

**2023**

# **KeyBanc Capital Markets & Sapphire Ventures SaaS Survey**

A shift towards efficient execution and profitability

14<sup>th</sup> Annual



# 14<sup>th</sup> Annual SaaS Survey – What’s Different?

For the past 14 years, KeyBanc Capital Markets has produced a one-of-a-kind survey that examines the performance of private SaaS companies year over year. This survey has been a definitive asset amongst the SaaS community, providing guidance to hypergrowth companies.

This year, and for the first time ever, KeyBanc Capital Markets and Sapphire Ventures have partnered together to take the survey to new heights, bringing a new lens to the data and its accompanying analysis. Specifically, this year’s KeyBanc Capital Markets & Sapphire Ventures SaaS Survey introduces an operator’s perspective, drawing actionable insights across various themes and understanding the impact of last year’s trends on go-to-market strategies.

**KeyBanc**  
Capital Markets



**SAPPHIRE**  
VENTURES

**1**

New questions to shed light on GTM metrics and efficiency

**2**

Survey respondents are larger in scale making the data more reliable

**3**

Operator feedback is included to bring relevance to the data set

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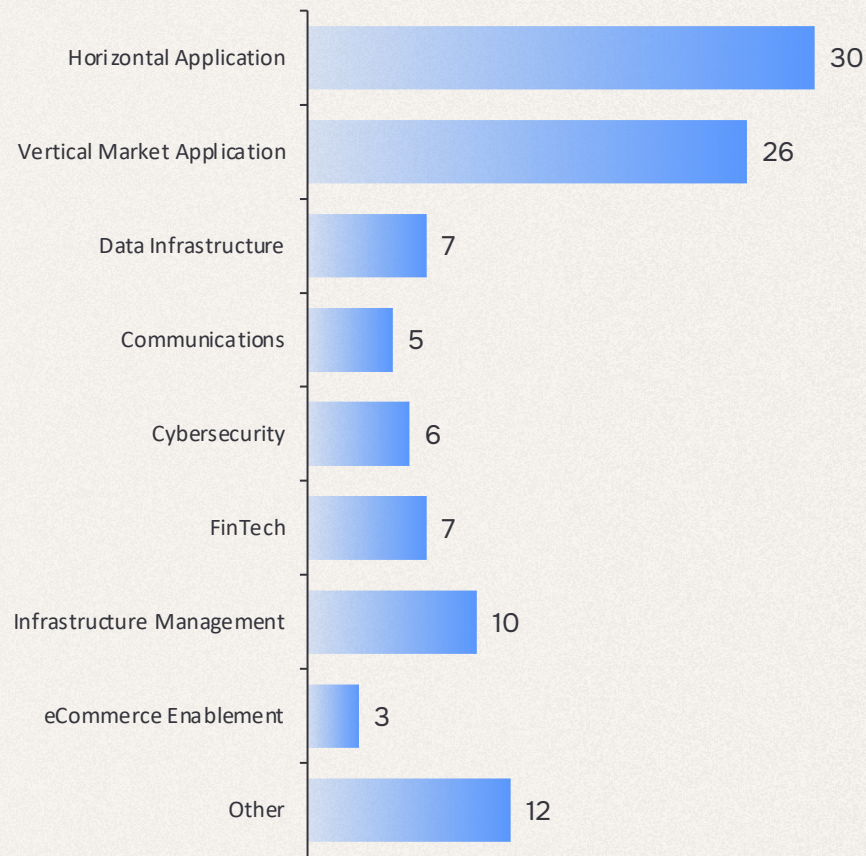
**4,000+**

2022 SaaS Survey Downloads



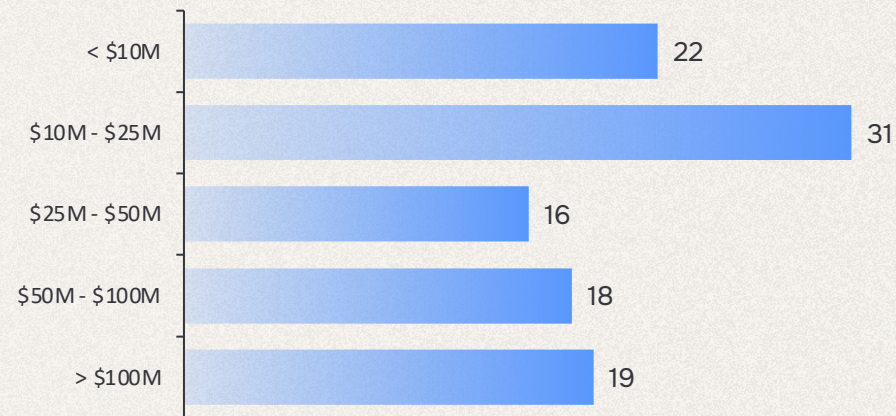
# Participant Demographics

Participant Count by Sector



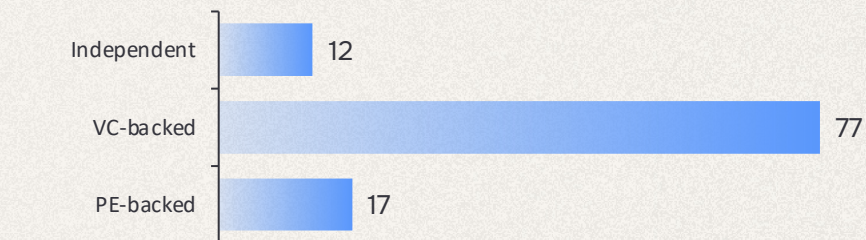
Respondents: 106

Participant Count by ARR Size



Respondents: 106

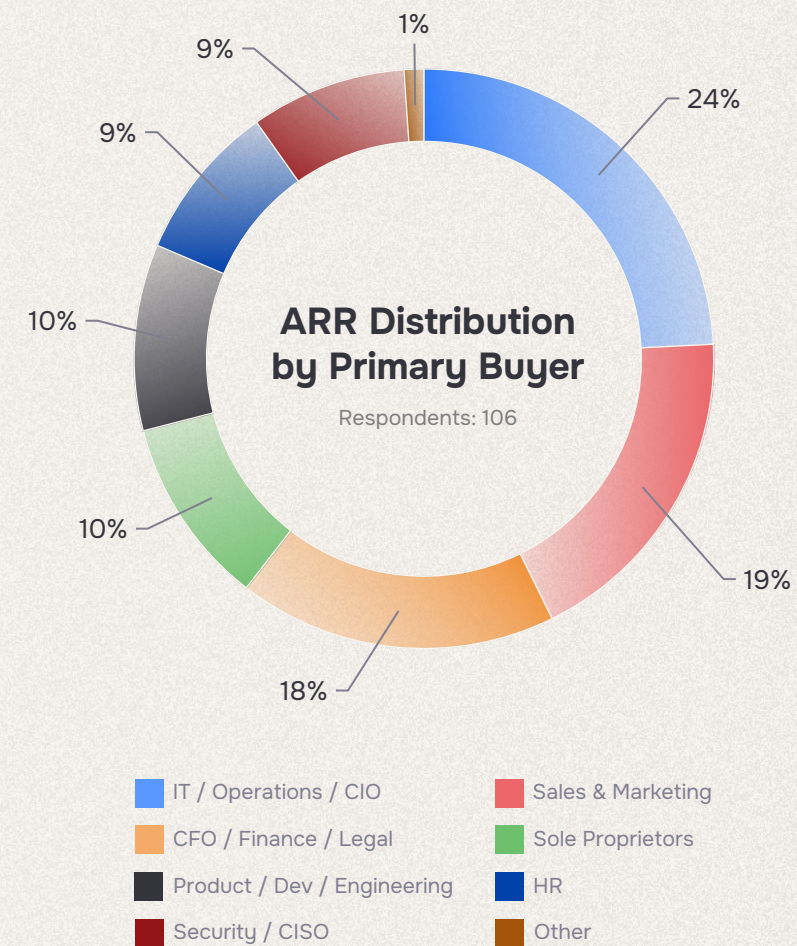
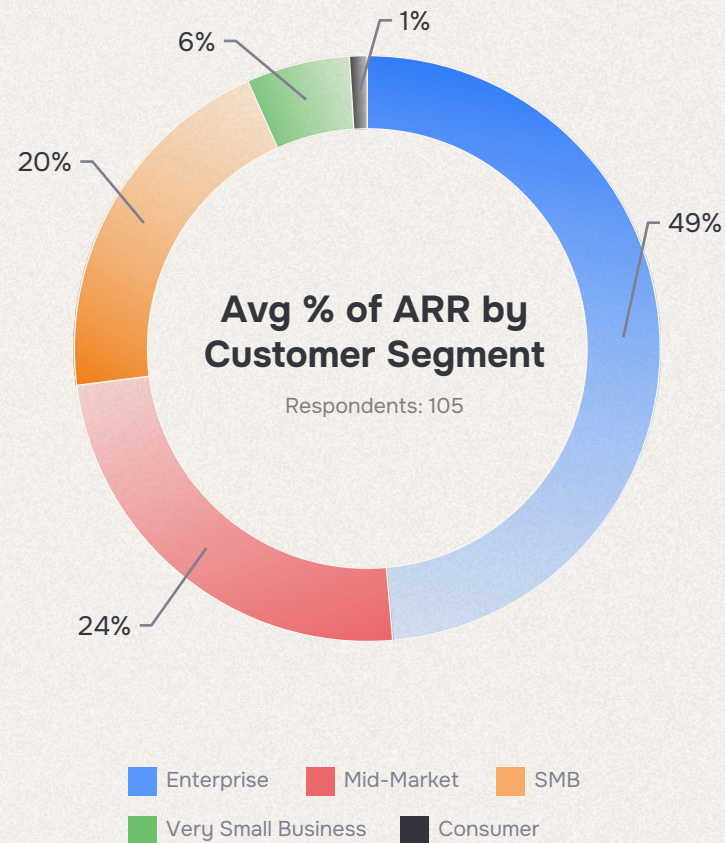
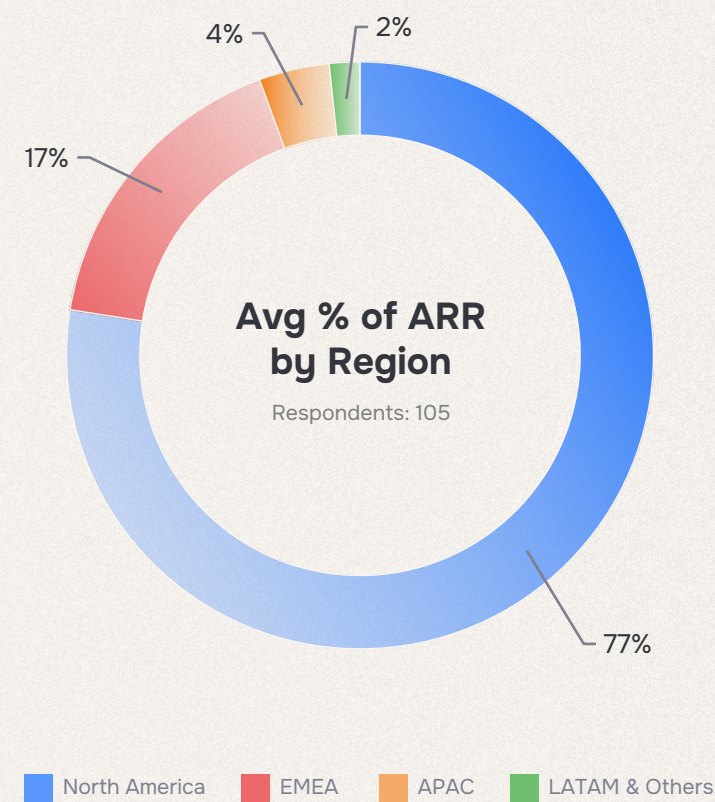
Participant Count by Ownership Type



Respondents: 106







# ARR Distribution by End Market





# Executive Summary

After analyzing last year's data and what's predicted to come, we identified clear trends of decelerated growth and a transition toward profitability—a resounding theme throughout the report. In addition, the report shows that sales and marketing are experiencing some lagging effects and that there is an overall feeling of optimism in more productive GTM teams after industry-wide adjustments.

	<b>ARR Growth &amp; Retention</b> 2023 ARR growth reflects a further drop from 2022 and recent years. <ul style="list-style-type: none"><li>&gt; Conservative buying sentiment is driving customer churn, longer deal cycles and reduced contract values, leading to lower growth rates.</li></ul>
	<b>GTM Execution &amp; Performance</b> 2023 conversion rates are expected to drop across the marketing funnel. <ul style="list-style-type: none"><li>&gt; Teams are figuring out the right mix of inbound and outbound motions. GTM teams are trying to drive revenue efficiency.</li><li>&gt; Magic Number data continues to decline.</li><li>&gt; Cuts in sales capacity result in initial gains in quota attainment per rep.</li></ul>
	<b>Expenses &amp; Profitability</b> S&M expenses significantly increased in 2022. <ul style="list-style-type: none"><li>&gt; Companies heavily invested in pursuing growth entering 2022.</li></ul> GTM teams are transitioning from growth to profitability in 2023. <ul style="list-style-type: none"><li>&gt; Expect enhanced profitability as companies right-size headcount.</li></ul>
	<b>Financing &amp; Valuation</b> Private market financings and multiples continue to show strength despite macroeconomic headwinds. <ul style="list-style-type: none"><li>&gt; Certain sectors are performing better than others.</li></ul> Public market software valuations are returning to near-normalized levels in 2023 at ~6x NTM revenue, compared to the all-time highs of ~17x in 2021.

Metric (Median)	2022		2023E
ARR Growth	35%	⬇️	26%
Gross Dollar Retention	88%	⊖	88%
Net Dollar Retention	108%	⬇️	104%
Account Executive Productivity	\$700K	⬆️	\$750K
Quota Attainment	78%	⬆️	80%
Gross Magic Number	0.73		-
Net Magic Number	0.50		-
CAC Payback	23 Months		-
Operating Expenses (% of rev)	106%		-
Rule of 40 (met or exceeded)	15%		-
EBITDA Margin	(32%)		-
EV / ARR (most recent transaction)	11.1x*		-

\*Excludes companies with <\$5M ARR at the time of transaction





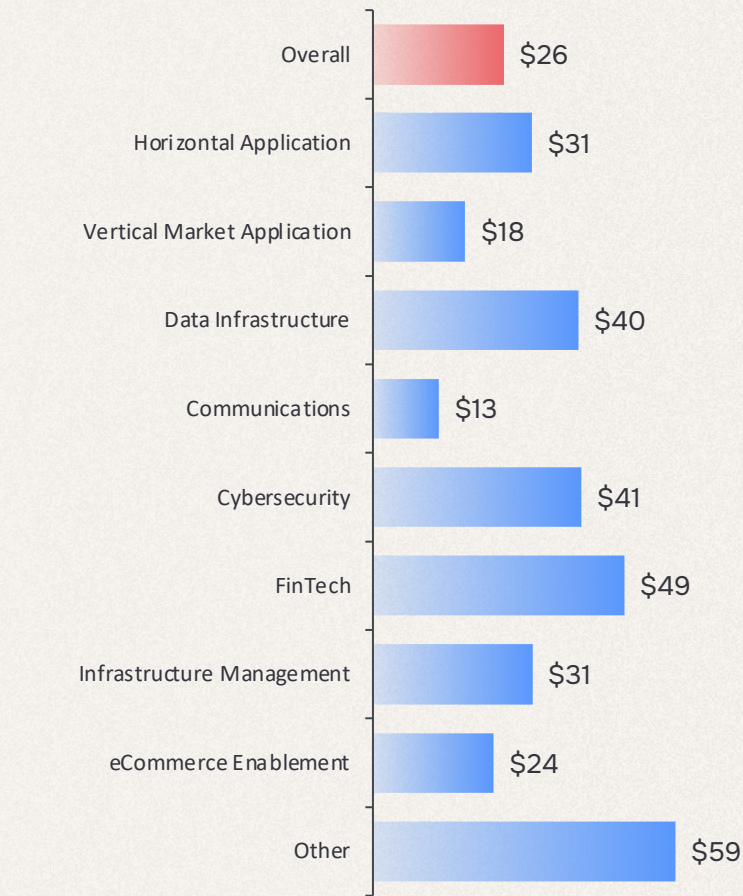
# ARR Overview & Retention Metrics





# ARR Distribution

Median ARR by Sector (2022)

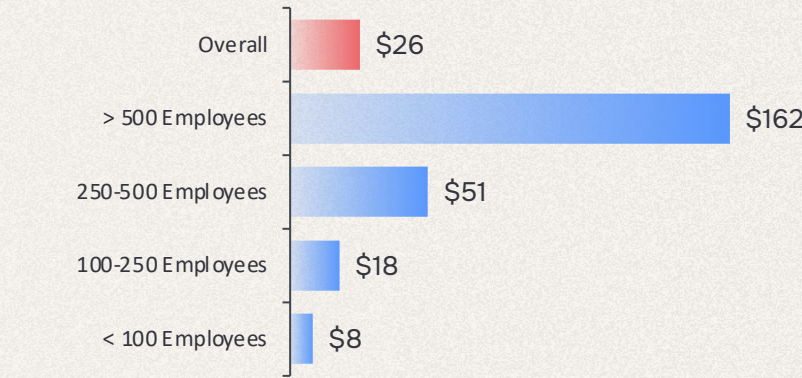


Median ARR Growth	
2022	2023E
35%	26%
38%	22%
38%	33%
27%	28%
15%	20%
36%	34%
23%	49%
48%	40%
7%	0%
25%	23%

Respondents: 104



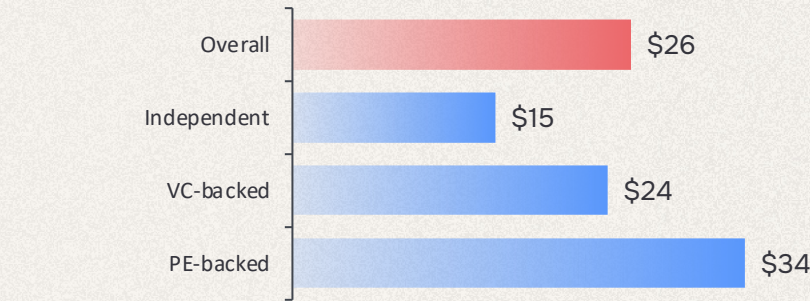
Median ARR by Employee Size (2022)



Respondents: 104

Median ARR Growth	
2022	2023E
35%	26%
35%	20%
31%	28%
31%	22%
50%	38%

Median ARR by Ownership (2022)



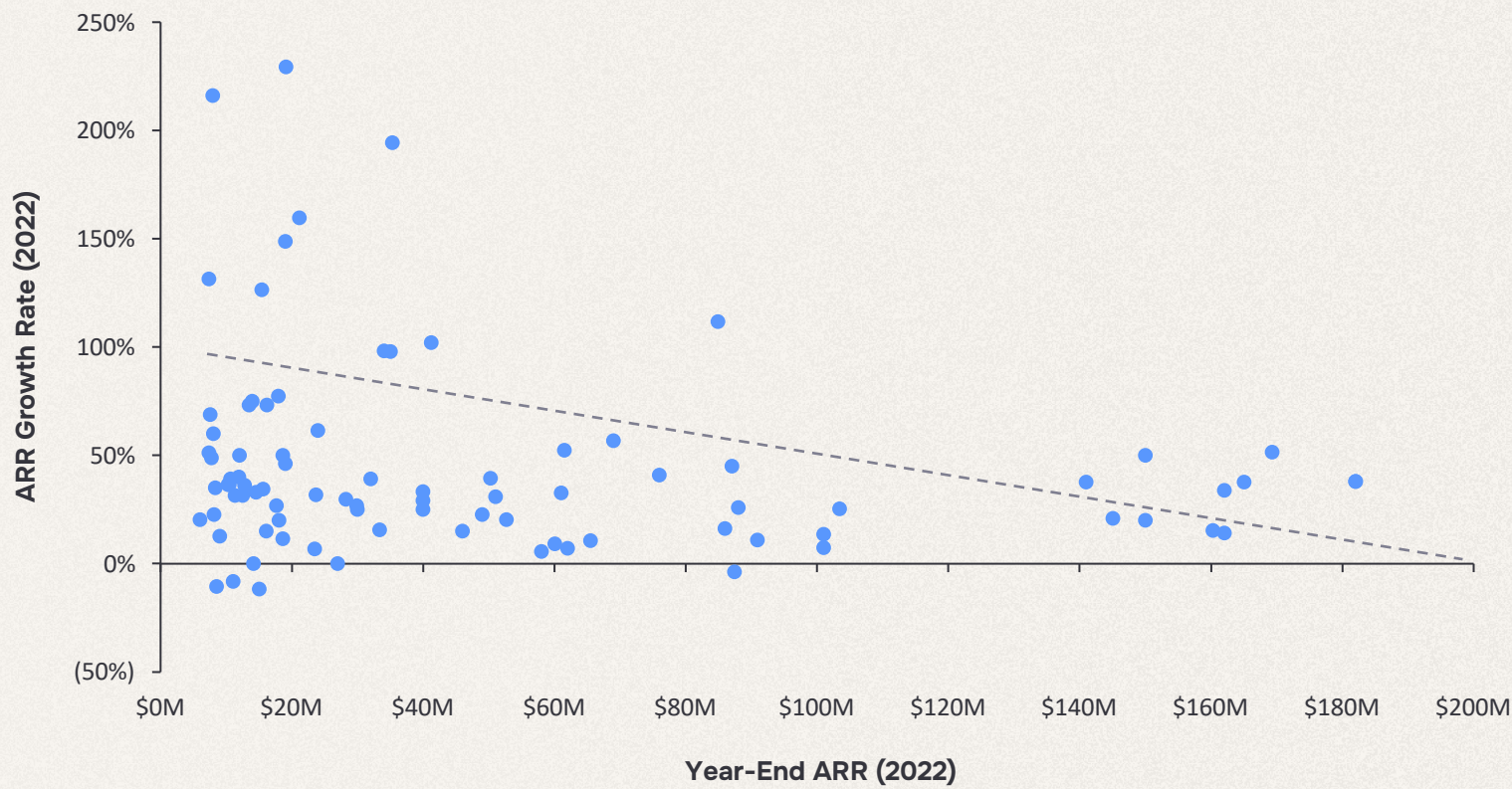
Respondents: 104

Median ARR Growth	
2022	2023E
35%	26%
40%	25%
35%	31%
26%	21%



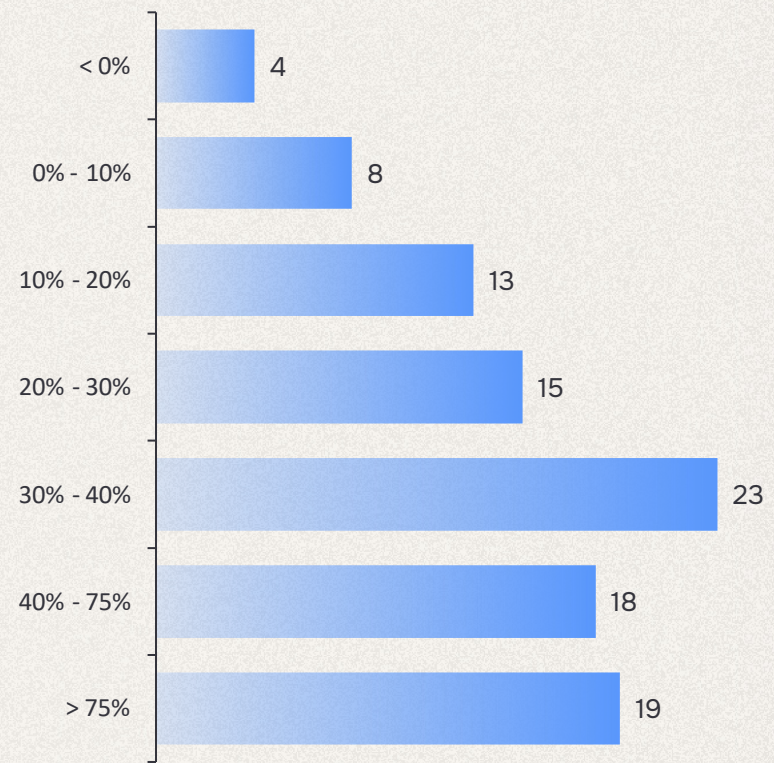
# 2022 ARR Growth

ARR Growth



Respondents: 87 | Excludes companies with <\$5M ARR

Participants by ARR Growth

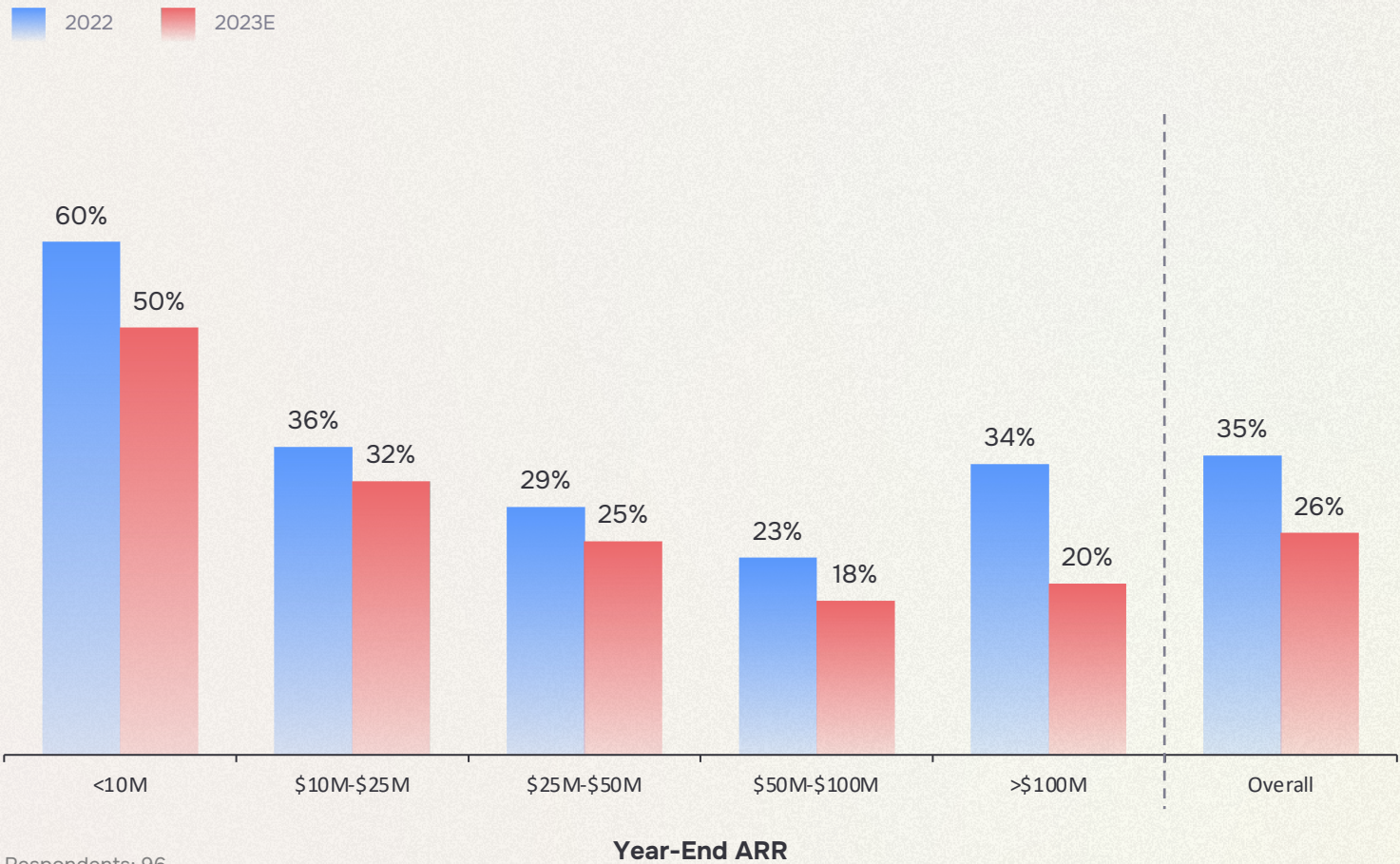


Respondents: 100



# 2023E ARR Growth

## Median ARR Growth by ARR Segment



### Further dip in 2023E growth

The market expects decelerating growth in 2023, primarily driven by budget cuts and right-sizing since 2H 2022.

### Higher decline seen in more mature companies

>\$50M ARR and above are expecting more significant drops in 2023 ARR growth.

“Many SaaS businesses with an overweighting in the Enterprise segment report a 1-2 quarter delay in impact from macro conditions, given enterprises’ reticence to pull the plug on large scale projects funded and kicked off before a slowdown.”



**Dave Wilner**

Operating Partner,  
Sapphire Ventures



# New ARR Growth Drivers

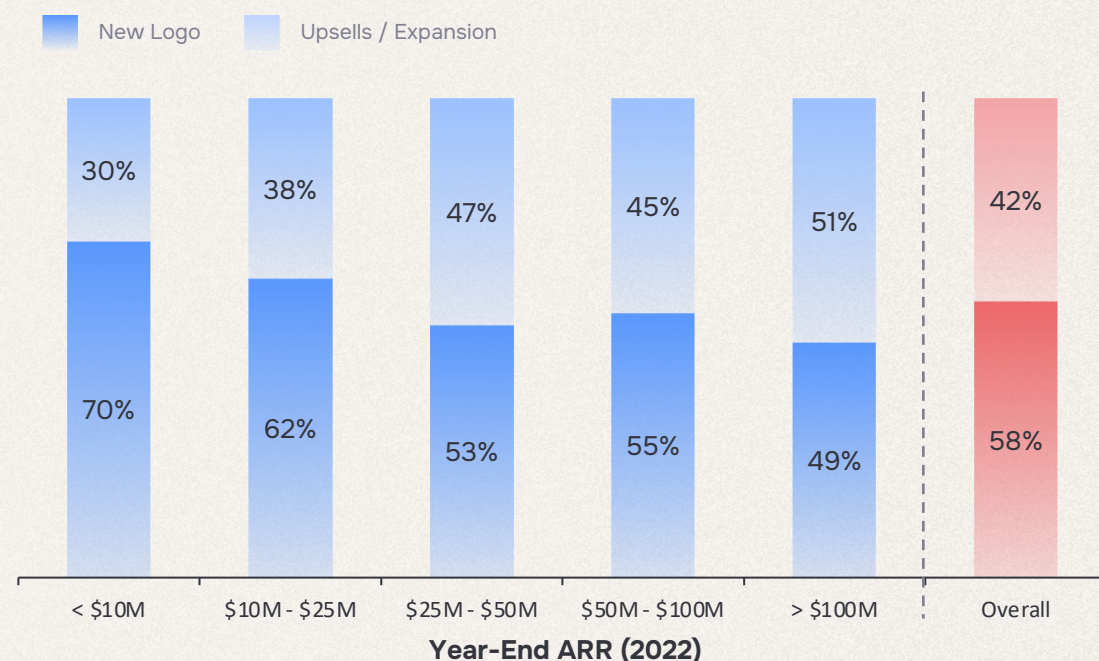
## No major variation in YoY ARR distribution

Overall, companies are forecasting a similar % of ARR growth coming from new logo wins vs upsells / expansion in 2023 vs 2022.

## New logo and customer expansions continue to be a challenge

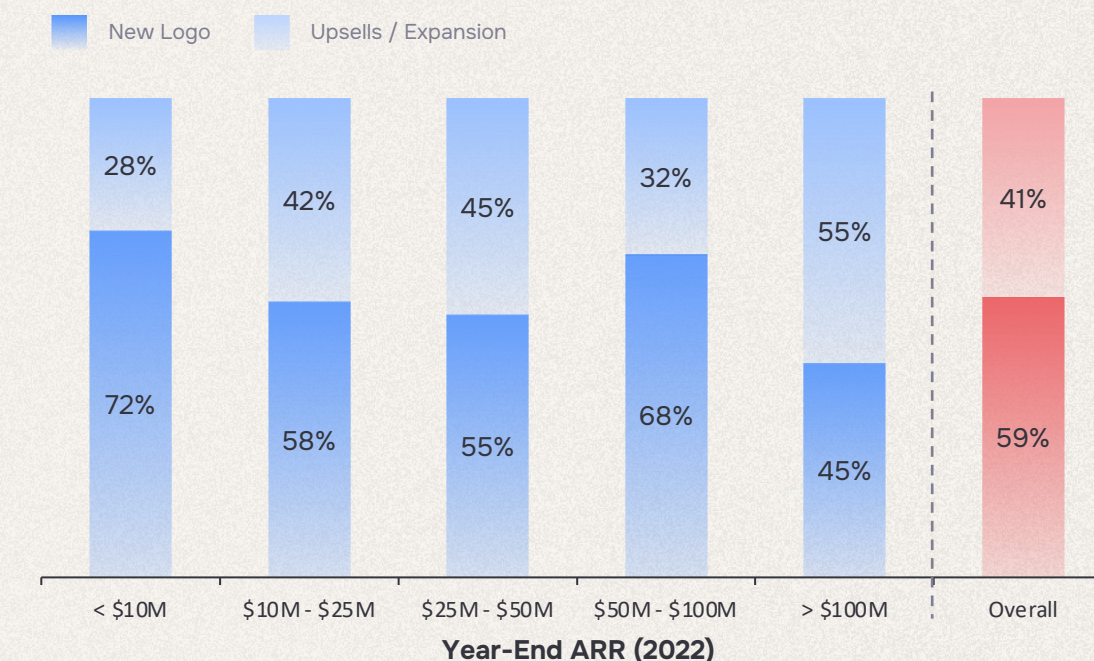
The lack of rotation towards customer expansion in 2023 indicates that GTM teams are not confident they can offset lower new logo wins with customer upsells / expansions.

### Gross New ARR Distribution (2022)



Respondents: 88

### Gross New ARR Distribution (2023E)



Respondents: 86

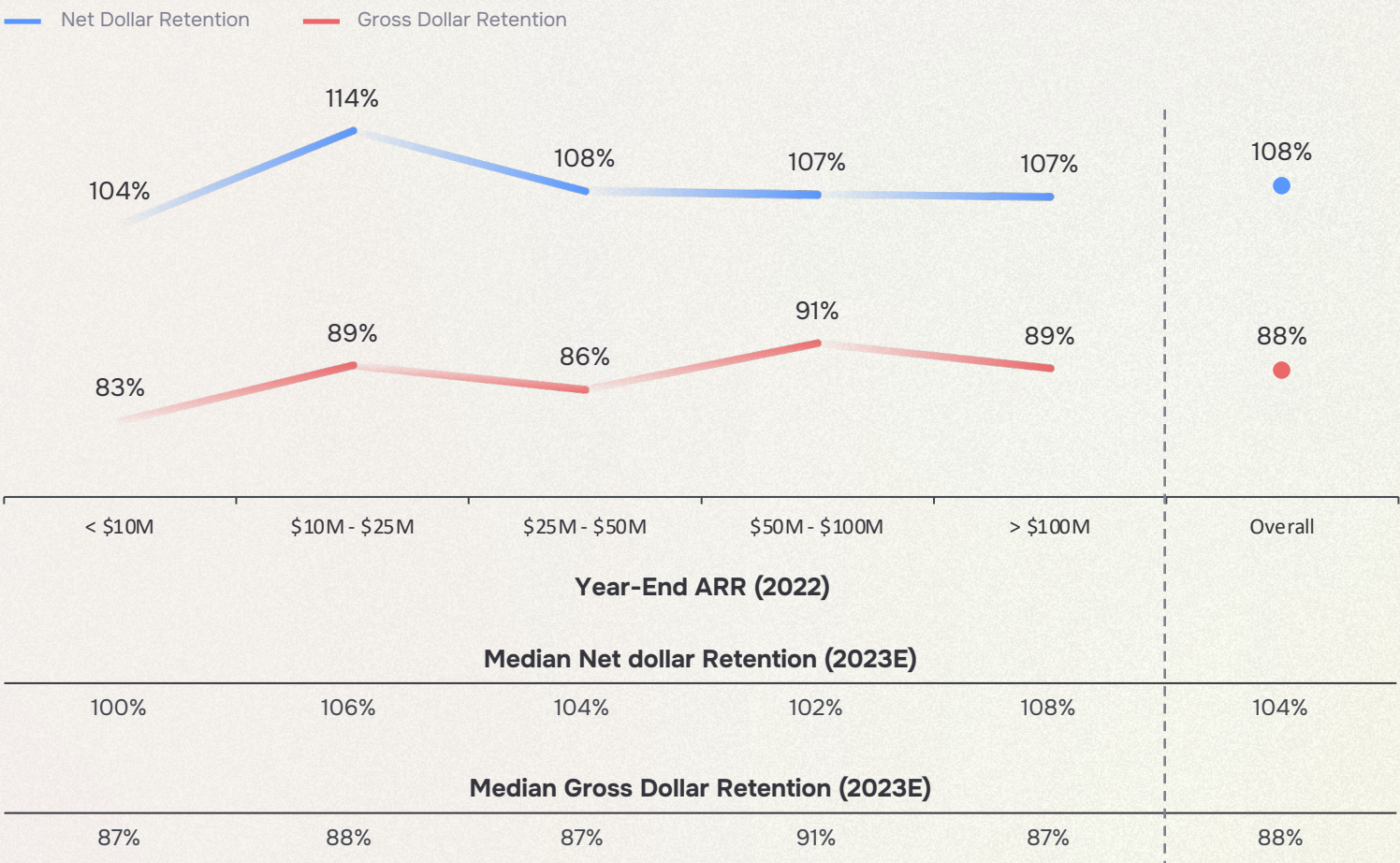


Gross New ARR = New Logo ARR + Expansion ARR



# Retention Metrics

## Median Gross and Net Dollar Retention (2022)



Respondents: 86



Gross Dollar Retention = (Beginning ARR - Churned ARR) / Beginning ARR  
Net Dollar Retention = (Beginning ARR + Expansion ARR - Churned ARR) / Beginning ARR

### Retention metrics steady

Best-in-class, enterprise-centric software companies typically see >90% gross / >100% net dollar retention rates.

Once companies grow above \$10M ARR, gross retention rates typically approach ~90%, which is expected to continue into 2023.

### Little correlation to ARR

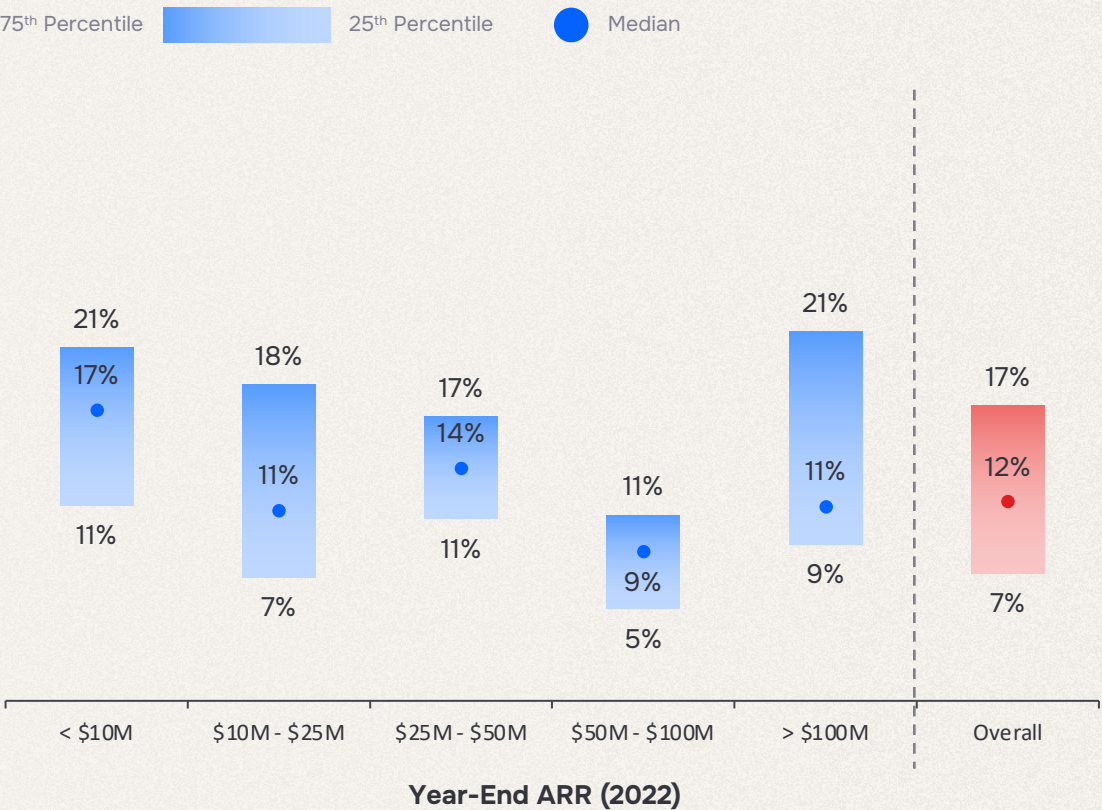
Net retention rates are less correlated to ARR scale, but most are projecting net retention to be impacted in 2023.

Customers generally overbought in 2022, which has led to a spike in downgrades and fewer upsells as increasing scrutiny is placed on all types of spending in 2023.



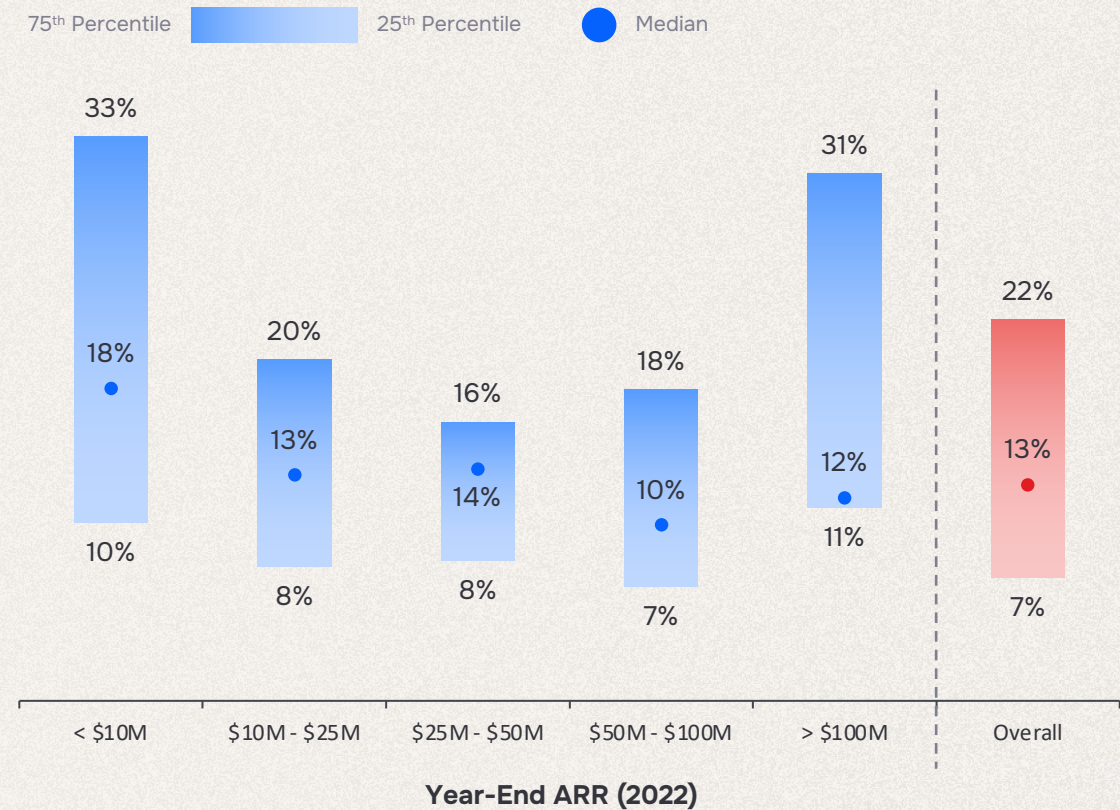
# Annual Gross Dollar Churn & Logo Churn

Gross Dollar Churn by ARR Segment (2022)



Respondents: 81

Logo Churn by ARR Segment (2022)



Respondents: 74

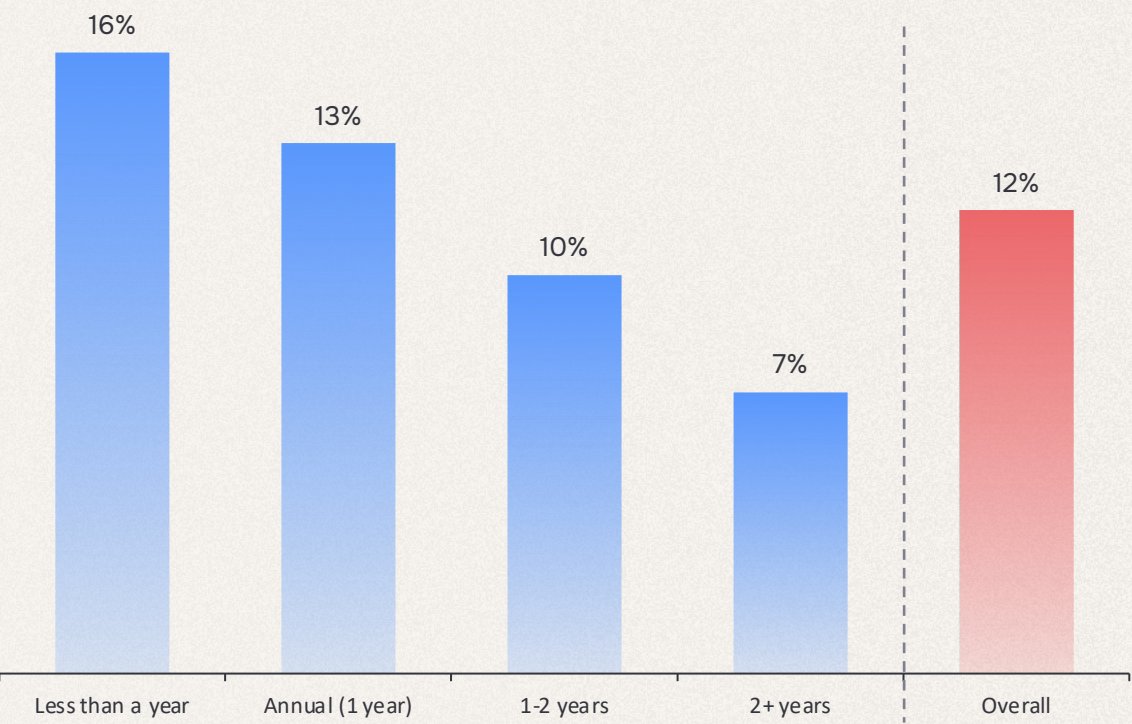


Gross Dollar Churn = Churned ARR / Beginning ARR  
Logo Churn = Churned Customers / Beginning Customers



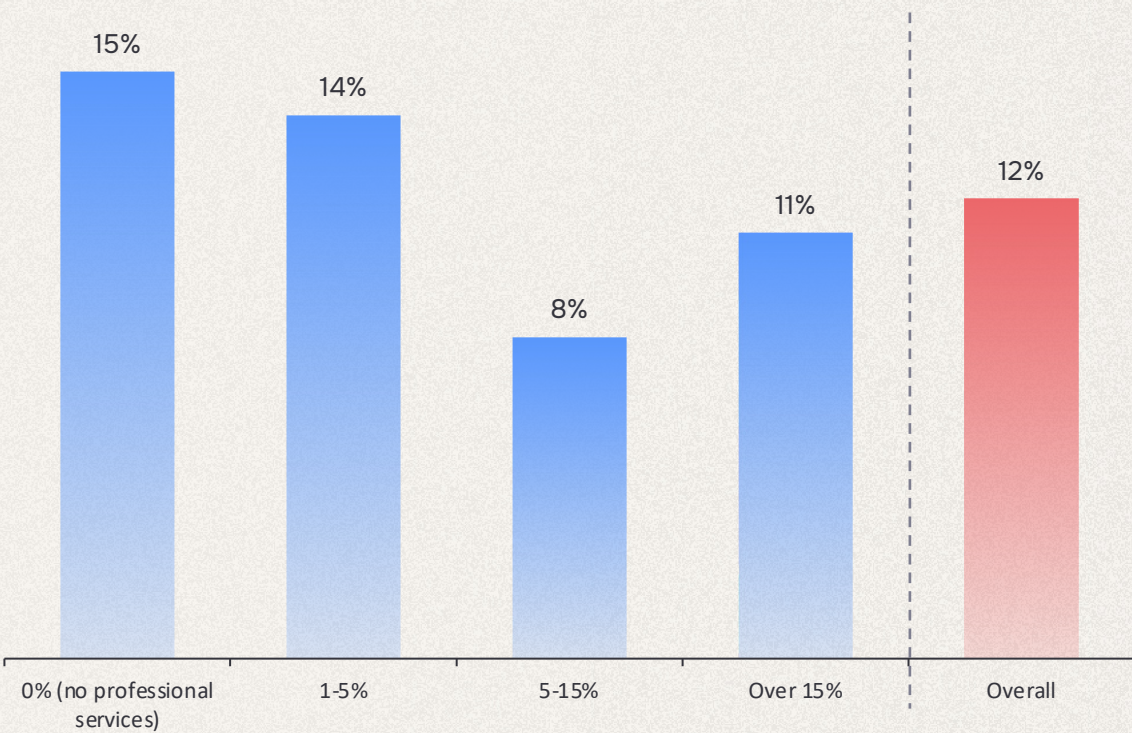
# Annual Gross Dollar Churn

Churn by Contract Length (2022)



Respondents: 78

Churn by Professional Services as % of Upfront ARR (2022)

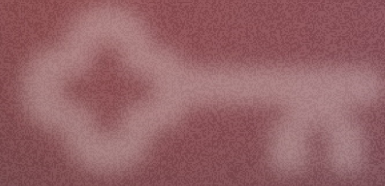


Respondents: 78



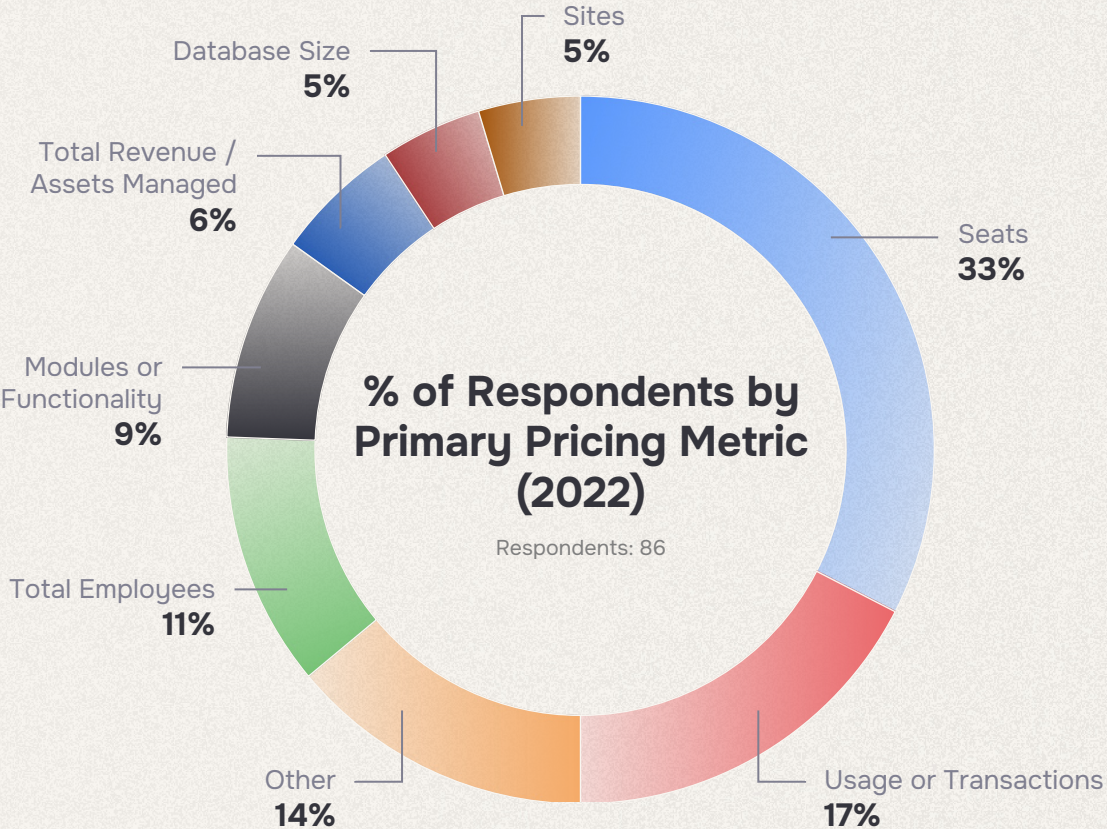
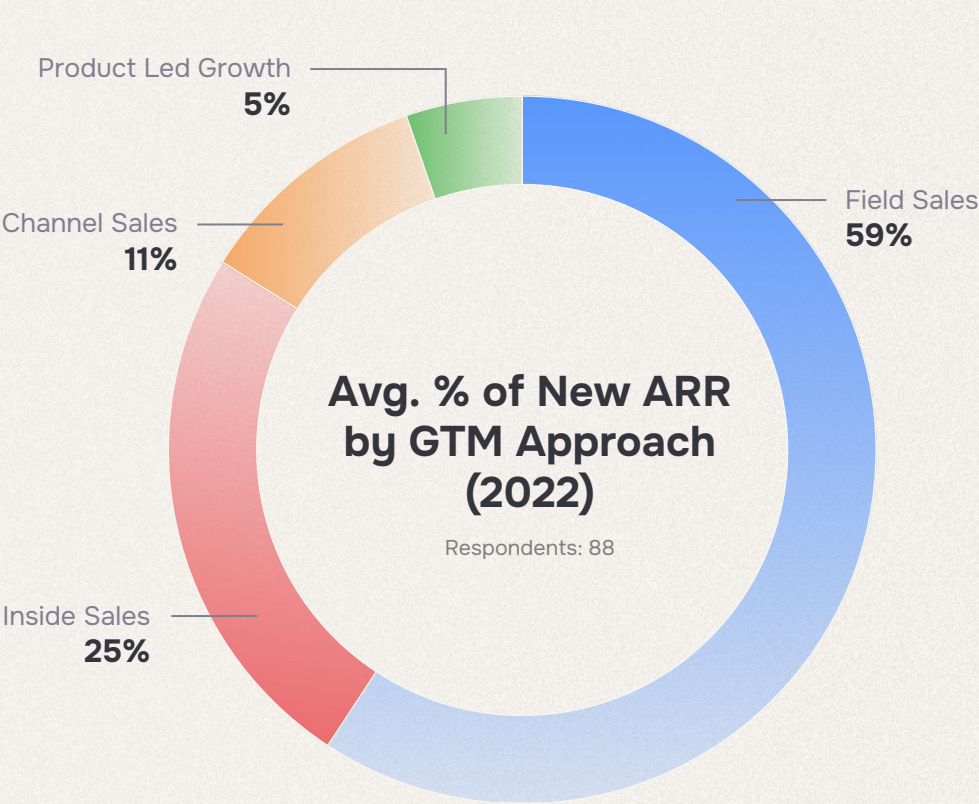


# GTM Execution & Performance



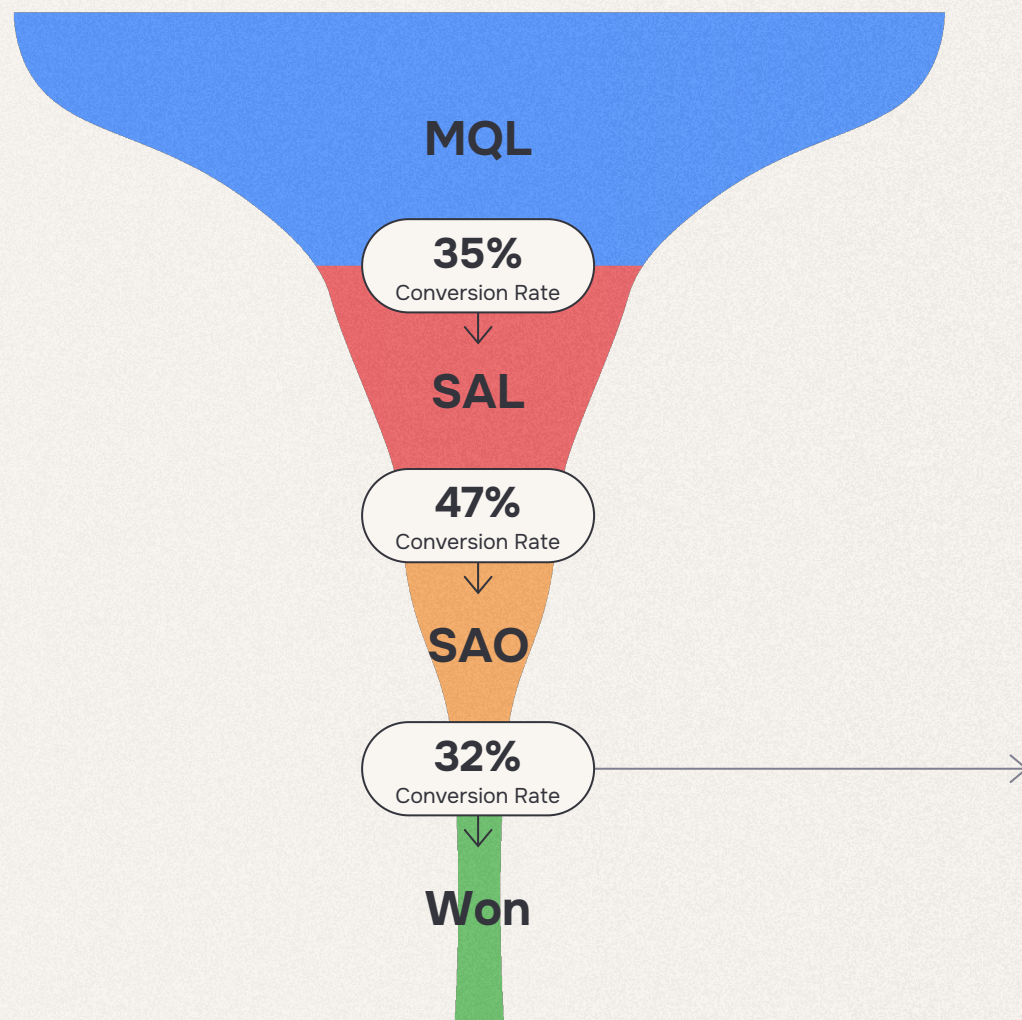


# Primary GTM Approach



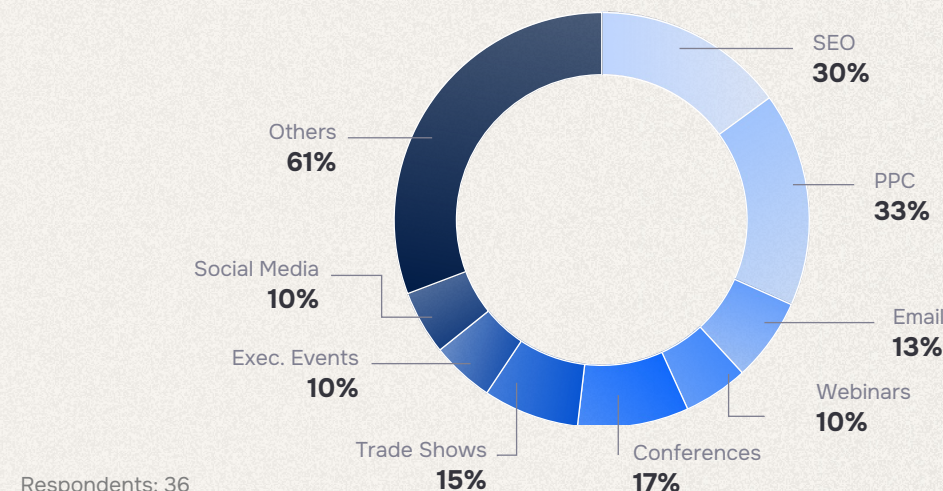


# Sales and Marketing Conversion Rates



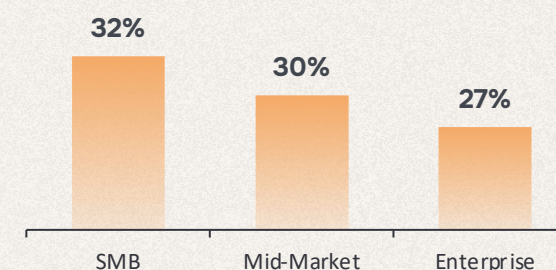
Respondents: 24 | Excludes companies with <\$30M in 2022 ARR

## Lead to MQL Conversion Rate by Type (2022)



Respondents: 36

## SAO to Won Conversion Rate by Customer Segment (2022)



Respondents: 22

“With the tight spending environment, the most efficient approach for tightening will be to prioritize maintaining SAO to closed-won conversion, by focusing expensive sales resources on high-value activities and investing in processes and tools (e.g., tighter verifiers, rigorous cadences, better automation through AI, etc). Unfortunately, I’m seeing many companies do the opposite - cutting marketing budget and inside sales roles and putting a higher burden on AEs.”

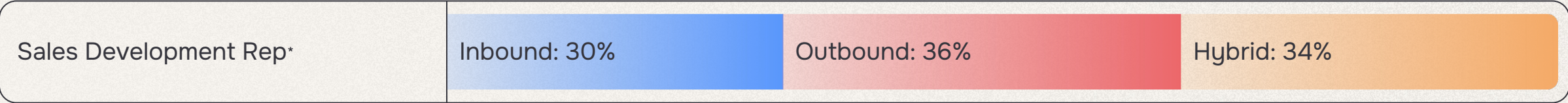


**Mahau Ma**

Operating Partner,  
Sapphire Ventures



# GTM Organizational Breakdown



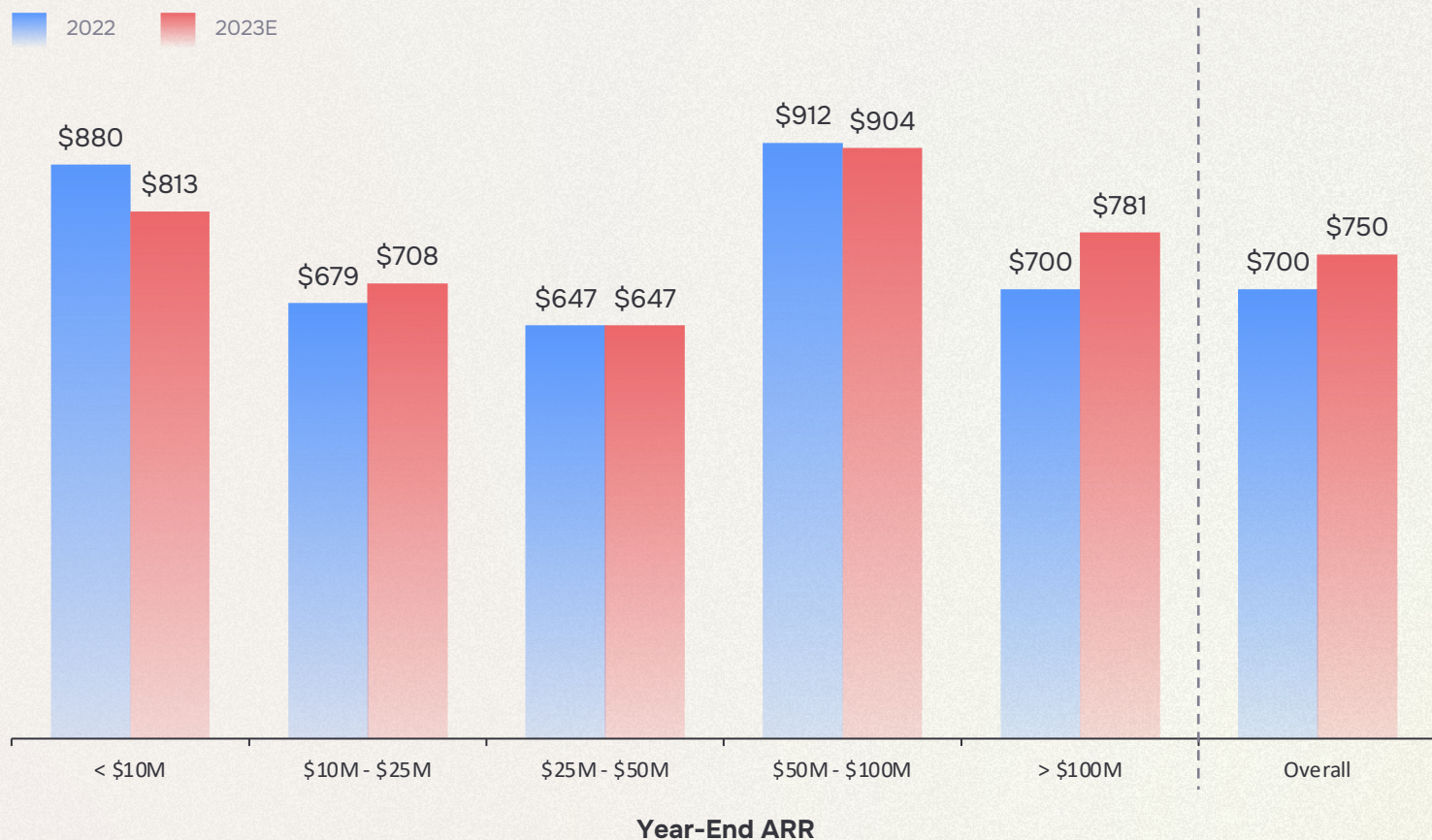
		SMB	Mid-Market	Enterprise
Business Development**	AE:BDR Ratio	1.7	2.1	2.2
Sales Engineer**	AE:SE Ratio	4.9	3.0	2.1
Account Executive**	Quota	\$0.8M	\$1.1M	\$1.5M
Customer Success Manager**	Book of Business	\$1.3M	\$1.5M	\$2.6M
	# of Accounts	100	40	14

Respondents: 85



# Account Executive Productivity

## Median Gross New ARR per Full-Time Account Executive by ARR (\$ in thousands)



Respondents: 69

### Slight increases in 2023E productivity

Companies are likely gaining initial increases in AE productivity by decreasing sales capacity and driving GTM efficiencies.

### Potential risk for sales leaders

However, companies aren't generally lowering ARR targets much, which could result in less quota buffer vs prior years.

### AI could potentially bridge the gap

Advancements in AI / ML tooling could prove critical to driving higher productivity as many companies seek to achieve aggressive 2024 targets with smaller GTM teams.

“Any nominal increase in AE productivity stems from the fact that most AEs let go during typical RIFs are newer reps that aren't fully ramped, along with a shedding of over-assigned (buffer) quota. While making the team optically more efficient in the short term, the leaning-out leaves the organization with very little room for error in quota attainment and the team ill-prepared for quick expansion when macro conditions improve.”



**Dave Wilner**



Operating Partner,  
Sapphire Ventures

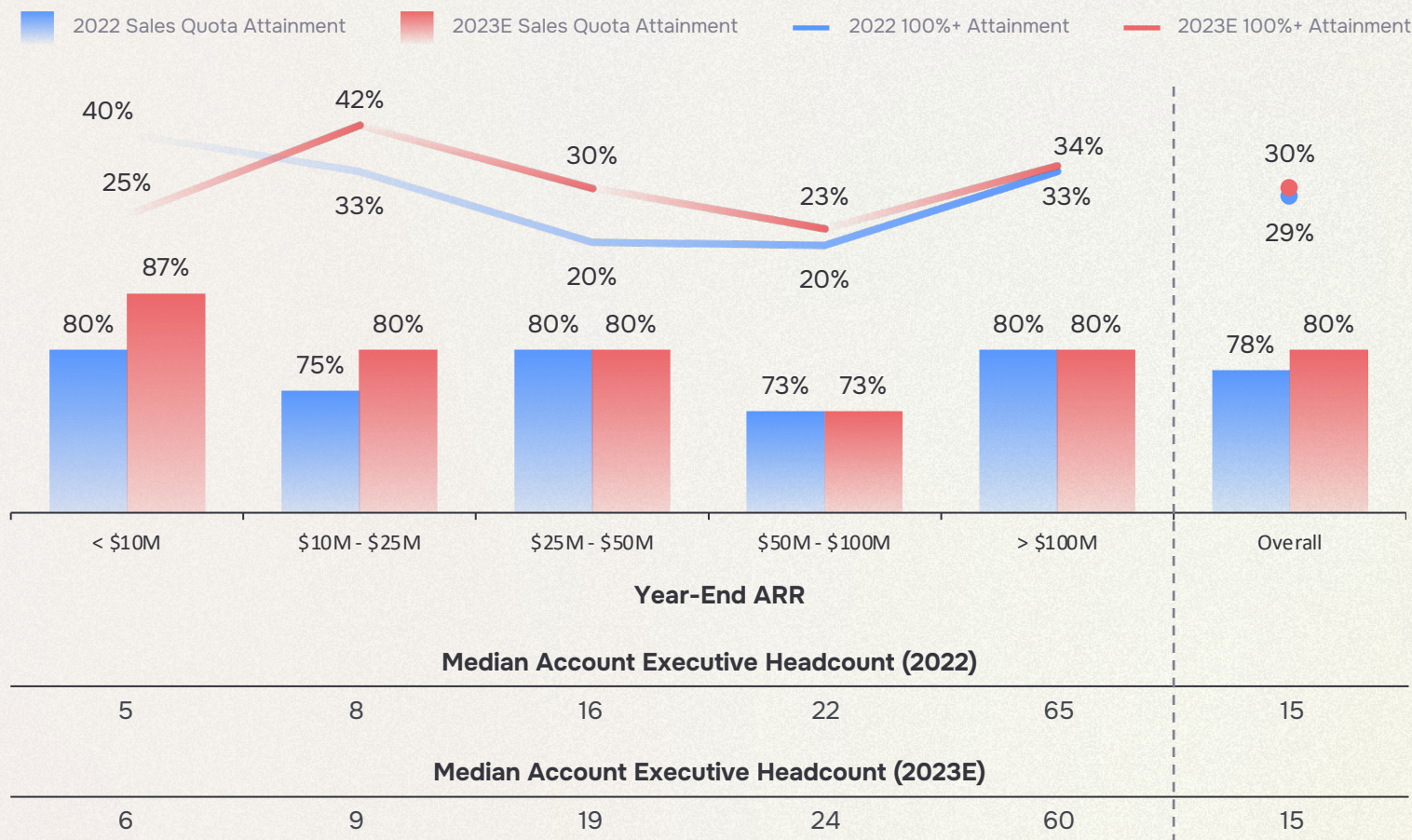


AE Productivity = (New Logo ARR + Expansion ARR) / # of Quota-Carrying AEs



# Sales Quota Achievements

## Sales Quota Attainment & Participation Rate



Respondents: 68



Sales Quota Attainment figures based on fully-ramped, quota-carrying AEs

### No major changes in attainment

Sales quota attainment is not expected to materially change between 2022 and 2023.

### More optimism for smaller SaaS teams

Companies with <\$25M ARR appear more optimistic about 2023 vs larger counterparts.

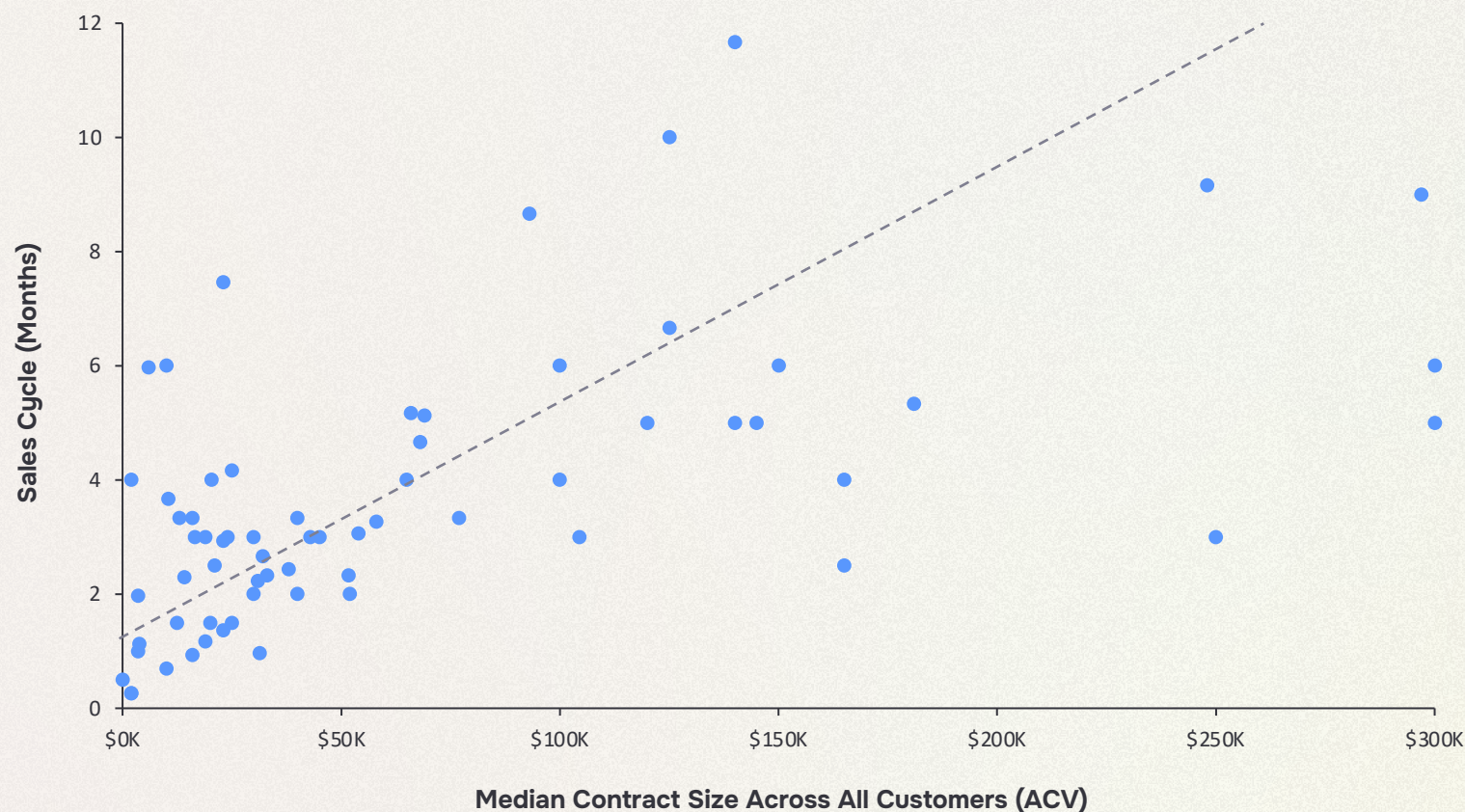
### Outliers seen at \$50-\$100M ARR

Companies with \$50M - \$100M ARR seem to be an outlier and demonstrate the lowest sales quota attainment, which could be reflective of some teams moving upmarket to an enterprise focus.



# Annual Contract Value with Sales Cycle Length

Median ACV vs Median Length of Sales Cycle in Months (2022)



## No major deviations from general trends

As expected, when the size of the average contract grows, there is a corresponding increase in sales cycle length.

## 2023E sales cycle times to increase

While sales cycle times appear to have gone down in 2022 (relative to recent years), the trend will likely reverse in 2023 as purchasing timelines get pushed and budgets continue to come under greater scrutiny.

Respondents: 67





# Customer Success Manager Statistics

## Median Accounts Covered and Book Size per CSM (2022)



### ICP to dictate CS coverage

Moving from SMB to Mid-Market to Enterprise, as expected, the number of covered accounts declines, but the value of the accounts increases.

### More complex customers require more CS resources

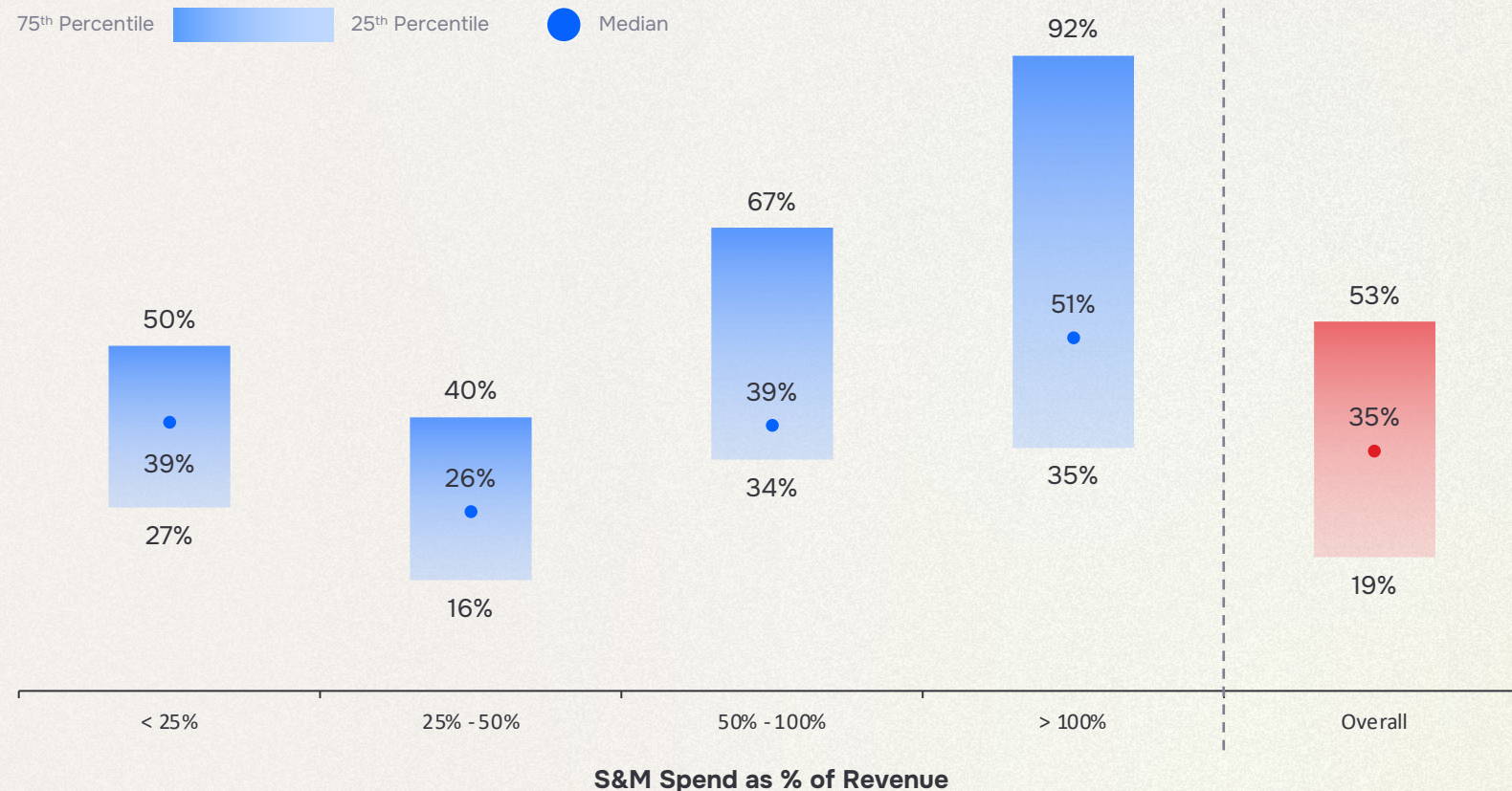
Enterprise expansion necessitates more strategic coverage models to address the opportunity.

Respondents: 78



# Sales & Marketing Spend and ARR Growth

## Median ARR Growth Rate (2022)



### Consistency across S&M spend

The mix of S&M spend is relatively consistent across all cohorts with ~2:1 ratio between Sales and Marketing (63% for Sales and 37% for Marketing).

### Unexpectedly higher growth for companies with <25% S&M spend

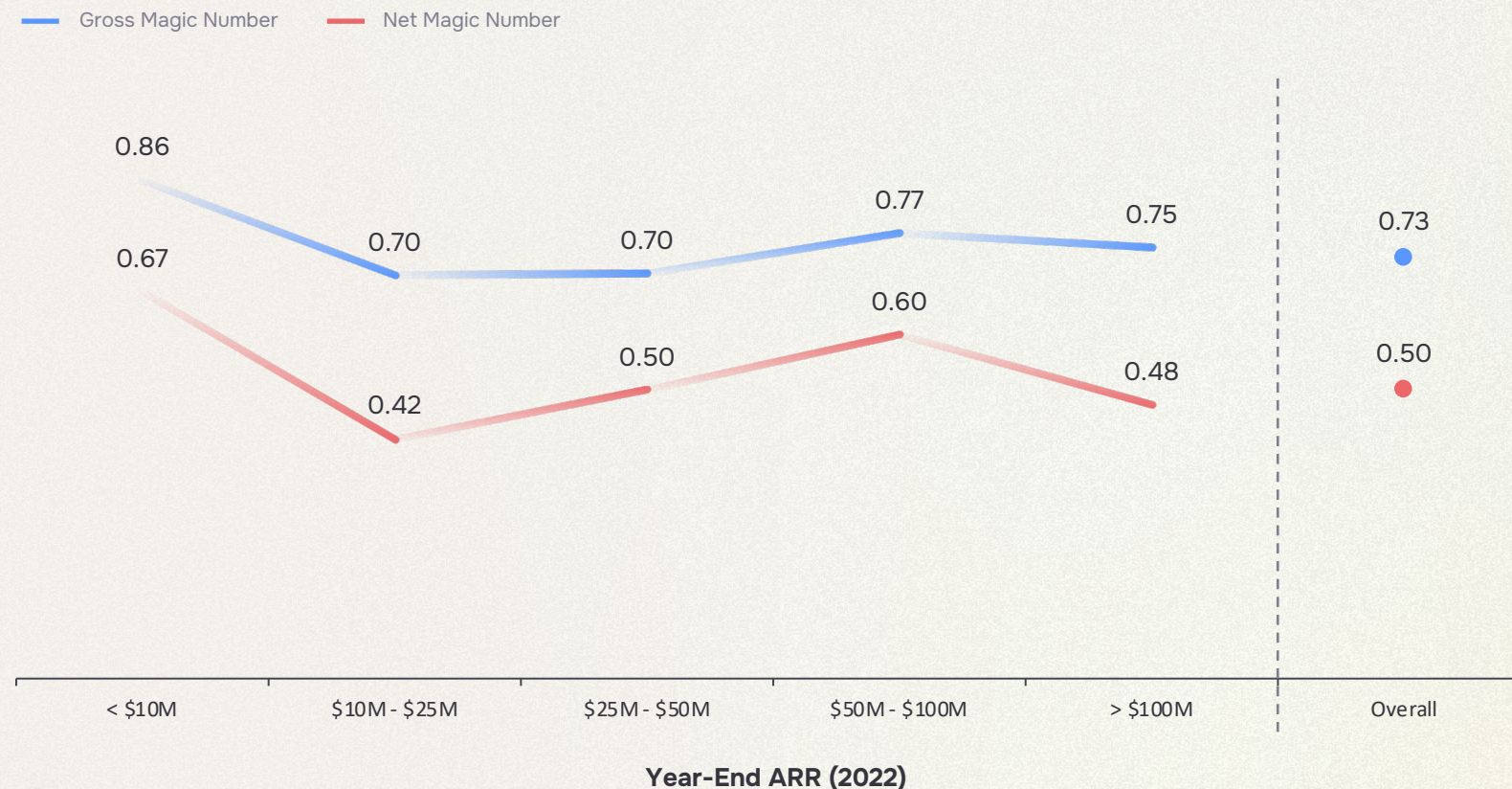
This cohort was comprised more heavily of smaller companies that required less S&M spend to achieve their growth targets.

Respondents: 63



# Magic Number

## Median Magic Number (2022)



### Gross and net magic numbers show best for companies with <\$10M ARR

This is driven by their conservatism around managing S&M expenses.

### Higher S&M spend through growth journey

As we move beyond \$10M ARR, we can see that companies are less efficient with their S&M spend, especially those with \$10M - \$25M ARR.

### Overall, magic numbers significantly impacted in 2H 2022 and 1H 2023

This is due to companies heavily investing in S&M initiatives in anticipation of growth that was never realized.

Respondents: 67

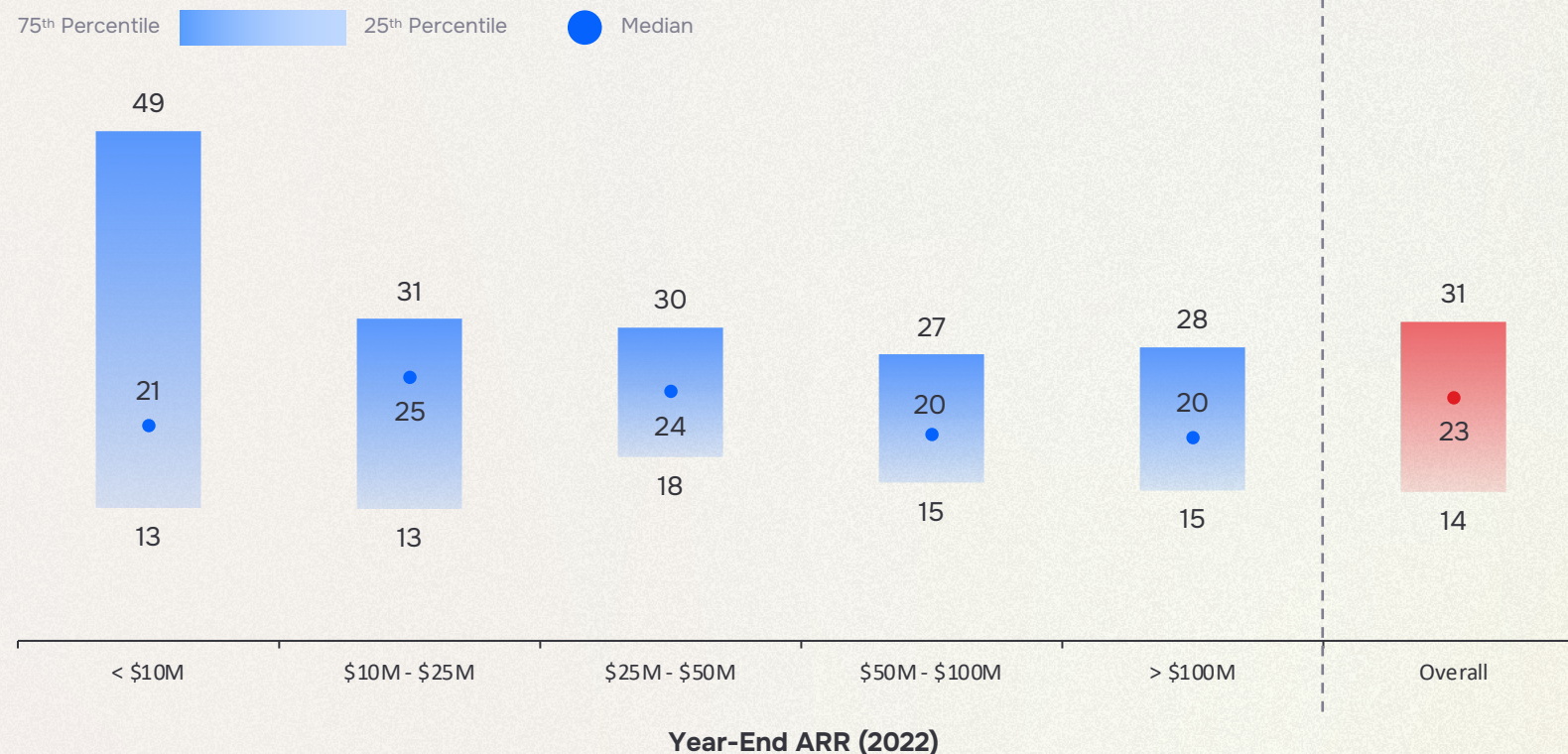


Gross Magic Number = (New Logo ARR + Expansion ARR) / Fully-Loaded S&M Spend  
Net Magic Number = (New Logo ARR + Expansion ARR - Churned ARR) / Fully-Loaded S&M Spend



# Customer Acquisition Cost (CAC) & Payback Period

## CAC Payback Period (Months) (2022)



**Small amount of variability in CAC outcome ranges**

We noticed minimal variability in the median CAC across ARR segments.

**Median CAC has remained relatively consistent**

At ~24 months based on previous survey results.

Respondents: 67



Fully-Loaded S&M Spend / (New Logo ARR + Expansion ARR) \* Gross Margin / 12

Confidential | 24





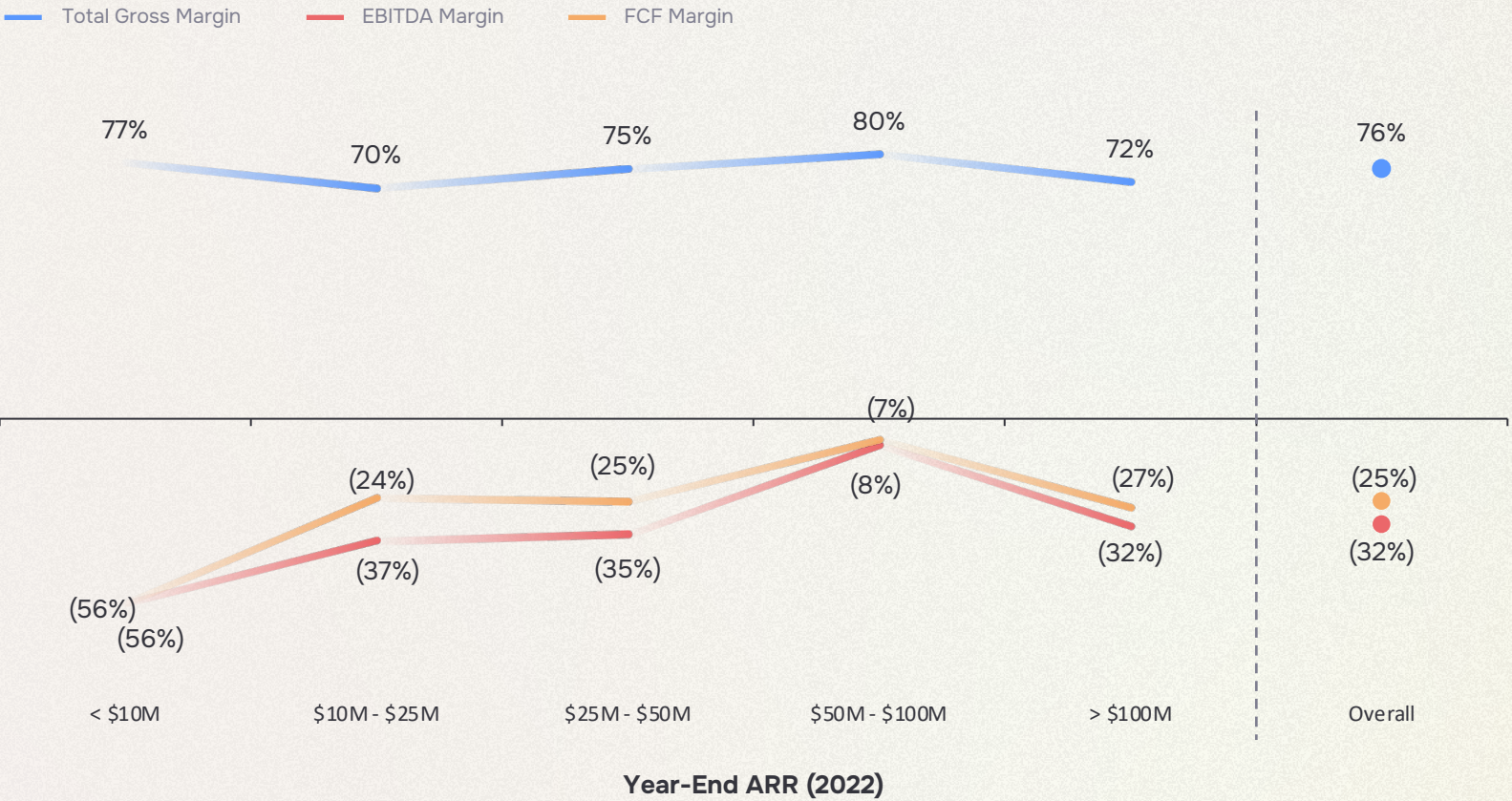
# Expenses & Profitability





# Profitability Margins

Median Gross, EBITDA, and Free Cash Flow (FCF) Margins (2022)



**No discernable trends with gross margins across company size**

Smaller-sized companies are experiencing lower EBITDA and FCF margins, which then start to improve as companies scale.

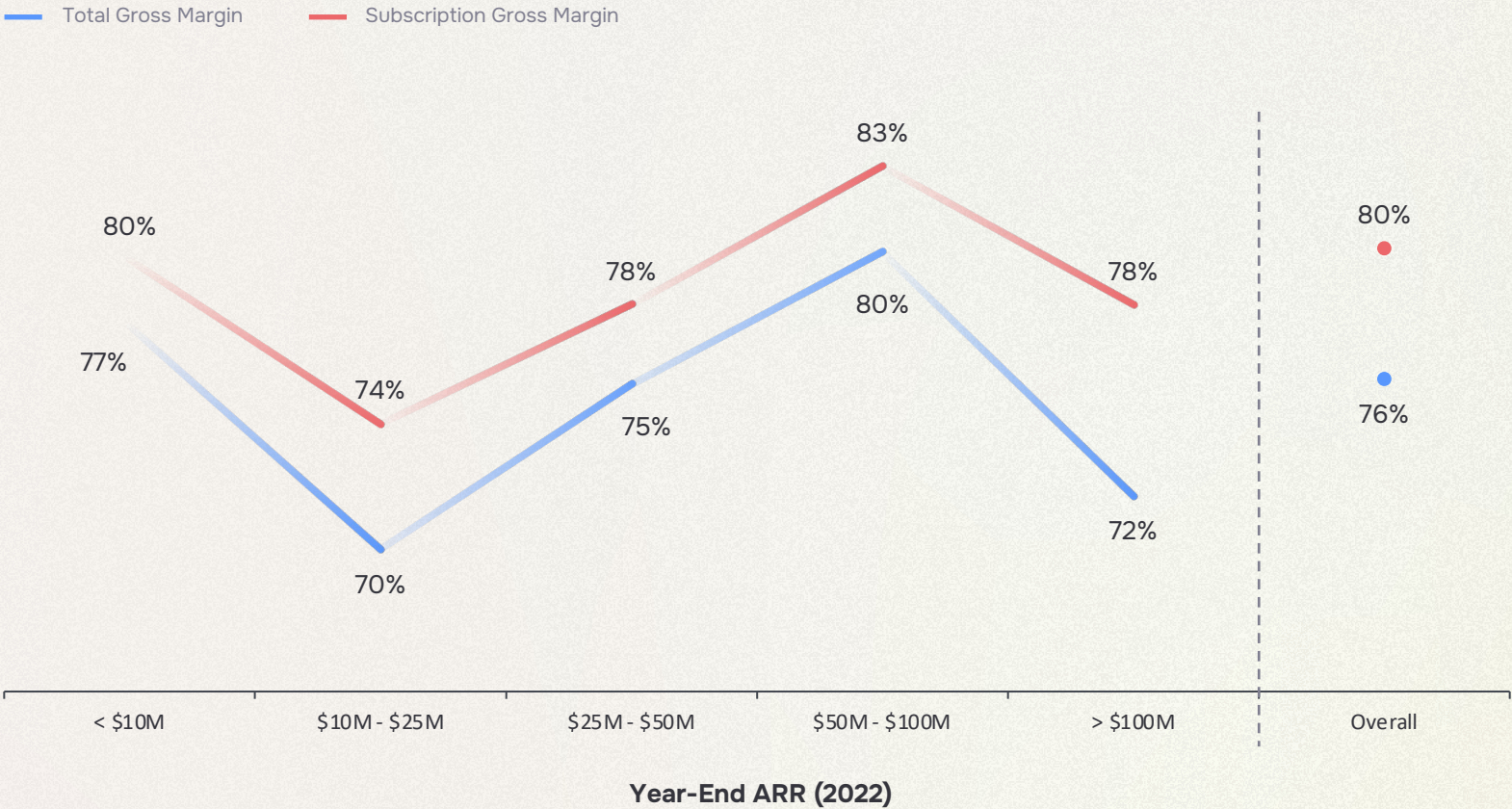
EBITDA and FCF margins became substantially worse in 2022 influenced by companies hiring more employees and pursuing growth with recently raised VC capital.

Respondents: 69



# Gross Margin Overview

Median Gross Margin by ARR Segment



**Subscription gross margins are higher than total gross margins**

As expected, by ~5% across all company sizes.

**Gross margins appear to be the worst for companies with \$10M - \$25M ARR**

However, they improve for larger-scale companies with greater buying power and better cost management controls in place.

**Gross margins appear to decline for companies with >\$100M**

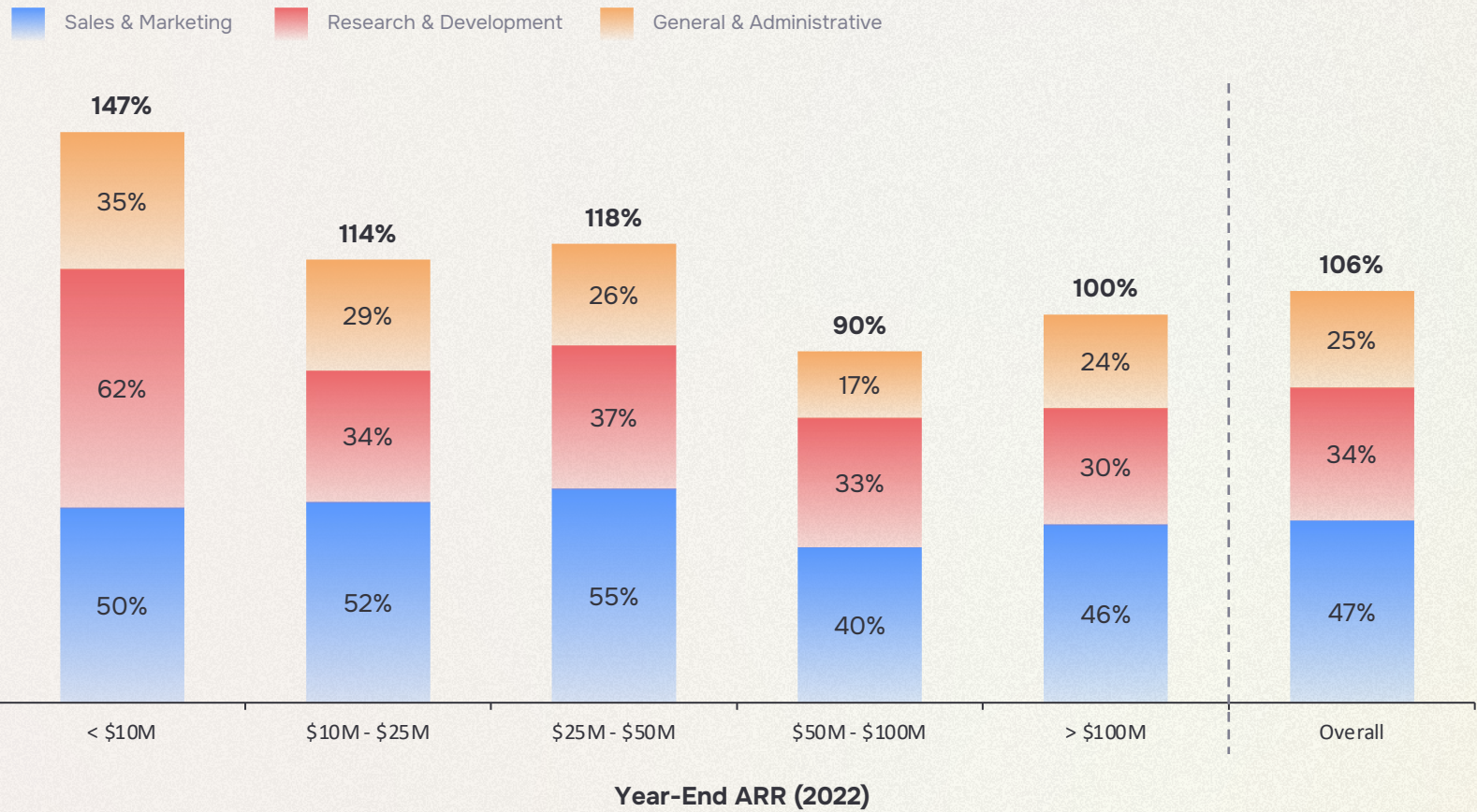
This is likely the result of having more siloed departments with less centralized cost planning across many product offerings.

Respondents: 75



# Operating Expenses

Median Expenses as % of Revenue (2022)



**Companies with <\$50M ARR seem to spend more as a % of revenue** as they proactively pursue growth over profitability.

**Once >\$50M ARR, they can generally realize greater economies of scale** and adjust their cost structure to achieve profitability.

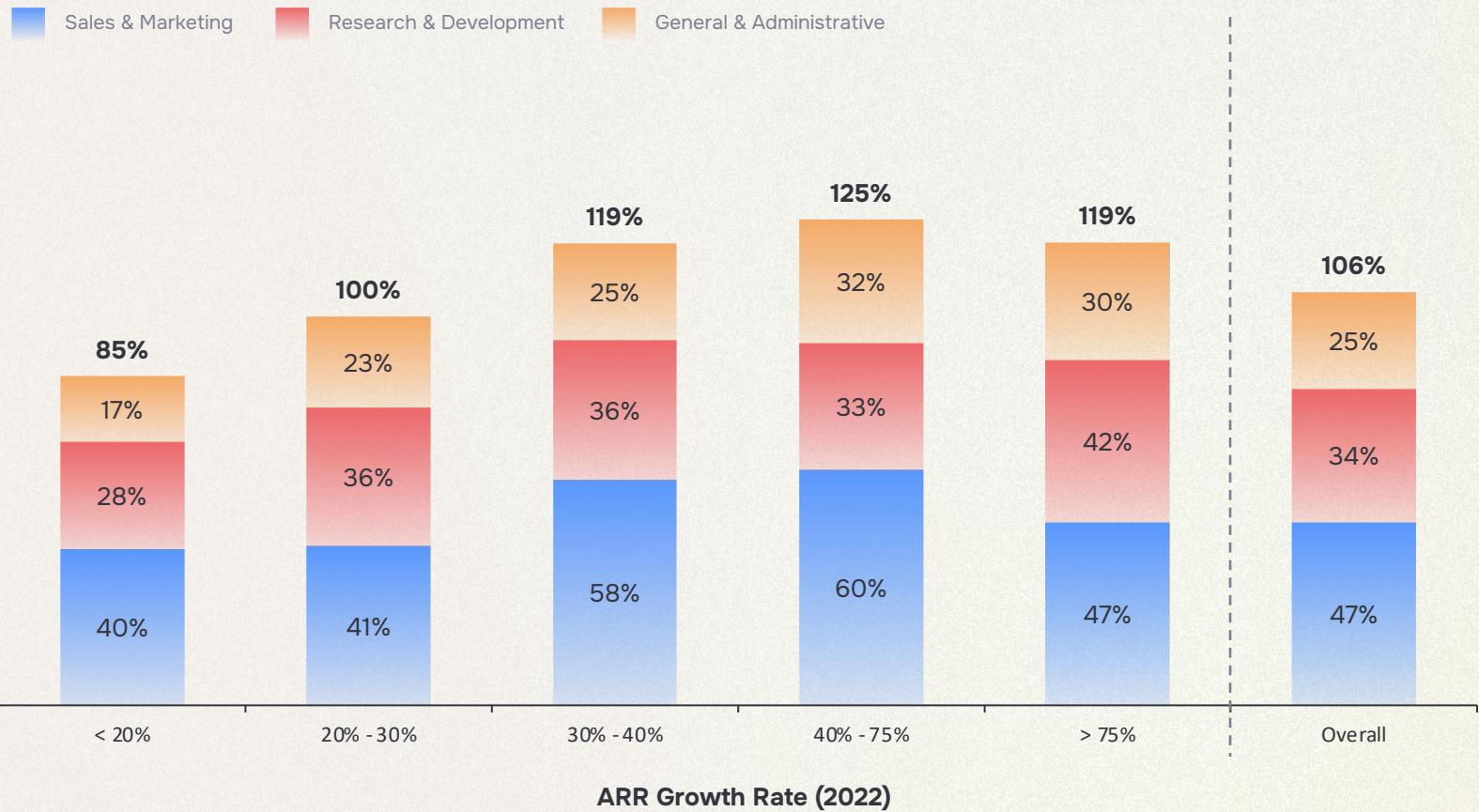
**Cost structures significantly increased in 2022 across all company sizes** after many chose to pursue growth with recently raised capital.

Respondents: 67



# Operating Expenses (cont'd)

Median Expenses as % of Revenue (2022)



**Mix shift of operating expenses as a % of revenue impacts ARR growth rates**

Greater investment in S&M generally translates to higher ARR growth.

**Highest growth segment of >75% is the exception**

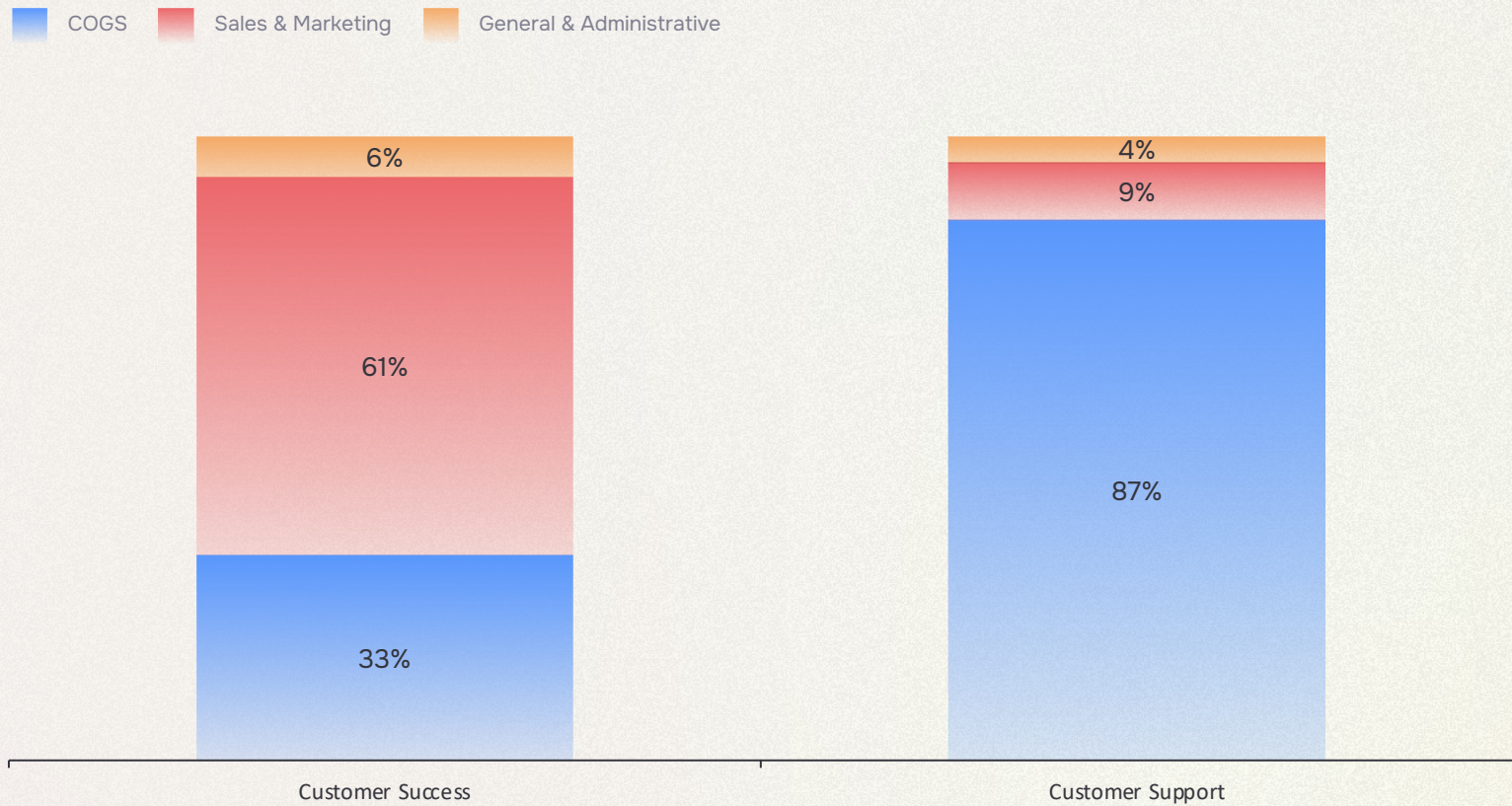
More R&D investment is required as these are usually smaller-sized companies with <\$10M ARR that are more heavily dependent on product development, which can be seen on the prior slide.

Respondents: 67



# Customer Success & Support Expenses

Customer Success & Support Expense Distribution by Cost Center



Customer support is directly attributable to **COGS** with ~87% of this expense going to the COGS cost center.

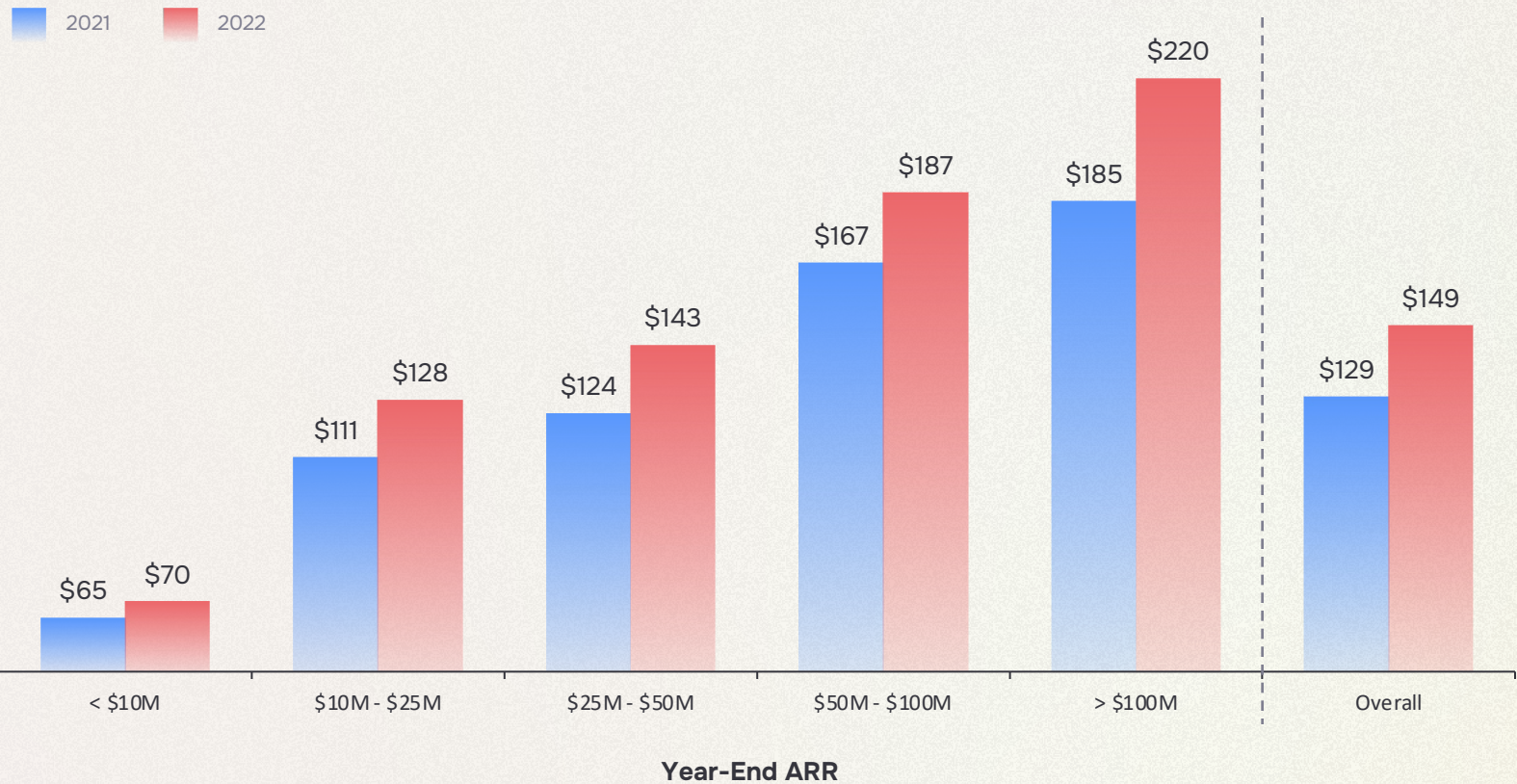
There's approximately a **2:1 ratio of cost distribution** between S&M and COGS.

Respondents: 72



# Human Capital Efficiency

Median ARR per Full-Time Employee by ARR Segment (\$ in thousands)



**Human capital efficiency becoming an increasingly important metric**

Boards are guiding management teams to achieve certain benchmarks.

**Steady increase in the ARR / FTE over the last few years**

We expect this trend to continue moving forward.

**Overall, human capital efficiency notably increased in 2022**

ARR / FTE grew from ~\$130k in 2021 to ~\$150k in 2022, representing a ~15% increase.

**The most scaled companies with >\$100M ARR experienced the largest improvement**

Growing from ~\$185k in 2021 to ~\$220k in 2022, representing a ~20% increase.

Respondents: 105



# Rule of 40 - SaaS Survey



**Only 15% of companies met or exceeded the Rule of 40 in 2022**, indicating that companies were inefficient with their spending relative to growth.

**Companies saw high growth, but they also spent much more to achieve that growth**, impacting profitability.

**The Rule of 40 is now more important than ever** as companies are seeking to attract capital from investors who are looking for strong unit economics.

**15%**  
Companies Meet or Exceed Rule of 40 Threshold

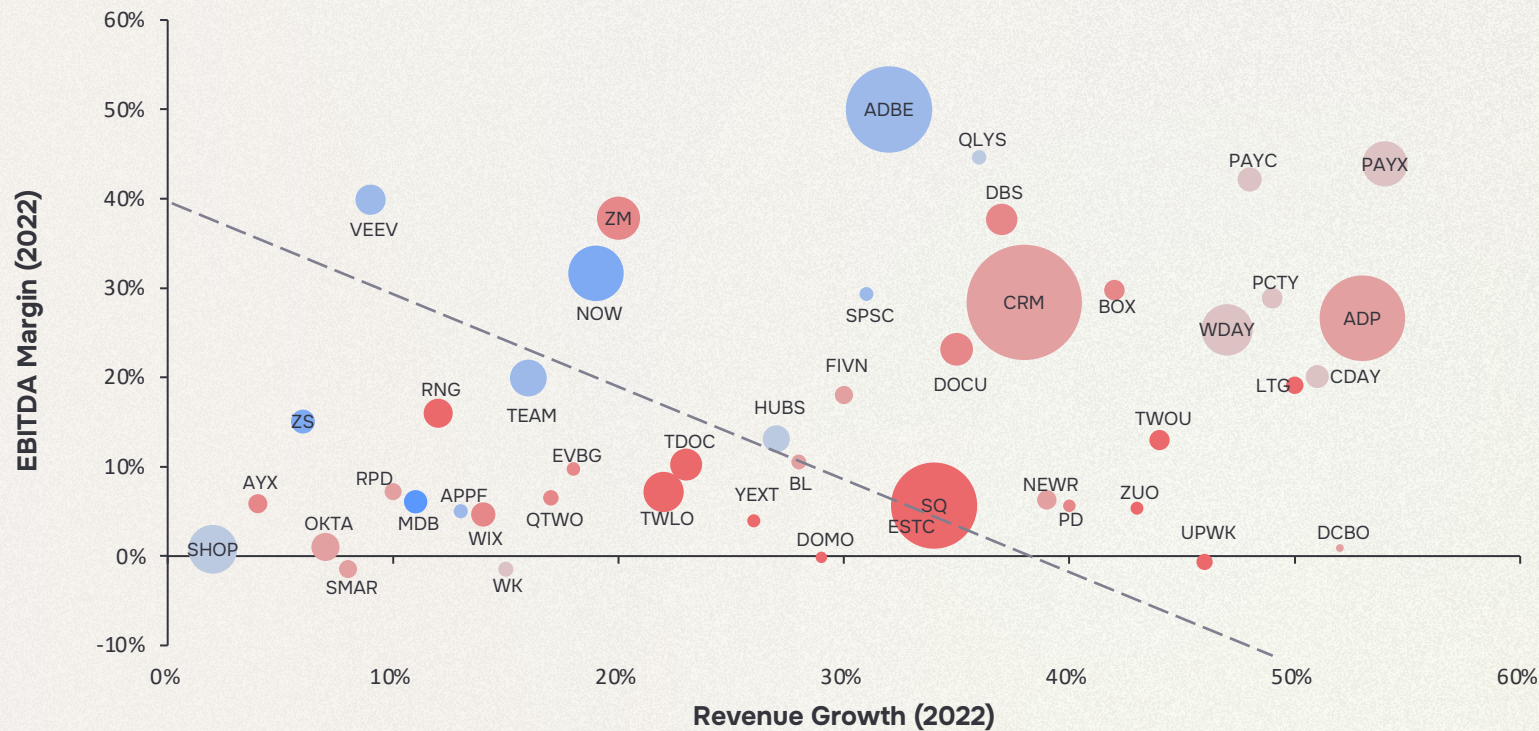
**35%**  
Median ARR Growth

**(25%)**  
Median FCF Margin

Respondents: 60



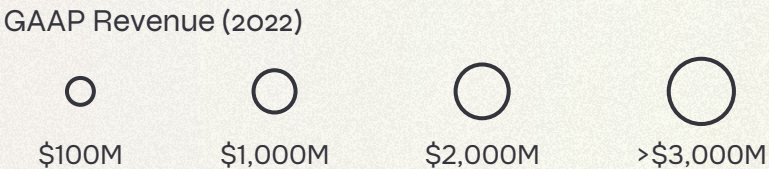
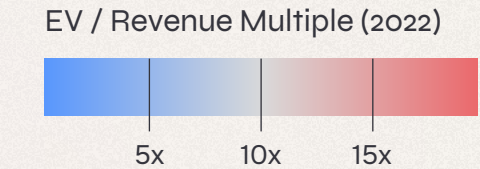
# Rule of 40 - Public Companies



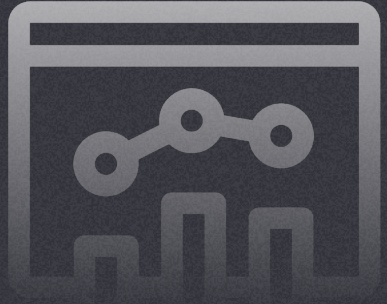
**Public companies fared better when it came to the Rule of 40**

In addition to greater economies of scale, these companies are constantly being held under public scrutiny by investors relative to private companies.

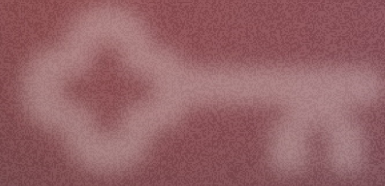
This has forced public companies to take a prudent approach to managing growth and profitability.







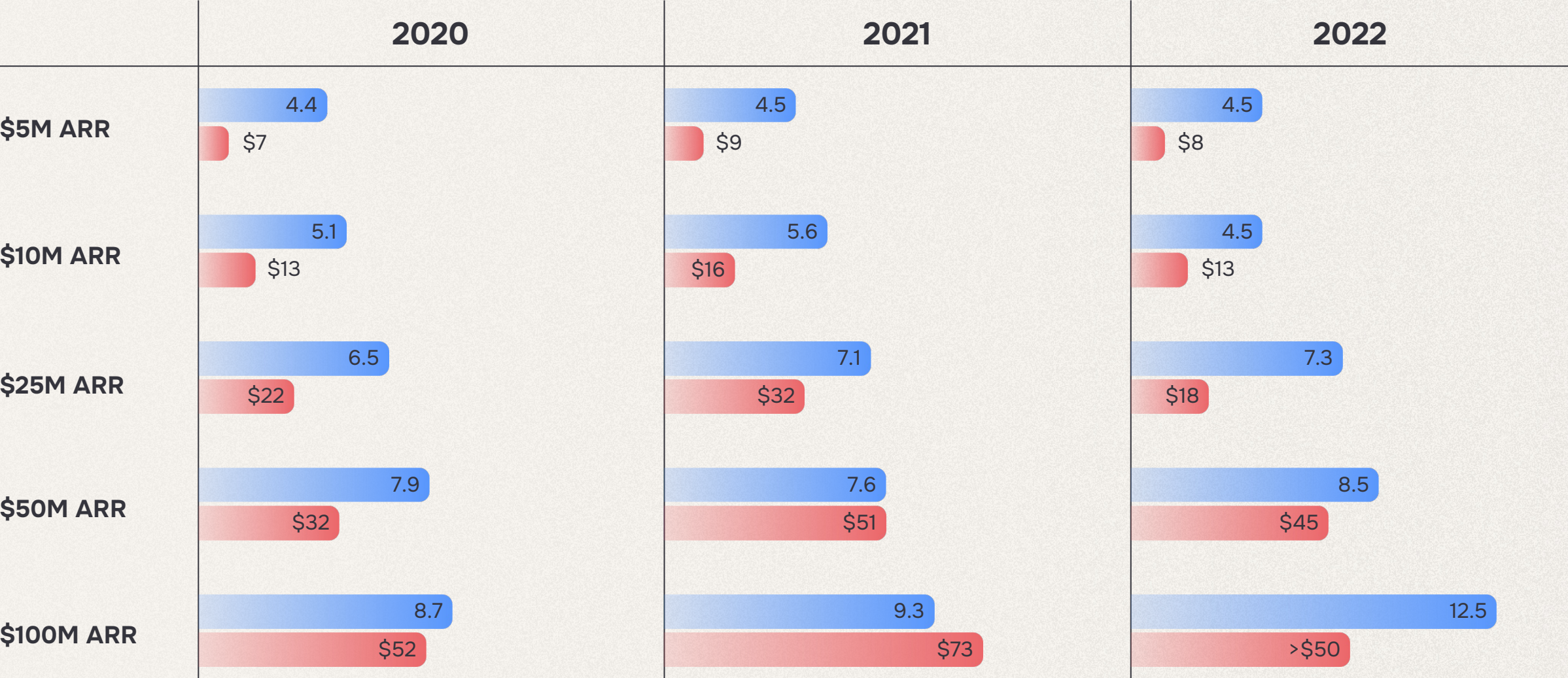
# Financing & Valuation





# Capital Efficiency

Years Required
Total Capital Consumed (\$ in M)



Respondents: 66



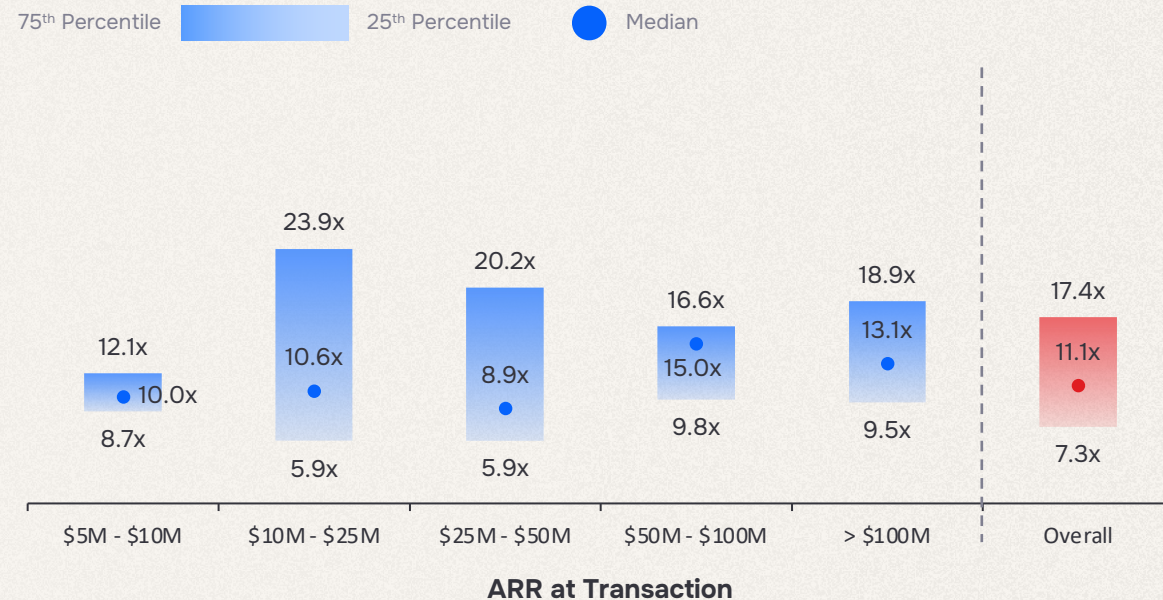


# Valuation by ARR and ARR Growth at Time of Last Transaction

Private market financing activity and multiples continue to show strength.

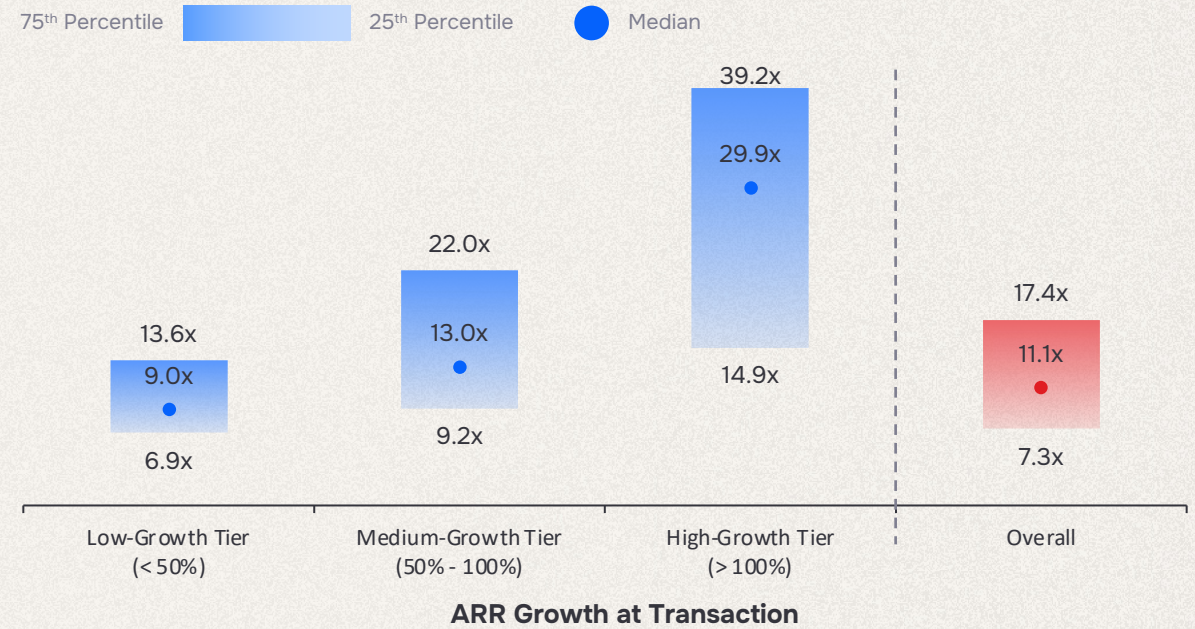
Lower growers (<50%) have seen private market multiples compress towards normalized public market multiples, while higher growers (>100%) have been more resilient, still commanding super-premium multiples (29.9x NTM median).

## Pre-Money Valuation / ARR



Respondents: 56

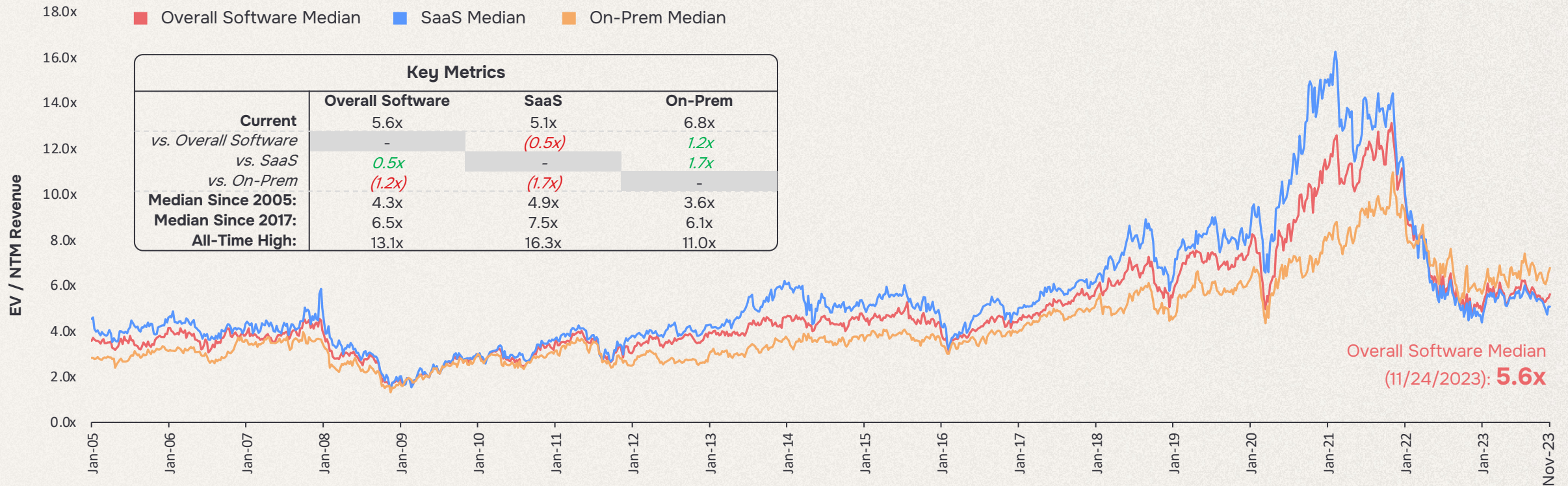
## Pre-Money Valuation / ARR by Growth



Respondents: 56; Excludes companies with <5M ARR at time of transaction



# Median Software EV / NTM Revenue Multiples since 2005



Source: Capital IQ as of market close on 11/24/2023; depicts median EV / NTM revenue consensus estimate valuations of the universe base

Note: Software universe is equally-weighted and includes the following (when each was publicly traded): ADBE, ADSK, AI, AKAM, ALKT, ALRM, ALTR, AMBR, AMPL, ANET, ANSS, API, APPF, APPN, APTI, ASAN, ATHN, AVDX, AYX, BAND, BASE, BCOV, BIGC, BILL, BL, BLKB, BLND, BNFT, BOX, BRZE, BSY, BV, CALD, CARB, CBLK, CDNS, CFLT, CHKP, CISN, CLDR, CNQR, CNVO, COVS, CRM, CRWD, CSLT, CSOD, CTCT, CVLT, CVT, CXM, CYBR, DBX, DDOG, DMAN, DOCN, DOCU, DOMO, DOX, DSY, DT, DWRE, ELLI, ELOQ, ENFN, ESTC, ET, ETWO, EVBG, EVCM, EXFY, FICO, FIVN, FLT, FORG, FROG, FRSH, FSLY, FTNT, GEN, GTLB, GWRE, HCP, HGN, HUBS, INST, INTA, INTU, IOT, JAMF, JIVE, KLTR, KNXA, KVYO, KXS, LAW, LOGM, MANH, MB, MCFE, MDB, MIME, MKTG, MKTO, MLNK, MNDY, MODN, MQ, MSFT, MSTR, MULE, N, NABL, NCNO, NET, NEWR, NOW, OKTA, OMTR, ONTF, OPWR, ORCL, OSPN, OTEX, PANW, PATH, PAYC, PAYX, PCOR, PCTY, PD, PEGA, PFPT, PFWD, PLAN, PLTR, PRGS, PRO, PS, PSTG, PTC, PVT, PWSC, PYCR, QLYS, QWON, RALY, RNG, RNOW, RP, RPD, RSKD, S, SAP, SCWX, SEMR, SEND, SFSF, SHOP, SLRY, SMAR, SNOW, SNPS, SOW, SPSC, SPT, SQI, SUMO, SWI, TDC, TEAM, TENB, TLEO, TOST, TWLO, TWOU, TXTR, ULTI, VEEV, VMW, VOCS, VRNS, VRSN, VTEX, WDAY, WK, WKME, WORK, WTC, XM, XRO, XTLY, YDLE, YEXT, ZI, ZM, ZS, ZUO



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# Thank You



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