

EQUITY RESEARCH

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- [Telecom & Networking Equipment](#)
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Paul Silverstein

646 562 1340

paul.silverstein@cowen.com

Fahad Najam

646 562 1427

fahad.najam@cowen.com

Elizabeth Pate

646 562 1437

liz.pate@cowen.com

INDUSTRY UPDATE

ALKIRA: A NEW NETWORKING COMPANY

THE COWEN INSIGHT

Against the backdrop of widespread and significant investor interest regarding the impact on the networking sector from the growing adoption of Public Cloud, we recently had the opportunity to speak with Alkira, a young private networking company founded in May 2018.

Value Proposition

While we don't opine on the company's financial valuation, in the context of the networking industry, we see Alkira creating a new product market category that we believe will have implications for incumbent networking equipment suppliers. Alkira is one of the first pure-play Public Cloud only networking companies. Alkira's mission is to simplify Public Cloud networking for enterprises as they migrate workloads to the Public Cloud. Alkira is simplifying many challenges enterprises face when migrating to Public Cloud. These challenges range from managing network complexity within the Public Cloud, and across multiple Public Clouds, security, governance and meeting compliance requirements.

Performance

Regarding performance, Alkira claims its solution helps enterprise customers reduce their Total Cost of Ownership (TCO) by as much as 45% when migrating to Public Cloud. Moreover, Alkira asserts that by helping enterprises transition seamlessly and effortlessly to Public Cloud, it is in fact helping further catalyze Public Cloud adoption. Notably, Alkira's solution is rooted in solving complexity in networking that stems from enterprises looking to interconnect myriad networking assets across multiple Cloud offerings. Alkira offers enterprises the value proposition of maintaining their on-premise networking policies and compliance requirements as they transition to a multi-Public Cloud environment and thereby minimizing the pain and risk attending such a transition.



Pedigree. Regarding pedigree, Alkira was co-founded by Amir Khan and Atif Khan, former Co-Founders of Viptela, which, as we had highlighted on several previous occasions (see our notes, “SD-WAN: Crossing The Chasm - Ahead of the Curve Series,” dated 4/10/17, “Cowen Communications Infrastructure Summit: SD-WAN Networking Highlights,” dated 8/14/17, and “Acquisition of Viptela: Solid Strategic Move,” dated 5/2/17), pioneered Software Defined - Wide Area Networking (SD-WAN), an entirely new networking product market that is quickly developing into the most dominant and understandable use-case driving the need for Software Defined Networking (SDN) by virtue of the prospect of significant cost savings for Enterprise IT and is now exploding from its nascent stage of development with significant implications for networking equipment suppliers, security vendors and communication service providers—including offering a multi-billion dollar equipment TAM and posing a significant risk to traditional branch router network equipment suppliers.

- **Co-Founder and CEO.** Mr. Amir Khan, who is CEO, in addition to being a co-founder, of Alkira, was one of the two co-founders and CEO of Viptela. At Viptela, Mr. Khan brought together leading engineering talent to build a company from concept to a successful exit in five years, with Viptela’s sale to CSCO in 2017 for \$610 million. Subsequently, VMware, Palo Alto and Fortinet has each acquired other SD-WAN private companies to gain entry into the SD-WAN market. Prior to founding Viptela in March 2012, Mr. Khan held product management positions at a number of networking companies including CSCO from 1991 - 1996 and again from 2002 - 2007; JNPR from 2007 - 2011; and Procket Networks, from 1999 until its acquisition by CSCO in 2002.
- **Co-Founder and CTO Atif Khan.** Alkira’s co-founder and CTO, Mr. Atif Khan, was a Vice President of Technology at Viptela and was part of the founding team. Prior to joining Viptela, Mr. Khan held product management and engineering roles at Cisco System, Timetra Networks (acquired by Alcatel, which in turn was acquired by Nokia) and Juniper Networks.

Messrs Khan and Khan have assembled a staff of over 50 employees, almost all of whom are in R&D, with backgrounds including Cisco, Juniper and Microsoft, with expertise in networking devices, core domain networking, distributed systems, DevOps, and user experience and visualization.

Institutional Investors. Alkira has successfully raised funds from institutional investors, which should allow Alkira to avoid the typical operational and strategic pressures attending the need for ongoing financing encountered by most private start-up technology companies.

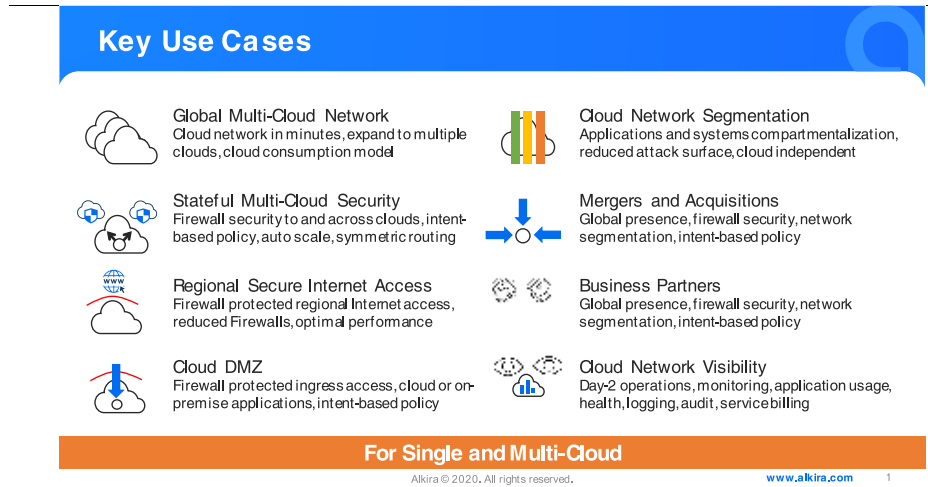
Implications for Other Networking Vendors

While Alkira’s potential impact on Arista, Cisco, Juniper and the rest of the networking industry is far from given, we see the emergence of Public Cloud Networking product market as an interesting new opportunity within the networking equipment sector. Messrs Khan have in the past proven that they can be quite disruptive. Their previous startup, Viptela, and the software-defined wide area networking (SD-WAN) technology they developed has proven to be highly disruptive to the multi-billion-dollar branch networking market. If Alkira proves to be another exception to the general rule it could help create a new product market, which in turn should benefit established networking equipment vendors and the rest of the networking industry.

Bringing Simplicity and Ease-of-Use to Multi-Cloud Networking

Alkira brings operational simplicity, visibility, control, governance and on-demand delivery to enterprise customers when selecting networking solutions for their Public Cloud and multiple Public Cloud topologies. The visibility and control features that Alkira bring to the enterprise can significantly enhance enterprise IT’s ability to meet governance requirement when adopting public cloud. Said differently, Alkira is pioneering a new networking product market that addresses the needs of the enterprise as it transitions to Public Cloud and to multiple Public Clouds. Alkira’s solution offers a “Multi-Cloud Network-as-a-service” that has built-in technology to automatically network enterprise workloads across multiple Public Cloud domains.

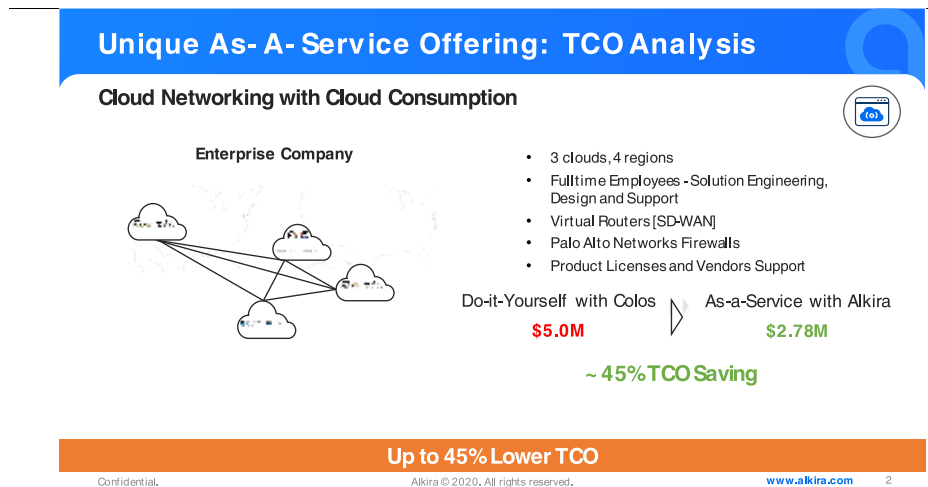
Figure 1 Alkira Addresses Multiple Cloud Use Cases



Source: Alkira

Leveraging Alkira's solutions, enterprise customers can "design, deploy, and provision a global multi-cloud network in minutes." Alkira's solutions can significantly lower an enterprise's total cost of ownership of connecting to Public Cloud and multiple Public Clouds by reducing the effort it would take an enterprise to implement a cloud network by itself. Moreover, Alkira's Cloud Exchange offering can significantly reduce the operational and governance challenges enterprises face in operating multiple public cloud domains by offering a pay-as-you-go model cloud networking solution that can seamlessly and automatically connect enterprise's workloads across multiple Public Clouds/Hybrid Clouds while providing in-depth visibility and control. In addition, Alkira's solution also provides visibility to enterprise workloads as they move across multiple Public Cloud provider infrastructure. By leveraging Alkira's technology, enterprises have the freedom to select and interoperate their workloads effortlessly across AWS, AZURE, Google Cloud and other Public Cloud infrastructure.

Figure 2 Alkira Can Significantly Reduce TCO of Transitioning To Public Cloud



Source: Alkira

Ticker	Rating	Price*	Price Target	Ticker	Rating	Price*	Price Target
CSCO	Outperform	\$42.78	\$60.00	ANET	Outperform	\$207.31	\$220.00
JNPR	Market Perform	\$22.48	\$24.00	NOK	Market Perform	\$3.37	\$4.00

*As of 04/14/2020

VALUATION METHODOLOGY AND RISKS

Valuation Methodology

Data Networking & Wireline Equipment:

Our valuation methodology is based on Price to Earnings per Share (P/E) and in cases where the company lacks consistent positive earnings, Enterprise Value to Revenue (EV/Rev). In certain cases, our valuation is also informed by a discounted cash flow (DCF) analysis.

Telecom Equipment/Wireless:

Our core valuation methodology is the analysis of a company's prospects to change its cash flow in future periods. Our primary tool to measure that expected change in cash flow – and the value of it today – is the 10-year DCF. Since earnings are typically a solid proxy for cash flow and are often more easily compared across companies and sectors, we also use Price-to-Earnings (P/E) ratios to value companies. P/E ratios compared to historical ranges and competitive companies can help to determine whether there is incremental value to be found in company shares.

Investment Risks

Data Networking & Wireline Equipment:

(1) rapidly changing/disruptive technology, particularly software defined networking, network functions virtualization, and virtualization could have an adverse impact on demand and/or pricing; (2) deterioration in the macro environment both domestically and internationally could lead to a reduction in enterprise IT spending and service provider capital expenditures with a consequent adverse impact on Data Networking and Communication Equipment companies' revenue and valuation multiples; and (3) further consolidation among service providers or adverse regulatory changes on service providers could lead to a reduction in their capital expenditures.

Telecom Equipment/Wireless:

High subsidies on mobile smartphones are the result of high end-user ARPUs; if ARPU declines, we would expect mobile phone ASPs to decline, pressuring OEM profitability. Mobile voice has driven wireless ARPU for two-plus decades; if the industry cannot convince end-users to increase dramatically data and Internet application consumption then revenue (ARPU) would be impacted. CAPEX to support the roll-out of LTE, LTE-A, and other 4G networks must stay available for our forecasts to be maintained; if a decline in global GDP occurs, CAPEX likely would be impacted negatively.

ADDENDUM

Stocks Mentioned In Important Disclosures

Ticker	Company Name
ANET	Arista Networks
CSCO	Cisco Systems
JNPR	Juniper Networks
NOK	Nokia (ADR)

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Cowen and Company, LLC. New York 646 562 1010 **Boston** 617 946 3700 **San Francisco** 415 646 7200 **Chicago** 312 577 2240 **Cleveland** 440 331 3531 **Atlanta** 866 544 7009 **Stamford** 646 616 3000 **Washington, D.C.** 202 868 5300 **London** (affiliate) 44 207 071 7500

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POINTS OF CONTACT

Analyst Profiles



Paul Silverstein

New York
646 562 1340
paul.silverstein@cowen.com

Paul Silverstein is a senior analyst covering networking and wireline equipment. He has covered the industry for almost 20 years.



Fahad Najam

New York
646 562 1427
fahad.najam@cowen.com

Fahad Najam is an associate covering networking. He spent 13 years in the networking industry in various roles and has an MBA from Wharton.



Elizabeth Pate

New York
646 562 1437
liz.pate@cowen.com

Liz Pate is a research associate covering networking and wireline equipment. She has spent nearly 20 years in equity research.

Reaching Cowen

Main U.S. Locations

New York

599 Lexington Avenue
New York, NY 10022
646 562 1010
800 221 5616

Boston

Two International Place
Boston, MA 02110
617 946 3700
800 343 7068

Cleveland

20006 Detroit Road
Suite 100
Rocky River, OH 44116
440 331 3531

San Francisco

One Maritime Plaza, 9th Floor
San Francisco, CA 94111
415 646 7200
800 858 9316

Atlanta

3424 Peachtree Road NE
Suite 2200
Atlanta, GA 30326
866 544 7009

Chicago

181 West Madison Street
Suite 3135
Chicago, IL 60602
312 577 2240

Stamford

262 Harbor Drive
Stamford, CT 06902
646 616 3000

Washington, D.C.

2900 K Street, NW
Suite 520
Washington, DC 20007
202 868 5300

International Location

Cowen International Limited

London

1 Snowden Street - 11th Floor
London EC2A 2DQ
United Kingdom
44 20 7071 7500

