

## **East African Essays: Table of Content**

- **Hormuud Telecom**
- **Cybersecurity's Relevance**
- **Fortinet and its Purpose**
- **Future Vision**

### **Hormuud Telecom:**

Hormuud Telecom is a Somali telecommunications company that operates in Somalia and Somaliland. It is one of the largest telecommunications providers in the country and has played a significant role in the development of Somalia's telecommunications infrastructure.

One of the main contributions of Hormuud Telecom is its provision of affordable and reliable telecommunications services to the Somali population. "The company has invested in building a robust telecommunications infrastructure, including the deployment of 3G and 4G networks, which has helped to improve access to telecommunication services across the country. This has helped to bridge the digital divide and improve access to information and communication technologies, which is particularly important in a country where many people live in remote areas." (Hormuud Website)

Hormuud Telecom has also played a significant role in the development of the Somali economy. The company has created jobs for many Somalis and has also helped to spur economic development by providing businesses with access to reliable telecommunications services. This has helped to improve the business environment and increase the competitiveness of Somali businesses. Hormuud Telecom also helps with providing financial services to the Somali population. They have developed a mobile money service, which allows customers to transfer money, pay bills, and make purchases using their mobile phones. This has helped to improve access to financial services for many Somalis, particularly in rural areas where access to traditional banking services is limited.

Despite the many positive contributions of Hormuud Telecom, there are also some concerns about the company's operations. One of the main concerns is the lack of regulation and oversight of the telecommunications sector in Somalia. This has led to concerns about the quality of services provided by the company, as well as the potential for fraud and abuse. Additionally, as the company is one of the largest telecommunications providers in the country it has been accused of having a dominant position in the market, which can be detrimental to competition and innovation.

In conclusion, Hormuud Telecom has played an important role in the development of Somalia's telecommunications infrastructure, providing affordable and reliable telecommunications services, financial services, and helping to spur economic development. However, there are also concerns about lack of regulation, potential for fraud and abuse, and dominant position in the market that needs to be addressed.

## **Cyber Securities Relevance:**

Cybersecurity is becoming increasingly relevant in the context of Hormuud Telecom and its operations in Somalia. As the company provides services such as mobile money transfers, which handle sensitive financial information, it is crucial to ensure that the company's networks and systems are properly secured to protect against cyber threats. This includes implementing measures such as firewalls, intrusion detection and prevention systems, encryption, and regular security assessments and penetration testing to protect against unauthorized access and cyber threats.

Furthermore, with the increasing use of technology in the financial sector in Somalia, it is essential to ensure that the mobile money service provided by Hormuud Telecom is secure and meets industry standards for data protection and privacy. This could mean implementing measures such as two-factor authentication, user access controls, and regular security audits to ensure that customer information is protected from cyber threats.

Along with this, as the company operates in an environment with a lack of regulation and oversight, it is important that Hormuud Telecom takes proactive measures to improve its cybersecurity posture and protect against cyber threats. Implementing a robust incident response plan to handle any potential security incidents, and having an incident response team in place that is trained and prepared to respond to security incidents would be a good idea (SOC team).

Utilizing cloud-based security tools like Fortinet's FortiGuard open network system is one way cloud security is relevant to Somalia. Cloud-based solutions can offer a more affordable and scalable substitute for on-premises security systems because many Somali organizations might not have the staff or resources to do so. Organizations in Somalia can take advantage of the newest security innovations and threat intelligence by utilizing cloud-based security solutions to better protect their networks and data.

Network operations are essential for ensuring Somali organizations' security. In the event of a compromise, organizations can control the spread of malware or other malicious software by implementing network segmentation and micro-segmentation. Organizations can enhance their overall security posture by putting in place incident response plans, firewalls, intrusion detection and prevention systems, regular security assessments, and penetration testing.

An organization's cybersecurity strategy in Somalia must also include Secure Networking, Zero Trust Access, and Open Ecosystems. Organizations can prevent the spread of malware or other malicious software in the event of a compromise by implementing secure networking techniques like network segmentation and micro-segmentation. Open ecosystems can assist businesses in exchanging threat information and working together with other businesses to strengthen their overall cybersecurity posture.

## **Fortinet, Open Network System:**

Fortinet is a leading provider of cybersecurity solutions and has been working in Somalia to improve the country's cybersecurity posture. One of their key contributions in the country is through their FortiGuard open network system.

My uncle, who is a contractor, has worked with Fortinet to improve the security of a hospital. This experience sparked my interest in researching the role of cybersecurity in the healthcare industry and how Fortinet's solutions can help to protect sensitive patient data and improve the overall security of healthcare organizations. This experience gave me a first-hand understanding of the importance of cybersecurity in the healthcare industry and how Fortinet's solutions can make a real impact in protecting patient data and improving the overall security of healthcare organizations. This sparked my interest in researching more on the topic, and also how similar solutions can be adapted and implemented in other industries, particularly in developing countries such as Somalia.

In Somalia, Fortinet's FortiGuard open network system has been used to improve the security of the country's telecommunications infrastructure. The system has been implemented by Hormuud Telecom, one of the largest telecommunications providers in the country, to protect their networks from cyber threats. This has helped to improve the security of their networks and protect against unauthorized access and cyber threats, which is particularly important in a country where many people live in remote areas.

Additionally, Fortinet's open network system also provides organizations with the ability to share threat intelligence and collaborate with other organizations to improve their overall cybersecurity posture. This is particularly important in a country like Somalia where the lack of resources and trained personnel can make it difficult to effectively implement and maintain security operations. In conclusion, Fortinet's FortiGuard open network system has been instrumental in improving the cybersecurity posture of Somalia through providing organizations with real-time visibility and control of their networks, and a range of security features to protect against cyber threats. Additionally, the system's ability to share threat intelligence and collaborate with other organizations is particularly important in a country like Somalia where resources are limited.

**Future Vision:**

When visiting Somalia, it was clear that there is a significant opportunity for improvement in the country's technology infrastructure. The airport, for example, is largely manual and not automated, which can lead to slow processing times and inefficiencies. This is a missed opportunity, as automation and digital technologies have the potential to greatly improve the efficiency and security of the airport's operations.

Furthermore, it is surprising to see how despite the large amount of digital money that flows around in the markets, the country's cybersecurity infrastructure is not well developed. This creates a vulnerability for wire fraud, where someone with ill intentions could potentially do a lot of damage. This highlights the importance of investing in cybersecurity infrastructure and training to protect against cyber threats and protect the financial sector.

Additionally, as the country's economy is heavily dependent on the telecommunications sector, it is important that the networks and systems of the companies providing these services are properly secured to protect against cyber threats. This includes implementing measures such as firewalls, intrusion detection and prevention systems, encryption, and regular security assessments and penetration testing to protect against unauthorized access and cyber threats.

In conclusion, there is a significant opportunity for improvement in Somalia's technology infrastructure. The country's reliance on digital money highlights the need for an improved cybersecurity infrastructure to protect against wire fraud and other cyber threats. Investing in automation, digital technologies and cybersecurity infrastructure and training is crucial for Somalia to improve its economy and protect its citizens.