

Pioneering the Internet in Ghana

History of Network
Computer Systems (1988–
2003)



Presented by
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Agenda

- Background – The Visionary
- Founding of NCS
- Setting the technology pace
- The Internet Arrives
- The First Subscriber & Growth
- Competition arrives
- Telecom Reforms
- The Shutdown
- Recognitions



The Visionary



Dr. Nii Narku Quaynor
– Ghana's first PhD in
Computer Science



Education: Dartmouth,
SUNY Stony Brook



Senior Engineering
Manager at DEC
(1977–1992)

First Return to Ghana (1979–82)

- Established Computer Science Dept. at University of Cape Coast
- Introduced first batch of computing students at UCC in Ghana
- Early struggles: few programmers, COBOL dominance



Second Coming (1988)

- Founded Network Computer Systems (NCS)
- Partnership with DEC
- Vision: Build capacity + grow Ghana's ICT industry



Founding of NCS (1988)

- Distributor of DEC products, systems integrator
- Positioned to pioneer networking & Internet in Ghana
- Spirit of national development era



Setting the Pace (1988–1993)

- Built wide-area DECnet linking VRA, GNPC, NCS offices
- Supported payroll, HRM, GIS tools
- Hosted ICTP microprocessor workshops



Internet Arrives (1993–1996)

- Ghana connected Aug 1995 – first in West Africa
- Collaboration: NCS, Pipex (UK), Ghana Telecom, British Telecom
- Delegation of .gh ccTLD in Jan 1995
- Initial 9.6 kbps IP link upgraded to 128 kbps satellite (1996)
- First website hosted in Ghana (1995)
- NCS also helped Liberia (.lr) and Gambia get connected



First Subscribers & Growth

- From 0 full subscribers in Jan 1995 → 323 by Mar 1996
- Early adopters: corporations, mining firms, media houses, govt depts
- Main modes: Dial-up PPP & UUCP; later ISDN lines
- Ghana.com became the central hub for email & hosting
- Internet quickly spread to Accra, Tema, Kumasi, Takoradi, Wa



Internet Competition (1996 onward)

- Competition began late 1996: Africa Online & Internet Ghana

- Aggressive market tactics, politicization of ICT sector

- Ghana ISP Association (GISPA) formed to lobby & coordinate ISPs

- Regulatory disputes: VoIP bans, interconnection issues

- Despite rivalry, NCS remained strong due to superior technical skills



Policy & Telecom Reform

- 1996: Ghana Telecom privatized (30% → Telekom Malaysia)
 - Creation of NCA regulator
- Mobile operators: Mobitel, Celltel, Spacefon



Capacity Building & ISOC Ghana (1995)

- NCS sponsored ISOC Ghana Chapter
- Training engineers at INET/DCW workshops
- Foundation of GARNet & Ghana NOG workshops



Key Projects by NCS



- SWIFT interbank network (1993–96)



- Satellite networks (AGC, GCB)



- Early e-commerce (eShika, Accushop)



- AfNOG 2001 & ICANN 2003 hosted

The Shutdown (2003)

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- On Nov 26, 2003, court bailiffs and police shut down NCS HQ
-
- Triggered by land dispute with UTC Estates tied to political interests
-
- Assets worth billions of cedis seized – 12 vehicles, servers, equipment
-
- 87 staff displaced, business collapsed overnight
-
- Ghana.com network kept services alive, symbol of resilience
-
- Case highlighted weak legal/ICT frameworks and political victimisation



Global Recognition – Nii Quaynor

- Dr. Nii Quaynor appointed first African Board Member of ICANN
- Inducted into the Internet Hall of Fame (2013)
- Recipient of Jonathan B. Postel Service Award (2007)
- Ethos Award and other global ICT recognitions
- Leadership roles in AfNOG, AfriNIC, AfTLD, ICANN, ISOC
- Widely celebrated as the 'Father of the Internet in Africa'

Recognition of Pioneering team

IP Team

- William Tevie, First IP Engineering
- Andrew Ayitey Bulley
- Charles Adu-Asah
- Godfred Ofori-Som

Engineering Team

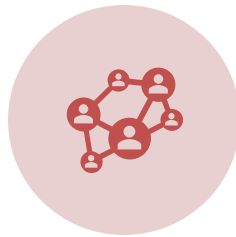
- Joseph Annan (AMAS)
- Mike Baidoo (Former CEO)
- David Kumi



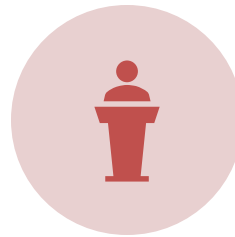
Policy Recognitions



HON KWAME
PEPRAH



HON. EDWARD
SALIA (POST-
HUMOUS)



HE PRESIDENT
MAHAMA

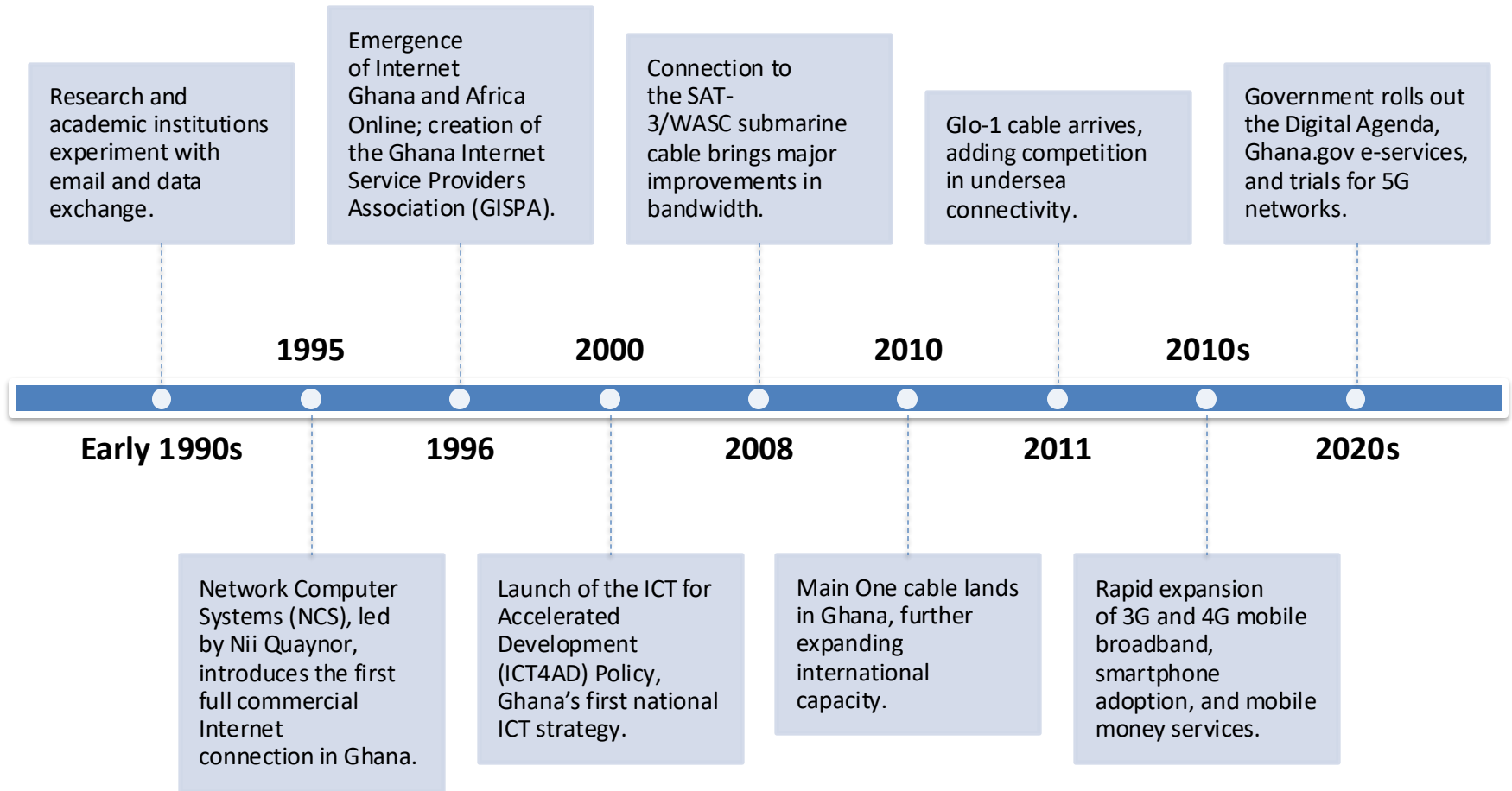


ISSAH YAHAYA
(POST-HUMOUS)

Legacy & Reflections

- Trained Ghana's first generation of network engineers
- Catalyst for Internet in Ghana & West Africa
- Legacy continues through GhNIC, ISOC Ghana, alumni pioneers

Timelines for Ghana's Internet Journey



THANK YOU

