SELECTED WORK

Electric Mobility for E-commerce Delivery

An anonymised research and data-analysis case study

PROJECT TYPE	Mixed-method transport and e-commerce research. Identifying institutional and participant details have been omitted.

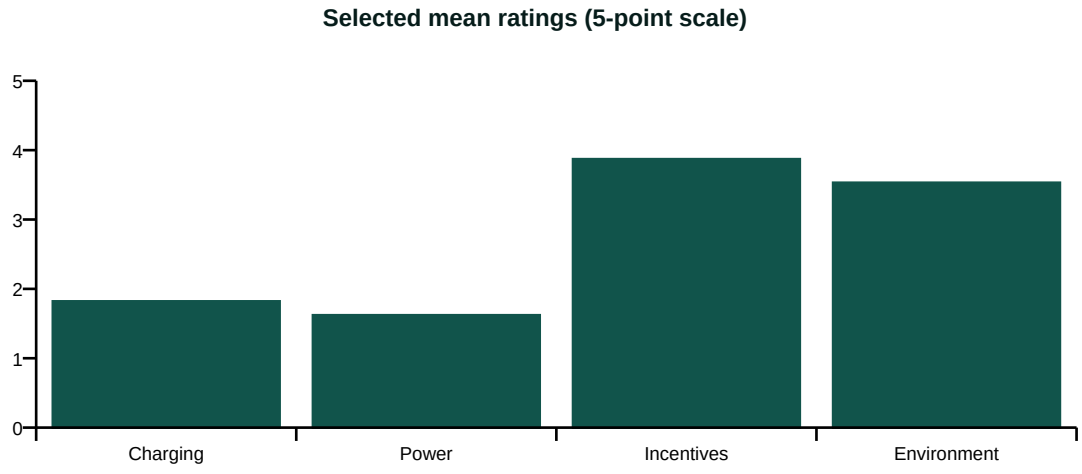
Project question

What conditions influence the adoption of electric mobility for e-commerce delivery in Lagos State, and how do infrastructure, organisational readiness and policy support shape willingness to pilot the technology?

Evidence base

Source	Coverage	Use in analysis
Questionnaire	372 valid responses	Descriptive statistics, correlation and regression
Interviews	15 participants	Context, operational barriers and policy interpretation
Literature	Transport, logistics and technology adoption	Conceptual framing and comparison

Selected findings



Infrastructure readiness was weak: charging availability recorded a mean of 1.82 and power reliability 1.62. Policy incentives recorded the strongest positive rating at 3.87, while environmental benefits recorded 3.53. A total of 61.8% of respondents indicated willingness to participate in a pilot.

Analytical output

- Correlation analysis showed a moderate positive relationship (r = 0.487).
- The regression model explained 37.4% of observed variation (R2 = 0.374).
- The overall model was statistically significant (p < 0.001).
- Quantitative findings were interpreted alongside interview evidence rather than presented in isolation.

From result to recommendation

Evidence	Interpretation	Practical direction
Low charging and power ratings	Infrastructure is a binding constraint	Begin with depot-based pilots and verified charging plans
High incentive rating	Policy support can reduce adoption risk	Prioritise targeted financing and pilot incentives
61.8% pilot willingness	Interest exists despite barriers	Use staged trials with clear performance measures

FormalPen contribution

- Data checking and analysis structure
- Statistical testing and interpretation
- Results narrative and visual summaries
- Conclusion and evidence-linked recommendations

RESPONSIBLE USE This public sample reports aggregate results only. It does not include participant records, client identity or confidential source material.