KK Networks delivers quality digital services to the underserved in Pakistan

KK Networks (KKN) has a big opportunity to bring affordable, high-quality internet services to the people and businesses of Pakistan. In a country of more than 230 million people, only half the population has broadband internet service today, according to official government figures. Digital connections can create economic opportunity, bring communities closer together, and foster education.

Headquartered in Lahore, KKN is on a high-growth trajectory as it delivers internet and other digital services to residential and business customers. KKN relies on Juniper networking and automation solutions in its regional and data center networks to deliver services to residential and business customers.

OVERVIEW

Company	KK Networks
Industry	Service Provider
Products Used	MX480, ACX7100, ACX710, Juniper Apstra, QFX5120, EX2300, EX3400
Region	EMEA

CUSTOMER SUCCESS AT-A-GLANCE

14

Regions in Pakistan served

4X

Growth in residential customers in the past two years

2X

Growth in corporate customers in the past two years

~~Uptime since deploying the~~ Juniper Cloud Metro network solution

● ○ ○ CHALLENGE

Empower people through technology

KKN began by offering residential internet in a single area of Lahore and quickly expanded to meet the demand. The opportunity was big, but in a fiercely competitive market, KKN wanted to offer high-quality, reliable, and affordable internet in more areas of Lahore and beyond. It also wanted to tap into the market for business-grade internet services.

But first, KKN had to address some growing pains. With its previous network, internet performance often slowed to a crawl during peak hours. Frequent network congestion meant that subscribers' internet connections would often drop.

To grow profitably, KKN needed to improve network reliability and expand capacity. As a Tier 2 ISP, KKN also wanted a network vendor that would be a trusted partner as its business evolved.

SOLUTION

Cloud metro fuels expansion

KKN began its relationship with Juniper in 2020, deploying a single Juniper MX480 Universal Router to support broadband network gateway functions for its residential internet service.

The relationship with Juniper has strengthened over time, as KKN worked closely with the Juniper team to design and build new high-performance, scalable, and reliable metro networks to serve as the digital foundation for the company's expansion plans.

KKN deployed the Juniper Cloud Metro solution to scale capacity, improve resiliency, and deliver low-latency subscriber experiences with residential and business services. High-capacity Juniper ACX7100-32C Cloud Metro routers form the aggregation network, meeting KKN's growth requirements with a compact, power-efficient design for operational efficiency.

The ACX710 Universal Metro Router is used for the access layer. As a compact, hardened platform, the ACX710 can be deployed indoors or outdoors, whether on top of a building or on a roadside pole. Its high port density and small footprint allow KKN to support more customers efficiently. KKN also uses Juniper EX Series Switches to extend connectivity to its business customers.

KKN uses a Juniper network fabric in the data center to support content delivery, voice, video, and other services. Juniper Apstra™ intent-based networking software automates and validates the design, deployment, and operation of the fabric and supports reliable data center operations. KKN uses Juniper QFX5120 switches for the underlay network and EVPN-VXLAN for the overlay network.

OUTCOME

Meet the growing demand for digital services in Pakistan

KKN has dramatically expanded both its service portfolio and geographic reach in the last two years. KKN operates 14 metro rings serving 140,000 residential customers—a four-fold increase in two years. The number of corporate customers has doubled in the same timeframe.

With a high-performance, low-latency, and resilient network, KKN can continue to grow its residential and corporate customer base without nagging concerns about a bandwidth crunch. Residential customers can enjoy their internet, telephone, and movies from their homes. Small business and enterprise customers can choose from KKN's enterprise telephony, cloud, data center, and managed IT services.

With a Juniper network, KKN can differentiate not only on digital service quality, but also through its in-house support, proactive monitoring, and solution expertise to help customers gain access to fast, affordable digital services.

> "We take pride in having Juniper not only as our technology provider, but also our trusted partner. We are a courageous company and understand how to get the full potential of these platforms."
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> Imran Ali
> CEO, KK Networks