



**The Standard for Apple  
in the Enterprise**

**Investor Presentation:  
Fourth Quarter 2022**



# Safe Harbor

Unless otherwise specified, financial information and other data presented in this presentation is presented as of December 31, 2022. The financial results and other data contained herein following July 1, 2021 include the impact of the Wandera acquisition, which closed on that date, unless otherwise specified. Jamf's historical results are not necessarily indicative of the results that may be expected in the future.

## Forward-Looking Statements

This presentation contains "forward-looking statements" within the meaning of federal securities laws, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "can," "will," "would," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "forecasts," "potential" or "continue" or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements may involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from those expressed or implied by the forward-looking statements. These statements include, but are not limited to, statements regarding our future financial and operating performance (including our outlook and guidance), the demand for our platform, anticipated impacts of macroeconomic conditions on our business, our expectations regarding business benefits and financial impacts from our acquisitions, partnerships and investments, and our ability to deliver on our long-term strategy.

The forward-looking statements contained in this presentation are also subject to additional risks, uncertainties, and factors, including those more fully described in our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2022. Additional information will also be set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, as well as the subsequent periodic and current reports and other filings that we make with the Securities and Exchange Commission from time to time. Moreover, we operate in a very competitive and rapidly changing environment, and new risks and uncertainties may emerge that could have an impact on the forward-looking statements contained in this press release and the accompanying conference call.

Given these factors, as well as other variables that may affect our operating results, you should not rely on forward-looking statements, assume that past financial performance will be a reliable indicator of future performance, or use historical trends to anticipate results or trends in future periods. The forward-looking statements included in this press release and the accompanying conference call relate only to events as of the date hereof. We undertake no obligation to update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

## Market and Industry Data

This presentation includes information concerning economic conditions, the Company's industry, the Company's markets and the Company's competitive position that is based on a variety of sources, including information from independent industry analysts and publications, as well as Jamf's own estimates and research. Jamf's estimates are derived from publicly available information released by third party sources, as well as data from its internal research, and are based on such data and the Company's knowledge of its industry, which the Company believes to be reasonable. The independent industry publications used in this presentation were not prepared on the Company's behalf. While the Company is not aware of any misstatements regarding any information in this presentation, forecasts, assumptions, expectations, beliefs, estimates and projects involve risk and uncertainties and are subject to change based on various factors.

## Non-GAAP Financial Measures

This presentation contains the financial measures Non-GAAP Gross Profit, Non-GAAP Gross Profit Margin, Non-GAAP Operating Income (Loss), Non-GAAP Operating Income (Loss) Margin, Free Cash Flow, Free Cash Flow Margin, Unlevered Free Cash Flow, Unlevered Free Cash Flow Margin, Non-GAAP Sales and Marketing, Non-GAAP Research and Development and Non-GAAP General and Administrative Expenses which are not recognized under generally accepted accounting principles in the United States ("GAAP").




In addition to our results determined in accordance with generally accepted accounting principles in the United States ("GAAP"), we believe the non-GAAP measures of non-GAAP operating expenses, non-GAAP gross profit, non-GAAP gross profit margin, non-GAAP operating income (loss), non-GAAP operating income (loss) margin, non-GAAP income before income taxes, non-GAAP provision for income taxes as it relates to the calculation of non-GAAP net income, non-GAAP net income, free cash flow, free cash flow margin, unlevered free cash flow, and unlevered free cash flow margin are useful in evaluating our operating performance. Certain of these non-GAAP measures exclude stock-based compensation, amortization expense, acquisition-related expenses, acquisition-related earnout, offering costs, foreign currency transaction loss, payroll taxes related to stock-based compensation, legal settlement, loss on extinguishment of debt, and amortization of debt issuance costs. We believe that non-GAAP financial information, when taken collectively, may be helpful to investors because it provides consistency and comparability with past financial performance and assists in comparisons with other companies, some of which use similar non-GAAP information to supplement their GAAP results. The non-GAAP financial information is presented for supplemental informational purposes only, should not be considered a substitute for financial information presented in accordance with GAAP, and may be different from similarly-titled non-GAAP measures used by other companies. The principal limitation of these non-GAAP financial measures is that they exclude significant expenses that are required by GAAP to be recorded in our financial statements. In addition, they are subject to inherent limitations as they reflect the exercise of judgment by our management about which expenses are excluded or included in determining these non-GAAP financial measures. Reconciliation tables of the most comparable GAAP financial measures to the non-GAAP financial measures used in this press release are included with the financial tables at the end of this release. We strongly encourage investors to review our consolidated financial statements included in our publicly filed reports in their entirety and not rely solely on any single financial measurement or communication.

Definitions of Non-GAAP Gross Profit, Non-GAAP Operating Income (Loss), Free Cash Flow, Unlevered Free Cash Flow, Non-GAAP Sales and Marketing, Non-GAAP Research and Development and Non-GAAP General and Administrative Expenses and reconciliations of these non-GAAP financial measures to the most directly comparable GAAP financial measure can be found at the end of this presentation.



 jamf

# Jamf - Helping Organizations Succeed with Apple

<b>71,000</b> Active Jamf Customers	<b>30.0m</b> Devices Run Jamf	<b>\$35b</b> Total Addressable Market <sup>1</sup>
<b>57</b> Net Promoter Score <sup>2</sup>	<b>113%</b> Dollar-Based Net Retention	<b>90%</b> Rate Jamf as a Great Place to Work <sup>3</sup>
<b>9 out of 10</b>  Top Fortune 500 Companies <sup>4</sup>	<b>22 out of 25</b>  Most Valuable Global Brands <sup>5</sup>	<b>15 out of 15</b>  Largest U.S. Banks <sup>6</sup>
<b>\$512.5m / 24%</b> ARR / Growth <sup>7</sup>	<b>31%</b> Revenue Growth <sup>7</sup>	<b>95%</b> Subscription Revenue
<b>81%</b> Non-GAAP Gross Margin <sup>8</sup>	<b>5%</b> Non-GAAP Operating Income Margin <sup>8</sup>	<b>18%</b> uFCF Margin <sup>8,9</sup>



## The Standard in Apple Enterprise Management



## Large and Growing Addressable Market



## Strong and Predictable Financial Profile

Note: Company statistics and financial metrics are as of the period ended 12/31/2022 unless footnoted otherwise. <sup>1</sup> Sourced from Frost & Sullivan and management estimates. <sup>2</sup> As of November 2022. <sup>3</sup> Based on December 2021 Great Place to Work®. An updated Great Place To Work survey is in process as of February 2023. <sup>4</sup> As ranked by Fortune as of 12/31/2022. <sup>5</sup> As ranked by Forbes Most Valuable Brands list as of 12/31/2022. <sup>6</sup> Based on total assets as of 12/31/2022. <sup>7</sup> Growth is compared to FY 2021. <sup>8</sup> See appendix for reconciliation of GAAP to Non-GAAP measures. <sup>9</sup> TTM as of December 31, 2022.

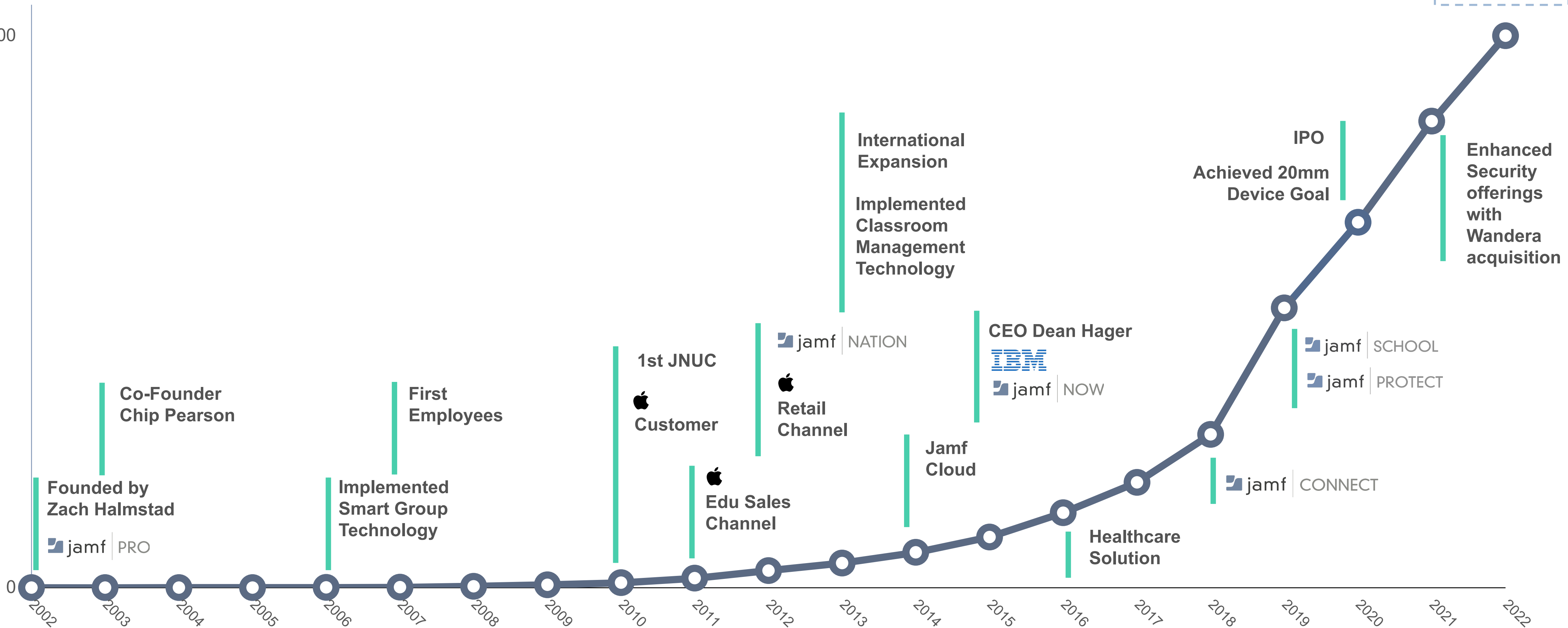


# The Jamf Story

Customers

71,000

**71,000**  
2022

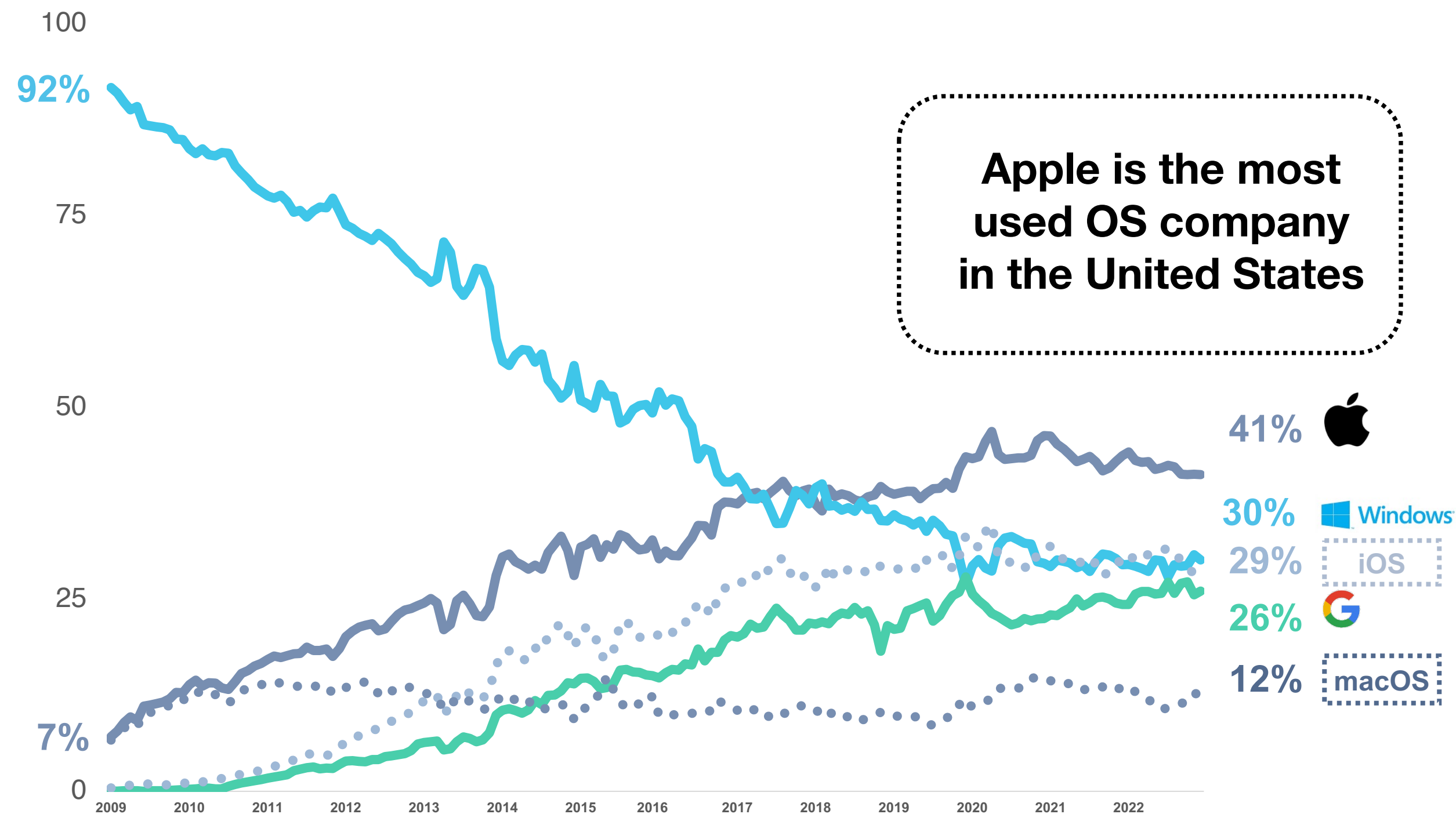




# Apple Market Share in the U.S. and Beyond

Strong Signs of Continued Growth

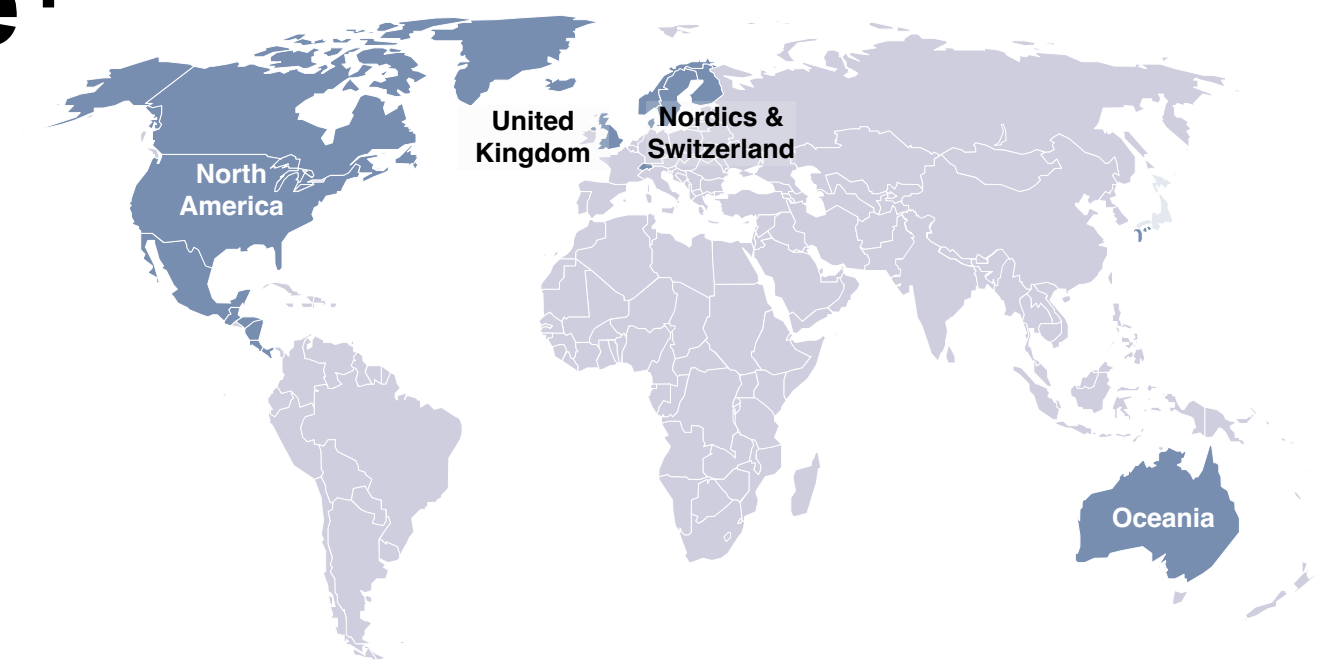
## U.S. Share by OS<sup>1</sup>



Apple is the most used OS company in the United States

## Apple #1 Share<sup>1</sup>

- North America
- Oceania
- United Kingdom
- Nordics
- Switzerland



## Apple Workforce Preferred<sup>2</sup>



62%

users surveyed would prefer an Apple device at work

89%

of users willing to make a salary sacrifice for device choice

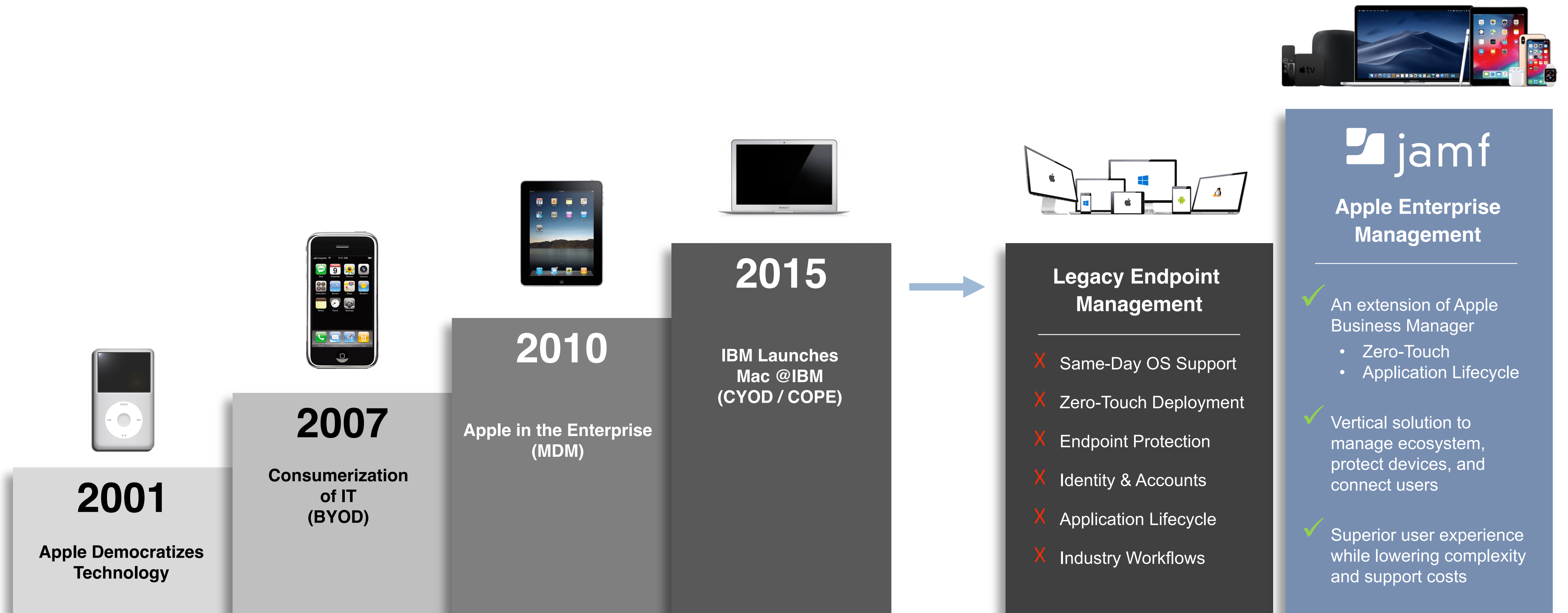
Calculated as total Internet traffic by operating system for both business and consumer. Data reflects market share within the United States over the time period 1/1/2009 to 12/31/2022.

<sup>1</sup> Source: Statcounter.

<sup>2</sup> Based on a 2021 survey conducted by Vanson Bourne and commissioned by Jamf.



# Jamf is the Standard for Managing and Securing Apple at Work






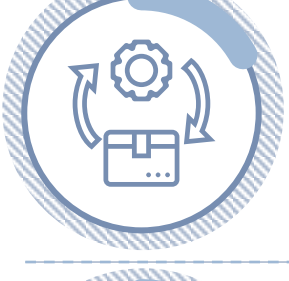




## Apple Enterprise Management

- ✓ An extension of Apple Business Manager
  - Zero-Touch
  - Application Lifecycle
- ✓ Vertical solution to manage ecosystem, protect devices, and connect users
- ✓ Superior user experience while lowering complexity and support costs



# IT Solutions for the Modern Workplace

	<b>Legacy Solutions</b>	 <b>jamf</b>
 <b>Provisioning and Deployment</b>	✗ Manual, Time-intensive, Inflexible	✔ <b>Zero-touch, Shrink-wrapped Deployment</b>
 <b>Identity-based Resource Access</b>	✗ Device AD-bound or Decoupled from Identity	✔ <b>Streamlined &amp; Singular Cloud-based Identity</b>
 <b>Operating System Updates</b>	✗ Delayed, Vulnerable	✔ <b>Same-Day Compatibility &amp; Features</b>
 <b>Network Risk Management</b>	✗ Intrusive to Privacy, Ineffective for Hybrid Work	✔ <b>Network-aware, Globally-available Content Filtering (Available Across Platforms)</b>
 <b>Application Lifecycle and Licensing</b>	✗ IT-assisted, Resource-intensive, Complex, Middleware-wrapped	✔ <b>Automated, Cloud-delivered, Privacy Preserving, Native with Enterprise App Store</b>
 <b>Endpoint Protection</b>	✗ Windows-centric Facing Apple Deprecation	✔ <b>Architected Apple-native</b>
 <b>Self-service</b>	✗ IT Hands-on Service	✔ <b>Empowered Employees Help Themselves</b>



# Jamf's Apple Enterprise Management and Security Platform



## Manage

- **Jamf Pro**  
The Apple management standard. Built for IT Pros.

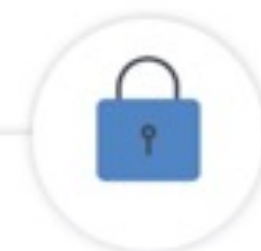
---

- **Jamf Now**  
Streamlined device management, no IT required.

---

- **Jamf School**  
Empowering educators with efficient classroom management.

jamf | NATION



## Secure

- **Jamf Connect**  
Streamlined provisioning, authentication, identity management and modern zero trust access.

---

- **Jamf Protect**  
Endpoint security, web filtering, mobile threat defense and remediation.

---

- **Jamf Safe Internet**  
Purpose-built content filtering and network threat protection for education.

---

- **ZecOps**  
Advanced detection & response for mobile devices.



## Extend

- **Education**  
Teacher, Student and Parent apps

---

- **Healthcare**
  - Patient Experience
  - Clinical Communications
  - Virtual Visits

---

- **X Industry**  
Setup and Reset for Shared Devices and Workflows

---

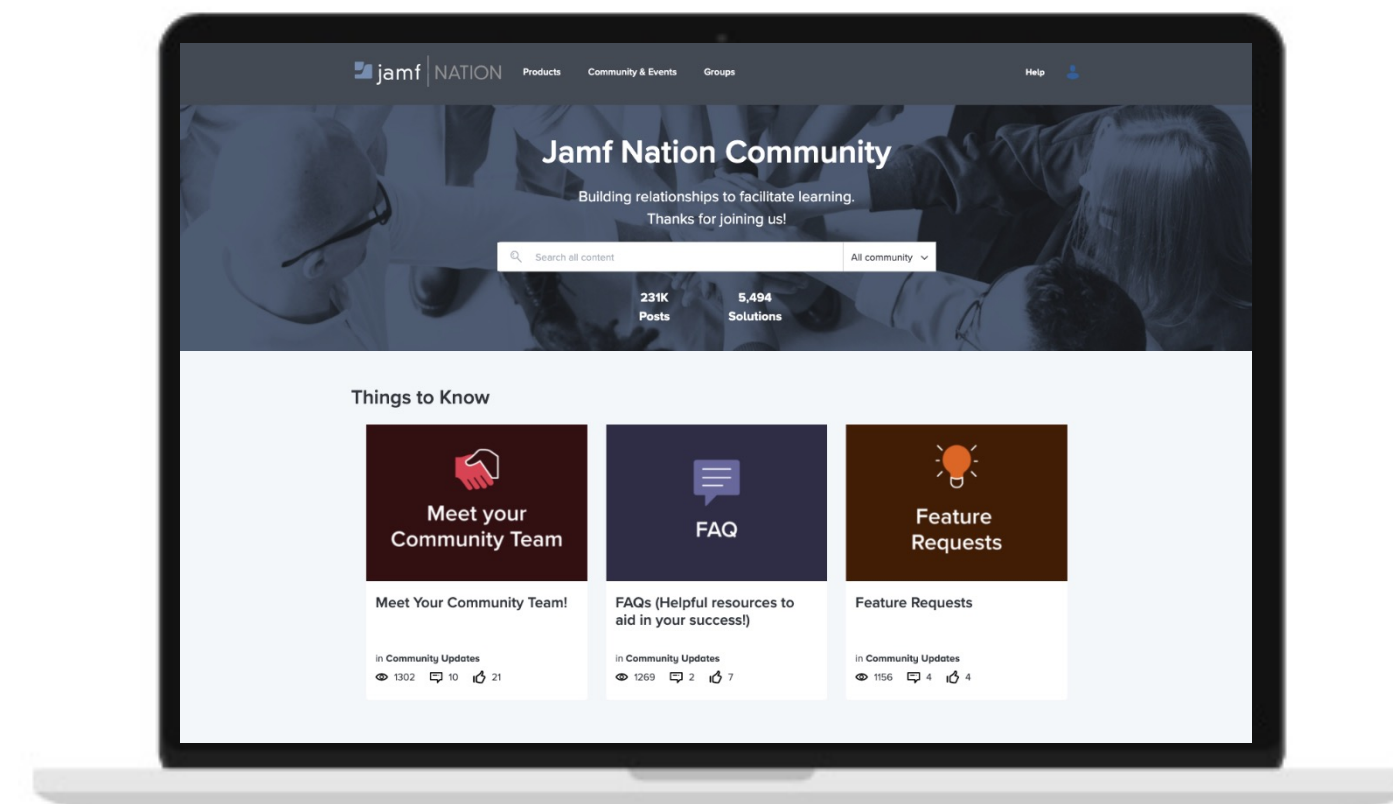
- **Developer Workflows**  
Jamf API and Marketplace



# Jamf Nation and Jamf Marketplace

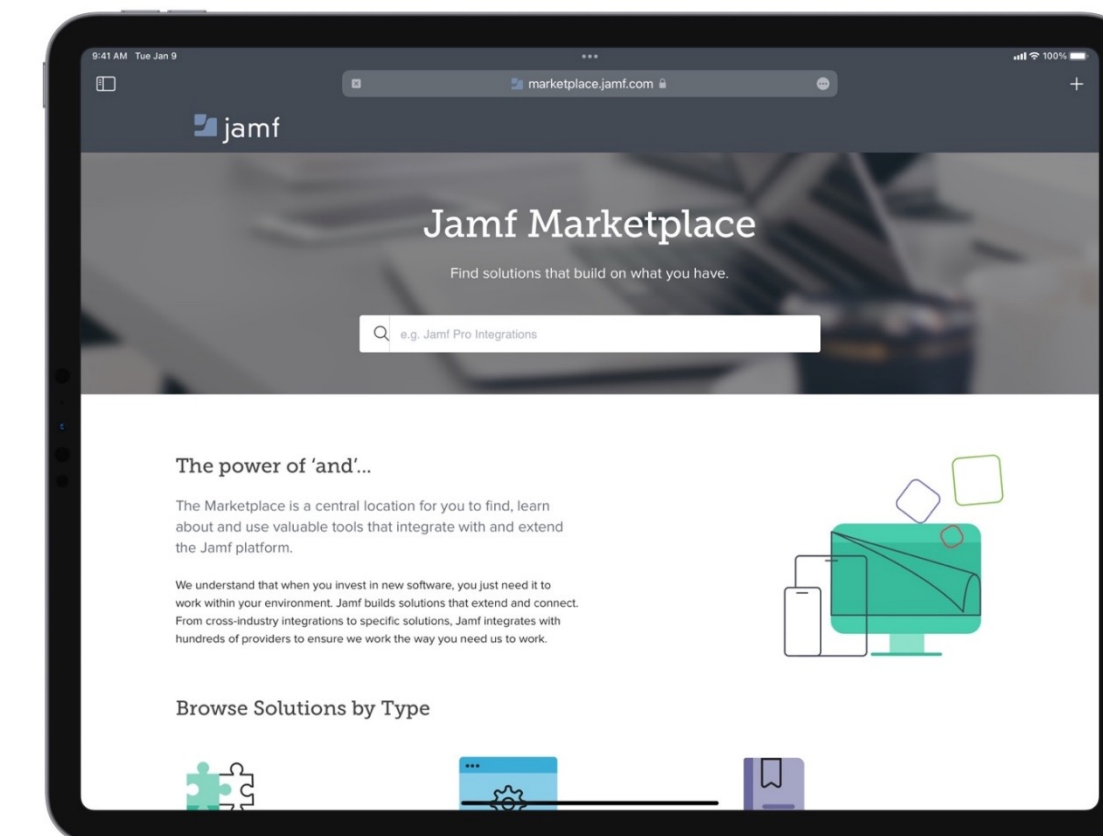
Expanded Ecosystem and Support Strengthen the Jamf Platform and Improve Jamf Efficiency

## Jamf Nation



- Largest online community of Apple IT administrators in the world
- Jamf Nation User Conference (JNUC) is largest Apple IT administrator event
- Builds a social community while improving Jamf efficiency

## Jamf Marketplace



- Hundreds of applications, integrations, and partner deployment guides
- Enabled by Jamf APIs, custom configurations, and facilitated by Jamf developer relations
- Evidence of Jamf's market leadership, with significant, sustained traffic and listed application QoQ growth
- Builds a solution ecosystem that strengthens Jamf retention



# Jamf Provides and Realizes Benefits of a Vertical Software Company by Focusing on the Apple Ecosystem

Community & Collaboration			<b>Apple Vertical</b> Jamf Nation
Identity Management			Jamf Connect
Zero Trust Network Access		Microsoft Tunnel VPN for Intune	Jamf Private Access
Network & Data Management		Microsoft Cloud Application Security	Jamf Data Policy
Endpoint Protection			Jamf Protect Jamf Threat Defense
Device Management		Microsoft Endpoint Manager	Jamf Pro Jamf Now Jamf School

## Key Benefits of Vertical Approach

- Efficient go to market / higher unit economics
- Efficient R&D spend by not being “all things to all people”
- Greater focus and ability to “super serve” a market segment
- Market leader / only vertically-focused Apple infrastructure and security platform of scale

Jamf takes a “Vertical Slice” of Apple in the Enterprise



# Our Relationship with Apple



SINCE **2010**

Apple as a Customer



SINCE **2011**

Education Channel Partner



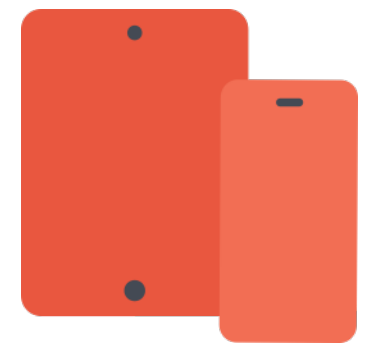
SINCE **2012**

Retail Channel Partner



SINCE **2012**

JNUC Presenter

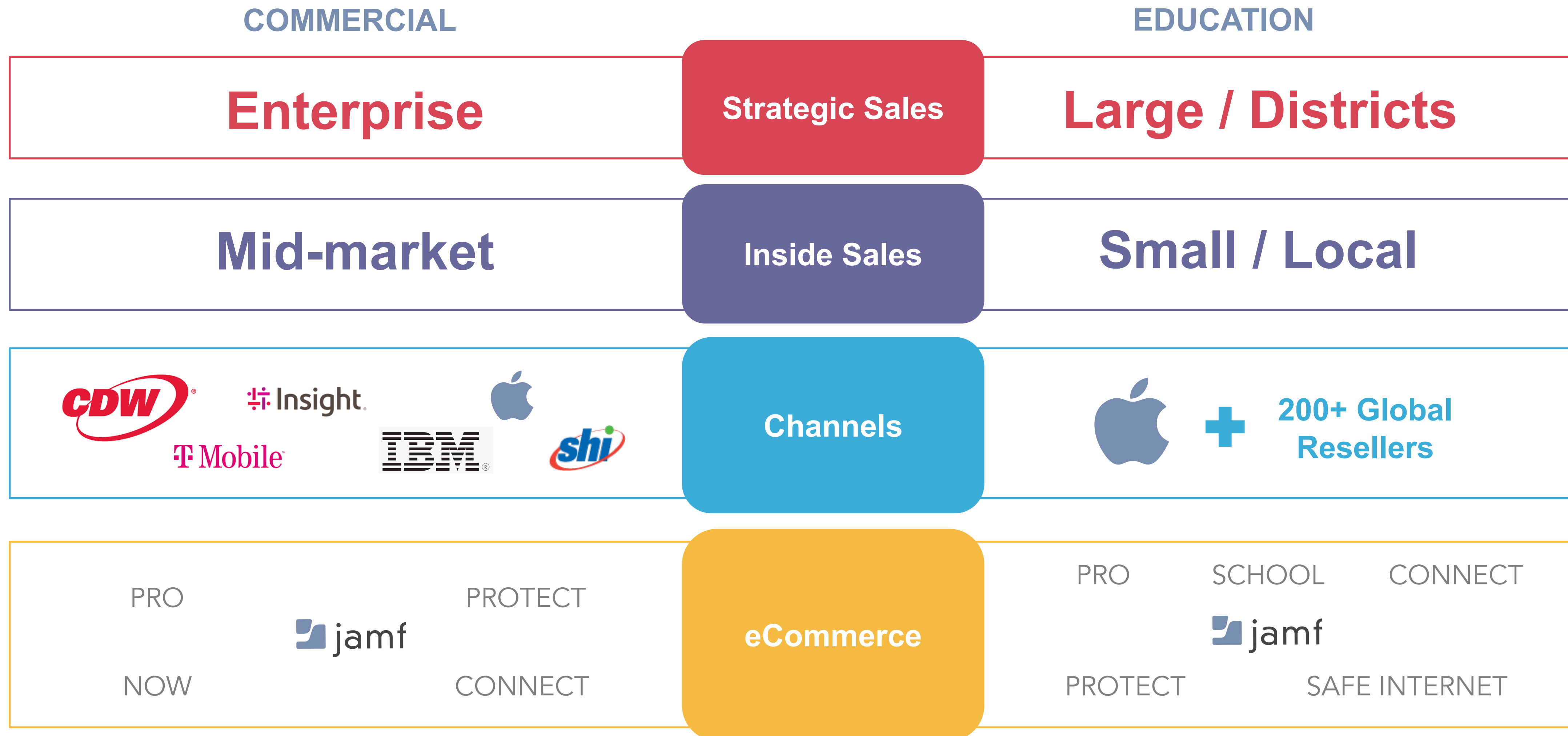


SINCE **2014**

Mobility Partner Program



# Effective Go To Market Model

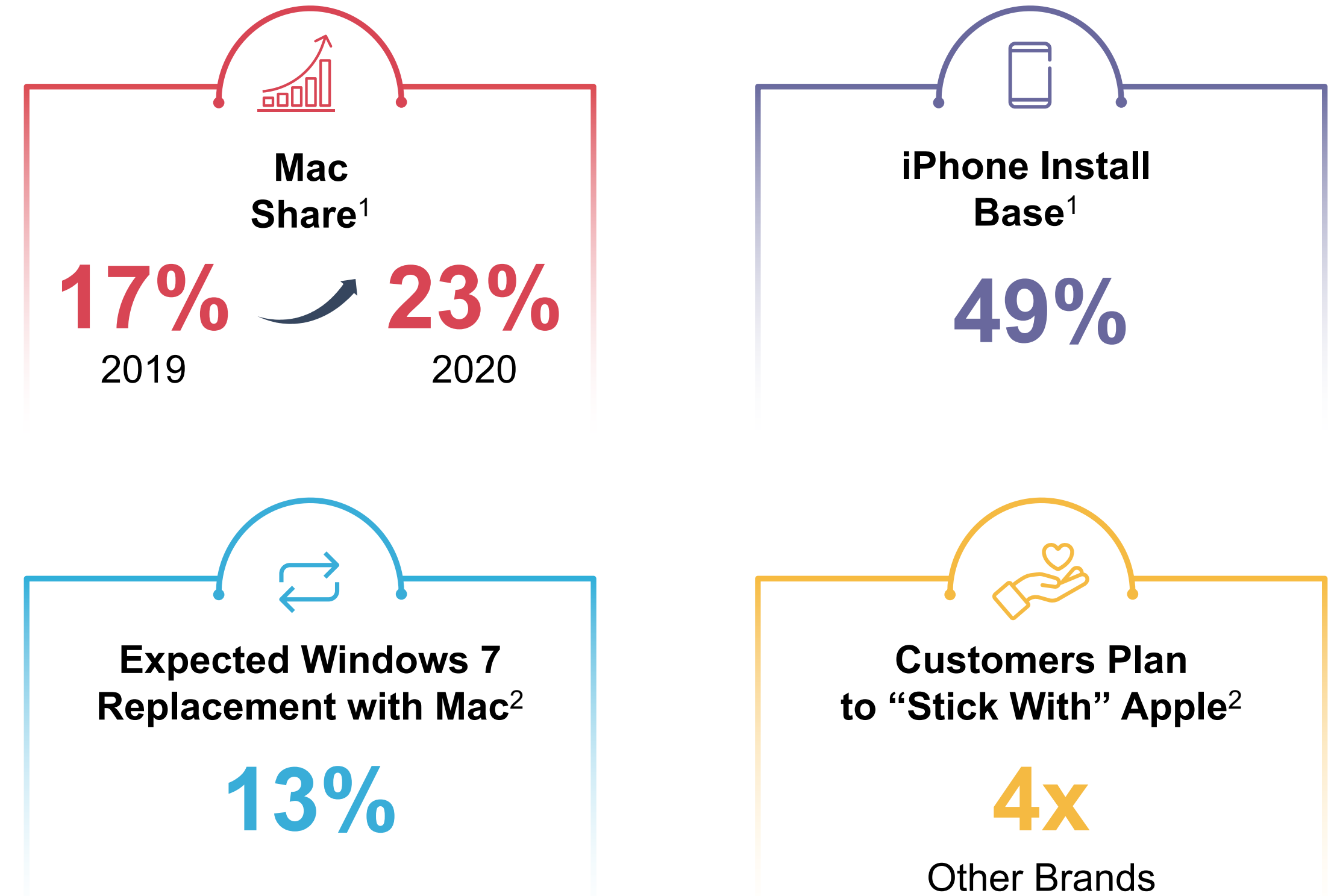
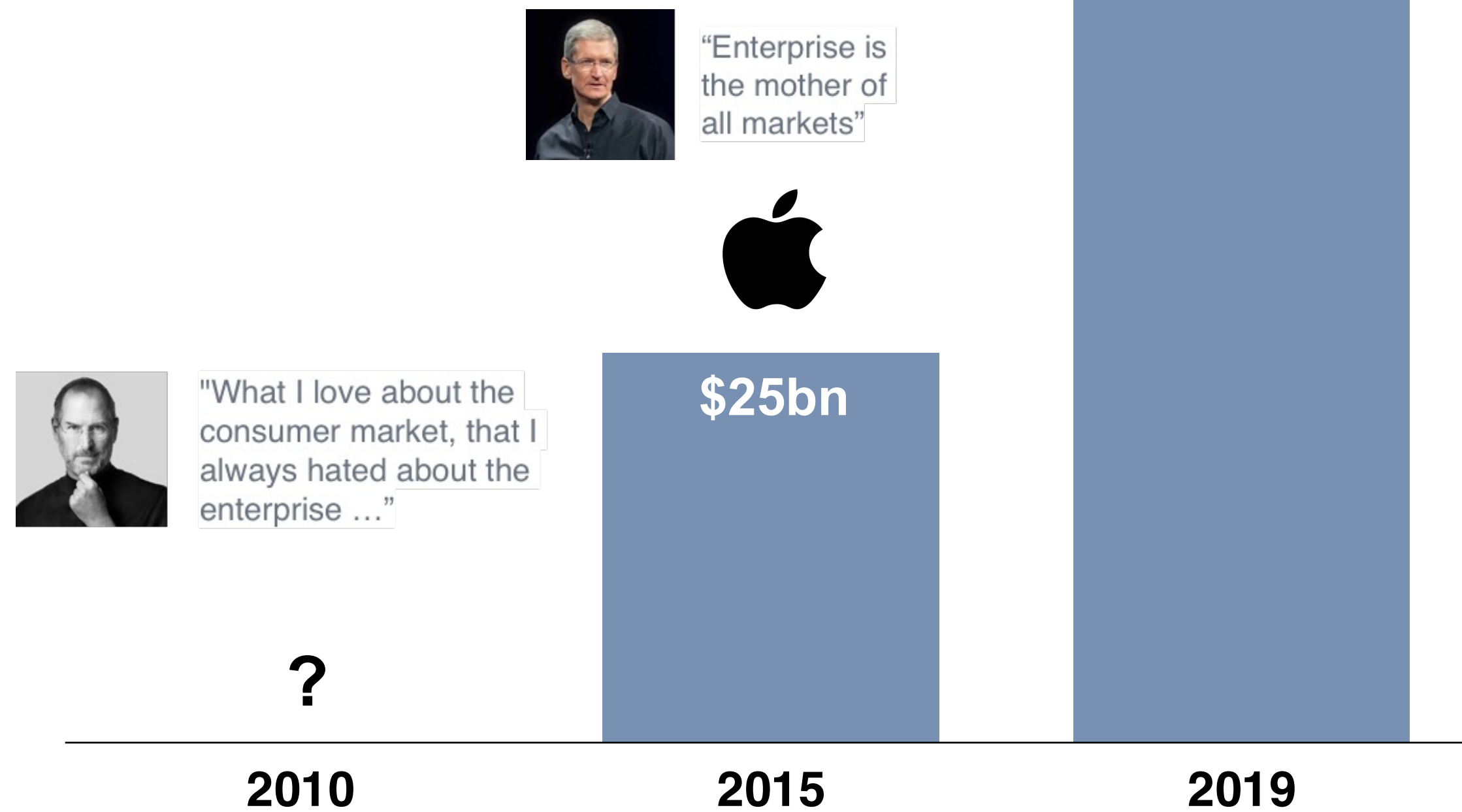




# Apple in the Enterprise

Impact of IT Consumerization, Changing Demographics and User Preference

## Apple Enterprise Revenue Estimates



<sup>1</sup> Source: IDC MarketScape: Worldwide Unified Endpoint Management Software for Apple Devices 2021 Vendor Assessment.

<sup>2</sup> Source: IDC 2019 U.S. Commercial PCD Survey.



# Digital Transformation Trends Favorable to Jamf

## Mobile Work



Shipping Apple devices directly to employee homes without IT ever touching them

## Education Technology



Enabling learning both in the classroom and at home, while providing control to teachers and parents

## Digital Health



Using Apple devices to connect care providers to patients in hospital and home in a compliant manner



# Trusted by Top Enterprises



**Valuable Brands**  
22 of top 25

1



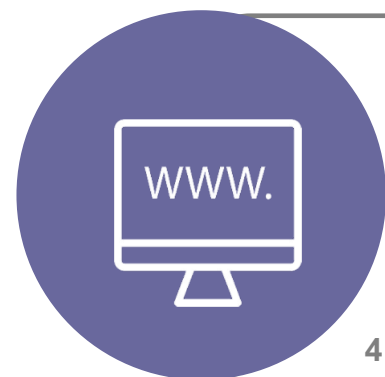
**U.S. Banks**  
15 of top 15

2



**Top Global Universities**  
10 of top 10

3



**Top Fortune 500 Technology**  
7 of top 10

4



**U.S. Media**  
8 of top 10

4



**U.S. School Districts**  
8 of top 10

5



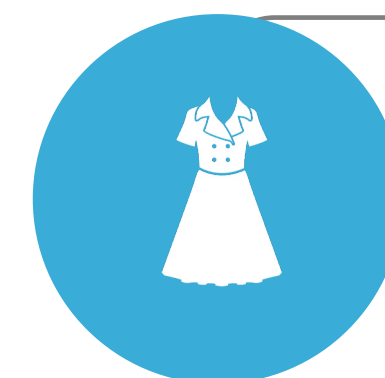
**Best U.S. Hospitals**  
17 of top 20

3



**Top Fortune 500**  
9 of top 10

4



**WW Apparel**  
4 of top 10

6



**U.S. Retailers**  
8 of top 10

7



**Consulting Firms**  
9 of top 10

8



**UEM Providers**  
2 of 2 Gartner  
MQ Leaders

9

<sup>1</sup> As ranked by Forbes Most Valuable Brands list as of 12/31/2022. <sup>2</sup> Based on total assets as of 12/31/2022. <sup>3</sup> As ranked by U.S. News and World Report. <sup>4</sup> As ranked by Fortune as of 12/31/2022. <sup>5</sup> As ranked by Niche. <sup>6</sup> As ranked by BizVibe. <sup>7</sup> As ranked by National Retail Federation. <sup>8</sup> As ranked by Vault. <sup>9</sup> As ranked by Gartner.



# Substantial Benefits to Enterprises

## FORRESTER®

Benefits of Mac M1 in the enterprise



**\$843<sup>1</sup> vs. PC Equivalent**

Cost Savings



**336%<sup>2</sup>**  
ROI



**+20%**  
Employee Retention



**+5%**  
Improved Productivity

## HOBSON & COMPANY

On benefits of using Jamf



**90%**

reduction in time spent provisioning

**90%**

reduction in time spent on ongoing device management

**90%**

reduction in time spent managing apps



**90%**

reduction in end-user productivity loss

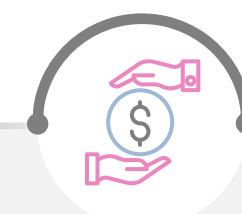


**70%**

reduction in time spent on help desk tickets

**70%**

reduction in time spent remediating incidents and vulnerabilities



**781%**  
3-year ROI



**2.7mth**  
payback period

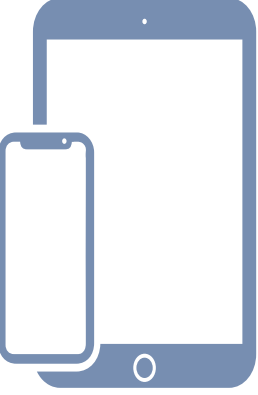

Note: Forrester and Hobson & Company data based on 2021 studies.

<sup>1</sup> Over a 3 year time period, when considering 3-year hardware, software, support and operational costs.

<sup>2</sup> Over 3 years.

# Large, Expanding Market Opportunity

## Methodology


 $*$ 

 $=$ 
**\$35bn**

**Devices**     **Jamf ASP**     **2022**  
**Total addressable market**

## Growth Drivers

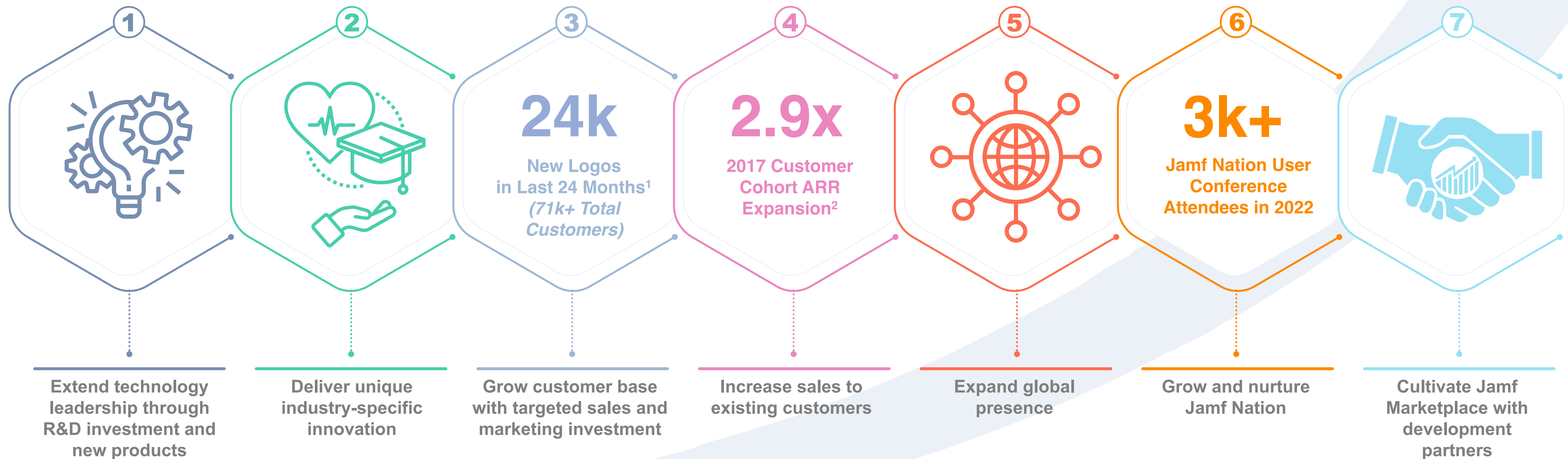
- Consumerization of IT and resulting Mac growth in the enterprise
- Power and affordability of Apple M1 and M2 chips
- Work and learn from anywhere
- Single mobile device for home and work
- Increased Apple specific security threat

	Education			Commercial		
	Mac	iPad	All other	Mac	iPhone/iPad	All other
Management	\$0.8B			\$9.7B		
Security				\$6.3B		
Protection	\$1.0B			\$6.0B		
<b>BYOD Security</b>				<b>\$11.8B</b>		

Note: Sourced from Frost & Sullivan and management estimates.



# Multiple Drivers of Future Growth



<sup>1</sup> Represents the period from 1/1/2021 to 12/31/2022. Includes new logos acquired via acquisitions.

<sup>2</sup> Represents the ARR expansion from the 2017 cohort over the period from 12/31/2017 to 12/31/2022. The 2017 cohort is defined as the customers who first purchased Jamf subscription software between 1/1/2017 and 12/31/2017.

# Jamf Management Team



**Dean Hager**

CEO  
(7 yrs.)



**Ian Goodkind**

CFO  
(3 yrs.)



**John Strosahl**

President and Chief  
Operating Officer  
(7 yrs.)



**Jason Wudi**

Chief Strategy Officer  
(16 yrs.)



**Beth Tschida**

Chief Technology Officer  
(4 yrs.)



**Sam Johnson**

Chief Customer Officer  
(15 yrs.)



**Linh Lam**

Chief Information Officer  
(1 yr.)



**Michelle Bucaria**

Chief People Officer  
(Recent hire)



**Jeff Lendino**

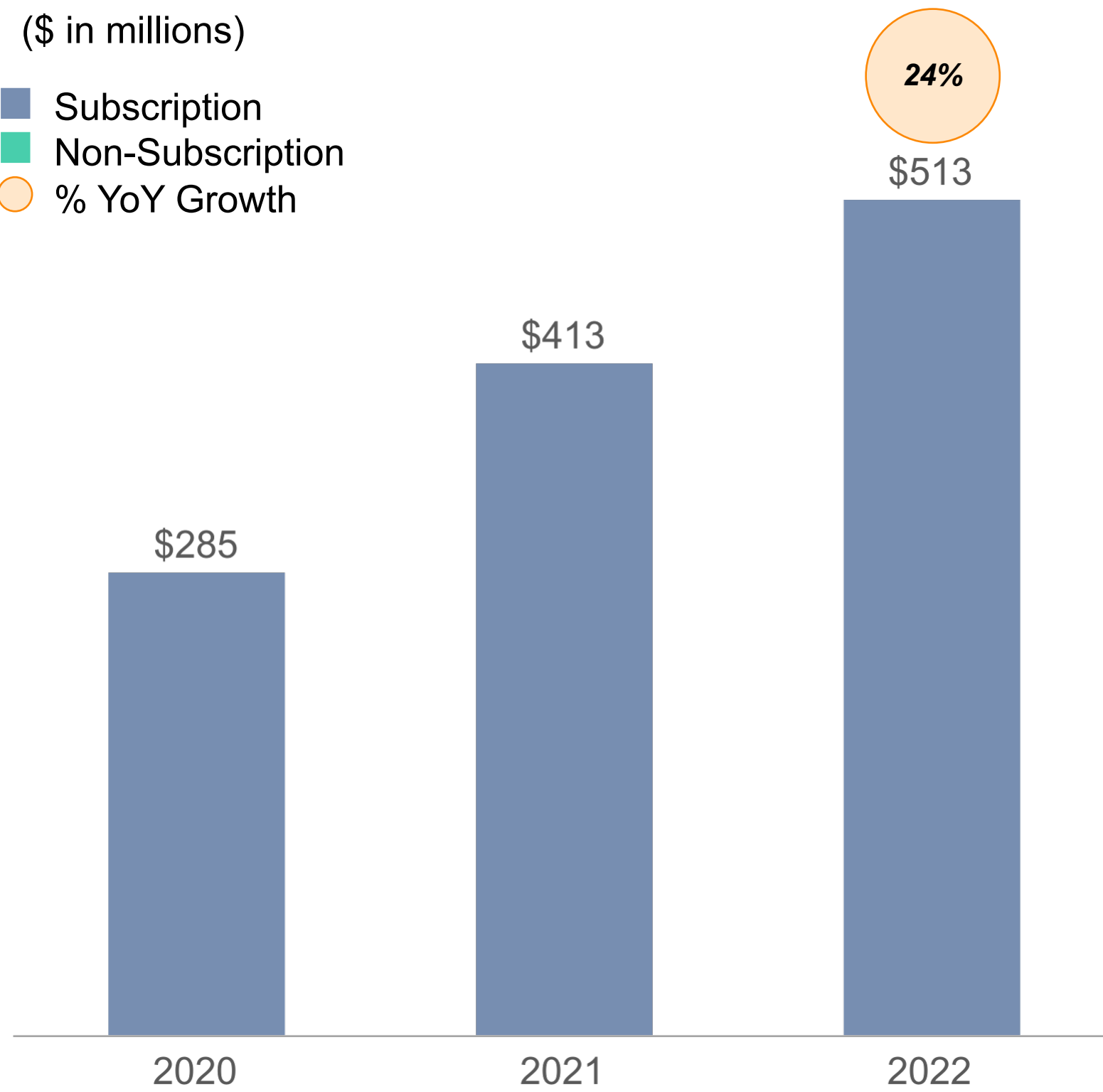
Chief Legal Officer  
(4 yrs.)



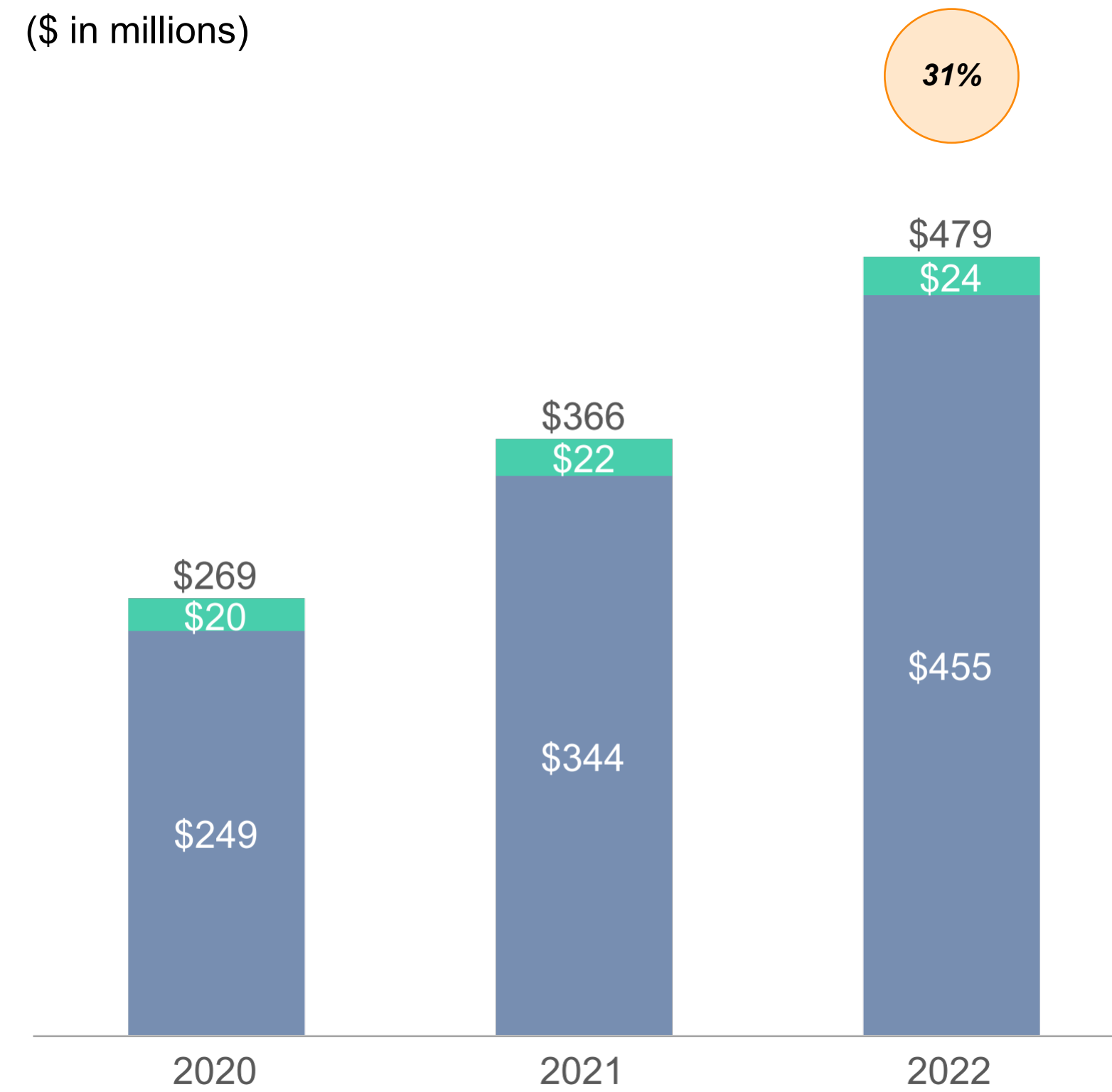


# Strong Growth Momentum

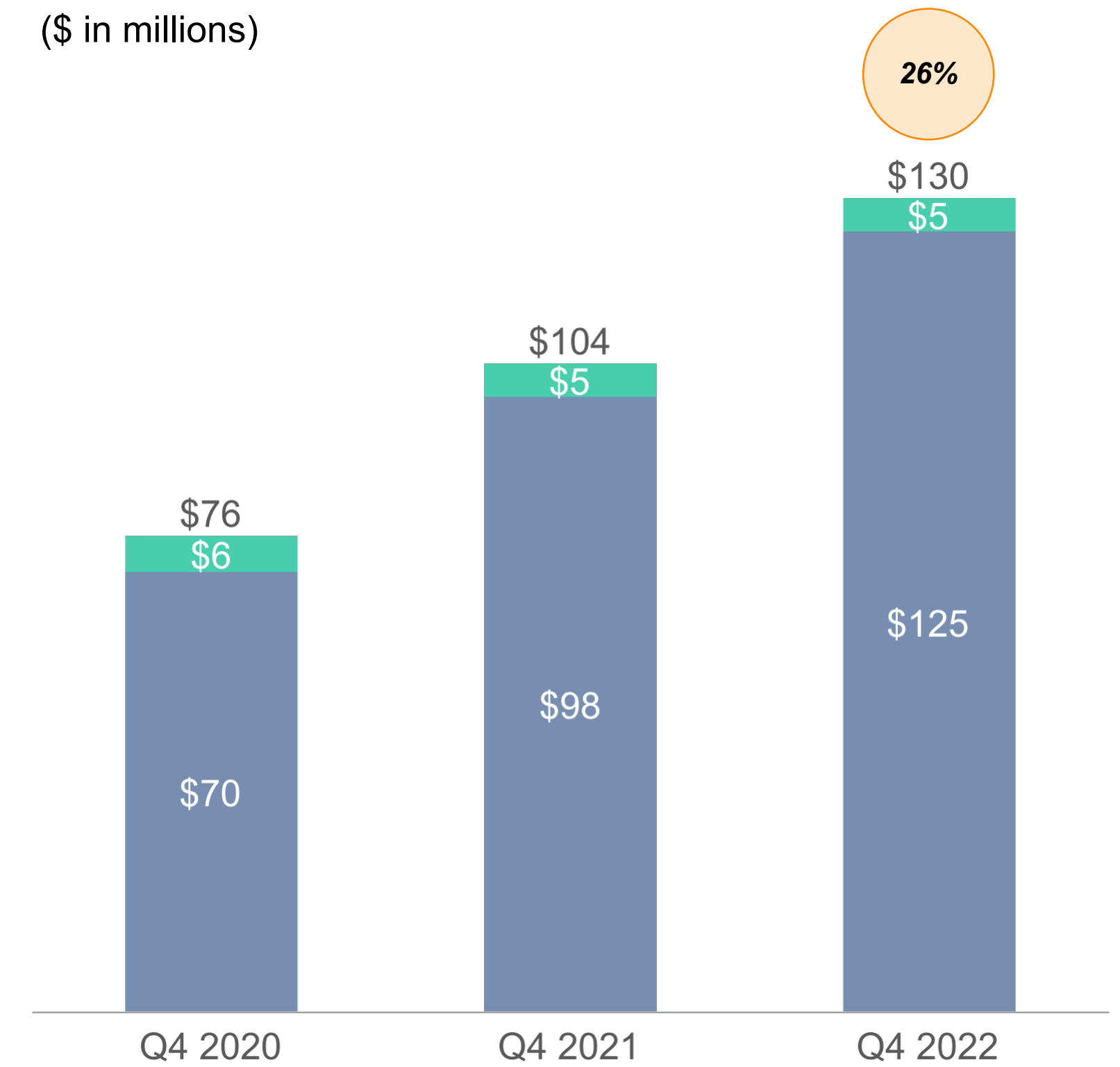
## ARR



## Annual Revenue



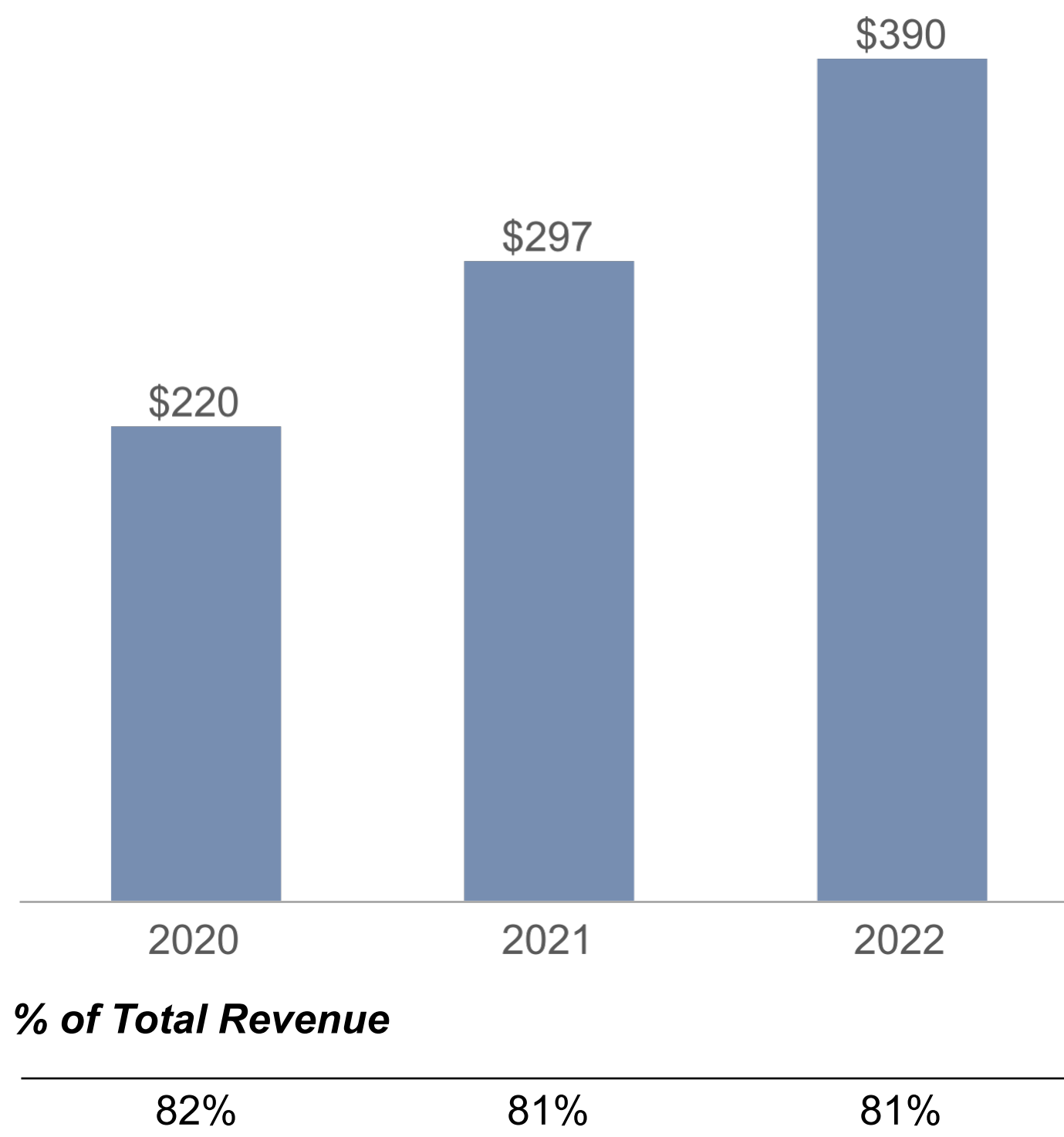
## Revenue – Q4



# Strong Gross Margins

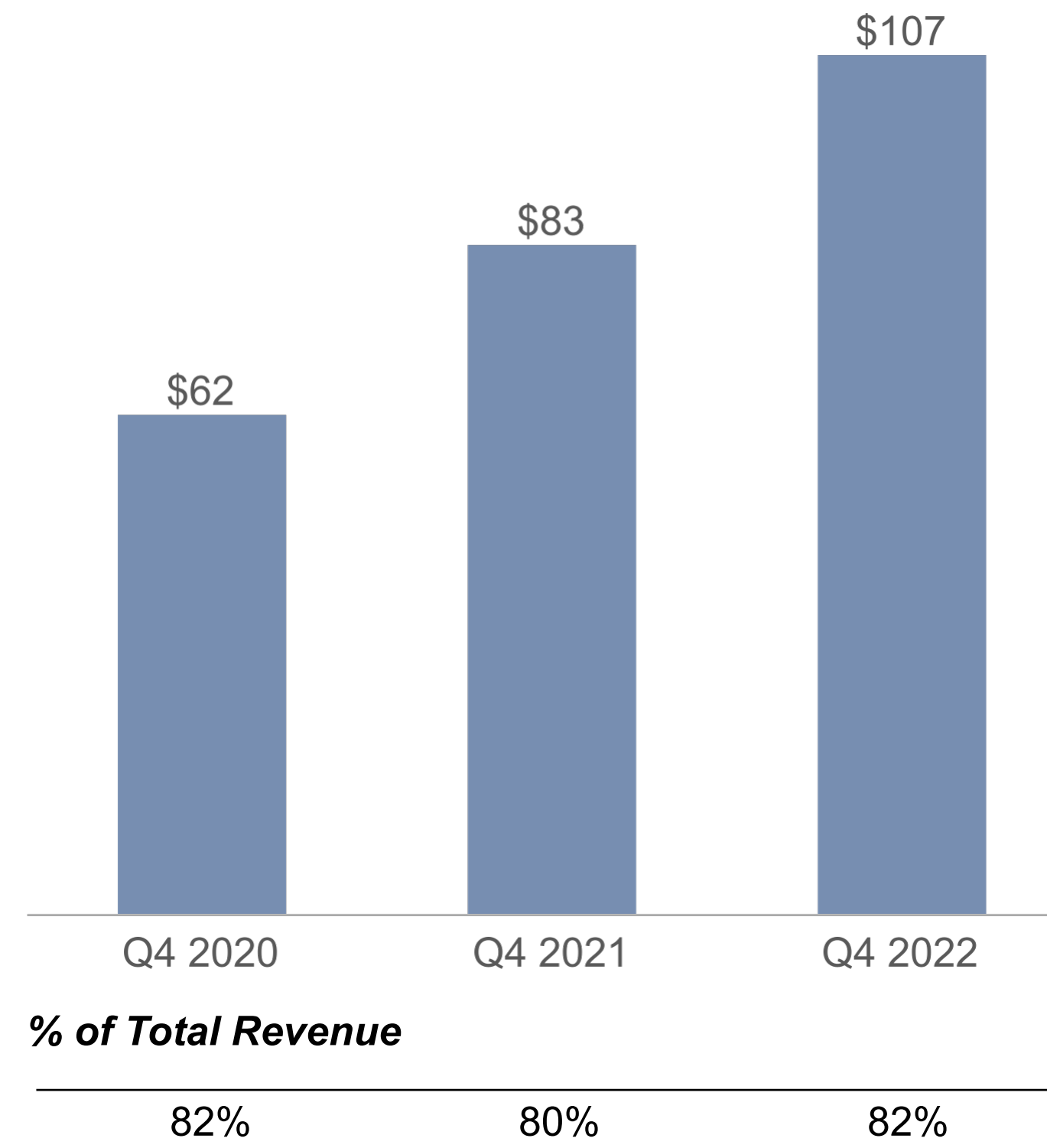
## Non-GAAP Gross Profit Margin – FY

(\$ in millions)



## Non-GAAP Gross Profit Margin – Q4

(\$ in millions)



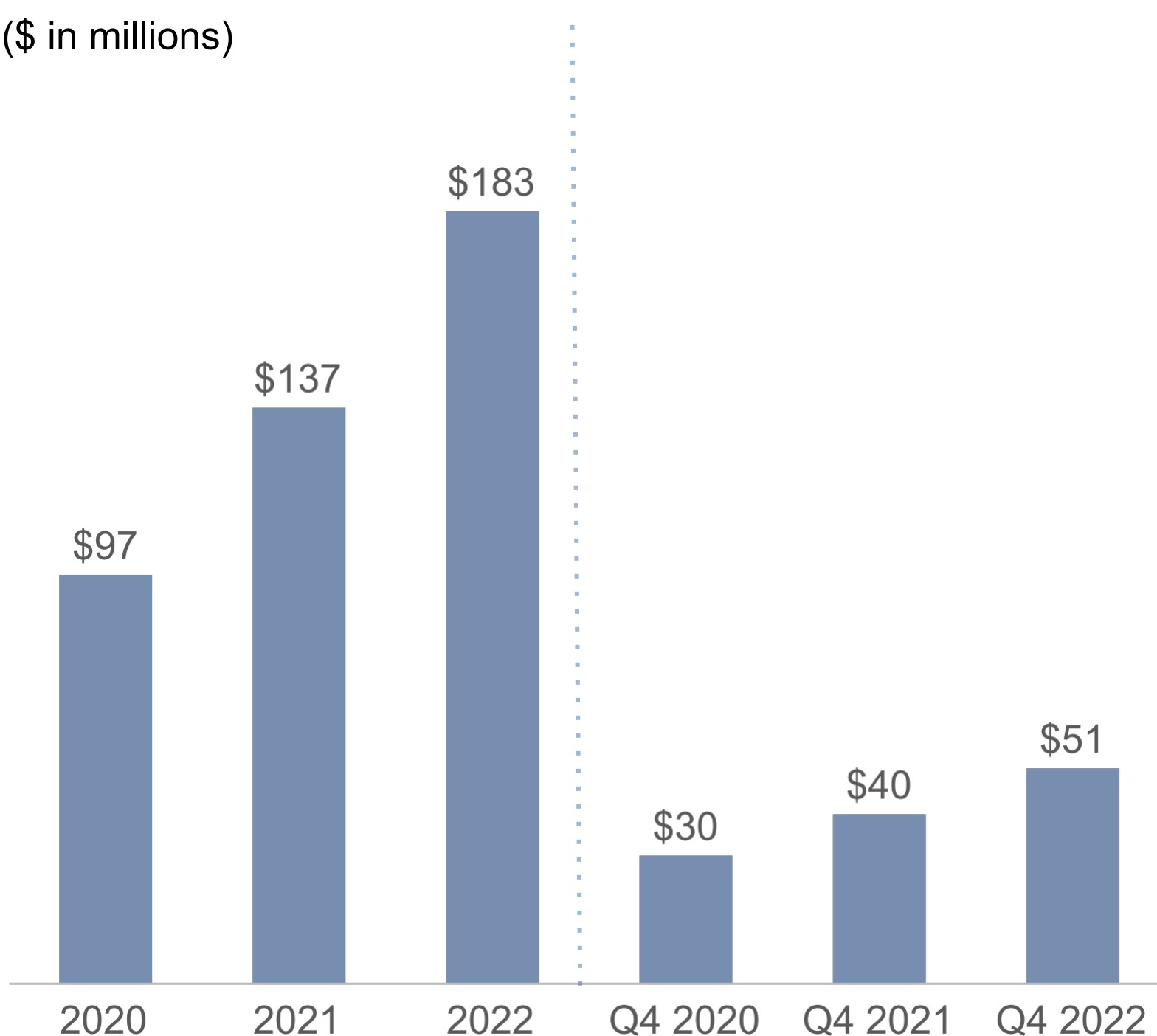
Note: Gross profit margin is presented on a non-GAAP basis (excludes amortization expense, stock-based compensation expense, acquisition-related expense, and payroll taxes related to stock-based compensation). See appendix for reconciliation of GAAP to non-GAAP measures.



# Leveraging Efficient Cost Structure

## Non-GAAP Sales and Marketing Expense

(\$ in millions)

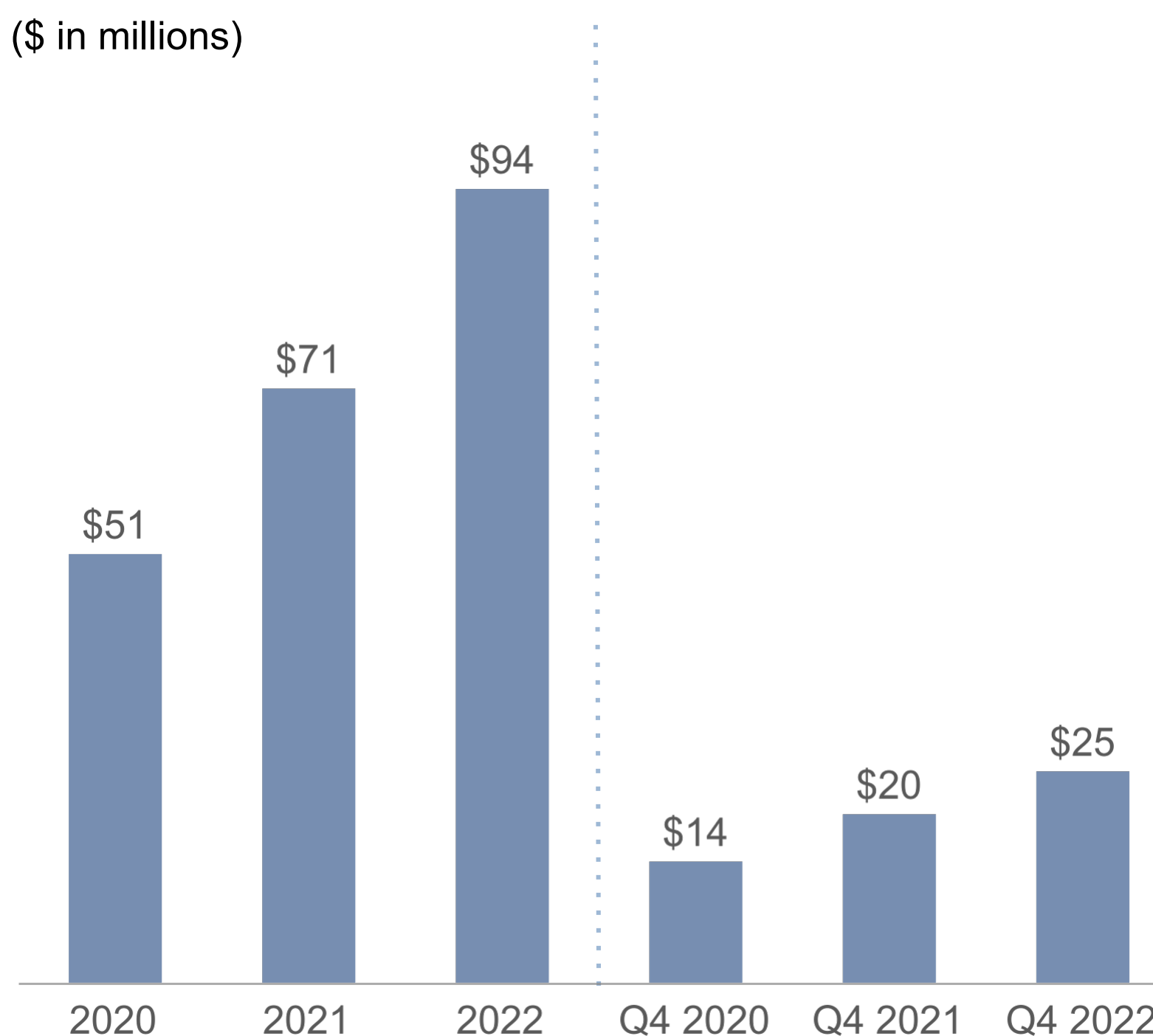


### % of Total Revenue

2020	2021	2022	Q4 2020	Q4 2021	Q4 2022
36%	37%	38%	40%	39%	39%

## Non-GAAP Research and Development Expense

(\$ in millions)

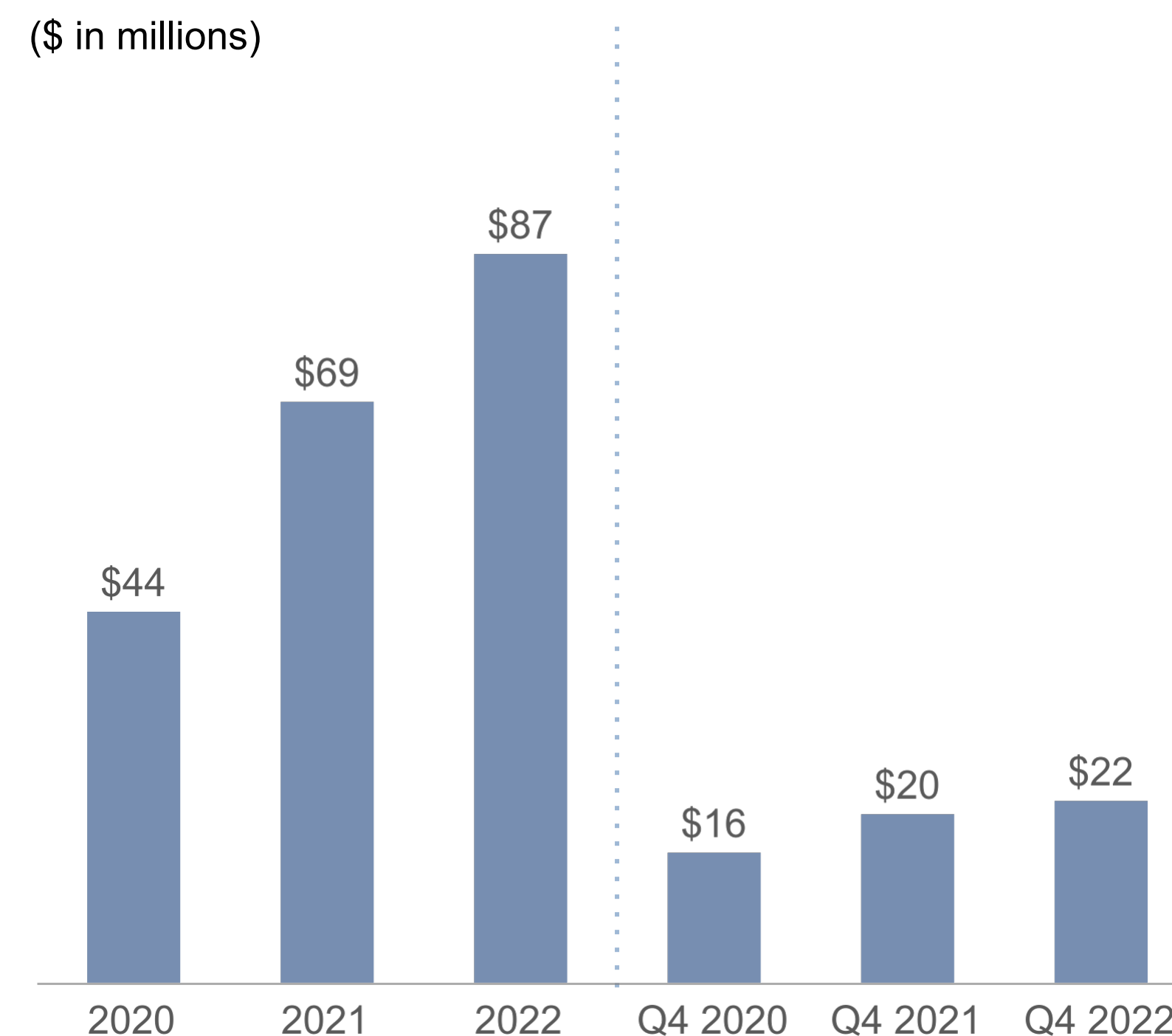


### % of Total Revenue

2020	2021	2022	Q4 2020	Q4 2021	Q4 2022
19%	19%	20%	19%	19%	19%

## Non-GAAP General and Administrative Expense

(\$ in millions)



### % of Total Revenue

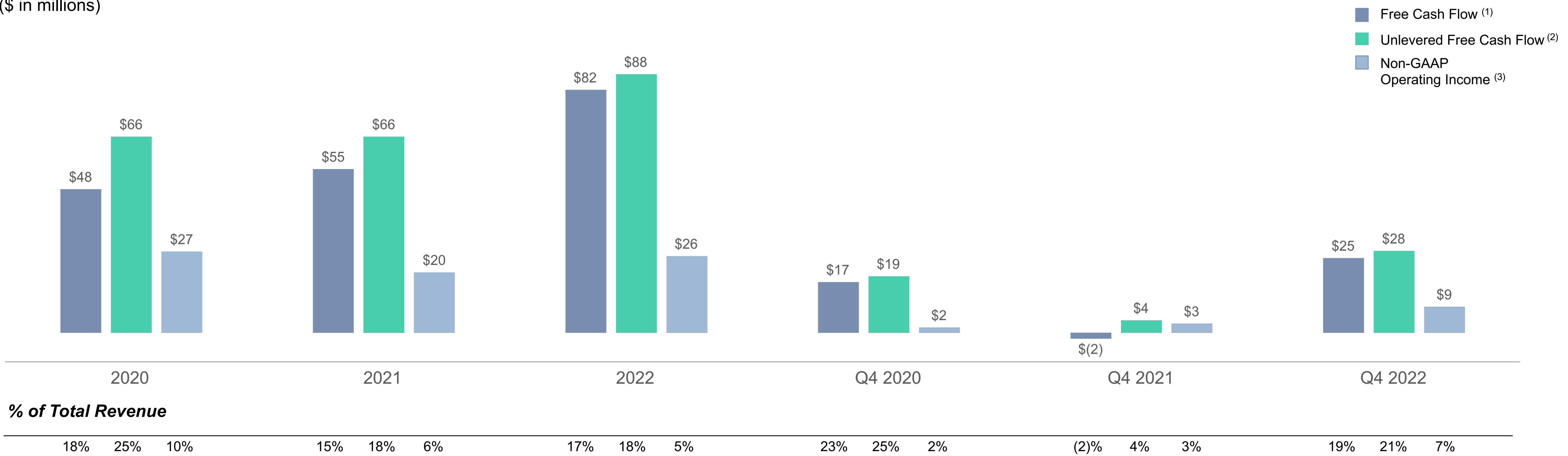
2020	2021	2022	Q4 2020	Q4 2021	Q4 2022
16%	19%	18%	20%	19%	17%

Note: Sales and marketing, research and development, and general and administrative expenses are presented on a non-GAAP basis (excludes amortization expense, stock-based compensation expense, acquisition-related expense, acquisition-related earnout, offering costs, payroll taxes related to stock-based compensation, and legal settlement). See appendix for reconciliation of GAAP to non-GAAP measures.

# Maintaining Profitability while Investing for Growth

## Free Cash Flow, Unlevered Free Cash Flow, and Non-GAAP Operating Income

(\$ in millions)



(1) Free cash flow is a non-GAAP metric and is defined as net cash provided by operating activities less cash paid for purchases of equipment and leasehold improvements. See appendix for reconciliation of GAAP to non-GAAP measures.

(2) Unlevered free cash flow is a non-GAAP metric and is defined as free cash flow plus cash paid for interest, cash paid for acquisition-related expense, and cash paid for legal settlement. See appendix for reconciliation of GAAP to non-GAAP measures.

(3) Non-GAAP operating income is a non-GAAP metric and is adjusted for amortization expense, stock-based compensation expense, acquisition-related expense, acquisition-related earnout, offering costs, payroll taxes related to stock-based compensation, and legal settlement. See appendix for reconciliation of GAAP to non-GAAP measures.



# Long Term Target Model

	FY2020 <sup>1</sup>	FY2021 <sup>1</sup>	FY2022 <sup>1</sup>	Long Term Target
Non-GAAP Gross Profit Margin	82%	81%	81%	81 – 82%
Non-GAAP Sales and Marketing Expense as a Percentage of Total Revenue	36%	37%	38%	33 – 35%
Non-GAAP Research and Development Expense as a Percentage of Total Revenue	19%	19%	20%	18 – 20%
Non-GAAP General and Administrative Expense as a Percentage of Total Revenue	16%	19%	18%	9 – 10%
Non-GAAP Operating Income Margin	10%	6%	5%	17 – 21%

<sup>1</sup> See appendix for reconciliation of GAAP to non-GAAP measures.

# Investment Highlights



**The Standard in Apple Enterprise Management**



**Exceptional Corporate Culture with Talented Management Team**



**Differentiated Apple-focused Technology**



**Large and Growing Addressable Market**



**Loyal, Blue Chip Customer Base**



**Powerful Subscription Model**



**Strong and Predictable Financial Profile**



**Strong Combination of Consistent High Growth and Cash Flow Generation**





The Standard for Apple  
in the Enterprise

Appendix





# Free Cash Flow and Unlevered Free Cash Flow

## Free Cash Flow and Unlevered Free Cash Flow Build

(\$ in millions)	FY2020	FY2021	FY2022	Q4 2020	Q4 2021	Q4 2022
Net cash provided by operating activities	\$53	\$65	\$90	\$20	\$—	\$27
Less:						
Cash paid for purchases of equipment and leasehold improvements	(4)	(10)	(8)	(3)	(2)	(2)
Free cash flow	48	55	82	17	(2)	25
Add:						
Cash paid for interest	13	1	1	—	—	—
Cash paid for acquisition-related expense	5	5	4	2	1	2
Cash paid for legal settlement	—	5	—	—	5	—
<b>Unlevered free cash flow</b>	<b>\$66</b>	<b>\$66</b>	<b>\$88</b>	<b>\$19</b>	<b>\$4</b>	<b>\$28</b>
Total revenue	\$269	\$366	\$479	\$76	\$104	\$130
Net cash provided by operating activities as a percentage of total revenue	20%	18%	19%	26%	—%	21%
Free cash flow margin	18%	15%	17%	23%	(2)%	19%
Unlevered free cash flow margin	25%	18%	18%	25%	4%	21%



# GAAP to Non-GAAP Gross Profit Reconciliation

## Non-GAAP Gross Profit

(\$ in millions)	FY2020	FY2021	FY2022	Q4 2020	Q4 2021	Q4 2022
Gross profit	\$208	\$276	\$360	\$59	\$77	\$100
Amortization expense	11	16	20	3	5	4
Stock-based compensation	1	4	10	—	2	3
Acquisition-related expense	—	—	—	—	—	—
Payroll taxes related to stock-based compensation	—	—	—	—	—	—
<b>Non-GAAP gross profit</b>	<b>\$220</b>	<b>\$297</b>	<b>\$390</b>	<b>\$62</b>	<b>\$83</b>	<b>\$107</b>
Total revenue	\$269	\$366	\$479	\$76	\$104	\$130
Gross profit margin	77%	75%	75%	77%	74%	77%
Non-GAAP gross profit margin	82%	81%	81%	82%	80%	82%

# GAAP to Non-GAAP Operating Income Reconciliation

## Non-GAAP Operating Income

(\$ in millions)	FY2020	FY2021	FY2022	Q4 2020	Q4 2021	Q4 2022
Operating loss	\$(17)	\$(76)	\$(139)	\$(13)	\$(26)	\$(25)
Amortization expense	33	41	48	8	12	11
Stock-based compensation	7	36	109	3	13	20
Acquisition-related expense	5	6	5	1	2	1
Acquisition-related earnout	(1)	6	1	2	1	—
Offering costs	1	1	—	1	—	—
Payroll taxes related to stock-based compensation	—	2	2	—	—	1
Legal settlement	—	5	—	—	1	—
<b>Non-GAAP operating income</b>	<b>\$27</b>	<b>\$20</b>	<b>\$26</b>	<b>\$2</b>	<b>\$3</b>	<b>\$9</b>
Total revenue	\$269	\$366	\$479	\$76	\$104	\$130
Operating loss margin	(6)%	(21)%	(29)%	(17)%	(25)%	(19)%
Non-GAAP operating income margin	10%	6%	5%	2%	3%	7%



# GAAP to Non-GAAP Expense Reconciliation

## Sales and Marketing Expense

(\$ in millions)	FY2020	FY2021	FY2022	Q4 2020	Q4 2021	Q4 2022
Sales and marketing expense	\$99	\$148	\$218	\$31	\$45	\$59
Stock-based compensation	(2)	(11)	(34)	(1)	(4)	(7)
Acquisition-related expense	—	—	—	—	—	—
Payroll taxes related to stock-based compensation	—	—	(1)	—	—	—
<b>Non-GAAP sales and marketing expense</b>	<b>\$97</b>	<b>\$137</b>	<b>\$183</b>	<b>\$30</b>	<b>\$40</b>	<b>\$51</b>
Sales and marketing expense as a percentage of total revenue	37%	40%	45%	41%	43%	45%
Non-GAAP sales and marketing expense as a percentage of total revenue	36%	37%	38%	40%	39%	39%

## Research and Development Expense

(\$ in millions)	FY2020	FY2021	FY2022	Q4 2020	Q4 2021	Q4 2022
Research and development expense	\$53	\$83	\$120	\$15	\$24	\$30
Stock-based compensation	(2)	(11)	(24)	(1)	(3)	(5)
Acquisition-related expense	—	(1)	(1)	—	—	—
Payroll taxes related to stock-based compensation	—	—	—	—	—	—
<b>Non-GAAP research and development expense</b>	<b>\$51</b>	<b>\$71</b>	<b>\$94</b>	<b>\$14</b>	<b>\$20</b>	<b>\$25</b>
Research and development expense as a percentage of total revenue	20%	23%	25%	20%	23%	23%
Non-GAAP research and development expense as a percentage of total revenue	19%	19%	20%	19%	19%	19%

## General and Administrative Expense

(\$ in millions)	FY2020	FY2021	FY2022	Q4 2020	Q4 2021	Q4 2022
General and administrative expense	\$52	\$96	\$133	\$20	\$27	\$29
Stock-based compensation	(3)	(10)	(41)	(1)	(4)	(5)
Acquisition-related expense	(5)	(5)	(4)	(1)	(1)	(1)
Acquisition-related earnout	1	(6)	(1)	(2)	(1)	—
Offering costs	(1)	(1)	—	(1)	—	—
Payroll taxes related to stock-based compensation	—	(1)	—	—	—	—
Legal settlement	—	(5)	—	—	(1)	—
<b>Non-GAAP general and administrative expense</b>	<b>\$44</b>	<b>\$69</b>	<b>\$87</b>	<b>\$16</b>	<b>\$20</b>	<b>\$22</b>
General and administrative expense as a percentage of total revenue	19%	26%	28%	26%	26%	22%
Non-GAAP general and administrative expense as a percentage of total revenue	16%	19%	18%	20%	19%	17%

# Select Definitions

<b>Dollar-Based Net Retention Rate</b>		Measures our ability to increase revenue across our existing customer base through expanded use of our software solutions, offset by customers whose subscription contracts with us are not renewed or renew at a lower amount
<b>Annual Recurring Revenue</b>		Represents the annualized value of all subscription and support and maintenance contracts as of the end of the period
<b>Recurring Revenue</b>		Represents revenue from SaaS and on-premise subscriptions and support and maintenance contracts
<b>Free Cash Flow</b>		Net cash provided by operating activities less cash paid for purchases of equipment and leasehold improvements
<b>Unlevered Free Cash Flow</b>		Free cash flow plus cash paid for interest, cash paid for acquisition-related expense, and cash paid for legal settlement
<b>Non-GAAP Gross Profit</b>		Gross profit adjusted for amortization expense, stock-based compensation expense, acquisition-related expense, and payroll taxes related to stock-based compensation
<b>Non-GAAP Operating Income and Expenses</b>		Operating loss or expense adjusted for amortization expense, stock-based compensation expense, acquisition-related expense, acquisition-related earnout, offering costs, payroll taxes related to stock-based compensation, and legal settlement





 jamf