Performance of the hotel industry in post-COVID-19 Tanzania: A case of Arusha City Council

Ahmed Mtondo [1], Ladislaus Batinoluho [1], Reguli Mushy [1]*

[1] *The Open University of Tanzania, Tanzania*

**Corresponding author: reguli.mushy@out.ac.tz*

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ABSTRACT

The COVID-19 pandemic disrupted the global hotel industry, and hotels in Arusha City, Tanzania, have shown only partial recovery well after the pandemic formally subsided. Anchored in the Theory of Consumer Behaviour and the Agile Supply Chain Theory, this study assessed the performance of the hotel industry in Arusha City in the post-COVID-19 period, examining performance before, during, and after the pandemic, and identifying the challenges hindering full recovery. A convergent parallel mixed-methods design was adopted, combining questionnaires administered to 181 hotel employees (145 fully completed and retained for the descriptive analyses), semi-structured interviews with seven hotel managers, and two focus group discussions across seven hotels. Quantitative data were analysed descriptively and through a chi-square test of association using IBM SPSS Statistics, while qualitative data were analysed using a reflexive thematic approach. The findings show that before the pandemic hotels recorded high revenue, strong guest turnout, and stable employment; during the pandemic guest numbers, revenue, and employment collapsed and several hotels closed temporarily; and in the post-pandemic period, despite health protocols, business innovation, and staff training, the industry still records slow recovery linked to financial constraints, the slow return of customers, and shortages of skilled staff. A chi-square test showed a statistically significant association, not a causal relationship, between pandemic-related effects and current hotel performance ($\chi^2(1, N = 181) = 6.495$, $p = .011$, $\varphi = .19$, a small-to-moderate effect). Hotel owners are encouraged to invest cautiously in digital technologies, while government and other stakeholders provide financial support, favourable policies, and skills training to strengthen sector resilience; because the present data are perceptual and retrospective, these recommendations should be verified through more direct, longitudinal evidence.

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1. INTRODUCTION

The hotel industry is among the oldest and most economically significant service industries worldwide, contributing substantially to employment, income generation, and national development (World Tourism Organization, 2020). Before the outbreak of COVID-19

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in late 2019, the industry recorded steady global growth: international travel arrivals increased by between 30% and 39% between 2015 and 2019 (Lai & Wong, 2020), and the industry generated between US$300 billion and US$450 billion annually, nearly one-third of the US$1.5 trillion generated by the broader tourism sector (World Tourism Organization, 2020). In Tanzania, and particularly in Arusha, a major tourism hub anchored by attractions such as the Ngorongoro Crater, Serengeti National Park, and Mount Kilimanjaro, the hotel industry similarly flourished; hotels in the Arusha region provided about 70% of regional employment and generated roughly 80% of the City Council's annual income before the pandemic (Arusha City Council, 2016). This pre-pandemic baseline is the only point at which the 2016 Arusha City Council report is used in this paper, because, as explained below, it is not an appropriate source for describing conditions during or after the pandemic.

The emergence of COVID-19 disrupted this trajectory across the world. Global travel restrictions, lockdowns, and border closures caused international overnight visitor arrivals to fall by 72% between January and October 2020 compared with the same period in 2019 (World Tourism Organization, 2020). In the post-COVID-19 period, governments and hotel operators across the world introduced financial incentives, health protocols, and business innovations to support recovery (Khan & Alotaibi, 2022; Biju & Kumar, 2022; Temelkov, 2022). Evidence from South Africa indicates that government intervention, in the form of subsidies and soft loans, helped some hotels meet running costs during the crisis (Gursoy & Chi, 2020), while regional evidence from Windhoek, Namibia, similarly shows that government-backed soft loans supported comparatively faster recovery (Sucheran, 2021). More recently, evidence synthesised across accommodation categories shows that recovery speed has been spatially uneven: budget properties with strong network accessibility returned to normal operation far sooner than higher-end properties constrained by narrower, more discretionary demand segments (Wang et al., 2025). Such experiences illustrate the depth and duration of national or regional policy responses, and the market segment a hotel occupies, jointly shape how severely, and for how long, individual hotel markets are affected by a shock of this kind.

In Africa, countries such as South Africa, Mauritius, Rwanda, and Kenya, where the hotel industry is of high economic importance, were significantly and negatively affected by the COVID-19 pandemic (Gursoy & Chi, 2020). Zimbabwean evidence likewise shows that three- to five-star hotels experienced sharp occupancy and revenue declines and had to resort to staff cuts and partial closures and concludes that the sector entered the crisis with little pre-existing disaster-management capacity (Ncube et al., 2021). In Tanzania, and specifically in Arusha, available secondary reports point to the hotel industry as a dominant source of regional employment and income before the pandemic, consistent with the 70%/80% figures cited above. Precise pandemic-period figures for employment, revenue, and occupancy losses specific to Arusha are not yet available from a source dated to the pandemic period

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itself. What is not in dispute is that tourist arrivals, hotel revenue, and employment in Arusha fell sharply during the pandemic and that many hotels operated at markedly reduced occupancy, forcing salary cuts, retrenchments, and closures (Assenga & Msuya, 2024). In response, the Tanzanian government introduced financial incentives, tax reductions, and promotional campaigns, and worked with other stakeholders to reduce tax rates and retrain hotel workers to help the sector adapt to the changed operating environment (Muoki, 2021; Temelkov, 2022; Khan & Alotaibi, 2022; Biju & Kumar, 2022). Yet, despite these interventions, there remains limited empirical evidence on how far hotels in Arusha have recovered.

The hotel industry in Tanzania plays a crucial role in economic growth, employment, income generation, and tourism development (World Tourism Organization, 2020; Arusha City Council, 2016). Various initiatives, ranging from health protocols and business innovation to government financial support, have been undertaken to support the industry's recovery in the post-COVID-19 period (Mkwizu, 2024). Two theoretical lenses help explain why such initiatives would, or would not, translate into measurable recovery. The Theory of Consumer Behaviour holds that, under conditions of economic and health uncertainty, consumers reduce discretionary and non-essential spending, including travel and hospitality expenditure, which in turn reduces demand for hotel services (Yu et al., 2021). This theory explains the sharp decline in bookings observed during the pandemic and the continuing caution among travelers thereafter, and predicts that hotel performance will lag behind the formal end of the pandemic for as long as demand-side caution persists. The Agile Supply Chain Theory, in turn, holds that firms which can reconfigure their operations quickly and flexibly in response to disruption are better positioned to survive and recover from shocks (Aigbedo, 2021). Recent extensions of this reasoning show that hotels with greater organisational agility, innovation capability, and data-driven decision-making recorded stronger post-pandemic firm performance than less agile competitors (Khalil et al., 2023), and that individual-level resilience among hotel employees is itself a resource that can be conceptualised and measured as part of a hotel's overall adaptive capacity (Zhang et al., 2024). Applied to the hotel industry, this supply-side theory suggests that hotels which adopted health protocols, diversified their services, and retrained staff would be better placed to recover than those that did not. Together, the two theories frame hotel performance as an outcome jointly shaped by demand-side consumer caution and supply-side adaptive capacity, rather than as a direct, uniform, or purely causal consequence of the pandemic itself, a distinction that matters because it implies hotel performance should be associated with, rather than mechanically caused by, pandemic exposure, and that any statistical test of this relationship should be interpreted as evidence of association. Empirical research on the hotel industry's pandemic experience demonstrates varied contexts but points to persistent challenges (Oktavio et al., 2023). Global studies show that the hospitality sector was among the hardest hit by pandemic-related travel bans and

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lockdowns (Gursoy & Chi, 2020; Baum & Hai, 2020), while sector-specific evidence links organisational resilience and corporate social responsibility practices to how well hotel managers weathered the crisis (Filimonau et al., 2020). However, these studies largely stop documenting the depth of disruption or the adoption of coping practices; comparatively few test, statistically, whether the coping practices they describe predict measurable recovery in revenue, employment, or occupancy, and fewer still examine this question outside high-income or middle-income tourism markets. In East Africa, studies on street food and catering operators in Dodoma City similarly found reduced customer numbers and slow trade recovery as recurring post-pandemic challenges (Assenga & Msuya, 2024), while research on brand performance and recovery responses in the Tanzanian tourism sector found that limited resources constrained recovery strategies (Mmasi & Mwaifyusi, 2021). Within Tanzania's own tourism and hospitality research base has begun to document related post-pandemic and destination-level dynamics in the region, for instance, on tourists' destination perceptions in neighbouring Botswana (Kemang et al., 2023), on gender and workforce empowerment as a recovery-relevant human-resource strategy in Bali's hotel sector (Priliani et al., 2025), and on the state of sustainability-oriented entrepreneurship education across East African universities (Kidere & Mkwizu, 2023). Yet, none of these examine the hotel industry's own multi-period performance trajectory. Although a substantial body of research has therefore examined the macroeconomic impact of COVID-19 on the global hospitality sector, and a smaller body has begun to document coping responses in East Africa, three specific gaps remain. First, almost no study has combined quantitative and qualitative evidence to track a single hotel population's performance across all three pandemic periods (before, during, and after) rather than at a single time point. Second, the two theoretical lenses used here, demand-side consumer caution and supply-side adaptive capacity, have rarely been applied jointly and explicitly to an African tourism-dependent hotel market, so it remains unclear how much of any residual post-pandemic weakness reflects lingering demand caution as opposed to insufficient supply-side agility. Third, where a recovery strategy is theorised to mediate the relationship between pandemic exposure and current performance, that mediating role has rarely been tested statistically rather than merely asserted conceptually. This study addresses these three gaps by examining the post-pandemic recovery trajectory of hotels in Arusha, Tanzania's principal safari-tourism hub, in terms of revenue trends, employment shifts, and operational resilience. Without such evidence, hotel owners, government agencies, and other stakeholders lack a clear, empirically grounded picture of how far the industry has recovered and what continues to constrain that recovery.

The study's novelty therefore does not rest on Arusha as a location alone, but on three things taken together: the joint application of demand-side and supply-side theory to a single African hotel population, the use of a convergent mixed-methods design to trace performance

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across three time periods rather than one, and an explicit, transparent treatment of the mediating role of recovery strategy, including an honest acknowledgement of where that mediation is conceptual rather than statistically demonstrated. This study contributes to the literature on post-pandemic hospitality performance by providing empirical, mixed-methods evidence on how hotels in a tourism-dependent East African city have recovered from a global shock. Theoretically, it applies the Theory of Consumer Behaviour and the Agile Supply Chain Theory jointly to explain hotel performance as a function of both demand-side caution and supply-side adaptive capacity, and it makes explicit which of the study's measured variables correspond to which theoretical construct. Empirically, it offers government authorities, hotel owners and managers, investors, and other stakeholders' data-driven insights into revenue recovery, employment trends, and operational challenges that can inform policy and business decisions. Methodologically, it demonstrates the value of triangulating questionnaires, interviews, and focus group discussions to capture both the scale and the lived experience of a sector-wide shock, while transparently reporting the design's limitations. Practically, the findings inform strategies such as digital transformation, financial support mechanisms, and skills training that can strengthen the resilience of the hotel industry against future crises.

The study's main objective was to assess the performance of the hotel industry after the COVID-19 pandemic in Arusha City Council. Specifically, the study aimed to: (i) examine the effects of the COVID-19 pandemic on the hotel industry; (ii) examine the performance level of the hotel industry before the COVID-19 pandemic; (iii) assess the performance level of the hotel industry during the COVID-19 pandemic; and (iv) assess the performance level of the hotel industry, and the challenges affecting that performance, in the post-COVID-19 (post-pandemic) period. Stating this fourth objective in terms of post-pandemic performance, and not only 'challenges', makes the objective map directly onto the three time periods, before, during, and after, that the rest of the study examines. The study was guided by the following questions: (i) How were hotels affected by the COVID-19 pandemic? (ii) What was the performance level of the hotel industry before the COVID-19 pandemic? (iii) What is the performance level of the hotel industry during the COVID-19 pandemic? and (iv) What is the performance level of the hotel industry, and what challenges affect that performance, in the post-COVID-19 period?

2. METHODOLOGY

This study adopted a pragmatic research philosophy and a cross-sectional research design, combining quantitative and qualitative data collection and analysis within a mixed-methods approach (Creswell & Creswell, 2018). Specifically, a convergent (concurrent) parallel mixed-methods design was used: quantitative data (questionnaires) and qualitative data (interviews and focus group discussions) were collected during the same field period,

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analysed separately using methods appropriate to each strand, and then merged at the interpretation stage by comparing quantitative percentages against qualitative themes for each objective (a triangulation/convergence approach) (Creswell & Creswell, 2018). This design permitted triangulation of data from multiple sources, allowing the weaknesses of each individual approach to be offset by the strengths of the other, while capturing a snapshot of hotel performance across the three time periods of interest (Saunders et al., 2023; Bryman, 2021). Because the design is cross-sectional, performance 'before' and 'during' the pandemic was necessarily reconstructed from respondents' retrospective recollections rather than measured contemporaneously; the implications of this for recall bias. The study was conducted in Arusha City Council, Tanzania, located between latitudes 2° and 6° south and longitudes 34.5° and 38.0° east on the slopes of Mount Meru (Figure 2). Arusha serves as Tanzania's principal tourism gateway, hosting more than 400 hotels of varying star ratings and providing access to attractions including the Ngorongoro Crater, Serengeti National Park, Arusha National Park, and Mount Kilimanjaro. Its heavy dependence on international and domestic tourism made it a suitable site for examining how a tourism-dependent hotel industry has responded to, and recovered from, the COVID-19 shock.

Conceptual Framework

Figure 1 presents the conceptual framework guiding the study; it is placed here, alongside the research design, rather than in the Introduction, because it is the framework that directly informed the instrument and the analysis strategy described below. The COVID-19 pandemic and its associated health measures, including travel restrictions, lockdowns, quarantine requirements, and social distancing, are treated as the independent variable that directly disrupted hotel operations, the operational counterpart of the demand-side caution described by the Theory of Consumer Behaviour. These effects are channeled through hotels' response and recovery strategies, namely health and safety protocols, business innovation, staff training, and financial recovery efforts, as the mediating variable, the operational counterpart of the Agile Supply Chain Theory's adaptive capacity. The dependent variable, hotel industry performance, is assessed across three periods: before COVID-19 (high guest numbers, high revenue, stable employment), during COVID-19 (limited services, revenue decline, staff layoffs), and after COVID-19 (slow return of customers, financial recovery difficulties, staff shortages). The framework therefore conceptualises hotel performance not simply as a direct outcome of the pandemic, but as the product of the pandemic's severity as mediated by the adequacy of hotels' recovery strategies. It is important to state plainly that this mediation pathway is conceptual: the analysis reported in the association between pandemic effects and current performance (via chi-square) and reports recovery-strategy indicators descriptively, but it does not statistically test recovery strategy as a mediator (for

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example, through bootstrapped indirect-effect estimation; Hayes, 2018). Figure 1 should therefore be read as the study's organising logic rather than as a statistically validated structural model; we return to this point, and to how the mediating pathway could be tested in future work.

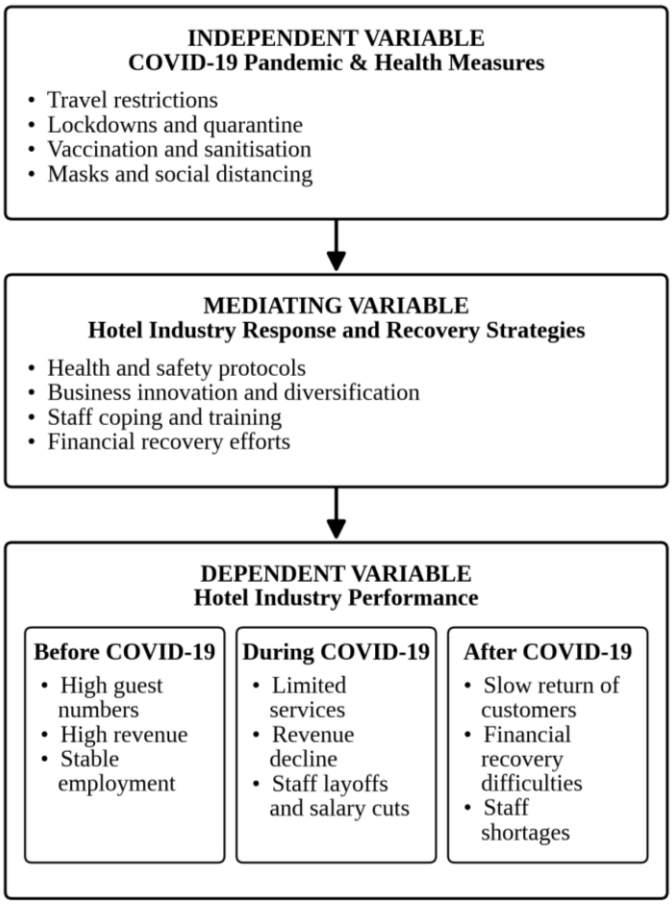


Figure 1. Conceptual Framework for the Study
Source: Researcher's Construct (2026)

Population, Sampling, and Sample Size Justification

The target population comprised employees and managers of the 76 hotels registered with the Arusha City Council, totalling approximately 1,368 staff and 76 managers (Arusha City Council, 2016). A multi-stage sampling procedure was used, and each stage is justified below. First, stratified random sampling was applied to categorise the 76 registered hotels by size, star rating, and level of pandemic impact, strata that were chosen because prior evidence (e.g., Wang et al., 2025) indicates that recovery speed differs systematically by hotel category, so stratifying on these variables reduces the risk that the achieved sample over- or under-represents any one category. Seven hotels (10% of the population of hotels) were then selected from within these strata by simple random sampling, one from each of the resulting strata cells, so that the final set of seven hotels spans the range of size, rating, and reported

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pandemic impact present in the sampling frame. These seven hotels employed a combined total of 333 staff. Applying the sample size formula recommended by Adam (2020), $n = N / [1 + N(e)^2]$, with $N = 333$ and a margin of error of 5%, yields $n = 333 / [1 + 333(0.05)^2] = 333 / 1.8325 = 181.7$, which rounds up to a minimum required sample of 182 respondents. Questionnaires were administered to all 182 target respondents; 181 questionnaires were returned (a 99.5% return rate). Hotel employees were selected through stratified random sampling by department followed by simple random sampling, while the seven hotel managers who participated in interviews were selected purposively based on decision-making authority and pandemic-related experience. Of the 181 returned questionnaires, 145 were sufficiently complete across all demographic and performance-indicator items to be retained for the descriptive analyses reported in Tables 1-5 (a usable response rate of 145/182 = 79.7%); the remaining 36 questionnaires had partial, but not complete, data on the demographic and indicator items and were therefore excluded from those specific tables, but they retained complete data on the two variables (pandemic effects and current performance) used in the chi-square test in Table 6, which is why that test's reported valid-case count (N = 181) is larger than the case count underlying Tables 1-5 (N = 145).

Data Collection Instruments and Procedures

Data were collected using structured questionnaires administered to 181 hotel employees, semi-structured interviews with seven hotel managers, and two focus group discussions involving 14 participants drawn from the sampled hotels (Creswell & Creswell, 2018). The questionnaire was developed directly from the conceptual framework in Figure 1: items on pre-pandemic and during-pandemic performance operationalised the dependent-variable indicators shown in the framework (guest turnout, revenue, employment, service levels), items on health protocols, business innovation, and staff training operationalised the mediating recovery-strategy construct, and items on perceived pandemic effects operationalised the independent variable. Most substantive items were closed-ended, categorical or multiple-response checklist items (consistent with the percentage-based reporting in Tables 2-5). The questionnaires, distributed both physically and electronically, captured quantitative information on employment trends, financial stability, and operational efficiency, while the semi-structured interviews explored managerial perspectives on financial recovery, employment shifts, and business sustainability in greater depth (Gursoy & Chi, 2020). Each of the seven sampled hotels contributed two focus group participants, who were then organised into two discussion groups of seven members each to explore shared experiences of hotel performance before, during, and after the pandemic.

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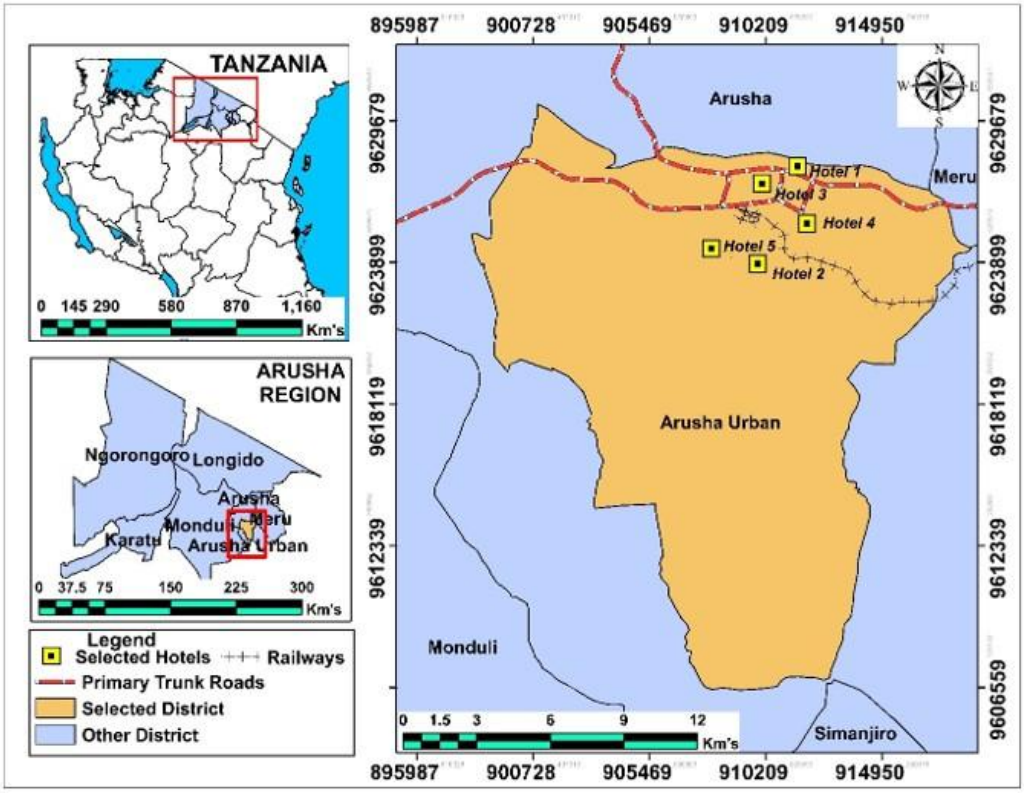


Figure 2. Map of Arusha City Council, the Study Area
Source: Researcher's Construct (2026)

Figure 2 as currently drawn labels five hotels (Hotel 1–Hotel 5), whereas the text above reports that seven hotels were sampled.

Data Analysis, Integration, Validity, and Trustworthiness

Quantitative data were analysed descriptively and inferentially, including a chi-square test of association, using IBM SPSS Statistics; qualitative data from interviews and focus group discussions were analysed using a six-phase reflexive thematic analysis procedure, familiarisation with the transcripts, generating initial codes, searching for candidate themes, reviewing themes against the coded extracts and the full data set, defining and naming themes, and producing the final analytic narrative (Braun & Clarke, 2019), with recurring themes and sub-themes identified and triangulated against the quantitative results through a convergence matrix that paired each quantitative indicator in Tables 2-5 with the qualitative theme(s) addressing the same objective, so that agreement or divergence between the two strands could be assessed explicitly rather than asserted narratively. For the chi-square test, the pandemic-effects variable was dichotomised into ‘multiple/severe effects reported’ versus ‘fewer effects reported’, and current performance was dichotomised into ‘low/constrained’ versus ‘improving’, to produce the 2×2 cross-tabulation summarised in Table 6. SPSS reports a continuity-corrected statistic alongside the uncorrected Pearson value for every 2×2 table

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by default, so its presence in Table 6 does not by itself indicate a violated assumption. The effect size associated with this test, computed from the reported statistics as $\varphi = \sqrt{(\chi^2/N)} = \sqrt{(6.495/181)} = 0.19$, indicates a small-to-moderate association (Cohen's conventions), which is reported here because effect size, not significance alone, is what indicates the practical strength of the pandemic-performance association. Instrument validity was established through content review, while reliability was assessed through a pilot test with 26 hotel employees in the neighbouring Karatu District, using Cronbach's alpha, with items yielding coefficients of 0.7 or above retained as reliable (Kumar, 2018). For the qualitative strand, trustworthiness was addressed through the criteria of credibility, transferability, dependability, and confirmability (Ahmed, 2024), established through triangulating interview, focus-group, and questionnaire data, purposive selection of managers with direct pandemic-era decision-making experience, and cross-checking emerging themes against the raw transcripts. Ethical clearance was obtained from the Open University of Tanzania, and all respondents participated voluntarily and gave informed consent, with confidentiality and anonymity maintained throughout.

3. RESULTS AND DISCUSSION

Demographic Profile of Respondents

The majority of respondents (60%) were aged between 20 and 39 years, with 33% aged 40-59 and 7% aged 60 and above, suggesting that the Arusha hotel workforce is predominantly young. Under the Agile Supply Chain Theory, is potentially an asset for recovery insofar as younger workforces tend to adapt more readily to the new technologies and revised service protocols that recovery has required. In Table 1, most respondents held post-secondary qualifications: 30.3% held a bachelor's degree, 28.3% held a diploma, 19.3% had completed secondary education, 15.2% held a tertiary certificate, and 6.9% held a master's degree or higher (N = 145). 50% of respondents were single, 42% were married, and 8% were divorced, while the majority (65%) had between five and fifteen years of work experience and 25% had more than fifteen years, indicating a workforce with substantial accumulated industry knowledge relevant to recovery efforts (Filimonau et al., 2020).

Table 1. Education Level of Respondents

Education Level	Frequency	Percentage (%)
Secondary	28	19.3
Tertiary certificate	22	15.2
Diploma	41	28.3
Bachelor's degree	44	30.3
Master's and above	10	6.9
Total	**145**	**100.0**

Source: Field Data (2026)

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Effects of the COVID-19 Pandemic on the Hotel Industry Performance

Respondents reported wide-ranging effects of the pandemic on hotel operations (Table 2). The most frequently cited effect was a collapse in revenue, reported by 90% of respondents; one general manager recalled that the hotel's booking system:

"showed zero income for weeks, revenue almost disappeared, even bank loans became impossible to repay" (General Manager).

A sharp decline in guest numbers was reported by 75% of respondents, consistent with a front office manager's account that international arrivals fell from an expected 60-78% of capacity to just 10-15% within two months of the outbreak. Staff layoffs (64%), operational shutdowns and closures (60%), and salary cuts (55%) were also widely reported, with one human resource manager noting that over 90% of part-time staff and 50% of full-time staff were let go or had their hours reduced, and a finance officer describing salary cuts of almost 40%, paid irregularly rather than monthly. In Ukraine, by comparison, about 60% of hotel workers lost their jobs during the pandemic, although many received severance pay (Asheber & Shkoda, 2020), suggesting that layoffs in Arusha were accompanied by comparatively limited compensation. These findings align with global evidence that the hospitality sector was among the hardest hit by pandemic-related travel bans and lockdowns (Gursoy & Chi, 2020; Baum & Hai, 2020), and are consistent with the Theory of Consumer Behaviour, under which economic and health-related uncertainty suppresses discretionary spending on non-essential services such as hotel stays. Read critically, however, the pattern in Table 2 is not simply 'the pandemic hurt hotels'; it shows a specific sequence, demand collapse (guest numbers, 75%) preceding and driving supply-side contraction (layoffs, closures, salary cuts), that is exactly the causal chain the Theory of Consumer Behaviour predicts, and it is this sequence, not the pandemic as an undifferentiated shock, that the Agile Supply Chain Theory implies hotels needed to interrupt through rapid reconfiguration. The comparatively ungenerous severance terms reported in Arusha relative to Ukraine further suggest that Arusha hotels' adaptive capacity was constrained not only by demand collapse but by weaker financial buffers going into the crisis (Asheber & Shkoda, 2020).

Table 2. Effects of the COVID-19 Pandemic on Hotel Industry Performance

Reported Effect	Respondents (%)
Collapse in revenue	90
Sharp decline in guest numbers	75
Staff layoffs	64
Operational shutdowns and closures	60
Salary cuts	55

Source: Field Data (2026)

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Hotel Industry Performance Before the COVID-19 pandemic

Before the pandemic, hotels in Arusha reported strong performance across all indicators (Table 3). The large majority of respondents (95%) reported high guest turnout and booking rates, 85% reported stable employment, 80% reported steady business growth and expansion, and 70% reported strong and predictable revenue streams. A reservations manager recalled that the hotel:

"had full bookings almost every weekend from international tourists; it was normal to see over 70% room occupancy year-round" (Reservations Manager).

while another manager described opening new branches in 2018 and 2019 as investor confidence in the sector grew. These findings mirror the pre-pandemic growth reported globally, where international travel arrivals rose by 30–39% between 2015 and 2019 (Lai & Wong, 2020). Theoretically, this pre-pandemic profile is the baseline against which the Theory of Consumer Behaviour's prediction of demand suppression, and the Agile Supply Chain Theory's prediction of recovery through reconfiguration, can both be judged: because occupancy, revenue, and employment were all high and stable immediately before the shock, the subsequent declines can be attributed with more confidence to the pandemic and its aftermath than to a pre-existing downward trend in the sector.

Table 3. Hotel Industry Performance Before the COVID-19 Pandemic

Performance Indicator	Respondents (%)
High guest turnout and bookings	95
Stable employment	85
Steady business growth	80
Strong revenue streams	70

Source: Field Data (2026)

Hotel Industry Performance During the COVID-19 Pandemic

During the pandemic, hotel operations contracted sharply (Table 4). About 34% of respondents reported that services were limited to essential departments only, with one manager describing operating at a basic level:

"just beds and emergency cleaning" (Hotel Manager).

Nonetheless, 30% of respondents reported that hotels introduced extensive health protocols, including sanitisation stations, mandatory masking, and contactless check-in, and 25% reported business innovations such as home food delivery and online bookings through local platforms, consistent with the Agile Supply Chain Theory's emphasis on flexible reconfiguration as a survival mechanism (Aigbedo, 2021). Despite reduced pay and uncertain job security, 82% of respondents agreed that customers continued to receive adequate service, reflecting considerable staff resilience during the crisis. This last figure is theoretically important: an 82% perceived-adequacy rate alongside only 30% and 25% uptake of formal

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health protocols and business innovation, respectively, suggests that service continuity during the crisis rested disproportionately on individual employee resilience and discretionary effort (Zhang et al., 2024), rather than on organisation-wide agile reconfiguration, implying that the Agile Supply Chain Theory's mechanism operated only partially in this context and that staff-level resilience deserves explicit recognition as a complementary explanatory factor alongside organisational agility.

Table 4. Hotel Industry Performance During the COVID-19 Pandemic

Performance Indicator	Respondents (%)
Limited operations and service cuts	34
Introduction of health protocols	30
Business innovation and adjustment	25
Continued adequate service despite constraints	82

Source: Field Data (2026)

Challenges Facing the Hotel Industry After the COVID-19 Pandemic

Despite the pandemic having formally ended, respondents reported that recovery remains incomplete (Table 5). Financial recovery difficulties were the most commonly cited challenge (64%), with hotel managers explaining that pre-existing bank loans continue to constrain access to further credit and to limit investment in marketing and renovation. The slow return of customers was reported by 24% of respondents; one hotel manager noted that occupancy remained:

"at 40–50% of customers, unlike the 80% before COVID" (Hotel Manager).

Staff shortages were also widely reported in interviews and focus group discussions, with managers describing difficulty rehiring experienced staff who had since moved into other sectors such as retail and transport. It should be noted that, unlike the first two rows of Table 5, the staff-shortage finding was generated qualitatively (interviews and focus group discussions) rather than from a questionnaire percentage. It is reported in Table 5 as 'widely reported' rather than as a percentage precisely because it is a qualitative, not a quantitative, indicator, and it should not be read as numerically comparable to the 64% and 24% figures alongside it. These findings are broadly consistent with regional evidence that hotel recovery in East Africa has been slow and uneven (Muoki, 2021). Critically, the three challenges in Table 5 are not independent: financial constraints limit the marketing and wage offers needed to attract both customers and skilled staff, which in turn slows the revenue recovery needed to ease those same financial constraints, a reinforcing cycle that neither theory used in this study fully anticipates on its own, and which suggests that consumer-behaviour-driven demand caution and supply-side capacity constraints are, in this setting, mutually reinforcing rather than separable mechanisms.

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Table 5. Challenges Facing the Hotel Industry in the Post-COVID-19 Period

Reported Challenge	Respondents (%)
Financial recovery difficulties	64
Slow return of customers	24
Shortage of skilled and experienced staff	Widely reported (qualitative)

Source: Field Data (2026)

Association Between COVID-19 Effects and Hotel Performance

A chi-square test was conducted to examine the statistical relationship between the effects of the COVID-19 pandemic and post-pandemic hotel performance. As shown in Table 6, the test produced a statistically significant result, $\chi^2(1, N = 181) = 6.495$, $p = .011$, with an effect size of $\varphi = .19$ (a small-to-moderate association by conventional benchmarks). This result indicates only that pandemic-related effects and current hotel performance are statistically associated. Because the data are cross-sectional and both variables were measured from the same respondents at the same point in time, the test cannot establish that pandemic effects *caused* current performance levels, and the discussion below is worded accordingly.

Table 6. Chi-Square Test of Association Between Hotel Performance and the Effects of the COVID-19 Pandemic

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	6.495	1	.011
Continuity correction	5.505	1	.019
Likelihood ratio	6.957	1	.008
N of valid cases	181		

Source: Field Data (2026)

Synthesis: Linking the Findings Back to Theory and to Prior Evidence

Read together, support a more integrated interpretation than any single result taken alone. The strong pre-pandemic baseline, the demand-led collapse during the pandemic, and the persistence of financial, demand, and staffing constraints well after the pandemic's formal end together describe a trajectory in which consumer caution (Theory of Consumer Behaviour) appears to have receded more slowly than hotels' own operational adjustments (Agile Supply Chain Theory) could compensate for, which is consistent with the small-to-moderate, rather than large. Pandemic exposure is one contributor to current performance, but the association is not strong enough to imply that pandemic exposure alone determines which hotels are still struggling. This reading is broadly consistent with international evidence that organisational agility, big-data-enabled decision-making, and innovation, not exposure severity alone, differentiate hotel performance after a shock (Khalil et al., 2023), and with evidence that recovery speed varies systematically by category and market segment rather than uniformly

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(Wang et al., 2025). It also qualifies the earlier Zimbabwean finding that hotels lacked disaster-management preparedness (Ncube et al., 2021). The Arusha evidence suggests that even hotels that did introduce protocols and innovations experienced only partial recovery, implying that preparedness alone, without sustained demand recovery, is unlikely to be sufficient.

4. CONCLUSION

This study sets out to assess the performance of the hotel industry in Arusha City Council in the post-COVID-19 period. The findings show that hotels performed strongly before the pandemic, with high guest turnout, steady growth, strong revenue, and stable employment, but that the pandemic caused a severe collapse in guest numbers, revenue, and employment, forcing many hotels into temporary or permanent closure. Although hotel owners and the government subsequently introduced health protocols, business innovations, and staff training to support recovery, the industry still records low performance in several respects, constrained chiefly by financial recovery difficulties, the slow return of customers, and shortages of skilled and experienced staff, challenges that a chi-square test confirmed are significantly associated with, though not proven to be caused by, the pandemic's lingering effects.

Theoretical and Scientific Contribution

Beyond summarising these findings, this study makes a specific theoretical contribution. It demonstrates empirically that the Theory of Consumer Behaviour and the Agile Supply Chain Theory are not competing but complementary explanations of post-pandemic hotel performance: the demand-side collapse and its slow reversal (consistent with consumer-behaviour theory) and the partial, employee-resilience-dependent nature of supply-side adaptation (consistent with, but only partially explained by, agile supply chain theory) jointly, rather than separately, account for why performance in Arusha remains constrained years after the pandemic's formal end. This joint application, together with the small-to-moderate (rather than large) effect size reported for the pandemic–performance association, provides an evidentiary basis, previously largely conceptual in this literature, for treating post-pandemic hotel recovery as jointly determined by residual demand caution and incomplete supply-side agility, rather than by either mechanism alone. The study also contributes methodologically by showing, transparently, both the value and the limits of a convergent mixed-methods, chi-square-based design for testing a conceptual mediation model: it identifies precisely which parts of the model (the direct association) were tested and which (the mediating role of recovery strategy) were not, offering a template other researchers can use to test the full mediated pathway with appropriate structural or regression-based methods.

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Implications of the Study

The findings carry several implications. For policymakers, they highlight the need for flexible, forward-looking policy frameworks that can be adapted quickly to the different business environments hotels face at different times, including contingency mechanisms that can be activated rapidly when future shocks occur. For hotel owners and managers, the findings underline that the business environment is shaped by both internal and external forces that shift over time, so that strategies must be temporally and spatially adaptive, supported by contingency planning that builds resilience beyond any single crisis. Practically, hotel owners and managers are encouraged to invest in digital technologies, such as online marketing and booking platforms, to enhance flexibility in service delivery. This recommendation is consistent with evidence that digitally and analytically capable hotels recovered faster elsewhere, although in the present study it rests on the 25% of respondents who reported business-innovation adoption and on managers' qualitative accounts, rather than on a direct statistical test linking digital-technology adoption to recovery outcomes in this sample. It should therefore be treated as an evidence-informed recommendation rather than a demonstrated causal finding, pending more direct testing. Government agencies, non-governmental organisations, and other stakeholders should provide targeted financial support, favourable credit and tax policies, and skills training to strengthen the sector's capacity to recover fully and to withstand future crises. Finally, the persistence of low performance well after the pandemic's formal end illustrates that the effects of a major shock can outlast the shock itself; researchers and practitioners alike therefore need to examine impacts over an extended timeframe rather than assuming recovery once the precipitating event has passed.

Limitations of the Study

This study has several limitations that should be considered when interpreting its findings. First, and most importantly, because data were collected cross-sectionally in 2026, respondents' accounts of pre-pandemic and during-pandemic performance are retrospective self-reports made several years after those events occurred; such recall is susceptible to recall bias, including the tendency to recall pre-pandemic conditions more favourably and pandemic-era conditions more negatively than contemporaneous records might show, and this should be borne in mind when interpreting the magnitude, though not necessarily the direction, of the before/during/after comparisons. Second, the study relies substantially on perceptual data (for example, respondents' judgements of ‘adequate service’ or ‘slow return of customers’) rather than on audited financial, occupancy, or payroll records, which may not align precisely with subjective assessments. Third, some hotel operators were reluctant to share detailed financial and operational data due to confidentiality concerns, which may have constrained the depth of the revenue and employment analysis, and is part of why perceptual, questionnaire and

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interview based indicators were used in place of audited records. Fourth, the study covered seven purposively and randomly selected hotels within a single city council, meaning that findings may not fully generalise to hotels of different categories or in other regions of Tanzania. Fifth, the cross-sectional design captured a snapshot of performance rather than tracking recovery trends over time, and, relatedly, the exact response rate and the reasons for the gap between the 182 targeted, 181 returned, and 145 fully complete questionnaires should be reported precisely, since an unclear response rate limits readers' ability to judge non-response bias. Despite these limitations, the use of multiple data sources, questionnaires, interviews, and focus group discussions, and triangulation across quantitative and qualitative data provided valuable insights into the post-pandemic performance of the hotel industry in Arusha City Council.

Directions for Future Research

Future studies could conduct comparative research between urban and rural hotel performance to assess variation in recovery outcomes, and longitudinal research tracking employment trends in hospitality over multiple years to offer insights into labour stability. Future research should also statistically test the mediating role of recovery strategy proposed in Figure 1, for example, using bootstrapped indirect-effect estimation or PLS-SEM, rather than presenting it only as a conceptual pathway, and should where possible pair perceptual survey and interview data with audited occupancy, revenue, or payroll records to reduce reliance on retrospective recall. Researchers could also work with official regulatory or tax records, where accessible, to complement self-reported financial data. Finally, deeper exploration into employee mental health, staff retention, and the effectiveness of government relief packages would enrich understanding of resilience-building in Tanzania's hotel industry.

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