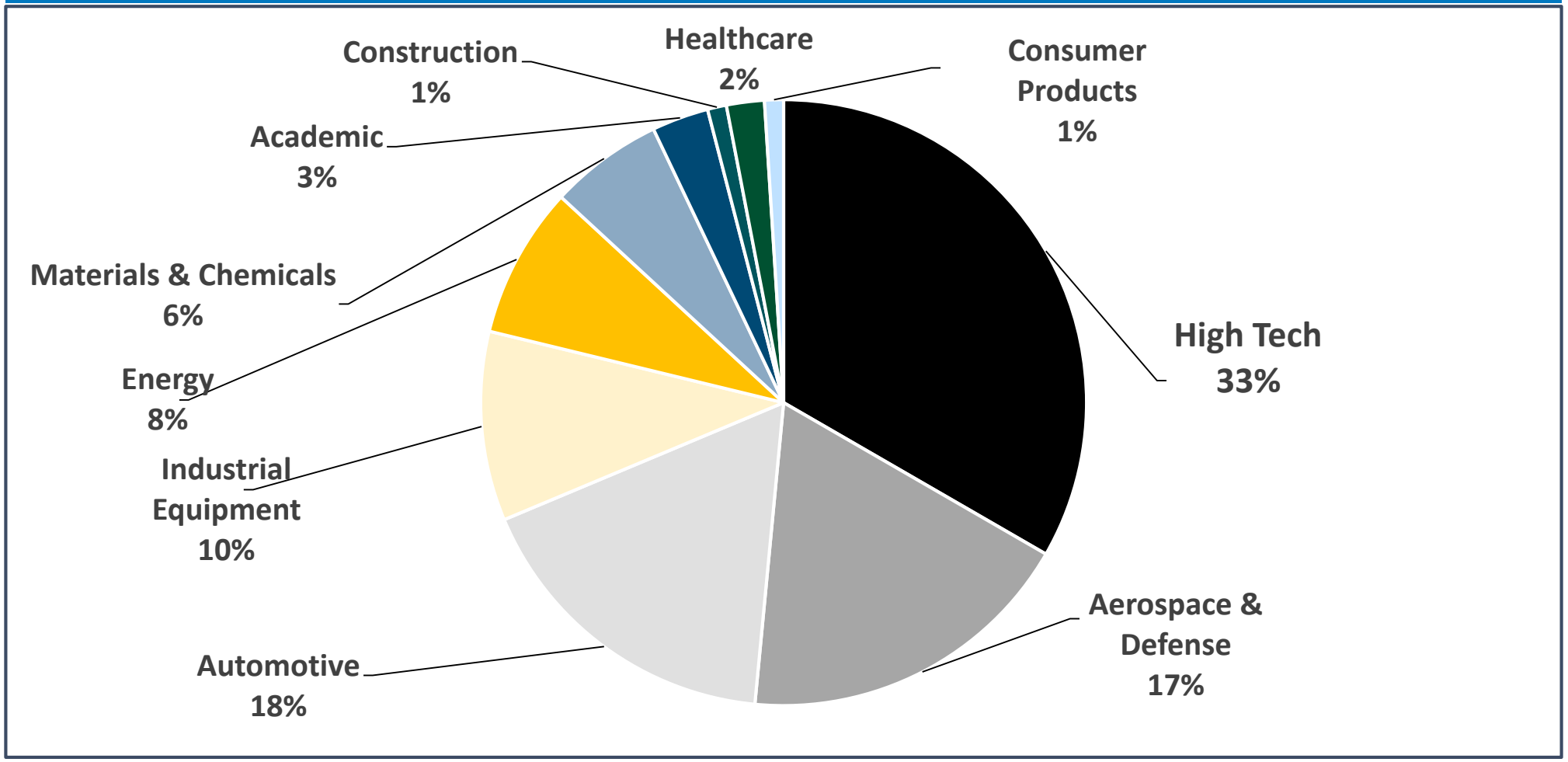


Q1 2019 Revenue By Geography



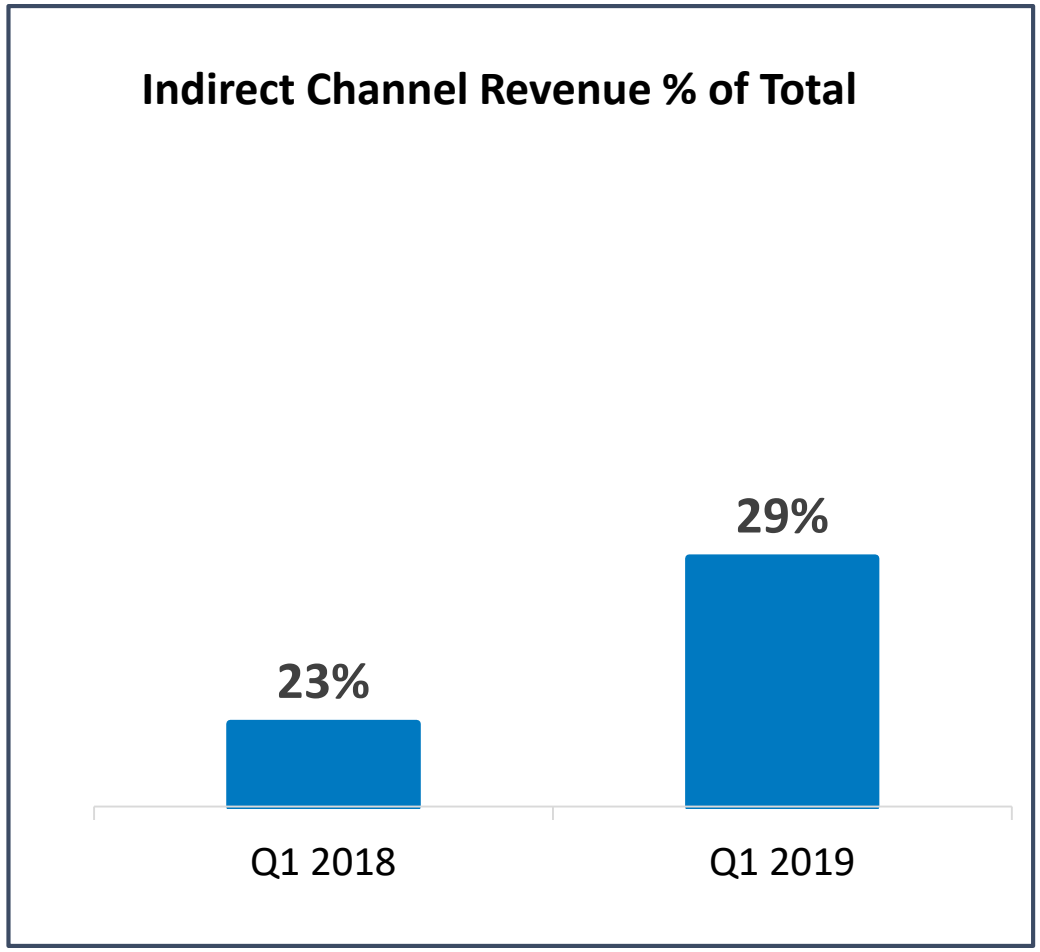
Diverse industry mix

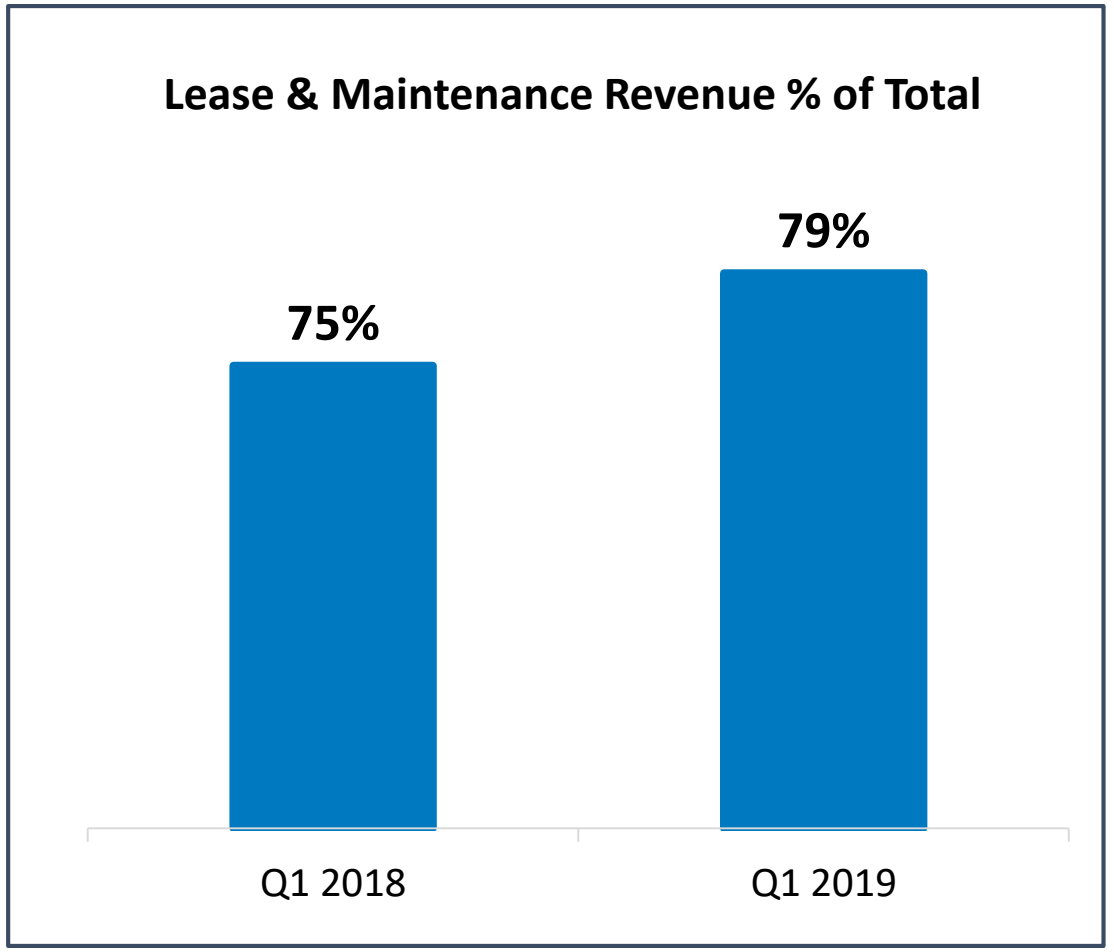
Trailing Twelve Month ACV By Industry – Q1 2019



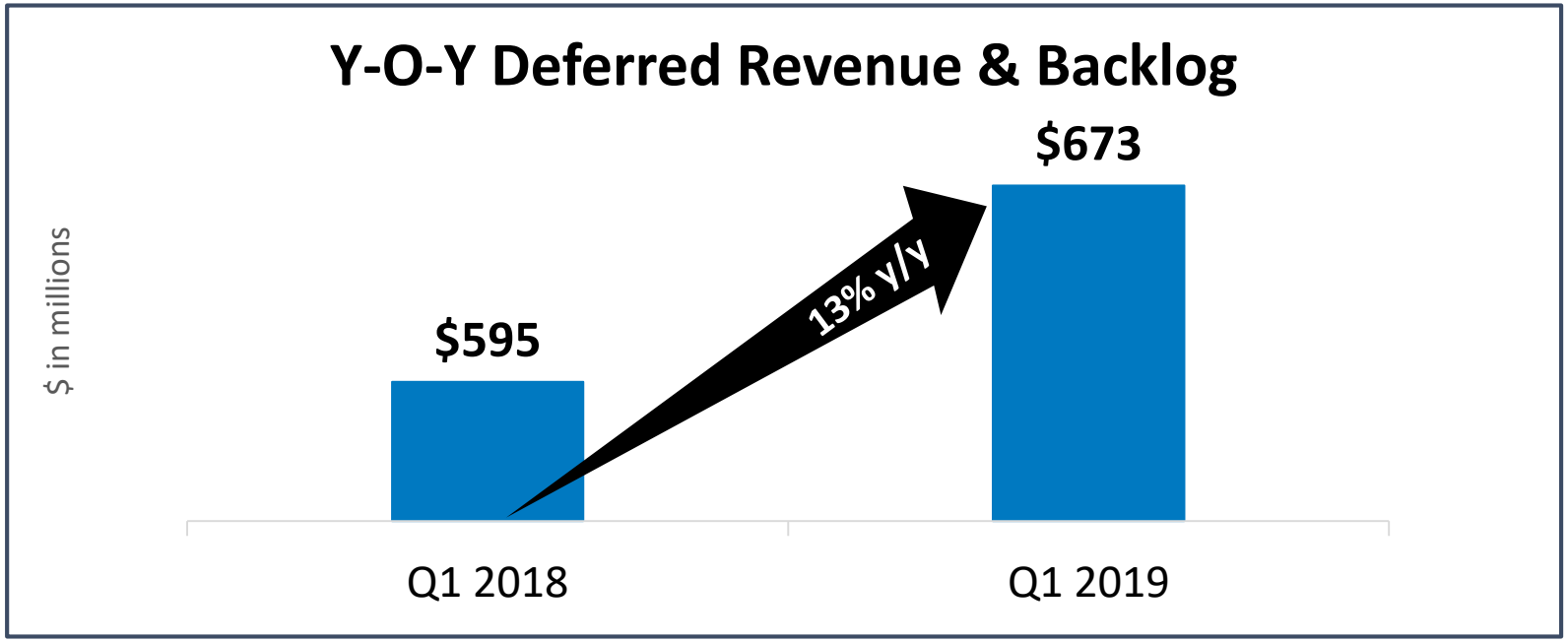
Note: Including Other which was 1%, industry mix ties to 100%

Diverse go-to-market revenue





Continuing to build deferred revenue and backlog



Note: Includes long-term deferred revenue and backlog.

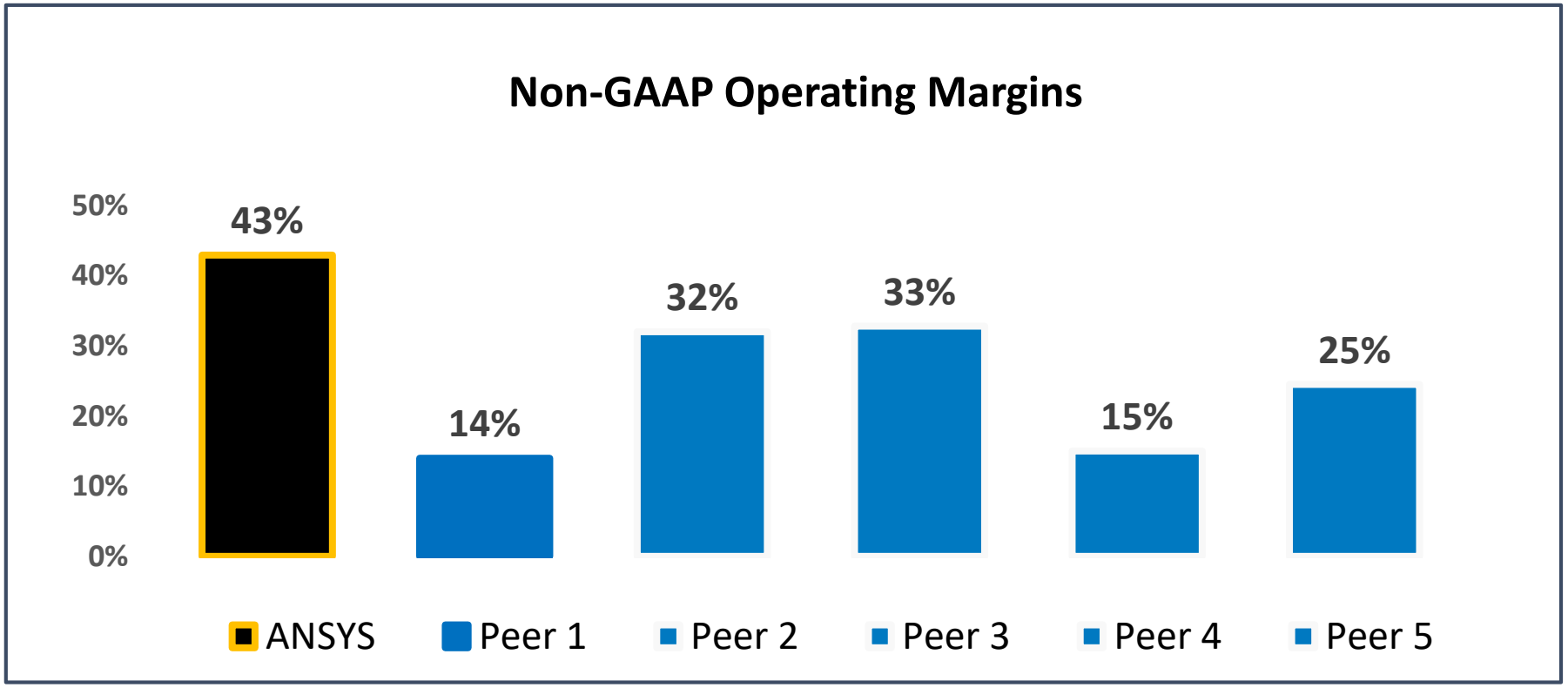
Strong Balance Sheet

As of March 31, 2019:

Cash & short-term investments	$608M
Cash flows from operations	$152M

Q1 2019 Industry-leading margins

- Our margins remain industry-leading for both our sector and vertical
- We are committed to maintaining our industry-leading margins while investing for long-term growth



ANSYS closest US peers include: Autodesk, Cadence, Dassault, PTC, Synopsys and Altair. ANSYS, Cadence, Dassault margins reported for Q1 2019 ended March 31, 2019. Additional peers margins reported for different periods: PTC for fiscal Q2 2019, ended March 31, 2019; Synopsys for the fiscal first quarter ended February 28, 2019 and Autodesk for the fiscal fourth quarter ended October 31, 2018. Altair Engineering does not report non-gaap operating margins.

Our long-term targets

Our 2020 target is sustained double-digit revenue growth…

…while maintaining financial discipline and best-in-class operating margins

Target 2020 Growth & Operating Margin Target (non-GAAP)
10%+
43-45%

ASC 605

Further opportunity to drive growth will require incremental investment

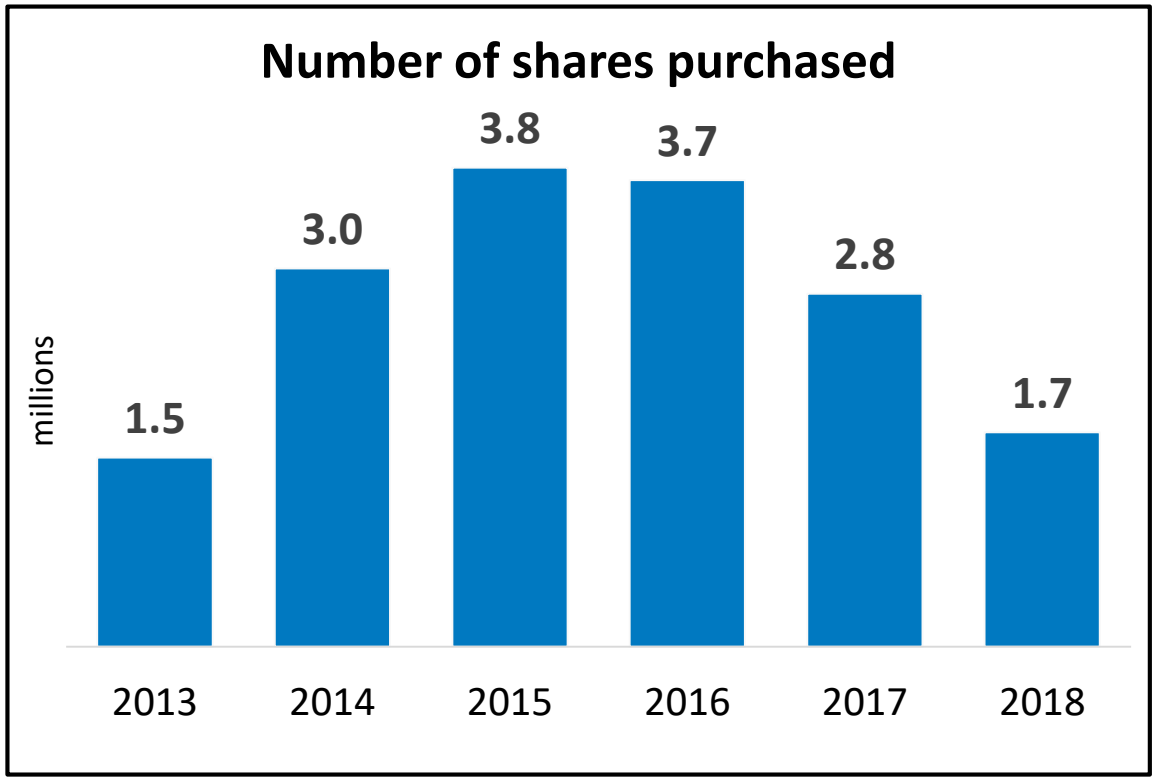
Go-to-market	• People (increased ratio of field engineers to sales reps, channel expansion and remote sales capability) • Tools/systems (quote-to-cash, low touch renewals) • Processes (customer advisory councils, data-driven planning)
Product	• Extending core technology leadership (physics, platform) • Investing in next-generation innovation (digital exploration, additive manufacturing, digital twin, IoT)
Scale Infrastructure	• Tools and systems (CRM, HRIS) • Expand competencies (FP&A, pricing, M&A) • New talent acquisition

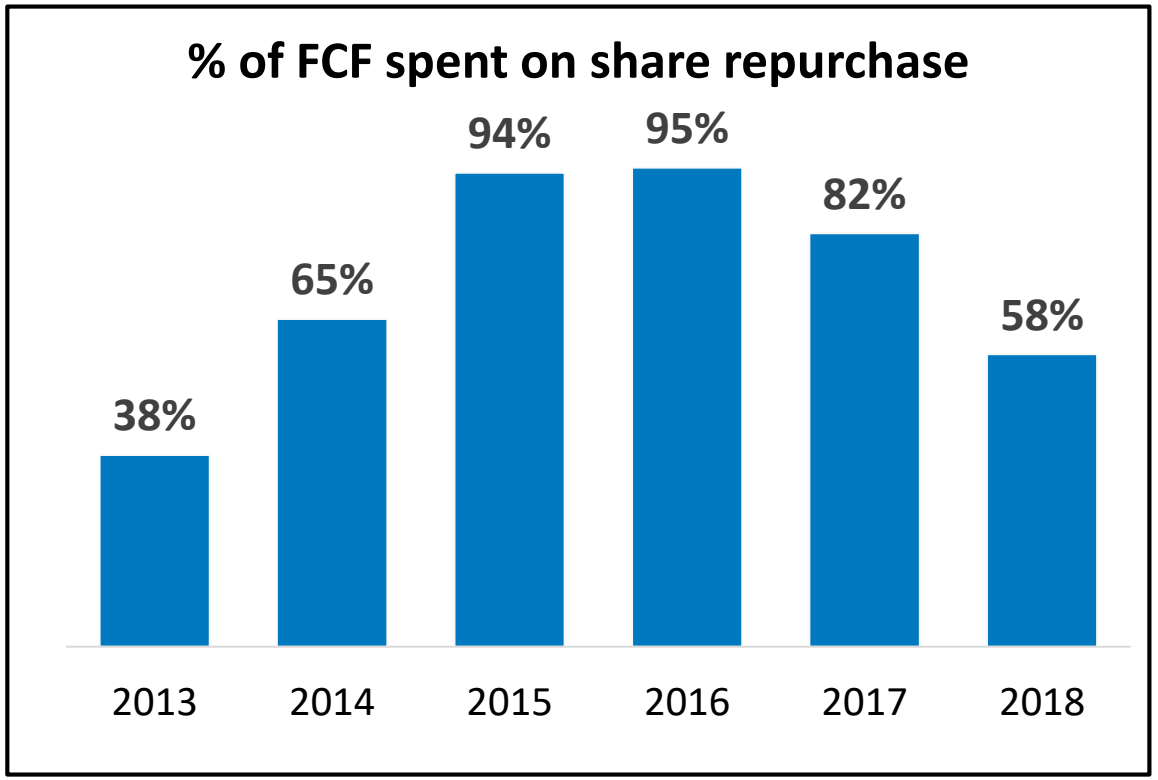
Partnerships and Acquisitions	• Investing to build strategic partnerships
	  • Customers: GE, Flowserve
	  • Peers: PTC, Synopsys

Capital allocation priorities

- **Investment in organic growth of the core business**
- **M&A to enhance growth**
  - **Size not determining factor – proven technology is key**
  - **Experienced talent**
  - **Synergy with customer base and global channel**
  - **Financially accretive within a reasonable timeframe**
- **Stock repurchase**
  - **Commitment to return excess cash to stockholders**

Returned excess capital to stockholders





Note: Free Cash Flow (FCF) defined as Operating Cash Flow – Capital Expenditures.

Return of excess capital to stockholders

- **We repurchased 0.3 million shares in Q1 at an average price of $179.42**
- **We spent 31% of free cash flow on share repurchase**

Financial Outlook – Q2 2019 ($ *in millions, except EPS*)

	GAAP	Non-GAAP
Revenue	$322.9 - $342.9	$325.0 - $345.0
Operating Margin	27.0% - 29.0%	39.0% - 41.0%
Tax rate	18.0% - 21.0%	21.0% - 22.0%
Diluted EPS	$0.79 - $1.00	$1.18 - $1.30

Financial Outlook – FY 2019 ($ *in millions, except EPS*)

	GAAP	Non-GAAP
Revenue	$1,421.9 - $1,471.9	$1,430.0 - $1,480.0
Operating Margin	32.0% - 34.0%	43.0% - 44.0%
Tax rate	18.0% - 21.0%	21.0% - 22.0%
Diluted EPS	$4.30 - $4.82	$5.75 - $6.10

Projected Annual Contract Value (ACV)	$1,425.0 - $1,470.0
Operating Cash Flows	$470.0 - $510.0

Why invest?

1. Market Leader in Engineering Simulation Positioned For Growth

- We have a 49-year history of technology innovation and commitment to engineering simulation
- ANSYS competitive strength is based on our technology leadership and reputation for simulating products across multiple physics with the highest accuracy
- Building on our technology and market leadership, we are extending our leadership well into the future by investing in our long-term secular growth initiatives

2. Long-Term Secular Growth Prospects

Ansys is positioned to benefit from multiple growth dimensions:

- Our pervasive engineering simulation strategy is designed to expand our footprint and drive broader adoption
  - ✓New applications; Additional users; Higher consumption of simulation
- Significant industry trends driving long-term secular growth opportunities
  - ✓Digital revolution making product design and delivery harder
  - ✓Faster, cheaper computing power

3. Continued Financial Discipline

- Track record of industry-leading margins for sector and software vertical

4. Incredible Financial Strength

- High percentage of growing recurring revenue and deferred revenue
- Diverse revenue sources
- Strong balance sheet

5. Strong Cash Generation

- Ability to invest in the core business
- Acquisition of best-in-class technologies extends leadership and supports future growth initiatives
- Returning excess capital to shareholders through share repurchases

Appendix

Appendix

ANSYS, INC. AND SUBSIDIARIES
Reconciliation of Non-GAAP Measures
(Unaudited)

(in thousands, except percentages and per share data)	Three Months Ended March 31, 2019 GAAP Results	Adjustments		Non-GAAP Results	Three Months Ended March 31, 2018 GAAP Results	Adjustments		Non-GAAP Results
Total revenue	**$ 317,130**	**$ 2,780**	**(1)**	**$ 319,910**	$ 282,873	$ 401	(4)	$ 283,274
Operating income	**95,649**	**41,537**	**(2)**	**137,186**	95,061	32,351	(5)	127,412
Operating profit margin	**30.2%**			**42.9%**	33.6%			45.0%
Net income	**$ 86,230**	**$ 24,440**	**(3)**	**$ 110,670**	$ 84,280	$ 18,784	(6)	$ 103,064
Earnings per share – diluted:								
Earnings per share	**$ 1.01**			**$ 1.29**	$ 0.98			$ 1.20
Weighted average shares	**85,493**			**85,493**	86,152			86,152

(1) Amount represents the revenue not reported during the period as a result of the acquisition accounting adjustment associated with the accounting for deferred revenue in business combinations.

(2) Amount represents $23.8 million of stock-based compensation expense, $4.0 million of excess payroll taxes related to stock-based awards, $8.3 million of amortization expense associated with intangible assets acquired in business combinations, $2.7 million of transaction expenses related to business combinations and the $2.8 million adjustment to revenue as reflected in (1) above.

(3) Amount represents the impact of the adjustments to operating income referred to in (2) above, decreased for the related income tax impact of $15.6 million, adjustments related to the transition tax associated with the Tax Cuts and Jobs Act of $1.3 million, and rabbi trust income of $0.2 million.

(4) Amount represents the revenue not reported during the period as a result of the acquisition accounting adjustment associated with the accounting for deferred revenue in business combinations.

(5) Amount represents $15.3 million of stock-based compensation expense, $3.1 million of excess payroll taxes related to stock-based awards, $12.2 million of amortization expense associated with intangible assets acquired in business combinations, $1.4 million of transaction expenses related to business combinations and the $0.4 million adjustment to revenue as reflected in (4) above.

(6) Amount represents the impact of the adjustments to operating income referred to in (5) above, decreased for the related income tax impact of $15.0 million and increased for adjustments related to the transition tax associated with the Tax Cuts and Jobs Act of $1.4 million.

ASC 606 requires three primary changes relative to current practice

Immediate license revenue recognition (including the license portion embedded in a lease)

1

Revenue allocation based on estimated selling price rather than Vendor-Specific Objective Evidence (VSOE)

2

Increased financial statement disclosures (including unbilled receivables, and the expected rollout of deferred revenue and backlog)

3

Overview of ASC 606 impact

INITIAL IMPACT

- Revenue recognition change will accelerate revenue
- Large, multi-year deals will create some volatility depending on timing (minority of the business)
- Modified retrospective implementation approach will provide disclosure of results under current rules for the first year
- Cash-flow impact for tax consequences of accelerated revenue
- No material change in accounting for sales commissions

GO-FORWARD IMPACT

- Minimal impact on future comparability for the vast majority of business volume
- Large, multi-year deals will create some volatility depending on timing (minority of the business)
- Impact likely to decrease over time as predictability increases
- ACV metric will provide clarity into business health
- No material change in accounting for sales commissions unless plan structure changes

New ACV metric will provide increased clarity into business health

NEW ANNUALIZED CONTRACT VALUE (ACV) METRIC

= **Bookings that occur during the quarter** + **Bookings in previous quarters with current period start date** - **Bookings in current quarter with a future start date** +/- **Adjustment to annualize time-based license and maintenance contracts greater than 1 year**

- We will continue to report and provide guidance on the same key financial metrics as we do today (revenue, operating margin, EPS, tax rate, etc.)
- We will begin disclosing fiscal year guidance on operating cash flow, free cash flow and ACV

IMPORTANT FACTORS REGARDING FUTURE RESULTS

The information provided in this document contains forward-looking statements concerning such matters as projected financial performance, market and industry segment growth, product development, commercialization and performance, acquisitions or other aspects of future operations, and other matters. Such statements, made pursuant to the safe harbor established by the securities laws, are based on the assumptions and expectations of the Company's management at the time such statements are made. The Company cautions investors that its performance and, therefore, any forward-looking statement, is subject to risks and uncertainties. Various important factors including, but not limited to, those discussed in the Company's Annual Report on Form 10-K (Item 1A. Risk Factors), may cause the Company's future results to differ materially from those forecasted in any forward-looking statement.

Annette N. Arribas
Senior Director, Global Investor Relations Officer
Phone: +1 (724) 820-3700
Email: annette.arribas@ansys.com

Virginea Stuart Gibson
Investor Relations Manager
Phone: +1 (724) 820-4225
Email: virginea.gibson@ansys.com

NASDAQ: ANSS

