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LUMINOUS INSIGHTS

Case Study

Africa's Indigenous Automotive Innovation: A Focus on Innoson Vehicle Manufacturing and the Future of Electric Vehicle Marketing

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ABSTRACT

The African electric vehicle market is gaining momentum, with indigenous automotive manufacturers like Nigeria's Innoson Vehicle Manufacturing (IVM), Ghana's Kantanka, and Uganda's Kiira Motors driving innovation and resilience despite challenges. This study highlights the role of entrepreneurship, local systems, and government policies in shaping the industry's growth. While obstacles such as infrastructure gaps, high costs, and limited support persist, these firms hold potential for both local and global impact. Drawing particularly from the case of IVM, the findings underscore the need for aligned policies, education, and industrial strategies to foster sustainable growth and global competitiveness, emphasizing the importance of indigenous enterprise development and sustainable marketing.

KEYWORDS

Indigenous Automotive Manufacturing, Marketing strategy, Sustainable marketing in emerging markets, Sub–Saharan Africa

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1. Introduction

Entrepreneurship has emerged as a powerful catalyst for economic development across Africa, with Nigeria serving as a key example of how indigenous innovation can drive industrial transformation. This study explores the pivotal role of entrepreneurship in addressing poverty and unemployment through the proliferation of small and medium enterprises, particularly in the automotive sector. Focusing on Nigeria's Innoson Vehicle Manufacturing (IVM), the study delves into the evolving landscape of Africa's automotive industry, especially in the context of electric vehicle innovation.

While the sector faces challenges—including limited infrastructure, high entry costs, and scarce technical expertise—the resilience and vision of local manufacturers signal a promising trajectory. Crucially, the essay highlights the importance of Integrated Marketing Communication approaches in influencing consumer and societal behaviour toward the adoption of electric vehicles. By leveraging coordinated messaging across digital, traditional, and community–based platforms, Integrated Marketing Communication strategies can build awareness, reshape public perception, and promote behavioural change in favour of sustainable mobility solutions.

This case study not only underscores Africa's capacity for industrial self–determination but also emphasizes the critical role of policy support and communication strategies in advancing the continent's transition to an inclusive, green automotive future.

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Africa's economic development has been increasingly driven by the private sector, with entrepreneurship playing a leading role in fostering industrial growth and innovation. Entrepreneurship is an essential engine for global economic development and, in Africa, it plays a significant role in reducing poverty and unemployment (Boettke, 2007). Entrepreneurship development programs have proliferated across the continent, contributing to job creation and the rise of small and medium enterprises (Ahmed & Nwankwo, 2013). Entrepreneurial intentions and success can be influenced by individual traits such as creativity, passion, and self–efficacy (Biraglia & Kadile, 2017b; Rasul et al., 20170). In Nigeria, entrepreneurial activities have significantly contributed to various industries, most notably the automotive industry (Osigwe, 2017).

In this study, we examine the rise of entrepreneurship across Africa, with a specific focus on Nigeria's automotive industry and indigenous models of enterprise, evaluating the key challenges and policies that have influenced the trajectory of industrial development on the continent. The African automotive industry is undergoing significant transformation, particularly in the realm of electric vehicles. This case study explores the evolving landscape of electric vehicle manufacturing in Africa, with a spotlight on Nigeria's IVM (Okorie, 2024). The study also highlights Uganda's Kiira Motors and Ghana's Kantanka Automobile, assessing the challenges and opportunities these indigenous firms face in driving Africa's automotive industry forward.[1]

2. Literature Review

The adoption of electric vehicles in Nigeria is still in its early stages but is gaining momentum. Notable developments include the establishment of Nigeria's first electric vehicle charging station and the launch of the country's first locally assembled EV, the Hyundai Kona, in 2021 (Ajayi, 2021). Despite these milestones, the electric vehicle market in Nigeria and across Africa, faces several challenges, including high entry costs, inadequate infrastructure, and limited expertise. However, firms like IVM are positioning themselves as key players in the sector, striving to meet the unique demands of the African market (Okorie, 2024).

The IVM case provides some insight into the role home–grown entrepreneurship in nurturing sustainable economic progress in a relatively underreported context such as Nigeria. In this study we highlight the significance of such resilience in the light of the sustainable marketing debate. Sustainable marketing scholarship situates it as a paradigm shift towards integrating a sustainability orientation with marketing with a view to creating value, not only for corporate profits but also for the planet and the people (Belz & Peattie, 2012; Kortam & Mahrous, 2020; Themistocleous, 2024). While the traditional marketing focuses on the short–term gains of the corporation through the impulsive satisfaction of consumers, sustainable marketing recognises ecological and societal concerns as critical components of a firm's strategy for long–term sustainability. Thus, this study utilises IVM's expansion into the electric vehicle space to demonstrate active deployment of a sustainable marketing ethos within the sub–Saharan African (SSA) context. Specifically, focused on marketing strategies, consumer engagement, policy alignment, and branding approaches that combine to boost sustainable mobility adoption across emerging markets.

2.1. The Nigerian Automotive Industry: Policies and Challenges

The Nigerian automotive industry has historically been a significant player in the industrialization agenda. However, challenges such as foreign dominance, inadequate infrastructure, and inconsistent government policies have impeded its growth (Proshare, 2013). The automotive policy introduced by the National Automotive Council (NAC) aimed to reduce vehicle imports by encouraging local production. While the policy showed promise, its implementation faced challenges (National Automotive Council, 2014; Omisore, 2019). There

[1] In Uganda, Kiira Motors Corporation (KMC) emerged from a university project and has since evolved into one of Africa's most ambitious automotive ventures. The company is backed by the Ugandan government and has developed the Kiira electric vehicle SMACK, a hybrid electric sedan designed for local conditions. Similarly, Ghana's Kantanka Automobile, founded by Apostle Kwadwo Safo, has focused on assembling passenger vehicles. Despite limited government backing, Kantanka is pushing for commercial acceptance and remains a testament to African ingenuity in the automotive space.

are, however, examples of resilience in the industry as Innoson Motors, Nigeria's first indigenous car manufacturer, has succeeded in creating a brand recognized locally and internationally despite the foreign–dominated market (Osigwe, 2017).

One of the most prominent models of entrepreneurship in Africa is the indigenous Igbo system in Nigeria, known as the Igba–Boi apprenticeship system (Agu et al., 2022; Igwe et al., 2020; Iwara et al., 2019; Nkamnebe & Ezemba, 2020a; Nkamnebe & Ezemba, 2020b; Nnonyelu, 2020; Oyewunmi et al., 2020; Udeh, 2022). This system demonstrates the cultural basis of entrepreneurship, where young people are mentored by established business owners, learning the intricacies of trade and eventually establishing their businesses. Indigenous entrepreneurship models provide a template for economic development that is rooted in traditional practices. This stands in contrast to Western forms of entrepreneurship and fosters sustainable local businesses by drawing on social capital and community networks (Colbourne, 2017). Table 1 summarises key insights from the provided literature, linking entrepreneurship and industrial development in Africa with a focus on education, indigenous models, and policy impacts (see Bahago et al., 2024).

The existing literature offers a wide range of perspectives that view entrepreneurship and entrepreneurs as key drivers of development. These perspectives are largely influenced by the unique passion entrepreneurs display in transforming societies through innovative ideas and bold creativity. Since the 18th century, scholars have been investigating the influence of specific traits on entrepreneurial success. Over time, a wealth of literature from economics, psychology, and management has emerged, analysing the characteristics and traits of entrepreneurs (Kerr et al., 2018; Salmony & Kanbach, 2022). In a comprehensive meta–analysis spanning seventeen years, Kerr et al. (2018) reviewed the fundamental personality traits of entrepreneurs, including the Big–5 model, self–efficacy, innovativeness, locus of control, need for achievement, risk attitudes, and entrepreneurial goals and aspirations. However, due to the diverse nature of entrepreneurship, there is no universal agreement among researchers on the exact impact of these traits and how they influence firm performance.

Studies also show that entrepreneurial education programs increase business success rates by equipping individuals with the necessary skills and mindset for business ownership (Dickson et al., 2008; Dumitrasciuc, 2019) . Educational institutions in Nigeria and other African countries are increasingly incorporating entrepreneurship programs into their curriculums to inspire a new generation of entrepreneurs (Madichie et al., 2008). Institutional support is equally important. Brautigam (1997) emphasizes that successful industrial development in Africa requires strong state institutions that support private enterprises. In the absence of robust state mechanisms, indigenous systems such as the *Igba–Boi model* have emerged as substitutes, providing the necessary framework for industrial development in the absence of formal support structures.

2.2. *Policy Impact Analysis of Selected Works*

The following articles provide insights into sustainable marketing strategies for electric vehicles in West Africa, particularly in Ghana and Nigeria cutting across Infrastructure gaps, local manufacturing policies, and alignment with energy policy – with policy implications highlighted in Table 2.

1. **Infrastructure Gaps Demand Coordinated Policy Action**
   Ackaah et al. (2025) highlight a critical finding: the lack of charging infrastructure directly limits electric vehicle user mobility in Ghana, especially outside urban centres. This gap points to the urgent need for national electric vehicle infrastructure policies—including investment incentives, zoning policies for public chargers, and utility regulation for EV–grid integration.

2. **Local Manufacturing Policies Enable Industrialization**
   Agberebi (2024) and Okorie (2024) both emphasize Nigeria's milestone: the unveiling of Innoson's locally produced electric vehicles. Nigeria's Automotive Industry Development Plan is bearing fruit, showing that industrial policy, when tied to green

Table 1: Highlights from the Literature

Author/Year	Key Focus	Key Insights
Hasan et al. (2024)	Understanding of the intention to purchase electric vehicles in India and incorporates price value and environmental concern into the Theory of Planned Behaviour model	The study offers insights to practitioners to encourage the use of electric vehicles and, hence, contributes to the 2030 SDGs as the use of electric vehicles would help to mitigate climate change, improve human health, and enhance the well–being of society.
Ahmed & Nwankwo (2013)	Entrepreneurship Development in Africa	Entrepreneurship is vital for job creation and poverty alleviation in Africa.
Nkamnebe & Ezemba (2020b)	Indigenous Entrepreneurship Models (Igba–Boi Model)	Indigenous Igbo apprenticeship system fosters entrepreneurial learning through mentorship.
Proshare (2013)	Nigerian Automotive Industry	Nigeria's automotive industry faces challenges of foreign dominance and infrastructural issues.
National Automotive Council (2014)	Automotive Industry Development Plan	The Nigerian government's automotive policy aims to reduce car imports and stimulate local production, but implementation has been problematic.
Osigwe (2017)	Innoson Motors and Indigenous Industry Growth	Innoson Motors is a success story in Nigeria's automotive sector, providing locally manufactured vehicles in a market dominated by imports.
Brautigam (1997)	Institutional Support for Industrial Development in Africa	Strong state institutions are necessary for industrial growth, but in their absence, indigenous systems like Igba–Boi have provided alternative pathways for economic development.
Biraglia & Kadile (2017a)	Entrepreneurial Passion and Creativity	Creativity and passion are key drivers of entrepreneurial success, helping individuals to navigate challenges and stay motivated.
Madichie et al. (2008)	Cultural Determinants of Entrepreneurship	Cultural factors, especially in sub–Saharan Africa, play a crucial role in shaping entrepreneurial emergence and success.
Dickson et al. (2008) and Dumitrasciuc (2019)	Role of Education in Entrepreneurship	Entrepreneurial education positively impacts business success by equipping individuals with the necessary skills and knowledge.
Colbourne (2017)	Indigenous Entrepreneurship and Hybrid Ventures	Indigenous and hybrid entrepreneurship models provide a sustainable way of business development rooted in local traditions and social capital.
Boettke (2007)	Entrepreneurial Responses to Poverty	Entrepreneurship offers a pathway out of poverty by providing opportunities for self–employment and innovation.

Source: Compiled by authors

Table 2: Comparative Studies and Policy Implications

Article	Contribution	Policy Implications
Ackaah et al. (2025)	Deep empirical analysis of Ghana's electric vehicle charging situation.	Governments must treat *charging networks as public utilities*–subsidizing their rollout just as they did for mobile networks in the past.
Agberebi (2024)	Official coverage of Innoson's recent electric vehicle debut.	Minimal technical/infrastructure critique. To sustain momentum, policymakers must create *fiscal incentives* (tax holidays, duty waivers) for electric vehicle component manufacturers and enforce *local content thresholds*.
Ajayi (2021)	Historical context on Nigeria's electric vehicle development.	Provides a valuable context for understanding how electric vehicle efforts began in Nigeria, but needs updated follow–up information.
TechPoint Africa (2025)	Current electric vehicle fleet metrics.	Policymakers need to introduce *national electric vehicle standards*, including vehicle safety, consumer warranties, battery disposal, and charger interoperability protocols.
Okorie (2024)	Industry analysis and future positioning.	Policymakers must create *fiscal incentives* (tax holidays, duty waivers) for electric vehicle component manufacturers and enforce *local content thresholds*.

innovation, can spur job creation and import substitution.

3. **Adoption is Outpacing Regulatory Frameworks**
   The anonymous (TechPoint Africa, 2025) article reports 20,000 electric vehicles on Nigerian roads, a surprising figure given limited formal infrastructure or consumer protections. This indicates that market adoption is advancing ahead of policy frameworks—a situation that can lead to safety concerns, consumer dissatisfaction, and unequal access.

4. **Electric vehicle Policy Must Align with Energy Policy**
   With grid instability in Nigeria, any electric vehicle push must be coupled with a renewable energy strategy (e.g., solar microgrids, battery swaps). Ackaah et al. (2025) also emphasize this in the Ghanaian context—electric vehicle policies must integrate with clean energy and urban mobility policies. It is argued that national electric vehicle policies must embed energy transition plans—incentivizing solar electric vehicle charging stations and encouraging net metering.

3. Methodology

The primary focus of this study is on IVM and its transition towards electric vehicle manufacturing. The article by Yunus Kemp highlights the growing momentum be-

hind electric vehicles in Africa, focusing particularly on South Africa and Kenya (see Kemp, 2024). It emphasizes how private sector investment and government incentives are fuelling the growth of electric vehicle infrastructure, especially charging stations. It covers major initiatives, including off–grid solar charging stations, collaborations with Chinese companies, assembly plants, and national policies encouraging electric vehicle adoption (Kemp, 2024). Both countries are actively addressing grid challenges, with special attention given to public transport electrification and the creation of green jobs.

This qualitative study draws upon previous similar studies (see Table 3) touching upon the challenges, prospects, and opportunities. For example, the *Systematic Literature Review on in Vehicle–To–Grid Technology Acceptance for electric vehicle Users* (Liu et al., 2025), and Driving the electric vehicle Agenda in Nigeria (Farinloye et al., 2024), leveraging sustainability, inclusivity, and technology of transformative transport services through marketing management (Mogaji, 2025), and innovations in small and medium automobile companies Osanebi (2017).

For illustrative purposes, Farinloye et al. (2024), in their article on "*The Challenges, Prospects and Opportunities" of "Driving the electric vehicle Agenda in Nigeria*," investigated the unique challenges and opportunities associated with electric vehicle adoption in Nigeria, with the aim to fill research gaps concerning electric vehicle adoption in developing nations. That study employed a qualitative approach grounded in phenomenological theory, and conducted interviews with 31 stakeholders, including industry professionals, academics, policymakers, and practitioners, to gather insights into the Nigerian electric vehicle landscape. The authors identified several challenges hindering electric vehicle adoption in Nigeria, to include limited charging infrastructure, heavy reliance on fossil fuels, affordability issues, unequal access to energy, and consumer scepticism. Conversely, opportunities included potential cost savings, government support, adaptable manufacturers, and the utilization of renewable energy sources.

The methodological considerations of electric vehicle in Africa have now been bolstered with additional resources. For example, Zhao et al. (2005) used a global comparative review analysing government policies, market penetration data, and incentive structures across major regions including the US, China, and Europe. Wellings et al. (2021) used a multidisciplinary review combining literature analysis, expert insights, and systems thinking to explore factors such as technological advancements, policy influence, infrastructure, economics, and consumer behaviour. Wolfram & Lutsey (2016) reviewed the cost trajectories and emissions implications of electric vehicle technologies through a meta–analysis of technical literature on electric vehicle cost components (especially batteries) and lifecycle emissions comparisons. In their study on "advances in consumer electric vehicle adoption research," Rezvani et al. (2015) relied on a systematic literature review covering empirical studies in consumer behaviour, technology adoption, and innovation diffusion related to electric vehicles.

Likewise, Mauksch et al. (2020) relied on a systematic literature review of expert identification techniques in foresight studies – with implications for the electric vehicle market. Gnann et al. (2018) in their study on "what drives the market for plug–in electric vehicles," undertook a review of international plug–in electric vehicle market diffusion models. Indeed, these authors drew upon a comparative analysis of 40 plug–in electric vehicle market diffusion models across different countries. Similarly, Coffman et al. (2017), in their study on "electric vehicles revisited," reviewed factors that affect adoption. These authors synthesised the literature on factors influencing electric vehicle adoption by undertaking a comprehensive literature review of peer–reviewed studies on electric vehicle adoption factors. Finally, Ajanovic (2015) discussed "the future of electric vehicles: prospects and impediments" with an evaluation of the future market potential of electric vehicles, emphasizing economic and environmental factors, by relying on an analytical review of existing literature and market data, focusing on cost comparisons and policy measures across countries.

The main focus is specifically on IVM and we only comment on other players such as Max as an indication of other players coming onstream. Indeed,

Table 3: Methodological Approaches to Electric Vhicles Research

Article	Purpose	Context	Methodology	Key Findings	Conclusions
Ajanovic (2015)	This study explores prospects and impediments for electric vehicles.	Technological optimism for electric vehicles contrasts with slow market growth.	Review of market data, technical development, and policies.	High costs, infrastructure gaps, and market inertia are major barriers.	Tech advancements alone will not suffice—policy and systemic support needed.
Xue et al. (2021)	Review global incentives and plug–in electric vehicle penetration.	Incentives are central to electric vehicle market growth.	Global comparative policy analysis.	Strong correlation between incentives and early market growth.	Policies must evolve from incentives to sustainable, systemic frameworks.
Osanebi (2017)	Assesses how innovation affects small and medium automobile companies' competitiveness.	Policymakers and industry leaders should support SMEs with funding, policies, and training for innovation.	Quantitative analysis of two SMEs: Innoson Motors (Nigeria) and UAB Autoja (Lithuania).	Innovation enhances product quality, safety, fuel efficiency but faces resource and skill challenges.	Innovation is critical for SME growth; recommends tech investment and skill development.
Coffman et al. (2017)	Review key adoption factors for electric vehicles.	electric vehicles are gaining attention in environmental policy.	Systematic literature review.	Adoption driven by income, incentives, charging access; hindered by range anxiety and cost.	Multi-factor approach is essential to design effective policies.
Gnann et al. (2018)	Analyze international plug–in electric vehicle market diffusion models.	Diffusion trends vary globally.	Comparative analysis of diffusion models.	Policies, tech learning curves, and social dynamics shape adoption models.	Tailored, region-specific diffusion models are needed.
Pelegov & Pontes (2018)	Review EV–driven battery industry success.	Battery tech is a key enabler of electric vehicle success.	Market and trend analysis.	Cost drops, localization, and vertical integration observed.	Battery innovation will shape the entire electric vehicle ecosystem.

Continued on next page

Table 3 – continued from previous page

Article	Purpose	Context	Methodology	Key Findings	Conclusions
Wellings et al. (2021)	Analyze factors shaping electric vehicle market future.	EV's impact tech, policy, economics, environment.	Systems thinking and literature synthesis.	Feedback loops between infrastructure, consumer trust, and policy.	Holistic and coordinated approaches are needed.
Farinloye et al. (2024)	Explore challenges, prospects, and opportunities for electric vehicle adoption in Nigeria.	Guides policymakers, investors, and researchers on electric vehicle adoption strategies in developing nations.	Qualitative study using interviews with 31 stakeholders (industry, academia, policymakers).	Major challenges include poor infrastructure, cost barriers, energy access issues; opportunities exist in renewable energy, cost savings, and policy support.	Need for awareness campaigns, better infrastructure, localized tech solutions, and strong government policies.
Mogaji (2025)	Introduce the concept of Transformative Transport Services integrating sustainability, inclusivity, and technology.	Provides frameworks for academics (research) and practitioners (design) to guide transformative transport development.	Conceptual paper based on Transformative Service Research (TSR) and Service–Dominant Logic (SDL).	Highlights value co–creation, consumer–centric sustainable transport, and evolving marketing roles.	Marketing management is key to achieving sustainable and inclusive transport innovation.

Note: This table is a compilation and structured summary of all the articles, categorized by purpose, context, methodology, findings, and conclusions.

one article (see Okorie, 2024) recently argued that Nigeria already has up to six Nigerian electric vehicle companies (e.g., MAX, founded by Adetayo Bamiduro and Chinedu Azodoh; Jet Motor Company; Savenhart Investment Limited Technology (Siltech), founded by Tolu Williams; Possible electric vehicles, founded by Mosope Olaosebikan; and Electric Motor Vehicle Company.

4. Case Study: Innoson Vehicle Manufacturing – A Modern Testament to the Igbo Apprenticeship Model

The Indigenous Igbo Apprenticeship System (IAS), known locally as Ìgba Bọ̀ị, has long served as a powerful socio–economic framework in Southeastern Nigeria. This traditional model, rooted in mentorship, skills transfer, and community–based economic development, has created generations of successful entrepreneurs. One of the most iconic beneficiaries of this system is Innocent Ifediaso Chukwuma, the founder of IVM—Nigeria's first indigenous car manufacturing company. Established in 2007 by Innocent Chukwuma, IVM began with the production of buses and trucks, later expanding into sedans and SUVs designed specifically for African conditions. The company's core philosophy is based on affordability, durability, and innovation. IVM also aims to be a key player in the development of electric vehicles in Africa. Crucially, IVM's foundation and growth are deeply rooted in the Ìgba Bọ̀ị system—a structured informal apprenticeship system where a young person serves under an experienced business mentor for several years, acquiring practical entrepreneurial skills and discipline.

IVM reflects the success of its founder, Chukwuma, an industrialist. During an in–depth interview with the authors, Chukwuma attributed his success to personal and entrepreneurial traits honed during his apprenticeship, including: simplicity and practical wisdom, financial skills regarding low–margin, high–volume strategies, and strategic innovation that involved local adaptation of Japanese technology via Taiwanese manufacturers. These traits, learned through experiential learning, echo the argument that the Igbo apprenticeship system is a viable alternative to formal education for entrepreneurial development.[2] The conglomerate includes: IVM – the largest indigenous automobile manufacturer in Africa; General Tyres and Tubes Co. Ltd – producers of tires and tubes; Innoson Nigeria Ltd – motorcycle manufacturing; and Innoson Tech Industries Ltd – Africa's largest plastic manufacturing facility.

4.1. *Marketing Strategies Influencing electric vehicle Adoption at Innoson*

IVM's marketing strategies, which incorporate electric vehicles within the context of a sub–optimal transportation system, undoubtedly speak eloquently to their bold engagement with sustainable marketing principles. This entails deliberately adopting Integrated Marketing Communication frameworks with coordinated messaging to broaden the adoption of sustainable mobility solutions in SSA. This is achieved by crafting messages that reflect core sustainable marketing principles such as local market tailoring, penetration pricing strategy, community–based promotional activities, sustainable marketing narratives, and digital platforms.

First, tailoring IVM's marketing to meet local market conditions and needs is central to the company's activities. It addresses both functional and emotional aspects of consumer value by communicating the affordability, durability, and suitability of its electric vehicle products for SSA road conditions. This is achieved by highlighting the low maintenance costs, resistance to harsh terrains, and energy efficiency of their electric vehicles, strategically positioning them as accessible innovations that align with the daily realities of African consumers. This is consistent with sustainable marketing literature that pushes for the localisation of sustainability messages to reflect the socio–economic contexts of target markets

[2]Chukwuma's own journey began with a modest start. Sent by his elder brother, a successful businessman, to undergo apprenticeship in the bustling spare parts markets of Nnewi, Innocent Chukwuma immersed himself in hands–on business education. Under the mentorship of Mr. Romanus Eze Onwuka (Rojenny), Chukwuma reports that he was taught the values of integrity, hard work, frugality, and business acumen. He notes that his experience of the apprenticeship system not only transferred business skills but also instilled character and leadership values—hallmarks of successful Igbo entrepreneurs. Chukwuma only had a secondary school education, and yet, he was able to grow his business from a spare parts trader into a diversified industrial company.

(Belz & Peattie, 2012).

Second, electric vehicles are considered more expensive than conventional vehicles, which hinders their adoption among lower–income consumers Lebeau et al. (2013) and Muzir et al. (2022). This supposition, coupled with a weak infrastructure base, tends to mystify the adoption of electric vehicles in Nigeria and other countries in SSA. IVM's penetration pricing strategy demystifies the existing orthodoxy by deliberately dismantling traditionally associated barriers to electric vehicle adoption. Interestingly, used vehicles, which significantly contribute to pollution and climate change, are mostly utilised in the region due to their relatively low purchase cost (United Nations Environment Programme, 2020). This makes IVM's pricing approach not just a strategy for market entry but, perhaps most importantly, a critical macromarketing strategy aimed at democratising access to green technology. Thus, by lowering prices, IVM marketing facilitates broader adoption of electric vehicles in Nigeria and demonstrates the potential for their adoption in emerging market contexts, reinforcing the social dimension of sustainability by promoting inclusivity in the technological transition.

Moreover, IVM's marketing communications consistently combine sustainability narratives that emphasize authenticity through national pride, industrial empowerment, and environmental stewardship. By this, IVM uses well–crafted messages to position their electric vehicles not only as a green product, which may not appeal to price–sensitive buyers in an emerging market context, but also as a product that conveys social concerns such as self–reliance, job creation, and innovation in technological leadership. Such a multi–layered messaging strategy is consistent with sustainable marketing communication strategies, where environmental, social, and economic messages are integrated to create holistic brand imagery to attain a broader tone. Muniz et al. (2019) highlight that modern consumers increasingly demand brands to be socially responsible, leading firms to invest significantly in aligning their brand's value proposition with social and environmental sustainability, ultimately creating a beneficial situation for businesses and society. Furthermore, incorporating environmental and economic considerations into branding strategies is critical for consumer acceptance, as it encourages a holistic understanding of a brand's commitment to sustainability (Choi & Ng, 2011).

In essence, IVM marketing strategies for electric vehicles represent an emerging sustainable marketing in SSA – one that prioritises affordability, local relevance, social empowerment, and adaptive communication techniques to foster sustainable consumption behaviours. IVM's strategy is designed not just to compete, but to disrupt. His goal is to flood the market with high–quality, affordable new vehicles, thereby phasing out "tokunbo" (used) cars. With a vision that includes local electric vehicle production, IVM is positioning itself as a future–forward brand aligned with global sustainability goals. IVM embraced strategies aligned with grassroots realities: *Penetration Pricing* – by offering affordable prices to capture market share. *Deconstructed Automation* – Rather than fully automating, IVM uses semi–manual processes to create local jobs, reflecting a socially conscious industrial strategy. *Product–Market Fit* – by understanding consumer desires, especially for affordable SUVs, IVM created products that rival imported second–hand vehicles.

5. Conclusions and Implications

The story of IVM is a powerful testament to the enduring relevance of the IAS model. Innocent Chukwuma's rise from a micro–trader to a national industrial icon validates the effectiveness of experiential learning, community mentoring, and Indigenous knowledge systems. In an age where formal education often overshadows informal systems, the Ìgba Boj model proves that culturally rooted practices can build resilient, visionary entrepreneurs capable of transforming industries.

Entrepreneurship has emerged as a powerful catalyst for economic development across Africa, with Nigeria serving as a key example of how indigenous innovation can drive industrial transformation. This essay explores the pivotal role of entrepreneurship in addressing poverty and unemployment through the proliferation of small and medium enterprises, particularly in the automotive sector. Focusing on Nigeria's IVM, this study delved into the evolving landscape of Africa's automotive industry, especially in the

context of electric vehicle innovation. It also considers regional counterparts such as Uganda's Kiira Motors and Ghana's Kantanka Automobile, analysing their contributions to a growing ecosystem of African automotive entrepreneurship. While the sector faces challenges—including limited infrastructure, high entry costs, and scarce technical expertise—the resilience and vision of local manufacturers signal a promising trajectory.

While the automotive industry in SSA faces significant hurdles, strategic policies and investments in local manufacturing and infrastructure can pave the way for a more robust and sustainable market. The trajectory of SSA's automotive industry hinges on the success of indigenous manufacturers and supportive policies. As companies like Kiira, Innoson, and Kantanka continue to innovate, there's potential for significant growth in local manufacturing, job creation, and technological advancement. Collaborative efforts between governments, private sector stakeholders, and international partners will be crucial in driving this transformation.

Significantly, this study highlights the importance of strategic approaches in influencing consumer and societal behaviour toward the adoption of electric vehicles. By leveraging coordinated messaging across digital, traditional, and community–based platforms, marketing strategies can build awareness, reshape public perception, and promote behavioural change in favour of sustainable mobility solutions. This case study not only underscores Africa's capacity for industrial self–determination but also emphasizes the critical role of policy support and communication strategies in advancing the continent's transition to an inclusive, green automotive future.

Ultimately, the study has both theoretical and practical implications – notably the need for a more systemic view of the subject matter, the need for tailored policies and infrastructure development, appropriate marketing communications, and finally, the value of collaborations and partnerships with a range of stakeholders viz:

1. *Adopt a Systemic View*: From a theoretical lens, our review of studies in Table 2, emphasize the interdependence of technology, infrastructure, policy, and consumer perception.
2. *Design Tailored Policies*: From a policy implications lens, a one–size–fits–all incentives or regulations will not work; national/regional customization is key.
3. *Strengthen Infrastructure*: Still on policy, charging access is consistently noted as a primary barrier and enabler.
4. *Enhance Public Marketing Communications*: Marketing and consumer education should address emotional, psychological, and economic concerns.
5. *Encourage Foresight and Collaboration*: Scenario planning, multi–stakeholder engagement, and systems thinking are crucial to futureproof strategies.

Table 4 provides some insight into the policy areas for intervention and sustainable marketing opportunity implications for further research enquiry.

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Table 4: How electric vehicle Policy Supports Sustainable Marketing

Policy Area	Sustainable Marketing Opportunity
Infrastructure development	Brands can market "freedom of movement" and convenient charging as core benefits, especially to urban millennials.
Local manufacturing policies	Promotes eco–nationalism: "Proudly Nigerian" or "Built for Ghana." This resonates with national pride and local economic impact.
Environmental standards and consumer protection	Enables trust–based marketing: brands can emphasize safety, certified batteries, and regulatory approval.
Green energy integration	Encourages dual branding of electric vehicles and solar tech: "Drive green, charge green." A clear fit for sustainability–focused consumers.

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