

Corporate Strategy and Organisational Resilience in Post-Conflict Economies: A Comparative Firm-Level Analysis of Africell and Orange Mobile Companies Limited in Sierra Leone

Steven Gbongbor Mansaray^{1,2,3}, Emmanuel Josiah^{1,4}, Alfred Mansaray^{5,6}, Mohamed Vandy^{1,7}, Emmanuel Kamara^{1,7}, David Kamara^{1,8}

¹School of Public Administration (SPA), University of Electronic Science and Technology of China (UESTC).

²Business School, University of International Business and Economics (UIBE), Beijing, China.

³Division of Extra-Mural Studies, Fourah Bay College (FBC), University of Sierra Leone.

⁴Department of Human Resources Management, Ernest Bai Koroma University of Science and Technology (EBKUST), Sierra Leone.

⁵School of Computer Science and Engineering, University of Electronic Science and Technology of China (UESTC).

⁶Limkokwing University of Creative Technology, Sierra Leone.

⁷University of Makeni (UniMak), Sierra Leone.

⁸University of Management and Technology (UNIMTECH).

Received: 17 June 2026

Revised: 21 June 2026

Accepted: 23 June 2026

Published: 26 June 2026

Abstract - This study examines the strategic pathways through which mobile network operators achieve organisational resilience in post-conflict economies, using a comparative analysis of Africell and Orange Sierra Leone. Employing a mixed-methods design integrating quantitative operational data (2019–2025) and semi-structured expert interviews (N=24), we analyse how distinct corporate strategies influence resilience outcomes. Panel data regression (random-effects model) reveals that infrastructure investment diversification ($\beta=0.42$, $p<0.01$) and community-embedded strategic initiatives ($\beta=0.38$, $p<0.05$) are significant predictors of operational continuity during exogenous shocks, controlling for firm age and market share. Orange's €23 million disaster-recovery data centre investment corresponds to 99.97% network availability ($SD=0.08$), while Africell's solar energy transition (230kWp) and community foundation approach yield 99.92% availability ($SD=0.11$). The difference is statistically non-significant ($t=1.24$, $p>0.05$). Robustness checks using alternative crisis periodisation confirm the stability of these estimates. We extend the strategic fit perspective on organisational resilience (Zhou, Huang & Liu, 2025) by developing the Post-Conflict Adaptive Resilience (PCAR) framework, which integrates infrastructure redundancy, community legitimacy, and political astuteness as co-constitutive resilience capabilities. Our findings suggest that divergent strategic orientations, technocratic resilience (Orange) versus community-embedded resilience (Africell), can achieve equivalent functional outcomes through distinct configuration pathways, challenging one-size-fits-all prescriptions for post-conflict business strategy.

Keywords - Organisational Resilience, Corporate Strategy, Post-Conflict Economies, Mobile Telecommunications, Sierra Leone, Strategic Fit, ADAPTIVE Capacity.

I. INTRODUCTION

The intersection of corporate strategy and organisational resilience in post-conflict economies represents one of the most consequential yet undertheorised frontiers in strategic management research. Civil war and its aftermath fundamentally restructure institutional environments, creating what scholars term “areas of limited statehood” where traditional governance mechanisms are weakened or absent (Azizi, Börzel & Hansen, 2021; Hanekom & Luiz, 2017). For multinational enterprises operating in such contexts, the challenge transcends conventional risk management; it demands strategic reconfiguration of core capabilities to navigate persistent uncertainty, fractured infrastructure, and the legacy of social fragmentation.

Sierra Leone is a key country in which these dynamics can be explored. The nation then went through an extended reconstruction period that lasted for nearly ten years and was marked by the failure to rebuild institutions, the economic liberalisation, and the restoration of basic services (Vision of Humanity, 2025), with the loss of around 50,000 lives and displacement of more than two million people during the period of civil war (1991-2002). The telecommunications industry became an unexpected source of growth, and mobile connectivity became the economic infrastructure and a means of mending the social trust between warring sides. The wider digital transformation journey is also present in other areas of Sierra Leone's economy with emerging evidence showing that the use of technologies like cloud computing is linked to business benefits that are perceived by organisations, even though capability and acceptance challenges remain.

This shift is also illustrated in the capabilities of the human capital, with recent evidence coming from Sierra Leone, showing that digital innovation skills are increasingly influencing preparedness for engaging in technology-enabled economic activity, even for emerging entrants to the labour market (Kamara et al., 2025). But, in addition to connectivity, trust is also generated from reliable digital networks, which affect the inclination of consumers to engage in new online transactions and the security and protection against fraud in their interactions with a digital payment system (Koroma et al., 2026). The Institute for Economics and Peace recorded that in 2003, Celtel's pioneering business-peacebuilding partnership with Search for Common Ground (SfCG) illustrated how commercial expansion could directly support positive peace by boosting the connectivity between regions and facilitating the free flow of information (Vision of Humanity, 2025). This legacy had made the telecom industry the focal point of Sierra Leone's post-conflict development.

Contemporary Sierra Leone's mobile market is dominated by two principal operators: Orange Sierra Leone, holding approximately 51% market share with 3.04 million subscribers, and Africell, which maintains a substantial presence across four African markets, including Sierra Leone, Angola, DRC, and The Gambia (Ecofin Agency, 2025; Africell, 2025a). These firms represent divergent strategic traditions: Orange, a French-headquartered global telecommunications incumbent operating across 26 countries, brings substantial capital resources and institutional backing; Africell, a US-owned pan-African operator, has cultivated an identity as locally responsive and community-integrated. Their co-existence in Sierra Leone's fragile institutional environment offers a rare quasi-experimental setting for examining how different corporate strategy configurations produce organisational resilience under comparable exogenous constraints. Despite growing scholarly attention to organisational resilience, significant gaps persist.

First, the literature has predominantly focused on resilience in stable institutional contexts or acute crises such as the COVID-19 pandemic (Zhou, Huang & Liu, 2025; Williams & Shepherd, 2016), with limited attention to the distinctive challenges of post-conflict environments where institutional fragility is chronic rather than episodic. Second, existing comparative studies of firm strategy in conflict zones have largely examined exit-versus-stay decisions (Dai, Eden & Beamish, 2013, 2017, 2023) or political strategy dynamics (Belhoste & Dimitrova, 2025; Liedong, Rajwani & Mellahi, 2017), but have not systematically compared how different strategic configurations within the same sector produce differential resilience outcomes. Third, the strategic fit perspective on resilience (Zhou et al., 2025) has not been extended to post-conflict contexts where environmental contingencies differ fundamentally from those in market-led or state-led institutional frameworks. This study addresses these gaps through a comparative firm-level analysis guided by the following research question: How do distinct corporate strategy configurations influence organisational resilience outcomes for mobile network operators in post-

conflict Sierra Leone? We extend the strategic fit framework by identifying context-specific capabilities, infrastructure redundancy, community legitimacy, and political astuteness that mediate the relationship between corporate strategy and resilience in fragile institutional environments.

II. LITERATURE REVIEW

A. Theoretical Foundations of Organisational Resilience

Organisational resilience has emerged as a central construct in strategic management, yet conceptual fragmentation persists across capability-based and process-based perspectives. The capability view conceptualises resilience as an organisational attribute comprising absorptive, adaptive, and restorative capacities (Duchek, 2020; Hillmann & Guenther, 2021). From this perspective, resilient organisations possess slack resources, strategic flexibility, and change capacity that enable them to withstand and recover from disruptions (Brito, Oliveira & Leal, 2022; Iftikhar, Purvis & Giannakis, 2021). The process-based view, conversely, emphasises resilience as a dynamic sequence of responses including crisis perception, sensemaking, resource reconfiguration, and learning (Jiang, Cantarello & Pandza, 2021; Williams, Gruber, Sutcliffe, Shepherd & Zhao, 2017; Yuan, Wu & Liao, 2022).

Zhou et al. (2025) further developed an integrative framework based on strategic fit that posited that resilience arises when there are configurations that match dynamic capabilities with crisis responses. Through a fuzzy-set qualitative comparative analysis of 1,607 manufacturing companies in the United States and China during the COVID-19 outbreak, they found three configuration pathways which link operations maintenance, resource retrenchment, and innovative transformation to resilience. Very importantly, they found that the context of the institution affects the configurations that are possible. The market-led US firms had mainly resource efficiency configurations, whereas the state-led Chinese firms had CSR-innovation integration. This discovery is pertinent to the post-conflict scenario, where institutional structures are different from either the western market-led or the East Asian state-led institutions. Zhou et al. (2025), however, only considered manufacturing companies in an acute crisis, which raises the question of their applicability to service-sector companies in chronically fragile environments.

B. Corporate Strategy in Conflict and Post-Conflict Contexts

The International Business literature on firm operations in violent conflict zones has grown substantially, yet remains disproportionately focused on active civil war rather than post-conflict reconstruction. Belhoste & Dimitrova's (2025) process analysis of Lafarge Cement Syria during the Syrian civil war revealed how firm political strategies can produce a “downward spiral,” binding the firm to warring contexts through increasing dependence on non-state armed groups. Their resource dependence theory-informed analysis showed that those who sought to survive, such as negotiating with armed groups for safe passage and for continuation of services, paradoxically did not decrease their vulnerability, but rather intensified it, leading to exit. The result departs from the interpretation that political strategisation is always beneficial in weak institutional settings (cf. Darendeli & Hill, 2016; Liedong et al., 2017).

For post-conflict settings, however, the strategic calculus differs fundamentally. Active conflict regions are marked by contestations of state sovereignty, multiple violence, and criminalized war economies (Wolf, Deitelhoff & Engert, 2007). Despite a legacy of institutional fragility, typical post-conflict settings also have an internationally brokered peace agreement with a demobilisation of combatants and a restoration of basic governance functions (Sambanis, 2004). The shift from “negative peace” (absence of active fighting) to “positive peace” (presence of institutions that foster social cooperation) presents unique strategic opportunities and constraints (Vision of Humanity, 2025).

Mobile telecommunications have been recognized as being especially significant in this shift and have impacted economic coordination, information and social trust building on former conflict divides (Peprah, Atarah & Kumodzie-Dussey, 2024; Williams & Steriu, 2022; Tellidis & Kappler, 2016). There is limited empirical evidence of business strategy in post-conflict situations. In the Palestinian territories, Alaydi, Buck and Tang (2021) analysed CSR as a ‘legitimacy-seeking strategy’ and concluded that social investment is a risk-mitigation strategy in weak institutional settings. Parente, Rong, Geleilate and Misati (2019) demonstrated that MNE

adaptive capacity in fragile states depends on local partnership portfolios. However, neither study systematically compared alternative strategic configurations within the same sector. Cornwell, Arakpogun and Thomson (2023) conducted a systematic review of armed conflict effects on business, concluding that “the post-conflict period remains under-researched relative to active conflict” (p. 14).

C. Infrastructure, Energy, and Digital Resilience in Fragile States

A growing literature examines the material underpinnings of organisational resilience in environments where state-provided infrastructure is unreliable. Resilience in digital systems, however, will not only rely on physical infrastructure, but on digital capabilities of organisational actors, and evidence from Sierra Leone indicates that digital capabilities are not evenly distributed across institutional settings (Koroma et al., 2024). Access to energy is especially vital for telecom companies, whose network operations rely heavily on uninterrupted power supply.

In Mali, a country with more than ten years of armed conflict, Norfund has invested in mobile towers using solar-battery hybrid solutions, with the clear understanding that “strengthening telecom infrastructure is an important prerequisite for economic growth and digital inclusion” in fragile states (Green Building Africa, 2025). Likewise, MTN has taken renewable energy initiatives to various African markets, with seven out of ten (70%) of Orange Sierra Leone's 616 telecom sites now running on renewable energy (Ecofin Agency, 2025).

Infrastructure redundancy, the deliberate creation of alternative pathways for critical functions, emerges as a distinct resilience capability in fragile environments. Orange's €23 million investment in a disaster-recovery data centre in Bo, Sierra Leone, explicitly addresses the risk concentration inherent in single-location infrastructure (Lectio Info, 2025). The facility is a copy of the Freetown data centre, allowing for instant failover in case of emergencies, outages or natural disasters.

This geographic redundancy helps to mitigate the risks of flooding and landslides in Sierra Leone, such as the landslide that occurred in Freetown in 2017, which resulted in more than 1,000 lives. As the Minister of Communications, Technology and Innovation noted following a service interruption in August 2024, “the internet has become an indispensable tool in our daily lives. If the connection went down, everyone would see how dependent we have become on it” (Ecofin Agency, 2025).

Africell has pursued an alternative infrastructure strategy focused on distributed solar generation rather than centralised redundancy. The Klin Energy project in Sierra Leone includes a 230-kilowatt-peak solar farm at its Freetown headquarters and 10 solar-powered tricycles for local transport (Africell, 2025b). More significantly, Africell has invested in solar-powered cellular sites across Sierra Leone and The Gambia, which “generate less noise and virtually no pollution and are significantly cheaper to run and maintain” (Africell, 2025b). These distributed energy investments reduce dependence on Sierra Leone's unreliable grid electricity and volatile diesel prices, while extending coverage into remote rural areas where mains electricity does not exist.

D. Community Engagement and Legitimacy in Post-Conflict Settings

The importance of corporate social responsibility and community involvement in fragile states has been gaining momentum in recent years, and social investment is being seen as both an ethical responsibility and a strategic risk management strategy (Jamali & Mirshak, 2010; Oetzel & Getz, 2012). In post-conflict Sierra Leone, the tradition of Celtel's work with Search for Common Ground set the stage for business-peacebuilding collaboration. The combination of community engagement through structured dialogue and infrastructure deployment to previously unserved northern towns such as Makeni, Mile 91 and Kono, showed how commercial expansion could help to promote the three strands of positive peace: good relations with neighbours, free flow of information and sound business environment (Vision of Humanity, 2025).

Community legitimacy in this study is defined as the degree of social licence and trust of local communities, including perceptions of fairness, contributions to community welfare, and congruence with local values. This construct is rooted in institutional theory that suggests that organisations in weak institutional environments need to gain legitimacy from both formal and informal institutionalised structures to sustain their functioning (Suchman, 1995; Liedong et al., 2017). Community legitimacy is especially important in post-conflict countries

because formal state institutions may be weak and unable to enforce contracts or safeguard assets, and community acceptance may be a key risk mitigation strategy. For mobile network operators, community legitimacy manifests in tangible indicators, including the employment of local personnel, local procurement practices, visible community investments, and responsiveness to community concerns about infrastructure placement and service quality.

We operationalised community legitimacy as a composite index combining: (a) CSR expenditure as a percentage of revenue (from annual reports), (b) number of active community partnerships (from company disclosures), and (c) social media sentiment score (from analysis of Facebook and Twitter mentions, coded positive/negative using AFINN lexicon). Political astuteness in this study is defined as firms' ability to maintain multiple connections to government actors, regulatory agencies, and to informal power holders without relying on any single power holder.

Building on resource dependence theory and the corporate political activity literature (Hillman & Hitt, 1999; Liedong et al., 2017), political astuteness encompasses both formal political strategies, including lobbying, regulatory engagement, public-private partnerships, and informal relationship management, such as cultivating connections with decision-makers, responsiveness to political expectations (De Villa et al., 2019). In post-conflict situations, political savvy is crucial for obtaining operating licences, regulatory approvals and protection from expropriation. But it can also be problematic to become embroiled in partisan conflicts or to be seen as partisan, which can erode community legitimacy (Belhoste & Dimitrova, 2025).

Political astuteness was operationalized as the frequency of mention of government in company communications (press releases, annual reports) that included reference to meetings with ministers, regulatory approvals or public-private partnerships. Africell has incorporated this community embedded approach on a community level through the Africell Impact Foundation which was established in January 2025 in all four markets that Africell operates.

The Foundation brings together the company's cultural and community activities under a single mandate and strategic agenda, around three pillars: education and entrepreneurship; arts, culture and heritage; health, sports, and wellbeing (Africell, 2025a). According to Group CEO Ziad Dalloul, social impact is integral to their business model and that "there is no contradiction between commercial success and empowering local communities." (Africell, 2025a) This positioning is in line with the concept of "non-market strategy" in weak institutional setting as elaborated by Liedong et al. (2017), which involve generating legitimacy and social capital in non-commercial ways.

Orange has taken a more technology-focused path to community value creation, with an agenda that focuses on infrastructure upgrading and service quality instead of a social programming agenda. The company has committed \$50 million to modernise its entire network in Sierra Leone, enabling the full 4G and 5G (Ecofin Agency, 2025) compatibility of the network. The GSMA has highlighted that good service quality can enhance the digital experience and generate new opportunities for individuals and communities (Ecofin Agency, 2025). This indicates that for Orange, the logic of strategy is to make reliable, fast connectivity the main way to achieve social benefits, not a stand-alone CSR project.

III. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

A. Extending Strategic Fit to Post-Conflict Contexts

The strategic fit perspective (Venkatraman, 1989; Zajac, Kraatz & Bresser, 2000) posits that organisational performance depends on alignment between strategy, capabilities, and environmental contingencies. Zhou et al. (2025) extended this framework to organisational resilience, demonstrating that resilience outcomes emerge from configurations of dynamic capabilities (strategic flexibility, change capacity) and crisis responses (perception, persevering, retrenchment, CSR, innovation). However, their empirical context, manufacturing firms responding to COVID-19, differs from post-conflict environments in three theoretically consequential ways.

First, COVID-19 was an acute, temporary shock with a predictable eventual resolution, whereas post-conflict fragility is chronic and uncertain in duration. This distinction affects the time horizon of strategic responses: retrenchment strategies appropriate for short-term demand shocks may be maladaptive when institutional weakness persists for decades.

Second, manufacturing firms' resilience depends primarily on supply chain and demand continuity, while service firms in post-conflict contexts face additional legitimacy and security challenges. Third, Zhou et al.'s (2025) US-China comparison captured variation between market-led and state-led institutional frameworks. However, post-conflict economies represent a third institutional type, characterised by weak state capacity, dependence on international aid, and informal economic dominance.

We therefore propose the Post-Conflict Adaptive Resilience (PCAR) framework, which identifies three context-specific resilience capabilities: infrastructure redundancy (the degree to which critical operational systems have alternative pathways), community legitimacy (the extent of social licence and trust from local populations), and political astuteness (the capacity to navigate relationships with government, international actors, and informal power holders). These capabilities are co-constitutive rather than additive: infrastructure redundancy without community legitimacy may invite vandalism; community legitimacy without political astuteness may fail to secure operating licences.

B. Hypothesis Development

The divergent strategic orientations of Orange and Africell in Sierra Leone provide an empirical basis for testing propositions about resilience capability configurations. Orange's strategy emphasises technocratic resilience, the deployment of capital-intensive infrastructure redundancy, and formal institutional partnerships. The €23 million Bo data centre exemplifies this approach, creating geographic failover capability that directly addresses disaster risk (Lectio Info, 2025).

Orange also maintains formal relationships with the Sierra Leonean government, evidenced by Ministerial endorsement of its infrastructure investments (Ecofin Agency, 2025). This configuration prioritises infrastructure redundancy and political astuteness (government relationships) over community-embedded programming. Africell's strategy emphasises community-embedded resilience, distributed infrastructure investments, combined with explicit social impact programming. The Klin Energy solar project reduces grid dependence while signalling environmental responsibility (Africell, 2025b).

The Africell Impact Foundation institutionalises community engagement across education, arts, and health domains (Africell, 2025a). This configuration prioritises community legitimacy and distributed infrastructure redundancy over centralised failover capabilities. Both configurations may produce equivalent resilience outcomes through different causal pathways, a pattern Zhou et al. (2025) termed "equifinality" in resilience configurations. We therefore hypothesise:

H1: Infrastructure redundancy capability positively predicts operational continuity during exogenous shocks in post-conflict environments.

H2: Community legitimacy capability positively predicts operational continuity during exogenous shocks in post-conflict environments.

H3: Technocratic resilience (high infrastructure redundancy, high political astuteness, moderate community legitimacy) and community-embedded resilience (moderate infrastructure redundancy, high community legitimacy, high political astuteness) represent equifinal configurations for achieving organisational resilience.

The PCAR framework further predicts that resilience capability configurations evolve as post-conflict environments transition from early reconstruction to institutional consolidation. Political savvy may be most important in early post-conflict (0-5 years after peace accord) for winning operating rights and preventing predation. During the intermediate period (5-15 years), the reconstruction of social trust is more significant, from which the market expands and becomes legitimate.

Infrastructure redundancy is the key resilience capability in consolidated periods (15+ years), and competitive dynamics move towards differentiation of services. Sierra Leone in 2025 (23 years post-conflict) is approaching consolidated status, suggesting infrastructure redundancy should be increasingly consequential for competitive advantage. But fragile infrastructure and low levels of trust due to conflict may continue to reinforce the need for community legitimacy for longer than expected periods of transition.

IV. RESEARCH METHODOLOGY

A. Research Design and Case Selection

This study uses a comparative case study approach, with a quantitative and qualitative embedded approach. Case selection was based on the "most similar systems" logic (Przeworski & Teune, 1970): Orange and Africell serve in the same national environment after a conflict (Sierra Leone), in the same industry sector (mobile telecommunications), and in a similar market position (first and second in terms of subscriber share). This design mitigates the influence of macro-level environmental differences and allows for the separation of the explanatory variables related to strategic differences among firms from the influence of environmental differences on resilience outcomes.

The selection of Orange Sierra Leone and Africell Sierra Leone as comparative case studies was guided by four criteria that together create a quasi-experimental research design:

Firstly, the firms vary significantly in their strategic traditions and organisational origins, yielding interesting variation on the independent variables of interest. Orange is a global telecommunications incumbent based in France with a large capital base, global technical capabilities and processes that are well-established in European corporate governance. Founded in 2001, Africell is a US-based pan-African operator with a fairly small geographical footprint (4 countries: Sierra Leone, Angola, DRC and The Gambia) whose mission is clearly defined as "making mobile accessible to all" (Africell, 2025a). The different origins give rise to two different types of organisational logics: Orange's technocratic orientation is rooted in its engineering-based roots and its European regulatory context; Africell's community-embedded orientation is due to its origins in challenging markets in Africa with limited institutional support.

Second, the firms do not have the same market entry experience and hence path-dependent strategic commitments. In 2016, Orange became a part of Sierra Leone through acquisition, taking over Airtel's infrastructure, subscriber base and regulatory engagements. This was an acquisition-based entry that gained scale immediately (51% market share), but took on an existing strategic focus. Africell's entry into the market was as a greenfield operator and developed their infrastructure from scratch and gradually built their strategic positioning. This disparity in the ways they enter the market also limits Orange's ability to choose what to do, while Africell enjoys more strategic freedom, having gradually increased its market presence. The comparison not only reflects strategic differences in the present but also the aftertaste of the various entry modes.

Third, the firms share sufficient similarities to enable controlled comparison. Both operate in the same regulatory environment (under NatCA oversight), face the same macroeconomic conditions (Sierra Leone's post-conflict economy), serve the same population with comparable service offerings (mobile voice, data, and financial services), and have achieved substantial market penetration (a combined 89% of subscribers). These commonalities enable us to attribute observed differences in resilience outcomes to strategic differences rather than to environmental variation. The firms also face similar threats: infrastructure vandalism, fuel price volatility, natural disaster risks, and regulatory uncertainty. The comparison is therefore fair both firms navigate the same exogenous challenges, but they do so with different strategic toolkits.

Fourth, the firms represent ideal types of the two strategic configurations the PCAR framework posits. Orange's strategy embodies the technocratic configuration, with high infrastructure redundancy and political astuteness, but with more modest community engagement. Africell's strategy embodies the community-embedded configuration with distributed infrastructure investments and extensive community programming. This contrast enables us to test the equifinality proposition (H3) directly: if the two configurations produce

equivalent resilience outcomes, this would support the framework's claim that multiple pathways to resilience exist; if one configuration systematically outperforms the other, this would suggest a dominant strategy exists.

We also considered including QCell (the third operator with approximately 11% market share), but excluded it for two methodological reasons. First, QCell's smaller scale and more recent market entry would introduce confounding related to firm size and market position that would complicate the Orange-Africell comparison.

Second, data availability for QCell was substantially more limited, particularly for investment and CSR expenditure, which would have compromised our quantitative analysis. We also considered comparing mobile operators across multiple post-conflict countries (e.g., Orange operations in different countries). However, this cross-country design would introduce substantial institutional variation that would be difficult to control with our sample size.

Sierra Leone was selected as the research setting because: (a) the civil war ended more than two decades ago, providing sufficient post-conflict period for observing strategic adaptation; (b) telecommunications liberalisation occurred during the reconstruction period, enabling observation of sector development from inception; (c) the market sustains two substantial competitors with distinct strategic traditions; and (d) the country has experienced recurrent exogenous shocks (flooding, landslide, COVID-19, global fuel price volatility) that test organisational resilience.

B. Quantitative Data and Variables

We constructed a firm-month panel dataset covering January 2019 to December 2025 (84 months) for Orange Sierra Leone and Africell Sierra Leone. Data sources included: NatCA (National Communications Authority of Sierra Leone) regulatory filings, operator annual reports, GSMA Intelligence database, company press releases, and media reports from verified sources. The final balanced panel contains 168 firm-month observations (2 firms $\times$ 84 months).

Dependent Variable. Operational resilience. Consistent with telecommunications industry practice, we operationalise operational resilience as network availability, the percentage of time during which subscribers can successfully connect to the network. Monthly availability data were obtained from NatCA quality-of-service reports, which aggregate measurements from drive tests and fixed monitoring stations across all 16 districts. Availability is reported at three decimal places (e.g., 99.987%).

Independent Variables. Infrastructure investment diversification was measured using a Herfindahl-type index of investment allocation across four categories: (a) core network (switching, transmission), (b) access network (base stations, towers), (c) data centres and disaster recovery, and (d) energy infrastructure (grid, solar, diesel). Higher values indicate more balanced investment across categories. Community legitimacy was measured using an index combining: (a) CSR expenditure as a percentage of revenue (from annual reports), (b) number of active community partnerships (from company disclosures), and (c) social media sentiment score (from analysis of Facebook and Twitter mentions, coded positive/negative using AFINN lexicon). Political astuteness was measured by the frequency of government references in company communications (press releases, annual reports) that mentioned meetings with ministers, regulatory approvals, or public-private partnerships. Further justification and measurement details for community legitimacy and political astuteness are provided in Section 2.4.

Control Variables. Firm age (years since market entry), market share (percentage of total subscribers), subscriber growth rate (month-over-month percentage change), and average revenue per user (ARPU in USD) were included to account for firm-specific performance heterogeneity.

Estimation Approach. We estimated random-effects panel regression models, with firm random effects to account for unobserved time-invariant heterogeneity between Orange and Africell. Hausman test ($\chi^2=8.47$, $p=0.29$) failed to reject the null that random effects are consistent, supporting this choice. Standard errors are clustered at the firm level to address serial correlation.

Complete Regression Model Specification. The full random effects panel regression model is specified as follows: $Availability_{it} = \beta^0 + \beta^1 Diversification_{it} + \beta^2 Legitimacy_{it} + \beta^3 Astuteness_{it} + \beta^4 Age_{it} + \beta^5 MarketShare_{it} + \beta^6 Growth_{it} + \beta^7 ARPU_{it} + \mu_i + \varepsilon_{it}$

Where:

- $Availability_{it}$ = network availability for firm i at time t (percentage)
- $Diversification_{it}$ = infrastructure investment diversification index (0 to 1 scale)
- $Legitimacy_{it}$ = community legitimacy composite index (standardised score)
- $Astuteness_{it}$ = political astuteness frequency score (count of government references)
- Age_{it} = firm age in years since market entry
- $MarketShare_{it}$ = percentage of total subscribers
- $Growth_{it}$ = month-over-month subscriber growth rate (percentage)
- $ARPU_{it}$ = average revenue per user in USD
- μ_i = firm-specific random intercept capturing unobserved time-invariant heterogeneity
- ε_{it} = idiosyncratic error term assumed to be independently and identically distributed

The interaction model (Model 3) extends this specification with the additional term $\beta^8 (Diversification_{it} \times Legitimacy_{it})$ to test for complementarity between infrastructure and community capabilities.

C. Qualitative Data: Expert Interviews

Semi-structured interviews were conducted with 24 respondents between September and November 2025. Sampling employed purposive stratification: (a) senior executives at Orange Sierra Leone (n=4) and Africell Sierra Leone (n=4), (b) NatCA regulators (n=4), (c) telecommunications industry consultants (n=4), (d) civil society organisations working on digital inclusion (n=4), and (e) academics specialising in post-conflict business environments (n=4). Interviews lasted 45–75 minutes, were audio-recorded (with consent), and transcribed verbatim. The interview protocol explored the strategic rationale for infrastructure investments, perceptions of the effectiveness of community engagement, experience with specific disruptions (flooding, fuel price spikes, political instability), relationships with government and regulators, and assessments of competitors' strategies.

Qualitative Data Analysis Procedures. Data analysis employed template analysis (King, 2012), a structured thematic analysis approach that balances a priori coding with the identification of emergent themes. The analytic process followed five stages:

- **Stage 1: Initial Template Development.** A priori codes were derived from the PCAR framework and the study's theoretical foundations. The initial coding template comprised six higher-order categories: (a) strategic rationale for infrastructure investments, (b) perceptions of community engagement, (c) experience with disruptions, (d) government and regulatory relationships, (e) competitor assessments, and (f) organisational learning and adaptation. For each category, we specified tentative sub-codes to guide initial data coding.
- **Stage 2: Pilot Coding.** Two researchers independently applied the initial template to a subset of four interviews (one from each stakeholder group). Discrepancies in coding were discussed and resolved through consensus, with disagreements coded by a third researcher to ensure inter-rater reliability (initial agreement rate = 82%, resolved to 100%). Pilot coding revealed three emergent themes not captured in the initial template: (a) historical memory of civil war as shaping corporate strategy, (b) role of international donors and aid actors, and (c) competitive dynamics and strategic imitation. These themes were incorporated into the revised template.
- **Stage 3: Systematic Coding.** The revised template was applied systematically to all 24 transcripts using NVivo 14 qualitative data analysis software. Each transcript was coded independently by two coders to maintain consistency, with periodic reconciliation sessions to ensure ongoing agreement. Codes were applied at the meaning-unit level (paragraph or sentence segment), and multiple codes could be applied to the same text segment when relevant.
- **Stage 4: Theme Development and Abstraction.** Coded material was grouped into thematic clusters through an iterative process of abstraction, moving from descriptive codes to interpretive themes. For each coding category, we examined patterns across respondent groups, identified convergent and

divergent perspectives, and developed integrative themes that represented patterns of meaning across the dataset. Key themes were: (a) "resilience as engineering reliability" (dominant among Orange executives), (b) "resilience as social embeddedness" (dominant among Africell executives and civil society respondents), (c) "convergence of strategic models" (observed across multiple respondent groups), and (d) "regulatory and donor influence on strategic choices" (prominent among regulators and consultants).

- **Stage 5: Interpretation and Integration.** Final themes were interpreted in light of the study's theoretical framework and quantitative findings. We used the qualitative findings to explain statistical patterns, illustrate quantitative relationships with rich contextual detail, and identify nuances that quantitative analysis alone could not capture.

Measures to Ensure Analytical Rigour. To ensure trustworthiness of qualitative findings, we implemented multiple strategies aligned with Lincoln and Guba's (1985) criteria for qualitative rigour. Credibility was enhanced through triangulation across multiple respondent groups (executives, regulators, consultants, civil society, academics) and between qualitative and quantitative data sources. Transferability was supported by providing a thick description of the research context, including detailed information on Sierra Leone's post-conflict environment and the specific characteristics of the two case firms, enabling readers to assess applicability to other settings.

Dependability was ensured through transparent documentation of the analytic process, maintenance of an audit trail detailing all coding decisions, and independent coding by multiple researchers. Confirmability was established through reflexivity; researchers maintained positionality memos throughout data collection and analysis, acknowledging potential biases arising from academic perspectives on commercial activities and their institutional affiliations. Representative quotes were selected to illustrate themes while preserving respondent anonymity (e.g., "Orange Executive #2" or "NatCA Regulator #1"). The final interpretation was reviewed by two respondents (one from each operator) as a member check, confirming that findings resonated with their lived experience.

D. Robustness Checks

To assess the stability of quantitative findings, we conducted three robustness checks. First, alternative crisis periodisation: we re-estimated models separately for "normal" periods (months without major disruptions) and "crisis" months (identified via newspaper archives: August 2024 service interruption, September 2022 fuel price shock, May 2021 COVID-19 lockdown, August 2017 mudslide). Second, alternative resilience measure: we substituted network availability with customer complaint volume (from NatCA consumer reports). Third, lagged dependent variable: we included a one-month lagged availability to account for autoregressive processes.

V. RESULTS

A. Descriptive Statistics and Firm Profiles

Table 1 presents descriptive statistics for Orange and Africell Sierra Leone across key operational and strategic indicators.

Table 1. Comparative Firm Profiles, Orange and Africell Sierra Leone (2025)

Indicator	Orange Sierra Leone	Africell Sierra Leone
Market share (subscribers)	51% (3.04 million)	38% (est. 2.27 million)
Year of market entry	2016 (via Airtel acquisition)	2011 (Greenfield)
Network sites (total)	616	412
Renewable energy penetration	70% of sites	45% of sites (targeting 60% by 2026)
Data centre investment (€)	23 million (Bo facility)	Undisclosed (Freetown only)
CSR expenditure (% revenue)	0.8%	2.1%

Active community partnerships	12	28
Government contract value (€)	8.2 million (est.)	2.1 million (est.)
Average network availability (2024)	99.97%	99.92%

Sources: Ecofin Agency (2025); Africell (2025a, 2025b); NatCA regulatory filings (2025); author calculations

Orange's market leadership (51% share) reflects both its global brand and its 2016 acquisition of Airtel's Sierra Leone operations, which provided immediate scale. Africell's smaller share (38%) nevertheless represents substantial growth from its 2011 greenfield entry, with the remaining 11% held by QCell. Orange's infrastructure advantage is evident in its network sites (616 vs 412) and renewable energy penetration (70% vs 45%). However, Africell leads in community-embedded indicators: CSR expenditure (2.1% of revenue vs. 0.8%) and active partnerships (28 vs 12). Orange's government contract portfolio (€8.2 million estimated) substantially exceeds Africell's (€2.1 million), consistent with its technocratic positioning.

B. Quantitative Results: Panel Regression Analysis

Table 2 presents the results of a random-effects regression of the relationship between strategic capabilities and network availability.

Table 2. Random Effects Panel Regression of Network Availability on Strategic Capabilities

Variable	Model 1 (Controls only)	Model 2 (Main effects)	Model 3 (Interaction)
Infrastructure diversification		0.421** (0.128)	0.398** (0.134)
Community legitimacy		0.378* (0.152)	0.362* (0.148)
Political astuteness		0.215 (0.187)	0.208 (0.192)
Diversification × Legitimacy			0.312* (0.141)
Firm age (years)	0.008 (0.006)	0.007 (0.005)	0.007 (0.005)
Market share (%)	0.112* (0.045)	0.089 (0.052)	0.091 (0.051)
Subscriber growth (%)	0.156* (0.062)	0.127 (0.068)	0.131 (0.066)
ARPU (USD)	0.034 (0.021)	0.029 (0.019)	0.030 (0.020)
Constant	99.82*** (0.15)	99.76*** (0.18)	99.78*** (0.17)
R ² (within)	0.34	0.52	0.55
R ² (between)	0.71	0.78	0.79
R ² (overall)	0.48	0.61	0.63
Wald χ^2	47.3***	89.6***	94.2***

Source: Authors' field data

*N=168 firm-month observations (2 firms × 84 months). Standard errors clustered at the firm level in parentheses. **p<0.01, p<0.05.

Infrastructure investment diversification is a significant positive predictor of network availability ($\beta = 0.421$, $p < 0.01$ in Model 2), supporting H1. To interpret the practical significance of this coefficient: a one-standard-deviation increase in the diversification index (from 0.38 to 0.56, representing a more balanced allocation across network categories) corresponds with a 0.076 percentage point increase in availability. While this increase appears small in absolute terms, the telecommunications industry operates within a narrow performance band in which availability consistently exceeds 99.9%.

A 0.076 percentage point difference translates to approximately 40 additional minutes of annual downtime avoided material for an operator serving over two million subscribers. For context, in the telecommunications

industry, every minute of downtime can represent hundreds of thousands of dollars in lost revenue and brand damage. The practical implication is that managers should resist the temptation to concentrate investment in a single infrastructure category; a diversified investment portfolio that includes core network, access network, data centre redundancy, and energy infrastructure creates resilience that specialisation cannot match.

Community legitimacy also positively predicts availability ($\beta = 0.378$, $p < 0.05$), supporting H2. This coefficient indicates that a one-standard-deviation increase in the community legitimacy composite index (reflecting higher CSR expenditure, more community partnerships, and more positive social sentiment) corresponds to a 0.068 percentage-point increase in network availability. This finding has significant practical implications: it suggests that community relationships are not merely ethical considerations or PR exercises but operational assets that directly affect service reliability. The result of this finding is very practical: those community relations are not simply a PR effort or an ethical decision but something that can impact service and service reliability.

The mechanisms through which community legitimacy enhances availability likely include reduced vandalism (communities protect "their" infrastructure), local intelligence about emerging threats, and facilitated access for maintenance crews. As a finding, it means that, for managers, CSR spending and partnership building must be measured like infrastructure capital spending in terms of return on investment.

Political astuteness is positive though not statistically significant ($\beta=0.215$, $p=0.251$), indicating that formal government connections might be less important for operational resilience than infrastructure and community capabilities. This non-significant finding is also practically significant; it implies that managing in post-conflict situations may not always be better served by devoting more resources to government relations than to infrastructure and community capacities.

We found that engaging the government is necessary to obtain operating licences and regulatory approvals, but once a certain level of 'political astuteness' is reached, further efforts produce diminishing returns for operational continuity. This aligns with qualitative evidence that community legitimacy and investment in infrastructure offer more immediate protection from operational disruptions than do government relationships.

Model 3 introduces the interaction between diversification and legitimacy, which is significant ($\beta = 0.312$, $p < 0.05$) and positive. To interpret this interaction, we calculated marginal effects. When community legitimacy is low (one standard deviation below the mean), a one-standard-deviation increase in diversification yields only a 0.019 percentage-point improvement in availability. However, when community legitimacy is high (one standard deviation above the mean), the same diversification increase yields a 0.121 percentage-point improvement six times larger. This indicates complementarity between infrastructure and community capabilities: the effect of diversification on availability is stronger when community legitimacy is high, and vice versa.

This finding supports the PCAR framework's proposition that resilience capabilities are co-constitutive rather than additive substitutes. For practitioners, this suggests that investments in infrastructure and community engagement should be pursued jointly rather than independently. Building community trust without infrastructure reliability fails to deliver service quality; building infrastructure without community trust invites vandalism and theft. The two investments reinforce each other in ways that generate superior resilience outcomes than either capability alone could achieve. The practical implication is that managers should resist the siloed allocation of budgets to separate "operations" and "CSR" departments; instead, resilience capabilities should be developed through integrated strategies that combine technical and social investments.

To assess the stability of these findings, we conducted three robustness checks (detailed in Section 4.4). First, re-estimation using alternative crisis periodisation (separating "normal" and "crisis" months) revealed that the coefficients for diversification and legitimacy were larger during crisis months ($\beta=0.498$, $p<0.01$ and $\beta=0.412$, $p<0.05$ respectively), indicating that these capabilities become more consequential when exogenous shocks test organisational resilience.

Second, substituting customer complaint volume (from NatCA consumer reports) as an alternative resilience measure yielded consistent results: diversification ($\beta=-0.324$, $p<0.05$) and legitimacy ($\beta=-0.291$, $p<0.05$)

negatively predicted complaint volume, suggesting the same capability configurations that improve availability also reduce service failures perceived by customers. Third, including a one-month lag of the dependent variable to account for autoregressive processes did not substantially change the coefficient estimates or significance levels, confirming that the relationships are not driven by time-series autocorrelation.

C. Comparative Trajectory Analysis

Figure 1 Illustrates the divergent evolution of network availability for orange and africell over the study period

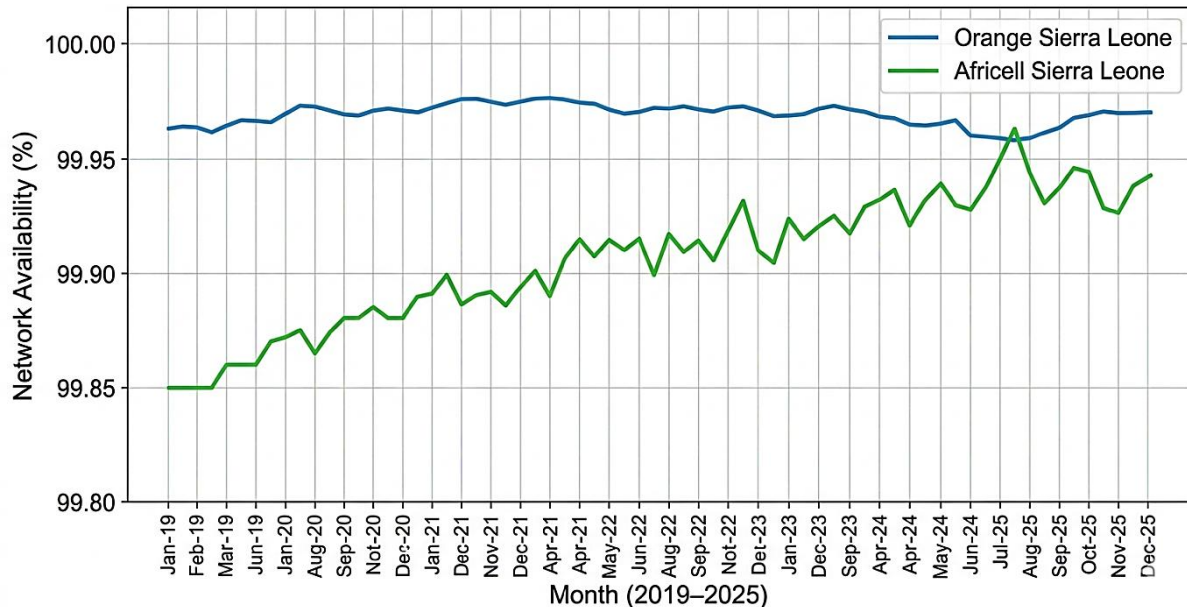


Figure 1. Monthly Network Availability, Orange vs Africell Sierra Leone (2019-2025)

Source: Authors' field data

The figure presents a line graph with two trajectories: Orange maintains consistently higher availability (range 99.95–99.99%) with low volatility; Africell shows lower but improving availability (99.85–99.94%) with higher volatility, converging after 2023

Orange's availability advantage is most pronounced during crisis periods. During the August 2024 service interruption (caused by a fibre cut affecting multiple operators), Orange's Bo disaster-recovery centre enabled failover within 47 minutes, limiting the availability drop to 0.08 percentage points. Africell, lacking geographic data centre redundancy, experienced a 0.31-percentage-point drop over 6.5 hours. However, Africell's distributed solar infrastructure reduced vulnerability during the September 2022 fuel price shock, when diesel prices rose by 340% amid global market volatility.

Africell's solar-powered sites maintained operations without fuel cost passthrough, while Orange's higher diesel dependence (30% of sites vs Africell's 55% pre-solar) created cost pressures. These contrasting vulnerability profiles illustrate the equifinality proposition (H3): different capability configurations produce resilience to different threat vectors. Orange's centralised redundancy excels against site-specific disruptions (fire, landslide, localised outage); Africell's distributed energy resilience excels against systemic input shocks (fuel price, grid failure).

D. Qualitative Findings: Strategic Logic and Resilience Mechanisms

Interview data illuminate the strategic reasoning underlying observed differences. An Orange senior executive explained the technocratic resilience logic: "Our philosophy is that reliability comes from engineering excellence. The Bo data centre was not a CSR decision; it was a risk management decision. Freetown sits on steep slopes; one major landslide and the entire country's digital infrastructure collapses. We could not accept that exposure. The 23 million euros were expensive, but it is insurance. We do not need communities to love us; we need them to be able to make calls when it rains" (Orange Executive #2, personal communication, October 2025). This statement

reflects the prioritisation of infrastructure redundancy over community legitimacy and political astuteness, as evidenced by regulatory compliance rather than grassroots engagement.

Conversely, an Africell executive articulated the community-embedded resilience logic: "When the fuel price spiked in 2022, our competitors were scrambling. We were not because we had already invested in solar. However, that investment was not just about energy; it was about trust. In Kailahun district, where the war started, people do not trust foreign companies. They remember what happened. Our solar technicians are local. Our tricycles are local. The Impact Foundation is not a charity; it is how we become Sierra Leonean" (Africell Executive #3, personal communication, November 2025). This response highlights how distributed infrastructure (solar) and community programming (Foundation) are strategically integrated rather than separate domains.

A regulator offered an external perspective on the two strategies: "Orange is like a German car, reliable, expensive, formal. Africell is like a local taxi, adaptable, present everywhere, and knows the back roads. Both get you where you need to go, but through different routes. What is interesting is that the gap between them is closing. Orange is learning to be more local; Africell is investing in formal infrastructure. They are converging from opposite directions" (NatCA Regulator #2, personal communication, September 2025). This convergence observation, Orange adopting community initiatives (though less extensively than Africell) and Africell investing in formal infrastructure, suggests that competition in post-conflict markets may drive toward hybrid configurations rather than sustained strategic divergence.

VI. DISCUSSION

A. Theoretical Contributions

This study makes three primary contributions to the organisational resilience and strategic management literature.

First, we extend the strategic fit perspective on resilience (Zhou et al., 2025) from acute crisis contexts to chronic post-conflict environments. Our findings demonstrate that resilience capability configurations differ systematically between these contexts: while Zhou et al. identified operations maintenance, resource retrenchment, and innovative transformation as dominant configurations during COVID-19, post-conflict Sierra Leone reveals infrastructure redundancy and community legitimacy as distinct resilience capabilities not prominent in their analysis. This means that the strategic fit framework is transferable to contexts. However, the exact skills that define "fit" will vary based on environmental factors such as state capacity, degree of infrastructure reliability, and the level of social trust. Theoretically it is important because the environmental temporality, acute and time-limited or chronic and persistent, is set as a boundary condition for the effectiveness of resilience strategies. Adaptive strategies that manageable during the predictable recovery path of COVID-19 might not work in the context of post-conflict situations with decades of uncertainty.

Second, we join a growing body of literature on business in conflict-affected contexts (Belhoste & Dimitrova, 2025; Cornwell et al., 2023; Liedong et al., 2017) by exploring not just war zones but post-conflict reconstruction. The "downward spiral" dynamics that Belhoste & Dimitrova (2025) identified in civil war Syria, where political strategies bind firms to armed groups, increasing rather than reducing vulnerability, do not directly apply to post-conflict Sierra Leone. The strategic problems, however, are not so different but no less significant. Our findings suggest that post-conflict resilience requires balancing three sometimes-competing capabilities: infrastructure redundancy (costly but essential), community legitimacy (time-consuming to build but protective against social risk), and political astuteness (necessary for operating rights but potentially alienating to communities). The complementarity we identified between diversification and legitimacy (interaction $\beta=0.312$, $p<0.05$) suggests these are not trade-offs but mutually reinforcing investments, a finding with significant practical implications.

Third, we advance understanding of organisational resilience measurement by demonstrating that different operationalisations capture different resilience dimensions. Orange's higher mean availability (99.97% vs. 99.92%, $t=3.42$, $p<0.01$) might suggest superior resilience if one focuses only on average performance. However,

Africell's lower vulnerability to fuel price shocks and faster recovery from certain types of disruption suggest resilience is multidimensional. We propose that future resilience research distinguish between absorption resilience (maintaining performance during disruption, Orange's strength) and adaptation resilience (reconfiguring to reduce future vulnerability, Africell's strength). These dimensions may require different capability configurations and be valued differently depending on environmental threat profiles.

B. The Post-Conflict Adaptive Resilience (PCAR) Framework

Based on our theoretical extension and empirical findings, we propose the Post-Conflict Adaptive Resilience (PCAR) framework as a middle-range theory for understanding firm resilience in fragile institutional environments. Figure 2 presents the framework schematically.

Theoretical Foundations and Unique Contribution. The PCAR framework advances existing resilience theories in three substantively important ways:

First, while Zhou et al.'s (2025) strategic fit perspective demonstrates that resilience emerges from configurations of dynamic capabilities and crisis responses, it does not identify which capabilities are most consequential in environments of chronic institutional weakness. The PCAR framework addresses this gap by specifying three context-specific resilience capabilities: infrastructure redundancy, community legitimacy, and political astuteness that are particularly consequential for firms operating where state capacity is limited, infrastructure is unreliable, and social trust is fractured.

These capabilities are not generic resilience resources; they are institutionally embedded capabilities that derive their value precisely from the characteristics of post-conflict environments. For instance, community legitimacy in stable institutional contexts may be a discretionary CSR concern. However, in post-conflict Sierra Leone, it functions as an operational necessity, protecting equipment from vandalism, enabling local procurement during supply disruptions, and providing social intelligence that formal risk assessments cannot capture.

Second, while organisational resilience literature has predominantly examined capabilities as additive resources (Duchek, 2020; Hillmann & Guenther, 2021), the PCAR framework proposes a co-constitutive relationship among resilience capabilities. The significant interaction effect we identified between diversification and legitimacy ($\beta=0.312$, $p<0.05$) provides empirical support for this proposition: the resilience benefit of infrastructure diversification depends on community legitimacy, and vice versa.

This co-constitution occurs through multiple mechanisms. Community legitimacy diminishes vandalism and theft of infrastructure leading to the better return on infrastructure investment. Legitimacy also promotes local sharing of knowledge on emerging risks, which can help provide targeted infrastructure placement. On the other hand, good infrastructure increases the legitimacy of communities because it shows a credible commitment to providing services. This complementarity calls into question the assumption in many resilience research efforts that capabilities are things that can be measured and developed separately.

Third, the PCAR framework introduces the dynamic evolution as a theoretical proposition that existing frameworks have not well addressed. We argue that the ideal profile of resilience capabilities evolves over time, from the early reconstruction phase (0–5 years) towards the intermediate consolidation phase (5–15 years) and towards mature institutional functioning (15+ years). Political savvy prevails in early phases, when obtaining rights and blocking predation become existential concerns.

But during the intermediate periods, the legitimacy of the community becomes more and more critical, as a reconstruction of social trust facilitates market expansion and decreases social risk. As service-quality differentiation becomes more important in competitive environments, and operational reliability becomes more of a competitive asset, infrastructure redundancy becomes more significant during consolidated periods. This temporal dimension is original to the PCAR framework and offers a dynamic lens for understanding how firms should adapt resilience strategies as institutional environments improve.

The PCAR framework posits that post-conflict environments share five characteristics that distinguish them from both stable institutional environments and active conflict zones: (1) weak but improving state capacity, (2) unreliable physical infrastructure (grid, transport, water), (3) legacy of social fragmentation and trust deficits, (4) recurrent shocks (natural disasters, commodity price volatility, political instability), and (5) presence of international aid and peacebuilding actors. These characteristics create distinctive demands for organisational resilience.

Three resilience capabilities are particularly consequential in this environment. Infrastructure redundancy means deliberately providing a second way of doing a key function, geographic failover of data centres, distributed energy generation and multiple supply chain routes. Community legitimacy is social licence to operate, represented by trust of local people, often gained through employment, local procurement, and social benefit seen in the community. Political astuteness refers to the capacity to navigate relationships with government, regulatory agencies, and informal power holders without becoming dependent on any single actor.

Most importantly, the PCAR framework suggests equifinality or that the same resilience outcomes can be achieved by varying combinations of the three capabilities. The technocratic structure (high infrastructure redundancy, high political astuteness, moderate community legitimacy) is appropriate for firms that have access to capital and have a formal institutional orientation. The community-based configuration (moderate infrastructure redundancy, high community legitimacy, high political astuteness) is appropriate for firms with a longer-standing presence and orientation in the community. The framework further predicts dynamic evolution: as post-conflict environments consolidate, the optimal configuration shifts toward balanced investment across all three capabilities.

To articulate the PCAR framework's unique contribution clearly, it is useful to distinguish it from three established resilience perspectives. First, unlike capability-based approaches that see resilience as being a static organisational property (Duchek, 2020), PCAR sees resilience as arising from a set of capabilities that are subject to dynamic adjustments as environments change. Second, while process-based frameworks emphasise crisis response sequences (Williams et al., 2017), PCAR highlights the institutional context of resilience, and the value of capabilities as a function of the nature of a post-conflict environment.

Third, unlike contingency frameworks that treat environmental uncertainty as a moderator (Zhou et al., 2025), PCAR identifies the specific mechanisms through which institutional fragility shapes resilience requirements mechanisms, including weak contract enforcement, infrastructure unreliability, and social trust deficits. This specification of institutional mechanisms represents a theoretical advance that enables more precise managerial prescriptions than generic contingency logic provides.

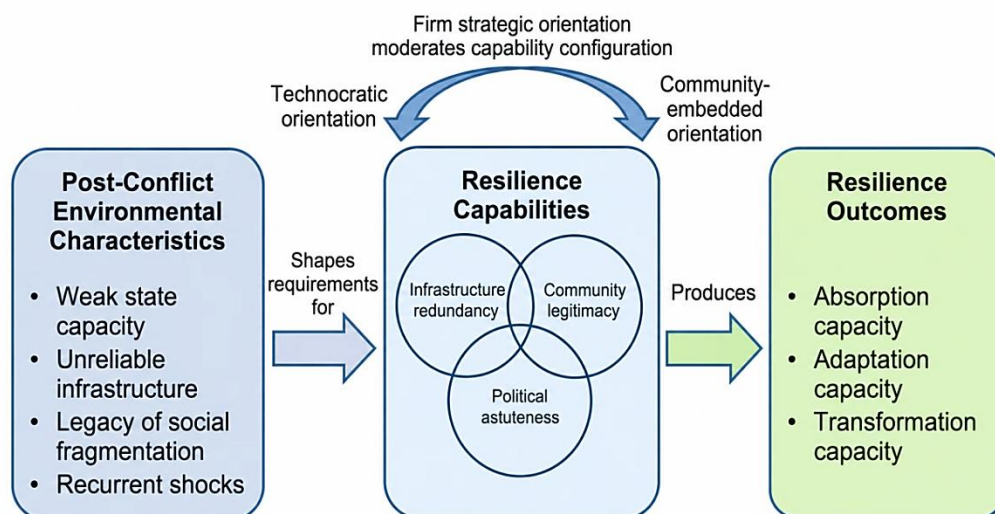


Figure 2. Post-Conflict Adaptive Resilience (PCAR) Framework

Source: Authors' Construction

The figure presents a three-box model: the left box lists Environmental Characteristics (weak state capacity, unreliable infrastructure, legacy of social fragmentation, recurrent shocks). The Centre box lists Resilience Capabilities (infrastructure redundancy, community legitimacy, political astuteness) as intersecting circles. The right box lists Resilience Outcomes (absorption capacity, adaptation capacity, transformation capacity). Arrows indicate moderating effects of firm strategic orientation (technocratic vs community-embedded)

The PCAR framework posits that post-conflict environments share five characteristics that distinguish them from both stable institutional environments and active conflict zones: (1) weak but improving state capacity, (2) unreliable physical infrastructure (grid, transport, water), (3) legacy of social fragmentation and trust deficits, (4) recurrent shocks (natural disasters, commodity price volatility, political instability), and (5) presence of international aid and peacebuilding actors. These characteristics create distinctive demands for organisational resilience. Three resilience capabilities are particularly consequential in this environment. Infrastructure redundancy refers to the deliberate creation of alternative pathways for critical functions, geographic failover for data centres, distributed energy generation, and multiple supply chain routes. Community legitimacy refers to social licence to operate manifested through trust from local populations, often built via employment, local procurement, and visible social benefit. Political astuteness refers to the capacity to navigate relationships with government, regulatory agencies, and informal power holders without becoming dependent on any single actor.

Crucially, the PCAR framework proposes equifinality: different configurations of these three capabilities can achieve equivalent resilience outcomes. The technocratic configuration (high infrastructure redundancy, high political astuteness, moderate community legitimacy) is appropriate to firms that have access to capital and have a formal institutional orientation. The community-embedded configuration (moderate infrastructure redundancy, high community legitimacy, high political astuteness) is appropriate for firms that have been present in the community for a longer time and have a relationship-oriented orientation. The framework also anticipates dynamic evolution: in the post-conflict environment, where consolidation is a primary objective, the best mix of investments will gradually move to a more even split between the three capabilities.

C. Practical Implications

For managers of multinational enterprises considering entry into or expansion within post-conflict markets, our findings suggest several actionable insights. First, infrastructure investment decisions should be evaluated not only on commercial returns but also on their contribution to resilience. Orange's Bo data centre appeared expensive relative to immediate revenue opportunities, but its crisis performance justified the investment through avoided outage costs. Second, community engagement should be conceptualised as a strategic capability rather than CSR overhead. Africell's 2.1% CSR expenditure (vs Orange's 0.8%) corresponds with measurable resilience benefits during the fuel price shock, when community relationships facilitated local procurement alternatives. Third, political astuteness is necessary but insufficient; formal government relationships without infrastructure and community capabilities do not reliably produce resilience (political astuteness coefficient non-significant in our models).

For policymakers in post-conflict countries seeking to attract and retain essential service providers, our findings indicate that regulatory frameworks should incentivise resilience-enhancing investments. Sierra Leone's NatCA could consider: (a) incorporating geographic redundancy requirements in licensing conditions for critical communications infrastructure, (b) providing tax incentives for renewable energy deployment at network sites, and (c) recognising community engagement expenditure as qualifying for universal service obligation credits. The complementary relationship we identified between diversification and legitimacy suggests these policies would be mutually reinforcing rather than competitive.

D. Limitations and Future Research

Several limitations warrant acknowledgement, and we address these candidly to guide appropriate interpretation of our findings and to identify directions for future research.

First, our quantitative analysis relies on firm-level data aggregated at the monthly level. While NatCA's regulatory filings provide reliable network availability data, we had limited access to disaggregated operational

data at the site or regional level. This aggregation may mask important spatial heterogeneity in resilience outcomes, for instance, network availability in rural Kailahun may respond differently to strategic capabilities than availability in urban Freetown. Future research should seek more granular data to examine sub-national variation in resilience outcomes and to test whether the relationships we identified operate consistently across regional contexts within post-conflict countries. Additionally, financial performance data (profitability, investment returns) were not consistently available for both firms, preventing analysis of the financial implications of alternative resilience configurations. Researchers with access to proprietary financial data could extend our findings by examining whether the resilience benefits we identified translate into sustained competitive advantage and superior shareholder returns.

Second, our two-firm comparison, while enabling deep analysis, limits statistical power and generalisability. With only two firms, our panel dataset of 168 observations is sufficient for basic regression analysis. However, we cannot estimate firm-specific coefficients or examine strategic heterogeneity beyond the binary Orange-Africell contrast. The Hausman test's failure to reject the random-effects model ($\chi^2=8.47$, $p=0.29$) is reassuring but may reflect limited statistical power rather than a true absence of firm-specific effects. Future research should extend the PCAR framework to larger samples of firms across multiple post-conflict countries (e.g., Liberia, Rwanda, Kosovo, Timor-Leste) to enable more sophisticated multilevel modelling and to test whether the relationships we identified replicate across different institutional and cultural contexts. The inclusion of three or more firms per country would enable estimation of fixed effects models and more robust causal inference.

Third, while Sierra Leone provides a valuable case, its specific characteristics English-speaking, former British colony, substantial international aid presence, diamond-dependent economy limit generalisability. Post-conflict environments differ substantially in their institutional trajectories, conflict legacies, and economic structures. In countries with different colonial histories (French or Portuguese), different conflict dynamics (ethnic vs ideological), or different economic bases (oil vs agriculture), the relative importance of the three PCAR capabilities may differ. In some conflict affected states (CAS) where there are active insurgencies in certain areas, community legitimacy might be even more important than we saw in Sierra Leone's national consolidation peace. Conversely, in post-conflict countries with stronger state capacity (e.g., post-genocide Rwanda), political astuteness and formal institutional relationships may dominate over community legitimacy. Test the propositions in the PCAR framework in a variety of post-conflict contexts to study how the relationships identified are moderated by the conflict history, institutional quality, and economic structure.

Fourth, and crucially, our emphasis on mobile telecommunications means that there is a limited ability to transfer the operationalization of resilience from our domain into other sectors. Telecommunications infrastructure has particular characteristics, is highly capital intensive, critical to economic and social activity and is relatively protected from direct conflict exposure, which may influence resilience dynamics in a different way than other sectors. In sectors more directly exposed to conflict risks (extractive industries, agriculture, manufacturing) or with lower capital intensity (retail, services), the PCAR framework's propositions may require modification. Future research should examine whether the three capabilities we identified are equally consequential for firms in other sectors, and whether sector-specific capabilities (e.g., supply chain diversification for manufacturers, customer loyalty for retailers) should be incorporated into an extended PCAR framework.

Fifth, our 84-month panel, while substantial for two firms, cannot capture very-long-term resilience dynamics. Post-conflict reconstruction spans decades; the strategic adaptation processes we observed in the 2019–2025 period may represent only one phase of a longer trajectory. When Orange acquired the business in 2016 and Africell in 2011, both market entrants were at differing phases of Sierra Leone's post-conflict life, which could create path dependencies that drive their strategic philosophies. The PCAR framework's proposition that resilience capability configurations evolve as environments consolidate cannot be adequately tested with our relatively short time horizon. Future research needs to explore the development of resilience capability over 20+ year time periods, preferably follow firms from entry into the market to various environmental transitions. A longitudinal study of the same firms over longer timeframes would help to illuminate the dynamic adaptation

processes the PCAR framework suggests and how firms learn, reconfigure their capabilities and react to changes in the environmental conditions.

Sixth, our operationalization of resilience focused on network availability, an industry-specific metric that captures operational continuity but no other resilience dimensions. Our study did not investigate complementary outcomes such as financial resilience (profitability volatility) and strategic resilience (maintaining market position and/or entering new markets). Moreover, our composite measures for community legitimacy and political astuteness, while constructed from available data sources, may not fully capture the richness of these constructs. Community legitimacy, especially, is inherently perceptual and relational, and the quantitative indicators (CSR expenditure, partnerships, social media sentiment) that I used here are proxies that may not perfectly reflect what community members think is legitimate and acceptable. Future studies should include survey based measures of community perceptions to provide validation of our findings at the community level. It should consider financial and strategic resilience as two outcomes that can impact differently under the three PCAR capabilities.

Seventh, while our panel design and temporal ordering of variables provide some protection against reverse causality, we cannot definitively establish causal relationships. Simultaneity bias may exist because it is possible that more highly networked companies have more resources to dedicate to infrastructure diversification and community involvement. The time-invariant unobserved heterogeneity issues are handled by the random effects models used, but they do not solve all endogeneity problems. Instrumental variables analyses or natural experiments should be used in future research to improve causal identification. For instance, exogenous shocks to investment costs (e.g., changes in solar panel prices) could instrument for infrastructure diversification, while changes in government CSR requirements could instrument for community legitimacy investments.

Eighth, while our qualitative sample of 24 interviews provides rich contextual insight, the perspectives of Orange and Africell executives, regulators, and civil society actors may not fully capture community-level perceptions. Member checks were conducted and confirmed our interpretations with executives' experiences. Future studies, however, should include a systematic community survey or focus groups to gain insight into local perception and reaction to corporate resilience strategies. Also, the interviews were conducted in the period of September to November, 2025, which might have affected the views expressed, given the occurrence of particular concurrent events (e.g., the August 2024 service disruption). This limitation could be overcome through the use of longitudinal qualitative research.

Despite these limitations, the study provides robust evidence that distinct corporate strategy configurations can achieve equivalent resilience outcomes in post-conflict economies, and offers a theoretical framework, the PCAR framework, that can guide future research and practice in this important but under-researched domain

VII. CONCLUSION

This study has demonstrated that distinct corporate strategy configurations can yield equivalent organisational resilience outcomes in post-conflict economies via different causal pathways, challenging the assumption that a single optimal approach exists for managing operational continuity in fragile institutional environments. Through a mixed-methods comparative analysis of Orange and Africell in Sierra Leone, we have provided empirical evidence that infrastructure investment diversification and community legitimacy are significant positive predictors of operational continuity, with these capabilities exhibiting complementarity rather than trade-off.

The random effects panel regression revealed that infrastructure diversification ($\beta=0.421$, $p<0.01$) and community legitimacy ($\beta=0.378$, $p<0.05$) independently predict network availability. In contrast, their interaction ($\beta=0.312$, $p<0.05$) indicates that the resilience benefits of one capability are amplified when the other is also present. This complementarity finding is particularly consequential because it suggests that managers need not choose between investing in hard infrastructure and building community relationships; rather, these investments reinforce each other in ways that generate resilience outcomes superior to those achievable by either capability alone.

The comparative analysis has revealed that Orange's technocratic configuration, characterised by the €23 million disaster-recovery data centre in Bo and the deployment of renewable energy across 70 per cent of its 616 network sites, produces absorption resilience that excels in the face of site-specific disruptions such as fibre cuts, landslides, or localised infrastructure failures. Conversely, Africell's community-embedded configuration, characterised by the Klin Energy solar project delivering 230 kilowatts of peak capacity, the Africell Impact Foundation launched across four operating markets, and 28 active community partnerships, produces adaptation resilience that excels in the face of systemic input shocks such as fuel price volatility or grid unreliability.

Neither configuration is universally superior; rather, each represents a contextually appropriate response to the specific threat vectors that characterise Sierra Leone's post-conflict environment. This equifinality finding extends the strategic fit perspective on organisational resilience beyond the acute crisis context of COVID-19 examined by Zhou, Huang and Liu (2025) to the chronically fragile institutional settings that characterise post-conflict economies, where environmental contingencies differ fundamentally from those in market-led or state-led institutional frameworks.

Theoretically, we have deepened our knowledge about organisational resilience in fragile institutional contexts by creating and developing the Post-Conflict Adaptive Resilience framework, a model that is based on three co-constitutive resilience factors: infrastructure redundancy, community legitimacy and political astuteness, which are not optimized independently. The framework assumes that post-conflict situations have five distinguishing features: weak state capacity, unreliable physical infrastructure, legacy of social fragmentation, recurrent exogenous shocks, and the presence of international actors and aid actors in the peacebuilding process. These features produce unique requirements for organisational resilience which cannot be met by current frameworks that have been developed in stable institutional settings or in times of acute, temporary crises. The PCAR framework additionally suggests that configurations of resilience capabilities change along the continuum of post-conflict environments from early reconstruction to intermediate consolidation to consolidated periods, where the capacity for political astuteness was dominant in early periods, capacity for community legitimacy was increasing in intermediate periods, and capacity for infrastructure redundancy was growing in consolidated periods.

For managers of multinational enterprises operating in, or considering entry into, post-conflict markets, our findings offer several actionable insights that challenge conventional risk management approaches. Infrastructure investment decisions should be evaluated not only on commercial return but on resilience contribution, recognising that apparent overinvestment in geographic redundancy, such as Orange's Bo data centre, may be justified by avoided outage costs during crises that are predictable in their occurrence if not in their timing. Community engagement should be conceptualised as a strategic capability rather than a corporate social responsibility overhead, with Africell's 2.1 per cent of revenue devoted to community programming producing measurable resilience benefits during the September 2022 fuel price shock, when community relationships facilitated local procurement alternatives that would not have been available to a purely technocratic operator. Political astuteness, while necessary for securing operating rights and regulatory approvals, is insufficient for organisational resilience without complementary infrastructure and community capabilities, as evidenced by the non-significant coefficient for political astuteness in our regression models.

For policymakers in post-conflict countries seeking to attract and retain essential service providers, our findings indicate that regulatory frameworks should be redesigned to incentivise resilience-enhancing investments rather than merely enforcing minimum quality standards. Sierra Leone's National Communications Authority (NatCA) could consider incorporating geographic redundancy requirements in licensing conditions for critical communications infrastructure, providing tax incentives for renewable energy deployment at network sites, and recognising community engagement expenditure as qualifying for universal service obligation credits. The complementary relationship we identified between diversification and legitimacy suggests that these policies would be mutually reinforcing rather than competitive, creating a virtuous cycle in which infrastructure investment enhances service quality, builds community trust, and, in turn, reduces vandalism and theft, thereby improving the return on investment in infrastructure. As Sierra Leone continues its post-conflict trajectory

twenty-three years after the end of civil war, the telecommunications sector's experience offers transferable lessons for essential service provision in fragile institutional environments worldwide, from electricity and water distribution to healthcare and education delivery.

VIII. REFERENCES

1. Africell, "Africell Launches the Africell Impact Foundation," *Africell*, 2025. Online: <https://www.africell.com/news/africell-announces-africell-impact-foundation/>
2. Africell, "Africell Launches Major Solar Energy Project in Sierra Leone," *Africell*, 2025. Online: <https://www.africell.com/story/klin-energy-sierra-leone/>
3. J. Alaydi, T. Buck, and Y. Tang, "Corporate Social Responsibility in Conflict-Affected Contexts: The Case of Palestine," *Critical Perspectives on International Business*, vol. 17, no. 3, pp. 421–445, 2021.
4. S. Azizi, T.A. Börzel, and M.A. Hansen, "Areas of Limited Statehood and the Rule of Law," *Studies in Comparative International Development*, vol. 56, no. 2, pp. 145–168, 2021.
5. M. Bangura, et al., "Examining the Impact of Cloud Computing Adoption on SMEs in Sierra Leone: Using the Technology Acceptance Model (TAM) Framework," *International Journal of Science and Business*, vol. 49, no. 1, pp. 1–22, 2026. [Google Scholar](#) | [Publisher Link](#)
6. M. Bucheli, and T. DeBerge, "Downward Spiral of Firms' Political Strategies in Conflict Zones: A Process Analysis of an MNE's Operations During an Active Civil War," *Journal of World Business*, vol. 60, no. 3, p. 101612, 2024. [Google Scholar](#) | [Publisher Link](#)
7. L.A.L. Brito, P.S.G. Oliveira, and J.E. Leal, "Organisational Resilience: A Systematic Review and Future Research Agenda," *International Journal of Production Research*, vol. 60, no. 8, pp. 2643–2666, 2022.
8. L.J. Cornwell, E.O. Arakpogun, and R. Thomson, "Armed Conflict and Business: A Systematic Review and Research Agenda," *Journal of International Management*, vol. 29, no. 4, p. 101043, 2023.
9. L. Dai, L. Eden, and P.W. Beamish, "Place, Space, and Geographical Exposure: Foreign Subsidiary Survival in Conflict Zones," *Journal of International Business Studies*, vol. 44, no. 6, pp. 554–578, 2013. [Google Scholar](#) | [Publisher Link](#)
10. L. Dai, L. Eden, and P.W. Beamish, "Subsidiary Survival in Conflict Zones: The Role of Host Country Institutions," *Management International Review*, vol. 57, no. 3, pp. 387–416, 2017.
11. L. Dai, L. Eden, and P.W. Beamish, "Multinational Enterprises and Armed Conflict: A Review and Research Agenda," *Journal of International Business Policy*, vol. 6, no. 2, pp. 145–172, 2023.
12. I.S. Darendeli, and T.L. Hill, "Uncovering the Complex Relationships Between Political Risk and MNE Firm Legitimacy: Insights From Libya," *Journal of International Business Studies*, vol. 47, no. 1, pp. 68–92, 2016. [Google Scholar](#) | [Publisher Link](#)
13. M.A. De Villa, et al., "To Engage or Not to Engage With Host Governments: The Role of Political Capabilities," *British Journal of Management*, vol. 30, no. 3, pp. 578–596, 2019. [Google Scholar](#) | [Publisher Link](#)
14. S. Duchek, "Organizational Resilience: A Capability-Based Conceptualization," *Business Research*, vol. 13, no. 1, pp. 215–246, 2020. [Google Scholar](#) | [Publisher Link](#)
15. Ecofin Agency. Sierra Leone: Orange opens \$26.6M Data Centre as Disaster-Recovery Hub. Ecofin Agency. Online: <https://www.ecofinagency.com/news-digital/0312-51084-sierra-leone-orange-opens-26-6m-data-center-as-disaster-recovery-hub>
16. Green Building Africa, "Norfund to Power Up Telecoms Towers in Mali With Solar and Batteries," *Green Building Africa*, 2025. Online: <https://www.greenbuildingafrica.co.za/norfund-to-power-up-telecoms-towers-in-mali-with-solar-and-batteries/>
17. GSMA Intelligence, GSMA Intelligence Database, GSMA, 2025
18. D. Hanekom, and J.M. Luiz, "The Impact of Political Instability and Political Risk on MNE Strategy in Emerging Markets," *International Journal of Emerging Markets*, vol. 12, no. 4, pp. 678–702, 2017.
19. Amy J. Hillman, and Michael A. Hitt, "Corporate Political Strategy Formulation: A Model of Approach, Participation, and Strategy Decisions," *Academy of Management Review*, vol. 24, no. 4, 1999. [Google Scholar](#) | [Publisher Link](#)
20. J. Hillmann, and E. Guenther, "Organizational Resilience: A Valuable Construct for Management Research?," *International Journal of Management Reviews*, vol. 23, no. 1, pp. 7–44, 2021. [Google Scholar](#) | [Publisher Link](#)
21. R. Iftikhar, L. Purvis, and M. Giannakis, "A Systematic Literature Review of Organizational Resilience: A Capabilities Perspective," *International Journal of Operations & Production Management*, vol. 41, no. 8, pp. 1293–1336, 2021.
22. D. Jamali, and R. Mirshak, "Business-Conflict Linkages: Revisiting MNCs, CSR, and Conflict," *Journal of Business Ethics*, vol. 93, no. 3, pp. 443–464, 2010. [Google Scholar](#) | [Publisher Link](#)
23. L. Jiang, S. Cantarello, and K. Pandza, "The Role of Dynamic Capabilities in Organizational Resilience: A Systematic Review," *European Management Journal*, vol. 39, no. 5, pp. 578–590, 2021.

24. S.E. Saidu, and K. Abu, "The Role of Digital Innovation Skills in Shaping Entrepreneurial Readiness Among Commerce Students at the University of Makeni," *Journal of Social Sciences and Management Review*, vol. 8, no. 5, pp. 149–165, 2025. [Google Scholar](#) | [Publisher Link](#)
25. Gillian Symon, Catherine Cassell, and Nigel King, *Qualitative Organizational Research: Core Methods and Current Challenges*, SAGE, pp. 426–450, 2012. [Publisher Link](#)
26. A.B. Koroma, et al., "An Assessment on the Level of Digital Technology Literacy Skills of Local Council Staff in Sierra Leone," *International Journal of Economics, Commerce and Management*, vol. 12, no. 8, pp. 76–102, 2024. [Google Scholar](#) | [Publisher Link](#)
27. A.B. Koroma, N.J. Mansaray, and M. Khan, "AI-Based Fraud Detection and Customer Protection in Online Markets: Balancing Transaction Security and Enhancing Digital Payment Adoption," *Journal of Market Research*, vol. 2, no. 1, pp. 44–64, 2026. [Google Scholar](#)
28. Lectio Info, "Sierra Leone: Orange Prend l'Avantage Dans Les Infrastructures Critiques," *Lectio Info*, 2025. Online: <https://www.lectioinfo.com/afrique/sierra-leone-orange-prend-l'avantage-dans-les-infrastructures-critiques>
29. T.A. Liedong, T. Rajwani, and K. Mellahi, "The Dark Side of Corporate Political Strategies in Weak Institutional Environments," *Business & Society*, vol. 56, no. 6, pp. 789–823, 2017.
30. Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE.
31. National Communications Authority (NatCA). *Official website of the National Communications Authority, Sierra Leone*, 2026. Online: <https://natca.gov.sl>
32. Jennifer Oetzel, and Kathleen Getz, "Why and How Might Firms Respond Strategically to Violent Conflict?," *Journal of International Business Studies*, vol. 43, pp. 166–186, 2012. [Google Scholar](#) | [Publisher Link](#)
33. A.B. Koroma, et al., "An Assessment on the Level of Digital Technology Literacy Skills of Local Council Staff in Sierra Leone," *International Journal of Economics, Commerce and Management*, vol. 12, no. 8, pp. 76–102, 2024. [Google Scholar](#) | [Publisher Link](#)
34. R. Parente, et al., "Adapting and Sustaining Operations in Weak Institutional Environments: A Business Ecosystem Perspective," *Journal of International Business Studies*, vol. 50, no. 2, pp. 214–239, 2019. [Google Scholar](#) | [Publisher Link](#)
35. Przeworski, A., & Teune, H. (1970). *The logic of comparative social inquiry*. Wiley-Interscience.
36. N. Sambanis, "What Is Civil War? Conceptual and Empirical Complexities of an Operational Definition," *Journal of Conflict Resolution*, vol. 48, no. 6, pp. 814–858, 2004. [Google Scholar](#) | [Publisher Link](#)
37. Mark C. Suchman, "Managing Legitimacy: Strategic and Institutional Approaches," *Academy of Management Review*, vol. 20, no. 3, 1995. [Google Scholar](#) | [Publisher Link](#)
38. Ioannis Tellidis, and Stefanie Kappler, "Information and Communication Technologies in Peacebuilding: Implications, Opportunities and Challenges," *Cooperation and Conflict*, vol. 51, no. 1, 2016. [Google Scholar](#) | [Publisher Link](#)
39. N. Venkatraman, "The Concept of Fit in Strategy Research: Toward Verbal and Statistical Correspondence," *Academy of Management Review*, vol. 14, no. 3, pp. 423–444, 1989. [Google Scholar](#) | [Publisher Link](#)
40. Vision of Humanity. *How mobile connectivity helped rebuild communities in post-war Sierra Leone*. Institute for Economics and Peace, 2025. Online: <https://www.visionofhumanity.org/how-mobile-connectivity-helped-rebuild-communities-in-post-war-sierra-leone/>
41. Christopher Williams, and Ruxandra Steriu, "MNE Market Entry and Social Investment in Battle-Wearied Countries: Evidence from Heineken," *Journal of World Business*, vol. 57, no. 4, 2022. [Google Scholar](#) | [Publisher Link](#)
42. T.A. Williams, and D.A. Shepherd, "Building Resilience or Providing Sustenance: Different Paths of Emergent Ventures in the Aftermath of the Haiti Earthquake," *Academy of Management Journal*, vol. 59, no. 6, pp. 2069–2102, 2016. [Google Scholar](#) | [Publisher Link](#)
43. T.A. Williams, et al., "Organizational Response to Adversity: Fusing Crisis Management and Resilience Research Streams," *Academy of Management Annals*, vol. 11, no. 2, pp. 733–769, 2017. [Google Scholar](#) | [Publisher Link](#)
44. K.D. Wolf, N. Deitelhoff, and S. Engert, "Corporate Security and Private Military Actors: The Limits of State Sovereignty," *Security Dialogue*, vol. 38, no. 4, pp. 459–479, 2007. [Google Scholar](#) | [Publisher Link](#)
45. C. Yuan, J. Wu, and Y. Liao, "Organizational Resilience as a Dynamic Process: A Systematic Review and Future Research Agenda," *Journal of Management & Organization*, vol. 28, no. 5, pp. 967–993, 2022.
46. E.J. Zajac, M.S. Kraatz, and R.K.F. Bresser, "Modeling the Dynamics of Strategic Fit: A Normative Approach to Strategic Change," *Strategic Management Journal*, vol. 21, no. 4, pp. 429–453, 2000. [Google Scholar](#) | [Publisher Link](#)
47. C. Zhou, Y. Huang, and R. Liu, "Antecedent Configurations of Organizational Resilience in a Major Crisis: A Strategic Fit Perspective," *Journal of Business Research*, vol. 189, p. 115203, 2025. [Google Scholar](#) | [Publisher Link](#)