

**Assessing the Impact of Business Continuity Plans on Covid-19 Pandemic: Case of Sierra Leonean
Insurance Industry**

Monday Utomwen

Department of Risk Management and Compliance, WAICA Reinsurance Corporation PLC, Freetown,
Sierra Leone

Author Note

Monday Utomwen  <https://orcid.org/0000-0001-6848-0731>

The author reports no conflicts of interest. The author alone is responsible for the content and writing of the paper. Correspondence concerning this article should be addressed to Monday Utomwen, 30 Junction, Hill Station, Regent Road, Freetown, Sierra Leone. Email: moutomwen@waicare.com

Abstract

Background

Business Continuity Plan (BCP) is a risk management tool that enables companies to prevent, plan for, respond to, and recover from disruptions. Companies with a developed BCP have undergone risk and impact assessment of possible disruptions to business operations, enabling the deployment of risk mitigations. COVID-19 was declared a pandemic by the World Health Organization on March 11th, 2020. This is a perfect example of such disruption, for which the Business Continuity Plan is formulated and implemented as mitigation. This paper examines how insurance companies in Sierra Leone are navigating the pandemic, utilizing the BCP.

Method

The non-experimental quantitative research conducted for this study obtained data from 10 out of 11 insurance companies in Sierra Leone, using questionnaires.

Results

The results showed that only 20% of respondents had a BCP formulated and approved before the COVID-19 pandemic.

Conclusion

The study concluded that profit, marketing activities, and revenue were the top 3 aspects of Sierra Leonean insurance industry operations affected by the COVID-19 pandemic. The research further showed that the late adoption of BCP had a significant negative impact on the Sierra Leonean insurance industry. The research recommends further study of BCP components, as implemented by the Sierra Leonean insurance industry.

Keywords: Business Continuity Plan, survival, impact, COVID-19, pandemic

Assessing the Impact of Business Continuity Plans on Covid-19 Pandemic: Case of Sierra Leonean Insurance Industry

A Business Continuity Plan (BCP) is the result of a coordinated risk and impact assessment, that enables a company's leadership to respond to disruptive events.¹ The World Health Organization declared COVID-19 a pandemic on March 11th, 2020.² The pandemic has greatly affected the global economy, including the small economy of Sierra Leone. Sierra Leone's international borders, airports, and seaports were shut down for months following the COVID-19 pandemic declaration. Consequently, recent economic projections have put Sierra Leone's economic contractions at 3.5%, with trade and financial flows severely affected.³

Thus, the COVID-19 pandemic has had a significant impact on both large and small companies. Companies face disasters and disruptive events at times, which threaten their survival. Implementing a BCP with tactical details is advantageous, as it addresses risks and responses.¹ Arguably, a clear-cut strategy to manage disruptions is an effective alternative to a tactical BCP.⁴

This study aims to:

- investigate and rank the exposure of Sierra Leonean insurance companies to the impact of COVID-19,
- investigate the impact of BCPs on COVID-19 pandemic mitigation in this industry,
- and investigate the impact of BCPs on the Sierra Leonean insurance industry's survival in a persistent COVID-19 scenario.

A BCP is activated in times of disruption or disaster, to help companies mitigate impacts and recover quickly.⁵ The main research question was to ascertain if BCPs affected the mitigation of COVID-19 pandemic impacts on the Sierra Leonean insurance industry.

Method Overview

In this study, a quantitative approach was used to collect data, exploring the relationship between the BCP, the impact of COVID-19, and the survival of Sierra Leonean insurance companies. The quantitative study consisted of a non-experimental approach that utilized closed-ended questionnaires to

obtain data from participants in the insurance companies of Sierra Leone. The survey questionnaire was comprised of three sections: BCP, the impact of COVID-19 on the Sierra Leonean insurance industry, and the survival of the insurance companies. Descriptive statistics and chi-square were applied to the numerical data, to explore the relationship between the variables. The questionnaire was designed and executed using the Qualtrics online survey.

The participants of this study comprised of insurance companies' employees in Sierra Leone. 11 insurance companies are operating in Sierra Leone, underwriting life, non-life, and medical insurance. These insurance companies are situated mainly in the capital Freetown, serving the entire population of Sierra Leone. Chief Finance Officers (CFOs), Heads, employees in Finance, or similar designation of officers in Sierra Leonean insurance companies were selected for the survey. Survey questionnaires, through Qualtrics online survey, were sent to CFOs of the 11 insurance companies. 10 out of 11 insurance companies responded to the survey. The data collected from the respondents enabled the research to conclude on the relationship between the BCP, the impact of COVID-19, and the survival of the Sierra Leonean insurance industry.

Descriptive and inferential analysis was adopted in this research. The data collected were summarized in tables and analyzed. Crosstab of BCP and impact of COVID-19 variables assisted in organizing and deriving relevant descriptive percentages, mean scores, and standard deviations of specific impact variables for ranking purposes. Chi-square Test of Significance was used to test the relationship between the BCP and COVID-19 impact variables.

Results

The obtained descriptive analysis of data was summarized using SPSS crosstab, percentages, and acquired mean scores, while chi-square was used to test the level of significance between variables.

BCP Formulation Status

In Table 1, the survey shows that 30% of respondents had no BCP, 50% of respondents formulated and approved a BCP during the pandemic, while 20% of respondents had a BCP already in place before the COVID-19 pandemic. This implies that 80% of respondents either had no BCP or had one formulated

only during the pandemic, which indicates that the awareness of the utilization of BCPs in the insurance industry of Sierra Leone was either non-existent or very limited before the COVID-19 pandemic.

Table 1

Business Continuity Policy Formulation Status

BCP Formulated and Approved	Percent
None	30%
During COVID-19	50%
Before COVID-19	20%

Source: Field Survey, 2020

Ranking of the Exposure of Sierra Leonean Insurance Companies to the Impact of COVID-19

Table 2 shows that the profits of insurance companies in Sierra Leone are most exposed to the impact of COVID-19. Profit has a mean score of 3.3, representing the highest exposure to the impact of COVID-19 in the Sierra Leonean insurance industry. Marketing and revenue have mean scores of 3.0 and 2.9 respectively, representing the 2nd and 3rd most affected business aspects of Sierra Leonean insurance companies by COVID-19. Employee layoffs and recruitment have mean scores of 2.8 and 2.3 respectively, representing the least exposed aspects of business operations to the COVID-19 pandemic in the Sierra Leonean insurance industry.

Table 2

COVID-19 Impact Exposure Mean Scores

Description	N	Mean	Std. Deviation
Profit	10	3.3000	0.82327
Marketing	10	3.0000	1.33333
Revenue	10	2.9000	1.37032
Employees	10	2.8000	1.54919

Description	N	Mean	Std. Deviation
Recruitment	10	2.3000	1.41814
Valid N (listwise)	10		

Source: Field Survey, 2020

Relationship Between the BCP and the Impacts of COVID-19

Table 3 shows the results of the cross-tabulation of BCP and the impact of COVID-19 on the Sierra Leonean insurance industry. Description of the relationship between BCP and each of the COVID-19 impact variables are presented subsequently, including the Test of Significance.

Table 3

A Cross Tabulation Showing BCP and COVID-19 Impacts

		Business Continuity Plan (BCP), formulated and approved?			
COVID-19 impact		<i>None</i>	<i>During COVID-19</i>	<i>Before COVID-19</i>	p value
COVID-19 did not impact our business operations negatively	<i>Strongly agree</i>	0.0%	0.0%	10.0%	0.151204
	<i>Agree</i>	0.0%	10.0%	0.0%	
	<i>Undecided</i>	0.0%	10.0%	0.0%	
	<i>Disagree</i>	30.0%	30.0%	0.0%	
	<i>Strongly disagree</i>	0.0%	0.0%	10.0%	
COVID-19 did not affect cash flow	<i>Strongly agree</i>	0.0%	0.0%	0.0%	0.084037
	<i>Agree</i>	0.0%	0.0%	10.0%	
	<i>Undecided</i>	0.0%	0.0%	0.0%	
	<i>Disagree</i>	20.0%	50.0%	0.0%	

		Business Continuity Plan (BCP), formulated and approved?			
	<i>Strongly disagree</i>	10.0%	0.0%	10.0%	
COVID-19 did not impact our revenue negatively	<i>Strongly agree</i>	0.0%	0.0%	10.0%	0.040428
	<i>Agree</i>	0.0%	0.0%	0.0%	
	<i>Undecided</i>	0.0%	0.0%	0.0%	
	<i>Disagree</i>	30.0%	50.0%	0.0%	
	<i>Strongly disagree</i>	0.0%	0.0%	10.0%	
COVID-19 did not impact our profitability negatively	<i>Strongly agree</i>	0.0%	0.0%	10.0%	0.092893
	<i>Agree</i>	0.0%	10.0%	0.0%	
	<i>Undecided</i>	0.0%	0.0%	0.0%	
	<i>Disagree</i>	30.0%	40.0%	0.0%	
	<i>Strongly disagree</i>	0.0%	0.0%	10.0%	
COVID-19 did not increase our claims experience	<i>Strongly agree</i>	0.0%	10.0%	10.0%	0.422799
	<i>Agree</i>	10.0%	30.0%	10.0%	
	<i>Undecided</i>	0.0%	0.0%	0.0%	
	<i>Disagree</i>	20.0%	10.0%	0.0%	
	<i>Strongly disagree</i>	0.0%	0.0%	0.0%	
COVID-19 did not increase administration and management expenses	<i>Strongly agree</i>	0.0%	0.0%	0.0%	0.231078
	<i>Agree</i>	20.0%	20.0%	10.0%	
	<i>Undecided</i>	0.0%	0.0%	0.0%	
	<i>Disagree</i>	10.0%	30.0%	0.0%	
	<i>Strongly disagree</i>	0.0%	0.0%	10.0%	
	<i>Strongly agree</i>	0.0%	0.0%	20.0%	0.090459

		Business Continuity Plan (BCP), formulated and approved?			
COVID-19 did not lead to employee layoffs	<i>Agree</i>	20.0%	30.0%	0.0%	
	<i>Undecided</i>	0.0%	10.0%	0.0%	
	<i>Disagree</i>	10.0%	10.0%	0.0%	
	<i>Strongly disagree</i>	0.0%	0.0%	0.0%	
The business will survive if COVID-19 persists till 2021	<i>Strongly agree</i>	10.0%	10.0%	20.0%	0.330854
	<i>Agree</i>	20.0%	30.0%	0.0%	
	<i>Undecided</i>	0.0%	10.0%	0.0%	
	<i>Disagree</i>	0.0%	0.0%	0.0%	
	<i>Strongly disagree</i>	0.0%	0.0%	0.0%	

Source: Field Survey, 2020

Business Operations Impact

In Table 3, the survey shows that 60% of respondents that reported that COVID-19 impacted their business operations negatively did not have a BCP in place or have only formulated a BCP during the pandemic. The results of the survey further showed that 10% of respondents that reported no impact on business operations had a BCP in place before the pandemic. However, on the other hand, 10% of respondents that reported having experienced some impact on business operations also had a BCP introduced before the pandemic. Out of the remaining 20% of respondents, despite having a formulated BCP during the pandemic, 10% were undecided on the impact COVID-19 had on business operations while the other 10% reported no impact on business operations.

Since the Test of Significance (Table 3) showed that p-value (0.151) is greater than α (0.05), the research concluded no significant relationship between the BCP and the mitigation of the impact of COVID-

19 on business operations in the Sierra Leonean insurance industry. This implied that most insurance companies in Sierra Leone had a late adoption of a BCP. Early adoption of BCP is expected to mitigate the impact of COVID-19 on business operations, when adopted, tested, and implemented before the disruption.

Cash Flow Impact

In Table 3, the survey shows that 80% of respondents that reported that COVID-19 impacted their cash flow negatively did not have a BCP in place or have only formulated a BCP during the pandemic. Out of the 20% that had BCP before the pandemic, 10% of the respondents reported an impact on cash flow due to the COVID-19 pandemic, while the remaining 10% of the respondents with BCP before the pandemic reported no impact on cash flow.

Chi-square Test of Significance (Table 3) showed p-value (0.084) greater than α (0.05). Thus, it is concluded there was no significant relationship between a BCP and mitigation of the impact of COVID-19 on cash flow in the Sierra Leonean insurance industry. Furthermore, it is implied that most insurance companies in Sierra Leone had a late adoption of BCP. Early adoption of BCP is expected to mitigate the impact of COVID-19 on cash flow, when adopted, tested, and implemented before the disruption.

Revenue Impact

In Table 3, the survey shows that 80% of respondents that reported that COVID-19 impacted their revenue negatively did not have a BCP in place or have only formulated a BCP during the pandemic. Out of the 20% of respondents that reported having a BCP before the pandemic, 10% reported that COVID-19 did not adversely impact their revenue.

In the Test of Significance (Table 3) for this impact, p-value (0.04) is less than α (0.05). Consequently, it is concluded that there is a significant relationship between a BCP and mitigation of the impact of COVID-19 on revenues in the Sierra Leonean insurance industry. Despite the late adoption of BCP by most insurance companies in Sierra Leone, revenue diminutions have not been experienced, which is reflective of the annual nature of policies underwritten, mostly on a credit basis.

Profitability Impact

In Table 3, the survey shows that 70% of respondents that have reported that COVID-19 impacted their profitability negatively did not have a BCP in place or have only formulated a BCP during the pandemic. Out of the 20% that had BCP before the pandemic, 10% of the respondents reported an impact on profitability due to the COVID-19 pandemic, while the remaining 10% of the respondents with BCP before the pandemic reported no impact on profitability. The remaining 10% respondent that only formulated BCP during the COVID-19 pandemic also reported no impact on profitability.

In the Test of Significance (Table 3) for this impact, p-value (0.093) is greater than α (0.05). Hence, it is concluded that there is no significant relationship between the BCP and mitigation of the impact of COVID-19 on the profitability of the Sierra Leonean insurance industry. Thus, it is implied that most insurance companies in Sierra Leone had a late adoption of BCP. Early adoption of BCP is expected to mitigate the impact of COVID-19 on profitability when adopted, tested, and implemented before the disruption.

Claims Experience Impact

In Table 3, the survey shows that 30% of respondents that reported that COVID-19 impacted their claims experience negatively did not have a BCP in place or have only formulated a BCP during the pandemic. The 20% of respondents that had BCP before the COVID-19 pandemic reported no impact on claims. 50% of respondents without a BCP or have only formulated a BCP during the pandemic also reported no increase in claims due to the impact of the COVID-19 pandemic.

In the Test of Significance for this impact (Table 3), p-value (0.423) is greater than α (0.05). Therefore, it is concluded that there is no significant relationship between a BCP and mitigation of the impact of COVID-19 on claims in the Sierra Leonean insurance industry. This implication indicates that most insurance companies in Sierra Leone had a late adoption of BCP. Early adoption of BCP is expected to mitigate the impact of COVID-19 on claims experience, when adopted, tested, and implemented before the disruption.

Management Expenses Impact

In Table 3, the survey shows that 40% of respondents that reported that COVID-19 impacted their management expenses negatively did not have a BCP in place or have only formulated a BCP during the pandemic. Out of the 20% that had a BCP before the pandemic, 10% reported that COVID-19 did not adversely impact their management expenses. Moreover, 40% of respondents without a BCP, or that have introduced a BCP during the pandemic, also reported no increase in management expenses.

In the Test of Significance (Table 3) for this impact, p-value (0.213) is greater than α (0.05). Thus, it is concluded that there is no significant relationship between a BCP and mitigation of the impact of COVID-19 on management expenses in the Sierra Leonean insurance industry. This implies that most insurance companies in Sierra Leone had a late adoption of BCP. Early adoption of BCP is expected to mitigate the impact of COVID-19 on administrative expenses, when adopted, tested, and implemented before the disruption.

Employee Layoffs Impact

In Table 3, the survey shows that 20% of respondents that reported that COVID-19 impacted employee layoffs, did not have a BCP in place, or have only formulated a BCP during the pandemic. The 20% that had a BCP before the pandemic reported that the COVID-19 did not adversely impact employee layoffs. Moreover, 50% of respondents without a BCP, or that introduced a BCP during the pandemic, reported no impact on employee layoffs, due to the COVID-19 pandemic, as well. The remaining 10% of respondents that have only formulated BCP during the pandemic are undecided on employee layoffs.

In the Test of Significance (Table 3) for this impact, p-value (0.090) is greater than α (0.05). Consequently, it is concluded that there is no significant relationship between a BCP and mitigation of the impact of COVID-19 on employee layoffs in the Sierra Leonean insurance industry. This implies that most insurance companies in Sierra Leone had a late adoption of BCP. Early adoption of BCP is expected to mitigate the impact of COVID-19 on employee layoffs when adopted, tested, and implemented before the disruption. Remote working capabilities are part of measures implemented in a BCP, to mitigate pandemic cases, such as COVID-19.

Business Survival

In Table 3, the survey shows that 70% of respondents that had no BCP in place or that had introduced a BCP during the pandemic, reported that their businesses would survive, even in persistent COVID-19 pandemic, until 2021. Equally, 20% of respondents with a BCP in place before the pandemic reported business survival in a persistent pandemic. The remaining 10% of respondents that have only formulated BCP during the pandemic are undecided on business survival.

In the Test of Significance (Table 3) for this impact, p-value (0.331) is greater than α (0.05). Therefore, it is concluded that there is no significant relationship between a BCP and the survival of Sierra Leonean insurance companies in a persistent COVID-19 pandemic. This implies that most insurance companies in Sierra Leone had a late adoption of BCP. Early adoption of BCP is expected to mitigate the impact of COVID-19 on business survival, when adopted, tested, and implemented before the disruption.

Discussion

While the results show that only a small percentage of the Sierra Leonean insurance industry (20%) had formulated and approved a BCP before the COVID-19 pandemic, a significant percentage of the respondents (80%) had no BCP in place or were late in formulating one.

BCP plays a vital role in managing risks associated with the COVID-19 pandemic. However, the late deployment of BCP by the Sierra Leonean insurance industry resulted in impacts on profits, marketing activities, and revenue. Nonetheless, the research did not ascertain the quality of the BCPs utilized, nor how the BCPs were activated during the pandemic.

The results confirmed that profit, marketing, and revenue are more exposed to the impact of the pandemic, compared with other aspects of business operations in the Sierra Leonean insurance industry.

BCP is a risk management tool used to prevent, plan for, respond to, and recover from disruptions. It forms part of the strategic objectives of a company's leadership, embedded in the operations of companies. Consequently, companies without an effective BCP in place are less prepared for disruptions. Furthermore, BCP enables companies to conduct risk and impact assessment required to build business resilience.

Conclusion

World Health Organization and other stakeholders are making frantic efforts to develop vaccines to curb the spread of the COVID-19 virus. Whilst a vaccine is still unavailable, companies' BCPs should act as risk management tools to mitigate the possible impacts of the pandemic.

This study provided an opportunity to obtain first-hand data from insurance companies in Sierra Leone, regarding their reactions to the continued impact of the COVID-19 pandemic. The study recommends further research into the formulation, implementation, and components of BCPs and BCP approaches, adopted by the Sierra Leonean insurance industry. This is imperative since BCP is a plan that is written and defined to support the company in times of disruption and forms part of the company and leadership culture.

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