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UTILIZING SME RESOURCES TO MITIGATE UNEMPLOYMENT IN BAUCHI STATE: AN INTERVENTION PROPOSAL

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Abstract
The Study presents an intervention programme designed to leverage small and medium enterprises (SMEs) as a strategic vehicle for mitigating unemployment in Bauchi State, Nigeria. Grounded in the Resource-Based View and contingency theory, the intervention builds on a cross-sectional survey of 354 targeted SMEs, from which 208 valid responses were collected and analysed using SPSS (IBM) for descriptive statistics, reliability checks and multiple regression modelling. The SPSS outputs show that finance, ICT, infrastructure, and entrepreneurial experience/skills are critical resources shaping SME capacity to generate jobs, and that together these variables explain a substantial share of the variation in mitigating unemployment, with each resource exerting a positive and statistically significant effect on SME employment outcomes. Based on this evidence, the proposal outlines a multi-component programme that will improve access to and effective utilization of finance, support ICT adoption, and strengthen entrepreneurial skills through targeted training and mentoring, while also advocating for more enabling infrastructure for SMEs across Bauchi's three senatorial zones. The outcomes include better financial management and record-keeping, increased use of digital tools in SME operations, enhanced managerial and technical skills among owners and staff, higher SME productivity and business performance, and measurable increases in youth and women employment in both urban and rural areas. By translating SPSS-based research findings into targeted policy and programme actions, the intervention aims to provide government, development partners and enterprise-support institutions with a practical framework for scaling SME-led job creation and promoting inclusive, sustainable economic development in Bauchi State.
Keywords: ICT, SME, Contingency theory, Resource Based View, Unemployment.

1.0Introduction

The small and medium enterprises SMEs resources has been regarded as building blocks for growth and development, quite a number of researchers have approached their study topics by identifying a set of factors or variables in which constitutes SMEs resources, the environment for entrepreneurship as well as small enterprises resources requirements. Saeed et al. (2026) found that resources for small business can be physical capital, capital resources, managerial team, financial resources and human capital these are largely responsible for the success of many new Small and Medium businesses. Adelaja, (2012) identifies similar factors like infrastructure, capital/funding,

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technical knowhow and raw material constitutes drawbacks to SMEs to generate more employment in Nigeria. Therefore, there is need for intervention in this lucrative sector of the economy. Bauchi State has abundance of natural resources from gold, cassiterite, columbine, wolfram, coal, lignite, iron-ore and off shore petroleum deposits under exploration also agricultural practices, animals rearing and tourism attraction destination the Yankari Game Reserve. Unfortunately, these natural resources and agricultural practices pointed above are in negligence positions transforming them to beneficiary resources that require the use finance, infrastructure, ICT level and finally skill endowments to utilize the resources in an effective and efficient ways. SMEs around the state are paving way to do more in generating more employment which is not reality along the way something has been missing.

The study adopts two theoretical foundation which the Resources based view (RBV) is the key theory that reflects each of the use resources utilizes by the study. The RBV is dynamic in approach and it can be characterized by the system at hand to address the require needs of this study in general coverage of three segmented areas which are: resources, authority (Government Support) and the outcome of the resources impact of competitive advantage that the SMEs will get at the end. Contingency theory has dwell in on this study for urgent needs to rescues SMEs as to channel the require resources possible in effective and efficient ways for strategic formulation possible to achieved target results of mitigating unemployment in Bauchi. The key concerned of the study indicates a key essential and prospective future of SMEs as the catalyst employment generation and development in Bauchi state and Nigeria at large. Indeed, use SMEs resources are in varying degrees where in very short supply or inadequacy this resulted in less development and growths within SMEs can they cannot be able to creates employment that what this study content examined. Therefore, it studies focus upon these resources like a basic human needs of SMEs essentially for enhancing their wellbeing, building more opportunities and employing more unemployed citizens. This study therefore seeks to fill these conceptual and contextual gaps by empirically investigating how the availability and utilisation of key SME resources affect the capacity of SMEs to mitigate unemployment in Bauchi State. It asks: *What explains the use of SME resources to mitigate unemployment in Bauchi State of Nigeria?* By focusing on finance, ICT, infrastructure and entrepreneurial skills as core resource variables, the study aims to generate evidence that can guide more effective support mechanisms and policy interventions for SME-led employment generation in a fragile regional economy.

1.2 Objectives of the Research

The main objective of the study was to determine the Use of Small and Medium Enterprises Resources to mitigate unemployment in Bauchi State.

1.2.1 Specific Objectives of the Study

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1. To examine the extent to which improved access to finance enhances the capacity of small and medium enterprises (SMEs) in Bauchi State to create sustainable employment opportunities.
2. To assess the influence of ICT adoption and utilization on SME productivity and job creation among youth and women-owned enterprises in Bauchi State.
3. To determine how the availability and quality of critical infrastructure (especially power, roads, and ICT connectivity) affect SME performance and their ability to expand employment.
4. To evaluate the role of entrepreneurial skills and experience, delivered through targeted capacity-building and mentoring, in strengthening SME competitiveness and scaling SME-led employment generation in Bauchi State.

2.1 Theoretical foundation and key literature

2.1 Introduction

This section anchors the study in two main theories—the **Resource-Based View (RBV)** and **contingency theory**—and reviews empirical work on SME resources and unemployment. It concentrates on four critical resource domains (finance, ICT, skills and experience, and infrastructure) and examines how they influence SME performance and the capacity of SMEs to mitigate unemployment in contexts such as Bauchi State

2.2 Resource-Based View (RBV)

RBV conceptualises firms as bundles of resources and capabilities that can generate sustained competitive advantage when they are valuable, rare, difficult to imitate and properly organised. Penrose (1959) described these as “productive opportunities,” while Wernerfelt (1984) and Barney (1986) argued that both tangible assets, such as finance and physical capital, and intangible assets, such as knowledge, skills and routines, underpin long-run performance. In the SME context, this means that finance, ICT, entrepreneurial skills and human capital are not just inputs but strategic resources that shape productivity, growth and ultimately employment outcomes. Carmeli (2001) explicitly includes technology, financial assets and human skills as core RBV resources, which corresponds closely with the variables examined in this study in relation to unemployment mitigation.

Evidence from different settings reinforces this view. Roberts (1990) notes that resource endowment can significantly improve SME performance. Saffu and Manu (2009) show that resource availability enhances the performance and employment capacity of women-owned SMEs in Ghana. Banney (1986) emphasises that the availability of resources is central to strategy formulation. Collectively, these studies suggest that SMEs with stronger internal resource profiles are better positioned to expand and sustain employment than those operating under severe resource constraints. At the same time, work by Dierickx and Cool (1989) and Lippman and Rumelt (2003) stresses that firms in developing economies must deliberately build internal resources, such as knowledge bases and social capital, rather than relying solely on external support. Resource-dependency perspectives further show that access to external resources and relationships with stakeholders such as government and NGOs shape firm behaviour and performance over time (Kiel & Elliot, 1996).

2.3 Contingency theory

Contingency theory complements RBV by emphasizing that the effectiveness of organizational strategies and resource configurations depends on the context in which firms operate. It focuses on how organisations adjust structures, processes and decisions to situational factors such as environmental uncertainty, policy regimes and market conditions. For SMEs in Bauchi State, this is particularly relevant because businesses operate in a dynamic and often unstable environment marked by political insecurity, infrastructural deficits and fluctuating demand. In such settings, the same financial or ICT resource can lead to very different outcomes depending on how it is aligned with the firm's strategy, structure and external conditions.

Contingency studies highlight that strategies must be adjusted when the external environment changes (Hofer, 1975), that risk assessment and corrective mechanisms are essential in unstable settings (Chen et al., 2005), and that strategic analysis often uses tools such as PEST (political, economic, social and technological analysis) to understand contextual constraints and opportunities. By combining RBV and contingency theory, this study therefore treats SME resources as strategic assets whose impact on unemployment depends on how well they are deployed within the specific socio-economic context of Bauchi State.

2.4 SME resources and mitigating unemployment

The literature on SMEs and employment repeatedly points to finance, ICT, skills and experience, and infrastructure as the most influential resource domains. Each of these has a distinct but interrelated relationship with performance and job creation. Finance is widely recognised as a critical determinant of SME performance and job-creation capacity. From an RBV perspective, finance underpins the acquisition of other resources and enables investment in growth (Grant, 1991; Peteraf, 1993). In Nigeria and other developing countries, however, SMEs face persistent financial gaps due to high collateral requirements, limited credit information and weak financial records. Onugu (2005) argues that finance is one of the most sensitive SME resources and can account for a substantial portion of performance differences, while surveys reported by the IFC (2011) and Industry Canada (2016) show that limited access to long-term finance constrains expansion and reduces the ability of SMEs to hire additional workers. Watson (2007) notes that poor financial record-keeping also makes it difficult to measure impact and design effective support policies. The relationship to unemployment is therefore direct: when SMEs cannot obtain and effectively use finance, they struggle to expand operations, invest in equipment or formalise jobs; when financing is available and well utilised, SMEs are more likely to create and sustain employment

ICT is another resource with strong potential to enhance SME performance and employment. ICT encompasses hardware, software, networks and digital platforms that support information flow, coordination and market access (Beckinsale & Ram, 2006; Porter & Miller, 1985). International evidence from OECD countries shows that widespread ICT adoption among SMEs is associated with higher sales growth, improved investment profiles and expanded employment. Studies in

Kenya highlight how initiatives such as M-PESA and ICT hubs have transformed business models and created large numbers of jobs directly and indirectly (Ndemo, 2017; Mathirajan & Krishnaswamy, 2010; Carmen et al., 2016). In Nigeria, however, the contingency dimension is pronounced: chronic power outages, weak ICT infrastructure, high costs and an urban–rural divide limit ICT diffusion among SMEs (Lal, 2007; Adebayo et al., 2013; Bogoro, 2015). These constraints reduce the employment benefits that ICT could otherwise generate. Thus, ICT can be a powerful lever for employment when infrastructure and skills are adequate, but its impact is muted when outages, high costs and low digital literacy persist.

Entrepreneurial skills and experience are vital intangible resources that determine how effectively SMEs mobilise finance, ICT and other inputs. From an RBV standpoint, skills, knowledge and learning capability are key drivers of competitive advantage and performance. European initiatives such as "skills for new jobs" explicitly link skill development to labour-market needs and SME growth (Shipton, 2006; Brussel.com, 2008). Pauuwe (1998) argues for frameworks that combine HRM and RBV, emphasising skill, experience and education as foundations for higher performance and employment generation. In many developing economies, including Nigeria, SMEs often under-invest in practical skills development and rely heavily on theoretical knowledge (Bogoro, 2015; Almeida & Aterido, 2010). This skill gap limits their ability to grow and absorb labour even when other resources are present. Oluwatomipe et al. (2016) and UN reports therefore call for more structured training and development programmes for African SMEs. In relation to unemployment, the effect is mediated through capability: SMEs with stronger skill and experience bases are more likely to innovate, expand and hire, while skill-deficient firms remain small, vulnerable and unable to create meaningful jobs.

Infrastructure—especially electricity, roads, water and communication systems—forms the enabling environment within which SME resources are deployed. Torrisi (2009) and Beyene (2002) argue that sound infrastructure is essential for economic development and sustainable SME operations, providing a conducive atmosphere for production and service delivery. Empirical work in Nigeria indicates that chronic electricity shortages have forced many SMEs in cities such as Kano, Lagos and Kaduna to shut down, resulting in mass job losses (Mohammed, 2009; Okoye et al., 2014). Infrastructure deficiencies significantly reduce SME productivity and constrain their ability to scale employment. Comparisons with countries like Kenya, which has made greater progress in power supply and infrastructure under its Vision 2030 agenda, highlight the employment potential that can be unlocked when infrastructure constraints are eased. In this sense, infrastructure acts as a system-level resource that conditions the effectiveness of firm-level resources such as finance, ICT and skills.

2.5 Empirical Studies and Research Gaps

There is no surprise that various studies existed on the ways that SMEs address issue of unemployment across Nigeria and other countries across the world. Previous studies carried out heighted similar issues (Ngek and Smit 2013, Makinde 2013, Fagge and Zubairu 2014, Abiodum 2014, Lekya 2015, Bouzza 2015). These studies focus more on policies and specific variables to address unemployment in Nigeria the other two studies were conducted in different regional context. For instance, Fagge and Zubairu (2014) did a study on Private sector youth unemployment in Nigeria. The findings indicate ethics clashes and Boko Haram result into the reason why private sector do not employed more and suggested that government should do more to supply power to sector as to address the issue. The study lack basic foundation due to basic issues heighted by several studies that lead into crises in Nigeria more are pointing finger at lack of resources available or need to acquire those resources which finally triggered socio-economic problem like unemployment then resulted to crisis (Dioke & Ikeije, 2016) Makinde, (2013) study on curbing the unemployment problem in Nigeria through entrepreneurship. In which the findings heighted needs for skills development centers across. The study indicates only one component of resources while other resources factors were silent and some SMEs already poses that skills resources their need might be something different to employ more.

Ngek and Smit (2013) study on Will Promoting typical SMEs start-up increases job creation in South Africa. Similarly, Bouzza (2015) study on Effectiveness of SMEs sector in economy and employment generation in Algeria. Conclusively, the two above studies put more emphasis on the strategic formulation by the government (independent variable) without looking at the key SMEs (dependent variables) needs these studies were contrast to this prospective study and there no doubt it was a different country approach issue. In spite of all these studies and issues highlighted so far, none has pointed out the central area of these key variable resources needed, the resources profile needs and strategic implementation by the authority concern toward SMEs to mitigate unemployment on same juncture these studies were not able to establish a correlation existing between use of SMEs resource tools and employment possibilities. Therefore, this study highlighted three (3) fundamental gaps from conceptual, methodological and contextual. Also little has been conducted specifically on study of this nature in Nigeria which is a concern of this study to focus and highlight, the next chapter presents the research methodology.

3.0 Research methodology

3.1 Introduction

This section describes the research design, population, sampling procedures, data collection and analytical techniques used in the completed study on SME resources and unemployment mitigation in Bauchi State. The chosen methods were intended to generate reliable, quantitative evidence that could directly address the research questions and test the proposed relationships between SME resources.

3.2 Research design

The study adopted a quantitative, cross-sectional survey design. It examined the use of SME resources to mitigate unemployment at a single point in time, using structured questionnaires administered to SME owners and managers across Bauchi State. This design was considered appropriate because it allows the collection of standardized data from a relatively large number of respondents and supports statistical analysis of relationships among variables such as finance, ICT, infrastructure, skills and employment creation.

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3.3 Population, sample size and sampling

The target population comprised all registered SMEs in Bauchi State. According to SMEDAN and the National Bureau of Statistics (2013), there were 2,120 SMEs in the state at the time of the study. From this population, a sample size of 354 SMEs was determined using Fischer's (2003) single-proportion formula, with a 95% confidence level, a 5% margin of error and an assumed response proportion of 50%. After adjustment for the finite population (N = 2,120), the final estimated sample size was 354 SMEs. A stratified random sampling technique was employed to ensure representation across the three senatorial districts of Bauchi State (North, Central and South) and across different types of SMEs (manufacturing, trading and services). A sampling frame of registered SMEs was obtained from the Bauchi State Ministry of Commerce, Industry and Cooperatives, and SMEs were randomly selected within each stratum. This approach improved the accuracy and generalizability of the findings by capturing the diversity of SMEs in the state.

3.4 Data collection

Primary data were collected using a structured questionnaire administered to SME owners and managers. The instrument contained three main sections: socio-demographic and firm characteristics; items measuring access to and utilization of finance, ICT, infrastructure, and entrepreneurial skills and experience; and items on employment creation and related outcomes. Most items were measured on a five-point Likert scale, ranging from "strongly disagree" to "strongly agree", with a few dichotomous (Yes/No) questions where appropriate. Questionnaires were distributed and collected through a drop-and-pick method, with support from officials of the Ministry of Commerce in the three zones to facilitate access and ensure coverage. Completed questionnaires were checked for completeness and consistency to minimise errors that could affect the validity of the analysis. Out of the 354 questionnaires distributed, 208 were returned and deemed usable, yielding a response rate of 59%, which is considered adequate for quantitative analysis.

3.5 Data analysis and SPSS application

The data were coded and entered the Statistical Package for Social Sciences (SPSS) for analysis. Categorical variables were summarized using frequencies and percentages, while continuous variables were summarized using means, medians, modes, and standard deviations. This descriptive analysis provided an overview of respondent characteristics, firm profiles, and the distribution of key SME resource variables. To test the study's hypotheses and examine the relationship between SME resources and unemployment mitigation, multiple linear regression analysis was conducted in SPSS. The model specified employment creation (mitigating unemployment) as the dependent variable and four SME resource variables—finance, ICT, infrastructure, and experience and skills—as independent variables. The regression model was expressed as: $\mathrm{Y=\beta0+\beta1X1+\beta2X2+\beta3X3+\beta4X4+\varepsilon} Y=\beta 0+\beta 1X1+\beta 2X2+\beta 3X3+\beta 4X4+\varepsilon$

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where YY represents employment creation (mitigation of unemployment), $\beta 0\beta 0$ is the intercept, $\beta 1\beta 1$ to $\beta 4\beta 4$ are the regression coefficients for finance ($X1X1$), ICT ($X2X2$), infrastructure ($X3X3$), and experience and skills ($X4X4$), and $\varepsilon\varepsilon$ is the error term.
ANOVA results from SPSS confirmed that the overall model was statistically significant ($p = 0.039$), indicating that the set of SME resource variables jointly explained a meaningful proportion of the variation in unemployment mitigation. The coefficients table showed that finance, ICT, infrastructure, and experience and skills each had positive and statistically significant effects on employment creation, supporting the theoretical expectation that better-resourced SMEs are more capable of generating jobs. By combining a cross-sectional survey design, stratified random sampling, structured questionnaires and SPSS-based regression analysis, the study produced robust quantitative evidence on how SME resources relate to unemployment mitigation in Bauchi State.

4.0 Results and discussion

4.1 Introduction

This section presents the main empirical results of the study and discusses their implications for the role of SME resources in mitigating unemployment in Bauchi State. It covers response rate, respondent and firm characteristics, key descriptive statistics on policies and resources, the ranking of critical SME resources, and the findings from the multiple regression model estimated using SPSS. The discussion links these results back to the Resource-Based View (RBV) and contingency theory to interpret how finance, ICT, infrastructure, and skills shape SME-led employment creation.

4.2 Response rate and sample profile

Out of a targeted sample of 354 SMEs across Bauchi State, 208 fully completed and returned questionnaires, yielding a response rate of 59%. This rate falls within the acceptable range for survey research and provided a sufficient empirical basis for analysis and interpretation. The respondents were predominantly male (77%), with females accounting for 23%, suggesting that SME ownership and management in the state remains male-dominated but with some participation by women. The age distribution indicated that the sample was concentrated in economically active cohorts: only a small share were below 20 years, while most respondents fell between 21 and 55 years, with the largest proportions in the 31–40 and 41–50 age brackets. In terms of marital status, 77% of respondents were married, 12% single, 8% widowed and 3% divorced. Educational attainment was generally high: 65% had OND, 26% had BSc/HND, 5% had MSc/MBA and 4% held PhDs, suggesting that most respondents had sufficient education to understand and respond to the survey instrument reliably. Three-quarters (75%) resided in urban areas, while 25% lived in rural settings, reflecting the urban concentration of formal SMEs but still capturing a substantial rural segment.

Firm-level characteristics further clarified the profile of SMEs in the sample. A large majority (74%) operated in services, with 26% in manufacturing, underscoring the dominance of service-based enterprises in Bauchi State's SME landscape. Around 40% of firms had been in

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operation for 10–20 years, 35% for 5–10 years, and smaller shares for under 5 years and above 20 years, indicating a mix of relatively young and more mature enterprises. Most SMEs (84%) were registered with the State Ministry of Commerce and Industry, with only 16% registered at the Corporate Affairs Commission, suggesting a predominantly state-level registration and possibly lower levels of full formalization. Ownership structures were mainly simple: 49% of firms were sole proprietorships, 29% partnerships, 19% limited liability companies, and only 3% corporate businesses. Two-thirds (66%) of respondents were owner-managers, while 34% were employee managers, which is consistent with the central role of owner-managers in SME decision-making. Firm size, measured by number of employees, was heavily skewed towards micro-enterprises: 47% had 0–5 employees, 26% had 5–10, 23% had 10–20 and only 4% had more than 20 employees. This confirms that most SMEs in Bauchi State are small operations with limited direct employment capacity per firm. Despite their small size, many firms reported some employment growth over time. About 25% indicated an employment increase of 10–20%, 33% reported 20–30%, 21% reported 30–40%, 13% reported 40–50%, and 8% reported 50% or more since inception. This pattern suggests that, even within a constrained environment, a substantial proportion of SMEs have expanded their workforce, albeit modestly. In terms of managerial experience, 37% of respondents had 5–10 years of experience, 24% had 10–15 years, and smaller proportions had less than 5 years or more than 15 years, indicating that the majority possessed significant hands-on experience in managing SMEs. Perceived firm performance was generally positive: 42% rated their performance as great, 40% as moderate, and only 18% as low.

Despite their small size, many firms reported some employment growth over time. About 25% indicated an employment increase of 10–20%, 33% reported 20–30%, 21% reported 30–40%, 13% reported 40–50%, and 8% reported 50% or more since inception. This pattern suggests that, even within a constrained environment, a substantial proportion of SMEs have expanded their workforce, albeit modestly. In terms of managerial experience, 37% of respondents had 5–10 years of experience, 24% had 10–15 years, and smaller proportions had less than 5 years or more than 15 years, indicating that the majority possessed significant hands-on experience in managing SMEs. Perceived firm performance was generally positive: 42% rated their performance as great, 40% as moderate, and only 18% as low.

4.3 Policies, Resources and Perceived effects on employment

Descriptive statistics on policy-related items and resource use provided insight into how SMEs perceived the relationship between policy instruments, resource availability and employment. Mean scores on a five-point Likert scale indicated that respondents generally agreed that various government policies and programmes had some effect on their capacity to employ. For example, taxation policies and raw material policies had means above 4.0, suggesting that respondents felt these frameworks had helped them to some extent in employment generation. Government small-scale business loan schemes and apprenticeship training programmes also recorded high means, reflecting perceived support to job creation where such interventions actually reached firms of particular relevance to this study were items directly linking resource use to employment outcomes. Respondents moderately to strongly agreed that strategic investment in SME resources

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would boost employment generation, that effective and efficient use of SME resources would enable them to employ more, and that if resources were fully engaged, SMEs would create more jobs. They also strongly endorsed the view that providing ICT facilities and infrastructure to SMEs would increase employment, and that entrepreneurship and management skill acquisition programmes would support greater labour absorption. Overall, the mean scores indicated a clear recognition among SME owners and managers that better access to and utilizations of finance, ICT, infrastructure and skills is essential for expanding employment.

4.4 Ranking of critical SME resources

When asked to rank SME resources according to their perceived importance for mitigating unemployment, respondents assigned the highest priority to infrastructure (45%), followed by ICT (32%), finance (19%) and experience and skills (4%). This ranking is revealing. While the theoretical and empirical literature often emphasises finance as a central constraint, the SMEs in Bauchi State perceived infrastructure—particularly electricity and related services—as the most critical bottleneck to job creation, with ICT also receiving considerable emphasis. Finance was still seen as important but, in this context, slightly less decisive than the enabling environment and digital connectivity. Experience and skills, although vital from an RBV perspective, were ranked lowest, possibly reflecting the more immediate and visible impact of infrastructure and ICT constraints. These perceptions align with qualitative observations that persistent power outages, poor roads and weak ICT infrastructure significantly disrupt operations, reduce productivity, and discourage expansion, thereby limiting SME capacity to absorb labour. The ranking suggests that from the perspective of SME operators, improvements in infrastructure and ICT would unlock more employment potential than any other single resource.

4.5 Regression results: SME resources and unemployment mitigation

To move beyond perceptions and examine actual statistical relationships, the study employed multiple linear regression analysis in SPSS, with mitigation of unemployment (employment creation) as the dependent variable and four SME resource variables—finance, ICT, infrastructure, and experience and skills—as independent variables. The model fitted the data reasonably well. The correlation coefficient (R) was 0.734, indicating a strong positive relationship between the combined set of resource variables and employment creation. The adjusted R-square was 0.503, meaning that approximately 50.3% of the variation in unemployment mitigation among the sampled SMEs was explained by the four resource variables included in the model, while 49.7% was due to other factors not captured in the regression. The Durbin–Watson statistic of 1.421, being close to 2, suggested no serious autocorrelation in the residuals. The ANOVA results confirmed that the overall regression model was statistically significant, with an F-value of 11.657 and a p-value of 0.039. This indicates that, taken together, finance, ICT, infrastructure and experience and skills significantly predict the extent to which SMEs contribute to mitigating unemployment in Bauchi State. In other words, the probability that the observed relationship between these resource variables and employment creation arose by chance is low.

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Inspection of the regression coefficients revealed that all four resource variables had positive and statistically significant effects on unemployment mitigation. The estimated regression equation was:
Y=3.544+0.541X1+0.644X2+0.148X3+0.504X4 $Y=3.544+0.541X1+0.644X2+0.148X3+0.504X4$
where Y Y denotes mitigation of unemployment (employment creation), X1 $X1$ finance, X2 $X2$ ICT, X3 $X3$ infrastructure, and X4 $X4$ experience and skills. The constant term of 3.544 implies that even at the baseline (when the measured levels of these resources are minimal), there is a positive level of employment creation, reflecting other unmeasured factors. The coefficient for finance (0.541, $p = 0.035$) suggests that a one-unit increase in effective finance use is associated with a 0.541unit increase in unemployment mitigation, holding other factors constant. ICT has the largest coefficient (0.644, $p = 0.049$), indicating that improvements in ICT access and utilisation are strongly associated with higher employment creation. Infrastructure (0.148, $p = 0.038$) and experience and skills (0.504, $p = 0.043$) also exhibit positive, significant coefficients, confirming that better infrastructure and stronger skills and experience contribute meaningfully to SME-led job creation.
These results provide quantitative support for the RBV proposition that bundles of valuable resources—financial, technological, physical and human—jointly drive performance and competitive advantage, here expressed in terms of the ability to generate employment. They also reflect the contingency perspective: the impact of these resources is observed in the specific context of Bauchi State, where environmental conditions such as insecurity, infrastructural deficits, and policy frameworks shape how resources are deployed and what outcomes they produce.

4.6 Discussion
Taken together, the descriptive and regression findings show that the use of SME resources to mitigate unemployment in Bauchi State is both constrained and promising. On the one hand, most SMEs are small, owner-managed and concentrated in services, with limited initial financing from banks or government schemes; personal savings and informal sources (relations and friends, trade creditors) remain the dominant modes of start-up finance, while only 10% of respondents had accessed government small-scale loans and 17% bank loans. This underlines the persistent funding gap and weak institutional support that other studies in Nigeria have identified. On the other hand, the regression analysis demonstrates that where finance, ICT, infrastructure, and skills are available and effectively used, SMEs do contribute significantly to employment creation. The positive and significant coefficients on all four resource variables indicate that strengthening any one of these will, on average, improve the capacity of SMEs to mitigate unemployment, while coordinated improvements across all four are likely to have the strongest impact. ICT shows a particularly strong effect, suggesting that digital tools, platforms and connectivity can play a transformative role in expanding market reach, improving efficiency and creating new job roles in administration, sales, logistics and customer services.

The high ranking of infrastructure by respondents reinforces this message. While finance and ICT matter, the absence of reliable electricity, roads and communication systems severely undermines

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the benefits of other resources. In this sense, infrastructure acts as a foundational, system-level resource that conditions the effectiveness of finance, ICT and skills. This finding resonates with the contingency view that resource effects are context-dependent: in an environment of chronic infrastructural deficits, addressing these conditions becomes a prerequisite for fully realizing the employment potential of SME-level resources. In conclusion, the study's results provide empirical support for both the Resource-Based View and contingency theory. They confirm Penrose's idea that SMEs require "productive opportunities" in the form of tangible and intangible resources, and they show that in Bauchi State these opportunities are constrained but still meaningful when finance, ICT, infrastructure, and skills are strengthened. At the same time, the findings underscore the need for context-sensitive strategies: policy interventions and support programmes must not only expand access to finance and training but also tackle structural constraints such as infrastructure and ICT gaps if SMEs are to play a more effective role in reducing unemployment.

5.0 Summary, Conclusion and recommendations

5.1 Summary of findings

The study evaluated the use of small and medium enterprise (SME) resources to mitigate unemployment in Bauchi State, Nigeria. The final sample comprised 208 SMEs out of a targeted 354, giving a response rate of 59%, which is adequate for quantitative analysis. Respondents were mainly male (77%), relatively well educated (65% OND, 26% BSc/HND, 9% postgraduate), and predominantly urban-based (75%), with firms concentrated in the service sector (74%) rather than manufacturing (26%).

Descriptive statistics showed that respondents generally agreed that policy instruments and resource-related interventions have an effect on their capacity to employ. Taxation and raw-material policies, government small-scale loan schemes, and apprenticeship training programmes all recorded high mean scores (above 4.0 on a 5-point scale), indicating that where these interventions are accessible, SMEs perceive them as helpful for job creation. Respondents also agreed that strategic investment in SME resources, effective and efficient use of those resources, and full engagement of resources by government would enable SMEs to employ more labour. In line with wider literature, the findings confirmed that ICT and skills are particularly important. Respondents strongly endorsed the view that provision of ICT facilities would increase employment (mean 4.354), and the study notes that SMEs with ICT networks tend to exhibit higher sales growth, better investment profiles and greater capacity to accommodate employees. This resonates with evidence from other contexts showing that ICT adoption supports SME survival and job creation. Entrepreneurship and management skill acquisition programmes also received positive ratings, but the study observed, consistent with Bogoro (2015) and Almeida and Aterido (2010), that many Nigerian SMEs still under-invest in practical, skills-oriented development, which constrains their growth and employment potential.

Respondents agreed that more intensive use of SME resources can enhance employment, and a substantial proportion recognised that some resources have priority over others. When asked to rank key resources for mitigating unemployment, infrastructure emerged as the top priority (45%), followed by ICT (32%), finance (19%) and experience and skills (4%), highlighting the perceived

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centrality of electricity, roads and related infrastructure for SME operations. Multiple regression analysis in SPSS showed that finance, ICT, infrastructure, and experience and skills jointly explain just over half of the variation in unemployment mitigation among sampled SMEs (adjusted $R^2 = 0.503$, $p = 0.039$). All four variables had positive and statistically significant coefficients in the model, indicating that improvements in any of these resource domains are associated with increased employment creation. This provides empirical support for the Resource-Based View and confirms that better-resourced SMEs in Bauchi State are more likely to contribute to mitigating unemployment.

5.2 Conclusion

On the basis of these findings, the study concludes that SME-led mitigation of unemployment in Bauchi State depends critically on the availability and effective utilisation of four resource domains: finance, ICT, infrastructure, and entrepreneurial skills and experience. Although most firms are small, service-oriented and heavily reliant on personal savings and informal financing, they demonstrate some capacity to expand employment when these resources are strengthened. The evidence shows that SMEs with better ICT access, more reliable infrastructure, improved financial support and enhanced managerial and technical skills report higher performance and greater job creation. The results also confirm that infrastructure and ICT are perceived as the most binding constraints, with finance and skills remaining important but somewhat less immediately visible to operators. Overall, the study supports the RBV proposition that bundles of valuable resources underpin SME performance and employment, and the contingency view that the impact of those resources is shaped by the specific structural and policy environment of Bauchi State.

5.3 Recommendations

The study recommends that government at state and federal levels, together with relevant agencies, should prioritise policies and programmes that expand SME access to and utilisation of finance, ICT, infrastructure and skills in an integrated manner. Policy makers and ministries should use the empirical results as a reference point when designing support schemes, ensuring that interventions in taxation, credit provision, ICT facilities and training are explicitly linked to employment targets for SMEs. There is a particular need for coordinated investment in infrastructure and ICT in SME clusters and industrial areas, including improved electricity supply, better road networks and affordable digital connectivity. Such investments would enhance the effectiveness of financial support and training programmes and allow SMEs to exploit new technologies such as solar solutions and digital platforms. At the firm level, SMEs should be encouraged, through incentives and support services, to strengthen record-keeping, financial management and skills development so that they can convert resource inflows into sustainable employment.

5.4 Limitations and suggestions for further study

The study faced several limitations. It relied on primary data collected through questionnaires from a single state, and, although the response rate was acceptable, the target population was large relative to the achieved sample. Data collection was time-consuming and depended on voluntary disclosure, which may have introduced response bias despite support from Ministry of Commerce

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officials. The cross-sectional design also limits the ability to track long-term effects of resource changes on employment. Future research should extend this analysis to other states and regions to capture differences in SME resource needs and contextual conditions. Longitudinal or panel studies would be particularly useful for measuring how changes in finance, ICT, infrastructure and skills over time influence SME growth and employment creation. Further work could also explore in more detail which specific combinations and sequencing of resource interventions deliver the greatest impact on unemployment, thereby providing even more precise guidance for policy makers and development partners.

References

Abiodum, O.(2014). The Small and Medium Enterprises Role and Performance in Nigeria :Competitive advantage and its Impacts. *International Journal of Research Studies in Management (2014, Oct) Vol. 3 Issue 2,75-86 ISSN:2243-7770*

Mba and Emiti. (2014). Issues, Challenges and Prospect of Small and Medium Enterprises in Port-Harcourt city, Nigeria. *European Journal of Sustainable Development(2014) Vol.3 Issue1, 104-114 Doi 10.14207/ejsd. ISSN2239-5938*

Akanbe, B., Jegede, C., & Osetimehin, K. (2012). An Evaluation of the Challenges and Prospects of Micro and Small Scale Enterprises Development in Nigeria. *American International Journal of Contemporary Research Vol. 2 No. 4.*

Badenmost, C. (n.d) Writing a Literature Review Chapter in a thesis. Memorial University, USA. Retrieved from hppts://m.youtube.com/watch?v=2cy 3GJk4z8

Barney, J. (1991). Firm Resources and Sustainable Competitive Advantage. *Journal of Management, 17:99-120.*

Barney and Arking (2001). Resources Based View Theories of Competitive Advantage a Retrospective on the Resource Base View. *Journal of Management 27(6): 643-650.*

Bogoro, (2015) *Entrepreneurship for Development*: Lecture Delivered at the 2nd Convocation Ceremony of the Kaduna State University on December11, 2015.

Bouazza, A.(2015).Small and Medium Enterprises as Effective sector for Economic Development and Employment creation in Algeria. *International Journal of Economic, Commerce and Management United Kingdom. Vol. 3, Issue 2, Feb, 2015. ISSN2348 0386 Retrieved from http://ijecm.co.uk/*

Ekem, J. (2011). Small and Medium Scale Enterprises Development in Nigeria: Constraints and Policy Option: Dissertation Stelleborch University.

Dierick, I. and Cool, K. (1989). Asset Slack Accumulation and Sustainability of Competitive Advantage: *Journal of Management Sciences 35: 1504-11.*

European Union, (2009) EU Support Programmes for SMEs: An Overview of the main findings Opportunities available for Europeans SMEs. Retrieved From EU Enterprises and Industry Directorate Generate.

Fagge and Zubairu, (2014) Private Sector and Youth Employment Generation in Nigeria: A Review *International Journal of Business and Law Research 2(3):45-56 September, 2014. ISSN:2360-8986* , www.seahipaj.org

Foss, J. (2011) Entrepreneurship in the Context of the Resource Based-View of the Firm *SMG working Paper No 8/2011 ISSN 978-87-91815-70-60 Retrieved from* www.cbs.dk/smg

Harash, E. and Jassem, A. (2014) Contingency factors and Performance of Research and Development (R&D) The Moderating Effects of Government Policy. *Journal of Asian Scientific Research Retrieved from http:/www.aesswb.com/journals/5003 Vol.4 Issue 2: 47-58*

Ibrahim., M. (2014). Impact Assessment of Accounting system on the Performance of SMEs in Bauchi Metroplitant, Nigeria.*The IIER Internationa Conference, Dubai, UAE 8th August, 2014 page 67.*

Insecurity.com(2007). *VoIP Lacking about to hurt Small business* Retrieved from http:/meship.com/blog/2011/06/03/VoIP-lacking-about-to hurt business.

Katuzo, H.(2008) Challenges that Inhibits the Development of Small and Medium Enterprises in Namibia.

Lekhanya, L. (2015)Public outlook on SMEs as a Strategic tool for Economic growth and job creation in South Africa. *Journal of Governance and Regulations/Volume 4 Issue 4, 2015.*

Sani, M .,& Ghazali., P. (2015). The effects of finance, infrastructure and training on the performance of SMEs in Nigeria. *International Journal of Business and Technopreneurship* 5(3), 25-30.

Saeed, A., Kolev, K. D., Hussain, T., Pichler, S., & Malik, O. F. (2026). Cross-Border Acquisitions and Firm Financial Performance: The Overlooked Role of Training Investments. *Human Resource Management*.

Margie, T., & Rahman, M., (2013). Complete Network Security protection for SMEs Limited resources. *International Journal of Network Security and Application (IJNSA).* School of Business and Technology, Capella University Minneapolis, MN USA. 6(6), 4-5 MPG Book ltd.

Mugenda, M.O & Mugenda, G. A., (2003). Research methods: Qualitative and Quantitative approaches. Nairobi, acts press, pg. 71-82

National Bureau of Statistics, (2013). *Unemployment/ Underemployment Report Quarter Two* (Research Report No4) Retrieved from agency poverty alleviation website http://wwwpoverty alleviation.ng.

Ndemo, B., (2016). *A digital Revolution is taking place in Kenya that has had Ripples around Africa and the World.* The Daily Nation, Received fromwww.nation.co.ke

Ndemo, B., (2016). *The paradigm shift: Disruption, Creativity, and Innovation in Kenya*. The digital Kenya part of the series Palgrave Studies of Entrepreneurship in Africa. www.nation.co.ke.

Onugu, A. (2005). *Small and Medium Enterprises (SMEs) in Nigeria*: Problems and Prospects Dissertation. UK St. Clement University Retrieved Online.

Volume 3, Issue 3, 20st June 2026. Pp. 23 – 38
ISSN - Online: 2006-6427
https://tatarialijournal.com

Penrose, T. (1959). *The Cornerstone of the Growth of the Firm*. Oxford University Press.

McAdoo., T. (2009). Re: The flexibility of APA style [Web log message]. Retrievedfromhttp://blog.apastyle.org/apastyle/2009/08/the-flexibility-of-apa-style.html.

Remult, P. (2003). A Bargaining Perspective on Resource Advantage: *Strategic Management Journal 24:101-106.*

Salami, G.(2013) Youths Unemployment in Nigeria: A Time for Creative Intervention. *International Journal of Business and Management. Vol.1 (2) Retrieved from www.resjournal.org/ijbmm*

Shuak., A. (2014). Role and Challenges of ICT adaptation by SMEs in India. *Nadar Janaki Ammal College, Sivakasi India Market survey facts for you* 8(2),23-24

Tadese,B. (2010). The Role of Micro Small Enterprises in Employment creation and Income Generation.

Tagegne, T.(2014). The Role of Small and Medium Enterprises in Reducing Youths Unemployment. The Case of Maserak TVET College Graduates Ethiopia.

Taylor., T. (n.d.) Choosing and Narrowing Research Topics for APA. University of Maryland, USA.

United Nations, Department of Economic and Social Affairs, Population division, (2015). *World population prospects: The 2015 Revision. (Medium fertility vibrant) Nigeria Population forecast.www.bauchistate.gov.ng*

Wernefelt, B. (1984). A Resource Based View of a Firm: *Strategic Management Journal, 5(2) 171-180.* www.bauchistate.gov.ng