THE ZENVUS SMART FARM

PRESENTED BY

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OUTLINE

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INTRODUCTION TO ZENVUS

- The Zenvus Smart –Farm Technology is an intelligent solution developed by Prof Ndubuisi Ekekwe that targets farmers for the enhancement and modification of their primitive farming techniques. It uses proprietary electronics sensors to collect soil data like moisture, nutrients, pH etc and send them to a cloud server via GSM, satellite or Wifi. Algorithms in the server analyze the data and advice farmers on farming accordingly

ZENVUS SMART FARMING SOLUTION

- The Zenvus Smart –Farm Technology is an intelligent solution for farms that uses proprietary electronics sensors to collect soil data like moisture, nutrients, pH etc and send them to a cloud server via GSM, satellite or Wifi. Algorithms in the server analyze the data and advice farmers on farming accordingly

- As the crops grow, the system deploys special cameras for detection of drought stress, pests and diseases. The data generated is aggregated, anonymized and made available via subscription for agro-lending, agro-insurance, commodity trading to banks, insurers and investors

ZENVUS SMART FARMING BENEFITS

- The Zenvus Smart-Farming Technology among other things would allow farmers and stakeholders make informed decisions by providing real time data for the farmers and stakeholders thus eliminating guesses on timing, procedure and crops for farming.
- Provides data analytics that relate information on possible outbreak of pests and diseases in farms which usually reduces yield, allowing farmers to initiate preventive measures
- It helps farmers map the boundaries of their farms and then print the documents so that farmers can obtain their land titles from governments

TECHNOLOGIES

Feature	Requirement	Comment
Network Area	**Wide**	The zenvus device sending data to a cloud server n application uses cellular connectivity, so requires wide network area
Spectrum	**Dedicated/Shared**	**The connectivity has be reliable**
Battery life	**Long**	**The battery need to be long since the device stays in the remote farms**
Connectivity cost	**Medium**	Price varies and thus need to be moderate
Module cost	**Medium**	The module cost also varies and thus need to be moderate
Bandwidth	**Medium**	**This application requires a medium bandwidth for transmitting farm real data and images**
Technologies	**Satellite**	

Other technologies: 2G, 3G, 4G & WiFi

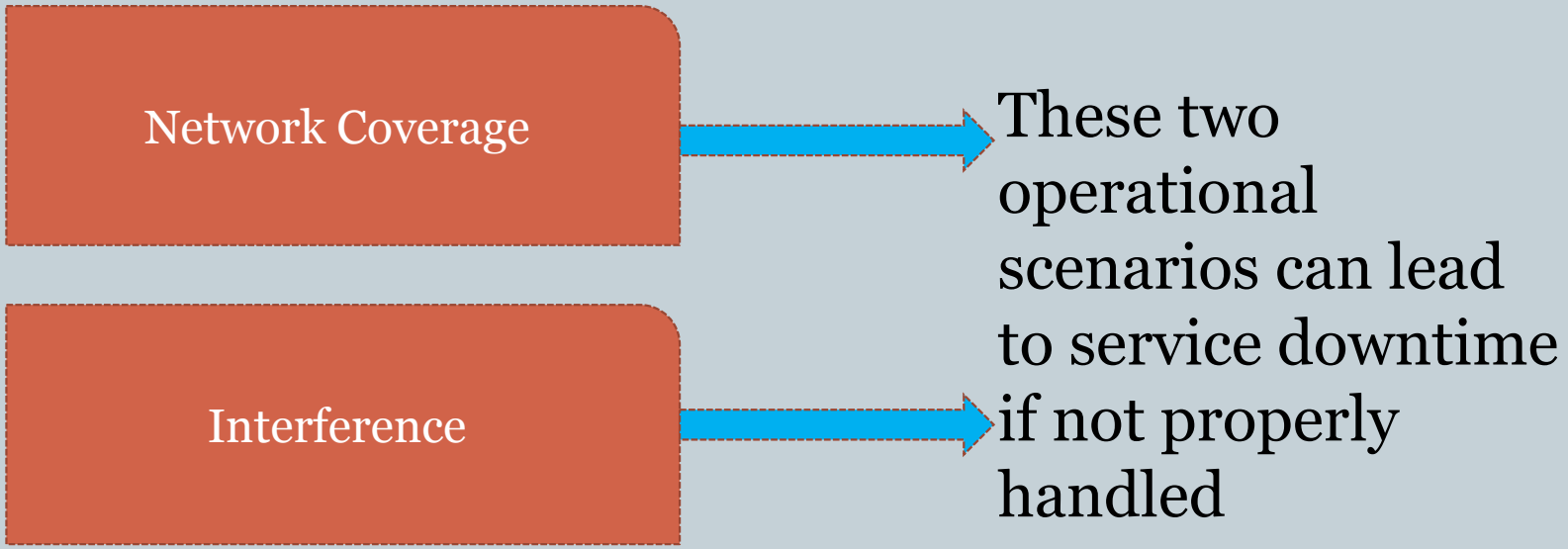
MOST LIKELY BUSINESS MODELS

Business models	Revenue of the IoT company	Device ownership
Product-as-a-Service	Recurring	IoT company
Transactional	Upfront	User

Either of the above two business model can serve the deployment of the zenvus smart farm depending on the financial capability of the choice of the customer.

OPERATIONAL ISSUES

- **Operational considerations**



POLICY TOPICS

Ensuring consumers' privacy protection

Ensuring consumers' data protection

It is incumbent open regulators and policy makers to ensure the privacy and the data protection of the consumers

CONCLUSION

- In this presentation we have highlighted the Zenvus smart farming Technology

- We have also looked at the solutions and the benefit of the technology, the technology for deploying the application, the business models and the operational concerns and the policy issues

The End

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