DIGITAL TRANSFORMS PHYSICAL

Q2'23 FINANCIAL RESULTS

Jim Heppelmann
Chief Executive Officer

Kristian Talvitie
Chief Financial Officer

April 26, 2023

FORWARD LOOKING STATEMENTS

This presentation includes forward looking statements regarding PTC's future financial performance, strategic outlook and expectations, anticipated future operations, and expected effects of strategic investments and initiatives. Because such statements deal with future events, actual results may differ materially from those projected in the forward-looking statements. Information about factors that could cause actual results to differ materially from those in the forward-looking statements can be found in the appendix to this presentation and in PTC's Annual Report on Form 10-K, Forms 10-Q and other filings with the U.S. Securities and Exchange Commission.

IMPORTANT INFORMATION ABOUT OPERATING AND NON-GAAP FINANCIAL MEASURES

This presentation includes supplemental operating and non-GAAP financial measures, targets and estimates. The non-GAAP financial measures are not prepared in accordance with generally accepted accounting principles. The definitions of these items and reconciliations of non-GAAP financial measures to comparable GAAP measures are included in the appendix to this presentation.

Q2'23 HIGHLIGHTS

JIM HEPPELMANN, CEO

SOLID Q2’23 TOP LINE RESULTS

ARR

$ in millions	Q2'23[1]	Q2'22	YoY Change	Q2'23 Guidance
ARR as reported	$1,882	$1,532	23%	
ARR at constant currency	$1,814	$1,440	26%	$1,790 - $1,810
Organic ARR as reported	$1,696	$1,532	11%	
Organic ARR at constant currency	$1,631	$1,440	13%	

Broad-based strength across all product groups and geographic regions

- Exceeded the high-end of our Q2’23 constant currency ARR guidance range
  - Strong renewal results in Q2’23 and 1H’23, with churn rate improvement YoY, ahead of guidance
  - Solid bookings results in Q2’23 and 1H’23
  - Solid pipeline and outlook for 2H’23
- Narrowed our FY’23 constant currency ARR guidance range, based on our 1H’23 results and expectations for 2H’23
  - Q2’23 had a higher mix of ramp deals, which put slight pressure on near-term ARR, but is positive for our long-term outlook

[1] Organic results exclude ServiceMax (acquired in Q2’23) and Codebeamer (acquired in Q3’22)

SOLID Q2’23 BOTTOM LINE RESULTS

CASH FLOW

Cash flow growth driven by ARR growth and operating efficiency[1] expansion

$ in millions	Q2'23	Q2'22	YoY Change	Q2'23 Guidance
Cash from operations	$211	$142	48%	~$205
Free cash flow	$207	$140	48%	~$200

Operational changes and solid execution continue to generate the positive results we expect

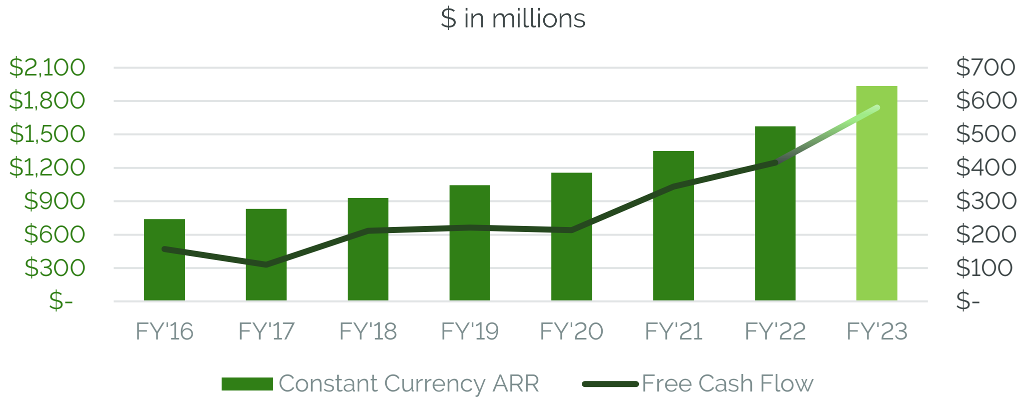
- Exceeded our Q2’23 cash flow guidance and extended our track record of disciplined operational management
- On track to expand operating efficiency[1] by at least 450 bps in FY’23, helped by resource rebalancing completed in 2H’22
- Raised our FY’23 cash flow guidance, based on our 1H’23 results and expectations for 2H’23
  - We are increasing investments in select growth opportunities (e.g., Codebeamer, Windchill+, and Atlas) in 2H’23
- Over the mid-term, we expect free cash flow to grow faster than ARR, with non-GAAP operating expenses expected to grow at roughly half the rate of ARR

[1] ARR + Perpetual License sales + Professional Services (collectively, inflows), less estimated cash costs to operate the business; divided by inflows

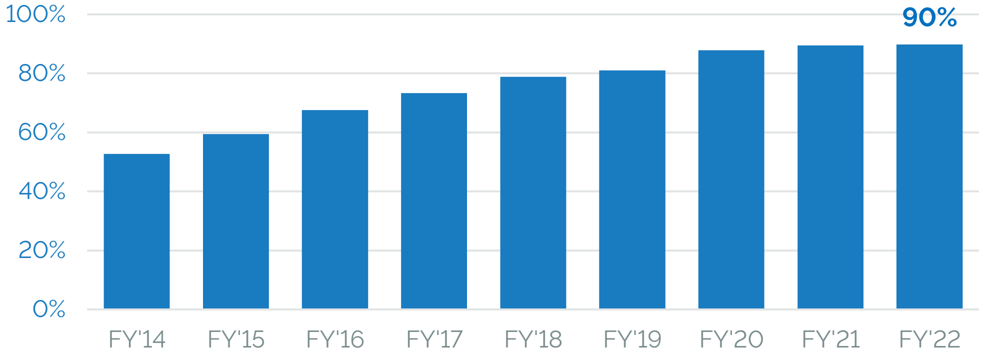
STRONG BALANCE OF TOP AND BOTTOM LINE GROWTH[1]

Peer-leading growth and resiliency supported by subscription business model

TOP AND BOTTOM LINE RESULTS



RECURRING REVENUE AS A % OF TOTAL REVENUE



POSITIONED TO DELIVER CONSISTENT FINANCIAL PERFORMANCE AT PEER-LEADING LEVELS

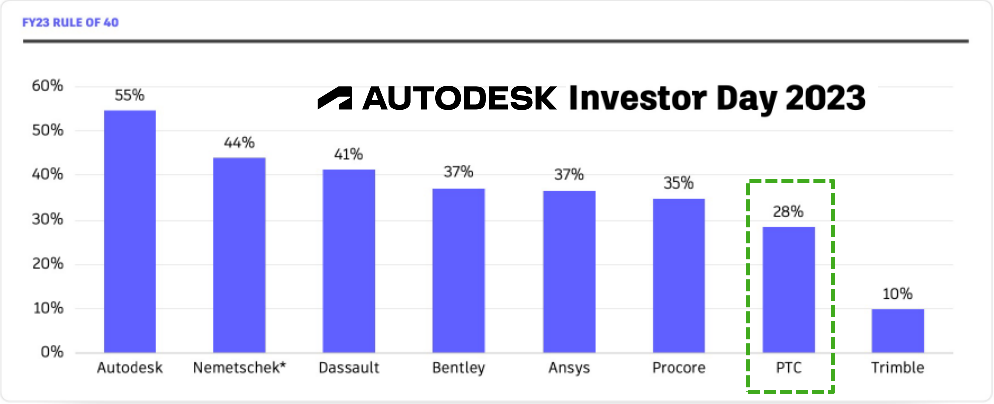
	FY'16 to FY'20 CAGR	FY'20 to FY'22 CAGR	Q2'23 Results	FY'23 Growth Guidance
Constant Currency ARR[1] growth	12%	17%	26% (13% organic[2])	22% - 24% (12% - 13% organic[3])
Non-GAAP Operating Expense growth	2%	8%	14%	10% - 11%
Free Cash Flow growth	8%	40%	48%	~39%

[1] Refer to the Non-GAAP Reconciliation Table on slide 30
[2] On a constant currency basis, using our FY'23 Plan foreign exchange rates (rates as of September 30, 2022) for all periods
[3] Organic Q2'23 results exclude exclude ServiceMax (acquired in Q2'23) and Codebeamer (acquired in Q3'22)
[4] Organic FY'23 growth guidance excludes ServiceMax (acquired in Q2'23)

RULE OF 40 PEER COMPARISON (USING REVENUE GROWTH % + FCF MARGIN %)

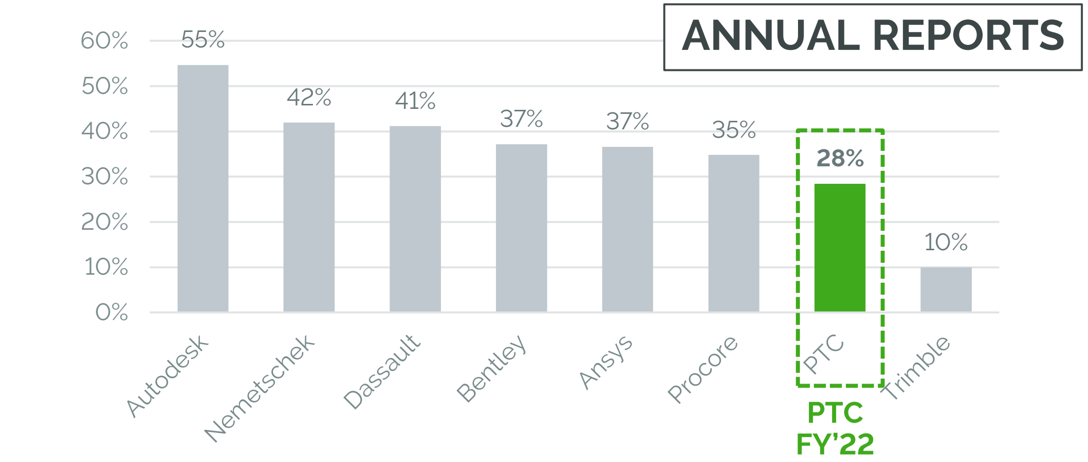
Balancing growth and profitability

Consistently industry leading rule-of-40 company

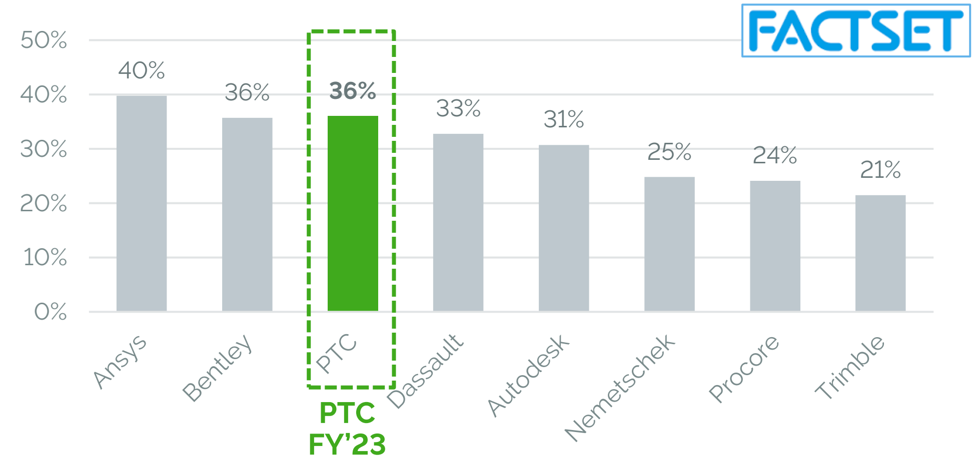


* prior year

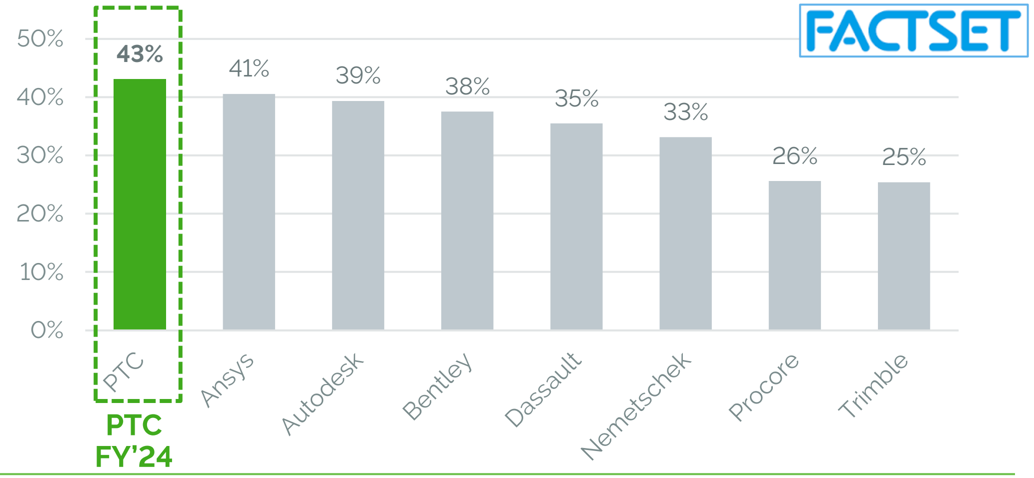
YEAR END CLOSEST TO DEC 31, 2022 ACTUALS



YEAR END CLOSEST TO DEC 31, 2023 CONSENSUS



YEAR END CLOSEST TO DEC 31, 2024 CONSENSUS



SOLID Q2'23 ARR RESULTS ACROSS GEOGRAPHIC REGIONS

Q2'23 compared to Q2'22

Americas

29% growth; 15% organic

Constant currency:

29% growth; 15% organic

Europe

21% growth; 9% organic

Constant currency:

25% growth; 12% organic

APAC

10% growth; 3% organic

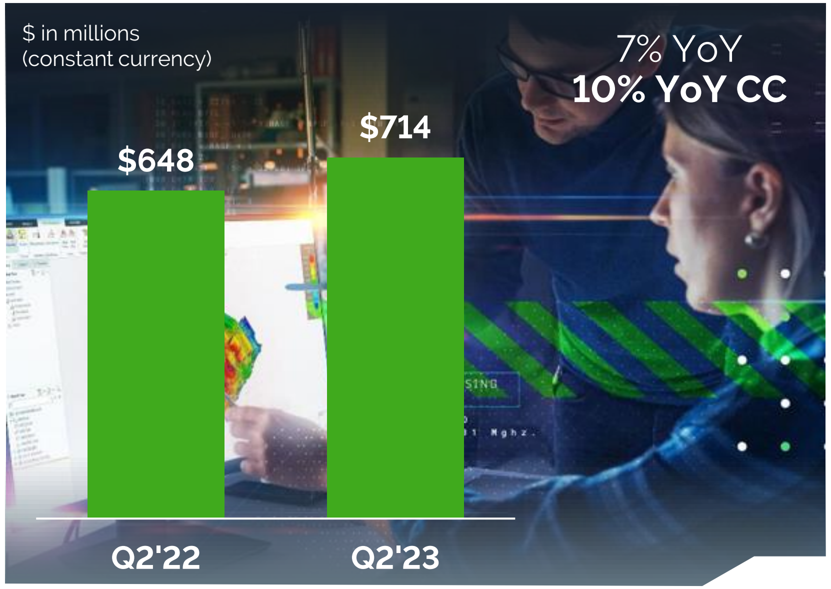
Constant currency:

19% growth; 12% organic

Inorganic growth due to the acquisition of ServiceMax and Codebeamer

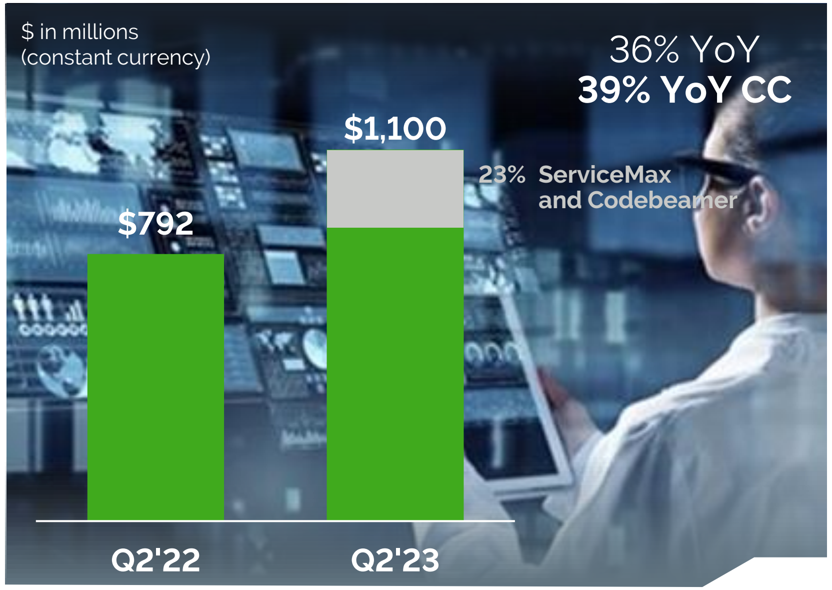
SOLID Q2'23 ARR RESULTS ACROSS PRODUCT GROUPS[1]

CAD: Product data authoring software



- Double-digit growth in the Americas and APAC; high single-digit growth in Europe
- Growth primarily driven by Creo
- Strong % growth in Onshape

PLM: Product data management and process orchestration software



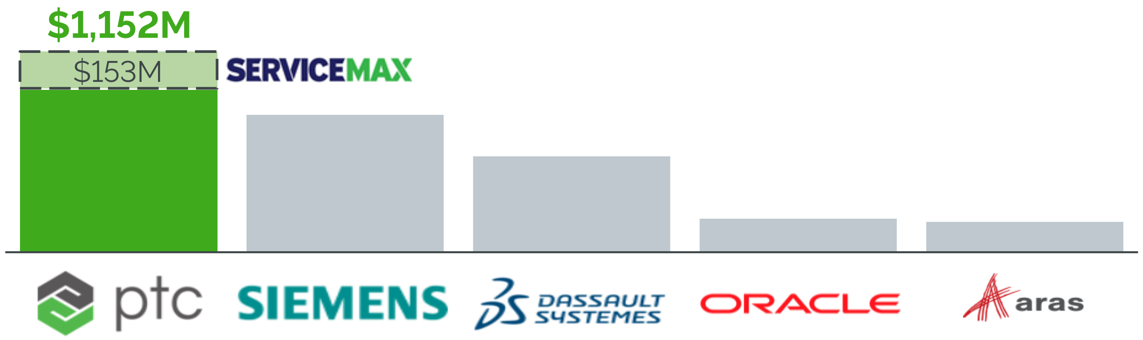
- 39% growth; 16% organic growth
- Double-digit organic growth across all 3 geographic regions
- Organic growth primarily driven by Windchill
- Strong organic % growth in Arena, Windchill, IoT, and SLM

[1] Amounts shown and discussed on this slide are on a constant currency basis; Slide 18 shows constant currency and reported ARR

PLM AND CAD IN CALENDAR 2022

PLM: Product data management and process orchestration software

PLM software revenue market share[1]



Category leadership in the PLM market

20% PTC ARR growth YoY vs **11% Market** revenue growth

- 2% inorganic growth (Codebeamer)
- Subscription business model
- Share gains due to strong product-market fit
- SaaS strategy

CAD: Product data authoring software

CAD software revenue market share[1]

Solid position in the CAD market

10% PTC ARR growth YoY vs **7% Market** revenue growth

- Subscription business model
- Share gains due to strong product-market fit
- SaaS strategy

[1] Source: Company data, industry analyst data, and estimates; Trailing pro forma revenue data for the 4 quarter period ended closest to 12/31/22 using consistent definitions of PLM and CAD; EUR amounts translated to USD on a quarterly basis using quarter-end foreign exchange rates

UPCOMING EVENT: LIVEWORX 2023

May 15 – 16, 2023
LiveWorx (in-person in Boston)

- Focused on strategy and customers
- Large global event with customers, partners, investors, and employees
- Dedicated investor track, featuring keynotes, investor sessions, and opportunities to interact directly with management, customers, and partners

ptc
LIVEWORX 23
A NEW ERA IN PRODUCT LIFECYCLE INNOVATION

Tuesday, May 16	Investor Track at LiveWorx 2023
9:00am – 10:15am	**Keynote session, featuring Jim Heppelmann, CEO**
10:15am – 11:15am	Break/Networking
11:15am – 11:45am	**Spotlight session on ServiceMax** with Neil Barua, President, SLM (Service Lifecycle Management)
12:00pm – 12:45pm	**Investor lunch** – Update on **environmental sustainability** and networking with members of our executive team
1:00pm – 1:30pm	**Spotlight session on Windchill+** with Mark Lobo, General Manager, PLM
1:40pm – 2:40pm	**Investor demo tour**
2:50pm – 3:20pm	**Spotlight session on Creo+** with Brian Thompson, General Manager, CAD
3:30pm – 4:30pm	**Investor Q&A session** with Jim Heppelmann, CEO, Kristian Talvitie, CFO, and members of our executive team
4:30pm	Adjourn Investor Track; free time to explore demos and network

Fresenius Medical Care is the world's leading provider of products and services for individuals with renal diseases of which around 3.8 million patients worldwide regularly undergo dialysis treatment. Fresenius Medical Care has a network of over 4,000 dialysis clinics and is also the leading provider of dialysis equipment.

FRESENIUS MEDICAL CARE

Challenge

With over 40 manufacturing factories and over 4,000 clinics globally, Fresenius Medical Care decided to take a harmonized and streamlined global approach to managing their product strategy. Coming from a document and paper centric world, Fresenius saw the opportunity to improve their products and bring down treatment costs for patients by digitally transforming the end-to-end management of their product lifecycle.

Solution and Impact

Fresenius built a digital workflow across their engineering, manufacturing and service domains, with **Windchill PLM** as the backbone. Fresenius is also using **Creo CAD** and **Thingworx IoT**, and they are leveraging insights from the connected data to improve product development, product quality, and the ongoing performance of their dialysis machines in their clinics.

- The end-to-end configuration management capabilities of Creo, Windchill, and Thingworx is enabling global collaboration in support of Fresenius' design anywhere, build anywhere, ship anywhere strategy.
- By executing product changes faster, driving automation, and doing preventative maintenance, Fresenius is bringing out new features and bringing down product costs at an accelerated pace, while also raising the quality and availability of treatment services for their patients.

windchill® | creo® | thingworx®

Komatsu develops and supplies technologies, equipment and services for the construction, mining, forklift, industrial and forestry markets. The company's global service and distributor networks support customer operations to enhance safety and productivity while optimizing performance.

KOMATSU

KOMATSU

Challenge

Komatsu is a titan in the heavy equipment industry. They design, manufacture, and service some of the largest industrial equipment in the world, with decades-long operational use.

Because post-sales service is strategic to their financial performance, Komatsu has been investing to boost the growth and profitability of their lifecycle support business. The support Komatsu offers after delivering equipment includes scheduled maintenance, unscheduled repairs, and parts services.

Solution and Impact

To help optimize their services business, Komatsu has expanded the use of PTC software beyond engineering and manufacturing (where they use **Creo CAD** and **Windchill PLM**).

- In 2022, **ServiceMax** was selected to digitize asset management and integrate service data to increase visibility and optimize service offerings.
- Since 2015, **Arbortext** is used to streamline the availability of trustworthy contextual technical content and documentation.
- Since 2006, **Servigistics** is used to optimize the service parts inventory globally to ensure the right service parts are available when, and where they are needed to maximize equipment utilization and availability.

SERVICEMAX a ptc technology | ptc servigistics | ptc arbortext

WRAP UP

STRONG PORTFOLIO AND STRATEGY

Portfolio of products is unique and compelling

Strategy and evolving portfolio align well to customer demand

Ranked as technology leader across portfolio

STRONG EXECUTION

FY'23 forecasted to be our 7th consecutive year of double-digit constant currency ARR growth

Targeting mid-teens constant currency ARR growth in FY'25

MARGIN EXPANSION

Hiring and investing in-line with macroeconomic environment and market opportunity

Targeting incremental margin expansion

PEER-LEADING ARR AND FCF GROWTH

Durable and efficient growth supported by highly resilient model with product leadership and SaaS tailwinds

Targeting peer-leading top line (ARR) and bottom line (FCF) growth

PTC has never been in a better position to create shareholder value

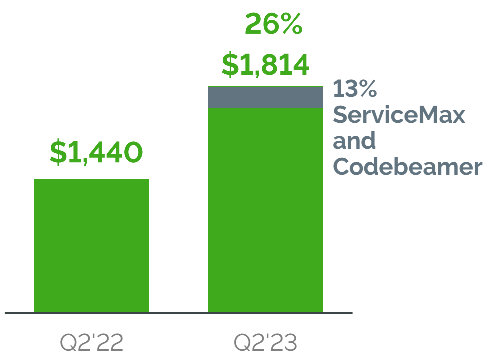
FINANCIAL REVIEW AND GUIDANCE

KRISTIAN TALVITIE, CFO

Q2'23 RESULTS VS PRIOR YEAR

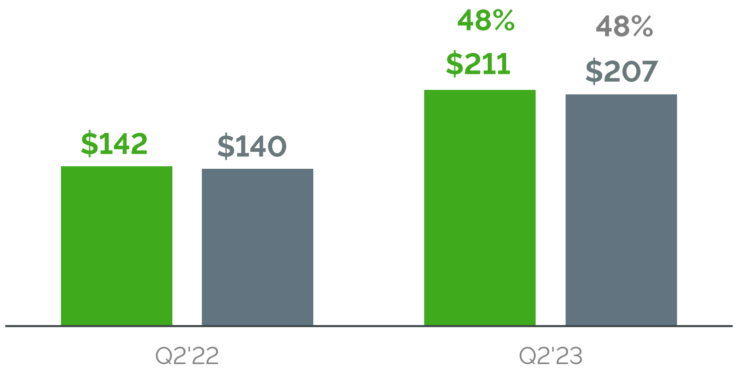
$ in millions

CONSTANT CURRENCY ARR



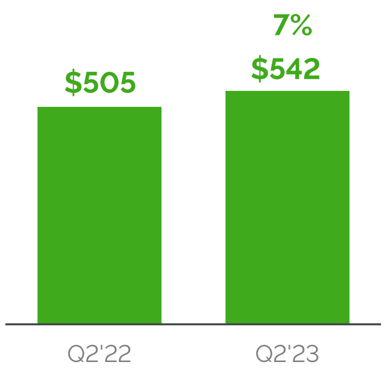
- ARR growth of 23%; organic ARR growth of 11%
- Constant currency ARR growth of 26%; organic constant currency ARR growth of 13%
- As reported ARR was $68M higher than constant currency ARR in Q2'23; However, FX was still a significant headwind YoY

CASH FLOW[1]



- Cash flow performance reflects continued operational execution
- Free cash flow is primarily a function of ARR rather than revenue

REVENUE



- Revenue growth of 7%; 13% constant currency
- While every $1 of ARR becomes $1 of revenue over the term of the contract, the timing of revenue recognition for on-premise subscription revenue under ASC 606 can vary significantly, impacting reported revenue and growth rates

[1] Refer to the Non-GAAP Reconciliation Table on slide 30

BALANCE SHEET AND SHARE REPURCHASES

Balance sheet as of March 31, 2023

- Cash and cash equivalents of $320 million
- Gross debt of $2,545 billion with an aggregate interest rate of 5.4%
  - $1.0 billion of senior notes with an aggregate interest rate of 3.8%
  - $500 million term loan with a variable interest rate of 6.4%
  - $425 million drawn on $1.25 billion revolving credit facility with a variable interest rate of 6.4%
  - $620 million deferred acquisition payment due in October 2023 related to ServiceMax
    - We will incur a total of $30 million of imputed interest, which reflects a fixed interest rate of 6.4%

Debt/EBITDA

- Debt/EBITDA ratio at the end of Q2'23 was 3.4x
- Debt/EBITDA ratio expected to be approximately 3x at the end of FY'23 and below 3x during FY'24

Share repurchase program

- Our long-term goal, assuming our Debt/EBITDA ratio is below 3x, is to return approximately 50% of our free cash flow to shareholders via share repurchases, while also taking into consideration the interest rate environment and strategic opportunities
- Given the current interest rate environment, we expect to prioritize paying down our debt in FY'23 and FY'24
- Expected share count increase of approximately 1 million in FY'23

FX DYNAMICS: IMPACT TO ARR

In millions	FY'22				FY'23			
ARR by Product Group (Constant Currency)	**Quarter Ended**				**Quarter Ended**			
Using FX rates as of September 30, 2022	**31-Dec**	**31-Mar**	**30-Jun**	**30-Sep**	**31-Dec**	**31-Mar**	**30-Jun Guidance Midpoint**	**30-Sep Guidance Midpoint**
CAD (product data authoring)	$ 632	$ 648	$ 665	$ 685	$ 696	$ 714		
PLM (product data management and process orchestration)	757	792	831	887	907	1,100		
Ending ARR	$ 1,389	$ 1,440	$ 1,496	$ 1,572	$ 1,603	$ 1,814	**$ 1,850**	**$ 1,938**

In millions	FY'22				FY'23			
ARR by Product Group (as Reported)	**Quarter Ended**				**Quarter Ended**			
	31-Dec	**31-Mar**	**30-Jun**	**30-Sep**	**31-Dec**	**31-Mar**	**30-Jun Midpoint[1]**	**30-Sep Midpoint[2]**
CAD (product data authoring)	$ 690	$ 698	$ 691	$ 685	$ 727	$ 748		
PLM (product data management and process orchestration)	806	834	854	887	936	1,134		
Ending ARR	$ 1,496	$ 1,532	$ 1,544	$ 1,572	$ 1,663	$ 1,882	**$ 1,920**	**$ 2,011**

For comparative purposes, in FY'23, we are reporting constant currency ARR using rates as of September 30, 2022 for all periods

[1] At end of Q2'23 FX rates, Q3'23 ARR would be higher by approximately $70 million, compared to our constant currency guidance
[2] At end of Q2'23 FX rates, FY'22 ARR would be higher by approximately $73 million, compared to our constant currency guidance

FX DYNAMICS: ARR SENSITIVITY TO EUR/USD AND USD/YEN

In millions	End of Q2'23
ARR base	$1,814
Estimated impact of $0.10 change in EUR/USD rate	$40
Estimated impact of 10 Yen change in USD/JPY rate	$9

As of the end of Q2’23

- 54% of our ARR is transacted in USD
- 23% of our ARR is transacted in EUR
- 6% of our ARR is transacted in JPY
- Also, we transact in 10+ additional currencies

FY'23 AND Q3'23 GUIDANCE

$ in millions	FY'23 Previous Guidance	FY'23 Guidance	FY'23 YoY Growth Guidance	Q3'23 Guidance
ARR at Constant Currency[1]	$1,910 - $1,960	$1,925 - $1,950	22% - 24%	$1,845 - $1,855
Cash from Operations	~$595	~$600	~38%	~$160
Free Cash Flow	~$575	~$580	~39%	~$155
Revenue	$2,070 - $2,150	$2,080 - $2,140	8% - 11%	

- Based on our performance in 1H'23 and outlook for 2H'23, we are:
  - **narrowing our Constant Currency ARR guidance range while slightly raising the midpoint,**
  - **increasing our Cash Flow guidance,** and
  - **increasing investments** in 2H'23 into select long-term growth opportunities
- In FY'23, we expect the quarterly linearity of full year Cash Flow results to follow a similar pattern as in FY'22 and FY'21

Reconciliation of Cash from Operations to Free Cash Flow

In millions	FY'23 Guidance	Q3'23 Guidance
Cash from Operations	~$600	~$160
Capital Expenditures	(~$20)	(~$5)
Free Cash Flow	~$580	~$155

[1] On a constant currency basis, using our FY'23 Plan foreign exchange rates (rates as of September 30, 2022) for all periods

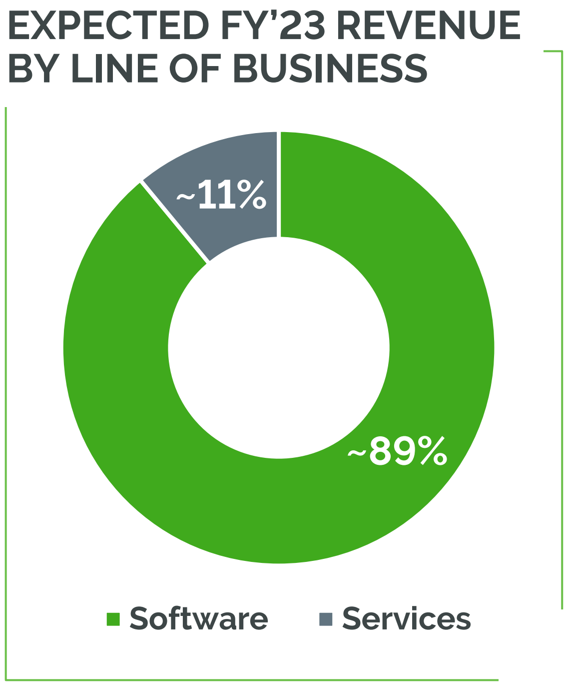
UPDATED FY’23 ARR AND FCF GROWTH SCENARIOS

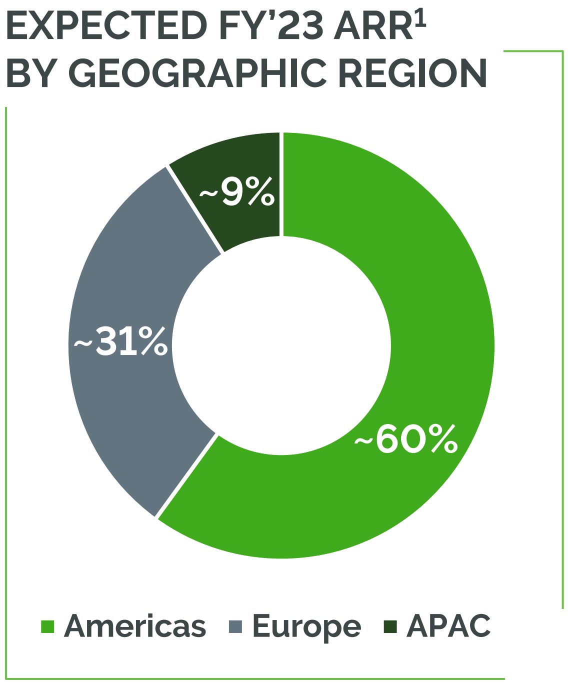
		Constant Currency ARR	Constant Currency ARR Growth	Organic Bookings YoY Scenario	Organic Churn YoY Scenario	Free Cash Flow[1]
Start of Q3’23 Most Plausible Scenarios	Updated Guidance Range	**$1,950 million**	**24%**	ARR drivers include:		**~$580 million**
		$1,938 million	**23%**	▪ bookings ▪ churn		**~$580 million**
		$1,925 million	**22%**	▪ ramp deals ▪ in-year starts		**~$580 million**
Guidance Raises		**+ $170M ARR** from ServiceMax **+ $8M ARR** guidance raise at midpoint				**+ $5M FCF** net from ServiceMax **+ $15M FCF** guidance raise
Start of FY’23 Most Plausible Scenarios	Initial Guidance Range	**$1,790 million**	**14%**	~5%	Flattish	**~$560 million**
		$1,760 million	**12%**	Flattish	~100bps worse	**~$560 million**
		$1,730 million	**10%**	~(15)%	~100bps worse	**~$560 million**

[1] Free cash flow guidance assumes more spending if we are at the high end of the ARR range and less spending if we are at the low end

EXPECTED FINANCIAL IMPACT OF SERVICEMAX IN FY'23

SERVICEMAX
a ptc technology





ServiceMax within PTC	FY'23 Expectation
Constant Currency ARR[1]	~$170 million
ARR Collections mix	~95% U.S. Dollar
Free Cash Flow impact to PTC[2]	~$5 million accretive
Revenue	~$140 million from Q2'23 - Q4'23
Non-GAAP Gross Margin %	~70%
Non-GAAP Operating Expense	~$70 million from Q2'23 - Q4'23
Total PTC cash interest payments	$85 million PTC total
Total PTC P&L interest expense	$125 million PTC total

[1] On a constant currency basis, using our FY'23 Plan foreign exchange rates (rates as of September 30, 2022)
[2] On a net basis, taking into account ServiceMax's free cash flow, partially offset by transaction-related payments and incremental interest payments

ILLUSTRATIVE CONSTANT CURRENCY ARR MODEL

What does PTC need to deliver to achieve the midpoint of constant currency ARR guidance?

Using FX rates as of September 30, 2022 $ in millions	Actual Q1'22	Actual Q2'22	Actual Q3'22	Actual Q4'22	Actual Q1'23	Actual Q2'23	What you need to believe Q3'23	What you need to believe Q4'23
Beginning ARR	$ 1,353	$ 1,389	$ 1,440	$ 1,496	$ 1,572	$ 1,603	$ 1,814	$ 1,850
Ending ARR	**1,389**	**1,440**	**1,496**	**1,572**	**1,603**	**1,814**	**1,850**	**1,938**
Sequential ARR growth	$ 37	$ 51	$ 56	$ 76	$ 31	$ 211	$ 36	$ 88
Acquisitions and exits[1]	-	5	(13)	-	-	(159)	-	-
Sequential organic ARR growth	**$ 37**	**$ 56**	**$ 43**	**$ 76**	**$ 31**	**$ 52**	**$ 36**	**$ 88**
Sequential organic ARR growth %	***3%***	***4%***	***3%***	***5%***	***2%***	***3%***	***2%***	***5%***

- Q3’23 and Q4’23 Ending ARR modelled at the midpoints of our guidance ranges
- To hit the midpoints of guidance for Q3’23 and Q4’23, we need:
  - $36M of sequential organic ARR growth in Q3’23, $7M less than we added QoQ in Q3’22
  - $88M of sequential organic ARR growth in Q4’23, $12M more than we added QoQ in Q4’22
  - Previously deferred ARR and ARR growth from ServiceMax are expected to provide $10M+ of incremental sequential ARR growth in Q4’23, compared to Q4’22

[1] Russia exit in Q2’22, Codebeamer acquisition in Q3’22, and ServiceMax acquisition in Q2’23

WEATHERING A STORM

PTC has a strong track record of disciplined operational management

Our top line is resilient due to our subscription business model and customer stickiness

Our cost structure is lean due to our FY'22 organizational realignment and resource rebalancing

We are proactively adapting to changing macro environments and market conditions

Solid Execution in FY'23

- Organic bookings expected to be flattish (vs. record bookings in FY'22) plus incremental bookings from ServiceMax and Codebeamer
- Organic churn rate improved in 1H'23, compared to 1H'22
- Free cash flow guidance ~$20M above initial guidance based on solid execution and prudent cost controls in 1H'23, as well as FX tailwind, partially offset by incremental investments in select growth opportunities (e.g., CodeBeamer, Windchill+, and Atlas) in 2H'23, as well as higher interest expense

APPENDIX: FY’23 GUIDANCE ASSUMPTIONS

- We provide ARR guidance on a constant currency basis, using our FY’23 Plan foreign exchange rates (rates as of September 30, 2022) for all periods. Foreign exchange fluctuations during the first half of FY’23 had a favorable impact on our Q2’23 reported ARR, compared to our Q2’23 constant currency ARR. Using foreign exchange rates as of the end of Q2’23 and assuming the midpoint of our constant currency guidance ranges:
  - Q3’23 reported ARR guidance would be higher by approximately $70 million, compared to Q3’23 constant currency ARR guidance
  - FY’23 reported ARR guidance would be higher by approximately $73 million, compared to FY’23 constant currency ARR guidance
- We expect FY’23 organic churn to be approximately 5.5%, in-line with FY’22.
- For cash flow, due to invoicing seasonality, and consistent with the past 2 years, we expect the majority of our collections to occur in 1H’23 and for Q4’23 to be our lowest cash flow generation quarter.
- Compared to FY’22, at the midpoint of FY’23 ARR guidance, FY’23 GAAP operating expenses are expected to increase approximately 7% to 8%, and FY’23 non-GAAP operating expenses are expected to increase approximately 10% to 11%, primarily due to the acquisition of ServiceMax, foreign exchange rate fluctuations, and incremental investments in 2H’23.
- FY’23 GAAP P&L results are expected to include the items below, totaling $284 million to $299 million, as well as their related tax effects:
  - $185 million to $200 million of stock-based compensation expense
  - $76 million of intangible asset amortization expense
  - $18 million of acquisition and transaction-related expense
  - $5 million of other non-operating expenses, primarily for financing charges associated with a debt commitment agreement related to the ServiceMax acquisition
- Our FY’23 GAAP and non-GAAP tax rate is expected to be approximately 20%.
- FY’23 capital expenditures are expected to be approximately $20 million.
- Our long-term goal, assuming our Debt/EBITDA ratio is below 3x, is to return approximately 50% of our free cash flow to shareholders via share repurchases, while also taking into consideration the interest rate environment and strategic opportunities. Given the current interest rate environment, we expect to prioritize paying down our debt in FY’23 and FY’24.

FORWARD-LOOKING STATEMENTS

Statements in this press release that are not historic facts, including statements about our future financial and growth expectations, guidance, and targets, and potential stock repurchases, are forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those projected. These risks include: the macroeconomic and/or global manufacturing climates may deteriorate sooner or to a greater extent than we expect due to, among other factors, the effects of the COVID-19 pandemic, including supply chain disruptions, increasing interest rates and inflation, volatile foreign exchange rates and the relative strength of the U.S. dollar, tightening of credit standards and availability, the effects of the Russia/Ukraine conflict, including the effect on energy supplies to Europe, and growing tensions with China, any of which could cause customers to delay or reduce purchases of new software, reduce the number of subscriptions they carry, or delay payments to us, which would adversely affect ARR and/or our financial results, including cash flow; our businesses, including our ServiceMax and SaaS businesses, may not expand and/or generate the revenue, cash flow, or ARR we expect if customers are slower to adopt those technologies than we expect or if they adopt competing technologies; our strategic initiatives and investments, including our accelerated investments in our transition to SaaS and the acquisition of ServiceMax, may not deliver the results when or as we expect; we may be unable to integrate the ServiceMax technology when or as we expect; we may be unable to generate sufficient operating cash flow to return 50% of free cash flow to shareholders, and other uses of cash or our credit facility limits could preclude such repurchases; and foreign exchange rates may differ materially from those we expect. In addition, our assumptions concerning our future GAAP and non-GAAP effective income tax rates are based on estimates and other factors that could change, including the geographic mix of our revenue, expenses, and profits. Other risks and uncertainties that could cause actual results to differ materially from those projected are detailed from time to time in reports we file with the Securities and Exchange Commission, including our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q.

OPERATING MEASURES

ARR: ARR (Annual Run Rate) represents the annualized value of our portfolio of active subscription software, cloud, SaaS, and support contracts as of the end of the reporting period. We calculate ARR as follows:

- We consider a contract to be active when the product or service contractual term commences (the "start date") until the right to use the product or service ends (the "expiration date"). Even if the contract with the customer is executed before the start date, the contract will not count toward ARR until the customer right to receive the benefit of the products or services has commenced.
- For contracts that include annual values that increase over time as there are additional deliverables in subsequent periods, which we refer to as ramp contracts, we include in ARR only the annualized value of components of the contract that are considered active as of the date of the ARR calculation. We do not include the future committed increases in the contract value as of the date of the ARR calculation.
- As ARR includes only contracts that are active at the end of the reporting period, ARR does not reflect assumptions or estimates regarding future customer renewals or non-renewals.
- Active contracts are annualized by dividing the total active contract value by the contract duration in days (expiration date minus start date), then multiplying that by 365 days (or 366 days for leap years).

We believe ARR is a valuable operating measure to assess the health of a subscription business because it is aligned with the amount that we invoice the customer on an annual basis. We invoice customers annually for the current year of the contract. A customer with a one-year contract will typically be invoiced for the total value of the contract at the beginning of the contractual term, while a customer with a multi-year contract will be invoiced for each annual period at the beginning of each year of the contract.

OPERATING MEASURES CONTINUED

ARR increases by the annualized value of active contracts that commence in a reporting period and decreases by the annualized value of contracts that expire in the reporting period.

As ARR is not annualized recurring revenue, it is not calculated based on recognized or unearned revenue and is not affected by variability in the timing of revenue under ASC 606, particularly for on-premises license subscriptions where a substantial portion of the total value of the contract is recognized at a point in time upon the later of when the software is made available, or the subscription term commences.

ARR should be viewed independently of recognized and unearned revenue and is not intended to be combined with, or to replace, either of those items. Investors should consider our ARR operating measure only in conjunction with our GAAP financial results.

Organic Constant Currency ARR: We provide an organic constant currency ARR measure to help investors understand and assess the performance of our business without the distorting effect of ARR from acquisitions in the comparative period and the effect of foreign exchange rate fluctuations.

Because our ARR measures represent the annualized value of customer contracts as of a point in time, they do not represent revenue for any particular period or remaining revenue that will be recognized in future periods.

Churn: We provide a churn measure to enable investors to understand and assess our customer contract retention. Churn represents the difference between the ARR amount for all subscription software, cloud, SaaS, and support contracts ended within a reporting period and the ARR for renewal contracts started within a reporting period as of the end of the reporting period.

NON-GAAP FINANCIAL MEASURES

PTC provides supplemental non-GAAP financial measures to its financial results. We use these non-GAAP financial measures, and we believe that they assist our investors, to make period-to-period comparisons of our operating performance because they provide a view of our operating results without items that are not, in our view, indicative of our operating results. These non-GAAP financial measures should not be construed as an alternative to GAAP results as the items excluded from the non-GAAP financial measures often have a material impact on our operating results, certain of those items are recurring, and others often recur. Management uses, and investors should consider, our non-GAAP financial measures only in conjunction with our GAAP results.

Non-GAAP operating expense, non-GAAP operating margin, non-GAAP gross profit, non-GAAP gross margin, non-GAAP net income and non-GAAP EPS exclude the effect of the following items: stock-based compensation; amortization of acquired intangible assets; acquisition and transaction-related charges included in general and administrative expenses; restructuring and other charges, net; certain non-operating charges and credits; and income tax adjustments. Additional information about the items we exclude from our non-GAAP financial measures and the reasons we exclude them can be found in “Non-GAAP Financial Measures” in our Annual Report on Form 10-K for the fiscal year ended September 30, 2022.

Free Cash Flow: PTC provides information on free cash flow to enable investors to assess our ability to generate cash without incurring additional external financings and to evaluate our performance against our announced long-term goals and intent to return approximately 50% of our free cash flow to shareholders via stock repurchases. Free cash flow is cash provided by (used in) operations net of capital expenditures. Free cash flow is not a measure of cash available for discretionary expenditures.

Constant Currency (CC): We present CC information to provide a framework for assessing how our underlying business performed excluding the effects of foreign currency rate fluctuations. To present CC information, FY’23 and comparative prior period results for entities reporting in currencies other than United States dollars are converted into United States dollars using the foreign exchange rate as of September 30, 2022, rather than the actual exchange rates in effect during that period. All discussion of FY’23 and comparative prior period ARR results (including FY’22 baseline amounts) are reflected using the foreign exchange rates as of September 30, 2022.

NON-GAAP RECONCILIATIONS

ARR

In millions	FY'16	FY'17	FY'18	FY'19	FY'20	FY'21	FY'22
ARR (as reported)	$ 807	$ 914	$ 1,010	$ 1,111	$ 1,264	$ 1,468	$ 1,572
ARR (constant currency)	$ 739	$ 832	$ 930	$ 1,043	$ 1,156	$ 1,353	$ 1,572

Recurring Revenue

$ in millions	FY'14	FY'15	FY'16	FY'17	FY'18	FY'19	FY'20	FY'21	FY'22
Total Revenue	$ 1,357	$ 1,255	$ 1,141	$ 1,164	$ 1,242	$ 1,256	$ 1,458	$ 1,807	$ 1,933
Recurring Revenue	$ 716	$ 747	$ 770	$ 854	$ 979	$ 1,017	$ 1,282	$ 1,616	$ 1,736
% of total Revenue	**53%**	**59%**	**68%**	**73%**	**79%**	**81%**	**88%**	**89%**	**90%**

Operating Expense

In millions	FY'16	FY'20	FY'22	Q2'22	Q2'23
GAAP operating expense	**$ 852**	**$ 913**	**$ 1,100**	**$ 253**	**$ 306**
Stock-based compensation expense	(55)	(101)	(152)	(34)	(47)
Acquisition and transaction-related charges	(3)	(9)	(13)	(4)	(12)
Pending legal settlement accrual	(3)	-	-	-	-
Restructuring and other charges (credits)	(76)	(33)	(36)	2	(0)
Amortization of acquired intangible assets	(33)	(29)	(35)	(8)	(11)
Non-GAAP operating expense	**$ 681**	**$ 742**	**$ 864**	**$ 208**	**$ 237**

Free Cash Flow

In millions	FY'16	FY'20	FY'22	Q2'22	Q2'23
Net cash provided by operating activities	$ 183	$ 234	$ 435	$ 142	$ 211
Capital expenditures	(26)	(20)	(19)	(2)	(4)
Free cash flow	$ 157	$ 214	$ 416	$ 140	$ 207

ptc

DIGITAL TRANSFORMS PHYSICAL

THANK YOU

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