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Article

# Exploring tourism SMEs crisis management practices during Covid-19 at Boudha, Kathmandu

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**Abstract:** The worldwide tourism industry alone expanded by 3.9% in 2018, contributing $8.8 trillion in sales and 319 million jobs to the global economy. The COVID-19 pandemic, which began to spread around the planet in 2020, had an impact on every aspect of life. Though many studies have explored COVID-19's effects on tourism SMEs in Nepal, there's a significant lack of research on their crisis management strategies during the pandemic. Thus, this study aims to measure the crisis management techniques used by small and medium-sized businesses (SMEs) in the Boudha Area during the COVID-19 epidemic. The study uses an explanatory research design to analyze a comprehensive understanding of how the Boudha Area's SMEs in the tourism industry handled the crisis of SMEs in the Kathmandu Valley. Non-probability with convenient sampling is used for the study. Data is collected through 403 SMEs using a structural questionnaire, and data collection is done using Kobo Toolbox. Structural Equation Modeling (SEM) using Partial Least Squares (PLS) version 4.0 is adopted for data analysis. The result shows a significant relationship between cost control and expected assistance with crisis management, while marketing and organizational support have an insignificant relationship with crisis management. Similarly, during COVID-19, 90.82% of the businesses had closed their businesses, and 47.89% of SMEs had closed for 3 months. Additionally, 88.09% of SMEs faced losses during COVID-19, and to maintain the crisis 46.4% of SMEs used their income to handle crises during COVID-19, and 93.3% of SMEs reduced their expenses to manage the crisis.

**Keywords:** crisis management; COVID-19; expected assistance; marketing; cost control

## 1. Introduction

The importance and relevance of the tourism sector in the world economy have significantly expanded during the past ten years. The tourism sector's importance to the global economy has grown substantially over the past decade. In 2018 alone, the global tourism industry grew by 3.9%, generating $8.8 trillion in revenue and supporting 319 million jobs worldwide [1]. The COVID-19 pandemic, which began to spread around the planet in 2020, had an impact on every aspect of life [2]. In this regard, small to medium-sized enterprises (SMEs) were affected in their size, resources, and cash flow [3]. It is estimated that the pandemic will have a negative impact on the tourism industry [4]. Different steps were implemented in pandemic-affected nations to slow the virus' spread [5]. The restriction of travel within countries and outside has severely impacted the tourism sector [6]. The introduction of restrictions has caused the tourism industry to stagnate. Travel by air was most

severely harmed, although travel by car and other ground vehicles was somewhat replaced [7].

According to Dias et al. [8], 90% of the firms are related to SME, which is the major contributor to employment in most countries. The COVID-19 epidemic is negatively affecting SMEs in both industrialized and developing countries, and its breadth is substantially broader than any other environmental danger [9]. As pillars of the national economy, micro, small, and medium-sized enterprises (MSMEs) require business resilience to survive [10]. SMEs, particularly those operating in developing nations with high rates of poverty and economic and political instability, have little capacity and resources to recover from such crises [11]. The majority of SMEs were unable to resume operations due to a lack of materials, employees' inability to work again, interrupted supply networks, and decreased demand [9]. Additionally, many SMEs were experiencing major cash issues as a result of high fixed expenditures [1]. As per the report by Shafi et al. [11], 65% of the US SMES had only four months of financial resources available during COVID time. The outbreak of coronavirus disease 2019 (COVID-19) has significantly impacted national and worldwide economies [12]. Businesses are dealing with a variety of problems that could result in losses, Shafi et al. [11]. In addition to the deaths, the COVID-19 epidemic has significantly disrupted supply chains and trade, which has had a substantial impact on the economy [9]. Governments all over the world have enacted various restrictions to slow the spread of the pandemic, including social isolation, travel bans, border closures, closures of public facilities and services, etc. These restrictions have halted global economic activity and brought on a new global recession [1].

The COVID-19 crisis has affected tourism activities and reduced visitor mobility [13]. Since there is no directly applicable historical standard, it is challenging to predict how any prospective future crises will unfold [1]. To handle the exceptional obstacles they faced, tourism organizations and SMEs had to adopt and implement a variety of crisis management solutions. Chinese SMEs adopted flexible human resources techniques as their key means of survival, along with product diversification, market analysis, and greater education [14]. Duarte Alonso et al. [15] found that the three steps of self-reliance, the inoperative component (discontinued operations and waiting for protocols), and preparing for the new regime were the most effective coping mechanisms. Shafi et al. [11] indicated that the majority of SMEs in Pakistan operate to reduce staff, salary, and business operations.

Nepal's tourism sector has faced numerous crises and challenges since its beginning. Governments around the world have instituted a variety of limitations (such as social segregation, travel restrictions, the closing of borders, the closure of public facilities and services, etc.) to limit the spread of the epidemic [1]. However, the number of visitors to Nepal during the pandemic drastically decreased due to travel restrictions, border closures, and infection-related anxiety. Due to canceled reservations and a decline in visitor numbers, tourism SMEs suffered significant income losses. Many companies have trouble paying their fixed expenses, such as rent, employees' salaries, and loan payments [3]. The gradual impact of the tourist downturn on the industry's employment saw thousands of people who depended on

tourism-related activities lose their jobs and see their incomes drop [11]. The total economy of Nepal, which depends largely on tourism, suffered a setback. Communities that relied on tourists, local businesses, and suppliers all suffered [13]. Hence, this study aims to find the factors influencing the tourism SME's crisis management behavior during COVID-19 in the Boudha area with the help of situational crisis communication theory as well as the general understanding regarding crisis management practices.

This study is structured into four sections. The first part highlighted the purpose of the study. The second section deals with the methodology sections and conceptual framework; the third section presents the analysis and discussion section; and at last, the summary, conclusion, and recommendations are presented.

## 2. Research method

### 2.1. Conceptual framework

A crisis is an unexpected event that poses a significant threat to the operations, structure, or reputation of an organization or society and requires immediate and effective response measures [16]. On the other hand, crisis management involves preparing for, responding to, and recovering from events that threaten to harm an organization, its stakeholders, or the general public [17]. Numerous studies have been carried out to provide information regarding the adoption of crisis management practices. Reviewing various conceptual frameworks has helped in gathering the knowledge provided by different scholars in the field of CMP practices in tourism SMEs. The study has reviewed several models, such as the Shafi Model of Crisis Management [11], the OCED Model of Crisis Response Strategies [18], the Kukanja Model of Managers' Usage of CMPs [1], the Conceptual Model of Digital Technologies for Pandemic Response [19], and the Conceptual Model of Disaster Management Framework [20].

According to Shafi et al. [11], a crisis has a negative link with tourism SMEs. CMP is treated as a dependent variable, whereas shutting down a business partially, laying off employees, reducing staff salaries, and applying for loans are treated as independent variables. Similarly, the OCED Model of Crisis Response Strategies focuses on diversification, decreasing expenses, applying new technology, enforcing health and safety regulations, and requesting government assistance, which are the factors that are useful for crisis management [18]. Furthermore, as per the Kukanja Model of Managers' Usage of CMPs, crisis management practices are treated as dependent variables, and marketing practices, workforce practices, cost control practices, and organizational support are treated as independent variables, resulting in a positive relationship between dependent and independent variables [1]. Likewise, according to the conceptual model of digital technologies for pandemic response, tracking functions, screening for infection, contact tracing, quarantine, and self-isolation, clinical management is used for crisis management [20].

Finally, the conceptual model of disaster management framework precursors, mobilization, action, recovery, reconstruction and reassessment, and review are independent variables, and the disaster management framework is a dependent variable [19]. Based on Crisis Management Theory and an existing literature review

of CMP, the researcher has developed the following research framework for the study purpose.

**Figure 1** indicates the different scales and variables of crisis management practices. It consists of six variables. Expected forms of assistance include marketing, cost control, workforce practices, organizational support, and crisis management practices. It has crisis management practices as an independent variable and expected forms of assistance, marketing, cost control, workforce practices, and organizational support as dependent variables.

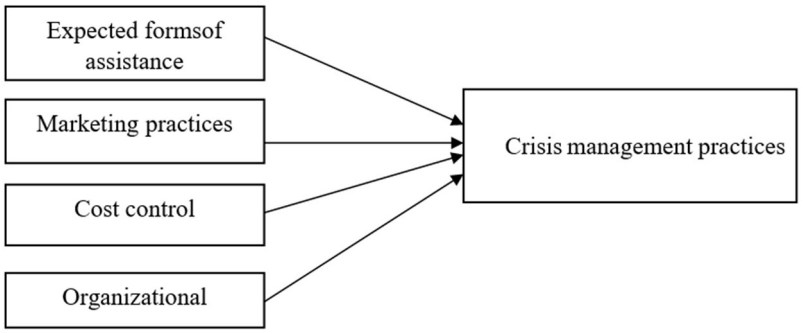


**Figure 1.** Model of crisis management practices.
Source: Adapted and Modified from Kukanja et al. [1].

### 2.1.1. Expected forms of assistance and crisis management practices

The types or categories of support that are frequently anticipated or requested in a specific circumstance or setting are referred to as expectation forms of aid. These expectations are predicated on the knowledge that particular types of help are required or advantageous to address the demands or difficulties resulting from a crisis or challenging circumstance [21]. Expected forms of assistance include tax write-offs, tax reductions, extensions of payment deadlines, covering wages, covering fixed costs, rebalancing of the state budget, budget lines for direct financing of SMEs, lower interest rates, favorable loans, loan modifications, intense promotion, education, and research [1]. Expected forms of assistance are important factors for crisis management.

H1: Expected forms of assistance have a positive relationship with crisis management practices.

### 2.1.2. Marketing practices and crisis management practices

To navigate and respond to crises successfully and protect their brand reputation, organizations need to implement marketing and crisis management practices [21]. Marketing management includes targeting new market segments, enlarging marketing campaigns, providing highly discounted rates and special offers, studying and understanding the needs of the target customer segments, focusing on loyal customers, making use of electronic marketing and opaque distribution channels, increasing marketing budgets, keeping up with competitors to take advantage of any developments that arise, and improving the quality of

H2: Marketing practices have a positive relationship with crisis management practices.

### 2.1.3. Cost control and crisis management practices

In crisis management, cost control refers to the application of methods and tactics to successfully manage and reduce costs when a crisis scenario arises. It entails making wise choices and taking action to cut expenses without sacrificing the organization's capacity to handle the crisis and recover from it.

Cost control includes emphasizing cost control and reducing operating costs, postponing some of the firm's due costs and/or rescheduling payments, developing additional avenues for revenues, closing some non-profitable departments and/or business operations when purchasing, using less expensive substitutes, using new IT technologies for reducing operating costs, and shrinking all planned investments [1].

H3: Cost control has a positive relationship with crisis management practices.

### 2.1.4. Organizational support and crisis management practices

The goal of cooperative management is to maximize the resources, knowledge, and efforts of all parties concerned to address the issue and lessen its effects. Co-operation management includes cooperating with other tourism providers, cooperating with different organizations (e.g., business associations), and cooperating on different activities that could improve the image of the tourist destination.

H4: Organizational support has a positive relationship with crisis management practices.

The different constructs are developed to test the hypothesis (see **Table 1**): 5 items from expected assistance (EA), 5 items from marketing practices, 5 items from cost control, 3 items from organization support, and 8 items from workforce practices.

**Table 1.** Variable and its definition.

| Construct | Observed Variable | Variable notation | Explanation |
|---|---|---|---|
| Expected Assistance (EA) | Interest rates | EA_1 | Lower interest rates |
| | Wages | EA_2 | Covering wages |
| | Fixed costs | EA_3 | Covering fixed costs |
| | Tax | EA_4 | Tax reductions |
| | Payment deadlines | EA_5 | Extension of payment deadlines |
| Marketing Practices (MP) | Market segments | MP_1 | Target new market segments |
| | Marketing campaigns | MP_2 | Enlarge marketing campaigns |
| | Customers | MP_3 | Focus on loyal customers |
| | Budget | MP_4 | Increase marketing budget |
| | Offerings | MP_5 | Improve the quality of offerings |
| Cost Control (CC) | Operating costs | CC_1 | Emphasize cost control and reduce operating costs |
| | Due costs | CC_2 | Postpone some of the firm's due costs |
| | Revenues | CC_3 | Develop additional avenues for revenues |
| | Business operations | CC_4 | Close some non-profitable departments and/or business operations |
| | IT technologies | CC_5 | Use new IT technologies for reducing operating costs |

**Table 1.** (*Continued*).

| Construct | Observed Variable | Variable notation | Explanation |
|---|---|---|---|
| Organizational support (OS) | Tourism | OS_1 | Cooperate with other tourism providers |
| | Organizations | OS_2 | Cooperate with different organizations |
| | Tourist destination | OS_3 | Cooperate on different activities that could improve the image of the tourist destination |
| Workforce practices (WP) | Wages | WP_1 | Reduce wages and pay rates |
| | Vacations | WP_2 | Give employees mandatory unpaid vacations |
| | Reduce Employees | WP_3 | Reduce the number of employees |
| | Productivity | WP_4 | Increase the productivity |
| | Additional Duties | WP_5 | Require staff to take additional duties that are not in their job descriptions |
| | Organizational Structure | WP_6 | Make changes in the organizational structure |
| | Working hours | WP_7 | Extend staff working hours |
| | Replace | WP_8 | Replace permanent employees with part-time employees |

## 2.2. Study area and population and sampling techniques

The study focuses on Boudha, Kathmandu, home to the UNESCO World Heritage Site Boudha Stupa since 1979 and a major tourist destination alongside Swayambhu [22]. Boudha area, situated approximately 11 kilometers (6.8 miles) from both the heart and the northeastern periphery of Kathmandu [23], annually attracts thousands of tourists and sustains a variety of SMEs, including hotels, restaurants, and souvenir shops. This research aims to understand the crisis management techniques employed by these businesses during the COVID-19 pandemic. The study surveys managers of these SMEs, who are crucial in business operations, to evaluate the effectiveness of their crisis strategies. This area's economic dependency on tourism and diverse SME landscape make it an ideal subject for investigating crisis management.

A non-probability with convenience sampling technique will be used for the study due to the lack of official information detailing the population of small retail shops in Kathmandu. The convenience sampling method is used for the survey as accessible or readily available people use this method. In 1954, Cochran [24] developed an equation to generate a representative sample for proportions in large populations, which is given as $n_0 = Z2pq/e^2$, where $n_0$ = sample size for study, standard tabulated value for 5% level of significance (z) = 1.96, Prevalence or proportion of an event 50% = 0.50, $p = 0.5$, $q = 1 - p = 0.5$, an allowable error that can be tolerated ($e$) = 5%. This study also undertakes a 5% non-response error. Thus, the sample size taken for the study was 402.

## 2.3. Research instrument, data collection and analysis

In this study, a structured questionnaire with a survey was used as the primary research instrument to gather data on the crisis management practices during COVID-19 in tourism SMEs. The questionnaire was developed specifically for this study, aligning with the research objectives. It comprises both open-ended and

closed-ended questions that are intended to address the concerns raised by the study straightforwardly and understandably, effectively communicating the objective of each inquiry. The questionnaire is divided into five sections that include the respondent's biographical information, their understanding of crisis management in general, the factors that influence crisis management practices, the difficulties that tourism SMEs encountered in COVID-19, and managerial suggestions for resolving those difficulties.

The developed structured questions were inserted into the Kobo Toolbox for data collection. Which is a helpful tool for offline and online data collection. Before proceeding with the data collection, a pilot survey involving 15 sample questions was conducted, which helped validate the consistency of the research questionnaire. The data was collected in the month of August 2023 from 403 respondents.

## 3. Results

### 3.1. Socio-demographic analysis

The socio-demographic information on the people was gathered from 403 respondents. This section includes tabulated data on gender, age, education level, occupation, monthly income, business type, and business nature that makes it easier to understand (See **Table 2**).

**Table 2.** Socio-demographic characteristics of the respondent.

| Title | Category | Number | Percentage (%) |
|---|---|---|---|
| Gender | Male | 246 | 61.04 |
| | Female | 157 | 38.96 |
| Age | 18–29 | 57 | 14.14 |
| | 30–39 | 166 | 41.19 |
| | 40–49 | 144 | 35.73 |
| | 50 and above | 36 | 8.93 |
| Education Level | No formal education | 6 | 1.49 |
| | Below SLC/SEE | 37 | 9.18 |
| | SLC/SEE | 87 | 21.59 |
| | Intermediate | 139 | 34.49 |
| | Bachelor | 115 | 28.54 |
| | Master | 17 | 4.22 |
| | Above Master | 2 | 0.5 |
| Family Types | Nuclear Family | 187 | 46.4 |
| | Joint Family | 215 | 53.35 |
| | Extended Family | 1 | 0.25 |
| Involvement in business | Family business | 123 | 30.52 |
| | Own business | 277 | 68.73 |
| | others | 3 | 0.74 |

**Table 2.** (*Continued*).

| Title | Category | Number | Percentage (%) |
|---|---|---|---|
| Business Type | Grocery shop | 28 | 6.95 |
| | Vegetables/fruits | 18 | 4.47 |
| | Fancy shop | 101 | 25.06 |
| | Pharmacy | 14 | 3.47 |
| | Restaurant/café | 50 | 12.41 |
| | Photo studio | 18 | 4.47 |
| | Gift shop | 51 | 12.66 |
| | Handicraft shop | 17 | 4.22 |
| | Travel agency | 2 | 0.5 |
| | Art gallery | 21 | 5.21 |
| | Thanka painting | 19 | 4.71 |
| | Book shop | 23 | 5.71 |
| | Others | 41 | 10.17 |
| Nature of Business | Own property | 32 | 7.94 |
| | Rent/lease | 365 | 90.57 |
| | Others | 6 | 1.49 |
| Income Level (Monthly) | Below 50,000 | 12 | 2.98 |
| | 50,000–75,000 | 35 | 8.68 |
| | 75,000–100,000 | 178 | 44.17 |
| | 100,000–150,000 | 158 | 39.21 |
| | 150,000–200,000 | 13 | 3.23 |

The study demonstrates that the major participation was from a male group (61.04%), while 98.52% of educated adult people (76.92%) are handling the businesses in the Boudha area. Most of the businesses (68.73%) have opened their businesses by themselves, and most of them have rented shops (90.57%). The data was collected from different SMEs, where the majority of them are fancy shops (25.06%), restaurants/café (12.41%), gift shops (12.66%), and glossary shops (6.95%). The study shows the SMEs in the Boudha area earn a good monthly income, as 83.38% of them earn income from 75,000 to 100,000 on a monthly basis.

## 3.2. General understanding of crisis management practices

This study tries to measure the respondent's general understanding of crisis management practices during COVID-19. This part includes how the respondent handled their business during COVID-19 and what practices they applied during a crisis to manage their business effectively.

The study has revealed that almost all (90.82%) SMEs in the Boudha area have closed during COVID time. 47.89% of the SMEs have closed for almost 3 months, while 88.09% of the SMEs have to bear a loss of up to 100%, and 61.28% of them have faced a loss above 50% of their sales. The study demonstrates that SMEs such as pharmacy, vegetables, dairy, and grocery have not closed their businesses. In pandemic time, 11.91% of the SMEs have gained up to 60% in profit. Different

methods have been applied by the business to manage COVID time: 46.4%) have used their income from other sources, 27.05% have utilized previous savings, and 9.93% have used loans from banks and financial institutions to manage COVID time. As the government has restricted the sale of goods and services, 3.47% of the SMEs have used online methods to sell their goods, 22.58% of them sell their products through home delivery, 2.1.09% of them have diversified their business by selling other goods, etc. (See **Table 3**).

**Table 3.** General understanding of crisis management practices.

| S. N | Variables | Explanation | Frequency | Percentage |
|---|---|---|---|---|
| (1) | Closed business | Yes | 366 | 90.82 |
| | | No | 37 | 9.18 |
| (2) | How long | less than one month | 15 | 3.72 |
| | | 2 months | 82 | 20.35 |
| | | 3 months | 193 | 47.89 |
| | | 4 months | 76 | 18.86 |
| (3) | If not closed business | Pharmacy | 9 | 2.23 |
| | | Vegetables | 11 | 2.73 |
| | | Dairy | 2 | 0.5 |
| | | Grocery | 15 | 3.72 |
| (4) | Profit/loss | Profit | 48 | 11.91 |
| | | Loss | 355 | 88.09 |
| (5) | Managed business during crisis | Run as usual | 35 | 8.68 |
| | | Loans from bank & financial institutions | 40 | 9.93 |
| | | Utilized previous saving | 109 | 27.05 |
| | | Used income from other sources | 187 | 46.4 |
| | | Borrowed from friends & Relatives | 27 | 6.7 |
| | | Others | 5 | 1.24 |
| (6) | Practices applied to c operate regular business | Online business | 14 | 3.47 |
| | | Home delivery | 91 | 22.58 |
| | | Reduce expenses | 376 | 93.3 |
| | | Diversification | 85 | 21.09 |
| | | Digital Transformation | 22 | 5.46 |
| | | Others | 41 | 10.17 |

## 3.3. Incentives and crisis management practices during COVID-19

The study reveals the range of benefits, support, and services that governments, institutions, and other entities offered to manage the crisis's negative effects. These rewards are intended to alleviate financial hardship, boost the economy, and assist individuals impacted by the pandemic's obstacles.

Only a few (12.9%) SMEs have gained incentives from government organizations (5.96%), local communities (0.99%), municipalities (0.99%), financial institutions (2.23%), and others (7.2%). Incentives like rent reduction (9.93%), tax write-off (4.22%), and a decrease in interest rate (1.99%) were received by the SMEs

during the COVID-19 period. 12.16% of SMEs feel that the incentives are helpful for crisis management. While 87.1% of SMEs have not received the incentives, they think that corruption (76.18%), nepotism by the local government, and others (71.46%) are the main reasons they have not received the incentives (see **Table 4**).

**Table 4.** Incentives received during Covid-19.

| S. N | Variables | Explanation | Frequency | Percentage |
|---|---|---|---|---|
| (1) | Incentive Received | Yes | 52 | 12.9 |
| | | No | 351 | 87.1 |
| (2) | Incentive dreceived | Rent reduction | 40 | 9.93 |
| | | Local funding and loans | 1 | 0.25 |
| | | Tax write-off | 17 | 4.22 |
| | | Decrease in interest rate | 8 | 1.99 |
| | | Support for specific industries | 3 | 0.74 |
| | | Others | 12 | 2.98 |
| (3) | Reason for not receiving the incentives | Suddenly shutdown of my business | 45 | 11.17 |
| | | Lack of information | 295 | 73.2 |
| | | Due to corruption | 307 | 76.18 |
| | | Nepotism by local govt. and others | 288 | 71.46 |
| (4) | Provider for the incentives | Government organizations | 24 | 5.96 |
| | | Local community | 4 | 0.99 |
| | | Municipality | 4 | 0.99 |
| | | Financial institutions | 9 | 2.23 |
| | | Others | 29 | 7.2 |
| (5) | Incentive helpful | Yes | 49 | 12.16 |
| | | No | 3 | 0.74 |
| (6) | what level it was helpful | Extremely helpful | 1 | 0.25 |
| | | Very helpful | 25 | 6.2 |
| | | Less helpful | 26 | 6.45 |

## 3.4. Training and crisis management practices during COVID-19

The education programs or skill-building efforts that people, companies, or organizations participate in help manage the difficulties. According to Permatasari and Mahyuni [19], crisis management practices will fail without the appropriate training and education programs. The study demonstrates that only 3.97% of the SMEs have received crisis management-related training before COVID-19, and this kind of training is received from the government (2.48%), NGO/INGOs (0.74%), and other organizations for 3–5 days (0.25%).

While COVID-19 has started, 99.5% of the SMEs have not received any kind of training during COVID-19, while only 0.5% of them have received it. They had received the training from the NGOs and INGOs (0.5%), and the training was conducted for 3-5 days (0.25%), and SMEs have felt a moderate level of help (0.25%) from such training. During the pandemic, the majority of the SMEs (81.39%) have managed the crisis by consulting with their friends, while 96.28% have waited for

COVID-19 to end and 31.51% of them have taken an expert opinion to manage the crisis (see **Table 5**).

**Table 5.** Training received during Covid-19.

| S.N. | Variables | Explanation | Frequency | Percentage (%) |
|---|---|---|---|---|
| (1) | Crisis management-related training before COVID-19 | Yes | 16 | 3.97 |
| | | No | 387 | 96.03 |
| (2) | Providers for the training | Government | 10 | 2.48 |
| | | Municipalities | 0 | 0 |
| | | NGO/INGOs | 3 | 0.74 |
| | | Local community | 2 | 0.5 |
| | | Others | 1 | 0.25 |
| (3) | Duration of the training | 1 day | 2 | 0.5 |
| | | 3–5days | 10 | 2.48 |
| | | 1 week-above 1 week | 4 | 0.99 |
| (4) | Training related to business operation in covid-19 | Yes | 2 | 0.5 |
| | | No | 401 | 99.5 |
| (5) | Training providers for business operation | Local community | 0 | 0 |
| | | Municipality | 0 | 0 |
| | | Provincial Government | 0 | 0 |
| | | Central government | 0 | 0 |
| | | NGO/INGOs | 2 | 0.5 |
| | | Others | 0 | 0 |
| (6) | Duration of the training related to business operation | 1 day | 0 | 0 |
| | | 3–5 days | 1 | 0.25 |
| | | 1 week-above 1 week | 1 | 0.25 |
| | | Others | 0 | 0 |
| (7) | Training helpful to the business operation | Yes | 15 | 3.72 |
| | | No | 1 | 0.25 |
| (8) | At what level training helpful | Extremely helpful | 0 | 0 |
| | | Moderate | 2 | 0.5 |
| | | Less helpful | 0 | 0 |
| | | Extremely less helpful | 0 | 0 |
| | | Others | 0 | 0 |
| (9) | How business manage their business in crisis time | Consulting with friend | 328 | 81.39 |
| | | Expert/Business operation opinion | 127 | 31.51 |
| | | Waits for Covid-19 to end | 388 | 96.28 |
| | | Others | 6 | 1.49 |

## 3.5. Effective crisis management practices during COVID-19

The study demonstrates that the crisis can be managed by reducing expenses (43%), utilizing the previous savings (22%), and government training (13%).

Additionally, generating new ideas (12%) and borrowing and taking loans (8%) were also seen as effective crisis management practices during COVID-19 (See **Figure 2**).

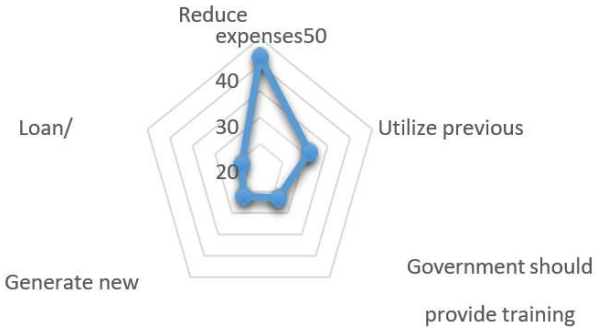


**Figure 2.** Response to crisis management.

## 3.6. Inferential analysis

### 3.6.1. Measurement model

*Reliability and validity*

In the empirical study, the measurement model is tested using composite reliability (CR), average variance extracted (AVE), convergent validity, and discriminant validity to test the construct validity. The composite reliability (CR) is tested to measure the internal consistency of the variable [25]. The value of CR greater than 0.7 shows good internal consistency, and the study has met the criteria. The convergent validity was tested using the average variance extracted (AVE) value, where the AVE value is higher than 0.5. In the study, the value of Cronbach's alpha and composite reliability is greater than 0.7, and the value of AVE is greater than 0.5. This further confirms there is no issue of reliability or convergent validity.

Similarly, the discriminant validity is measured using the heterotrait-monotrait (HTMT), where the correlation between the constructs is measured. The threshold limit is below 0.90, and **Table 6** shows that all HTMT ratios are higher than below the cutoff value of 0.9, further demonstrating the study's discriminant validity. Further, the discriminant validity was measured using the Fornal Larcker criteria, where the square root of the AVE of each construct needs to be greater than the inter-construct correlations. The study has met the Fornal Larcker criteria.

**Table 6.** Reliability and validity.

| Coding | Latent Variables and Items | Loadings | AVE | CR | Cronbach's Alpha |
|---|---|---|---|---|---|
| EA | Expected Assistance | | | | |
| EA_1 | Tax evasion | 0.779 | | | |
| EA_2 | Tax write-off | 0.758 | | | |
| EA_3 | Extension of payment deadline | 0.724 | | | |
| EA_4 | Direct financing facilities | 0.792 | 0.626 | 0.93 | 0.916 |
| EA_5 | Expected assistant from government | 0.79 | | | |
| EA_6 | Expected help from government | 0.841 | | | |
| EA_7 | Lowered the interest rate. | 0.822 | | | |
| EA_8 | Favorable loan from banks during pandemic. | 0.819 | | | |

**Table 6.** (*Continued*).

| Coding | Latent Variables and Items | Loadings | AVE | CR | Cronbach's Alpha |
|---|---|---|---|---|---|
| MP | **Marketing Practices** | | | | |
| MP_2 | I used digital platform to sell my products. | 0.095 | | | |
| MP_3 | I provided high discount on the products. | 1.000 | | | |
| CC | **Cost Control** | | 0.504 | 0.547 | 0.13 |
| CC_1 | I reduced operating expense. | 0.805 | | | |
| CC_2 | I postponed some of the firms. | 0.873 | | | |
| CC_5 | I postponed all of my new investment. | 0.678 | | | |
| OS | **Organizational Support** | | | | |
| OS_1 | Co-operated with tourism providers. | 0.798 | | | |
| OS_2 | Co- operated with different chambers. | 0.930 | 0.726 | 0.913 | 0.876 |
| OS-3 | Co-operated with local business supporter. | 0.714 | | | |
| OS_4 | Co-operated with NGO/INGO. | 0.945 | | | |
| CMP | **Crisis Management Practices** | | | | |
| CMP_3 | Delay or reschedule part of the company's expenses. | 0.141 | 0.505 | 0.566 | 0.076 |
| CMP_6 | used income from another sources | 0.995 | | | |

*Discriminant validity*

When evaluating the causal linkages under research, discriminant validity assures that the latent constructs being used are, in fact, distinct from one another. Discriminant validity is measured through the HTMT criteria, Fornell and Lacker, and cross-loading. The estimation of the correlation between the constructs is the foundation of HTMT [26]. Based on the HTMT ratio, discriminant validity is proven. The threshold for HTMT is 0.85 or less, while Kock advises a permissive cutoff of 0.90 or less. **Table 7** shows that all HTMT ratios are below the cutoff value of 0.9, further demonstrating the study's discriminant validity.

When evaluating discriminant validity, the Fornell-Larcker criterion can be used to establish how different one component is from the other construct's model [26]. Cross-loading technique and the heterotrait-monotrait (HTMT) ratio scale are supplementary measures to verify discriminant validity because Fornell and Lacker alone are insufficient to test discriminant validity. The square root of each construct's AVE has a bigger value than the correlations of other latent constructs, as shown in **Table 7**, which shows satisfying the Fornell and Lacker criterion.

**Table 7.** Discriminant validity.

| **Heterotrait -Monotrait Ratio (HTMT)** | | | | | **Fornell and Larcker Criterion** | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **CC** | **CMP** | **EA** | **MP** | **OS** | **CC** | **CMP** | **EA** | **MP** | **OS** |
| CC | | | | | | 0.789 | | | | |
| CMP | 0.546 | | | | | 0.151 | 0.71 | | | |
| EA | 0.076 | 0.455 | | | | –0.004 | –0.153 | 0.791 | | |
| MP | 0.263 | 0.389 | 0.316 | | | 0.066 | –0.015 | 0.066 | 0.71 | |
| OS | 0.077 | 0.361 | 0.152 | 0.289 | | 0.04 | 0.106 | –0.101 | –0.005 | 0.852 |

Cross-loadings were used to further confirm the discriminant validity. If an item significantly loads onto its parent construct rather than the other construct in the study, this is known as cross-loading. In the study there is no cross-loading problem because the item's cross-loading values with other constructs are less than 0.1.

### 3.6.2. Structural model analysis

*Path analysis*

The model's predictive ability is shown by the value of $R^2$, which also explains the variance in the endogenous variable explained by the exogenous variables **(see Figure 3)**. Stronger explanatory power is shown by higher $R^2$ values, which range from 0 to 1 [26]. $R^2$ values of 0.75, 0.50, and 0.25, respectively, are significant, moderate, and weak. The independent variables expected form of assistance, marketing practices, cost control, and organizational support explain the 54% variance in the crisis management practices.

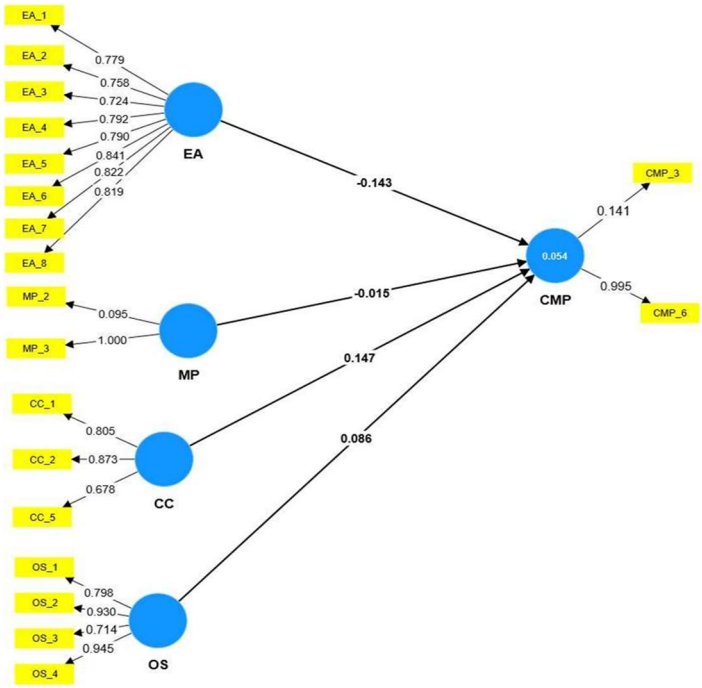


**Figure 3.** Path analysis.

*Hypothesis testing*

**Table 8** provides a concise overview of the results obtained from hypothesis testing, specifically focusing on the relationships between independent variables (CC, EA, MP, OS) and the dependent variable (CMP). The beta coefficient represents the estimated effect size for each relationship, and the standard deviation measures the variability in the data. The findings reveal there is no significant association between Management Practices (MP), Organizational Support (OS), and Expectation Assistance (EA) and Crisis Management Practices (CMP) while Cost Control (CC) shows a positive relationship.

**Table 8.** Hypothesis testing.

| | Beta coefficient (b) | Standard deviation (SD) | *T*-value | *P*-values | LLCI | ULCI | Conclusion |
|---|---|---|---|---|---|---|---|
| H1: EA → CMP | –0.143 | 0.052 | 2.741 | 0.006 | –0.249 | –0.07 | Not supported |
| H2: MP → CMP | –0.015 | 0.074 | 0.197 | 0.844 | –0.123 | 0.14 | Not supported |
| H3: CC → CMP | 0.147 | 0.054 | 2.743 | 0.006 | 0.054 | 0.25 | Supported |
| H4: OS → CMP | 0.086 | 0.061 | 1.417 | 0.157 | –0.082 | 0.195 | Not supported |

## 4. Discussion

The study focuses on exploring tourism SMEs crisis management practices during COVID-19 in Boudha, Kathmandu. The hypotheses were formulated based on the relationships between the independent variables (cost control, management practices, organizational structure, expectations assistance) and the dependent variables (crisis management practices). Out of four hypotheses tested, H3 was the only one found to be significant, while H1, H2, and H4 showed insignificant results. The results of H3 showed that effective cost-control measures are positively correlated with the implementation of policies that focus on crisis management practices. Reductions in operating costs, business operations, and labor costs are common crisis management practices. The study shows a similar kind of result as that by Alonso-Almeida and Bremser [27].

In the study, other hypotheses (H1, H2, and H4) were found to be insignificant. The hypothesis shows an insignificant relationship between the expected form of assistance, marketing practices, cost control, and organizational support and crisis management practices. The study by Kukanja et al. [1] shows that there is an insignificant relationship between the form of assistance and crisis management practices. This may be because assistance from stakeholders cannot be much more helpful for crisis management practices. Similarly, marketing practices and organizational support are helpful for crisis management, according to Kukanja et al. [1], the results of the study contradict this finding. The contradiction arises from differing views on the importance of financial aid and marketing strategies in crisis management, highlighting the need for an integrated approach to protect brand reputation and navigate crises effectively.

## 5. Conclusion

The study indicates a balanced gender distribution among respondents in the Boudha area, with a notable presence of younger individuals engaged in business activities. Individuals with intermediate and bachelor's degrees are involved in various business sectors. However, a majority of respondents lack crisis management training, suggesting a need for proactive intervention from both organizations and the government to provide such training. Despite acknowledging the importance of incentives for supporting businesses, respondents reported a deficiency in accessing them. This underscores the necessity of implementing incentivization schemes through governmental or organizational channels to bolster resilience and preparedness in times of crisis.

Furthermore, the study reveals that most respondents are acquainted with crisis management concepts and have firsthand experience with them. However, concerning the relationship between management practices, organizational structure, expectation assistance, cost control, and crisis management practices, the findings suggest no significant correlation between certain factors. Notably, there seems to be a positive association between effective cost-control measures and improved crisis management practices. The study's limitations are that it solely examines crisis management practices within the Boudha area. Future research could explore additional sectors and variables, such as the workforce's impact and the role of digital platforms in crisis management, to develop more nuanced crisis management strategies applicable in diverse contexts.

The study's findings on crisis management techniques among tourism SMEs in the Boudha region during COVID-19 offer invaluable insights for policymakers, industry stakeholders, and SME owners. Plans and resources can be developed to enhance the resilience of SMEs in the travel and tourism sector, ensuring their capacity to navigate unforeseen challenges effectively. With the aid of this study, concerned stakeholders can develop effective crisis management strategies that consider regional nuances, ultimately supporting the viability of SMEs amidst crises such as the COVID-19 pandemic.

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