



THE INTERNET ECOSYSTEM OF PAKISTAN

Presented By Imran Khan
MD RapidCompute

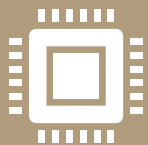
INTERNET ECOSYSTEM IN PAKISTAN



Availability since early 1990's.



Currently, several undersea telecommunications cables are deployed by Pakistan.



Pakistan's internet bandwidth capacity now hovers around 60 Tbps.

Internet in Pakistan

Pakistan: Internet Service Providers



And many more...

Pakistan: Policy and Decision Makers

Ministry of Information Technology and Telecommunication

Pakistan Telecommunication
Authority (PTA)

National IT Board

Universal Service Fund

National Telecom
Corporation

Special Communication
Organization

Ignite National
Technology Fund

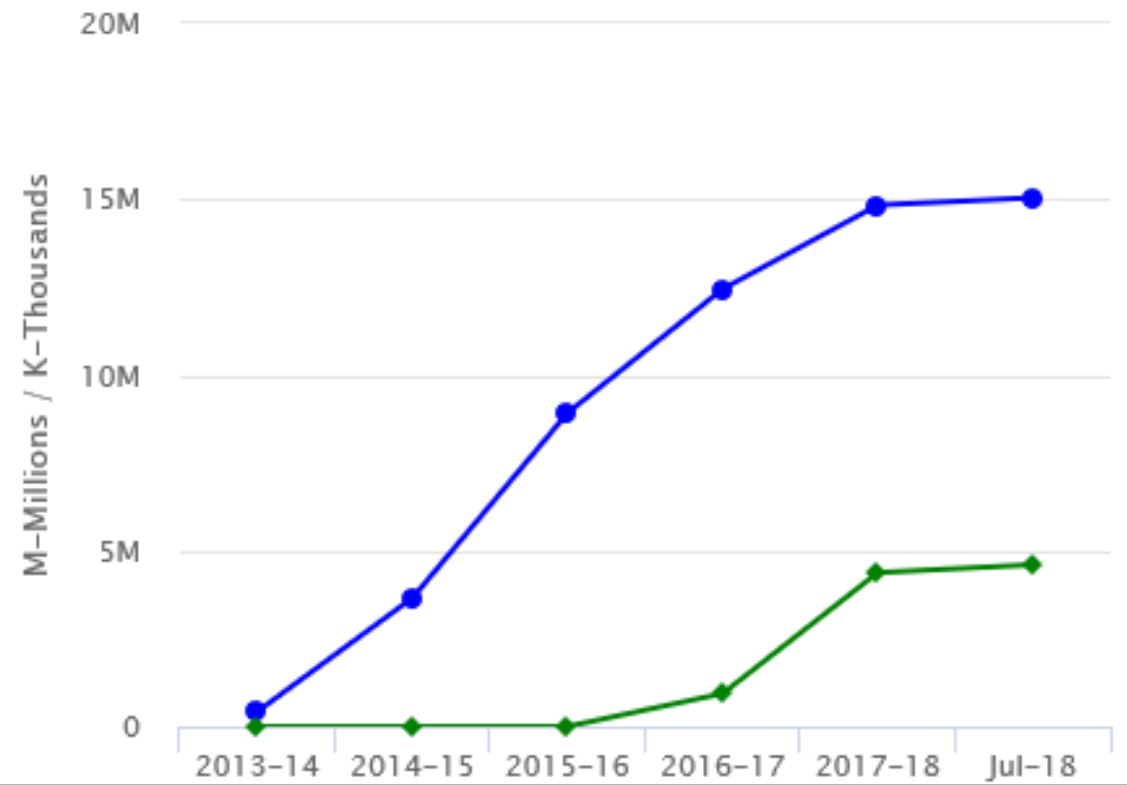
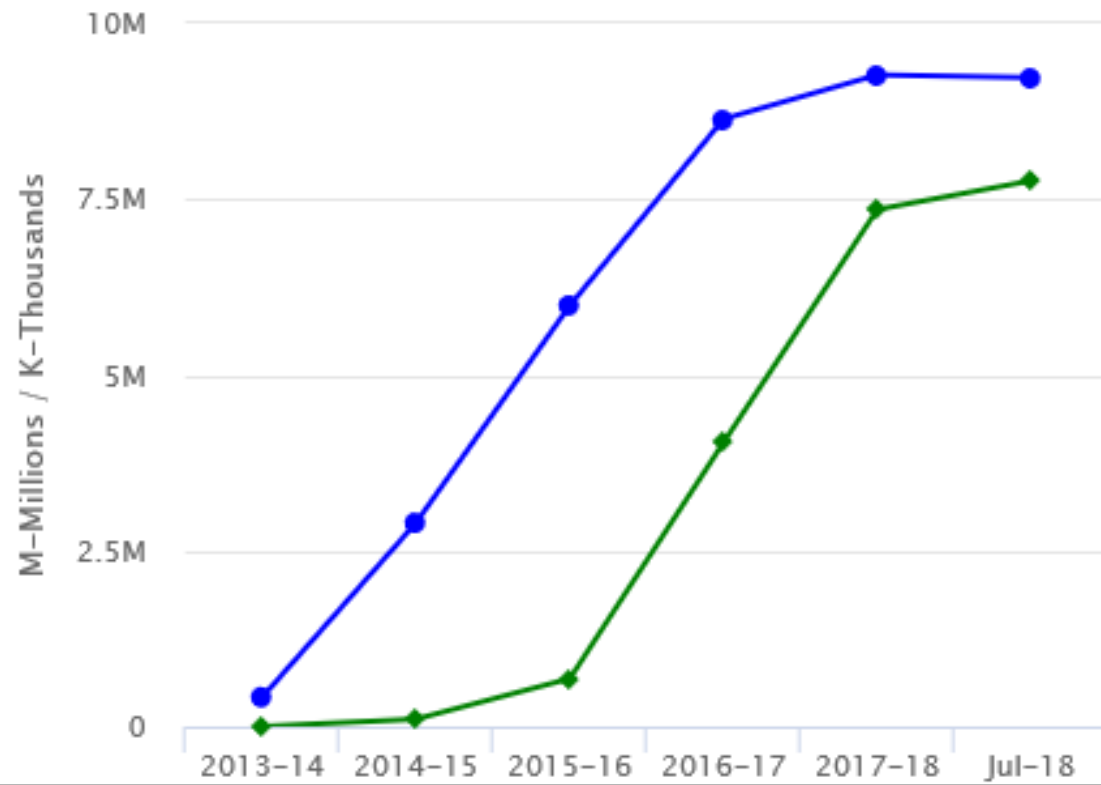
Pakistan Software
Export Board

Telecom Foundation

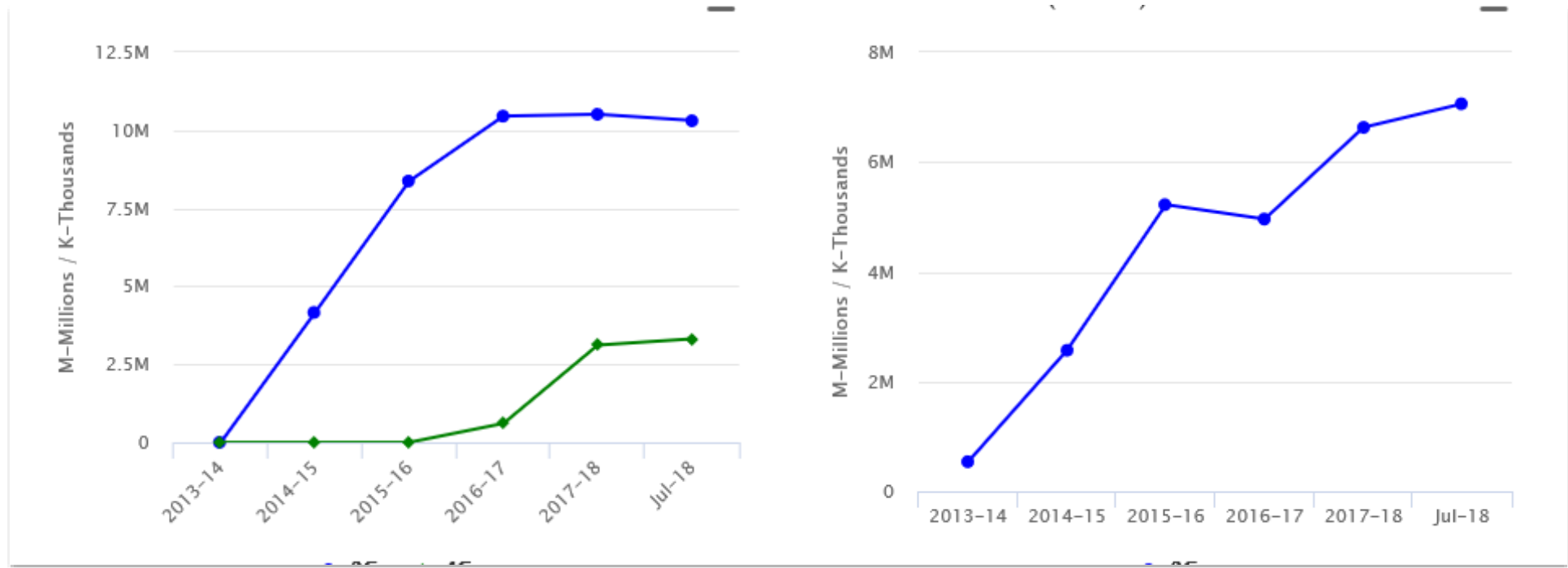
Virtual University
of Pakistan

Internet in Pakistan: Backbone

Submarine Cable	Operator	Capacity (Tbps)
SEA-ME-WE-3	PTCL	0.48
TWA-1	Transworld Associates	1.28
SEA-ME-WE-4	PTCL	1.28
IMEWE	PTCL	3.86
SRG-1 (Silk Route Gateway)	Multinet	20
SEA-ME-WE-5	Transworld Associates	24
AAE-1	PTCL	40
PEACE (Pakistan East Africa Cable Express)	Cybernet	60



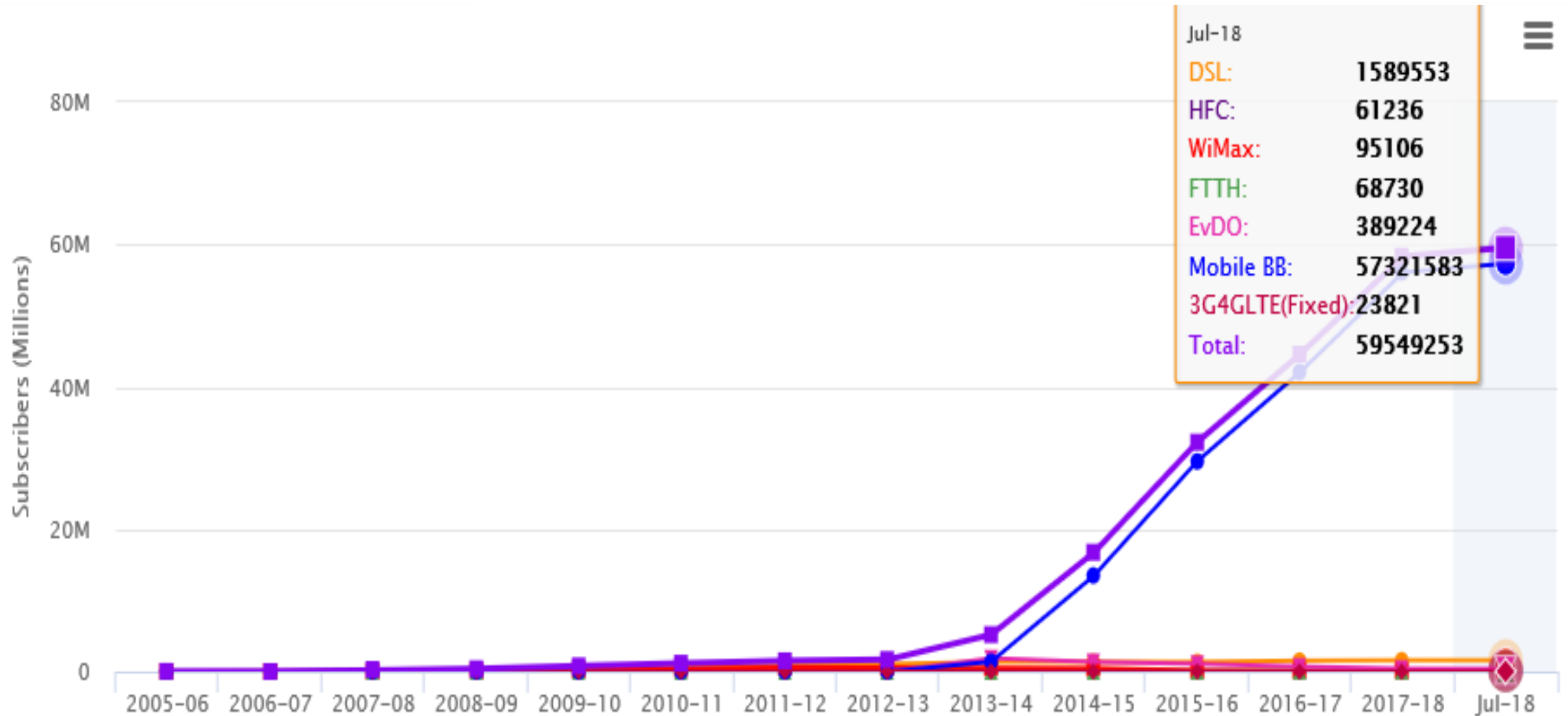
3G/4G SUBSCRIBERS



3G/4G SUBSCRIBERS

Broadband Subscribers in Pakistan

by Technology



About Cybernet

History

Established in 1996 as a private limited company with investment from the Lakson Group

Employees Strength

700+ (adding 100 per quarter)

Network

Service Provisioning in 70+ Cities & Towns

Offerings

FTTH (GPON and Metro-Ethernet), Radio P2P/ PtMP, 3G/4G/LTE*, Limited WiMAX*, VSAT (iDirect DVBS2, SCPC), DSL, CIR Internet Services, International and Domestic MPLS Services & Leased Circuits, Backhauling Solutions, Cloud Powered Hosting, Enterprise Voice Solutions

Corporate Clientele

1500+ Corporate Customers

HIGH SPEED INTERNET

CIR Internet Bandwidth

CLEAR HD VOICE SERVICE

DARK FIBER CONNECTIVITY

MANAGED SERVICES

IP/MPLS VPN

National IP/MPLS VPN
International IP/MPLS VPN

ETHERNET VPN

Metro EVPN
National EVPN
International EVPN

BACKHAUL

2G TDM Backhaul
3G/4G Internet Backhaul

SYSTEM INTEGRATION

SERVICES WE OFFER

BACKED BY STATE-OF-THE-ART TECHNOLOGY AND NETWORK INFRASTRUCTURE



Powered by

CYBERNET

Welcome to the Future of Broadband!

- StormFiber - Pakistan's most reliable fiber to the home (FTTH) network
- Based on state of the art GPON based technology
- Powered By Cybernet, Pakistan's leading corporate ISP
- We raise the bar for what consumers expect from home based services





StormFiber - A Whole New Experience!

- Consumers across the globe are switching to fiber backed connectivity
- a medium that offers you faster speeds when compared to conventional wired/wireless service providers
- StormFiber lets you tap into the true power of the Internet

tvnation

Welcome to the world of HD



Analog TV

With over 68 channels of clear, reliable entertainment, TVNation Analog TV is the simple and convenient way to entertain your entire household. Whatever you're looking for — movies, sports, news, music videos, documentaries, hit TV shows, children's programming — find more of it with TVNation Analog TV.

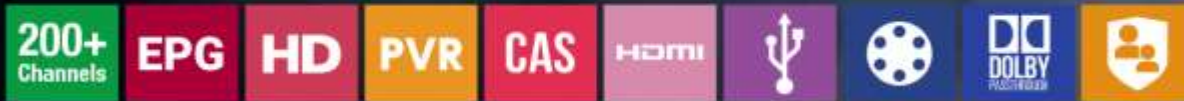
Analog TV is one of the most affordable way to get the best television entertainment in your home or in offices. TVNation Analog TV offers an affordable and broad choice of channels to meet the viewing needs of all the members of your household. You can enjoy your choice of spectacular sports and entertainment, breaking news stories and in-depth reports, intriguing educational programs, and your favorite local shows. There are networks for food-lovers, movie-goers, history buffs as well as local broadcast channels too.

FEATURES & PACKAGES

- ❖ Up to 68 channels of the most popular networks — HBO, CNN, Ten Sports, — and in-house channels to fulfill your entertainment needs
- ❖ All your local channels at no additional cost

tvnationHD

ENHANCE YOUR TV VIEWING
EXPERIENCE



www.tvnation.com

Digital TV

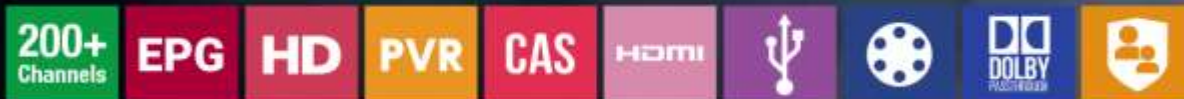
TVNation is a revolutionary entertainment ecosystem that aims to change the way Pakistanis view television. **TVNationHD** also called **TVNation Digital TV**, powered through a state-of-the-art set top box, is leading the wave of digitization in Pakistan.

Keeping in mind the diverse tastes of each member in the family, we have carefully crafted our channel lineup. From cooking shows to sports, we have something in store for everyone.

tvnation

tvnationHD

ENHANCE YOUR TV VIEWING
EXPERIENCE



www.tvnation.com

FEATURES & PACKAGES

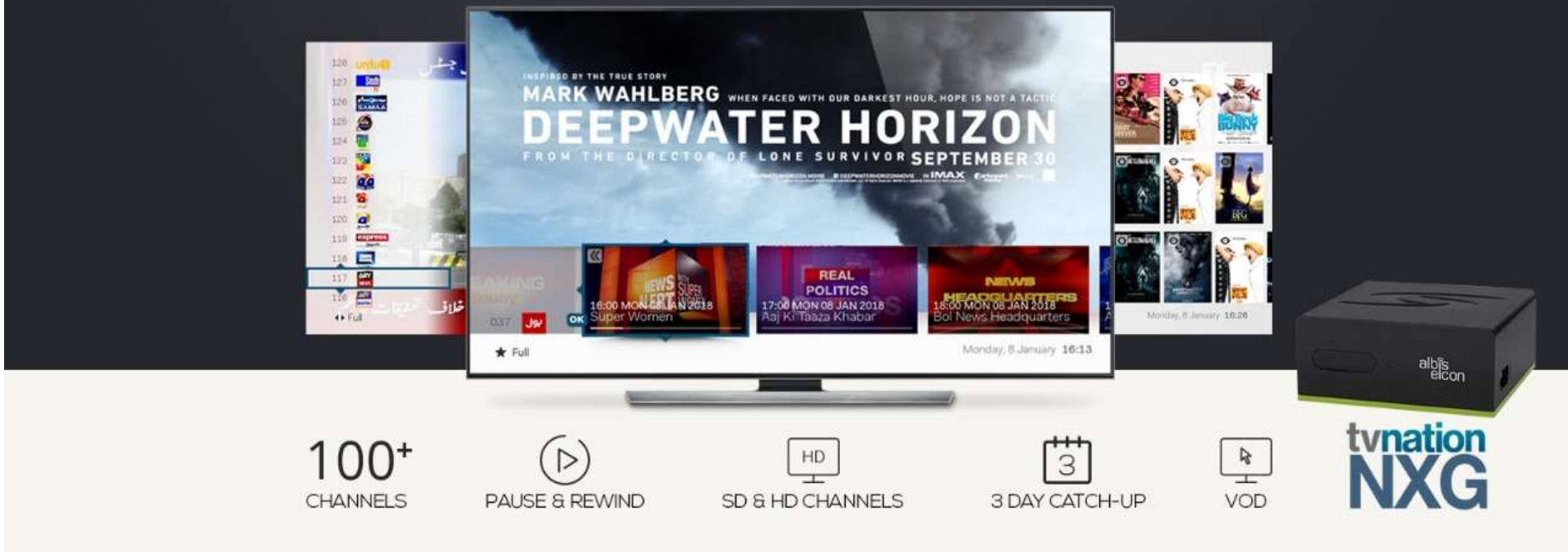
- ❖ **SD & HD Channels** - Get access to over 200 live television channels from around the world, mostly in high definition.
- ❖ **ELECTRONIC PROGRAM GUIDE (EPG)** - Access interactive and content-rich EPG using the remote control and view daily program listings. .
- ❖ **RECORDING** - Record your favorite programs on a USB stick to view later.
- ❖ **A LEARNING REMOTE** - You can now control all the main functions of the HD Box and your TV with a single remote.
- ❖ **FAST CHANNEL CHANGE** - The firmware on the set-top box is optimized for fast channel change.
- ❖ **CAS (CONDITIONAL ACCESS SYSTEM)** - Put your trust in our state-of-the-art set-top box that is fully compliant with PEMRA's digitization requirements.

tvnation



tvnation
NXG

THE NEXT GENERATION OF TELEVISION IS NOW IN PAKISTAN



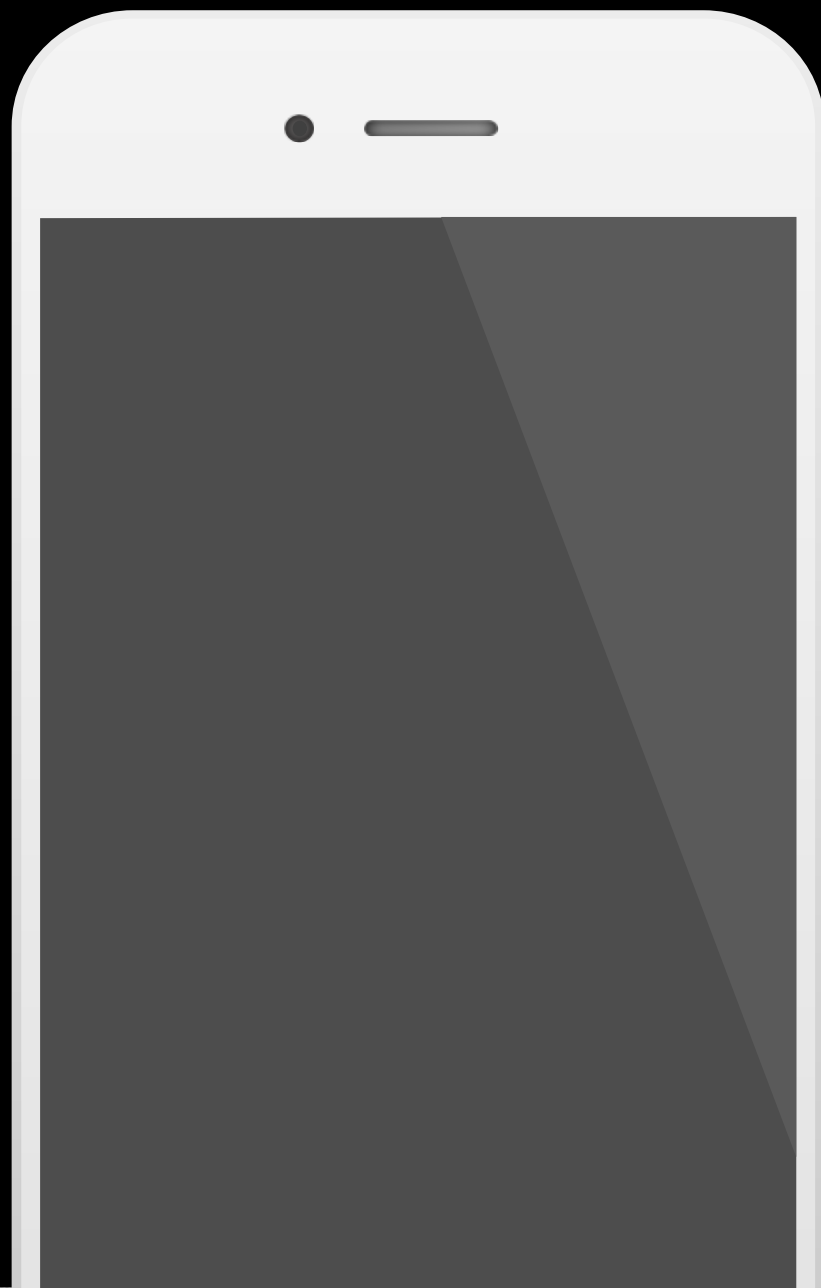
OTT/IPTV

TVNation NXG is a revolutionary entertainment ecosystem that provides a seamless viewing experience over multiple screens. TVNation NXG is offered across three mediums: Television (powered by an IP-enabled set-top-box), PC (web application) and Mobile phone/tablet (smartphone application).

Enjoy a full spectrum of Over-The-Top TV with 100+ live channels in High Definition, 7-day Catch-up, Electronic Program Guide (EPG) and carefully curated Video-on-Demand (VOD) library.

Watch what you want, when you want, and where you want.

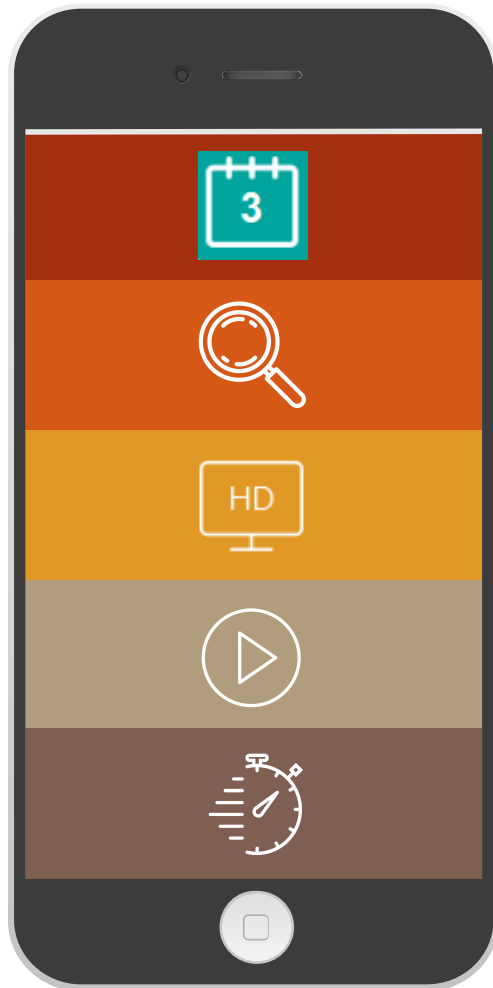
tvnation



TVNation NXG mobile app:

Stream 100+ live TV channels and watch Video on Demand from your smartphone with the TVNation NXG app.

TVNation NXG App – Top Features



CATCHUP FEATURE

With our 3 day Catch-up feature, missing your favorite show will now be a thing of the past!

ELECTRONIC PROGRAM GUIDE (EPG)

Interactive and content-rich EPG designed to offer an industry-leading user experience.

HD CHANNELS

Enjoy full spectrum of over-the-top TV with 100+ live TV channels mostly in HD.

VIDEO-ON-DEMAND (VOD)

Carefully curated Video-on-Demand library.

PAUSE & REWIND

Take control of your TV. Pause and rewind your favorite shows while you watch live TV.

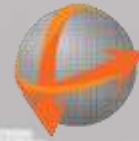


RapidCompute™

A division of CYBERNET

Defining Mission Critical

SAP HANA **vmware®** **CITRIX®**



RapidCompute™
A division of CYBERNET



Pakistan's first Enterprise Class public cloud computing platform.

Infrastructure as a Service (IaaS) cloud provider offering high performing, standards-based, flexible and robust cloud solutions.

Multiple data centers in Karachi and Lahore, managed by a team of highly skilled and dedicated engineers.

Fully committed to providing the best cloud experience to enterprises and customers alike.



THE RAPIDCOMPUTE ADVANTAGE

- Enterprise cloud platform offering services and features at par with International vendors like AWS and Microsoft Azure.
- True flavor of flexible billing with pay-as-you-go option with hourly and monthly rates.
- Working with numerous Government institutions like **FBR, NTC, Sind Bank, PSX**, and several projects with the Punjab Government including **CappMAgri**
- Understands local businesses and their needs and offer flexible, customizable solutions

SECURE, SAFE AND LOCAL

- All 4 data centers hosted within Pakistan
- 24/7 local support available
- Subsidiary of Cybernet, a 100% locally owned and run, leading ISP
- Built from the ground up by using in-house expertise and local talent pool and HR
- Use our own software layer that prevents foreign intrusion and interference
- Trust of Government institutions to host sensitive data

THE RAPIDCOMPUTE ADVANTAGE

INTERNATIONAL CLOUD

VENDORS

60 minutes time for an engineer to respond to a call in standard IT

250 ms of time taken for a request to go to New York and back from Karachi

RAPIDCOMPUTE

15 minutes standard response time

10 – 40 ms of time taken from RapidCompute to your infrastructure





TITANIUM

PAKISTAN'S FIRST HOSTED INFOSEC SOLUTION

Titanium offers premium class security products that help you meet your policy, regulatory, and business requirements. Our deep dive expertise in leading security platforms helps protect your mission critical infrastructure for safer, faster and smoother operations.

SOC as a Service

SIEM



WEB
APPLICATION
FIREWALL



NETWORK
MONITORING



PCI ASV
SCANNING



CIS HARDENED
IMAGES



DDOS
MITIGATION



FORENSIC
ANALYSIS



USER AWARENESS
TRAINING

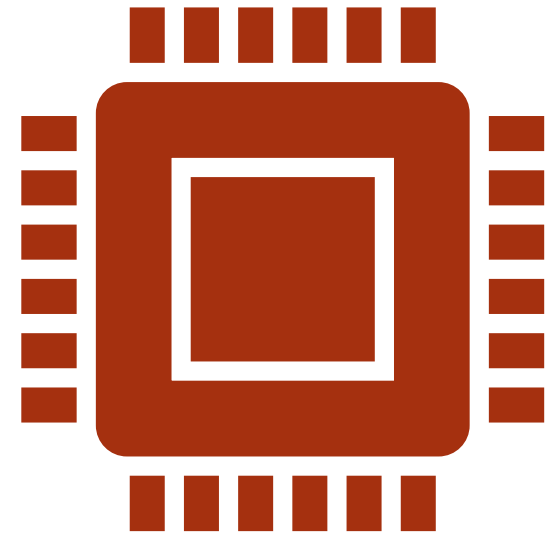


ABOUT NAYAPAY

- Applicant for the E-Money Institution (EMI) license of the State Bank of Pakistan
- Significant gap between consumer expectations and financial services currently available
- Need for a robust, **local** payment service that provides similar user conveniences to and has as profound an impact on the transaction economy as those which PayPal, Venmo, AliPay and WeChat Pay have on their native markets
- Aims to introduce a robust payment services platform to enable merchants and consumers to sign up, conduct transaction and communicate cheaply, securely and conveniently
- Built using best in class components that will address transaction throughput and security

Conclusion

Internet has been the enabler for every single digital activity we do today.



THANK YOU
