EcoChain Pioneering Sustainable ECommerce Logistics for SMBs

Theme 4: Empowering SMBs in the Digital Ecosystem

Amazon Smbhav Hackathon 2024 – Prototype Phase Submission

Team Pravah

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Reducing Environmental Impact in E-Commerce Logistics

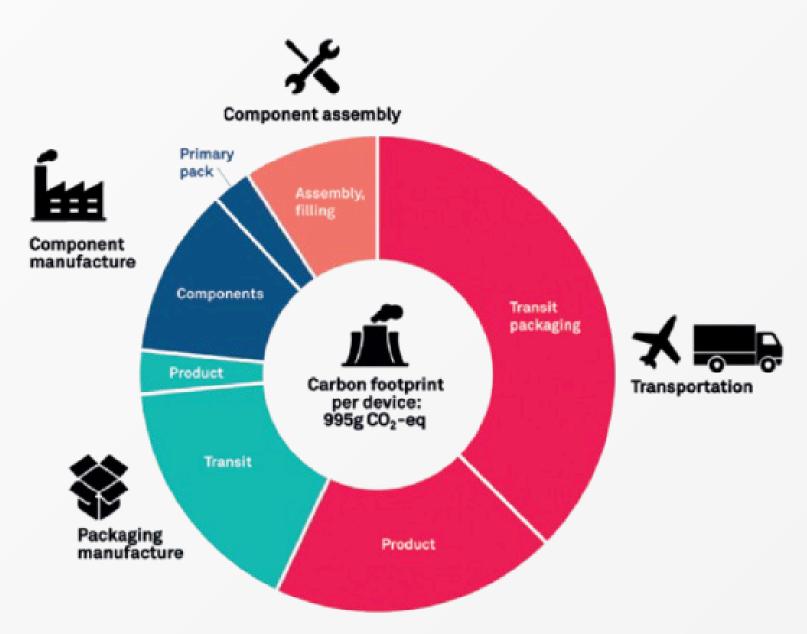
Key Points:

Ecoship Logistics:

- Lower carbon emissions.
- Adopt sustainable logistics practices.
- Promote eco-friendly packaging.

Challenges:

- High environmental impact from deliveries.
- Need for cost-efficient solutions aligned with Amazon's sustainability goals.





EcoChain: Al-Powered Green Logistics for SMBs



Key Features

01 Eco Route Optimization



Minimize emissions with Al-driven route planning.

02 Smart Packaging Exchange Network (SPEN)

Reusable packaging to reduce waste.

03 Low-Emission Courier Marketplace



Connect SMBs with green logistics partners.

04 Eco-Dashboard



Track Amazon Green Score, EcoPoints, and emissions saved.

What Makes EcoChain Unique?



Sustainability

Promotes green logistics and reduces the carbon footprint.



Gamification

Encourages adoption through Amazon Green Score and EcoPoints.



Scalability

Seamless integration into Amazon's ecosystem.



Cost-Efficiency

Enables SMBs to operate sustainably while reducing costs.



Cutting Edge Technology for Green Logistics

Frontend: Next.js, Tailwind CSS.

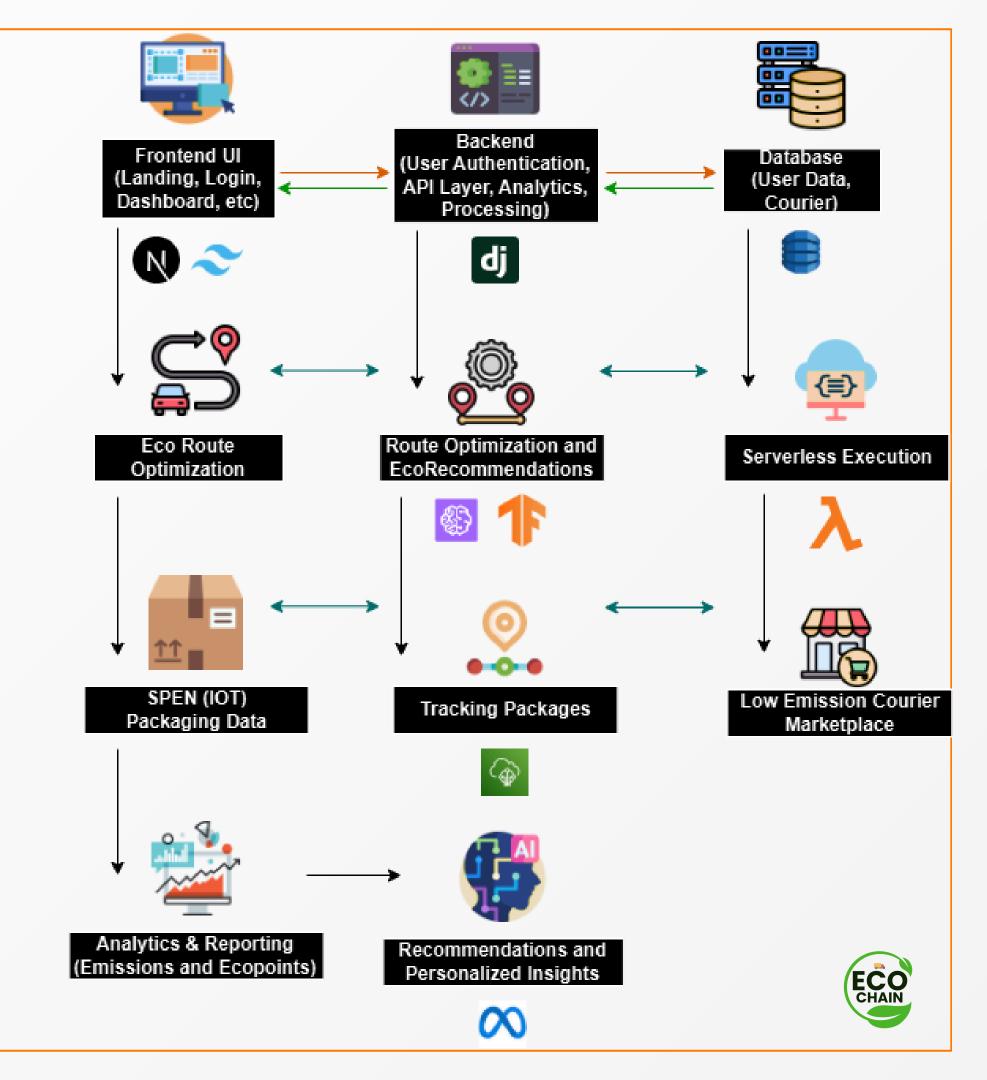
Backend: Django, AWS Lambda,

DynamoDB.

AI/ML: AWS SageMaker, TensorFlow.

IoT: AWS IoT Core for packaging

tracking.



EcoChain's Measurable Impact

45% Reduction in Carbon Emissions

Achieved through optimized routes and low-emission courier services.

60% Reduction in Packaging Waste

SPEN promotes reusability and recycling.



90% User Adoption Rate for Amazon Green Score

Gamified engagement encourages widespread use among SMBs.

70% Increase in EcoPoints Redemption

Highlights active SMB participation in sustainable practices.



EcoChain: Built for Growth



SMB-focused, addressing cost and sustainability needs.



Cloud infrastructure (AWS) ensures future growth.



Continuous improvement through Al-driven recommendations.



Thanks!

EcoChain

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