ETHLagos Virtual Hackathon | Presentations

Nigerian Energy Support Programme (NESP)

Team **5** | 26th October 2020

Ensuring Transparency in billing and power consumption | MOPower…power accuracy on the go

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Outline

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Problem Statement

To solve the lack of distrust, transparency and accuracy in metering/monitoring systems in Nigeria due to the prevalent and widely dismissed estimated billings from electricity distribution companies to consumers.

Features:

- Lack of accuracy in monitoring systems in Nigeria.
- Lack of trust and transparency in estimated billings.
- Low compliance in timely payment by consumers.

Idea - Solution and Benefit

- Efficient platform (blockchain's immutable ledger) to ensure transparency in billing.
- Total control on consumption and payment

Blockchain's immutable ledger and transaction history providing a basis for improved billing and less dispute.

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Business Model Canvas

1. PROBLEM WE SOLVE:
Lack of trust, transparency and accuracy in metering/monitoring systems in Nigeria due to the prevalent and widely dismissed estimated billings from electricity distribution companies leading to low compliance in payment by consumers

2. KEY METRICS:
Presently less than 1/10th of Nigeria's 41 million households have their electricity consumption metered and half of those are faulty(Pwc).

6. REVENUE STREAMS:
- Commissions : 2.5% of consumption or transactions via our platform and hope to capture 10% of 41million households in Nigeria at estimated monthly payment of N2500 our2.5% of transaction fees will earn us N256million monthly.

3. CHANNELS:
Our specific paths to customers includes websites, chatbots, USSD codes, social media; blogs, facebook, whatsapp, Instagram etc.

4. SOLUTIONS/UNIQUE VALUE PROPOSITIONS
- User identification
- Track electricity consumption
- Transparency in billing leading to compliance in payment by customers and loyalty.
- Store and provide verifiable data for Minigrid financiers and policymakers.

7. OUR CUSTOMERS:
- Homes, Offices, MSMEs, communities.
- The upwardly mobile and consumption data savvy who want commensurate value for their spendings on activities such as transportation, food, power, banking transactions etc.

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5. COST STRUCTURE: Our projected expense routes are Legal, Land/rent, maintenance, marketing costs, team renumeration, electrical component, mobile, web and apps development, utility fees etc. which is about N25million take off per year.

8. KEY PARTNERS:
Policymakers, Mini grid financiers and providers, power producers

9. CUSTOMER RELATIONSHIP:
Feedback forms, one on one engagement, service centres, online customer service.

10. KEY ACTIVITIES: Payment system, Customers data collection, evaluation and management, marketing

11. KEY RESOURCES: Human, IT, Financial management

Limitations and Possible Fixes

S/N	Limitation	Situation	Possible Fixes
1	Privacy and Security	Consumer details and consumption data are currently **stored in raw form on the blockchain.**	**All sensitive data will be encrypted** before storage on the blockchain.
2	Crypto-to-local Currency Exchange	Consumers **can not use their local currency to drive Ether-based transactions**, how consumers can buy energy tokens through local currency.	**Integrate with an Utility** or Third-party that specializes in and is regulated to carryout both payment processing and crypto-to-local currency exchange.
3.	Hackathon scope	Implementation scope has been limited to keeping a **transparent blockchain ledger** of transaction history and smart meter consumption.	Implement other crucial aspects of the system on the blockchain.

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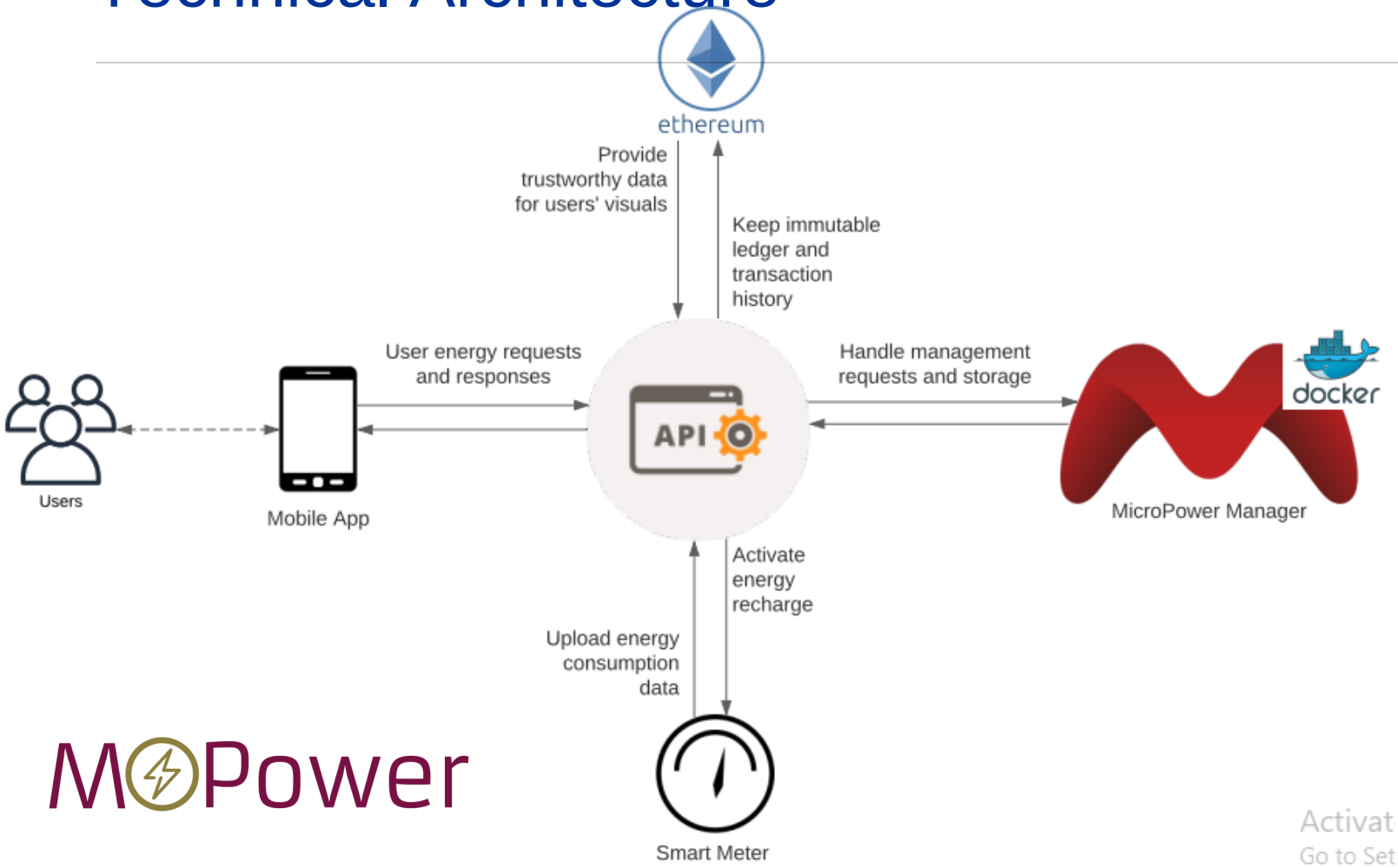
Technical Architecture



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Technical Product Roadmap

WEEK	ACTIVITY		
1	System Architecture and Product Redesign		
2			
3	Mobile App UI/UX	Central API development	Smart Contracts and Blockchain development
4			
5	App Review		
6	API Consumption	API integrations and bug fixes	Blockchain integrations and bug fixes
7			
8			
9	Deployments and bug fixes		
10			
11	Product Testing		
12			

Demo

Sustainability Planning

Earn maximal revenue by capturing at least 10% of 41 million households in Nigeria and charging 2.5% of commissions on transactions through transparent billing and consumption

Ensure customers enrollment through social media and adverts on other channels

Reinvest at least 40% of earnings on developing platforms and producing smart power appliances that are used daily by populace.

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The Team

Oluseye Oyeniyi
Energy/Business

Edah Alake
Energy/Business

Opeyemi Olabode
Blockchain/Tech

Martins Aloba
Blockchain/Tech

John Agbanusi
Blockchain/Tech

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Thank you!

Contact:

Team 5

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Follow us on Social Media:

@nesp_nigeria

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