Rural Africa Reaches to the Sky for Internet Access

Background

What our case study talked about

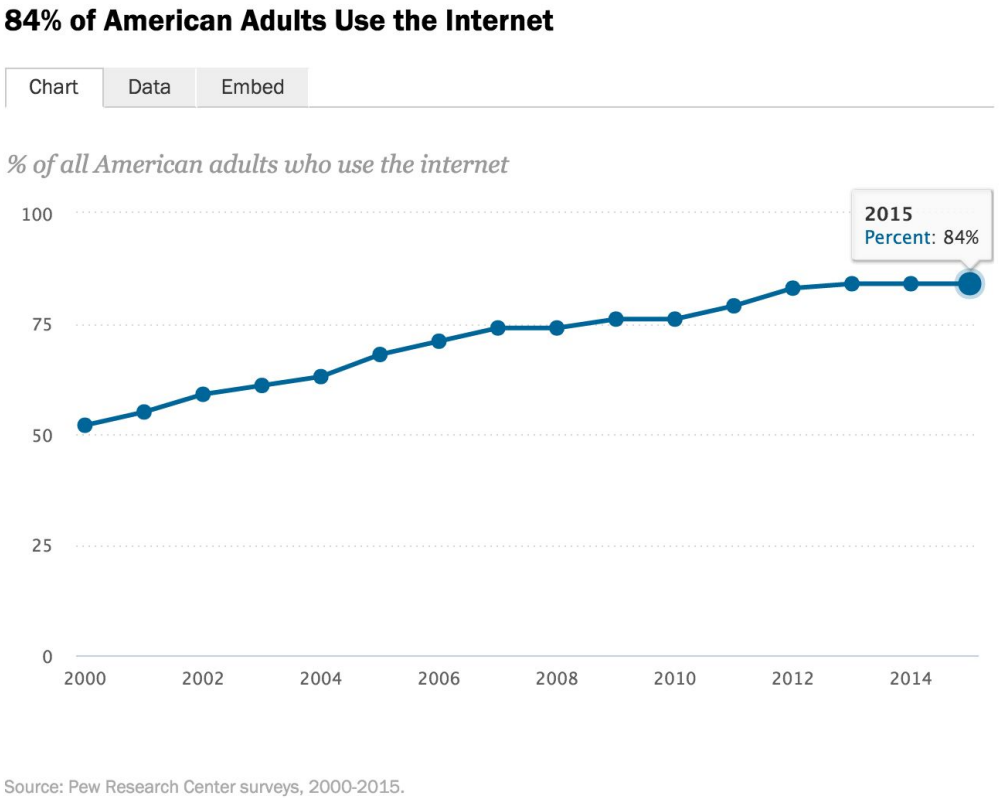
Google Project Link

https://youtu.be/sFwQcUyw-5k

Question 1

Where does Africa stand in relation to Europe & other developed nations with regard to Internet connectivity and use?

Question #1


84% of American Adults Use the Internet
Chart
Data
Embed
% of all American adults who use the internet
100
75
50
25
0
2000
2002
2004
2006
2008
2010
2012
2014
2015
Percent: 84%
Source: Pew Research Center surveys, 2000-2015.

Question #1

Internet Growth and Population Statistics:

YEAR	Users	Population	% Pop.	Usage Source
2000	200,000	21,624,422	0.9 %	ITU
2003	1,500,000	21,771,609	6.9 %	ITU
2005	2,540,000	23,595,634	10.8 %	C+I+A
2007	4,700,000	24,069,943	19.5 %	ITU
2009	7,761,800	28,686,633	27.1 %	ITU
2010	9,800,000	25,731,776	38.1 %	ITU
2012	13,000,000	26,534,504	49.0 %	IWS

Question #1

Internet users by region

	2005	2010	2014[a]
Africa	2%	10%	19%
Americas	36%	49%	65%
Arab States	8%	26%	41%
Asia and Pacific	9%	23%	32%
Commonwealth of Independent States	10%	34%	56%
Europe	46%	67%	75%

[a] Estimate.

Source: International Telecommunications Union.[6]

Question 2

What technological barriers do companies face when trying to link networks in different locations?

How do companies like Skyvision help?

What are they facing when trying to link networks that are located in different locations?

1. Access to the internet:

Africa:		Europe:
16% of the population	VS	63% of the population

2. Digital divide - low bandwidth + low speed

What are the barriers?

1. Technological barriers:

- digital divide:

  the content lacks terrestrial connectivity

  between the
  - submarine cables
  - the internet exchange points
  - and the “last mile” delivery system.

2. Non-Technological barriers:

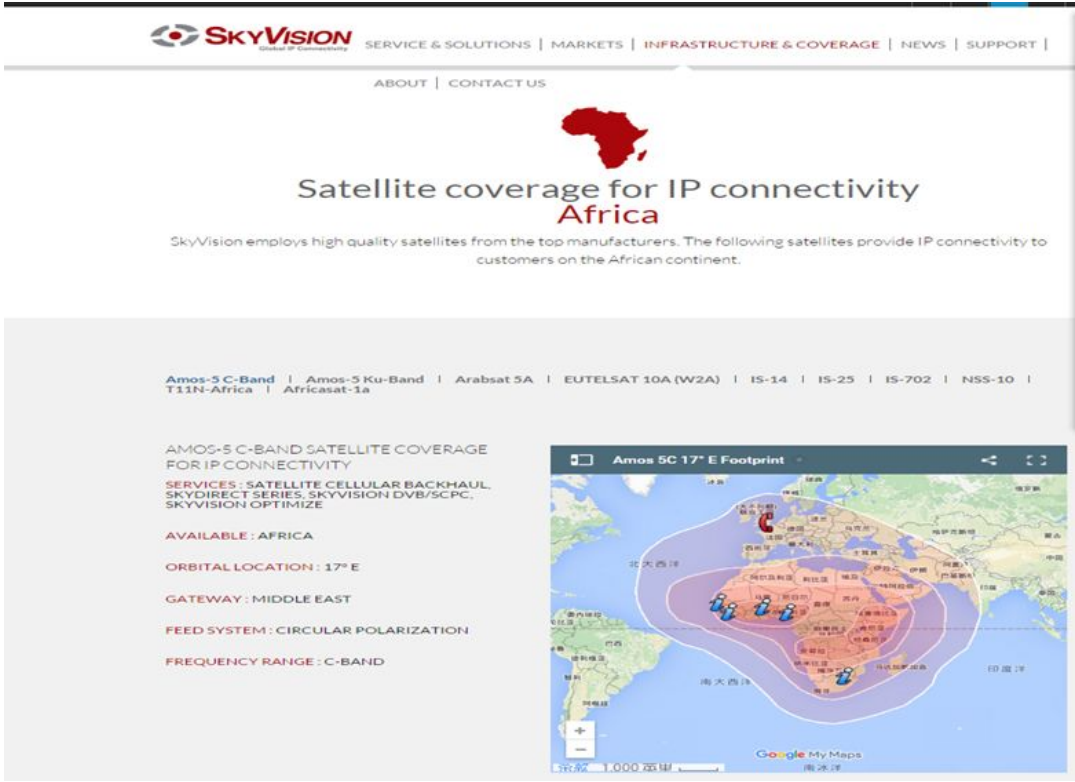
a. high costs (technology equipments, government tax etc).

b. government policy.

How does the Skyvision help?

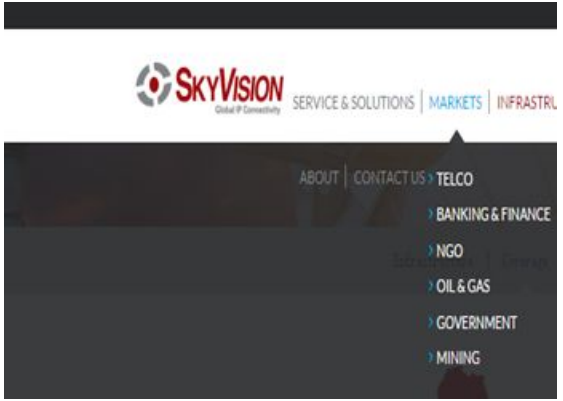
- customized **virtual private networks**: enable companies to connect to their WAN sites for **data sharing**, **support more efficient collaboration**.

- **Satellite systems**: provide reliable broadband, high-speed data services.



Benefits for using Skyvision

●Has different applications correspond to different fields.



Sufficient teleports

Support for Multiple protocol Label Switching(MPLS) Backbone.

Best RF(Radio Frequency) capability

Peering with main originators of internet service

How does **Project Link** help?

- Google announced it in **2013**.
- Project Link **builds fiber-optic networks**, making it possible for local providers to connect more people to the Internet and each other.
- Be headquartered in **Kampala, Uganda**.

The future of **Project Link**

- Broadband access to the Internet is still **unavailable** in many places in Africa.
- Google is now expanding Project Link to **Ghana** and expect to build **over 1,000 kilometers of fiber** in Greater Accra, Tema and Kumasi.

Question 3

Do you think that innovators like SkyVision or Google will have more success?

- They succeeded to some extent , however, this success is confined on major cities.

- As long as government restrictions (high taxes and licensing fees) are exist, it might be difficult to have more success.

Question 3

Infrastructure

Lack of infrastructure is a negative, not a positive:

Geographical coverage.

Speed.

Weather conditions.

Sudden malfunctions.

Ongoing maintenance.

((High COST))

Question 3

In conclusion

Only 16% of the population got access to the internet because of the few constraints.

1.**Lack of infrastructure:** There are no cable lines readily available to connect ISP's, so they have to rely on satellite which is managed by private firms and they are expensive.

2.**Cross Border Policies:** Cross border policies are heavily affecting negatively on infrastructure development.

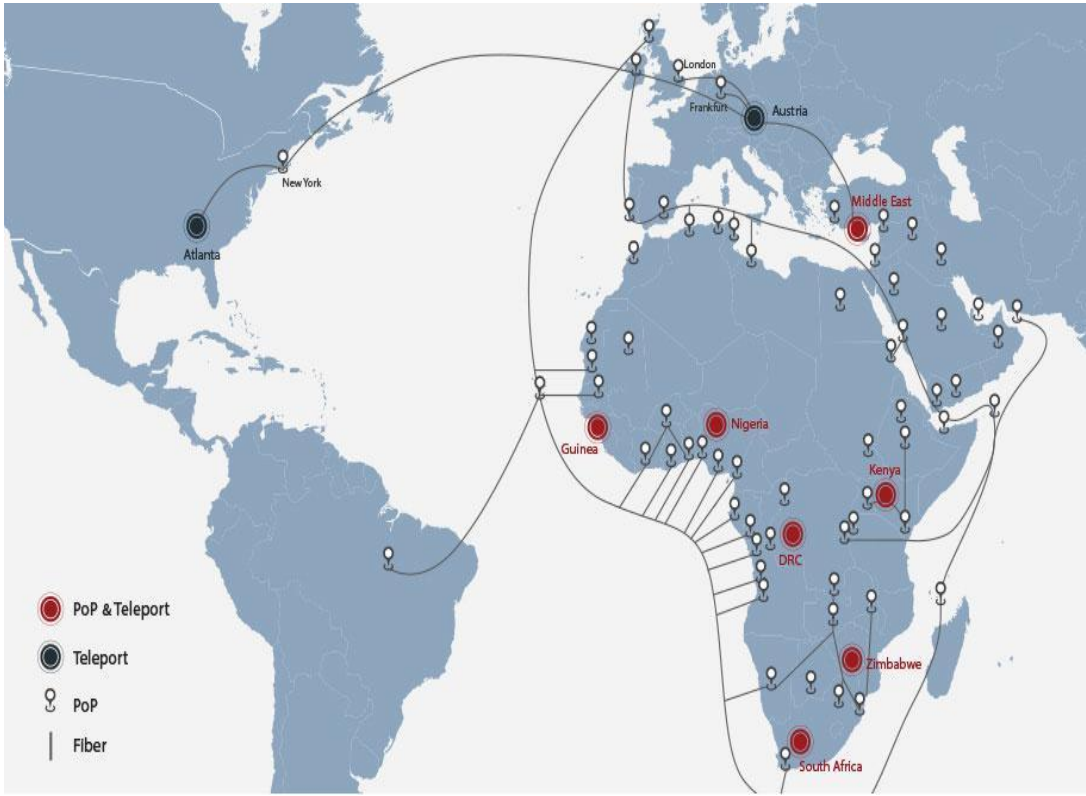
Policy makers are not cooperating to liberalize the policies to encourage private investments to develop infrastructure across Africa.

Question 4

What role do you think government and international organization should take in overcoming the digital divide in urban and rural Africa?

SkyVision

https://www.youtube.com/watch?v=QvSHucBgJHo



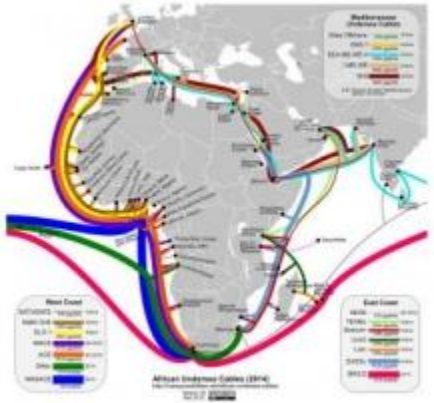
Government:

They have high taxes on technology that is placed on the ground.

(Later you will see how Google and Facebook get around this)

The Government should really be working to get the internet up and running.

1. Good for society
2. Good for health/education
3. Good for GNI
4. Good for their pocket books



International Organizations:

Why would they care?

1. Untapped markets
2. People who want this new technology
3. A good time to get most of the market
4. People will feel good about your company.

Google and Facebook

Sorry about the strange format apparently we cannot view this in America on youtube.

http://en.savefrom.net/#url=http://youtube.com/watch?v=HST7IjSOdUI&utm_source=youtube.com&utm_medium=short_domains&utm_campaign=www.ssyoutube.com

Sources:

http://www.pewinternet.org/2015/06/26/americans-internet-access-2000-2015/

http://www.internetworldstats.com/me/sa.htm

https://en.wikipedia.org/wiki/Internet_in_Africa#Internet_access

https://www.youtube.com/watch?v=QvSHucBgIHo

Thanks!