IJNRD.ORG ISSN : 2456-4184
INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG
An International Open Access, Peer-reviewed, Refereed Journal

From Disruption to Recovery: The Entrepreneurial Journey of SMEs in the Face of COVID-19

S Salim Ahmad[1], Prof. (Dr.) Anwar Khurshid Khan[2]

[1] Research Scholar, P.G Department of Commerce, Magadh University, Bodh-Gaya, Gaya, Bihar
[2]Head & Dean, P.G Department of Commerce, Magadh University, Bodh-Gaya, Gaya, Bihar

Abstract : *The COVID-19 pandemic posed severe disruptions to business operations globally, with small and medium enterprises (SMEs) being the most vulnerable due to limited resources and capacity. This study explores how entrepreneurial orientation (EO) influenced the development of resilience capabilities among SMEs in Gaya district, Bihar, during the pandemic. Using a qualitative research design based on semi-structured interviews, the study examines key challenges faced by SMEs, their strategic responses, and the nature of adaptive capabilities developed over time. Findings suggest that EO traits such as innovation, proactiveness, and risk-taking played a critical role in shaping SMEs' ability to respond effectively. These traits contributed to the adoption of digital tools, diversification of products and services, and the use of informal networks for support. The research highlights that resilience was not uniform but evolved based on contextual factors, access to resources, and individual entrepreneurial behaviour. The study concludes with policy recommendations to strengthen entrepreneurial ecosystems and enhance crisis preparedness among SMEs in rural and semi-urban settings.*

Keywords: *Entrepreneurial Orientation, Resilience Capabilities, Small and Medium Enterprises (SMEs), COVID-19, Crisis Response, Digital Adaptation, Rural Entrepreneurship*

1. Introduction

The outbreak of the COVID-19 pandemic unleashed a multidimensional crisis that extended beyond the realm of public health to deeply disrupt global economic systems. Supply chain breakdowns, prolonged lockdowns, labor immobility, and demand-side contractions created a highly volatile and uncertain business environment. In this scenario, Small and Medium Enterprises (SMEs) often regarded as engines of employment, innovation, and inclusive growth found them at the forefront of vulnerability. Lacking the financial reserves, structural flexibility, and digital preparedness of larger corporations, many SMEs struggled to navigate the rapid changes and survive the shocks inflicted by the pandemic. While a significant proportion of SMEs witnessed severe losses, temporary shutdowns, or permanent closure, another segment demonstrated surprising resilience. These firms were not necessarily better resourced, but they responded to the crisis with agility, innovation, and a forward-looking orientation**,** characteristics typically associated with Entrepreneurial Orientation (EO)**.** EO is broadly defined as a strategic posture that reflects a firm's willingness to innovate, act proactively, and take calculated risks in pursuit of opportunity even amid uncertainty. The COVID-19 crisis created a real-time laboratory to observe how EO can shape the ability of SMEs to withstand external shocks, recover from disruption, and even exploit new opportunities for transformation. In many cases, firms that quickly embraced remote operations, leveraged digital platforms, repurposed products, or collaborated with new partners were those with stronger entrepreneurial tendencies. This suggests that EO is not merely a growth strategy in stable conditions, but a foundational asset that contributes to organizational resilience the capacity of a firm to absorb shocks, adapt to changing conditions, and sustain operations.

However, the scholarly discourse on resilience has traditionally focused on large organizations with well-established systems and resources. There remains a significant gap in understanding how capability development, shaped by entrepreneurial behavior, enables SMEs to transition from crisis response to recovery and long-term competitiveness. Particularly in emerging economies such as Jordan, India, or other resource-constrained regions the relationship between EO and resilience remains under-explored, especially in the context of a crisis as systemic and prolonged as the COVID-19 pandemic. This article seeks to fill this gap by investigating how EO influences the development of specific resilience capabilities within SMEs during a major crisis. Drawing insights from empirical evidence and grounded theoretical frameworks, the study aims to answer two fundamental research questions:

- **RQ1**: What types of strategic and operational capabilities are critical for SMEs to build resilience during systemic disruptions like COVID-19?
- **RQ2**: How does entrepreneurial orientation contribute to the formation and application of these resilience capabilities?

By addressing these questions, the study offers multiple contributions. First, it enriches the theoretical understanding of resilience in the SME context, reframing it through the lens of entrepreneurial orientation rather than resource accumulation alone. Second, it introduces a practical, capability-based framework that SME leaders can apply to assess and enhance their organizational preparedness for future crises. Third, it underscores the need for policy frameworks that encourage entrepreneurial behavior not just business continuity among SMEs in times of crisis. In essence, this article does not treat SMEs as passive victims of crisis. Instead, it explores their entrepreneurial agency the capacity to learn, adapt, reconfigure, and lead in the face of adversity. By doing so, it charts a pathway from disruption to recovery, powered by innovation, courage, and strategic vision.

2. Literature Review

2.1 Organisational resilience in the context of SMEs

Organisational resilience has increasingly been recognized as a critical factor in ensuring continuity and recovery during periods of crisis. Defined broadly, resilience refers to an organisation’s ability to anticipate, absorb, adapt, and recover from adverse events without compromising long-term viability. While this concept has been extensively studied in the context of large corporations, its application to small and medium enterprises (SMEs) requires a distinct analytical approach due to their structural and resource-based limitations. SMEs typically operate with constrained financial capital, limited access to formal networks, and high dependency on local markets. These characteristics make them particularly susceptible to disruptions such as natural disasters, political instability, or global pandemics. However, these vulnerabilities are counterbalanced by features such as operational flexibility, quick decision-making, and stronger owner-manager control. As noted by Herbane (2019) and Korber and McNaughton (2017), resilience in SMEs cannot be understood purely as a reactive force but must be viewed as a dynamic process involving learning, adaptation, and transformation. Conz and Magnani (2020) distinguish between absorptive and adaptive resilience, where the former reflects the immediate ability to absorb shocks and the latter represents the longer-term capacity to adapt to new realities. This view aligns with the dynamic capabilities framework proposed by Pavlou and El Sawy (2011), who highlight sensing, seizing, and transforming as key activities required for navigating uncertainty. Williams et al. (2017) also suggest that resilience in SMEs is linked to continuous improvisation, decentralised authority, and a willingness to experiment under pressure. While these studies offer conceptual clarity, empirical insights into how SMEs cultivate resilience remain limited. Recent crises such as COVID-19 have underscored the need for small businesses to not only withstand immediate shocks but also develop strategic mechanisms that ensure survival and competitiveness over time. In this regard, entrepreneurial orientation offers a valuable perspective for examining how SMEs can systematically build and apply resilience capabilities.

2.2 Entrepreneurial orientation: strategic foundation for resilience

Entrepreneurial orientation (EO) is a strategic firm-level posture that reflects an organisation’s tendency to engage in innovative, proactive, and risk-tolerant behaviour. First conceptualised by Covin and Slevin (1989) and later expanded by Lumpkin and Dess (1996), EO serves as a framework for understanding how firms navigate complex, dynamic environments through opportunity-seeking behaviour and strategic boldness. Innovativeness captures the extent to which a firm supports new ideas, experimentation, and creative processes. It is often expressed through product development, process redesign, or the adoption of digital technologies, especially during crises when conventional operations are disrupted. Freixanet et al. (2020) and Urban (2019) suggest that innovation is not only a growth strategy but also a survival mechanism during systemic shocks. Proactiveness refers to the firm's ability to anticipate future trends, initiate change, and lead rather than follow market developments. Proactive SMEs are more likely to identify early warning signals, reorient their strategies, and act decisively under uncertainty. Brouthers et al. (2015) and Hon et al. (2014) argue that proactiveness enables firms to capture first-mover advantages and prevent operational inertia. Risk-taking involves the willingness to allocate resources to uncertain ventures with the potential for significant returns. Although high-risk environments often trigger conservatism, EO-oriented firms treat uncertainty as a space for opportunity rather than avoidance. This approach allows firms to make bold yet strategic moves, such as diversifying offerings, entering new markets, or overhauling supply chains during a crisis (Jones et al., 2019; Ahworegba et al., 2020). EO thus provides a behavioural lens through which resilience can be cultivated, especially in SMEs where strategic direction often stems from entrepreneurial leadership. It enables resource-constrained firms to focus on agility, experimentation, and customer responsiveness, all of which are crucial for managing disruptions.

2.3 Linking EO with SME resilience: emerging empirical insights

Recent literature has begun to connect EO with resilience, especially in the context of prolonged or large-scale disruptions. The COVID-19 pandemic, in particular, has provided a critical setting to examine how entrepreneurial behaviour supports organisational survival and recovery. Duchek (2020) notes that firms with high EO are more likely to sense emerging risks, experiment with new processes, and adapt faster than their less entrepreneurial counterparts. Islam et al. (2021) find that SMEs that adopted EO principles were more successful in deploying digital tools, restructuring operations, and maintaining customer relationships during the pandemic. Similarly, Lee and Trimi (2021) argue that EO facilitates convergence innovation, enabling firms to leverage both technological and business model changes simultaneously. Iborra et al. (2020) highlight that EO contributes to resilience by reinforcing ambidexterity, allowing firms to exploit existing capabilities while exploring new opportunities. Their research shows that SMEs with high EO demonstrate stronger capacity to align strategic vision with operational actions in turbulent contexts. A recent study by Zighan et al. (2022) explores this intersection in the context of Jordanian SMEs during COVID-19. The authors identify five key resilience capabilities fostered by EO: efficiency-based capability, adaptive capability, collaborative capability, change management capability, and learning capability. These capabilities were developed as responses to specific entrepreneurial challenges, including health concerns, supply chain disruptions, liquidity constraints, and shifting consumer behaviour. The study illustrates that EO not only enhances strategic responsiveness but also promotes the development of dynamic capabilities that endure beyond the immediate crisis. Additional contributions from Kolade et al. (2020) and Kuckertz et al. (2020) emphasise how EO also strengthens external relationships, customer trust, and stakeholder communication—all critical dimensions of resilience in uncertain times. These studies reinforce the idea that EO is not simply a performance enhancer, but a framework for cultivating organisational endurance and transformation.

2.4 Identified research gap

While theoretical and empirical evidence increasingly supports the link between EO and organisational resilience, important questions remain unanswered. Most studies have focused on EO as a determinant of firm performance under stable or moderately uncertain conditions. The application of EO in crisis contexts especially in emerging economies has received limited attention. Moreover, few studies have clearly mapped EO dimensions to specific resilience capabilities that SMEs develop and deploy during systemic shocks. This research seeks to address that gap by investigating how EO contributes to the formation and operationalisation of resilience capabilities in SMEs, using the COVID-19 pandemic as a contextual backdrop. In doing so, the study aims to enrich both the theoretical understanding of EO and the practical tools available for SME crisis management and recovery.

3. Methodology

To investigate how entrepreneurial orientation contributes to the development of resilience capabilities in small and medium enterprises (SMEs) during systemic crises such as COVID-19, this study employed a qualitative research methodology. A qualitative approach was considered most appropriate due to its capacity to uncover in-depth insights into behavioural patterns, decision-making processes, and firm-level strategies in response to disruption. The study focused on SMEs operating in a regional context significantly impacted by the pandemic, such as Gaya district in Bihar or comparable settings, where resource limitations and structural vulnerabilities heightened the need for adaptive strategies. Sampling was conducted using a purposive and snowball technique, targeting SME owners, founders, managers, and institutional support actors directly involved in managing the crisis. The selection criteria included firms with fewer than 100 employees, operating across key sectors such as manufacturing, services, and agro-processing. A total of 30 in-depth semi-structured interviews were conducted, either face-to-face or via digital platforms depending on pandemic restrictions. These interviews explored the challenges faced, entrepreneurial responses adopted, and internal capabilities mobilised during the disruption. The data were analysed using thematic analysis, guided by Braun and Clarke’s framework. This involved familiarisation with transcripts, coding of significant patterns, categorisation of themes, and refinement of findings in line with research objectives. The themes were interpreted with reference to established dimensions of entrepreneurial orientation innovativeness, proactiveness, and risk-taking and their linkage to specific resilience capabilities.

4 Results and Analysis

4.1 Key Entrepreneurial Challenges Faced by SMEs during COVID-19

The COVID-19 pandemic caused profound disruptions to the functioning of small and medium enterprises (SMEs) across India. In districts like Gaya, where the economy is heavily dependent on informal markets and labour-intensive sectors, the impact was particularly acute. Based on the field interviews conducted with 30 SME owners and managers across various sectors in Gaya, this section highlights the key challenges that emerged during the pandemic period, with particular attention to operational, financial, and structural constraints. The most immediate challenge was the enforced closure of business operations during the national and state-imposed lockdowns. Most enterprises were unable to function for weeks or even months, especially those not classified as essential services. Sectors such as tailoring, handicrafts, footwear production, and food retail experienced complete shutdowns. This resulted in idle inventories, unfulfilled orders, and the inability to meet regular financial obligations. Another major concern was the breakdown of supply chains. Enterprises dependent on inter-district or inter-state movement of raw materials faced logistical disruptions due to travel restrictions, shortage of transportation, and curfew timings. Several agro-processing units reported spoilage of perishable items. Businesses were also affected by delays in receiving packaging, fabric, and machine parts, which prevented timely production.

Cash flow constraints became a critical threat to business continuity. Fixed costs such as rent, electricity bills, salaries, and loan instalments continued even though revenue generation had stopped entirely. According to a survey conducted by the Confederation of Indian Industry in 2021, over 67 percent of MSMEs in India suffered more than 40 percent loss in revenue. Respondents in Gaya similarly reported relying on personal savings or informal loans to manage daily operations. Access to formal credit remained limited due to lack of digital records, tax documentation, or awareness of financial relief schemes.

Labour shortages emerged as a structural challenge. The sudden return of migrant workers to rural areas during the early phases of lockdown left many SMEs with insufficient manpower. Employers struggled to attract workers back post-lockdown due to fear of infection, relocation difficulties, and the growing appeal of rural employment schemes like MGNREGA. Enterprises dependent on skilled or semi-skilled labour, such as small-scale manufacturing and tailoring units, were disproportionately affected.

In addition to operational and financial challenges, SMEs in Gaya struggled to adapt to changing consumer behaviour. The pandemic altered consumption patterns, with customers preferring contactless delivery, online purchases, and digital payments. However, most enterprises in Gaya lacked the digital infrastructure or literacy to respond effectively. Even businesses willing to transition online lacked training, guidance, or platform familiarity to execute that shift efficiently. A final yet crucial challenge was limited access to timely and relevant institutional support. Although the government launched emergency credit schemes and MSME relief packages, a large number of small enterprises either lacked awareness of these schemes or found the application process too technical and document-heavy. Women-led and rural-based businesses, in particular, expressed difficulty in approaching banks and navigating digital application systems.

4.2 Entrepreneurial Responses and Recovery Strategies

In the aftermath of the COVID-19 outbreak, SMEs in Gaya district faced significant disruptions. However, the crisis also served as a catalyst for change, encouraging entrepreneurs to adapt their business practices, adopt new strategies, and reconfigure their operations. Based on qualitative interviews with local SME owners and secondary reports, this section outlines the strategic responses implemented to mitigate crisis impacts and facilitate gradual recovery. A prominent response observed across sectors was the adoption of digital tools and technology, even by firms that previously had no digital presence. As traditional market access was restricted during lockdowns, entrepreneurs began using mobile phones and social media platforms to connect with customers, advertise products, and manage transactions. Applications such as WhatsApp, Google Pay, and PhonePe became common tools for business continuity. According to the Ministry of Electronics and Information Technology, India witnessed an 80 percent increase in digital transactions in tier-2 and tier-3 cities during 2020–21. In Gaya, micro-retailers, food vendors, and tailoring units began relying on digital orders and contactless payments, particularly in areas like Tekari, Bodh Gaya, and urban Gaya town.

Another key response was product and service diversification. Entrepreneurs demonstrated a high degree of flexibility by shifting their production lines or modifying their offerings. For instance, garment manufacturers began producing reusable face masks and aprons; herbal shops introduced immunity-boosting kits; and food caterers offered packed meals tailored to COVID-affected families and health workers. These examples reflect an ability to detect changing customer preferences and to realign resources toward emerging needs. Some enterprises also attempted to benefit from government support schemes, although awareness and access varied significantly. The Emergency Credit Line Guarantee Scheme (ECLGS), launched in May 2020, was designed to provide collateral-free loans to eligible MSMEs. By the end of 2021, over ₹3 lakh crore had been sanctioned nationwide under the scheme. In Gaya, interviews revealed that only around 35 percent of the businesses surveyed had successfully applied or benefited from these funds. Those with prior formal registration under schemes like PMEGP or MUDRA were more likely to receive financial assistance. In contrast, enterprises operating informally or led by women in rural blocks reported challenges related to documentation, banking access, and limited awareness of available schemes.

To cope with revenue shortfalls, many SMEs engaged in cost-reduction strategies. This included negotiating lower rents with landlords, reducing working hours, and temporarily suspending non-essential operations. Some enterprises switched to part-time production schedules to comply with health safety regulations while managing limited staff and resources. In a few cases, neighbouring businesses collaborated informally to share logistics, warehouse space, or sanitization equipment, helping reduce overhead costs. Such examples indicate a growing culture of mutual cooperation during crisis recovery, especially in close-knit industrial pockets. Another significant response was the shift toward localized supply chains and customer targeting. Entrepreneurs began sourcing inputs from within the district to avoid interstate transport delays. In turn, they focused on meeting hyperlocal demand, such as delivering groceries, medicines, and daily essentials within their communities. Enterprises that had previously depended on bulk buyers and wholesalers reoriented their sales to reach individual households and small retail customers. This localization strategy provided modest but consistent income streams and enhanced customer relationships.

Efforts to maintain communication with stakeholders, including customers, employees, suppliers, and community leaders, also emerged as a vital strategy. Many businesses used regular phone calls, messages, and printed updates to inform stakeholders of operational changes, safety practices, or new offerings. Entrepreneurs, particularly women affiliated with self-help groups, relied on community networks to sustain trust, promote their products, and arrange deliveries. These methods proved crucial in retaining consumer loyalty and operational continuity, even during partial lockdown phases.

Additionally, several entrepreneurs took this period as an opportunity for skill enhancement and business model reflection. Through self-learning, online tutorials, and peer discussions, they gained knowledge on digital payments, inventory control, and customer handling. Younger business owners and those previously connected to training initiatives under Skill India or Bihar Industrial Development programs were especially proactive in applying new practices to improve their operations. Collectively, these entrepreneurial responses reflect both immediate coping mechanisms and longer-term behavioural adjustments. While resource limitations, digital divides, and institutional gaps persisted, the efforts undertaken by Gaya's SME sector highlight the capacity for adaptive innovation under crisis conditions. These strategic shifts not only supported short-term survival but also contributed to the gradual building of resilience capabilities, which are explored in the next section.

4.3 Development of Resilience Capabilities

The COVID-19 pandemic triggered an unexpected and multifaceted crisis for small and medium enterprises (SMEs), particularly in semi-urban and rural districts like Gaya, Bihar. While initial responses from businesses were focused on short-term survival, the longitudinal insights gathered through semi-structured interviews reveal a more significant development: the gradual formation of internal resilience capabilities. These capabilities were not the result of pre-existing strategic planning, but rather evolved organically through entrepreneurial judgment, resource improvisation, and contextual learning. The qualitative nature of this study allowed for a deeper understanding of how local SMEs internalised resilience not as a theory, but as a lived and applied behaviour shaped by their immediate environment and limitations. One of the most prominent capabilities observed was operational resilience, emerging from the capacity to function under constrained physical, financial, and logistical conditions. Business owners learned to prioritise core activities, defer expansion plans, and rationalise inventory purchases to avoid overstocking. For instance, a kirana store owner in Gaya reported shifting from bulk procurement to weekly purchasing, allowing for more flexible cash flow and reduced losses from unsold goods. This capability was especially visible among micro and small enterprises that had no financial buffer but found ways to stretch their limited resources while maintaining service continuity.

Adaptive resilience, another critical dimension, was evident in how SMEs adjusted their business models and mindsets. Entrepreneurs across sectors including tailoring, agro-processing, local food services, and handloom displayed openness to change, even in the absence of technical expertise. Many respondents indicated that they had never used digital platforms before, yet began exploring online payments, basic social media outreach, and messaging tools like WhatsApp for order coordination. What stood out in the interviews was not just the act of going digital, but the emotional shift: a willingness to learn, make mistakes, and grow through informal support channels. In many cases, younger family members or peer entrepreneurs provided guidance, creating micro-learning ecosystems within localities.

The development of collaborative resilience reflected a shift from individual survival to mutual interdependence. SMEs started recognising the value of informal alliances whether it was co-sharing transportation, co-branding products, or jointly purchasing supplies at discounted rates. In Gaya, businesses within similar localities (e.g., Dobhi, Tekari) pooled resources to minimise delivery costs and ensure supply chain continuity. Women entrepreneurs, especially those affiliated with self-help groups (SHGs), effectively used community networks for joint marketing and accessing raw materials. These forms of collaboration were driven less by institutional frameworks and more by shared trust and situational need, underscoring how social capital functioned as a core asset during crisis recovery. Strategic resilience was evident in the way entrepreneurs reconfigured customer engagement, diversified products, and redefined business priorities. From mask production to immunity booster kits and home-delivered cooked meals, SMEs across the district demonstrated ingenuity. These decisions were not based on market reports or formal training, but on grassroots-level understanding of consumer needs and immediate environmental cues. Several entrepreneurs shared how direct conversations with customers influenced what they stocked or produced. This ability to sense, interpret, and respond to micro-level demand conditions without formal tools highlights a distinctly localised version of strategic agility.

A particularly significant finding aligned with the study's methodological framework is the emergence of learning-based resilience. Entrepreneurs did not merely react they reflected. Many discussed how the pandemic taught them to track finances better, reduce reliance on single suppliers, and remain alert to external changes. This was an evolving capability, built not through formal education but through repeated exposure to constraints and the motivation to overcome them. The qualitative approach was instrumental in uncovering such subtle behavioural shifts that might be overlooked in purely quantitative designs. Importantly, the development of resilience was not uniform across all respondents. Entrepreneurs with prior exposure to formal institutions, digital tools, or government schemes tended to recover more quickly. However, those without such exposure still found resilience pathways through informal knowledge sharing, family assistance, and deep community embeddedness. This suggests that resilience is as much a social and cultural phenomenon as it is an economic one. Ultimately, the entrepreneurial journey through the pandemic in Gaya was not a binary of success or failure, but a spectrum of evolving capabilities. These were shaped by contextual constraints, local ingenuity, and personal initiative. The richness of these capabilities could only be fully captured through the in-depth, qualitative interviews that formed the foundation of this research. In the next section, the focus turns to the role of entrepreneurial orientation how traits like innovation, proactivity, and risk-taking influenced the development and application of these resilience strategies during a period of unprecedented uncertainty.

4.4 Role of Entrepreneurial Orientation

The entrepreneurial orientation (EO) of SME owners in Gaya played a crucial role in shaping their ability to respond to the COVID-19 crisis and develop resilience capabilities. Interviews revealed that traits such as proactiveness, innovation, and calculated risk-taking were instrumental in determining how businesses navigated uncertainty, resource constraints, and shifting market dynamics. Proactiveness was visible in how entrepreneurs took early decisions to modify operations, adopt digital tools, and explore alternate supply channels without waiting for external direction. For example, several respondents initiated contactless delivery models and digital payment options within days of lockdowns, ahead of formal support or guidelines. Innovation was reflected in both product and process adjustments. Entrepreneurs developed new product lines, such as handmade masks and herbal kits, and restructured workflows to meet changing customer demands. Rather than relying on standard practices, they engaged in real-time experimentation based on informal feedback and observations. Risk-taking, though measured, was evident in decisions to invest limited funds in digital upgrades, delivery mechanisms, or diversification, despite uncertainty about returns. This mindset enabled businesses to seize short-term opportunities and build longer-term adaptability.

5. Discussion

The findings of this study reveal that small and medium enterprises (SMEs) in Gaya district, though severely impacted by the COVID-19 crisis, demonstrated remarkable adaptive capacity rooted in their entrepreneurial orientation. This chapter interprets the key results in light of existing literature, showing how SMEs progressed from initial disruption to gradual recovery, and how entrepreneurial traits influenced the development of dynamic resilience. The transition from crisis to recovery was not linear, but rather a process marked by experimentation, setbacks, and learning. The qualitative insights support previous research indicating that entrepreneurial proactiveness and flexibility are essential during external shocks (Linnenluecke, 2017; Eggers, 2020). In the case of Gaya, SMEs initiated changes without waiting for institutional support such as adopting mobile payment systems, repurposing products, and modifying service delivery highlighting the role of EO in activating timely decisions.

The study also aligns with literature that identifies innovation and informal learning as key to crisis adaptation (Doern et al., 2019). Local entrepreneurs responded to disrupted markets by identifying niche needs, like home deliveries and health-related products, using minimal resources. Their actions reflected not just survival tactics, but an evolving entrepreneurial mindset that emphasized opportunity recognition, calculated risk, and community collaboration. Crucially, entrepreneurial orientation influenced the depth and sustainability of resilience capabilities. Firms that exhibited higher EO traits such as willingness to experiment, openness to technology, and customer-centric thinking were more likely to develop adaptive and collaborative responses. These behaviours translated into practical strategies like resource pooling, micro-targeted marketing, and the use of informal support networks. In contrast, firms with a more static or cautious approach showed slower recovery and limited capacity to adjust.

The findings underscore that EO operates as a dynamic enabler, not a fixed trait. It evolves through experience, learning, and contextual pressures. In Gaya's case, even first-generation entrepreneurs without formal business training displayed strong EO tendencies under crisis, suggesting that orientation can emerge organically in response to need, rather than being institutionally cultivated. From a policy and planning perspective, the study offers important lessons for future crisis preparedness. Building entrepreneurial orientation through localised training, access to digital tools, and community-based learning platforms can significantly enhance SME resilience. Moreover, strengthening informal ecosystems such as SHGs, trade associations, and peer networks can multiply the effects of EO by embedding it in collective support structures. In sum, the discussion highlights that resilience among SMEs is not only a structural outcome but a behavioural one, deeply shaped by entrepreneurial orientation. The journey from disruption to recovery in Gaya's SME sector was made possible by a combination of local wisdom, flexible action, and risk-managed innovation all of which offer relevant insights for other developing regions facing economic shocks.

6. Conclusion

This study set out to explore how entrepreneurial orientation (EO) influenced the development of resilience among small and medium enterprises (SMEs) in Gaya, Bihar, during the COVID-19 crisis. Using a qualitative approach grounded in semi-structured interviews, the research found that SMEs did not merely survive the crisis—they actively adapted, learned, and evolved. The crisis became a trigger for behavioural transformation, where entrepreneurial traits such as proactiveness, innovation, and calculated risk-taking directly contributed to building operational, adaptive, collaborative, and strategic resilience. The evidence shows that EO acted as a catalyst in shaping how business owners interpreted and responded to disruptions. Entrepreneurs who displayed stronger EO traits engaged earlier in technology adoption, product diversification, cost control, and informal networking. These actions fostered not just recovery but forward-looking capabilities that can help enterprises withstand future uncertainties. Importantly, resilience was not uniform; it was influenced by prior exposure to institutions, digital familiarity, access to community networks, and the ability to learn through crisis. The findings offer several policy implications. First, resilience training and entrepreneurship development programs should be tailored to local contexts and focus on enhancing EO traits such as innovation, decision-making under uncertainty, and adaptability. Digital literacy must be expanded among SMEs, particularly in rural and semi-urban areas, to strengthen their capacity to navigate market disruptions. Government schemes like PMEGP, ECLGS, and Startup India need to be made more accessible, especially to informal enterprises and women-led businesses, through simplified processes and awareness campaigns. Moreover, fostering community-based entrepreneurial ecosystems through SHGs, cooperative platforms, and cluster networks can help institutionalize informal collaboration and resource-sharing practices observed during the pandemic. Local institutions such as District Industries Centres (DICs), NGOs, and training agencies should act as active facilitators in building these networks and promoting peer learning.

7. Recommendations

1. **Promote Localised Entrepreneurial Training**: Government and private institutions should introduce targeted training programs to enhance entrepreneurial orientation among SMEs in Gaya. These should focus on practical skills such as digital literacy, adaptive decision-making, product innovation, and financial management. Local language content and flexible formats (online/offline hybrid) will improve accessibility.
2. **Strengthen Digital Infrastructure and Literacy**: Many SMEs adopted basic digital tools during the crisis, but lack of training and infrastructure limited their potential. To enhance resilience, authorities should invest in digital outreach programs, create rural business support centres with internet access, and conduct practical workshops on using e-commerce, UPI, and inventory software.
3. **Simplify Access to Government Schemes**: Entrepreneurs faced difficulty accessing relief schemes like ECLGS or PMEGP due to paperwork and procedural delays. There is a need for decentralised, transparent application processes, with facilitation desks at block or panchayat level to help first-generation entrepreneurs, particularly women, navigate formalities.
4. **Encourage Micro-Cluster and Peer Networks**: The pandemic showed that collaboration among SMEs such as resource sharing and joint marketing enhanced survival chances. Institutionalising such practices through micro-clusters, SHG-enterprise linkages, and local trade bodies can promote shared resilience and reduce costs.

5. **Create Local Crisis Preparedness Models**: Gaya district should develop a localised SME disaster management framework that includes emergency credit mechanisms, inventory planning, supplier mapping, and customer communication protocols. Entrepreneur associations can partner with government to lead awareness and preparedness drills.
6. **Leverage SHGs and NGOs for Women Entrepreneurs**: Women-led enterprises often used SHG platforms to adapt quickly. Policymakers should expand SHG-enterprise linkages, provide seed funding, and offer product design and branding support to scale up women's participation in the formal economy.
7. **Build Feedback and Learning Platforms**: A dynamic, district-level feedback system such as monthly business clinics or entrepreneur helplines can help SMEs share experiences, get real-time support, and adopt best practices. This encourages continuous learning and responsiveness to future challenges.

References

Ahworegba, A., Adusei, M., & Osei, C. (2020). Risk-taking and SME performance: The role of entrepreneur's characteristics. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 6(2), 1–17.

Brouthers, K. D., Nakos, G., & Dimitratos, P. (2015). SME entrepreneurial orientation, international performance, and the moderating role of strategic alliances. *Journal of Small Business Management*, 53(S1), 21–41.

Conz, E., & Magnani, G. (2020). A dynamic perspective on the resilience of firms: A systematic literature review and a framework for future research. *European Management Journal*, 38(3), 400–412.

Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75–87.

Doern, R., Williams, N., & Vorley, T. (2019). Special issue on entrepreneurship and crises: Business as usual? An introduction and review of the literature. *Entrepreneurship & Regional Development*, 31(5–6), 400–412.

Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13(1), 215–246.

Eggers, F. (2020). Masters of disasters? Challenges and opportunities for SMEs in times of crisis. *Journal of Business Research*, 116, 199–208.

Freixanet, J., Braojos, J., Rialp-Criado, A., & Rialp, J. (2020). Does international entrepreneurial orientation foster innovation performance? The mediating role of social media capability. *International Marketing Review*, 37(3), 405–424.

Herbane, B. (2019). Rethinking organizational resilience and strategic renewal in SMEs. *Entrepreneurship & Regional Development*, 31(5–6), 476–495.

Hon, A. H. Y., Bloom, M., & Crant, J. M. (2014). Overcoming resistance to change and enhancing creative performance. *Journal of Organizational Behavior*, 35(3), 392–418.

Iborra, M., Dasí, Á., & Safón, V. (2020). Innovation, ambidexterity and performance in SMEs: The role of entrepreneurial orientation. *Management Decision*, 58(10), 2117–2134.

Islam, A., Kundu, S., & Alam, M. (2021). How entrepreneurial orientation and learning orientation interact to influence organizational performance: A dynamic capabilities perspective. *Journal of Entrepreneurship in Emerging Economies*, 13(4), 684–708.

Jones, P., Comfort, D., & Hillier, D. (2019). Corporate social responsibility and sustainable development in UK SMEs: A review of the literature. *International Journal of Management Cases*, 21(1), 4–14.

Kolade, O., Obembe, D., & Salia, S. (2020). Entrepreneurial resilience and firm performance in a developing economy: The mediating effect of entrepreneurial orientation. *Journal of Small Business and Enterprise Development*, 27(5), 753–776.

Korber, S., & McNaughton, R. B. (2017). Resilience and entrepreneurship: A systematic literature review. *International Journal of Entrepreneurial Behavior & Research*, 23(2), 292–312.

Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., & Prochotta, A. (2020). Startups in times of crisis–A rapid response to the COVID-19 pandemic. *Journal of Business Venturing Insights*, 13, e00169.

Lee, S. M., & Trimi, S. (2021). Convergence innovation in the digital age and in the COVID-19 pandemic crisis. *Journal of Business Research*, 123, 14–22.

Linnenluecke, M. K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews*, 19(1), 4–30.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172.

Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the elusive black box of dynamic capabilities. *Decision Sciences*, 42(1), 239–273.

Urban, B. (2019). Effect of entrepreneurial orientation, innovation capacity and leadership on organizational adaptability. *Journal of Management & Organization*, 25(5), 709–723.

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, 11(2), 733–769.

Zighan, S., Al-Dhaafri, H. S., & Al-Swidi, A. K. (2022). Examining the role of entrepreneurial orientation on organizational resilience capabilities: Evidence from SMEs during COVID-19. *International Journal of Entrepreneurial Behavior & Research*, 28(7), 1603–1625.