

BUSINESS MODEL REVIEW

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SAFE HARBOR STATEMENT

This presentation includes forward looking statements regarding PTC's future financial performance and expectations, including the expected resilience of its subscription business model, as well as about the development of products and markets, which are based on current assumptions. Because such statements deal with future events, actual results may differ materially from current projections and expectations due to risks and uncertainties, including that: the macroeconomic and/or global manufacturing climates may deteriorate due to, among other items, the geopolitical environment, including the U.S. Administration's focus on technology transactions with non-U.S. entities and potential expanded prohibitions, ongoing trade tensions and tariffs, and business disruptions due to COVID-19, which could cause our customers to delay purchases of, or not purchase, our solutions, or fail to renew subscriptions for our solutions; customers may purchase competitive solutions rather than ours if we do not provide compelling solutions, which could adversely affect our growth rates and revenue; our strategic alliances and partner ecosystem may not generate the revenue we expect if those partners are unable to successfully sell our solutions; as well as other risks and uncertainties described in PTC's most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and other filings made from time to time with the U.S. Securities and Exchange Commission.

IMPORTANT INFORMATION ABOUT OPERATING MEASURES

This presentation includes operating measures and estimates. An explanation of our New ACV, ARR, and churn subscription operating measures and constant currency calculation are on page 4 of this presentation.

Purpose

Highlight the expected durability of our business model in light of the near term global macroeconomic environment

OPERATING MEASURES



We provide operating measures to supplement our GAAP financial results. These measures are not a substitute for our GAAP financial results and should be used in conjunction with our GAAP financial statements.

ARR, as revised for FY'20 and used in this presentation, represents the annualized value of our portfolio of recurring customer arrangements as of the end of a reporting period, including subscription software, cloud and support contracts. Because this measure represents the annualized value of recurring customer contracts as of the end of a reporting period, ARR does not represent revenue for any particular period or remaining revenue that will be recognized in future periods.

New ACV represents the annual contract value for subscription and support revenue from new customers and expansions from existing customers.

Churn is gross churn, net of pricing.

Our **constant currency** calculation converts non-U.S. amounts into U.S. dollars using the foreign exchange rates as of September 30, 2019, rather than the actual exchange rates in effect during that period.

OBSERVATIONS ON Q2'20

- There has been no material disruption to our business quarter-to-date, although we are seeing signs of softness in smaller pockets of our business, most notably in the airline and retail space.
- Even if we didn't book any additional new business this quarter, Q2 ARR would be approaching low double-digit YoY growth in constant currency.
- Important to remember that Fx impacts the total base of ARR at a point in time and is not an income statement rate.
- At current rates, Fx is ~100bps tailwind to ARR FY'20 YoY growth.

SCENARIOS

ATTRACTIVE RANGE OF OUTCOMES IN FY'24¹

	Optimist	Market	Pessimist	2009 Redux
ARR	~\$2.4B	~\$2.3B	~\$2.1B	~\$2.0B
ARR Growth	17% CAGR	15% CAGR	13% CAGR	12% CAGR

Growth Product Group²

- New ACV growth decelerates to low-30's
- High-40s New ACV CAGR
- ~50% ARR CAGR

Core Product Group

- Same as Market scenario

FSG

- Same as Market scenario

Churn

- Same as Market scenario

Growth Product Group²

- New ACV growth decelerates to high-20's
- Mid-40s ARR CAGR

Core Product Group

- New ACV flat FY'20 to FY'24
- High single-digit ARR CAGR

FSG

- New ACV declines 5% per year FY'21 to FY'24
- Low single-digit ARR CAGR

Churn

- Total churn improves ~150 bps by FY'24

Growth Product Group²

- New ACV growth decelerates to mid-teens
- Low-30s New ACV CAGR
- High-30s ARR CAGR

Core Product Group

- Same as Market scenario

FSG

- Same as Market scenario

Churn

- Same as Market scenario

Growth Product Group²

- New ACV declines 30% in FY'22
- Mid-30s ARR CAGR

Core Product Group

- New ACV declines 30% in FY'22
- Mid-to-high single-digit ARR CAGR

FSG

- New ACV declines 30% in FY'22
- Flat ARR CAGR

Churn

- Same as Market scenario

PESSIMIST: FY'20 ARR OF ~\$1.25B

Applying November 2019 investor day assumptions to FY'20



"A" = actual "E" = estimate

Assumptions

New ACV¹ Core Product Group

- Flat YoY CC in fiscal Q2 - Q4

New ACV¹ Growth Product Group

- Growing at half the market growth rate for Q2 - Q4

New ACV¹ FSG

- Declines 5% YoY CC Q2 - Q4

Churn

- Total churn remains flat YoY at ~8%

¹ New ACV excludes committed contract value

2009 REDUX: FY'20 ARR OF ~\$1.23B

Applying November 2019 investor day assumptions to FY'20



Assumptions

New ACV¹ for all Product Groups

- Declines 30% YoY CC in fiscal Q2 - Q4

Churn

- Total churn remains flat YoY at ~8%

QUESTIONS?



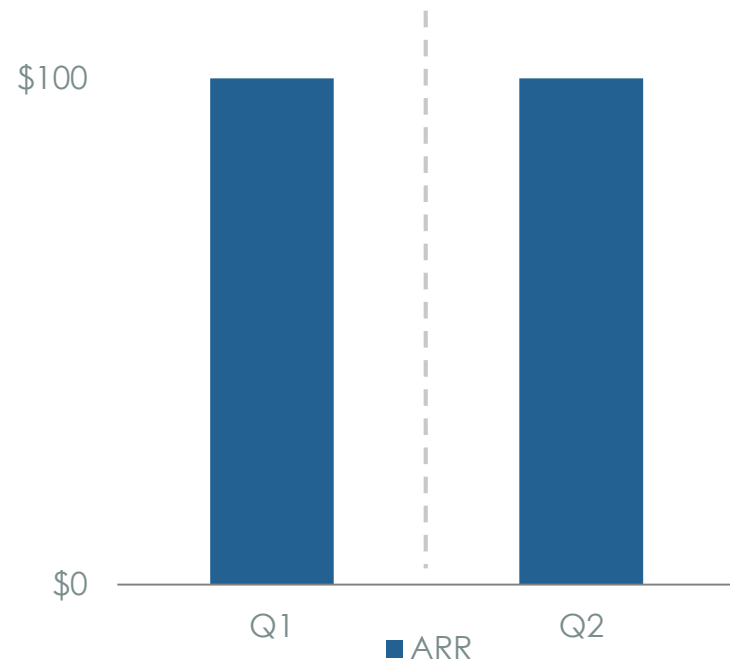
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APPENDIX

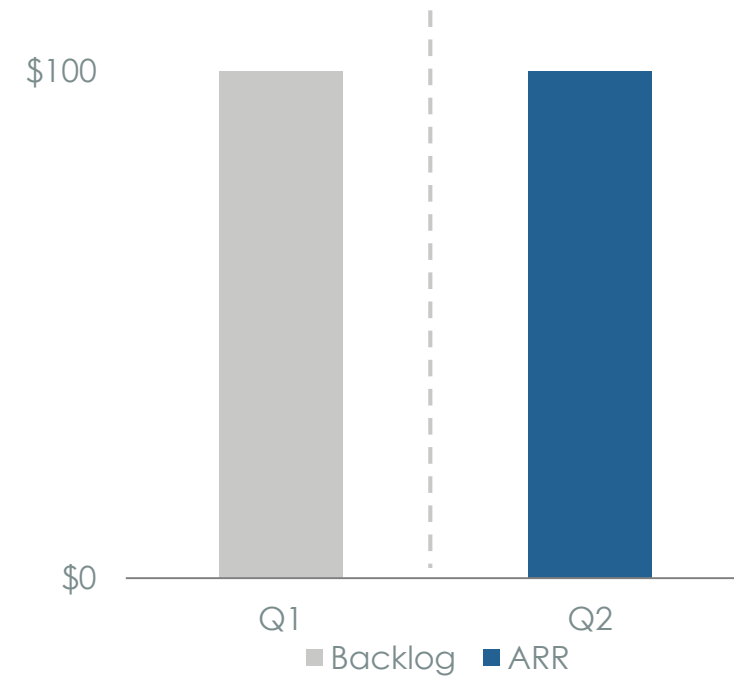
- ARR defined (per Sept 8-K)
 - ARR represents the annualized value of our portfolio of recurring customer arrangements as of the end of the reporting period, including subscription software, cloud, and support contracts
- This was a change from our historical definition
 - ARR was based on the annualized value of quarterly reported recurring revenue under ASC 605
 - Under ASC 606 there is **little correlation** between ARR and reported revenue
- Start dates matter
 - Subscription ACV and Support ACV is recorded when a contract starts (vs. booked)

ARR MECHANICS – START DATES

\$100K ACV booked in Q1
with Q1 start date

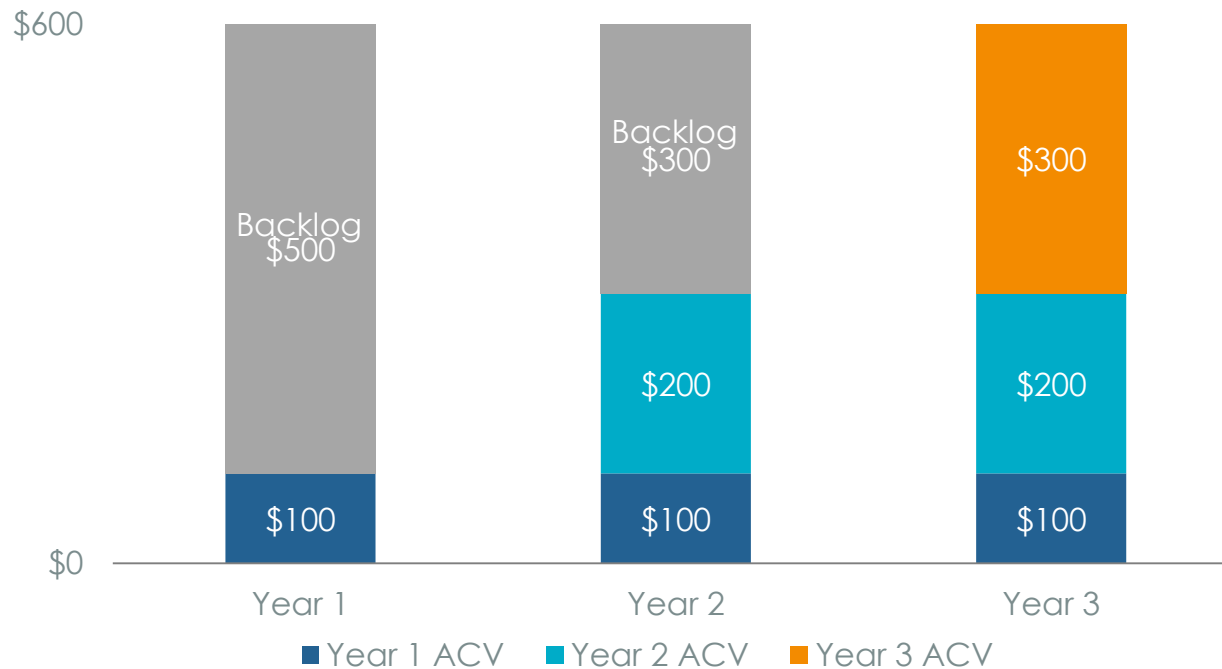


\$100K ACV booked in Q1
with Q2 start date



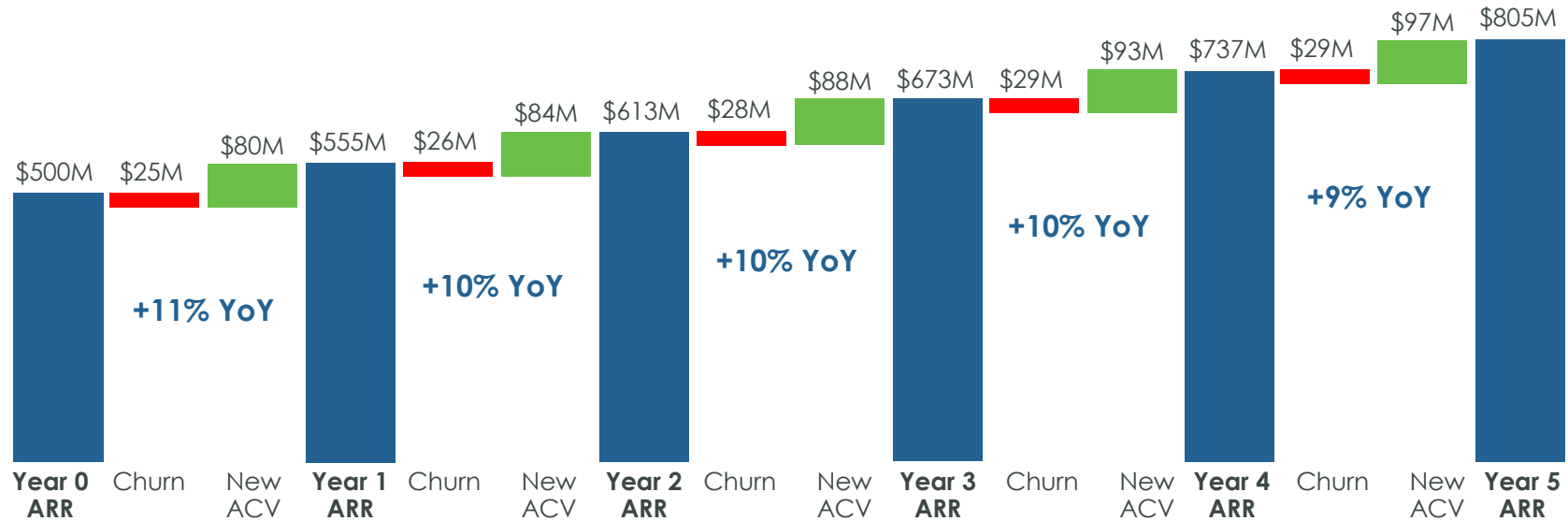
ARR MECHANICS – RAMP DEALS

- Multi-year agreements with annual committed volume increases
- Example of 3-year ramp deal:
 - Yr. 1 New ACV of \$100
 - Yr. 2 New ACV of \$200
 - Yr. 3 New ACV of \$300



- Yr. 1 ARR of \$100 with \$500 in backlog
- Yr. 2 ARR of \$300 with \$300 in backlog
- Yr. 3 ARR of \$600

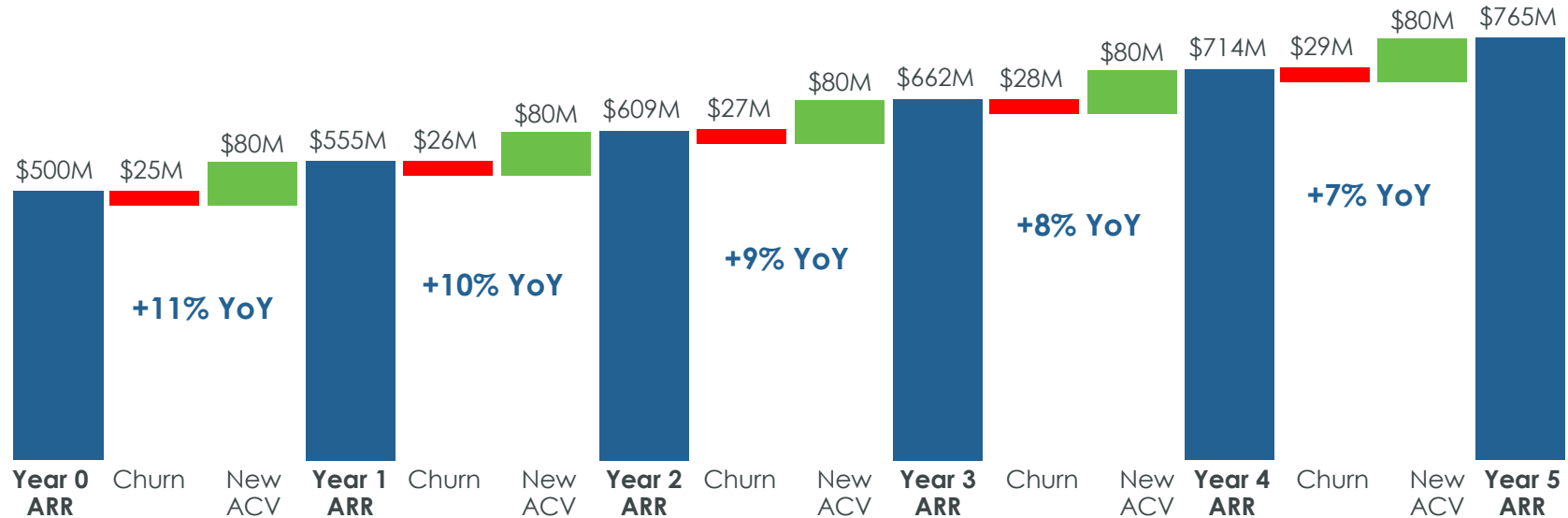
ARR MECHANICS – GROWTH DYNAMICS



- \$500M beginning ARR
- \$80M New ACV; 5% growth
- 5% churn improving 100bps

Yields 10% ARR CAGR

ARR MECHANICS – GROWTH DYNAMICS (CON'T)



- \$500M beginning ARR
- \$80M New ACV; 0% growth
- 5% churn improving 100bps

Yields 9% ARR CAGR