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CrowdStrike Research

BI Infrastructure Software, Global Dashboard

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1. CrowdStrike: Company Outlook

(Bloomberg Intelligence) -- THESIS: CrowdStrike's cloud-security momentum keeps building, with customer growth and adoption of add-on products reflecting steady win rates over legacy endpoint peers. Though the company's valuation reflects elevated expectations, we think there's scope for CrowdStrike to sustain elevated top-line growth following the SolarWinds and Hafnium hacks, and this could support annual recurring revenue growth of 50-60%. Gross and operating margin should remain supported by company-wide deployments at large customers and upselling in areas such as security information and event management (SIEM) and vulnerability assessment. (03/16/21)

Key Topics

Workload Migration Aids TAM Expansion

CrowdStrike Roadmap Focused on Containers Amid Workload Shift

CrowdStrike's ease of deployment on the cloud, coupled with on-premise workload migration, could create a 10x multiplier effect amid rising adoption of containers and Kubernetes for enterprise IT. Expanding functionality in vulnerability assessment, shown at CrowdStrike's Cloud Workloads product briefing, could further boost attach rates. (10/16/20)

2. Multiplier Effect for Cloud Workloads

The cloud-security market could double through 2024 as on-premise workload migration creates a 10x multiplier effect in terms of containers and Kubernetes instances. We believe CrowdStrike's market share could be aided by its product lead and native integrations with hyperscale cloud providers Amazon AWS, Microsoft Azure and Google Cloud. Most on-premise firewall and endpoint-security providers likely trail cloud peers in securing containers and Kubernetes workloads.

Unlike CrowdStrike, large appliance vendors such as Palo Alto Networks, Check Point and Fortinet will likely cannibalize their product sales with workload migration to the cloud. (10/16/20)

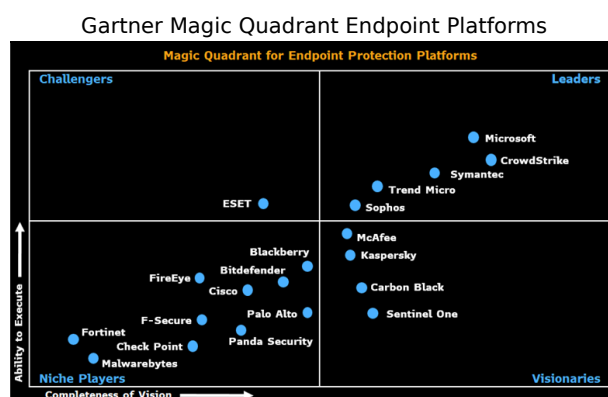# Bloomberg Intelligence

Cloud-Security Growth
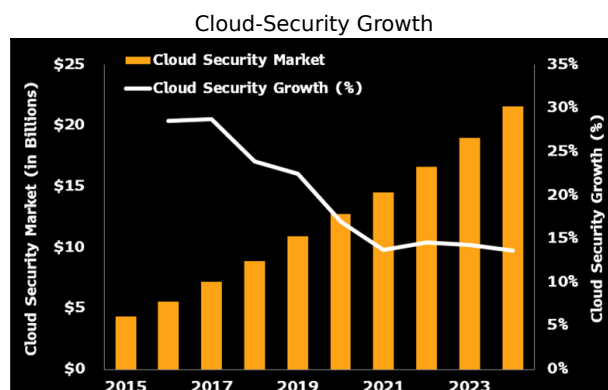
Source: IDC, Bloomberg Intelligence

3. Attach Rates Bolstered by Add-on Products

CrowdStrike may add more products in segments such as vulnerability assessment as enterprises migrate their workloads to the cloud from on-premise data centers. While the cybersecurity market remains fragmented for on-premise workloads, we believe CrowdStrike's cloud lead could aid its product adoption over pure-play vulnerability-assessment providers such as Rapid7, Qualys and Tenable.

The company's ease of deployment for cloud workloads could remain a differentiator vs. peers such as Palo Alto Networks, Cisco, Check Point and Fortinet, which have mostly relied on tuck-in acquisitions to expand their cloud functionality. (10/16/20)

**Gartner Magic Quadrant Endpoint Platforms**

Source: Gartner, Bloomberg Intelligence

4. Data Advantage a Sustainable Moat

CrowdStrike has a sustainable market advantage, in our view, given the company's scale of protecting containers and Kubernetes instances on the cloud. Most large incumbent security providers, including Cisco, Palo Alto Networks, Fortinet, Check Point, Broadcom (Symantec) and McAfee, likely trail CrowdStrike's cloud offerings in terms of functionality and efficacy.

We believe workload security on the cloud could expand CrowdStrike's addressable market beyond its core endpoint-security focus and support annual recurring revenue (ARR) growth of over 50% for the next three years -- about 5-6x the pace of the overall security market. (10/16/20)

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CrowdStrike Cloud Scale
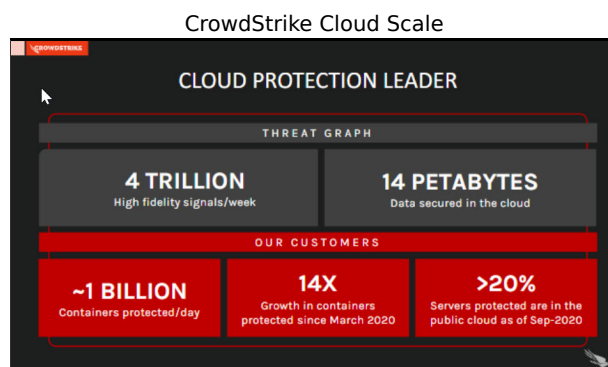
Source: Bloomberg Intelligence

Shift in Endpoint Solutions Aids Sales

CrowdStrike May See Faster Market-Share Gains Amid Russian Hack

The high-profile Russian hack involving SolarWinds could speed market-share gains for CrowdStrike, as we believe enterprises and governments are likely to speed their shift to behavioral and AI-based offerings, where the company leads, from signature-based endpoint security. Legacy providers such as Symantec, McAfee and Trend Micro are about 45% of the endpoint-security market. (12/21/20)

5. Russian Hack Aids EDR Product Demand

CrowdStrike could see faster demand for its endpoint detection and response (EDR) offerings, given the Russian hack may have hit a large number of enterprises and government entities. Expansion in the customer base and products may support CrowdStrike's compound annual sales growth of at least 40% in the next three years. That's at least 4x faster than the corporate endpoint-security market and 10x the consumer segment. We believe CrowdStrike has a deep moat with its proprietary AI and cloud-based platform, where a data advantage will continue to improve efficacy of its products vs. competitors.

With most enterprises investing in enabling work from home, investment in a cloud-based endpoint EDR solution will become a priority amid a surge in the total number of devices outside corporate networks. (12/21/20)

Endpoint Security Growth Expectations
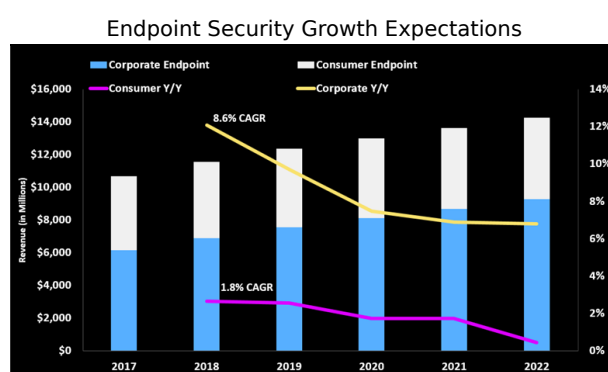
Source: IDC

6. Inflection in Pace of Customer Additions

CrowdStrike's pace of customer additions could accelerate, similar to Zoom's growth in video collaboration, in our view, in the wake of the massive Russian hack involving SolarWinds. Companies may see the advantage of cloud-based endpoint security over legacy signature-based software following the attack. CrowdStrike could have a long runway in the corporate endpoint-
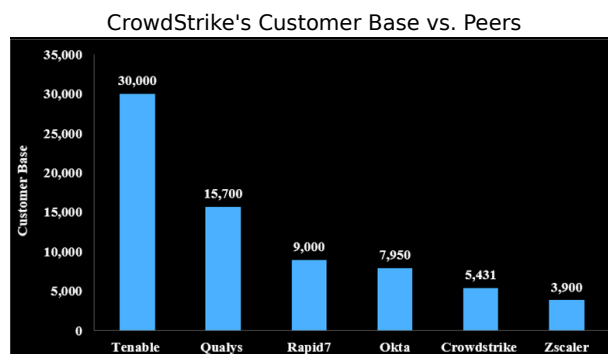
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security market, where most legacy incumbents have been slow to shift to a cloud model. New-customer additions have averaged over 90% in the past two years, albeit from a small base. A strengthening brand can also allow CrowdStrike to speed up customer adoption.

While most of the top-line growth is driven by adding customers, upselling and indirect channel sales appear poised to become a bigger portion of overall revenue as the client base expands. (12/21/20)

CrowdStrike's Customer Base vs. Peers

Source: Company Filings, Bloomberg Intelligence

7. Shift From Signatures to Behavior, AI

CrowdStrike's market-share gains in the $13 billion endpoint-security market could rise amid a shift to behavioral and AI-based offerings, which have shown better efficacy with unknown advanced cyberattacks vs. traditional signature-based products. In the network-security market, next-generation providers such as Palo Alto Networks and Fortinet have taken share from legacy firewall companies. But in endpoint security, legacy providers such as Symantec (Broadcom), McAfee and Trend Micro still have over 45% share. We believe that may change dramatically in the next three years, as companies replace traditional endpoint products with cloud-based EDR offerings, where CrowdStrike has emerged as the leader.

Symantec, McAfee and Trend Micro continue to trail CrowdStrike in shifting their products to the cloud. (12/21/20)

Endpoint Security Market Share
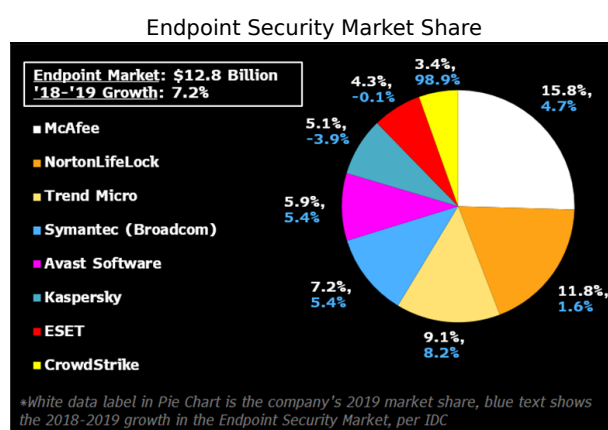
Source: IDC, Bloomberg Intelligence

Strong Moat Drives Category Leadership

CrowdStrike's Exposure to SIEM, Vulnerability Helped by Add-Ons

CrowdStrike's success in deploying add-on modules has expanded its addressable market beyond its core endpoint -security business into other high-growth areas such as SIEM and vulnerability-assessment. We believe the company's threat-data collection and analysis could remain a
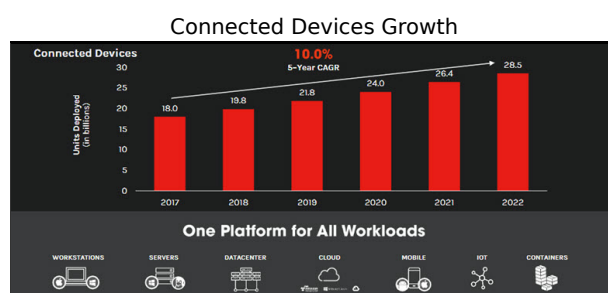
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competitive advantage vs. larger rival Palo Alto, which is using tuck-in deals to close the product gap. (12/21/20)

8. Fending Off Competitive Threats

CrowdStrike's unified approach to providing security across workloads and platforms creates durable advantages for its threat graph, or the brains behind its endpoint protection platform. Proprietary data on threats should keep improving the efficacy of the company's products over larger providers such as Palo Alto Networks and Microsoft that recently launched their own endpoint detection and response (EDR) offerings. CrowdStrike's use of a lightweight agent and the ease of deployment, with a self-service cloud model, are key differentiators vs. legacy on-premise products that slow application performance and require installation of updates to add capabilities.

CrowdStrike spans all types of workloads -- containers, servers, workstations, mobile devices and IoT sensors -- and platforms including Windows, Linux and macOS. (12/20/20)

Connected Devices Growth

Source: Bloomberg Intelligence

9. Low Churn, High Retention Fan ARR Growth

Customers additions should remain the primary driver of CrowdStrike's top-line growth in the near to medium term, but upselling at existing clients will continue to become a bigger portion of annual recurring revenue (ARR) amid low churn and strong retention with its enterprise customer base. The company's win rates should remain high as most legacy vendors, including Symantec (Broadcom), McAfee and Trend Micro, are still behind in launching a cloud-based EDR offering, while larger peers such as Palo Alto Networks and Microsoft's ATP product don't have CrowdStrike's proprietary database of threat information.

CrowdStrike continues to show strong engagement at enterprise customers, with about 40% of the global top-100 companies and 11 of the top-20 banks deploying its products on a company-wide basis. (12/20/20)

CrowdStrike ARR Growth vs. SaaS Peers
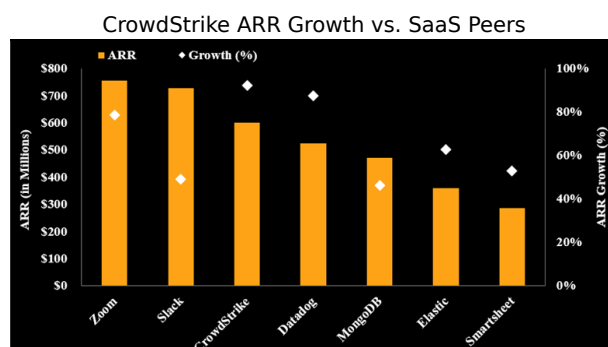
Source: Company Filings, Bloomberg Intelligence

## 10. Expansion in SIEM, Vulnerability Management

While CrowdStrike's initial success was driven by its product adoption for endpoint security, native integrations with best-of-breed cloud security products and a large amount of proprietary data

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should allow the company to expand into adjacent categories. We believe CrowdStrike's success in deploying add-on modules such as Spotlight and Discover should lead to market-share gains in the fragmented security information and event management (SIEM) and vulnerability-assessment market dominated by peers such as Splunk, Tenable, Rapid7 and Qualys. About 50% of its customers now use four or more modules, highlighting the steady upselling.

SIEM products typically help gather information from firewalls, email gateways and endpoint devices to provide a holistic view of security threats. (12/20/20)

CrowdStrike's TAM Opportunity

Source: Bloomberg Intelligence
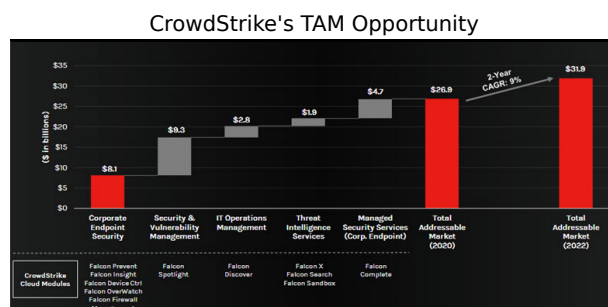
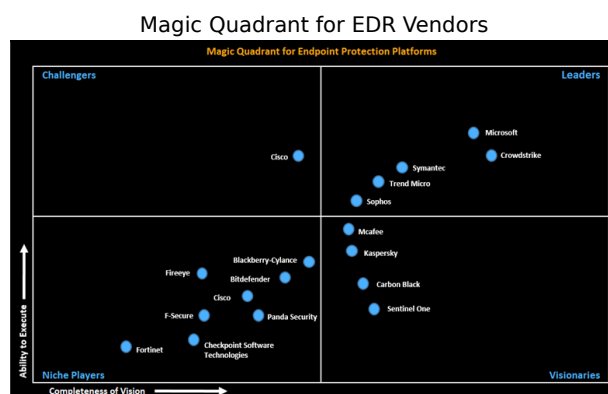**Remote Work Boosts Endpoint Detection Demand**

CrowdStrike Higher Efficacy, Ease of Deployment to Aid Adoption

CrowdStrike's higher product efficacy and ease of deployment could further accelerate its customer adoption as enterprises seek to replace their legacy endpoint-security products amid the secular trends of cloud and remote work. The company has the highest LTV-to-CAC ratio, a proxy for large-customer deployments, among security-software makers. (12/21/20)

11. Product Efficacy Aiding Customer Adoption

CrowdStrike stands out among the endpoint detection and response (EDR) vendors with its ease of cloud-based deployment and higher efficacy in detecting and preventing advanced security threats. We believe companies are favoring best-of-breed security products amid growing risks to their operations from potential cyberattacks. CrowdStrike's product lead will likely aid faster customer adoption amid a surge in new corporate endpoint devices due to employees working from home.

CrowdStrike's capabilities and product features rank well ahead of larger rivals such as Palo Alto (Cortex XDR), Microsoft's ATP product, VMware (Carbon Black) and BlackBerry (Cylance) as well as pure-play cloud peers such as SentinelOne and Cybereason. (12/20/20)

Magic Quadrant for EDR Vendors

Source: Gartner, Bloomberg Intelligence

12. Pricing Advantage vs. Security Peers

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CrowdStrike's cloud-based pricing encourages adoption over traditional on-premise endpoint security companies such as Symantec, McAfee, Trend Micro and Sophos. While Microsoft uses bundled pricing for its ATP security product with its E5 cloud offering, we believe CrowdStrike's support for Linux and MacOS devices, in addition to Windows, should aid its differentiation.

Among pure-play EDR vendors, CrowdStrike has been able to charge higher prices vs. rivals such as Cylance and Carbon Black. CrowdStrike alliances with other leading cloud security vendors including Okta and Zscaler should allow it to tap each other's client bases. (12/20/20)

CrowdStrike Pricing vs. Cloud Peers

Product	Pricing	Features
Crowdstrike Falcon Premium	$18.99 *Per Endpoint/Month*	Threat Intelligence, Antivirus, EDR, Threat Hunting, IT Hygiene
Microsoft Advanced Threat Protection	$57.0 *Per User/Month*	Advanced Threat Analytics, Anitivrus, Threat Protection
SentinelOne	$45.00 *Per User/Year*	Attack Prevention, Automated EDR, Antivirus, Behavioral Analytics
Cylance Protect	$5.99 *Per User/Year*	Zero-Day Prevention, Malware Prevention, Memory Exploitation Detection and Prevention

**Microsoft ATP is bundled in Microsoft 365 E5 product offering*

Source: Company Wesbites, Capterra, Bloomberg Intelligence

13. Enterprise Focus Aids ARR, LTV-to-CAC

CrowdStrike's focus on enterprise customers has aided its annual recurring revenue (ARR) per customer, which is much higher than cloud-security peers such as Okta, which is more focused on mid-sized businesses. We believe the company's sales cycle could get shorter with a proliferation in endpoint devices amid work from home. Enterprises are likely to invest in new AI and behavioral-based endpoint security, where CrowdStrike is a leader, to replace traditional signature-based products.

While CrowdStrike's sales and marketing intensity of about 65% is much higher than cloud-security peers such as Zscaler and Qualys, we believe the company has done a good job with enterprise-wide deployments, which is reflected in its ratio of long-term value to customer-acquisition cost (LTV-to-CAC) of about 14x vs. 6x for Okta. (12/20/20)

LTV-to-CAC for Security Providers
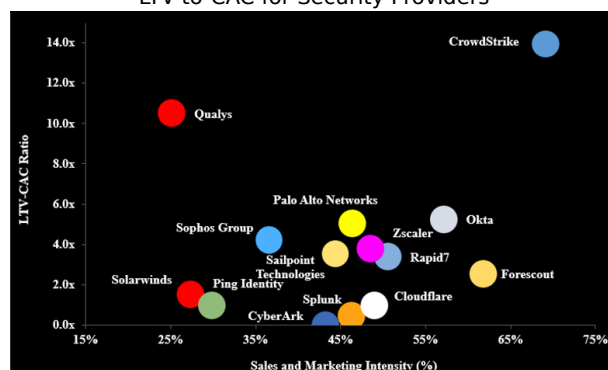
Source: Company Filings, Bloomberg Intelligence

Operating Margin to Improve with Upselling

CrowdStrike Margin Improvement Aided by Companywide Deployments

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Increasing remote work, coupled with the need to reduce fragmentation of security products, could further aid CrowdStrike's gross-margin improvement, in our view. Meanwhile, operating leverage may be driven by more companywide deployments, reduced customer-acquisition costs and an increasing mix of higher-margin subscription revenue in the next two to three years. (12/21/20)

14. Expanding Product Suite Bolsters Gross Margin

Larger company deployments and increasing use of CrowdStrike's proprietary threat graph, which predicts and prevents breaches, continue to drive a steady expansion in its gross margin. The company is increasing platform capabilities by adding security modules that go beyond its core anti-virus and endpoint detection and response (EDR) functionality and that help integration with third-party firewall and security information and event management (SIEM) providers. New functionality built on top of its platform via the CrowdStrike store should help drive upselling, further expanding gross margin.

Alliances with system integrators and managed service providers should also aid gross margin, while the company likely moves away from lower-margin professional work. (12/20/20)
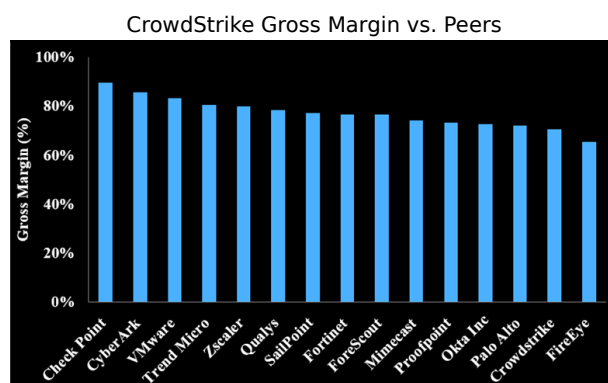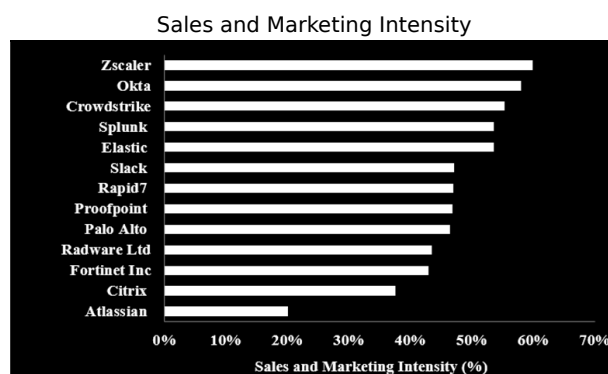

Source: Company Filings, Bloomberg Intelligence

15. Customer-Acquisition Costs to Come Down

Customer-acquisition costs at CrowdStrike should decline as the remote-work trend combines with increasing customer referrals across most industries. Demand will likely remain high for its offerings amid a surge in the number of endpoint devices as most companies have allowed work from home for business continuity. We believe the company will achieve faster operating profit growth than top-line growth, driven by steady operating leverage and scale in deploying its cloud-based offerings.

CrowdStrike's leadership in EDR is strengthening brand awareness, which will further aid traction with new customers. Sales and marketing intensity could fall to about 40% from roughly 50% in the next two years, in our view. (12/20/20)

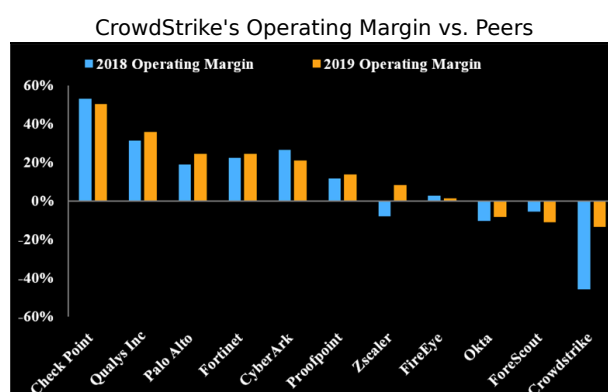Source: Company Filings, Bloomberg Intelligence

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16. Large-Customer Focus Aids Operating Margin

CrowdStrike's focus on enterprises and strong retention has aided annual recurring revenue (ARR), which we believe will fuel operating leverage over the next two years. Company-wide deployments have pushed ARR per customer to over $100,000, well above cloud peers including Okta and Zscaler. An increasing percentage of higher gross-margin subscriptions sales, to about 95% in the next 2-3 years from about 91%, should also be a tailwind for CrowdStrike's operating margin, in our view.

The company may be able to lower marketing expenses, about 50% of sales, by more than 5 percentage points this year, as it expands partner channels and forms alliances with system integrators. (12/20/20)

CrowdStrike's Operating Margin vs. Peers

Source: Company Filings, Bloomberg Intelligence

Financial Review

Earnings

17. CrowdStrike Outperformance Could Continue: Earnings Outlook

Post-4Q Earnings Outlook: CrowdStrike's view of 50% sales growth for fiscal 2022 was about 10 percentage points above consensus, and we see potential room for upward revisions as customer demand for its products gets a boost from the recent SolarWinds and Hafnium attacks. CrowdStrike delivered another strong quarter, aided by new customer additions and faster uptake of its add-on offerings. Though the outperformance wasn't spurred by an outsized contract, growing order sizes likely drove gross-margin improvement of about 400 bps in fiscal 4Q21.

We believe CrowdStrike's lead with containers and workload security could further aid its deployment sizes as corporations move on-premise workloads to the cloud. The company may pursue more acquisitions, similar to Humio and Preempt, to expand its suite. (03/16/21)

Highlights From Recent Results:
- Management Ups Sales-Growth Outlook by 10 percentage points to 50% for Fiscal 2022 Amid Strong Customer Momentum
- Customer Expansion Aided by Lead in Containers and Workload Security, Migration of On-Premise Workloads to Cloud
- Subscription Gross Margin Improves 400 Bps in Fiscal 2021 Amid Growing Order Sizes, Upselling of Add-On Modules
- Operating Margin Aided by Strong Sales Momentum, Increasing Order Sizes and Lower Marketing Expenses

Additional Resources:
- Analyzer | BI »
- Earnings Release | NSN »

Financial Trends

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18. CrowdStrike View Helped by Customer Retention, Suite Expansion

CrowdStrike's leadership in cloud security. coupled with an expanding product suite, should keep supporting its outsized top-line growth of over 50%, at least 5x faster than the high-single-digit pace expected for the overall security market. The company's best-in-class gross-customer retention of about 98%, along with solid traction with new customer additions in the wake of recent high-profile cyber breaches, drives our view. Legacy rivals Symantec (Broadcom), McAfee and Trend Micro still have 45% of the $11 billion endpoint-security market.

Expansion in adjacent segments of the security market, such as security information, event management (SIEM) and vulnerability assessment, with recent acquistions of Humio and Preempt, may drive more upselling at customers and help CrowdStrike's gross and operating margins. (03/18/21)

CrowdStrike's Financial Trends
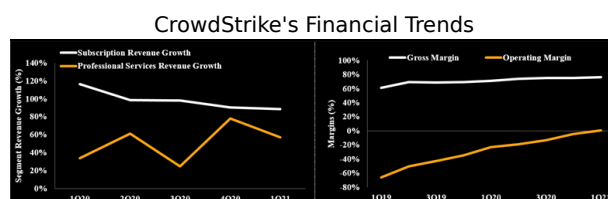
Source: Company Filings, Bloomberg Intelligence

Valuation

19. CrowdStrike's Valuation Driven by Enviable Position in Security

While CrowdStrike's multiple of greater than 20x EV-to-forward sales reflects elevated expectations, the company's outsized growth rates and product lead over rivals underpin its premium valuation, similar to other software-as-a-service companies. Its emergence as a cloud-based leader in the endpoint security market could lead to revenue growth of more than 50% in the next two years and at least a 30% compound annual growth rate through 2025. Free-cash-flow gains will likely be supported by expanding margin and high retention at large customers.

There's some risk of revenue being pulled forward to 1H due to more remote work. Yet the company has revenue visibility due to its traction with enterprise customers, which will allow it to snag more market share from legacy rivals such as Symantec, McAfee and Trend Micro. (06/17/20)

CrowdStrike's Valuation vs. Peers
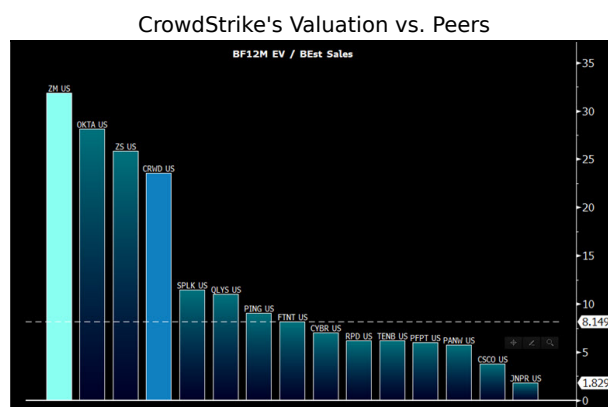
Source: Bloomberg Intelligence

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