

ORGANIZATIONAL PREPAREDNESS, BUSINESS RESILIENCY AND SUSTAINABILITY OF SELECTED COMPANIES IN LAGUNA DURING MAJOR CRISIS AND DISASTERS

Romeo L. Mawili

University of Perpetual Help System Laguna-Philippines, **PHILIPPINES**

Email: c090531@uphsl.edu.ph

Susana C. Bautista

University of Perpetual Help System Laguna-Philippines, **PHILIPPINES**

Email: bautista.susana@uphsl.edu.ph

ABSTRACT

Today's business environment requires a robust, enterprise-wide plan to deal with unexpected crises. Major crises may have different shapes and forms, everything from natural disaster or industrial error to criminal or political acts to global economic and health crises. Managers play a strategic role in organizational preparedness, sustainability, and reliability to contribute tangible deliverables through advance preparation, including safety and security initiatives, leadership development, talent management and solid communication plans to support crisis management. Thus, the manager's concept of organizational preparedness, business resiliency and sustainability during major crisis and disasters should be studied. Descriptive correlational research design was employed in this paper in examining the organizational preparedness, business resiliency and sustainability of selected companies in Laguna during major crisis and disasters. The study revealed that the managers had a positive concept on the level of organizational preparedness, business resiliency and sustainability during major crisis and disasters. Correlations indicated that the more positive the respondent's perception on the level of organizational preparedness the more positive on the level of business resiliency and sustainability in times of crisis and disasters. In essence, the results yield substantial concept on the level of organizational preparedness, business resiliency and sustainability of the organization in times of crisis and disasters.

Keywords: Descriptive Correlational Study, Preparedness, Resiliency and Sustainability.

INTRODUCTION

Success in business translates to the economic well-being of a company and its residents through job creation and offering improved quality of life for the country's citizens (Smyth, 2019). It means that the role of companies in alleviating the status of a society is vital. But during adversity and unplanned events, devastating effects and the undesirable result will change the expected outcome. Hence, according to Warren Buffet (n.d.), predicting rain does not count building an ark does. Since there are inevitable circumstances that can be predicted, the plan of action to be executed to mitigate the effect of the problem is significant. Moreover, organizing strategies on the measures to lessen the impact of a disaster or crisis, aligning responsibilities, and giving specific assignments should take place beforehand. With this kind of business environment companies are increasingly vulnerable to disruptions. It needs to take necessary measures for the company to ensure success even during challenging times. Sahebjamnia (2017) posited that organizations need a proactive approach equipped with a decision support framework to protect themselves against the outcomes of disruptive events. Moreover, Tiernan et.al. (2018) pointed out that by aligning the level of policy design and analysis, disaster management, health, and climate change adaptation policy networks can

more effectively integrate efforts to build resilience. It means that building a resilient business needs a holistic approach as it goes beyond profit. Therefore, preparedness for business resiliency and sustainability is creating a strategic alignment and partnership to the economic and social sectors. It requires cooperation beyond the boundary of a company. Jankelova et.al. (2018) disclosed that companies confirmed more negative experiences than positive with the crisis. In an effort to maintain or to increase competitiveness, companies started to create more intensively strategic partnerships. The study delved on determining and examining the organizational preparedness, business resiliency and sustainability of selected companies in Laguna during major crisis and disasters which longed to be a valuable undertaking in response to the need to enhance the organizational preparedness, resiliency and sustainability of the organization during major crisis and disasters. Furthermore, the investigation addressed certain issues as research gaps that had been identified during the conduct of the study which may serve as first-hand evidence for the improvement of the organizational preparedness. In core, the results of the investigation may certainly guide the company to come up with the relevant organizational preparedness, resilience, and sustainability of the company during major crisis and disasters.

From the above-mentioned premises, a well-thought emergency preparedness not only helps to take control of stressful situation and it is the best way to prepare for the unexpected while protecting the business and employees from harm. Business organizations should adopt sound and prudent management practices to ensure business preparedness in the event of an operational incident. Given that crises can occur at any time, organization preparedness which involves the identification, prevention, and management of potential crises has increasingly gained importance in the managerial spheres. Several researchers investigated that in times of crisis and disasters organization need a holding leader, top management, crisis portfolios and strategies that entail policies or procedures developed to minimize the impact of crisis. According to Kerzner (2019), organizational preparedness should have a crisis manager that needed perception, empathy, and empowerment. Also, stated that top management can affect an organization's ability to minimize the severity of these crisis events. Pauchant, in Thomas, H. (2016) recommends forming crisis portfolios. This way, organizations can rationalize their crisis management. Scolobig and Pratt (2018) concluded that crisis management strategies include methods to enhance communication in a business organization that could help lay the foundation for longevity.

Several researchers investigated like Hills (2017) links resilience and crisis management and suggest that resilience is an outcome or goal, and that business preparedness in a crisis is a strategy or tool which an organization can use to achieve it. Hamad (2018) considers resilience as a main issue in Risk Management, and Jackson, he viewed resilience as a new way of thinking about risk. As systems and organizations cannot be designed to anticipate all possible risks (Fiksel, 2016), resilient organizations have to deal with events that will have serious consequences, even when they have low probability of occurrence (Sulpardi, 2018). Sustainability is fast becoming fashionable in strategic management, and yet its meaning is often elusive. Some people restrict sustainability to environmental issues, and others use it synonymously with corporate social responsibility. The organizational structure of any business is vital for its success in acting as a driver for the company to accomplish its vision. At its most basic level, an organization is either an individual or a group of people who work together to achieve a shared aim or set of aims (Zawawi, 2019 in McNamara 2015). Banerjee (2020) suggests there are deeply rooted ideological barriers that come into play when business sustainability is approached from the dominant-economic centered paradigm. As such, the dominant view is that business can profit from sustainability while solving the social and

environmental problems (Hart 2016). Furthermore, Pantelica et al. (2016) elaborated the sustainability of a firm as the ability of the company to meet the needs and requirements of current stakeholders while developing continuous investment and managerial strategies to ensure future profitability, social well-being, and environmental protection. Hence, a company is sustainable when leaders can develop strategies to increase market share, talent, stakeholders' benefits, and lower operational cost and workforce. Additionally, a firm is sustainable if it continues to exist regardless of market threats and internal change (Banker et al., 2014 in MJCVMachado 2016). This study aimed to determine the following 1) The Level of Organizational Preparedness, 2) The Level of Business Resiliency in terms of Adaptability, Reliability, Agility, Effectiveness of Resilience Action, Flexibility, and Recovery Level and Time. 3) The Level of Business Sustainability, 4) Relationship between the Level of Organizational Preparedness and Level of Business Resiliency, 5) Relationship between the Level of Organizational Preparedness and Level of Business Sustainability, 6) Relationship between the Level of Business Resiliency and Level of Business Sustainability.

METHODS

The study used descriptive-correlational research design since it determines the organizational preparedness, business resiliency and sustainability of selected companies in Laguna during major crisis and disasters. Likewise, it identified possible patterns of relationships that exist among variables and it measured the strength of such correlation. Data used in investigation came from 75 manufacturing firms in Laguna that were being served by the researcher's managed company. Using Slovin's formula to determine the sample size with 5% error tolerance, the total samples were the 63 managers and or company officers. The researcher used three sets of survey questionnaire. The first part dealt with the level of business preparedness, the second part focused on the level of business resilience and the last part dealt with the level of business sustainability which were measured using the Likert – Type Scale (Strongly Agree/ Very Positive - 4, Agree/ Positive - 3, Disagree/ Negative - 2, Strongly Disagree/ Very Negative – 1).

Notably, the researcher prepared the questionnaire and secured permission from the different companies in Laguna for the distribution of the research instrument. As the managers and or company officers agreed to participate in the research study, the prepared questionnaires were sent to their nominated email addresses. The managers and or company officers were asked to accomplish the survey questionnaire. The respondents were assured of their privacy and confidentiality of information about their identities. These were completed voluntarily and returned to the researcher. The questionnaires were then collected, organized, presented, analyzed and interpreted. To make sure that the data gathered were precisely treated; weighted mean was used to determine the level of organizational preparedness, level of business resilience and level of business sustainability of the organization. Descriptive statistics such as frequency counts and percent were used to measure the level of organizational preparedness, business resilience and business sustainability of the organization. Pearson Product Moment of Correlation or Pearson-r was used to ascertain if there is a relationship between the level of organizational preparedness and level of business resiliency, relationship between the level of organizational preparedness and level of business sustainability, and relationship between the level of business resiliency and level of business sustainability.

RESULTS AND DISCUSSION

Discussion of the Level of Organizational Preparedness, Business Resiliency and Sustainability of selected companies in times of crisis and disasters is presented in the succeeding tables and textual presentations:

Table 1. The Level of Organizational Preparedness of Selected Companies in Laguna in Times of Crisis and Disaster

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I believe that our management team are capable to respond to any crisis/disaster.	3.14	Positive	6
2. A well-prepared crises and disaster proof organization has every member of the organization aware of their core functions should a crisis/disaster occurs.	3.49	Positive	4
3. To ensure organizational preparedness, managers must create succession plan in case team members may not able to perform during crisis and disaster.	3.65	Very Positive	2
4. Appointing a crisis manager as additional core functions of Chief Operating Officer, Chief Risk Officer or the Chief Legal Officer is practical and duable.	3.29	Positive	5
5. I believe, leadership style has a significant impact on the level of success of any effort particularly on events necessitating a quick response such as crisis/disaster.	3.63	Very Positive	3
6. Business owners must be fully involved in crafting crisis management strategies to ensure reputational assets are protected during crisis.	3.68	Very Positive	1
Average	3.48	Positive	

Shown in Table 1 were the weighted mean of the respondents' perception on the Level of Organizational Preparedness of selected companies in Laguna in times of crisis and disaster. To sum up, an average weighted mean of 3.48 revealed that the respondents had positive perception on the Level of Organizational Preparedness of Selected Companies in Laguna in Times of Crisis and Disaster. This means that organizational preparedness is a vital program for any organization that wants to survive and prosper. The findings of the study support the research of Bundy (2017) which cited that organizational preparedness is the process by which an organization deals with a disruptive and unexpected event that threatens to harm organization, its stakeholders or the general public. With this, organizational preparedness is not a single activity. Hence there are several levels of activity in ensuring that an organization is prepared such as crisis prevention, business continuity planning, preparedness and response training and recovery management.

Table 2. The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Adaptability

Indicators	Weighted Mean	Verbal Interpretation	Rank
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1. A resilient business organization builds strong strategic action plans to adapt any changes within its external and internal environment.	3.65	Very Positive	1
2. Our company's crisis and management is designed to be adaptable to any crisis and disaster that may occur in the near future.	3.11	Positive	5
3. Management to effectively adapt unexpected disruptions must set key indicators to interpret possible impact of crisis and disasters.	3.51	Very Positive	3
4. Management must constantly innovate its products and services to adapt to current situation especially during crisis and disasters.	3.49	Positive	4
5. Management must encourage continual improvement on processes within the internal organization as a response to small- and large-scale changes in the external environment.	3.62	Very Positive	2
Average	3.48	Positive	

As shown in Table 2, The Level of Business Resiliency of selected companies in Laguna in times of crisis and disaster: Adaptability with an average weighted mean of 3.48 revealed that the respondents have positive perception on the Level of Business Resiliency of selected companies in Laguna in terms of Adaptability. They believed that mastering organizational resilience offers the best opportunity to pass the test of time, unlocking future prosperity and securing longevity. Those that learn to spring forward and not backward reap dividends for their company, employees, investors, customers and society in general and in order to be able to adapt, organizations should have the capacity to interpret incoming signals and to adjust the organization accordingly. Thus, the adaptability asserts that an effective organization must develop norms and beliefs that support its capacity to receive and interpret signals from its environment and translate these into internal cognition, behavioral, and structural changes. The findings of the study support the research of Stevenson (2016) as the adaptive ability of a system in response to changes in its environment. Strategy sets the organizational direction which will result in a superior competitive position within that environment. It is necessary to state that there is an interrelationship between strategy and the changing organizational environment. In other words, a strategy is designed to help an organization adapt to a changing world. In a strategic sense, adaptability is the ability of a firm to form and execute an effective strategy. The ability to adapt, however, seems to include much more than just the ability to do a strategy.

Table 3. The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Reliability

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Businesses must be reliable in providing the best product and services even in adverse situation.	3.51	Very Positive	5
2. Management must come up a documented action plans for every risk to happen as a sign of being reliable in providing products and services.	3.52	Very Positive	4
3. A business organization that effectively build and document Risk Register is a strong sign of being reliable.	3.54	Very Positive	2.5

4. Business organization must perform risk assessment on a planned interval to test the reliability of its planned actions in case of crisis and disasters.	3.54	Very Positive	2.5
5. Management must constantly conduct reviews to examine failures and anomalies after conducting risk assessment to further improve planned actions in case of crisis and disasters.	3.59	Very Positive	1
Average	3.54	Very Positive	

As shown in Table 3, The Level of Business Resiliency of selected companies in Laguna in times of crisis and disaster: Reliability the average weighted mean of 3.54 revealed that the respondents had a very positive attitude towards the level of business resiliency in times of crisis and disaster in terms of Reliability. This means that ensuring reliability becomes an especially important issue in the extreme conditions of the organization's functioning, which cause crisis in those organizations. Such conditions can disturb the sustainability of the organization and thus, threaten not only its sustainability but also its sole survival by triggering a spiral of escalation of negative phenomena in the organization. Ensuring reliability is becoming a necessary condition for those organizations to overcome the crisis and restore their sustainability and balance. The findings of the study support the research of Weick K.E (2016), of which reliability is the probability that a system fulfils its function satisfactorily, for a specified time interval and under certain operating conditions. In this current time of uncertainty and volatility, it is easy to become overly focused on the negative; however, researchers have found that high-reliability organizations are those that are able to harness opportunity in challenging times.

Table 4. The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Agility

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Our organization reacts to crisis and disasters not as a threat to our business survival but as an opportunity to adapt and employ planned actions.	3.19	Positive	2.5
2. I believe that our current contingency program is designed to absorb shocks from external and internal factors when confronted with crisis and disasters.	3.13	Positive	4
3. The disruptions caused by Covid 19 Pandemic in our business operations is only minimal as our organization immediately recovers in less than 3 months.	2.79	Positive	5
4. Management has incorporated series of planned actions as a quick response action to ensure quick recovery in case of business disruptions.	3.19	Positive	2.5
5. Management must be flexible in case of new kind of disaster occurs contrary to planned action but new actions contingent to current situation.	3.44	Positive	1
Average	3.15	Positive	

As shown in Table 4, The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Agility the average weighted mean of 3.15 revealed that the respondents had positive attitude towards the level of Business Resiliency in terms of Agility.

Strategies are designed and implemented to improve how business operates. New ways of adapting to changes in the face of crisis and turbulent times are embraced and more especially, organizations are adapting to their environment in order to continue to survive. The findings of the study support the research of Oosterhout in Nafei (2017) explained that organizational agility is not only about being flexible to cater for predictable changes but also is able to adapt and respond to unpredictable changes quickly and efficiently. They added that agility is an organizational ability to react quickly and effectively to an environment which can change radically.

Table 5. The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Effectiveness of Resilience Action

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Business Organization must include in its Management Review the effectiveness of resilience in actions taken with in a period particularly during the crisis situation.	3.63	Very Positive	1
2. Management in doing the review of effectiveness must include new cases that occurs and yet to occur internally in case of crisis happening in the external environment.	3.40	Positive	4
3. Management should be willing for an external auditor in validating effectiveness of actions related to crisis and disaster management.	3.33	Positive	5
4. Management must communicate results to various stakeholders of the organization for results of effectiveness of actions.	3.49	Positive	3
5. Managers' performance measurement must include effectiveness of actions implemented for business resiliency.	3.51	Very Positive	2
Average	3.47	Positive	

As shown in Table 5, The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Effectiveness of Resilience Action the average weighted mean of 3.47 revealed that the respondents had a positive attitude towards the level of Business Resiliency in terms of Effectiveness of Resilience Action. This means that creating a centralized oversight of the business resiliency process brings many benefits, including greater awareness, a bigger pool of expertise, common terminology and reducing the chances of redundant efforts. Having an overarching corporate response plan in place makes it possible to have high-level leadership trained and ready in case an extreme event occurs. The findings of the study support the research of Välikangas (2018) cited that companies need to dynamically reinvent or renew their business models and strategies as circumstances change – to attain zero traumas and this forms the core for building an organization's strategic resilience.

Table 6. The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Flexibility

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Management must ensure flexibility in its crisis and disaster programs encourage continual improvement and implement revisions as needed.	3.63	Very Positive	1.5
2. With the current pandemic, Management and the entire organization must display flexibility in any assignments and functions deemed necessary to mitigate the impact.	3.63	Very Positive	1.5
3. Relocations of work and changes in Work Schedule are expected during crisis and disasters.	3.29	Positive	4
4. Managers must confront with the idea of cutting number of employees and add responsibilities to the remaining workers as part of mitigation plan during crisis.	2.87	Positive	5
5. Succession plan must be constantly updated readily activated in case of crisis and disaster to support business survival.	3.49	Positive	3
Average	3.38	Positive	

As shown in Table 6, The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Flexibility the average weighted mean of 3.38 revealed that the respondents had positive attitude towards the Level of Business Resiliency in terms of Flexibility. This means that companies with a flexible workplace expect to operate relatively smoothly and exploit higher investment flexibility to increase spending. In contrast, companies with low workplace flexibility face generally unfavorable conditions, and use higher investment flexibility to reduce (or possibly postpone) investment spending. The findings of the study support the research of Borodzics in Se Chang (2018) arguing that 'flexibility may be the key to facilitating crisis management'. Moreover, he links flexibility to creativity when he, based on research on crisis management executive trainings, concludes that 'in every single case of a successfully managed crisis event, the positive outcome could be directly linked to creative or flexible rule breaking by key decision makers in the response'. The researchers have also linked flexibility to improvisation and creativity. Flexible processes are usually understood as a requirement for new ideas, assumptions and choices that organizations need for adaptation and change.

Table 7. The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Recovery Level and Time

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. A resilient business must be able to come up a crisis and disaster recovery plan.	3.56	Very Positive	1
2. The crisis recovery plan must include remedies the business organization must employ to the negative impact caused to the business.	3.54	Very Positive	2

3. Time needed by the organization to restore to its pre-disaster level is essential in a resilient business hence it must be indicated in the recovery plan.	3.46	Positive	4
4. Provision of necessary resources needed, point person or in-charge and management commitment must be part of the recovery plan.	3.48	Positive	3
5. Recovery outcome or expectations must be included in the conceptualizing the plan to ensure that the recovery plan is designed for the survival of the business.	3.44	Positive	5
Average	3.50	Very Positive	

As shown in Table 7, The Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster: Recovery Level and Time, the average weighted mean of 3.50 revealed that the respondents had Very Positive attitude towards the level of business resiliency in terms of Recovery Level and Time. A resilient business must be able to come up a crisis and disaster recovery plan. Businesses must have plans in place for everything no matter the crisis unfolding; the enterprise needs clear communication channels and chains of command to allow for the best possible response to the situation as it unfolds. The findings of the study support the research of Mc. Allister Y. (2016). Recovery level can be expressed as the difference between the system's initial state before the malfunctioning/accident and the restore point, and it can be also compared to a desired recovery level in order to assess the performance of specific actions put in place while Recovery time indicates the time needed by the system and organization to restore to its normal state.

Table 8. Composite Table for the Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster

Indicators	Weighted Mean	Verbal Interpretation	Rank
Adaptability	3.48	Positive	3
Reliability	3.54	Very Positive	1
Agility	3.15	Positive	6
Effectiveness of Resilience Action	3.47	Positive	4
Flexibility	3.38	Positive	5
Recovery Level and Time	3.50	Very Positive	2
Overall Weighted Mean	3.42	Positive	

As shown in Table 8, Composite Table for the Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster indicator 2 "Reliability" with a weighted mean of 3.54 was interpreted as Very Positive and was rank 1. Indicator 6 "Recovery Level and Time" obtained a weighted mean of 3.50 which was interpreted as Very Positive and was rank 2. While indicator 1 "Adaptability" with a weighted mean of 3.48 was interpreted Positive and was rank 3. On the other hand, indicator 4 "Effectiveness of Resilience Action" got a weighted mean of 3.47 was interpreted Positive and was rank 4. Indicator 5 "Flexibility" with a weighted mean of 3.38 was interpreted as Positive and was rank 5. Lastly, Indicator 3 "Agility" got a weighted mean of 3.15 was interpreted Positive and was rank 6.

Table 9. The Level of Business Sustainability in Times of Crisis and Disaster

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Management believes that current strategies and actions in combating crisis and disasters, ensures business continuity and sustainability.	3.49	Positive	4
2. I believe that business sustainability not only focused on "green business" but more on social benefit of the business and more importantly the economic benefit to the shareholders.	3.54	Very Positive	2.5
3. To ensure business sustainability, managers' main task is to lower operational cost and workforce during crisis and disaster.	3.13	Positive	6
4. As an assurance of our business survival, a documented business continuity and sustainability plan is necessary for our company.	3.54	Very Positive	2.5
5. Plant-wide risk assessment and risk management program must be reviewed once or twice a year.	3.48	Positive	5
6. To have a sustainable program on crisis and disaster management necessitates full employee commitment, engagement, and involvement.	3.60	Very Positive	1
Average	3.46	Positive	

As shown in Table 9, The Level of Business Sustainability in Times of Crisis and Disaster the average weighted mean of 3.46 revealed that the respondents had positive attitude towards the Level of Business Sustainability in Times of Crisis and Disaster. They believed that crisis offers an important wake-up call; the resilience that a sustainability strategy offers is not a nice-to-have, but a must-have to remain competitive and relevant in uncertain times. The findings of the study support the research of Hansen & Schaltegger, (2016). Business sustainability involves profitability, long-term growth, innovation and creativity, and competitive advantage over the rivals. Every sustainable corporate strategy should involve the equilibrium between the three interrelated elements of economy, social, and environment. Development sustainability implies satisfying the needs of current generation without compromising the chance of the future generation to satisfy their needs.

Table 10. Relationship between the Level of Organizational Preparedness and Level of Business Resiliency of Selected Companies in Laguna in Times of Crisis and Disaster

Indicators	Pearson r	p-value	Interpretation
Adaptability	0.762 Moderate correlation	0.000	Significant
Reliability	0.771 Moderate correlation	0.000	Significant
Agility	0.628 Moderate correlation	0.000	Significant
Effectiveness of Resilience Action	0.693 Moderate correlation	0.000	Significant
Flexibility	0.568 Moderate correlation	0.000	Significant
Recovery Level and Time	0.716 Moderate correlation	0.000	Significant

Significant @ 0.01

As shown in the table there was a significant relationship between the respondents' level of organizational preparedness and their level of business resiliency in times of crisis and disaster. The probability values of 0.000 for all indicators of level of business resiliency were less than the 0.01 significance level. This implies that the higher the level of organizational preparedness the higher is their level of business resiliency. This means that the more positive the respondent's perception on the level of organizational preparedness the more positive on the level of business resiliency in times of crisis and disaster. In the study of Wildavsky in S Duchek(2020),the resilient organization is also quite remarkable that typically identifies external shocks as potentially existential threats to an organization's health. The organizations will find it hard to cope with such shocks. The resilient organization thus presents researchers with an enigma, as it works in practice but not in theory. Organizational preparedness needs to put in action continuous monitoring efforts, i.e., implementing a set of activities aimed at helping actors to constantly monitor organizational processes and eventually correct and reiterate, through information gathered, the actions taken.

Table 11. Relationship between the Level of Organizational Preparedness and Level of Business Sustainability of Selected Companies in Laguna in Times of Crisis and Disaster

Indicators	Pearson r	p-value	Interpretation
Level of Organizational Preparedness and Level of Business Sustainability of Selected Companies in Laguna in Times of Crisis and Disaster	0.536 Moderate correlation	0.000	Significant
Significant @ 0.01			

As shown in Table 11, for the relationship between the Level of Organizational Preparedness and Level of Business Sustainability of Selected Companies in Laguna in Times of Crisis and Disaster with the p-value of 0.000 was obtained which was lower than the 0.01 level of significance; this showed that there is a significant relationship between the respondents' perception of the relationship between the Level of Organizational Preparedness and Level of Business Sustainability of Selected Companies in Laguna in Times of Crisis and Disaster. This means that the more positive the respondent's perception on the level of organizational preparedness the more positive on their perception on the level of business sustainability in times of crisis and disaster.

Table 12. Relationship between the Level of Business Resiliency and Level of Business Sustainability of Selected Companies in Laguna in Times of Crisis and Disaster

Indicators	Pearson r	p-value	Interpretation
Adaptability	0.592 Moderate correlation	0.000	Significant
Reliability	0.636 Moderate correlation	0.000	Significant
Agility	0.670 Moderate correlation	0.000	Significant

Effectiveness of Resilience Action	0.681 Moderate correlation	0.000	Significant
Flexibility	0.741 Moderate correlation	0.000	Significant
Recovery Level and Time	0.656 Moderate correlation	0.000	Significant
Significant @ 0.01			

As shown in Table 12, for the relationship between the level of business resiliency and level of business sustainability in terms of adaptability, reliability, agility, effectiveness of resilience action, flexibility and recovery level and time with the p-value of 0.000 was obtained which was lower than the 0.01 level of significance; this showed that there is a significant relationship between the respondents' perception of the relationship between the Level of Business Resiliency and the Level of Business Sustainability of selected companies in Laguna in times of crisis and disaster. This means that the more positive the respondent's perception on the level of business resiliency the more positive on their perception on the level of business sustainability in times of crisis and disaster.

CONCLUSIONS

The respondents had positive perceptions on the Level of Organizational Preparedness, the Level of Business Resiliency and on the Level of Business Sustainability of selected companies in Laguna in times of crisis and disaster. Moreover, the more positive the respondent's perception on the Level of Organizational Preparedness the more positive on their perception on the Level of Business Resiliency and on the Level of Business Sustainability in times of crisis and disaster. Furthermore, the more positive the respondent's perception on the Level of Business Resiliency the more positive on their perception on the Level of Business Sustainability in times of crisis and disaster. Consistent with the conclusion, an understanding of the relationship among preparedness in times of crisis and disaster help the company to design effective organizational preparedness in times of crisis and disaster.

RECOMMENDATIONS

Same with other research study, this research has its limitations. First is the sample size which was limited to a number of company managers and officers within the geographical area being served by the researcher's company. Hence it would be remarkable to extend the investigation to a broader geographical area with a large number of respondents. Second is the category of respondents which are managers and or company officers who have technical and management background and definitely have expertise on crisis and disaster management. Future research study should include staff or the rank-and-file employee of the organization. On a broader understanding of the interaction between variables, it is important to include other "Crisis Management Plan" for full implementation in a given scenario of crisis.

REFERENCES

AgyeiwaahE. (2017). Identifying core indicators of sustainable tourism: A path forward? Tourism Management Perspectives.

- Bansal (2017) Similar but Not the Same: Differentiating Corporate Sustainability from Corporate Responsibility; *Academy of Management Annals* Vol. 11, No. 1 <https://doi.org/10.5465/annals.2015.0095>.
- Banerjee (2020) Agile Supply Chain Management; DOI: 10.4018/978-1-7998-0945-6.ch084.
- Bundy (2017) The Association between Ethics and Stakeholder Theory", Sustainability, Stakeholder Governance, and Corporate Social Responsibility (Advances in Strategic Management, Vol. 38), Emerald Publishing Limited, pp. 365-387. <https://doi.org/10.1108/S0742-332220180000038019>.
- Duchek (2020) Organizational Resilience: a capability-based conceptualization. *Bus Res* 13, 215–246 (2020). <https://doi.org/10.1007/s40685-019-0085-7>.
- Fiksel, (2016) The New Resilience Paradigm - Essential Strategies for a Changing Risk Landscape.
- Hamad (2018) Effective time management and Organizational performance: A case study of Qatar non-governmental organizations (NGOs)
- Hills (2017) Engaging Employees in Sustainable Development – a Case Study of Environmental Education and Awareness Training in Hong Kong <https://doi.org/10.1002/bse.1903>.
- Jankelova et.al. (2018) Security of the business organizations as a result of the economic crisis. *Entrepreneurship and Sustainability Issues*, Entrepreneurship and Sustainability Center, 2018, 5 (3), pp.659 - 671. <10.9770/jesi.2018.5.3(18)>. <hal-01829654>.
- Kerzner (2019) [BOOK] Innovation Project Management: Methods, Case Studies, and Tools for Managing Innovation Projects- 2019 - books.google.com.
- Mc. Allister Y. (2016) Risk-Based Decision Making for Sustainable and Resilient Infrastructure Systems; *Journal of Structural Engineering* September 2016 | Volume 142, Issue 9 ISSN (print): 0733-9445 | ISSN (online): 1943-541X.
- Metha (2020) Checks and balances: A business-oriented lens on disaster management and warnings <https://doi.org/10.1111/disa.12473>.
- Nafei (2017) The role of top management support and organizational capabilities in achieving e-business entrepreneurship", *Kybernetes*, Vol. <https://doi.org/10.1108/K-12-2019-0851>.
- Se Chang (2019) Institutional entrepreneurship for sustainable business organizations, *Human Resource Management Review*, Volume 30, Issue 3, 100691, ISSN 1053-4822, <https://doi.org/10.1016/j.hrmr.2019.100691>.
- Smyth, (2019) Cultivating sustainable communities of practice within hierarchical bureaucracies: The crucial role of an executive sponsorship", *International Journal of Managing Projects in Business*, Vol. 12 No. 2, pp.400-422. <https://doi.org/10.1108/IJMPB-03-2018-0040>.
- Stevenson (2016) Implementing Socially Sustainable Practices in Challenging Institutional Contexts: Building Theory from Seven Developing Country Supplier Cases. *Journal of Bus Ethics* 161, 415–442 (2020). <https://doi.org/10.1007/s10551-018-3951-x>
- Sulpardi, (2018). New Perspective on the Resilience of SMEs Proactive, Adaptive, Reactive from Business Turbulence: A Systematic Review, Volume XII, Issue V, 2020 *Journal of Xi'an University of Architecture & Technology* ISSN No : 1006-7930.
- Tiernan et.al. (2018) A review of themes in disaster resilience literature and international practice since 2012, *Policy Design and Practice*, 2:1, 53-74, DOI: 10.1080/25741292.2018.1507240.

- Thomas, (2016) "Profiling the resiliency and sustainability of UK manufacturing companies", *Journal of Manufacturing Technology Management*, Vol. 27 No.1, pp. 82-99. <https://doi.org/10.1108/JMTM-06-2014-0086>.
- Välikangas (2018) The quest for resilience. 2003 Harvard Business Review.
- Weick K.E (2016) Business model innovation and organizational resilience: towards an integrated conceptual framework. *J Bus Econ* 86, 647–670 (2016). [://doi.org/10.1007/s11573-015-0796-y](https://doi.org/10.1007/s11573-015-0796-y).